DRINKING WATER SOURCE PROTECTION
Our Actions Matter

LAKE ERIE SOURCE PROTECTION REGION

Long Point Region Source Protection Area

APPROVED SOURCE PROTECTION PLAN

EXPLANATORY DOCUMENT

Prepared on behalf of:
Lake Erie Region Source Protection Committee

Under the Clean Water Act, 2006
(Ontario Regulation 287/07)

May 20, 2020

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This project has received funding support from the Government of Ontario.

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1.0 INTRODUCTION

The Explanatory Document provides stakeholders, the general public, other interested parties, as well as the Source Protection Committee, Source Protection Authority and the Ministry of the Environment, Conservation and Parks, with the intent and rationale behind the policy decisions made in the Source Protection Plan Policies (Volume II). Information on the context of the Source Protection Plan and the planning process is presented in Volume I of the Source Protection Plan.

Volume I of the Long Point Region Source Protection Plan provides the context for the overall Plan, including a brief history of source protection planning and the *Clean Water Act, 2006*, Source Protection Plan objectives, and a description of the watershed/source protection area. This volume also includes a description of plan components, key steps in the planning process, public consultation, interaction with other Source Protection Regions, source water threats, guidance on how to read the plan, and details on plan implementation and enforcement.

The **Assessment Report** is another key component of the Source Protection Plan. Since 2005, numerous technical studies were completed and are summarized in the Long Point Region Source Protection Area Assessment Report. The Assessment Report can be found online at www.sourcewater.ca.

Volume II of the Long Point Region Source Protection Plan contains the Source Protection Plan policies. These policies address both existing (where applicable) and future drinking water threats. Volume II only includes policies for significant drinking water threats, local threats, and optional content. Future updates to the Source Protection Plan may include policies for moderate and low threats. The appendices associated with this volume include information as required by section 34 of O. Reg. 287/07.

The **Explanatory Document**, as stated in section 40 of O. Reg. 287/07 of the *Clean Water Act, 2006*, contains the following information:

- An explanation of the reasons for each policy set out in the source protection plan.
- An explanation of the reasons for designating an activity under paragraph 1 of subsection 22 (3) of the *Clean Water Act, 2006*, including the reasons relied on by the committee to form the opinion that the activity must be prohibited in order to ensure that it ceases to be a significant drinking water threat.
- A summary of the comments received under sections 35 to 39 and an explanation of how the comments affected the development of the policies set out in the Source Protection Plan.
- An explanation of how the summary referred to in paragraph 7 of subsection 13 (1) affected the development of the policies set out in the Source Protection Plan.
- A summary of how the consideration of the potential financial implications for persons and bodies that would be implementing or affected by the Source Protection Plan influenced the development of the policies set out in the plan.
- If a policy described in subsection 22 (7) of the Act or paragraph 1 of section 26 of this Regulation is the only policy set out in a Source Protection Plan to deal with an activity that has been identified as a significant drinking water threat, a statement that the Source Protection Committee is of the opinion that,
    - the policy, if implemented, will promote the achievement of the objectives of the plan in accordance with paragraph 2 of subsection 22 (2) of the Act, and

- a policy to regulate or prohibit the activity is not necessary to achieve those objectives.

This document is submitted to the Ministry of the Environment, Conservation and Parks, with the Source Protection Plan under section 22(16) of the *Clean Water Act, 2006* and under section 45(1) of O. Reg. 287/07.

In preparation for submission, this document has been updated to reflect any changes made to the Source Protection Plan and includes a brief explanation of the effect, if any, of comments received during consultation on the Plan under section 41 of O. Reg. 287/07 on the development of the Plan.

2.0 OVERVIEW OF POLICY DEVELOPMENT WITHIN THE LAKE ERIE SOURCE PROTECTION REGION

The following sections present an overview of the policy development within the Lake Erie Source Protection Region, specifically for the Long Point Region Source Protection Area, and the necessary information that guided the policy development process. The policies were developed to meet the objectives of the *Clean Water Act, 2006* as described in the *Clean Water Act, 2006* and Volume I of this Source Protection Plan. All documents referenced are available online at www.sourcewater.ca.

2.1 Policy Development within the Lake Erie Source Protection Region

2.1.1 Municipal Process

As outlined in Volume I of the Source Protection Plan, the municipal role as defined by the approved Terms of Reference for the Source Protection Plan development is critical to the success of the program. Municipalities within the Long Point Region Source Protection Area together with the Grand River, Kettle Creek, Catfish Creek and Long Point Region Conservation Authorities have been actively involved in the development of the Source Protection Plan policies.

In addition, municipal councils have been actively informed about the source protection plan policies throughout the policy development process. This collaborative process ensured that local conditions and needs were considered and accounted for. Further information on the process completed is presented in each of the municipal sections.

2.1.2 Financial Considerations

As of the date of this Source Protection Plan, there has been no long-term financial commitment from the Ministry of the Environment, Conservation and Parks for implementation of Source Protection Plans. Starting in 2013 through to the end of 2017, the Ministry provided funding for small and rural municipalities through the Source Protection Municipal Implementation Fund (SPMIF). The fund was designed to support municipal activities in the early stages of implementation. Moving forward, the Ministry has communicated its expectation that municipalities fund implementation efforts without provincial support.

The Province of Ontario has fully funded and continues to support source protection planning, including capacity building at each Conservation Authority, completion of the technical documents, and the process to update Assessment Reports and Source Protection Plans. The Grand River Conservation Authority has responsibility for fiscal management with parties undertaking tasks in the Lake Erie Source Protection Region. Where a municipality has taken the lead for specific tasks, a Memorandum of Agreement between the Grand River Conservation Authority and the municipality was required, setting out the legal and financial obligations, technical deliverables and schedules.

Financial assistance has been made available between 2008 and 2013 to those whose activities and properties may be affected by the implementation of the Source Protection Plan through section 97 of the *Clean Water Act, 2006* which established the Ontario Drinking Water Stewardship Program. The program also provided for outreach and education programs to raise awareness of the importance and opportunities for individuals to take actions to protect sources of drinking water. O. Reg. 287/07 further clarifies the details of the Ontario Drinking Water Stewardship Program.

The Ontario Drinking Water Stewardship Program, funded by the Ministry of the Environment, Conservation and Parks, has directed grants to landowners within close proximity to municipal wells or surface water intakes. Such funding allowed landowners to undertake projects that reduce existing potential contamination sources, and supported communications and outreach efforts to persons and businesses within these areas. For the first three years (2008-2010), the program's grant funding was concentrated on undertaking early actions close to municipal drinking water systems, in advance of approved Source Protection Plans. From 2010 to 2013, the program prioritized funding of voluntary projects that addressed significant threats identified in Assessment Reports prepared under the *Clean Water Act, 2006*. The Lake Erie Region Source Protection Committee has requested that the Province continue fund the Ontario Drinking Water Stewardship Program beyond 2014. The Joint Advisory Committee (JAC) continues to encourage the Province to re-establish and rejuvenate the stewardship program to support local source protection plan implementation efforts.

Source water protection is a responsibility that crosses watershed and municipal boundaries; therefore, arriving at a fair and equitable manner to share the financial responsibilities of implementation of the Source Protection Plan is complicated.

Within the *Clean Water Act*, *2006* some provisions are set out for financing various aspects of source protection implementation including stewardship programs and the collection of fees for Part IV policies. As stated in the *Clean Water Act, 2006* fees can be collected for applications received under section 58, 59 or 60, for agreeing to or establishing a Part IV Risk Management Plan under section 56 or 58, for issuing a notice under section 59, for accepting a risk assessment under section 60, or for entering property or exercising any other powers under section 62.

The Lake Erie Source Protection Committee has, from the outset of the planning process, empowered municipalities to direct the source protection plans to meet their needs. The Lake Erie Region has been unique in this approach allowing municipalities to take the lead on policy development. This has resulted in source protection plans that have been designed with the financial means of the municipality in mind.

The financial implications, and the question about what agency would ultimately be responsible for funding source water protection implementation in the Long Point Region Source Protection Area was strongly considered in the development of the source protection policies. The goal of the source protection policies was to, whenever possible; protect the municipal drinking water supply with the least possible expense to the implementing body.

The *Clean Water Act, 2006* and the source protection planning process were introduced by the Province in response to a province-wide concern about the safety of municipal drinking water. The Lake Erie Region Source Protection Committee strongly believes that the Province should continue to fund the implementation of the Long Point Region Source Protection Plan and is committed to requesting that this be done.

2.1.3 Industry Stakeholder Meetings and Discussion Papers

Industry specific experts were invited to attend a series of workshops between February and April 2011 to aid in the development of the water quality policy tool analysis presented in the appendices of the Discussion Papers. These workshops provided an opportunity for Source Protection Committee Members, staff, municipalities, and industry experts to discuss each of the drinking water quality threats and determine policy tool options that would be best suited to meet the objectives of the *Clean Water Act, 2006*. The discussion papers did not make specific recommendations on the tools to be used but identified most promising policy options to address the specific drinking water threats.

2.1.4 Post Discussion Papers

After publishing the water quality discussion papers in 2011, additional information on the drinking water threats was provided by a variety of stakeholders and implementing bodies that allowed for the further refinement of the policy approaches for each of the drinking water quality threats. This is reflected in the policies presented in Volume II of the Source Protection Plan.

Discussion on the specific details of further refinement of the Source Protection Plan policies is presented for each of the drinking water threats, where applicable, in the specific municipal sections of this Explanatory Document.

2.1.5 Early Engagement Process

Updates to the Source Protection Plan are identified and revised in collaboration with affected municipalities. Implementing bodies are provided with a pre-consultation notice and the opportunity to provide feedback on proposed updates to the Source Protection Plan prior to release for formal public consultation.

2.2 Additional Source Protection Plan Information

The following section provides clarification on issues and concerns raised throughout the source protection planning process by the Lake Erie Region Source Protection Committee, other interested bodies and the general public. The Source Protection Committee felt that it was important to provide clarification as to why certain activities that the public or other agencies may expect to be included in the Source Protection Plan were not included.

Climate Change

Predictions on climate change have implications to both water quality and quantity. In terms of water quality, the increase in air temperature and greater occurrence of extreme precipitation events is predicted to degrade water quality, including lower dissolved oxygen rates and higher stream temperatures. In terms of water quantity, climate change is expected to shift the timing of seasonal events, including an earlier and lower spring freshet, and change levels in Lake Erie due to increased lake surface temperatures. Further information on the potential effects of climate change is presented in the Long Point Region Assessment Report available online at www.sourcewater.ca.

On January 13, 2011, the Source Protection Committee passed a resolution not to include policies for data collection for climate change in the Source Protection Plan.

Emerging Contaminants: Pharmaceuticals in Drinking Water Supplies

Certain pharmaceuticals are potentially a new class of water pollutants. Drugs such as antibiotics, anti-depressants, birth control pills, seizure medication, cancer treatments, pain

killers, tranquilizers and cholesterol-lowering compounds have been detected in varied water sources.

Pharmaceutical industries, hospitals, and other medical facilities are obvious sources of these compounds, but households also contribute a significant share. People often dispose of unused medicines by flushing them down toilets, and human excreta can contain varied incompletely metabolized medicines. These drugs can pass intact through conventional sewage treatment facilities, into waterways, lakes and aquifers. Further, discarded pharmaceuticals often end up at dumps and landfills, posing a threat to underlying groundwater.

Farm animals also are a source of pharmaceuticals entering the environment, through their ingestion of hormones, antibiotics and veterinary medicines. Manure containing traces of such pharmaceuticals is spread on land and can then wash off into surface water and percolate into groundwater.

Future source protection planning initiatives should consider the impacts of these sources of contaminants as potential threats to drinking water sources.

Policies for Incentive Programs or Education and Outreach Programs for Drinking Water Systems outside of the Terms of Reference

Policies in the Source Protection Plans can generally only address threats related to drinking water systems included in the Terms of Reference. Although there is a process for municipalities to add drinking water systems to the Terms of Reference if they meet certain criteria, no municipality in the Lake Erie Region has chosen to do this to date. The *Clean Water Act, 2006* allows for policies for incentive programs or education and outreach programs to be developed for drinking water systems outside the Terms of Reference. There is, however, no data available on the number or location of non-municipal residential systems in the Lake Erie Region.

On January 13, 2011 the Source Protection Committee passed a resolution not to include incentive program or education and outreach program policies for drinking water systems not included in the Terms of Reference in the Source Protection Plan.

Dead Stock

As of the date of this Source Protection Plan, the disposal of dead stock is not included as a drinking water threat. This activity was included as a drinking water threat in the 2008 version of the Ministry of the Environment, Conservation and Parks *Tables of Drinking Water Threats*, but has since been removed due to changes in legislation. The *Dead Animal Disposal Act* (1968) was replaced by the Disposal of Dead Farm Animals regulation under the *Nutrient Management Act, 2002* (NMA) and the Disposal of Dead stock regulation under the *Food Safety and Quality Act*.

This regulation provides more disposal options for livestock producers and meat plant operators, with measures that will protect the environment. To be included as a drinking water threat in a future source protection plan, an application for inclusion as a local threat must be made by the Source Protection Committee to the Director. As of the date of this Source Protection Plan, this request has not been made by the Source Protection Committee.

3.0 WATERSHED WIDE POLICY DEVELOPMENT CONSIDERATION FOR PRESCRIBED DRINKING WATER THREATS

The following sections describe the decision making process behind the drafting of the Source Protection Plan policies made by the policy developers for the management or prohibition of the prescribed drinking water threats as outlined in the *Clean Water Act, 2006*. Further information on policy development, including the intent and rationale for the selection of specific policy tools is presented in County specific sections.

A detailed description of the prescribed and non-prescribed drinking water quality and quantity threats can be found in Appendix B of Volume I of the Source Protection Plan.

As required by the *Clean Water Act, 2006*, policies must be written to address existing drinking water threats that meet the objectives of the *Clean Water Act, 2006*. Where the policy developers and Source Protection Committee were confident that no existing drinking water threats were in existence, outreach and education policies and incentive policies were developed. The *Clean Water Act, 2006* also requires policies for addressing future drinking water threats that meet the objectives of the *Clean Water Act, 2006*. Some of the policies presented in Volume II of the Source Protection Plan were included because of this requirement even though in the opinion of the municipality and the Source Protection Committee these drinking water threats are very unlikely to occur in the future.

3.1 The Establishment, Operation or Maintenance of a Waste Disposal Site within the Meaning of Part V of the Environmental Protection Act

Discussion Paper Summary
The main consideration for policy development is to reduce or eliminate the risks from existing and future waste sites and, more specifically, to ensure that any discharge from the sites does not result in a significant risk to drinking water through appropriate measures to mitigate the threat. The following is a summary of the early discussions on potential policy options for each of the Waste Disposal Site sub-threats.

<u>Application of Untreated Septage (Hauled sewage) to Land</u>
The land application of hauled sewage is governed by an Environmental Compliance Approval, a Prescribed Instrument, which contains terms and conditions designed to protect both the local groundwater and surface water supplies from adverse impacts associated with land application of this material. This may include, for example, stipulated separation distances from wells and surface water bodies, or restrictions on winter spreading to reduce the risk of run-off. Therefore, the discussion paper identified the use of Prescribed Instruments as an option to address this threat. These policies could be written to require that Environmental Compliance Approvals for activities located within significant drinking water threat areas that receive hauled sewage be reviewed and, if necessary, amended to ensure they contain terms and conditions that adequately protect drinking water and meet the objectives of the *Clean Water Act, 2006*.

The discussion paper also identified education and outreach as possible tools to promote implementation of best management and alternative practices by farmers and operators of sites that receive septage.

Storage, Treatment and Discharge of Tailings from Mines
Waste Disposal Site- Landfarming (disposal) of Petroleum Refining Waste
Waste Disposal Site- Liquid Industrial Waste Injection into a well
As of the date of the completion of the Assessment Report enumeration, there were no known existing activities identified in the Lake Erie Source Protection Region for the prescribed drinking water sub- categories listed above; therefore, only policies to prevent future significant threats were identified as being necessary. With the exception of mine tailing ponds, all of the above sub threats are required to have an Environmental Compliance Approval under Part V of the *Environmental Protection Act*, 1990 therefore, the use of the Prescribed Instrument tool was identified as the most promising policy tool.

Mine tailing ponds are required to have an Environmental Compliance Approval under the *Ontario Water Resources Act*, 990 thus; the Prescribed Instrument tool was also identified as the most promising policy tool.

Waste Disposal Sites- Landfilling of Hazardous Waste, Municipal Waste, and solid Non-Hazardous Industrial or Commercial Waste
The Prescribed Instrument tool was identified by the Discussion Paper as it is available for most threats associated with landfilling activities. Policies could be written to require that Environmental Compliance Approvals are reviewed and, if necessary, amended by the Ministry of the Environment, Conservation and Parks to ensure the protection of drinking water in vulnerable areas where these threats are significant. Terms and conditions for the Environmental Compliance Approval could be based on advanced best management practices and could include requirements for training of staff, and ongoing monitoring.

Other approaches for managing landfilling and hazardous waste activities are associated with encouraging and supporting proper waste disposal by business and home owners. For example, the discussion paper identified education and outreach programs as a policy option to educate the public about the disposal of household hazardous waste, electronics, compost and recyclables.

Waste Disposal Sites- PCB Waste Storage, Storage of Hazardous Waste at disposal sites
Storage of Wastes as described in clause (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste
Similar policy approaches to Waste Disposal Sites- Landfilling of Hazardous Waste, Municipal Waste, and solid Non-Hazardous Industrial or Commercial Waste have been identified in the discussion paper to address the regulated waste disposal sites. However, there are a number of activities and types of waste disposal activities that are exempt from the Environmental Compliance Approval process under the *Environmental Protection Act*. For example, hardware stores that collect and store hazardous waste are not required to have an Environmental Compliance Approval, even if the activity meets the criteria for a significant threat. Risk Management Plans have been identified as an effective way to manage this activity as the Part IV tools are provided as a policy tool option if no Prescribed Instrument tools are available.

Post Discussion Paper
Since the finalization of the Waste Disposal Sites discussion paper in September 2011, additional guidance was provided by the Ministry of the Environment, Conservation and Parks on the ability of certain activities to be managed through the Environmental Compliance Approval process. This guidance aided the policy developers in their specific decision making progress.

In most cases, policies were developed using the Prescribed Instrument tool because it was determined to be the most efficient way to manage this activity using existing regulatory requirements the Ministry of the Environment, Conservation and Parks would be required to review and, if necessary, amend Environmental Compliance Approvals for these activities. Further, policies were drafted to require the Ministry of the Environment, Conservation and Parks to include terms and conditions when issuing new Environmental Compliance Approvals that, when implemented, will ensure these waste sites do not become significant drinking water threats. For those activities not regulated within the Environmental Compliance Approval process, the use of Part IV Risk Management Plans was selected in most cases to manage these activities.

Prohibition of these activities was also selected where, based on current and future land uses, this activity was unlikely to occur and/or where further protection was required based on the vulnerability of the area to contamination from this activity.

3.2 The Establishment, Operation or Maintenance of a System That Collects, Stores, Transmits, Treats or Disposes of Sewage

Discussion Paper Summary
The Prescribed Instrument tool (Environmental Compliance Approval under the *Environmental Protection Act, 1990* or *Ontario Water Resources Act, 1990*) was identified as the most promising policy tool for managing and prohibiting significant drinking water threats related to sewage. A policy may have been developed to require review of existing activities or prohibition of future sewage system activities to ensure adequate protection of drinking water sources. Part IV tools are unavailable for use for sewage system activities where there is an existing Prescribed Instrument tool available. Where there is no Prescribed Instrument, the Part IV tools were identified as an option to manage or prohibit activities.

On January 1, 2011, updates to the *Ontario Building Code Act, 1992* came into effect to recognize vulnerable areas identified within the Assessment Report and require mandatory inspection programs for onsite sewage systems regulated under the *Ontario Building Code Act, 1992* in areas where they are identified as significant drinking water threats in the approved Assessment Report.

Post Discussion Paper
To address these drinking water threat activities, policy developers typically selected the most promising policy tools as identified in the Discussion Papers. Since the publication of the Discussion Papers, refinements were made to the selected policy tools, based on clarifications of where land use planning can be used to address certain threats. Specific discussion included the ability to require tertiary treatment systems within the limitations of the *Ontario Building Code Act, 1992*. It was concluded that these systems could be encouraged, but not made mandatory due to the current building approval processes.

In most cases, policies were developed using the Prescribed Instrument tool because it was determined to be the most efficient way to manage this activity. Using existing regulatory requirements, the Ministry of the Environment, Conservation and Parks must review and, if necessary, amend Environmental Compliance Approvals for these activities. Further, policies were drafted to require the Ministry of the Environment, Conservation and Parks, to include terms and conditions when issuing new Environmental Compliance Approvals that, when implemented, will ensure these activities do not become significant drinking water threats.

3.3 The Application and Storage of Agricultural Source Material to Land

Discussion Paper Summary
For agricultural properties that are regulated under the *Nutrient Management Act, 2002*, the Prescribed Instrument tool was identified as a policy option. A policy could be written to ensure that the Nutrient Management Plan and Strategy under the *Nutrient Management Act, 2002* effectively protects drinking water sources from the application and storage of agricultural source material. For agricultural properties that are not regulated under the *Nutrient Management Act, 2002*, Part IV Risk Management Plans for the application and/or storage of agricultural source material were identified as a favourable tool for managing threats related to agricultural source material. The site specific plan could incorporate components of the requirements under the *Nutrient Management Act, 2002*, as well as additional or enhanced requirements to address the gaps in the existing legislation, such as monitoring or more restrictive nutrient application rates.

Education, outreach and incentive programs were identified as additional policy options to complement the Prescribed Instrument and Part IV Risk Management Plan policies.

Post Discussion Paper
Further guidance was presented to the policy developers and Source Protection Committee by the Ministry of the Environment, Conservation and Parks and Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) on the applicability of the *Nutrient Management Act, 2002* to protect drinking water sources. Policies contained in the Source Protection Plan reflect this guidance and comments received during the pre-consultation processes.

In their technical guidance, OMAFRA stated that where the *Nutrient Management Act, 2002* can be applied (i.e. farms that are phased in under the *Nutrient Management Act, 2002),* this Prescribed Instrument should be utilized. However, where the *Nutrient Management Act, 2002* does not apply, OMAFRA recommended the use of a Part IV Risk Management Plan.

3.4 The Management of Agricultural Source Material

This Source Protection Plan only addresses significant drinking water threats. Policies addressing the management of agricultural source material (aquaculture) are therefore not included in this Source Protection Plan as this activity cannot be a significant drinking water threat under the current Technical Rules for the prescribed drinking water threat tables.

3.5 The Application, Handling and Storage of Non-Agricultural Source Material (NASM) To Land

Discussion Paper Summary
Both Environmental Compliance Approvals (issued by the Ministry of the Environment, Conservation and Parks under the *Environmental Protection Act, 1990)* and NASM Plans (issued by OMAFRA under the *Nutrient Management Act, 2002)* are Prescribed Instruments under the *Clean Water Act, 2006* and have been identified as policy tool options to address these drinking water threats. Where NASM is currently regulated under the *Nutrient Management Act, 2002*, a policy was typically written to require OMAFRA to review existing and new NASM plans in significant threat areas to ensure that they protect drinking water sources. Similarly, where NASM is currently regulated under S.39 of the *Environmental Protection Act*, *1990* policies were drafted to require the Ministry of the Environment, Conservation and Parks,

to review and amend, if necessary, existing Environmental Compliance Approvals in the significant threat areas to ensure that they protect drinking water sources.

The prohibition tool is also available for NASM and could be applied to vulnerable areas for future threats. The application of NASM is currently prohibited under the *Nutrient Management Act, 2002* within 100 meters of a municipal well.

Post Discussion Paper
The acquisition of new information has been minimal and few additional discussions have taken place since the finalization of the Discussion Paper.

3.6 The Application, Handling and Storage of Commercial Fertilizer to Land

Discussion Paper Summary
In cases where the application of commercial fertilizer to land is addressed through Nutrient Management Plans developed under the *Nutrient Management Act, 2002*, the Discussion Paper identified a specify action policy as a potential option. Specify action policies could be written to request the Ministry of the Environment, Conservation and Parks to prioritize inspections for properties where the application of commercial fertilizer is considered a significant threat to ensure that the threat is appropriately managed. Nutrient Management Plans are created by a trained and certified individual - either a farmer or a consultant. Therefore, if a source protection plan policy requires that specific management practices be included in Nutrient Management Plans using the Prescribed Instrument tool, OMAFRA and the affected farmers would need to be informed during consultation periods. This was identified as a significant challenge based on additional correspondence provided by the Ministry of the Environment, Conservation and Parks.

Where commercial fertilizer is not regulated under the *Nutrient Management Act, 2002,* Part IV tools were identified as a potential policy option, meaning a policy could be written to require a Part IV Risk Management Plan for activities involving the application, handling and/or storage of commercial fertilizer in significant threat areas.

The Part IV Risk Management Plan could incorporate components of Nutrient Management Plans and other existing standards for commercial fertilizer, as well as requirements for inspection and monitoring. This tool would also effectively manage activities not occurring on a farm such as a retail storage facility.

Education and outreach programs were identified as another policy option to address drinking water threats related to commercial fertilizer. These programs could be targeted towards fertilizer application technicians, or towards homeowners who may not be aware of best management practices for fertilizer and the potential threats to drinking water sources.

Post Discussion Paper
Further discussions were held on the ability to effectively manage this activity using the *Nutrient Management Act, 2002* as a Prescribed Instrument tool. It was determined that, due to the limited ability to add additional requirements to the Nutrient Management Plans, it would be difficult to ensure reduced risk to drinking water sources. Thus, in many cases, Part IV Risk Management Plan was selected by policy developers to manage this activity, as this tool will better achieve the objectives of the *Clean Water Act, 2006*. In specific cases, prohibition of this activity was selected based on a review of current and future land use within the applicable vulnerable areas where this activity is or would be a significant drinking water threat.

3.7 The Application, Handling and Storage of Pesticide to Land

Discussion Paper Summary
Part IV Risk Management Plans were identified as the most promising policy options for activities involving the application, handling and storage of pesticides in significant threat areas. Where further restrictions are required, the Prescribed Instrument tool was identified as an option, as it could require the Ministry of the Environment, Conservation and Parks to revoke, or not issue, pesticide permits where pesticide activities are considered significant threats.

Education and outreach policies were identified as supporting policy options. These programs could be developed to inform the various audiences involved in the application and storage of pesticide about best management practices, Integrated Pest Management, or alternatives to pesticides that are less harmful to the environment, specifically drinking water sources. Focus could be placed on retail storage of pesticide, which is less regulated than pesticide application.

Post Discussion Paper
Further review of the *Pesticide Act* revealed that there were few situations where a pesticide permit would actually be required on land uses surrounding municipal intakes. Therefore, the use of the Prescribed Instrument tool to address this drinking water threat was determined to be very limited. In many cases, policy developers selected the prohibition and management of future and existing activities using the Part IV tools

3.8 The Application, Handling and Storage of Road Salt

Addressing significant drinking water threats from road salt can be achieved by requiring Part IV Risk Management Plans for activities associated with the application and storage of road salt by road authorities. This can also be achieved by requiring Smart about Salt™ accreditation for property owners. However, Part IV Risk Management Plans may not be feasible in all municipalities based on the resources required to implement them.

The Discussion Paper also identified specify action policies that could be written to require municipal road authorities, and encourage the Ministry of Transportation and private contractors, to develop or amend existing salt management plans. These developments and/or amendments would ensure that salt management plans contain policies for vulnerable areas to protect drinking water sources. Such a policy could require that the plan be submitted annually to Environment Canada.
Education and outreach programs were identified in the Discussion Paper as an option for promoting responsible salt storage and application and the use of alternative de-icers. Such programs could be targeted towards the residential, industrial, commercial and institutional sectors, as well as to the public at large and local decision makers. The goal of this approach would be to improve industry practices and raise awareness about the link between salt application and water quality.

For future threats, Part IV prohibition and land-use planning tools are available, and could be used to prohibit certain activities associated with the storage of road salt. However, as road salt application is required to prevent winter related accidents, prohibiting this activity was considered an unlikely option, and if possible, limited to smaller areas.

Post Discussion Paper
After the publication of the Discussion Papers, additional discussion on alternative options to address this drinking water threat was minimal. Further guidance was provided by the Ministry of Transportation on their ability to amend salt management plans. Most policy developers selected land use planning and Part IV tools to manage and prohibit existing and future activities. In most cases these policies were complemented with education and outreach programs.

For the application of road salt to be considered a significant drinking water threat the impervious area must be equal to or greater than 80%. This circumstance does not currently exist within the Long Point Region Source Protection Area and therefore policies were not included to address this threat.

3.9 The Storage of Snow

Discussion Paper Summary
The Discussion Paper identified Part IV Risk Management Plans to address existing threats from the storage of snow as an effective policy option for snow storage areas located within 100 metres of municipal drinking water sources. Other available policy options would require the development of salt management plans or amend existing plans to include conditions to protect municipal drinking water sources. Establishing an education and stewardship program for private contractors was identified as another option. This program could inform contractors about the responsibilities of storing and transporting snow in vulnerable areas and provide recognition for those who follow best management practices.

For future threats, land-use planning tools were identified as available to prohibit large scale storage areas in the most vulnerable areas. Future storage facilities within vulnerable areas could also be permitted subject to the provisions of a Part IV Risk Management Plan, satisfactory to the municipality.

Post Discussion Paper
Following the publication of the Discussion Papers, further discussion on policy tool options for this drinking water threat was limited. In most cases, the land use planning tool has been selected by policy developers to manage or prohibit these activities in the future as there were minimal identified existing drinking water threats within the Assessment Report enumeration within most of the municipalities in the Long Point Region Source Protection Area.

3.10 The Handling and Storage of Fuel

Discussion Paper Summary
The Discussion Paper identified Part IV Risk Management Plans as an effective policy option to address significant threat activities involving the handling and storage of liquid fuel. A Part IV Risk Management Plan could incorporate components of O. Reg. 217/01 and its code, as well as other measures to ensure the protection of drinking water sources. Education and outreach and incentive programs were also identified as an available policy option to address drinking water threats from liquid fuels. Various players involved in the handling and storage of liquid fuel could be the target of such education programs. The Discussion Paper suggested that programs targeted at liquid fuel distributors would be especially valuable.

In certain cases, instruments relating to liquid fuel storage are issued under the *Aggregate Resources Act* and the *Safe Drinking Water Act* for aggregate operations and municipal residential drinking water facilities, respectively. For these circumstances, the Prescribed

Instrument policy tool was identified as an effective policy option. A Prescribed Instrument policy could require that these instruments incorporate drinking water protection and contain appropriate spill contingency measures.

Post Discussion Paper
The Ministry of Consumer Services and the Technical Standards and Safety Authority provided guidance to the policy developers to aid in their development of the Source Protection Plan policies. This included a description of their abilities to implement certain policies with respect to the codes they promote. This discussion has been reflected in the current Source Protection Plan policies. As a result, the majority of policy developers decided not to direct the policies towards The Ministry of Consumer Services and the Technical Standards and Safety Authority.

3.11 The Handling and Storage of Dense Non-Aqueous Phase Liquid (DNAPL)

Discussion Paper Summary
Part IV Risk Management Plans were identified in the Discussion Paper as an effective tool to address drinking water threats from dense non-aqueous phase liquid (DNAPL). These plans could address operating practices, such as containment and management, employee training, spill contingency plans, periodic testing of storage systems, as well as other items. If the requirements of the Part IV Risk Management Plan are not met, then the storage site would be prohibited.

An alternative policy approach identified to address threats from DNAPLs was for municipalities to establish bylaws that prohibit storage within 100 metres of the municipal drinking water source.

Softer tools such as education and outreach and incentive programs were also identified to effectively address threats, especially for where DNAPLs are used in smaller volumes, such as in residential areas. Policies could be written to promote the use of alternative non-toxic products and/or proper waste disposal.

Post Discussion Paper
During the development of Source Protection Plan policies further discussions included determining the scope of work required, as the threat circumstances for DNAPLs do not stipulate a quantity threshold. Therefore, even a very small quantity is regarded as a significant drinking water threat. Policies typically reflect this and tend to be more restrictive closer to the municipal intake. In some cases, separate policies have been written for commercial and industrial versus residential users. As the Ministry of the Environment, Conservation and Parks did not provide any guidance on quantity thresholds in the circumstance tables, the policy developers decided not to assign a quantity threshold.

3.12 The Handling and Storage of an Organic Solvent

Discussion Paper Summary
The Discussion Paper identified Part IV Risk Management Plans as an effective policy tool to manage significant drinking water threats from organic solvents. These plans could address operating practices such as containment and management, employee training, spill contingency plans, periodic testing of storage systems, as well as other items. If the requirements of the Part IV Risk Management Plan are not met, then the storage site would be prohibited.

Another policy approach identified to address significant drinking water threats from organic solvents is for municipalities to establish bylaws that prohibit the discharge of organic solvents into municipal sewer systems, or to prohibit storage within 100 metres of the municipal drinking water source. Through a specify action policy municipalities could be required to enact sewer use bylaws that address threats from organic solvents, such as requirements for compliance programs and pollution prevention planning.

Education and outreach programs were also identified as proactive tools for addressing threats from organic solvents, most likely to be used in support of other policy approaches. Programs could be directed at businesses that store organic solvents and could address pollution prevention approaches, best management practices and safe disposal in industries storing organic solvents, with priority on significant threat areas.

Post Discussion Paper
After the publication of the Discussion Papers there was little further discussion on this drinking water threat. In the majority of cases, policy developers selected the Part IV tools to manage or prohibit these activities. Prohibition (using Part IV or land use planning tools) was often selected when there was future potential for this activity to occur within 100 metres of the municipal drinking water source or where the vulnerability score was high enough to regard this activity as significant.

3.13 The Management of Runoff That Contains Chemicals Used In the De-Icing of Aircraft

Discussion Paper Summary
There are no existing significant drinking water threats identified within the Long Point Region Source Protection Area. Further, based on land use activities surrounding existing municipal intakes, the potential for an airport to be constructed in the future that is of a size that might rank as a significant drinking water threat is minimal.

It is possible to affect decision-making on airport lands, provided that the functioning of the site is not impeded. Although the Federal Government has immunity from provincial law, the Federal Government can waive that immunity by contract/agreement or conduct. Where a municipality has the responsibility for establishing Risk Management Plans, a Source Protection Plan policy can direct a municipality to negotiate a Part IV Risk Management Plan under the *Clean Water Act, 2006* with the airport authority.

Post Discussion Paper
Although it is unlikely for this activity to occur in the Long Point Region Source Protection Area in the foreseeable future, policies must be included as per the rules under the *Clean Water Act, 2006*. Therefore, as new airports would require the completion of an Environmental Assessment, the municipalities would in their review of this Environmental Assessment be able to provide comments to the federal authorities on the effects of this activity on their drinking water supply, specifically for the de-icing of aircrafts. This was most often determined to be the most effective method to manage these future activities.

3.14 An Activity that Takes Water from an Aquifer or a Surface Water Body without Returning the Water Taken From the Same Aquifer or Surface Water

The discussion papers developed in 2011 did not include water quantity. The development of the water quantity policies was undertaken in collaboration with Norfolk County staff, through regular meetings and teleconferences.

The discussions identified Prescribed Instruments, specifically the Permit To Take Water (PTTW), as an effective policy option to address significant threat activities involving the consumptive taking of water. Where PTTW already exists, policies may be developed to direct the Province to review and amend existing permits and require that source protection terms and conditions are added; the terms and conditions should ultimately ensure that the municipality's water supply is sustainable. New or increased takings subject to the PTTW process could also include similar source protection terms and conditions.

Municipal land use planning policies could also be an effective tool to address consumptive water taking threats. Policies could be developed to require the local planning authority to manage new developments by including criteria for approval that ensure the proposed activity does not become a significant drinking water threat. The restrictiveness of the policies may vary depending on existing municipal land use policies and the geographic setting of the vulnerable area(s).

The specify action tool could also be very valuable in addressing existing and future threats through the development of locally-specific policies and softer tools such as education and outreach and incentive programs could be used to promote source protection policies in general and focus on water conservation specifically. Outreach programs could target property and business owners in the vulnerable area.

3.15 An Activity that Reduces the Recharge of an Aquifer

The discussion papers developed in 2011 did not include water quantity. The development of the water quantity policies was undertaken in collaboration with Norfolk County staff, through regular meetings and teleconferences.

Addressing significant drinking water threats related to recharge reduction activities may be achieved by implementing policies that require the local planning authority to manage new developments by including criteria for approval that ensure the proposed activity does not become a significant drinking water threat. The restrictiveness of the policies may vary depending on existing municipal land use policies and the geographic setting of the vulnerable area(s).

Specify action policies may also be a valuable tool and provide locally-specific policies. Education and outreach programs could be developed to support these or other policy approaches by promoting low impact development and/or best management practices.

3.16 The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm Animal Yard

Discussion Paper Summary

Outdoor Confinement Areas

The *Nutrient Management Act, 2002* is a Prescribed Instrument under the *Clean Water Act, 2006*, meaning Nutrient Management Strategies can be used to implement policies. These tools and the legislative framework are already in place, making them an effective approach for addressing existing and future drinking water threats from farm animal yards and outdoor confinement areas. The Prescribed Instrument tool was identified in the Discussion Paper and a policy could require OMAFRA to ensure existing and proposed Nutrient Management Strategies in significant threat areas effectively protect municipal drinking water supplies. The policy could require that such strategies contain contingencies in case municipal groundwater monitoring shows concerns relating to nitrogen and pathogens.

Nutrient Management Strategies only apply to outdoor confinement areas and farm animal yards on properties regulated under the *Nutrient Management Act, 2002.* Therefore, for properties with outdoor confinement areas or farm animal yards that pose a significant threat to drinking water that are not regulated under the *Nutrient Management Act, 2002*, policies were drafted to require Part IV Risk Management Plans that could be applied to both existing and future threats. A Part IV Risk Management Plan could effectively deal with the diversity of farm animal yards and outdoor confinement areas types by applying best management practices. These include components of the Environmental Farm Plan on a site by site basis and requirements for ongoing monitoring and reporting to the Risk Management Official.

The Part IV Risk Management Plan could also include aspects of a Nutrient Management Strategy, as it relates to outdoor confinement areas, to maintain consistency with current regulations.

Livestock Grazing and Pasturing Land

Livestock grazing and pasturing lands are not defined under the *Nutrient Management Act, 2002*, and therefore, these threats cannot be managed through the use of the Prescribed Instruments tool. Therefore, a policy could be written to require Part IV Risk Management Plans for properties with grazing and pasturing lands that pose significant drinking water threats.

In both cases, 'softer' tools such as education and outreach and incentive programs can be used to address livestock threats. These tools will support implementation of regulations, but they can also be used on their own. Incentive programs could also be developed to support the implementation of education programs or other policy options, such as voluntary Nutrient Management Strategies, to increase the likelihood of adopting best management practices.

Post Discussion Paper

Within 100 metres of the municipal intake, or within the Intake Protection Zone-1 it was determined that these areas should be considered "no go" zones. This is due to the close proximity to the municipal well or intake and the need to protect this area from any possible activities that may impact or damage the source. Therefore, in a majority of cases, most policies require prohibition of this activity within these areas. This position of prohibition within 100 metres of the well and/or within IPZ-1 was not supported by OMAFRA, based on their technical guidance received during the consultation period.

3.17 The Establishment and Operation of a Liquid Hydrocarbon Pipeline

At the time water quality discussion papers were developed, the establishment and operation of a liquid hydrocarbon pipelines was not prescribed as a Drinking Water Threat activity; however, the conveyance of oil by way of underground pipelines was included as an approved local threat activity in the Lake Erie Region. In July 2018, O. Reg. 287/07 under the *Clean Water Act, 2006* was amended to include the establishment and operation of a liquid hydrocarbon pipeline in the list of Prescribed Drinking Water Threats.

4.0 WATERSHED WIDE POLICY DEVELOPMENT, INTENT AND RATIONALE FOR NON-PRESCRIBED DRINKING WATER THREATS

The following sections describe the decision making process for the selection of policy tools made by the policy development teams for non-prescribed drinking water threats. A brief summary has been provided where the outcomes published within the Discussion Paper were available. Further information on policy development including the intent and rationale for the selection of specific policy tools is presented in the individual County sections.

4.1 Optional Content

4.1.1 Discussion Paper Summary

On January 13, 2011 the Source Protection Committee passed a resolution (Res. No. 05-11) which determined that policies for the following optional content shall be included within the Source Protection Plans as outlined in O. Reg. 287/07:

1. Policies on conditions that have been identified as significant drinking water threats in the Assessment Reports;
2. Policies to update spill prevention, spill contingency or emergency response plans along highways, railways or shipping lanes in Intake Protection Zones (IPZ) or Wellhead Protection Areas (WHPA);
3. Policies that govern transport pathways;
4. Policies for the monitoring of moderate and low drinking water threats in specific situations;
5. Anything that will assist in understanding the plan; and
6. Dates for when the policies take effect.

<u>Conditions</u>
Conditions are contaminated sites for which there is evidence of off-site contamination from a past activity that may have an immediate impact on drinking water quality, as outlined in Part XI.3, Rule 126 of the *Clean Water Act, 2006,* Technical Rules. This is further discussed in Section 4.1.2. Condition sites were identified in Haldimand County within the Long Point Source Protection Area.

<u>Spill Prevention, Spill Contingency or Emergency Response Plans</u>
Spill prevention plans outline the appropriate handling and storage (action plan) of potentially harmful substances, and may include preventative maintenance standards and reporting. Spill prevention and contingency plans are outlined in the *Environmental Protection Act, 1990*, O. Reg. 224/07 and are developed by industries as described in O. Reg. 222/07, Environmental Penalties. This includes, but is not limited to, industrial facilities (Table 1 of the Regulation) and facilities that discharge sewage other than storm water to a watercourse.

Policies for spill prevention, spill contingency or emergency response plans can only be included in the Source Protection Plan if they relate to a highway (as defined by the *Highway Traffic Act, 1990*), railway line or a shipping lane (i.e., along a transportation corridor).

This does not include properties that are along highways and also within the vulnerable area (O. Reg. 287/07 section 26(6)).

Every municipality is responsible for creating an emergency response plan governing the provision of necessary services during an emergency, and the procedures under and the manner in which employees of the municipality and other persons will respond to the emergency. Outdated plans may be a threat to drinking water sources, as they may not contain the most recent data and most appropriate response (i.e. personnel) to an emergency or spill.

Policies were written in all cases to encourage the appropriate party(ies) to update their response/prevention/contingency plans to include the vulnerability mapping and to allow the appropriate party to have immediate access to this information when needed. This may also modify the development of these plans to ensure that if a spill occurred, a heighted response to the activities would occur because of the threat to the municipal drinking water supply.

Transport Pathways

Transport pathways are defined in the *Clean Water Act, 2006* O. Reg. 287/07. Transport pathways are a land condition, resulting from human activity, which increases the vulnerability of a municipal drinking water system's raw water supply. Transport pathways, such as an abandoned well, may facilitate the movement of contaminants vertically or laterally below grade, and can result in greater impact from activities identified as a drinking water threat.

Policies for a specific transport pathway could support ongoing stewardship programs to provide funding to decommission abandoned wells, thereby reducing the ability of contaminants to enter the groundwater within the vulnerable areas. This may further reduce the vulnerability of an area and the amount of enumerated threats. For transport pathways not related to drinking water wells, a policy to support best management practices and the approval of installation of new municipal infrastructure by a qualified professional would aid in the protection of municipal drinking water sources.

A broad transport pathway policy could include requesting municipalities to determine which transport pathways exist within the identified vulnerable areas and develop policies once completed to protect municipal drinking water sources.

Abandoned wells were the only transport pathways identified as a concern for the Long Point Region Source Protection Area surrounding the Belmont wellhead protection area. As such, this is the only transport pathway addressed in this Source Protection Plan.

Monitoring of Moderate and Low Drinking Water Threats

The monitoring of moderate and low drinking water threats must be included in the Source Protection Plans where the Source Protection Committee determines that this is advisable to ensure they do not become significant drinking water threats. Currently, there are no locations within the Lake Erie Source Protection Region where the Source Protection Committee has determined it is advisable to monitor moderate and low threats.

4.1.2 Post Discussion Paper Summary

Spill Prevention, Spill Contingency and Emergency Response Plans along highways, railway lines or shipping lanes

The intent of the Source Protection Plan policies is to ensure that spill prevention plans, contingency plans and emergency response plans are updated for the purpose of protecting drinking water sources.

Municipal emergency services are often the first responders to events that may adversely impact a source of municipal drinking water. Therefore, spill prevention and contingency / response plans should be updated to include maps that clearly detail the vulnerable areas. Quick and effective response to spills could prevent an emergency from affecting a municipal drinking water source.

Additionally, updates to the current spill prevention and contingency / response plans could act as a communication tool for the municipalities and the public and ensure people are aware of the location of wellhead protection areas and knowledgeable regarding the appropriate response in the event of a spill in these areas.

Transport Pathways: Abandoned Wells

To ensure that groundwater vulnerability is not increased due to future transport pathways with respect to an abandoned well, the policies typically support the provincial efforts to encourage the decommissioning of abandoned wells as per O. Reg. 903. Often these wells are located on private property and the cost to properly decommission or upgrade the structure may be prohibitive. A specific transport pathway policy to support ongoing stewardship programs to decommission abandoned wells could reduce the ability of contaminants to enter the groundwater within the vulnerable areas. This may further reduce the vulnerability of an area and the amount of enumerated threats.

Conditions

Conditions are a contamination detected in the drinking water source that exists as a result of past activities that could affect the quality of drinking water. In general, Conditions resulting from past activities are found on former industrial or commercial properties but could also include other sites such as old landfills or former agricultural storage areas. A wide variety of chemicals can be associated with Conditions. Chemicals with high mobility and high toxicity are most likely to result in issues at drinking water wells and intakes or result in off-site contamination. Technical Rules (Ministry of the Environment, Conservation and Parks, 2009, Rule 126) describe a number of conditions that are considered drinking water threats to municipal sources.

The policy tools for Conditions resulting from past activities are more limited than for existing activities. Part IV tools are not available for Conditions sites where the contamination has been caused by a previous activity on the property. However, when the contamination is caused by a current activity, contamination resulting from leaking fuel tanks at an operating gas station for example, Part IV tools may be applicable. With limited tools, it is likely that managing the risk presented by Conditions sites may require the application of several tools in combination and may require progressively refined policies in subsequent Source Protection Plans applied in the long-term.

With limited tools under the *Clean Water Act, 2006* for Conditions sites, it is important to emphasize that the Ministry of the Environment, Conservation and Parks has the legislative

authority to deal with contaminated sites using existing tools available under the *Environmental Protection Act.* Under specified circumstances, these tools may be used when the Ministry has reasonable grounds to believe that contamination is present in the environment and that the contamination in question is causing or may cause an "adverse effect" as defined under the *Environmental Protection Act*.

Prescribed Instruments have limited use. Where an Environmental Compliance Approvals or Permit to Take Water has been issued for a remedial project, there may be an opportunity to modify the instrument to include restrictions such as source control, remediation, monitoring, risk assessment and/or reporting.

Policies could be developed to direct the province to review its Prescribed Instruments for properties with Conditions and where appropriate, apply these source protection conditions to its instruments.

The most powerful tools to address Conditions sites are the existing Ministry of the Environment, Conservation and Parks authorities under the *Environmental Protection Act* and the *Ontario Water Resources Act*. To aid the Ministry of the Environment, Conservation and Parks in enforcing the existing legislation, the Source Protection Committee may develop policies to prioritize Conditions sites in some manner (i.e., in Issues Contributing Areas or within the WHPA-A and B or within IPZ-1 and 2) in order to have the Ministry of the Environment, Conservation and Parks apply its limited resources in a way that would be most effective in aid of source protection. The Ministry of the Environment, Conservation and Parks could also be directed to report on an annual basis to the Source Protection Committee on the status of Conditions sites and the progress made to ensure the sites cease to be significant drinking water threats. The development of policies whereby Conditions sites are identified early and information is shared between the Ministry of the Environment, Conservation and Parks, local municipalities and the Source Protection Committee would aid in the management and monitoring of the Conditions sites. If possible, a policy requiring "Qualified Persons" as defined by the O.Reg. 153/04, to report off site contamination in vulnerable areas where the contamination would result in a significant condition, to the Ministry of the Environment, Conservation and Parks and Source Protection Committee, would enhance identification of Conditions sites and allow for early management and monitoring.

Land use planning has direct application for Conditions resulting from past activities. The Source Protection Plan could develop policies to direct municipalities to amend their Official Plans to require a Records of Site Condition (RSC) under O.Reg. 153/04 to be filed for all Conditions sites whenever a building permit or planning approval is requested. A less restrictive approach would be to require an RSC only when there is a change to a more sensitive land use. Development applications may provide opportunities for the municipality to gain more environmental information on potentially contaminated sites to determine whether an RSC is required (i.e. Require a Phase 1 and/or Phase 2 Environmental Site Assessment as part of the development application for former industrial/commercial properties or other potentially contaminated properties). The RSC process is well established and defines a best management practice for managing contaminated sites. However, the RSC process does not apply to offsite contamination. Since offsite contamination is not dealt with by O.Reg. 153/04, and it is off site contamination that defines a significant Conditions site, the use of a RSC in and of itself, may not address the objective of "ceases to be a significant threat". In some cases, the RSC can be used to facilitate remediation of the subject property where contamination exceeds site-specific cleanup criteria and thereby may address the source of the offsite contamination but may need to be combined with other policy options or tools to address the offsite contamination. In other

cases, Risk Management Plans are used to prevent exposure to the contamination and no remediation of the source may be required.

Incentive programs can be used to promote the cleanup of Conditions sites and to direct actions to specific areas. Programs such as Community Improvement Plans may have applications with incentives such as grants, tax benefits, tax deferrals, or waiving of development charges or municipal fees. Policies could be developed to require the local planning authority to use "Community Improvement Plans" under the *Planning Act* to provide incentives for redevelopment and cleanup of contaminated sites. The Community Improvement Plans could be incorporated into an Official Plan or by other means to designate the areas for which the Community Improvement Plans would apply. The incentives program could also require the use of the RSC process as part of the application for funding.

To be effective for cleanup of Conditions, the incentive program should include as a goal the "remediation of groundwater contamination sources", alongside the goal of beneficial re-use of brownfield sites.

Education and outreach programs can be used to promote source protection policies in general and the identification and remediation of contaminated sites specifically. Policies could be developed to provide educational materials to property owners which define the intake protection zone, wellhead protection areas, the drinking water issues and Issue Contributing Areas. The education materials could contain resource materials on Brownfield re-development and incentives programs. Outreach programs could target typical Conditions site stakeholders such as developers, industrial land owners and real estate lawyers and agents. It should be recognized however that, given the high costs of contaminated site remediation, education and outreach programs are not likely to have a meaningful effect on remediation or mitigation of condition sites, and may have the negative effect of stigmatizing brownfield sites and creating more barriers to the beneficial re-use of brownfield sites.

4.2 Transitional Policies

Unlike most land use related legislation e.g. *Planning Act, Ontario Building Code Act* which tends to focus primarily on regulating future development/activities, the *Clean Water Act, 2006* requires the development of policies to address existing and future occurrences of a significant threat. Therefore, the policy approach for addressing existing threats may vary markedly from the policy approach used to address potential future threats, particularly given that the *Clean Water Act, 2006* puts a much greater onus on the Source Protection Committee to justify the use of certain policy tools, such as Part IV prohibition, for addressing existing threats.

The current guidance being provided as to how the Source Protection Plan would differentiate between existing and future instances of a threat seems to be simply that a significant threat activity existed at the date the Source Protection Plan comes into effect (or at some point prior to that date), with any other circumstance considered to be future. Unfortunately, from a policy and practical implementation perspective, such a distinction may not necessarily be reasonable or appropriate in all situations. Therefore, some form of transitional regulation and/or policy and associated guidance were requested to deal with circumstances that do not fit cleanly within such a definition. In the absence of a provincially consistent approach, transition policies were developed to address these circumstances, such as:

- Potential uses/activities that would constitute a significant threat being proposed through applications for Building Permit or development approval under the *Planning Act* initiated

before the Source Protection Plan comes into effect, or certain policies within the Source Protection Plan come into effect;
- Expansions to and replacement of existing threats, uses permitted under existing zoning without any further approvals, but not necessarily established as of the date of Source Protection Plan comes into effect; and
- Threat policies in the Source Protection Plan that establish a policy implementation date that is later than the effective date of the Source Protection Plan.

4.3 Part IV, Section 59: Restricted Land Use

The intent of these policies is to designate all land uses where activities have been designated for the purposes of Section 57 and/or 58 of the *Clean Water Act, 2006* as Restricted Land Uses under Section 59 of the *Clean Water Act*, *2006*.

These policies were developed to require all applications made under the *Planning Act, Condominium Act* and *Building Code Act,* for areas where activities could be significant drinking water threats, to be reviewed by the Risk Management Official. The Risk Management Official would then advise the applicant if section 57 (prohibition) or section 58 (Risk Management Plans) of the *Clean Water Act, 2006* apply. The policies enable the Risk Management Official to pre-screen applications for land uses and activities identified as a significant drinking water threat within vulnerable areas.

In some cases residential uses have been excluded from this policy to limit the amount of applications the Risk Management Official may be required to review. As most of the drinking water threats would not apply on a residential property, based on the circumstances required, it was determined this was a way to reduce the burden of implementation.

4.4 Implementation and Timing

The timing policies were grouped according to Section 40, 43, 57, 58, 59; under the *Clean Water Act, 2006,* and education and outreach. Each policy grouping was assigned an implementation deadline.

All policies in the Source Protection Plan took effect July 1, 2016 as set by the Minister in the Plan approval letter. Many of the policies were implemented immediately. However, some of the policies will take additional time to fully implement, due to: other legislative requirements and timelines that must be met; timeframes to develop and implement new programs; and budgetary constraints. As such, these policies specify the time in which the policies will take effect so that they are not required to be implemented immediately.

For amended policies, only including but not limited to the addition of new drinking water threats and regulated areas and activities, is the date of posting of the Notice of Approval of the amendment provisions on the Environmental Bill of Rights Registry.

The provincial ministries' request for a three (3) year implementation timeline was included in the policies. However, the Ministry of the Environment, Conservation and Parks provided further comment regarding their desired timeframe for implementation of the Prescribed Instrument tool and Director discretion to determine the timeline for implementation. The request for allowing the Director to determine the timeline for implementation was not included in the Source Protection Plan policies. The policy development team felt that it was not reasonable to allow

this flexibility for the Ministry and not have this discretion available for other implementing bodies.

4.5 Annual Reporting and Monitoring

Monitoring and Annual Reporting policies have been included for each policy which addresses significant drinking water threats. In some instances one monitoring policy may apply to a number of different policies as the same information is required from the monitoring body. The intent of these policies is to provide the Source Protection Authority with the appropriate information to complete the required Annual Progress Report and Supplemental Form.

To gauge the effectiveness of the policies within the Source Protection Plan it is imperative that the Source Protection Authority track the Plan's policy implementation. In most instances this is accomplished by requiring the implementing body to report details of their accomplishments to the Source Protection Authority. This information is provided to the Source Protection Authority before February 1 of each year so that an Annual Progress Report and Supplemental Form can be provided to the Ministry of the Environment, Conservation and Parks as required by the *Clean Water Act, 2006*.

These policies also require the municipalities to amend their Official Plans and Zoning By-laws to ensure conformity with the Source Protection Plan. The purpose of the monitoring policy included is to provide notice as to what was amended/included in the Official Plan and Zoning By-law to implement the Source Protection Plan.

4.6 Incentive Programs

The intent of including policies for incentive programs is to encourage the development and implementation of incentive programs to aid in the implementation of Source Water Protection initiatives. Further, policy developers and the Source Protection Committee felt strongly that the Ministry of the Environment, Conservation and Parks should be requested to fund the Ontario Drinking Water Stewardship Program to assist landowners to manage or cease activities that are identified as significant drinking water threats on their properties.

4.7 Interpretation of the Source Protection Plan

The Lake Erie Region Project Team discussed the need for an Interpretation section in order to assist the reader in understanding what was to be considered the legal part of the Source Protection Plan policy. This included adding additional text to Volume I and II to aid the reader in how to read the policies using the policy applicability mapping and sidebars. It was important to note in the Source Protection Plan policy section (Volume II), that the Source Protection Plan consists of both the written policy text and Schedules.

The interpretation policy is intended to ensure the Schedules are a legal component of the Source Protection Plan. This policy was adapted from similar policies which appear in current Official Planning documents and was included in the Source Protection Plan under Section 29 of O. Reg. 287/07.

The intent of the Schedules in the Source Protection Plan is to identify the areas where the policies of the Source Protection Plan apply. The boundaries for circumstances shown on the Plan Schedules are general and more detailed interpretation of the boundaries rely on the

mapping in the approved Assessment Report and the Specific Circumstances found in the Tables of Drinking Water Threats, *Clean Water Act, 2006*.

The second part of this policy addresses updates to Acts and regulations that may occur at any time. This part allows for these updates to occur without triggering a need for an update to the Source Protection Plan policies which reference specific sections of various legislation.

5.0 THE COUNTY OF OXFORD POLICY RATIONALE

5.1 Municipal Support

To date, the municipalities within the Long Point Region Source Protection Area and the County of Oxford have been given the opportunity to participate in the development of the Source Protection Plan policies.

The County of Oxford has been present at various meetings hosted by the Lake Erie Source Protection Region since late 2010 in order to develop locally implementable policies. These policies have been reviewed by municipal staff and council.

5.2 Financial Considerations

The County's involvement in the development of Source Protection Plan policies has had financial implications for the County in terms of the considerable commitment of policy, technical and support staff to the projects. In the development of the Source Protection Plan policies and, in particular, the selection of the most appropriate policy tools, the potential financial impacts on the County and other implementing bodies and businesses and landowners were key considerations. Although the policy approaches proposed were selected, first and foremost, for being the most effective and appropriate for addressing the various significant drinking water threats, every attempt was also made to minimize the potential financial impacts of implementation on the various stakeholders.

There are direct financial costs to the County and/or local municipalities to fund, train and administer a Risk Management Official and Inspector(s). These positions require on-going administrative and support staff resources to ensure the on-going negotiation, enforcement and monitoring of Risk Management Plans.

The *Clean Water Act, 2006* does make provision for imposing fees associated with the Risk Management Officer/Inspector in order to assist in recovering costs. The imposition of such fees was carefully considered, as they may have a financial impact on landowners and business operators.

Further discussions with neighbouring municipalities (e.g. Norfolk County) or Source Protection Regions where wellhead protection areas from the County extend into their jurisdictions (or vice versa) will also likely be undertaken to review various implementation options and considerations.

The County of Oxford also incurs additional labour and administrative costs to implement the Ontario Building Code requirements for the mandatory onsite sewage inspections.

Municipal staff resources (primarily County, with some potential local) are required to implement education and outreach programs associated with the handling and storage of dense non-aqueous phase liquids (DNAPLs) in household quantities and application of commercial fertilizer in association with residential uses.

There is also a cost to the County and local municipalities to amend Official Plans and Zoning By-laws to implement the Source Protection Plan policies, in terms of staff resources and

Planning Act process requirements e.g. public notice requirements. In addition, annual reporting requirements to the Source Protection Authority require staff resources and have cost implications to the County and/or local municipalities to prepare and administer.

In 2016, Oxford County added a Source Protection charge as part of the water rates to support these financial costs of the program. Future threats, due to development or change in land use, that require a RMP to be negotiated will be charged a fee, implemented through the County's Fees and Charges By-Law.

5.3 The County of Oxford Policy Rationale

With a few exceptions, the general policy approach for the County of Oxford was to manage existing significant threats and prohibit the establishment of new significant threats, where possible and reasonable. Where prohibition was not possible or reasonable, the focus was to adequately manage the threat. Prescribed Instruments were generally used where they were determined to be effective for managing or prohibiting the threat. Part IV tools were used where Prescribed Instruments were not adequate or applicable. Where Section 57 (prohibition) and Section 58 (regulated activities) were used, Section 59 (restricted land use) was used to better integrate these new policy tools and related processes with existing development approval processes. Education and Outreach, Incentives and Land Use Planning policy approaches were generally limited to complementary tools for addressing significant threats, as opposed to being the primary policy approach.

5.3.1 Implementation Timing

Intent:
These policies are intended to provide implementing bodies with timing requirements for enactment of policies.

Rationale:
Except where otherwise stated in the implementation timing policies or specifically set out in the *Clean Water Act, 2006* all policies in the Source Protection Plan come into effect on the date set by the Minister. The policies pertaining to new/future threats will be implemented immediately. However, the majority of the existing threat policies and some of the new/future threat policies will take additional time to fully implement due to other legislative requirements and timelines that must be met, the time required to develop and implement new programs, and budgetary constraints. As such, this policy specifies implementation timing for these various policies, so that they are not required to be implemented immediately upon the Source Protection Plan coming into effect.

The timing policies were grouped according to Section 57(1), 58(1), 59(1), 40(2), 43(2) of the *Clean Water Act, 2006* as well as Education and Outreach. Each policy grouping was assigned an implementation deadline. It was determined that the implementation timelines for Part IV (Section 57, 58 and 59) and Prescribed Instrument policies should generally be as short as possible, while still being achievable for the implementing bodies, as these are the primary policy approaches being used to ensure that the vast majority of prescribed activities in the *Clean Water Act, 2006* cease to be, or do not become significant drinking water threats. One noted exception is Section 58, Risk Management Plan policies for existing threats, where no timeframe has been specified, in order to allow the Risk Management Official the flexibility to establish local priorities for the implementation of RMPs for existing uses, while ensuring that RMPs required for new/future uses are implemented in a reasonable timeframe.

In the case of Education and Outreach policies and Section 40 and 43 policies, longer timeframes have been permitted for implementation, as these policies will likely require the development of new programs.

Notwithstanding the permitted implementation timing, the County of Oxford intends to amend their Official Plan and Zoning By-Laws as soon as possible to address and/or communicate the applicable Source Protection Plan policies. These are the primary documents typically consulted by those making land use decisions and are; therefore, a key tool for communicating which land uses/activities may be prohibited, regulated or restricted by the policies of the Source Protection Plan using other tools, such as Part IV prohibition.

5.3.2 Transition Policies and Related Definitions

Definitions for 'existing' and 'future/new' have been included in the County of Oxford policies to ensure the policies for existing and future significant threat activities are applied as intended. The definitions of existing and future/new were determined to be critical to understanding the specific circumstances under which an existing or future policy would apply to a threat activity, which is particularly important in instances where the policy approaches for 'existing' and 'future/new' activities differ. For example, in most cases, future/new occurrences of a particular significant threat activity are prohibited, while existing occurrences are managed. Generally, if a significant threat activity existed on the date the Source Protection Plan was approved, or existed at some point prior to Plan approval and is clearly intended to be a continuous or recurring activity (e.g. an on-going intermittent activity that is directly associated with the current use of the property, such as the seasonal storage of commercial fertilizer for retail purposes as part of a garden centre), it would be considered existing. The intent is that an activity will not be considered existing unless the proponent can demonstrate to the satisfaction of the implementing body that a particular significant threat activity is existing in accordance with the definition.

It is noted that the Ministry of Environment had suggested alternative wording for the definition of existing that would have recognized any significant threat activity that existed within the 10 year period prior to the date of the Source Protection Plan approval as being existing. However, the County preferred to require that the 'intent to continue' be clearly demonstrated to the satisfaction of the implementing body before a previously existing activity would be considered as existing.

In addition to providing definitions of 'existing' and 'new/future', transitional policies have been included to identify a number of additional circumstances (e.g. stage in the development approval process) under which an activity or threat may be evaluated in accordance with the policies in the Source Protection Plan pertaining to existing threats. This distinction becomes important for significant threat activities for which 'existing' and 'new/future' occurrences are addressed differently by the Source Protection Plan policies. It is particularly important in instances where a 'new/future' significant threat activity would be prohibited, while an existing occurrence of that activity would be allowed to continue with appropriate risk management. Transitional provisions do not exempt a significant threat activity from complying with the policies of the Source Protection Plan, but rather clarify whether 'existing' or 'new/future' policies will apply. Either way, the threat activity will be addressed by Source Protection Plan policies and will need to satisfy the *Clean Water Act, 2006* test of 'ceasing to be or never becoming' a significant drinking water threat. In the limited circumstances where the transitional provision would apply, this would generally mean that this *Clean Water Act, 2006,* test will simply need to be satisfied through management of the activity, rather than its prohibition.

There are two main transition policies included in the County of Oxford Source Protection Plan policies. The first pertains to significant threat activities associated with a development that is being proposed as part of one or more development applications (e.g. zoning, site plan and/or building permit) as of the date the Source Protection Plan takes effect. For example, an applicant has obtained all required local development approvals for a particular use and associated significant threat activity and commenced construction of the related buildings and facilities, but has not yet engaged in the activity when the Source Protection Plan comes into effect. If the significant threat activity associated with the proposed development (e.g. fuel storage as part of a gas station) was prohibited by the Source Protection Plan, that activity would not be able to be engaged in at that location notwithstanding that the proponent may have invested considerable time, money and effort in preparing the material to support the applications and possibly even preparing the site and constructing a building. Therefore, it was determined that it would be fair and reasonable to establish transitional policies to allow a significant threat activity that was clearly intended to be established as part of a formal development proposal prior to the effective date of the Source Protection Plan, to be evaluated as existing for the purposes of applying the Source Protection Plan policies. It was determined that if one or more of these applications had been submitted and deemed to be complete as of the date of Source Protection Plan approval, and the applicant has formally declared that one or more significant threat activities are being proposed as part of the development, that would constitute a sufficient commitment to the establishment of the threat activity to give it transitional consideration. For similar reasons, transitional provisions for significant threat activities proposed through a complete application for a Prescribed Instrument submitted prior to the effective date of the Source Protection Plan were also included.

The second transitional policy pertains to uses and associated activities that could be established on a property in accordance with existing zoning, with no further local development approvals (e.g. *Planning Act* or building permit). A number of prescribed significant threat activities (e.g. storage and handling of commercial fertilizer, pesticides, organic solvents, DNPALs etc.) would not likely require a building permit, or any other form of local approval, to be established on a property, even after the Source Protection Plan comes into effect. This is most likely in cases where there are existing buildings and structures on a property that are suitable for the proposed use (e.g. storage of DNAPLs in an existing industrial building).

For example, a proponent may have purchased or leased a property zoned for industrial purposes and containing existing industrial buildings, with the specific intent of operating a new industry that requires the handling and storage of DNAPLs as an essential part of their process. Given that there would not likely be any local planning or building permit approvals required, it is quite likely that the proponent would not be aware that their operation involves a significant threat activity regulated by the Source Protection Plan policies. This situation is even more likely if local planning documents (Official Plan and Zoning) have not yet been updated to identify the areas and activities that are subject to the Source Protection Plan policies. In such circumstances, it may also be very difficult for the implementing body for a particular policy to confirm whether such activity was established after the date the Source Protection Plan was approved. For these reasons, it was determined that it would be fair and reasonable to give transitional consideration to significant threat activities in such circumstances. However, it also felt important to include the provision that, at such time as a Risk Management Inspector (RMI) has visited the site and documented the threat activities existing at that time, any threat activities not documented as existing will thereafter be considered future. The intent is that once such inspection has occurred, the owner/operator could no longer claim to be unaware of the Source Protection Plan restrictions on significant threat activities and the RMI would have conclusive documentation of the threats that were existing at that point in time. The intent is that

the RMI on-site inspections and existing threat documentation will be conducted as soon as possible after the Source Protection Plans are approved.

Finally, unless otherwise noted in the threat specific policies, it is intended that replacements, modifications and expansions to existing significant threat activities be considered as part of the existing significant threat activity and, therefore, evaluated in accordance with the policies pertaining to existing threats. A specific policy dealing with replacements, modifications and expansions was included in previous versions of the County of Oxford's policies, however, it was removed based on discussions with MOE staff. These discussions concluded that specific policies were not required to allow for replacements, modifications and expansions to existing significant threats, particularly in cases where Part IV or Prescribed Instrument policies were used. For policies where it was determined that specific provisions for replacements, modification and expansions were necessary (such as where land use planning tools were used), wording was added to those policies.

5.3.3 Part IV Policies

Section 57 Prohibition

Intent:
These policies are intended to prohibit activities under Section 57 of the *Clean Water Act, 2006* in vulnerable areas where the activities are or would be a significant drinking water threat.

Rationale:
Based on a review of current and permitted land uses in the areas where the following activities could be a significant drinking water threat, it is believed that prohibition is both reasonable and most effective for addressing a number of the significant drinking water threats in the County of Oxford. Prohibited activities within WHPAs include:

- Establishment, operation, or maintenance of a waste disposal site, within the meaning of Part V of the *Environmental Protection Act,* waste disposal sites that do not require an Environmental Compliance Approval (ECA), with the exception of the following waste threat subcategories:
  - storage of wastes described in clauses (p), (q), (r), (s), (t),or (u) of the definition of hazardous waste, or, in clause (d) of the definition of liquid industrial waste; and
  - the storage of hazardous or liquid industrial waste;
- New or existing application of agricultural source material (WHPA-A)
- New storage of agricultural source material (WHPA-A & B, v-score 10)
- New handling and storage of commercial fertilizer (>2,500 L)
- New handling and storage of pesticides greater than 2,500 kilograms
- New and existing handling, and storage of road salt
- New storage of snow (storage area >1 ha)
- New handling and storage of fuel
- New handling and storage of DNAPLs
- New handling and storage of an organic solvent

<u>Waste disposal sites that do not require an Environmental Compliance Approval (ECA)</u>
Waste disposal sites are generally regulated under the *Environmental Protection Act* and require an Environmental Compliance Approval (ECA); however, not all aspects of such threats (such as PCB storage) are necessarily regulated under Part V of the Environmental Protection Act. Therefore, Section 57 was generally used as a way to address any potential "gaps" in the

Prescribed Instrument for future occurrences of these threats in a manner that would be consistent with prohibition through the Prescribed Instrument. It was determined to be unnecessary to prohibit existing occurrences of this activity where it would be a significant drinking water threat.

Given the limited area and number of properties in the County of Oxford where such activities could be a significant drinking water threat, it was determined that future waste disposal sites could, and therefore should, be located in areas where they are not a significant threat to drinking water sources. No concerns were raised during pre-consultation with respect to prohibiting future occurrences of this activity in areas where it would be a significant threat to drinking water sources. The only exception to the prohibition of new waste threats is for the following waste threat sub-categories, provided an ECA is not required:

- storage of wastes described in clauses (p), (q), (r), (s), (t), or (u) of the definition of hazardous waste, or in clause (d) of the definition of liquid industrial waste; or
- storage of hazardous or liquid industrial waste,

These two exceptions were introduced based on further detail regarding the nature of these threats that was provided by the Ministry of the Environment, Conservation and Parks and Climate Change as part of their review of the plan. Upon review of this information, it was determined that these two threat categories capture both large and small quantities of hazardous and liquid industrial waste that can be generated by a broad range of industrial, commercial and/or institutional operations. Examples of such operations include nursing homes, medical clinics, retailers, print shops and laboratories that may only generate small quantities of such wastes as part of their regular operations (e.g. hardware stores that collect hazardous waste for disposal).

Given that there are a considerable number of industrial, commercial and institutionally zoned properties located within significant threat areas in the County, it was determined that prohibition of such waste threats where an ECA is not required may have the unintentional consequence of constraining or prohibiting many planned land uses that only generate fairly small quantities of such wastes. It should be noted that although such activities are not subject to an ECA, there are other tools prescribed by the Environmental Protection Act that the Ministry of the Environment, Conservation and Parks can use to regulate such activities. Further, it is understood that uses or sites that store larger quantities of such wastes, such as landfills and transfer stations, are generally subject to an ECA. Therefore, the County determined that it would be appropriate to continue to prohibit future threat activities in these two threat sub-categories where an ECA is required.

As part of their review, the Ministry of the Environment, Conservation and Parks and Climate Change had also suggested that the County consider management versus prohibition for the storage of polychlorinated biphenyls (PCB) waste threat sub-category. However, given that such threats can only be significant if they are located below grade or in an outdoor area and not in a container, it was the opinion of the County that prohibition remains a reasonable and appropriate approach for future occurrences of such threat activities, as it would simply mean that they would need to be located above grade and in an indoor area or in a container.

<u>The application and Storage of Agricultural Source Material (ASM)</u>
While the *Nutrient Management Act, 2002 (*NMA) prohibits the application and storage of ASM within 100 m of a well (WHPA-A) for farms regulated under the NMA, it does not establish similar prohibitions for WHPA-B with a vulnerability score of 10. The NMA's use of prohibition

within 100 m from a well pre-dated the establishment of WHPA travel time based zones and vulnerability scoring and ICAs for Nitrates which provide well specific information on which to base local policy decisions.

Under the *Clean Water Act, 2006*, the tables of drinking water threats identify the risk and level of threat posed by this activity as being the same within all areas with a vulnerability score of 10. In fact, areas in WHPA-B with a vulnerability score of 10 have a high intrinsic vulnerability, while many of the WHPA-As in the Source Protection Region are moderate or low intrinsic vulnerability. As such, areas in WHPA-B with a vulnerability score of 10 may be considered more vulnerable than many WHPA-As, even though they have the same vulnerability score.

In the case of the future storage of ASM, it was determined that the most effective and consistent policy approach would be to prohibit within both the WHPA-A (as per the NMA) and the WHPA-B, with a vulnerability score of 10 (where storage of ASM is not currently prohibited on farms regulated under the NMA). This approach is keeping with the County of Oxford's overall policy approach, which is generally to prohibit new/future significant threats from becoming established where achievable and reasonable. As the NMA does not apply to all agricultural operations, Part IV prohibition was determined to be the most appropriate tool to prohibit this activity, as it would ensure that all agricultural operations undertaking this activity within such significant threat areas are treated consistently.

The storage of ASM is also a significant threat in the nitrate ICAs in the County of Oxford. However, given the large area and number of properties affected and the more limited opportunity to locate such facilities outside of a vulnerable area on a number of the agricultural properties located within the ICA, it was determined to be more reasonable to manage future storage of ASM through an RMP in an ICA, in areas outside of a WHPA-A and WHPA-B with a vulnerability score of 10. It is intended that the RMP process would be used to direct ASM storage facilities to be located on a portion of a property outside of a vulnerable area, wherever possible.

Prohibition was also deemed to be a reasonable approach in the County of Oxford, given the location of existing livestock barns and other farm buildings/structures, the limited area affected and opportunities to locate new facilities outside of significant threat areas. Furthermore, the establishment of ASM storage facilities in the WHPA-A and B is already prohibited by the water quality policies in the County Official Plan, so the proposed Source Protection Plan policies will actually reduce the area where such significant threat activities are currently prohibited.

The County of Oxford also closely considered the potential impacts of prohibiting the existing and future application of ASM to land in both the WHPA-A (as per the NMA) and the WHPA-B, with a vulnerability score of 10 and in nitrate ICAs. However, it was determined that such an approach may have a substantial impact on existing agricultural operations, as this significant threat activity was identified as existing, or likely to be existing, on all agricultural properties located within significant threat areas in the County of Oxford. For this reason, it was also determined that it would be unlikely that application of ASM to land would be considered a 'new/future' activity on affected properties in the County of Oxford context. Therefore, the County of Oxford chose to apply Part IV prohibition to existing and future application of ASM only in the WHPA-A, as this is consistent with the requirements for operations regulated under the NMA. As the NMA does not apply to all agricultural operations, Part IV prohibition was determined to be the most appropriate tool to prohibit this activity, as it would ensure that all agricultural operations undertaking this activity within significant threat areas are treated consistently.

Handling and storage of commercial fertilizer

Section 57 was determined to be the most appropriate and effective approach for addressing the handling and storage of commercial fertilizer in quantities greater than 2,500 kilograms, which is the minimum size threshold for being a significant threat in an WHPA. This approach provides the greatest certainty for the protection of municipal drinking water sources, by ensuring no additional significant drinking water threats of that type and size can be established. It was also determined to be a reasonable approach, given that the land area affected is relatively small and alternate locations could be found to locate new facilities.

However, it was determined that Section 57 would not be the most appropriate approach for handling and storage of commercial fertilizer in quantities less than or equal to 2,500 kilograms as they can be a significant threat in an ICA for Nitrates at any quantity. Prohibiting such threats would impact a considerably larger area and number of properties than just those contained in the WHPA-A and B. As well, the absence of any minimum size threshold may create unnecessary hardship for existing uses planning to handle or store smaller quantities of commercial fertilizer within such areas in the future. As such, it was determined that any future handling or storage of such smaller quantities of commercial fertilizer could be adequately managed through a Risk Management Plan.

Handling and storage of pesticides (greater than 2500 kg or 2500 Litres)

While it was deemed to be unreasonable to prohibit existing storage facilities, it was also determined that new activities should be directed to areas where the risks are not significant. It was determined that Section 57 was the most appropriate and effective approach, as it provides the greatest certainty for protection of municipal drinking water sources by ensuring no additional significant drinking water threats related to this activity can be established.

It was also determined to be reasonable, as the areas where this activity could be a significant threat are relatively small and there generally appear to be opportunities to locate new facilities in alternative locations.

Handling and storage of road salt

Prohibition of both future and existing salt handling and storage through Section 57 was determined to be the most appropriate approach because no existing road salt storage threats were identified, or likely, within the County of Oxford. Furthermore, according to the Tables of Drinking Water Threats, at or above grade, only larger quantities of salt stored in a manner where it is exposed to precipitation or runoff is considered a significant threat.

Therefore, prohibition of the significant threat was determined to be the most appropriate policy approach for this activity, as the activity can still continue, or be established, provided that it is constructed in a manner which would not be a significant drinking water threat (not exposed to precipitation or runoff).

Handling and Storage of Snow

The County of Oxford chose to use Risk Management Plans to address existing occurrences of this activity, as no existing occurrences of this activity were identified and, even if there were, it would not be appropriate to prohibit such activities. However, given the threat circumstances e.g. size of storage area (>1 ha) at or above grade and existing and planned land uses in significant threat areas, it was determined to be very unlikely that new snow storage activities that would be considered significant threat activities would be proposed within a is enacted comes into effect WHPA-A or WHPA-B with a vulnerability score of 10 (that are not located

within an ICA for Nitrates) in the County of Oxford. Based on the threat circumstances, the limited area potentially affected and the ample opportunities to locate new facilities outside of significant threat areas, it was determined that Section 57 was the most appropriate approach for future threats in these vulnerable areas, as it provides the greatest certainty for protection of municipal drinking water sources, by ensuring no additional significant drinking water threats related to this activity are established.

However, the storage of snow is also a significant threat in a nitrate ICA regardless of the storage area size. Given, the low storage area size threshold (0.01 ha) to be a significant threat in an ICA and the considerably larger area and number of properties affected, it was determined that it would be more appropriate and reasonable to simply manage future snow storage facilities of an area between 0.01 ha and 1 ha through an Risk Management Plan, where they are a significant threat. It is intended that the Risk Management Plan process would be used to encourage such snow storage facilities to be located on a portion of a property outside of a vulnerable area wherever possible.

Handling and storage of fuel

The circumstances for this activity in the Tables of Drinking Water Threats indicate that for fuel storage less than 2500 Litres (L), storage above grade is not a significant threat. Therefore, new fuel storage below this size (e.g. residential heating oil storage) could still be located at, or above grade, while fuel storage larger than 2500 L would be prohibited below, at, or above grade in significant threat areas. Given the number of potential existing significant threats associated with this activity, it was not deemed appropriate to prohibit existing storage of fuel. However, Section 57 was determined to be the most appropriate approach for addressing future threats, as it provides the greatest certainty for protection of municipal drinking water sources, by ensuring no additional significant drinking water threats related to this activity are established. Furthermore, it was deemed to be reasonable, given that the areas where this activity would be a significant threat to drinking water are relatively small and there are many other locations where this activity could be undertaken without being a significant threat to drinking water.

Handling and storage of dense non-aqueous phase liquids (DNAPLs)

Dense non-aqueous phase liquids (DNAPLs) are particularly persistent and toxic chemicals. The *Clean Water Act, 2006* establishes that any quantity of the specified chemicals that are considered DNAPLs is a significant threat in WHPA-A, B and C regardless of vulnerability score. Section 57 was used to prohibit new/future occurrences of this activity in the most vulnerable areas (WHPA-A and B with a vulnerability score of 10), with the exception of DNAPLs in quantities typical of household use in association with residential uses.

The approach was deemed to be more reasonable than prohibition over the entire significant threat area (WHPA-A, B and C), as such a broad prohibition could potentially have resulted in substantial impacts on economic development opportunities in some areas, given the large number of industrial and commercial properties affected. This prohibition was only applied to future activities, as it was felt that prohibition of existing could result in undue hardship for existing operations. In recognition of these potential impacts, Section 58 (Risk Management Plans) was applied within the remainder of the WHPA areas where this activity is a significant threat. While prohibition of existing activities was not relied upon to eliminate the threat, this does not limit the Risk Management Official/Inspector from discussing opportunities for using alternatives to the prescribed DNAPL, or relocating to an alternative location as part of the RMP negotiation process.

Handling and storage of organic solvents

The Tables of Drinking Water Threats identify the quantities (e.g. 25L) above which the handling and storage of prescribed organic solvents are a significant threat to drinking water sources. As well, only the organic solvents specifically identified in the tables are significant drinking water threats. As with many of the other activities that the County of Oxford chose to prohibit, it was determined that prohibition of existing handling and storage was not necessary or appropriate. However, Section 57 was determined to be the most appropriate approach for addressing future threats, as it provides the greatest certainty for protection of municipal drinking water sources, by ensuring no additional significant drinking water threats related to this activity are established. Furthermore, it was deemed to be reasonable, given that the areas where this activity would be a significant threat to drinking water are relatively small and there are ample other locations where this activity could be undertaken without being a significant threat to drinking water. As well, there may be alternative chemicals or processes available that would not be a significant drinking water threat if located in a significant threat area.

Section 58 Risk Management Plans

Intent:

The development of Risk Management Plans (RMP) under Section 58 of the *Clean Water Act, 2006* was used to allow for the management of activities that cannot be managed effectively through land use planning or existing Prescribed Instruments.

Rationale:

Risk Management Plans, in accordance with Section 58 of the *Clean Water Act, 2006* are used as a tool to manage existing and future drinking water threats. This tool is used to "fill the gap" where a land use planning policy or other existing legislation cannot adequately regulate a significant drinking water threat. This tool is particularly effective in dealing with existing significant drinking water threat activities, where prohibition would likely impose undue hardship on property owners, businesses, etc. Risk Management Plans also provide an opportunity to work with property owners/proponents to manage a threat.

The RMP process also serves as a site specific education and outreach opportunity by allowing the Risk Management Official (RMO) to comprehensively review and discuss potential alternatives (e.g. processes, substances or locations) that might eliminate the significant threat, as well as best management practices and any available local incentives with the person undertaking the activity.

The threats that require a Risk Management Plan include:

- Establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the *Environmental Protection Act*: existing waste disposal site that is not subject to an Environmental Compliance Approval or a new waste disposal site that is not subject to an Environmental Compliance Approval and falls within one of the two following waste threat sub-categories:
  - storage of wastes described in clauses (p), (q), (r), (s), (t), or (u) of the definition of hazardous waste, or in clause (d) of the definition of liquid industrial waste; or
  - storage of hazardous or liquid industrial waste;
- New or existing application of agricultural source material (outside of a WHPA-A)
- Existing storage of agricultural source material and new storage of agricultural source material in an ICA (Nit), but outside of a WHPA-A or B, with a v-score of 10

- New or existing application of commercial fertilizer
- Existing handling and storage of commercial fertilizer and new handling and storage of commercial fertilizer <=2,500 L (except for residential use)
- New or existing application of pesticides
- New (less than or equal to 2,500 kg) or existing (any quantity) handling and storage of pesticides
- Existing storage of snow and new storage of snow (storage area between 0.01 ha and 1 ha)
- Existing handling and storage of fuel and new handling and storage of fuel required for back-up generators at municipal supply wells
- New or existing handling and storage of DNAPLs (except for quantities typical of household use in association with residential uses)
- Existing handling and storage of organic solvents
- New management of runoff that contains chemicals used in the de-icing of aircraft
- New and existing use of land as livestock grazing or pasturing, outdoor confinement area or farm animal yard

Waste activities that do not require an Environmental Compliance Approval

This policy ensures that existing significant threat activities that are part of the waste disposal site circumstances which do not require an Environmental Compliance Approval, and new significant waste disposal site threats related to the storage of hazardous waste or storage of hazardous or liquid industrial waste that do not require an Environmental Compliance Approval, are adequately managed to ensure they do not become a significant drinking water threat. Examples of such threats include auto-salvaging facilities and hardware stores that collect hazardous waste for disposal. Although there may be financial and staffing implications for the implementing body related to the development and implementation of Risk Management Plans to manage such waste disposal sites, it was also determined to be the best option for managing these existing threats. This determination was based on the understanding that the waste disposal site activities that are not subject to an Environmental Compliance Approval are generally smaller scale and may be associated with the regular activities of a broad range of existing and future industrial, commercial and/or institutional operations that are currently permitted by existing zoning in a number of the County's significant threat areas. Further, although such waste disposal sites may not be subject to an Environmental Compliance Approval, they are generally still regulated by the Ministry of the Environment, Conservation and Parks, Conservation and Parksthrough other tools (e.g. Director's orders, hazardous waste information network etc.). It is anticipated that these other tools may assist in informing the development of the Risk Management Plan for such activities.

The application and storage of Agricultural Source Material (ASM)

Risk Management Plans (RMPs) were determined to be the most consistent, appropriate and effective means of regulating the application of ASM in significant threat areas outside of the WHPA-A, including in an Issue Contributing Area (ICA) and existing storage of ASM in all significant threat areas, even in instances where such activities would be subject to a Prescribed Instrument issued under the NMA. RMPs were also determined to be the most appropriate tool for regulating the new storage of ASM in an ICA for Nitrates that is located outside of WHPA-A and WHPA-B with a vulnerability score of 10. Oxford County staff are comfortable with the policy approach and the number of properties impacted.

Using Section 58 policies ensures that all properties and operations associated with such activities in significant threat areas are subject to the same review process and monitoring and

management requirements. As well, properties containing such significant threat activities are also likely to contain other significant threats that would require a RMP. Therefore, the use of RMPs and other Part IV tools to manage the various threats on a property allows for those threat activities to be dealt with consistently by the Risk Management Official (i.e., review processes and monitoring and management requirements). Use of these tools also ensures the Risk Management Official (RMO) is aware of all threats on a property and how they are being managed and provides an opportunity to discuss alternative locations that might eliminate the significant threat, best management practices and any local education and outreach or incentive programs that might be available to assist in managing those threats.

It is intended that the principles of the NMA, and any Prescribed Instruments issued under that Act, would serve as the general basis for the development of an RMP for such significant drinking water threats and it is anticipated that the RMO will work closely with the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) staff to determine how such principles should be applied. The RMP will also include best management practices around nutrient application and storage. The County is aware that the Nutrient Management Act (NMA, 2002) prohibits the land application of nutrients (including commercial fertilizer) within the WHPA-A for those farming applications regulated (phased in) under the NMA and that risk management officials and inspectors will be made aware of and trained on these requirements.

Oxford County has retained a professional agronomist firm to assist with developing reasonable content and risk management measures to manage agricultural-related significant drinking water threats. Funding through the County's Source Protection incentive fund will be available to impacted property owners to meet the requirements of the RMP. If properties have existing regulatory approvals for significant threat activities, such as a Nutrient Management Plan or Strategy, they may be required to review and update those instruments to account for the risk to source water rather than implementing an RMP.

<u>The application, handling and storage of Pesticide</u>
Section 58 was determined to be the most appropriate approach for the application of pesticides and storage of smaller quantities of pesticides, as there are risk management measures which can adequately manage the risks such that the activity ceases to be a significant threat. As well, properties containing such significant threat activities are also likely to contain other significant threats that would require a Risk Management Plan (RMP). Therefore, the RMP process would allow for all threats on a property to be dealt with consistently by the Risk Management Official.

Section 58 was used for existing handling and storage of pesticides at a facility where they are manufactured, distributed or processed to allow activities to only be undertaken when the risk is managed through a RMP. While prohibition of future activities where the volume handled or stored would make it a significant threat was determined to be necessary to manage the risks associated with such pesticide threats, prohibition of existing activities was not deemed to be appropriate and, therefore, management through Section 58 was selected.

Risk management measures have not been specified in these policies to provide flexibility for the RMO to determine how best to protect municipal drinking water sources. It is intended that potential opportunities to switch to alternative pesticides or to relocate storage outside of significant threat areas would also be discussed as part of the RMP process.

<u>The application, handling, and storage of Commercial Fertilizer</u>
Risk Management Plans (RMPs) were determined to be the most effective and appropriate means of regulating the application of commercial fertilizer, the existing handling and storage of

commercial fertilizers in significant threat areas, and the new handling and storage of commercial fertilizer less than or equal to 2,500 kilograms, even in instances where such activities may be subject to a Prescribed Instrument issued under the NMA. Using Section 58 policies would ensure that all properties and operations associated with such activities in significant threat areas are subject to the same review process and monitoring and management requirements.

As well, properties containing such significant threat activities are also likely to contain other significant threats that would require a RMP. Therefore, the RMP process would allow for all threats on a property to be dealt with through a single, consistent process and provide an opportunity for the RMO to discuss any local education and outreach or incentive programs that might be available to assist in managing those threats. It is intended that the principles of the NMA would serve as the general basis for the development of an RMP for the application of commercial fertilizer.

The storage of Snow

This activity can only be a significant drinking water threat if the storage of snow is below grade or, at or above grade if the area where the snow is stored is more than 1 ha, or the storage of snow is in an Issue Contributing Area for Nitrates. The Assessment Report did not identify any existing threats in the County of Oxford, nor are any suspected. Although unlikely, if an existing occurrence of this threat activity were to be discovered in a significant threat area outside of an ICA for Nitrates, it was determined that a Risk Management Plan would be sufficient to adequately manage the risk such that the activity ceases to be a significant threat. Given that the storage of snow can be a significant threat in an ICA for Nitrates with a much smaller storage area than in other significant threat areas, it was also determined to be appropriate to use a Risk Management Plan to manage new snow storage and disposal sites less than 1 ha in area, where they would be a significant drinking water threat. The County of Oxford chose to use Part IV prohibition for new snow storage and disposal sites greater than 1 ha in area for the reasons outlined under Part IV prohibition policy approaches section.

The handling and storage of Fuel

Although prohibition was determined to be the most appropriate approach for addressing future handling and storage of fuel for the reasons outlined under the Part IV prohibition rationale, given the number of potential existing occurrences of this activity in the County of Oxford, it was determined that a Risk Management Plan was the more appropriate approach for addressing existing threats. This approach was also selected to provide the necessary flexibility to allow for new fuel storage required for back-up generators at municipal wells (which are required for emergency purposes) provided appropriate risk management measures are in place. The Risk Management Plan process can be used to ensure compliance with the requirements of the *Technical Standards and Safety Act* and any other requirements deemed necessary by the RMO to protect municipal drinking water sources.

The handling and storage of a Dense Non-Aqueous Phase Liquid (DNAPLs)

DNAPLs are a significant threat in WHPA-A, B and C regardless of vulnerability scores, therefore a large area and number of properties is potentially affected by any applicable policies. While it was determined to be important to prohibit the establishment of new DNAPL threat activities in the highest risk areas (WHPA-A and B with a vulnerability score of 10), it was not deemed to be appropriate to apply this prohibition to existing activities or to extend it to all areas where this activity would be a significant threat, due to the large area affected and the potential impact on existing and planned employment uses and associated economic development opportunities.

Although the use of DNAPLs may potentially be associated with residential uses, as the chemicals may be found within many commonly used products, the quantities are likely to be small and manageable through an education and outreach program focused on the safe storage, handling and disposal of these chemicals. However, existing DNAPL handling and storage and future DNAPL handling and storage outside of WHPA-A & B with a vulnerability score of 10 and involving quantities and concentrations of DNAPLs that, in the opinion of the RMO exceed that typical of household use, would still be designated for the purposes of Section 58 and require the establishment of a Risk Management Plan. Specific quantities, concentrations, or risk management measures were not identified in the policies to allow the RMO the flexibility to effectively manage the risks and focus on the instances of this threat that pose the greatest risk to the municipal drinking water systems.

The handling and storage of Organic Solvents

Section 58 was used for existing handling and storage of organic solvents to allow activities to only be undertaken when the risks can be adequately managed through a RMP. While prohibition of future activities was determined to be the most appropriate approach to address new occurrences of this threat for the reasons outlined under the Section 57 policies, prohibition of existing activities was not deemed to be necessary and therefore, management through the use of S. 58 was selected.

Only specific organic solvents, as listed in the Table of Drinking Water Threats under the *Clean Water Act, 2006* are significant drinking water threats. Alternatives to those chemicals listed may be available and the Risk Management Plan process can be used to discuss the potential use of different products and/or management of how existing organic solvents are handled and stored (e.g. moving storage above grade, improved containment, spill measures put in place, etc.)

The management of runoff that contains chemicals used in the De-icing of Aircraft

There were no existing threats associated with aircraft de-icing noted in the Assessment Report for the County of Oxford. Further, the potential for an airport to be constructed that is of a size and in a location that would be considered a significant drinking water threat is minimal. Therefore, the County of Oxford was confident that a policy to address existing occurrences of this threat activity was not required. However a policy was developed to address future occurrences of this threat to encompass the unlikely development of new airports or the reclassification of an existing airport's threat level due to changes in passenger service. While airports and related activities are regulated by the Federal government, it was determined that municipalities should work collaboratively with airport authorities to ensure that activities associated with this drinking water threat never become significant. A Risk Management Plan is a formalization of the collaborative effort between the airport authority and the Risk Management Official.

The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm animal yard

Although outdoor confinement areas are regulated by the *Nutrient Management Act*, not all farms contained within significant threat areas are subject to the *Nutrient Management Act* and, therefore, required to have Nutrient Management Plans and/or Strategies. In addition, the *Nutrient Management Act* does not regulate livestock grazing or pasturing activities. Therefore, it was determined that Risk Management Plans (RMPs) would be the most consistent, appropriate and effective means of addressing this threat.

Using Section 58 policies would ensure that all properties and operations associated with such activities in significant threat areas are subject to the same review process and monitoring and management requirements. As well, properties containing such significant threat activities are also likely to contain other significant threats that would require a RMP. Therefore, the RMP process would allow for all threats on a property to be dealt with through a single, consistent process and provide an opportunity for the Risk Management Official (RMO) to discuss any local education and outreach or incentive programs that might be available to assist in managing those threats. It is intended that the principles of the NMA would serve as the general basis for the development of an RMP for such significant drinking water threats and it is anticipated that the RMO will work closely with OMAFRA staff to determine how best to apply such principles.

Direct prohibition of future occurrences of this activity was not selected as the preferred approach given the difficulty of differentiating between existing and future occurrences of these activities, which typically do not require a building permit or other development approvals. However, given that no existing outdoor confinement areas have been identified in the County and there are few, if any, existing livestock barns located within significant threat areas, it is intended that the RMP process will be used to achieve location or relocation of such activities outside of significant threat areas in most cases.

Section 59 Restricted Land Use

Intent:
To designate all land uses, with the exception of residential land uses, in areas where significant threat activities may be designated for the purposes of Section 57 and/or 58 of the *Clean Water Act, 2006* (WHPA-A, B and C), as Restricted Land uses under Section 59 of the *Clean Water Act, 2006* to help ensure that any applicable Part IV tools are considered early in the development process.

The intent of these policies is to 'flag' new *Planning Act* and building permit applications that could result in the establishment of a new significant drinking water threat subject to Part IV policies. This 'flagging' process is intended to ensure that applicants proposing development that may result in the establishment of a significant threat and the planning and building permit approval authorities are made aware of applicable Source Protection Plan policies prior to development approval. This is beneficial to both the municipality and the proponent because it would reduce the need to initiate enforcement of prohibition or risk management measures after a building or land use associated with a significant threat activity has been established. Where Section 58 policies would apply to the activity, the Section 59 policies would require the proponent to negotiate or otherwise have their RMP established prior to proceeding with the application. Being aware of the RMP requirements at the outset may also make it easier for the proponent to re-locate the significant threat activity on the site, or undertake other adjustments to the building or facility design/layout or associated processes, to address RMP requirements that may have been more difficult or costly if the activity was already established.

This process also helps to ensure significant threat activities that would be prohibited, or require the establishment of a Risk Management Plan, are not inadvertently approved, or allowed to establish as a result of a local development approval process, in contravention of the Source Protection Plan policies.

Rationale:
These policies were developed to require all applications under the *Planning Act,* and *Ontario Building Code Act*, with the exception of those associated with residential uses, within areas where activities are, or would be a significant drinking water threat to be reviewed by the Risk Management Official, who would then advise the applicant/landowner if Section 57 (prohibition) or Section 58 (Risk Management Plans) of the *Clean Water Act, 2006* apply.

Residential land uses were excluded from the restricted land use policy as they are unlikely to be associated with new significant drinking water threat activities that would be prohibited or require Risk Management Plans. As well, given the number of residential properties located within significant threat areas, the volume of residential building permits that the RMO may have been required to review could have been considerable, with very little potential of involving threat activities that would be subject to Section 57 or 58 policies.

It was also determined that the Section 59 review of applications for residential uses may have placed unnecessary pressure on limited RMO/RMI staffing resources, resulting in potential delays in development approvals and implementation of other Part IV Source Protection Plan policies (e.g. RMP's for existing activities), while providing little to no implementation benefit.

The only significant threats that would generally be associated with residential land use would be on-site sewage systems, application of commercial fertilizer and fuel storage. On-site sewage systems and commercial fertilizer application in Oxford are not dealt with by Section 57 or 58 policies, so Section 59 would not apply. Furthermore, Section 59 screening was not seen to be necessary for fuel storage on residential properties, as installation of new underground fuel storage tanks, which would require a Risk Management Plan, was deemed to be unlikely.

The policies also enable the Risk Management Official to screen applications for activities identified as a significant drinking water threat within vulnerable areas. The policies also contain provisions to allow for the Risk Management Official to issue written guidance that would allow for a Planning Authority or Building Official to make a determination that the development proposed by a particular *Planning Act* or Building Permit application is not designated for the purposes of Section 59, under specified circumstances. The intent is to allow for the Restricted Land Use process to be refined over time, so that only those applications that are likely to be associated with, or affect, a significant threat activity would require review by the Risk Management Official (RMO). It is also anticipated that the RMO will establish requirements for the provision of additional documentation or detailed information (e.g. specific nature of the land use and associated activities and location on the site) to assist in the screening and review of development proposals.

5.3.4 Prescribed Instruments

Ministry of the Environment, Conservation and Parks: Prohibit Environmental Compliance Approvals

Intent:
The Ministry of the Environment, Conservation and Parks is required to prohibit activities within the Environmental Compliance Approval (ECA) process where they would be significant drinking water threats under Subsection 39 of the *Clean Water Act, 2006*.

Rationale:
New waste disposal site that requires an Environmental Compliance Approval (ECA)

Although the ECA process is considered to be rigorous, prohibition of these activities through the ECA process was determined to be the most appropriate approach for the same reasons as outlined in the rationale provided for the uses of Section 57 prohibition for future occurrences of these threats that are not subject to an ECA.

New onsite sewage system requiring an Environmental Compliance Approval: new sewage treatment plant, sewage treatment plant effluent, stormwater management facility discharge
Given that the area affected by these policies is relatively small, the fact that a number of these threats (sewage treatment plant effluent and stormwater management facility discharge) are only significant under specific circumstances and that there is ample area where these activities could be located without being considered a significant threat, the prohibition of these activities through the ECA process was determined not to have a significant impact on the municipality or on future development opportunities in most cases. Further, the establishment of new onsite sewage systems is already prohibited in the WHPA-A and B by the water quality policies contained in the County of Oxford's Official Plan. The one exception to prohibition through the ECA process is for stormwater management facility discharge for a facility with a drainage area less than 100 ha and predominately rural, residential and/or agricultural land uses. Given that these facilities can be significant threats in an ICA for nitrates regardless of the drainage area of the facility and the ICAs in the County affect a substantially larger area and number of properties than the WHPA-A & B with a vulnerability score of 10, it was determined that it would be more reasonable to manage future occurrences of such threats through the ECA process. It should be noted that the areas affected by the ICAs for nitrates in the County area all predominately comprised of rural, residential and/or agricultural land uses, which is why the policy distinction for such facilities in an ICA only pertains to those land uses.

Ministry of the Environment, Conservation and Parks: Review and Amend Environmental Compliance Approvals
Ministry of Agriculture, Food and Rural Affairs: Review and Amend Non-Agricultural Source Material Plans

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Intent:
That the Ministry of the Environment, Conservation and Parks and the Ministry of Agriculture, Food and Rural Affairs are required to review activities that are subject to Environmental Compliance Approvals and Non-Agricultural Source Material (NASM) plans (in accordance with the *Nutrient Management Act*), respectively, where such activities would be significant drinking water threats under Subsection 39 of the *Clean Water Act, 2006*.

Environmental Compliance Approvals and NASM plans are not to be approved unless terms and conditions are imposed that, when implemented, will ensure that the activity ceases to be or never becomes a significant drinking water threat or, where specified, the activity is prohibited where it is or would be a significant threat.

Rationale:
Policies using the Prescribed Instrument tool rely on the authorities of the Ministry of the Environment, Conservation and Parks and the Ministry of Agriculture, Food and Rural Affairs to protect drinking water sources through their respective approval processes. It is generally a priority of the County to use existing regulatory tools where available and effective for addressing a particular threat activity. Environmental Compliance Approvals have been a longstanding requirement for waste disposal and sewage, and the criteria used to assess these Certificates are thorough. Similarly, NASM plans under the *Nutrient Management Act* have

comprehensive requirements and criteria that are used to address NASM. Requiring these Ministries to review Environmental Compliance Approvals and NASM plans in light of the circumstances that make the activity a significant drinking water threat will serve to ensure that terms and conditions are added to these approvals, where necessary.

Ministry of Agriculture, Food and Rural Affairs and/orMinistry of the Environment, Conservation and Parks: Prohibit Application or New Storage of Non-Agricultural Source Material through NASM Plans/ECAs

Intent:
The Ministry of the Environment, Conservation and Parks or the Ministry of Agriculture, Food and Rural Affairs, as applicable, are required to prohibit the existing and future application of NASM and new storage of NASM through the Environmental Compliance Approval process or the Nutrient Management Act, as applicable, where such activities would be significant drinking water threat under Subsection 39 of the *Clean Water Act, 2006*.

Rationale:
As the application (both existing and future) or new storage of non-agricultural source material appears to be comprehensively regulated by the applicable Prescribed Instruments (no gaps or exceptions were identified), the County of Oxford determined that these existing regulatory tools were the most appropriate for achieving the desired prohibition of such activities where they would be a significant threat.

The Tables of Drinking Water Threats identify the circumstances and vulnerable areas where these activities are a significant threat to drinking water sources. While the NMA prohibits the application or storage of NASM within 100 m of a well (WHPA-A), the NMA does not require a similar prohibition for WHPA-B with a vulnerability score of 10 or an Issue Contributing Area (ICA) for nitrates. The NMA's use of prohibition within 100 m from a well pre-dated the establishment of WHPA travel time based zones and vulnerability scoring and Issue Contributing Areas for nitrates, which provide well specific information upon which to base local Source Protection policy decisions.

Under the *Clean Water Act, 2006*, the Tables of Drinking Water Threats identify that the risk and level of threat posed by this activity is the same within areas with a vulnerability score of 10. In fact, areas in WHPA-B with a vulnerability score of 10 have a high intrinsic vulnerability, while many of the WHPA-As actually have moderate or low intrinsic vulnerability. As such, areas in WHPA-B with a vulnerability score of 10 may be considered more vulnerable than many WHPA-As, even though they have the same vulnerability score.

Therefore, based on the *Clean Water Act, 2006* science, it was determined that the most appropriate and consistent policy approach would be to prohibit these significant threat activities within both the WHPA-A, (as per the NMA) and within the WHPA-B with a vulnerability score of 10 and in an ICAs for nitrates (where application of NASM is not currently prohibited under the NMA). The same policy approach has been applied to both existing and future occurrences of this threat, given that NASM application does not occur on an on-going basis on the same parcel of land and, therefore, in effect there can be no application of NASM that would be considered 'existing' under the County of Oxford definition.

Given that existing storage of NASM was not identified, or suspected, in significant threat areas in the County of Oxford, prohibition of existing NASM storage was not deemed to be necessary.

However, it was determined that managing future storage of NASM was not appropriate, when prohibition of future NASM storage was both a reasonable and more precautionary policy approach, particularly given the limited area of agricultural land that would be affected within the County of Oxford, much of which is owned by the County of Oxford. Prohibition prevents the establishment of new significant threats of this type and therefore, provides the most certainty in achieving the overall goal of protecting municipal drinking water systems.

Ministry of Agriculture, Food and Rural Affairs and/orMinistry of the Environment, Conservation and Parks: Review and Amend Existing Non-Agricultural Source Material Plans

Intent:
The Ministry of the Environment, Conservation and Parks or Ministry of Agriculture, Food and Rural Affairs, as applicable, are required to review and, if necessary, amend Environmental Compliance Approvals or Non-Agricultural Source Material (NASM) Plans to ensure the existing storage of NASM is managed such that it ceases to be a significant drinking water threat.

Rationale:
As the storage of non-agricultural source material appears to be comprehensively regulated by the applicable Prescribed Instruments (no gaps or exceptions were identified), the County of Oxford determined that these existing regulatory tools were the most appropriate for managing such activities where they would be a significant threat. Although no existing NASM storage facilities were identified, or suspected, in significant threat areas in the County of Oxford, given the fact that such facilities may involve considerable investment/infrastructure, it was determined that it would be more reasonable to manage these existing facilities in the unlikely event one were to be identified prior to approval of the Source Protection Plan.

5.3.5 Land Use Planning

Management / Regulation through *Planning Act*

Intent:
The general land use planning policies are intended to ensure local planning documents are amended to include information that will serve as a resource for identifying and communicating the areas and activities that are regulated by the Source Protection Plan to those considering or making land use decisions. Further the policies require Official Plans and Zoning By-laws, as applicable, to be amended to conform with the significant threat policies set out in the Source Protection Plan, which in the case of the County of Oxford pertains to the prohibition of development on onsite sewage systems regulated by the Ontario Building Code through land use planning.

Rationale:
The purpose of these policies is to provide direction as to what needs to be amended/included in the Official Plan and Zoning By-law to ensure all land use planning decisions conform with the significant threat policies contained in the Source Protection Plan. These policies also identify specific uses that will be prohibited or managed through land use planning documents. The transition policies of OC-CW-1.2 also allow for transitioning of certain *Planning Act* and *Building Code Act* applications to be processed under the “existing” policy requirements.

Official Plans and Zoning By-laws are the primary land use documents used by planning authorities (municipalities) to communicate permitted land uses and associated requirements to

developers, landowners and the general public. Given that all planning decisions are required to conform with the Source Protection Plan policies on the date the Source Protection Plan takes effect, it is important that local land use planning documents are consistent with the Source Protection Plan as soon as possible. Having local land use planning documents up to date will assist in ensuring that those making local land use decisions e.g. business operators, perspective purchasers, developers, real estate agents and municipal staff and Council are aware of the Source Protection Plan policies and how they may affect land uses or activities in a particular area, before making any such decisions.

New onsite sewage systems or onsite sewage system holding tanks, with the exception of such tanks and systems that are required for a municipal water supply well or located in an ICA for nitrates, but outside of a WHPA-A or B with a vulnerability score of 10.

Part IV tools under the *Clean Water Act, 2006* cannot be used to prohibit sewage threats, so it was determined that the best remaining policy tool to prevent the establishment of new onsite sewage systems regulated under the Ontario Building Code would be to prohibit/regulate development to be serviced by these types of onsite sewage systems through land use planning, in areas where they would be a significant drinking water threat (except in an Issue Contributing Area (ICA) for nitrates located outside of a WHPA-A/B with a vulnerability score of 10). Amendments to the County of Oxford Official Plan and, more importantly, Area Municipal Zoning By-laws would be required to implement this policy. The area affected by this prohibition is limited and, based on review of the properties potentially affected; the impact on future development in the County of Oxford is anticipated to be minimal. Furthermore, development on new onsite sewage systems in the WHPA-A and B is already prohibited by the water quality policies contained in the County of Oxford Official Plan, so the proposed policies will serve to reduce the area where such significant threat activities are currently prohibited.

For new onsite sewage systems located within an ICA for nitrates, but outside of a WHPA-A or B with a vulnerability score of 10 it was determined that prohibition would not be reasonable given the considerably larger area and number of properties affected by the larger ICA. Prohibition may have the potential to prevent a number of these properties from establishing a new dwelling (or other permitted use requiring onsite sewage system) anywhere on the property. As such, it was determined that any new onsite sewage systems and holding tanks within an ICA, but outside of the WHPA-A or B with a vulnerability score of 10, could be appropriately managed through the onsite sewage system maintenance inspection program, which is the same approach being used to manage existing onsite sewage systems. This inspection process is currently funded by Oxford County and does not incur cost to property owners. Should system upgrades be required, funding is available through the County's Source Protection incentive fund. However, through the onsite sewage system approval process, property owners would still be encouraged to locate new systems outside of the ICA on their property wherever possible.

5.3.6 Education and Outreach

Education and Outreach Programs: Municipality and Conservation Authority delivered

Intent:

The general education and outreach policies are intended to indicate that the County of Oxford, together with other the Conservation Authority and other bodies, where possible, may develop Education and Outreach programs directed at any, or all, significant drinking water threat activities where deemed necessary or appropriate.

The threat specific education and outreach policies require the County of Oxford to develop mandatory education and outreach programs to address certain significant threat activities. The long-term funding of education and outreach programs is critical to their success and effectiveness. The financial involvement of the Province in these programs will help to ensure their ongoing effectiveness and in maintaining a level of consistency in program messaging across the province.

Rationale:
Education and outreach can be an effective tool to influence behaviours and practices for individuals and businesses. The County of Oxford supports the use of this tool as a complementary policy approach for managing significant drinking water threats, where deemed necessary and/or appropriate. For example, the handling and storage of DNAPLs may be a necessary part of a business process, but if the users of these products are more aware of the risks associated with these products and the need to consider alternatives, this awareness could improve the protection of the drinking water source.

The County of Oxford supports the potential use of Education and Outreach programs to address significant drinking water threats, where deemed necessary and/or appropriate and subject to available funding. However, Education and Outreach programs have also been selected as the primary policy tool for addressing the following activities:

<u>The handling and storage of dense non-aqueous phase liquids (DNAPLs) - Household Concentrations/Quantities</u>
As DNAPLs are considered a significant drinking water threat in any quantity, the use of small quantities or concentrations of DNAPLs in association with residential uses may potentially be a significant threat, as the chemicals are readily available and may be found within commonly used products. However, given the large number of residential properties that would need to be reviewed to determine whether DNAPLs were present and the likelihood of anything other than small 'household' type quantities being found, it was determined that an education and outreach program focused on the safe storage, handling and disposal of these chemicals would generally be adequate to ensure DNAPLs potentially associated with these land uses cease to be, or never become, a significant drinking water threat.

<u>The application of commercial fertilizer in association with a residential use</u>
In certain areas, the application of commercial fertilizer to residential properties is considered a significant drinking water threat. However, given the number of residential properties affected, the very small percentage of the total managed land area in the County of Oxford comprised of residential uses and the fact that any other management approach e.g. RMP would also likely be limited primarily to education, it was determined that an education and outreach program focused on the proper application of commercial fertilizer would be adequate to ensure such activity ceases to be, or never becomes, a significant drinking water threat.

5.3.7 Incentive Programs

Incentive Programs: Municipality delivered (with Ministry of the Environment, Conservation and Parks and other bodies where possible)

Intent:
The general incentive policies are intended to indicate that the County of Oxford, together with other bodies, where possible, may develop incentive programs directed at significant drinking water threat activities where deemed necessary or appropriate. These policies also request that

the Ministry of the Environment, Conservation and Parks consider providing continued funding for incentive programs, such as the Ontario Drinking Water Stewardship Program.

Rationale:
Incentives can be an effective tool for influencing behaviours and practices for individuals and businesses. The County of Oxford supports the use of this tool as a complementary policy approach to assist in addressing significant drinking water threats, where deemed necessary and/or appropriate. Although, the County of Oxford supports the potential use of Incentive programs to address significant drinking water threats, where deemed necessary and/or appropriate, such programs are dependent on available funding. Continued funding for incentive programs from the Ministry of the Environment, Conservation and Parks will be a key component in assessing the potential financial impacts on the municipality associated with undertaking any such programs. Therefore, the Source Protection Plan includes a policy requesting the Province to consider the provision of continued funding for incentive programs, such as the Ontario Drinking Water Stewardship Program. As Source Protection is a provincial initiative, it was determined that continued Provincial funding for incentive programs should be provided to ensure the effective implementation of the Source Protection Plan policies.

5.3.8 Stewardship Programs

Decommissioning of Abandoned Wells that serve as Transport Pathways

Intent:
The intent is to ensure transport pathways such as abandoned wells are properly managed to reduce the risks to municipal drinking water sources.

Rationale:
Abandoned wells are often located on private property and it may be cost prohibitive to properly decommission or upgrade these wells. A specific transport pathway policy to support ongoing stewardship programs to decommission abandoned wells would help reduce the ability of contaminants to enter the groundwater within vulnerable areas. This may further reduce the vulnerability of an area and the number of identified threats.

5.3.9 Specify Action

Encourage Appropriate Siting, Design and Maintenance Standards for the Establishment and Operation of a Liquid Hydrocarbon Pipeline

Intent:
The location and siting of liquid hydrocarbon pipelines is not controlled by the local municipalities, therefore managing this activity through direction and recommendations to the appropriate approval authority is the most effective approach for this local threat.

Rationale:
Two significant threats have been identified within the County of Oxford. The primary concern regarding this threat relates to a potential spill from a liquid hydrocarbon pipeline. Encouraging the National Energy Board and the Ontario Energy Board to include appropriate design standards and maintenance practices will ensure that any new facility would be constructed in a manner or located so as to protect municipal drinking water supplies.

Spill Prevention, Spill Contingency and Emergency Response Plans along highways, railway lines or shipping lanes

Intent:
To ensure that emergency plans, contingency plans and spill containment plans are updated with respect to spills that occur within WHPAs.

Rationale:
Municipal emergency services are often the first responders to events that may adversely impact a source of municipal drinking water. Therefore, spill prevention and contingency/response plans should be updated to include maps that clearly detail the vulnerable areas. Quick and effective response to spills can prevent an emergency from affecting a municipal drinking water source. Additionally, updates to the current spill prevention and contingency/response plans could act as a communication tool for the municipalities and the public and ensure residents are aware of the location of WHPAs and knowledgeable regarding the appropriate response in the event of a spill in these areas.

Environmental Compliance Approvals and Consultation

Intent:
To develop a consultation process related to document sharing and consultation on the issuance and/or notification of prescribed instruments, which could be used to guide information exchange between the Ministry of the Environment, Conservation and Parks and the County.

Rationale:
The development of a consultation process will allow for better information exchange between the two agencies which can be used to help ensure prescribed instruments better protect municipal drinking water sources. Throughout the preparation of the Source Protection Plan ongoing dialogue has occurred with the Ministry of the Environment, Conservation and Parks and Climate Change and other Provincial Ministries regarding the desire of municipalities to have a more interactive consultation process with the Ministries when they are reviewing or issuing a Prescribed Instrument. It is also important to the County that due consideration be given to comments provided by the County by the Ministries in that process.

5.3.10 Monitoring Policies

Intent:
Monitoring Policies have been included for each policy listed above. In some instance one monitoring policy may apply to a number of different policies as the same information is required from the monitoring body.

Rationale:
The *Clean Water Act, 2006* requires the Source Protection Authority to prepare and submit to the Director and the Source Protection Committee an annual report that describes the measures taken to implement the Source Protection Plan. In order to prepare this report, the Source Protection Authority requires other implementing bodies to report annually to the Source Protection Authority by February 1st of each year. Section 65 (8) of O. Reg. 287/07 requires that annual reports from the Risk Management Official be submitted by February 1st of each year. The reporting policies use this date as the basis for establishing the reporting deadline for the other implementing bodies.

5.4 Summary of Comments Received During Pre-Consultation

In accordance with Ontario Regulation 287/07 made under the *Clean Water Act, 2006*, the Grand River Conservation Authority acting as the Grand River Source Protection Authority on behalf of Oxford County and the Source Protection Committee, completed pre-consultation for the Long Point Region Source Protection Plan update with the various implementing bodies affected by the plan.

The pre-consultation process began on June 24, 2019. This update included map amendments for the County. For a complete draft of the Source Protection Plan, agencies were directed to www.sourcewater.ca

Agencies were given until July 29, 2019 to provide comments. This period was the first opportunity for agencies to provide comments on the draft updates to the Plan.

The following table summarizes the results of the pre-consultation for Oxford County within the Long Point Region Source Protection Area.

Table 5-1: Summary of Pre-Consultation Comments – Oxford County	
Summary of Comment	**How Comment was Addressed**
Ministry of the Environment, Conservation and Parks,(MECP)	
Policies OC-CW-1.1.1, NC-CW-1.1.1, EC-CW-1.1.1, and HC-CW-1.1.1 could use some punctuation to improve readability.	• Punctuation added to improve readability
Throughout the documents, the short name for the sewage storage threat sub-category should be corrected to “Sewage Storage – Treatment or Holding Tanks.”	• Text removed
In volume II, section 3.0 Oxford County: the introductory paragraph is missing the new Schedules F and H. The entire source protection plan should be reviewed to ensure these references are correct.	• List revised to reflect updated schedule titles
The draft amendment includes policies addressing the Establishment and Operation of a Liquid Hydrocarbon Pipeline, and states that policies apply in WHPA-A & B with a vulnerability score of 10. While the assessment report has been edited to remove references to the previously-approved local threat for pipelines and has now listed pipelines in the list of prescribed threats, it is unclear whether the assessment for where this threat would be a significant, moderate, or low threat in the source protection area has been done. We note that there are three subcategories of the pipeline threat (above ground, below ground, and within or under a water body)which can be significant in WHPA A-B with a vulnerability score of 10. In IPZ 1-2 and WHPA-E with a vulnerability score of 9 or 10, two of the subcategories (above ground and within or under a water body) can be significant. We would like to know whether this prescribed threat has been assessed across the source protection area, including for the surface water intakes. Volume 1, Appendix B retains	• This threat has only been assessed for the Otterville Wellfield, County of Oxford as that is the only municipal system that included updated Wellhead Protection Areas (WHPAs), vulnerability scoring and a threats assessment. • The reference to hazard scores in Volume 1, Appendix B has been replaced by a reference to the Source Water Protection Tables of Drinking Water Threats and circumstances. Additionally, the vulnerable areas where significant threats occur was updated to include WHPA-E and IPZs. • Policies across the Source Protection Area were reviewed and applicable, updated, to ensure they reflect the areas where this activity would be a significant threat. • Additional text has been added to the Haldimand and Norfolk sections of the Explanatory Document to provide additional

Table 5-1: Summary of Pre-Consultation Comments – Oxford County	
Summary of Comment	**How Comment was Addressed**
text noting pipeline hazard scores provided by the Director, which seems a relic from when pipelines were a local threat and omit reference to IPZ scores or 9 or 10. Corresponding policies should be updated to reflect the areas where this activity would be a significant threat; at present there are no policies for the Haldimand and Norfolk intakes with a vulnerability score of 9. While the 2018 General Regulation amendments permit the exclusion of pipeline policies (O.Reg. 287/07, ss. 31(2)), a description of the process and information used to reach the conclusion that there is no reasonable prospect a pipeline will ever be established or operated in the IPZs scoring 9 is required (O.Reg. 287/07, ss. 40(2), paragraph 7). This rationale would also need to be included in the updated explanatory document. We appreciate you sharing this information with our office.	context.

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6.0 NORFOLK COUNTY POLICY RATIONALE

6.1 Municipal Support

To date, the municipalities within the Long Point Region Source Protection Area, including Norfolk County, have been actively involved with the development of the Source Protection Plan policies.

Norfolk County has been present at various meetings hosted by the Lake Erie Source Protection Region in order to develop locally implementable policies. These policies have been reviewed by municipal staff and council.

6.2 Financial Considerations

There are and will continue to be direct financial costs to Norfolk County (which delivers water services) to fund, train and administer a Risk Management Official and Inspector(s). This position requires on-going administrative and support staff resources to ensure the on-going negotiation, enforcement and monitoring of Risk Management Plans. Further discussions are also required with neighbouring municipalities where Wellhead Protection Areas cross jurisdictions. This raises some questions for Norfolk County in terms of responsibility and cost recovery for the implementation of measures to protect the municipal drinking water supplies from other jurisdictions. The *Clean Water Act, 2006* does make provisions for imposing fees associated with the Risk Management Official/Inspector in order to assist in recovering costs. However, this may obviously have a direct impact on landowners, farmers, businesses, etc.

There are also additional labour and administrative costs incurred to implement Source Protection Plan policies related to, for example, Official Plan and Zoning By-law amendments, onsite sewage inspections, education and outreach programs and annual reporting.

6.3 Policy Intent and Rationale

Review of current and projected land uses indicates that there is a high level of protection of the municipal raw water from the prescribed drinking water quality threats. Review of the Long Point Region Tier 3 study however, indicates that there is a significant risk to Simcoe's water supply from the prescribed drinking water quantity threat: consumptive takings. The policies developed reflect this current assessment as presented in the Assessment Report available online at www.sourcewater.ca.

Based on the percentage of impervious surface area presented in the Assessment Report, policies were not required to address significant drinking water threat activities from the application of road salt.

6.3.1 Part IV Policies

Section 57 Prohibition

Intent:
These policies are intended to prohibit activities under Section 57 of the *Clean Water Act, 2006* invulnerable areas where the activities would be a significant drinking water threat if they are or would be established.

Rationale:
Based on a review of current and projected land uses in the areas where the following activities could be a significant drinking water threat. Staff are confident these activities are unlikely to occur in the future in Norfolk County; it is therefore appropriate to use this policy tool.

Waste activities that do not require an Environmental Compliance Approval
For activities which do not require an Environmental Compliance Approval, the use of Part IV Prohibition within WHPA-A ensures that activities do not become a significant drinking water threat. The risks presented by these types of facilities warrant prohibition of future occurrences within a WHPA-A as this is the area that is most vulnerable. These types of activities include such things as the discharge of mine tailings or paint recycling depots. Given existing land uses in the County, it is unlikely these activities will occur within WHPA-A and therefore, the impact of prohibiting these activities is negligible.

The application, handling and storage of agricultural source material (ASM)
The risks presented by the application of ASM in a WHPA-A or IPZ with a vulnerability score greater than or equal to nine (9), which is directly adjacent to a drinking water well or the immediate proximity of the intake, warrants prohibition of existing and future occurrences. This policy is consistent with the established policy direction in the *Nutrient Management Act.*

The *Nutrient Management Act* currently prohibits the application of agricultural source material within 100 metres of a drinking water well where Nutrient Management Plans and/or Strategies are in place. The storage of ASM also poses a significant risk to drinking water sources within a WHPA-A, and therefore is also prohibited.

The handling and storage of non- agricultural source material (NASM)
The risks presented by the handling and storage of non-agricultural source material warrants prohibition of future storage within WHPA-A or B with a vulnerability score of 10 and IPZ with a vulnerability score greater than or equal to nine (9). The *Nutrient Management Act* currently prohibits the storage and application of agricultural source material within 100 metres of a drinking water well. Prohibiting the storage of NASM in this area is consistent with the established policy direction of the *Nutrient Management Act*. The prohibition of this activity is also proposed to be extended to the most vulnerable areas (score=10) of WHPA-B, as the vulnerability of these areas is equivalent to that of WHPA-A. The extent of area affected within the WHPA-B with a vulnerability score of 10 is generally confined within Norfolk County owned lands and the impact on the agricultural community is expected to be negligible as there would be alternative areas outside these ‘prohibited areas’ to store and handle NASM.

The handling and storage of commercial fertilizer, pesticides, road salt, and the storage of snow
The risks presented by the handling and storage of commercial fertilizer, pesticides, road salt, and the storage of snow within the vulnerable Wellhead Protection Areas, Intake Protection Zones and Issue Contributing Area warrant the future prohibition of these activities. Based on a review of the current and projected land uses, there are alternative locations within Norfolk County outside of these vulnerable areas where new facilities can locate. The circumstances which generally make the storage of snow a significant drinking water threat (i.e. snow stored above grade on an area greater than 1 hectare in vulnerability score=10 areas, or greater than 0.01 hectares in a nitrate ICA; or snow stored below grade on an area greater than 0.01 hectares in a nitrate ICA or vulnerability 10 area) are not anticipated to occur within the vulnerable areas, or can be directed outside the vulnerable areas where they would be significant. Similarly, the quantities which make the handling and storage of commercial fertilizer and pesticides a significant drinking water threat warrant the prohibition of these

activities within the most vulnerable wellhead areas. The large volumes required would generally not apply to a small-scale operator or individual who is storing these materials for their own personal use/gain. The impacts of this policy are anticipated to be negligible.

The handling and storage of Fuel, dense non-aqueous phase (DNAPLs) and organic solvents
The risks presented by these types of activities warrant prohibition of future occurrences within the most vulnerable wellhead/intake protection zones. There are alternative locations within Norfolk County where new activities can locate that are outside the 'prohibited areas'. The impact of this policy on landowners/businesses is anticipated to be negligible.

Farm animal yards and outdoor confinement areas
The risks presented by these activities warrant prohibition of future occurrences within WHPA-A and IPZ with a vulnerability score greater than or equal to nine (9). These types of activities can generate the same level of risk to drinking water supplies as the application or storage of agricultural source material. The proposed prohibition of these activities is consistent with the approach taken with respect to the application and storage of ASM and the established policy direction of the *Nutrient Management Act*. The area affected by this prohibition is relatively confined and consequently the projected impact on the agricultural community in Norfolk County is anticipated to be negligible.

Section 58 Risk Management Plans

Intent:
These policies are intended to require the development of Risk Management Plans under Section 58 of the *Clean Water Act, 2006* for current or future activities. Risk Management Plans are used where the threat cannot be effectively managed through other approaches.

Rationale:
Risk Management Plans, established, under Section 58 of the *Clean Water Act, 2006* are used as a tool to manage existing and future drinking water threats. This tool is used to "fill the gap" where land use policy or other existing legislation cannot regulate a significant drinking water threat. This tool is particularly effective in dealing with existing significant drinking water threat activities, where prohibition will likely impose undue hardship on property owners, businesses, etc. Risk Management Plans also provide an opportunity to work with property owners/proponents to manage a threat, particularly in areas that are less vulnerable (i.e. WHPA-B or C).

Waste activities that do not require an Environmental Compliance Approval (Existing)
This policy ensures that existing waste activities (and future waste activities outside WHPA-A) which do not require an Environmental Compliance Approval are adequately managed to ensure they do not become a significant drinking water threat. Examples include auto-salvaging facilities and hardware stores that collect hazardous waste for disposal in less vulnerable areas (outside a WHPA-A). Although the policy would result in costs to the County, the use of Risk Management Plans to manage existing storage of waste is considered the best option to manage these existing threats, particularly since these activities do not have an Environmental Compliance Approval and there are relatively few circumstances where this policy would apply.

The application and storage of agricultural source material (ASM)
For a livestock operation that does not have or does not require a Nutrient Management Plan or Strategy, a Risk Management Plan is an effective means to regulate the application and storage of ASM. Existing agricultural operations without a Nutrient Management Plan/Strategy include

livestock operations with less than 300 Nutrient Units. New livestock operations not requiring a Nutrient Management Plan/Strategy are those with less than five (5) Nutrient Units. It is anticipated that the number of livestock operations that meet these circumstances is nominal and this approach is deemed appropriate. A Risk Management Plan may be similar in nature to a Nutrient Management Plan/Strategy and therefore would be a tool that is familiar to the agricultural community.

The application, handling and storage of pesticide

The existing and future application, and existing handling and storage of pesticides can be effectively addressed through the establishment of Risk Management Plans. Although the policy would result in costs to Norfolk County, the use of Risk Management Plans to manage the instances where pesticides are applied is the best option to manage this activity because land use planning tools cannot be used to manage activities. Given the relatively few existing threats in Norfolk County for the handling, storage and application of pesticides to land, this tool is considered to be the most appropriate to manage this activity. This tool is also preferred over others (i.e. Part IV prohibition) particularly given the potential negative impacts such restrictions would have on Norfolk County's agricultural community.

With the exception of the Delhi wells, Norfolk County owns most of the land within 100 metres of their wells (WHPA-A). Norfolk County has control over the application and existing storage of pesticides within large portions of the WHPA-As and does not feel it is necessary to prohibit these activities.

The application, handling, and storage of commercial fertilizer

The application of commercial fertilizer is generally covered under the *Nutrient Management Act*. However, not all agricultural operations or land uses are subject to the policies of the *Nutrient Management Act* and traditional land use planning tools can not address the application of fertilizer. In addition, the *Nutrient Management Act* does not cover the handling and storage of commercial fertilizer. These activities are difficult to regulate with any other tool, therefore Norfolk County has determined a Risk Management Plan is the most effective approach to manage this activity, particularly where the land use or agricultural operations are not subject to the *Nutrient Management Act*.

The handling and storage of road salt

This threat can be effectively addressed through the use of Risk Management Plans. Although the policy will result in costs to Norfolk County, the use of Risk Management Plans to manage existing storage and handling of road salt was the best option to manage the threat. The circumstances which make this activity a significant drinking water threat (e.g. greater than 5,000 tonnes) limit the number of potential occurrences of this threat. The Assessment Report does not identify any existing threats; therefore, the implementation of this approach is anticipated to have negligible impacts.

The handling and storage of fuel

Norfolk County has concluded that the use of Risk Management Plans is the preferred policy direction to address this threat, particularly for existing and future fuel storage in small and large quantities (greater than 250 Litres) and larger quantities of fuel storage (greater than 2,500 Litres) outside WHPA-A. Prohibition was not selected as a policy choice because it could potentially create a number of non-conforming uses for the existing activities identified as a threat within the vulnerable areas. A Risk Management Plan approach is recommended to ensure compliance with the requirements of the *Technical Standards and Safety Act*.

Notwithstanding the prohibition of fuel storage in WHPA-A (policy NC-CW-12.3a), an exemption to this policy is provided for fuel storage required for emergency back-up generators at municipal wells or other essential service uses (e.g. hospitals). These types of facilities are generally required to have emergency back-up generators to ensure their continued operation during electrical power disruptions. The intent of this policy is to permit these types of activities, subject to a Risk Management Plan, in order to ensure the continued supply of water and provision of essential services, particularly during emergency situations.

The handling and storage of a dense non-aqueous phase liquid (DNAPLs) and organic solvents- WHPA-A/B/C

The use of Risk Management Plans ensures that the handling and storage of a DNAPLs and organic solvents are adequately managed to ensure these activities do not become a significant drinking water threat. Although these policies will result in costs to the County, the use of Risk Management Plans to manage the existing instances identified within the vulnerable areas where DNAPLs and organic solvents are currently being stored and handled is the best option to manage this threat.

With this measure in place, new land uses in WHPA-B with a vulnerability score of eight (8) and WHPA-C areas will also be required to prepare a Risk Management Plan. Given the broad area where these activities are a significant drinking water threat, the use of this approach is considered appropriate.

The management of runoff that contains chemicals used in the de-icing of aircraft

There are no existing threats associated with aircraft de-icing identified in the Assessment Report. Based on land use activities surrounding existing municipal intakes, the potential for an airport to be constructed in the future that is of a size which may pose a significant drinking water threat is minimal. The most effective policy to address this threat is the use of a Risk Management Plan. While airports and related activities are regulated by the Federal government, it was determined that the municipality should work collaboratively with airport authorities to ensure that activities associated with this drinking water threat never become significant. A Risk Management Plan is a formalization of the collaborative effort between the airport authority and the Risk Management Official.

The use of land as livestock grazing or pasturing land, an outdoor confinement area of a farm animal yard

Prohibition was only used to manage future occurrences of farm animal yards or outdoor confinement areas in the highest vulnerability areas to limit the potential impacts it would have on Norfolk County's agricultural community. A Nutrient Management Plan and/or Strategy can be an effective tool to manage these threats. However, not all agricultural operations are subject to *Nutrient Management Act* and therefore, are not required to have Nutrient Management Plans and/or Strategies. In addition, the *Nutrient Management Act* does not regulate livestock grazing or pasturing. Therefore, a Risk Management Plan is an effective means to regulate these activities. The Risk Management Plan may be scoped to the requirements of a Nutrient Management Plan/Strategy to ensure consistency within the agricultural community.

Section 59 Restricted Land Use

Intent:

Designate all land uses where activities are designated for the purposes of Section 57 and/or 58 of the *Clean Water Act, 2006* as Restricted Land uses under Section 59 of the *Clean Water Act, 2006*.

Rationale:
These policies were developed to require all applications under the *Planning Act, Condominium Act* and Ontario *Building Code Act* where activities are, or would be, a significant drinking water threat to be reviewed by the Risk Management Official, who would then advise the applicant if Section 57 (Prohibition) or Section 58 (Risk Management Plans) of the *Clean Water Act, 2006* apply.

The policies enable the Risk Management Official to pre-screen applications for activities identified as a significant drinking water threat within vulnerable areas.

6.3.2 Prescribed Instruments

Ministry of the Environment, Conservation and Parks: Prohibit Environmental Compliance Approvals

Intent:
The Ministry of the Environment, Conservation and Parks (MECP) is required to prohibit significant drinking water threats through the Environmental Compliance Approval.

Rationale:
Norfolk County's preference is to rely on existing legislation, as much as possible, to regulate prescribed drinking water threats. The Environmental Compliance Approval process is an established process that can effectively regulate and restrict uses and activities.

New waste disposal sites within the meaning of Part IV of the *Environmental Protection Act*, new onsite sewage systems or sewage works
The risks presented by these activities warrant prohibition of future occurrences. Norfolk County is confident that alternative locations outside vulnerable wellhead areas are available to accommodate these activities. As a result, prohibition of these activities through the Environmental Compliance Approval process will not have a significant impact on the municipality or property owners.

Ministry of the Environment, Conservation and Parks: Review and Amend Environmental Compliance Approvals

Intent:
The Ministry of the Environment, Conservation and Parks is required to review or prepare Environmental Compliance Approvals to ensure that appropriate terms and conditions are incorporated that, when implemented, reduce the risk to drinking water. The Ministry of the Environment, Conservation and Parks will amend existing Environmental Compliance Approvals (if necessary) to include these terms and conditions and will not grant future Environmental Compliance Approvals unless these terms and conditions are included.

Rationale:
Policies using the Prescribed Instrument tool rely on the existing responsibility of the Ministry of the Environment, Conservation and Parks to protect drinking water sources. It is a priority of Norfolk County to use existing regulatory tools when available to address existing threat(s) within Norfolk County. Environmental Compliance Approvals have been a longstanding requirement for waste disposal and sewage, and the criteria used to assess these Environmental Compliance Approvals are thorough. Requiring the Ministry to review

Environmental Compliance Approvals in light of the circumstances that make the activity a significant drinking water threat will serve to ensure that additional terms and conditions are added to Environmental Compliance Approvals, where necessary.

Ministry of the Environment, Conservation and Parks : Review and Amend Permits To Take Water (PTTW)

Intent:
The Ministry of the Environment, Conservation and Parks and Climate Change (MECP) is required to review and amend existing permits and ensure that any new permit applications include source protection terms and conditions; the conditions should ultimately ensure that the municipality's water supply is sustainable.

Rationale:
The County's preference is to rely on existing legislation where possible to regulate drinking water threats. The PPTW process is an established and reliable method for regulating activities related to large takings of water.

<u>The management of consumptive water takings equal to or greater than 50,000 Litres/day</u>
For existing and future consumptive water takings, this threat can be effectively addressed through the use of a PTTW. Both existing and future takings can be managed through the permit process and the inclusion of specific terms and conditions. Being able to address existing and future activities makes the instrument a very effective tool, particularly if the terms and conditions take into account the Tier 3 study model and results. Additionally, as part of the effort to minimize implementation costs to Norfolk County, the PTTW program is the responsibility of and funded by Province. Although considered an effective tool, there a currently no permitted takings in the area to which this tool would apply. The effectiveness of the tool lies in its ability to regulate any future takings that may occur.

Ministry of Agriculture, Food and Rural Affairs: Prohibit Non-Agricultural Source Material Plans

Intent:
The Ministry of the Environment, Conservation and Parks or the Ministry of Agriculture, Food and Rural Affairs (OMAFRA), as applicable, are required to prohibit the application of non-agricultural source material within the Environmental Compliance Approval process or in accordance with the *Nutrient Management Act* where it would be significant drinking water threat under Subsection 39 of the *Clean Water Act, 2006*.

Rationale:
The risks presented by the application of non-agricultural source material in a WHPA or IPZ with a vulnerability score greater than or equal to nine (9) or the Nitrate Issue Contributing Area warrants prohibition of this activity within these most vulnerable areas. The *Nutrient Management Act* currently prohibits the application of non-agricultural source material within 100 metres of a municipal well. Therefore, prohibition within WHPA-A is consistent with this established policy approach of the *Nutrient Management Act*. Norfolk County's preference is to use existing regulatory tools where possible. Therefore, prohibition through this Prescribed Instrument is desirable.

Additionally, the prohibition of this activity is proposed to be extended to the most vulnerable areas (score=10) of WHPA-B, as the vulnerability of these areas is equivalent to that of WHPA-A. The extent of area affected within the WHPA-B with a vulnerability score of 10 is largely within Norfolk County owned lands

Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and/or Ministry of the Environment, Conservation and Parks (MECP): Review and Amend Non-Agricultural Source Material Plans and Nutrient Management Plans / Strategies

Intent:
The Ministry of the Environment, Conservation and Parks or Ministry of Agriculture, Food and Rural Affairs, as applicable, are required to review and, if necessary, amend Non-Agricultural Source Material (NASM) Plans or Nutrient Management Plans or Strategies to ensure these threats are managed such that they do not become a significant drinking water threat.

Rationale:
A number of existing threats have been identified within Norfolk County in the Assessment Report. Norfolk County determined the use of Prescribed Instruments, specifically Non-Agricultural Source Material (NASM) Plans and Nutrient Management Plans/Strategies as the preferred approach to address these threats. The protocol for these Plans was extensively reviewed and updated by the Province. These revisions are an important addition in the management of drinking water threats and the County will rely on OMAFRA and/or MECP to include measures to protect drinking water sources.

6.3.3 Land Use Planning

Land Use Planning Prohibition

Intent:
To manage or prohibit significant drinking water threat activities within Official Plans and Zoning By-laws.

Rationale:
On-site sewage systems with a design flow greater than 10,000 Litres
Part IV tools of the *Clean Water Act, 2006* cannot be used to prohibit sewage threats. Norfolk County concluded the best approach to prevent future onsite sewage systems of this design is to prohibit developments which rely on these types of onsite sewage systems through land use planning in the most vulnerable wellhead protection areas. There are other areas outside of the vulnerable areas of the WHPAs and IPZs that development can locate. Amendments to Norfolk County Official Plan policies will be required to implement this policy.

Land Use Planning Management

Intent:
To manage significant drinking water threat activities within Official Plans and Zoning By-laws.

Rationale:
The management of activity that takes water from an aquifer or surface water body without returning the water taken to the same aquifer or surface water body
Land Use Planning as a management tool is considered to be an effective way to address consumptive water takings, particularly when paired with the PTTW process. The tool provides

Norfolk County with the final decision-making authority to approve or reject permit applications, even if the Ministry has determined that the taking would not become a significant drinking water threat. Specific criteria for approval, such as ensuring the taking does not exceed Simcoe's water allocation threshold, provides an additional safeguard to protection the municipality's drinking water supply. Amendments to Norfolk County Official Plan policies will be required to implement this policy.

The management of an activity that reduces the recharge of an aquifer
The Tier 3 Risk Assessment identified recharge reduction activities as having a negligible effect on the sustainability of Simcoe's drinking water supply. The County concluded that strong policy language would not be necessary and that managing recharge reductions activities through a flexible land use planning policy was the appropriate approach. Amendments to Norfolk County Official Plan policies will be required to implement this policy.

Education and Outreach Programs: Municipality and Conservation Authority delivered

Intent:
To request Norfolk County to work with other implementing bodies, where appropriate, to develop or enhance stewardship or outreach and education programs directed at any or all, significant drinking water threat activities where it may be deemed necessary.

Rationale:
The application and storage of ASM and NASM and livestock grazing, pasturing, outdoor confinement areas and farm animal yards
Education and outreach is considered by Norfolk County to be an effective way to regulate these activities, particularly within the Nitrate Issue Contributing Areas. These areas encompass large geographic areas and other tools such Risk Management Plans or Prohibitions will affect numerous properties and agricultural activities.

An education and outreach program will also complement the proposed management/regulation tools (e.g. Prohibition or Risk Management) for the more vulnerable areas (i.e. WHPA-A or B).

There are no enumerated existing occurrences of outdoor confinement areas or farm animal yards within WHPA-A or IPZ-1 in Norfolk County. Therefore, the County is confident an education and outreach policy will be an effective way to manage this activity.

The application of commercial fertilizer or pesticides
Other tools (e.g. Risk Management Plans) have been used to manage this activity on agricultural land and non-agricultural uses. An education and outreach program for the application of commercial fertilizer or pesticides is intended to complement the other tools proposed to manage these activities.

The handling and storage of fuel (greater than 250 Litres but less than 2,500 Litres)
Norfolk County intends to implement an education and outreach program to supplement the other tools proposed to manage this activity. The objective of the education and outreach program would be to inform property owners regarding issues such as maintenance and inspection procedures for fuel oil storage tanks and implementation of spill prevention measures.

The handling and storage of dense non-aqueous phase liquid (DNAPLs)
Norfolk County is concerned that there are various issues relating to the use of DNAPLs in all land uses and activities. Many DNAPLs are readily available and are found within commonly used products. Therefore, the use of education and outreach programs which promote the use of alternative products is considered appropriate to complement the other tools proposed to manage this significant drinking water threat.

An activity that takes water from an aquifer or surface water body without returning the water taken to the same aquifer or surface water body
Norfolk County considers education and outreach to be an effective tool to manage this activity, particularly a future activity that could become a significant drinking water threat. The objective of the program would be to promote water conservation and compliment other, stronger policy tools.

6.3.4 Incentive Programs

Intent:
To encourage funding of programs, which encourage the protection of existing and future drinking water sources from significant drinking water threats.

Rationale:
As a supplemental policy, Norfolk County supports incentive programs to assist property owners with the cost of implementing beneficial practices to protect drinking water sources. Where possible, incentives will be utilized with other tools to achieve risk reduction. The province has assisted (directly/in-directly) in the funding of programs such as the Ontario Drinking Water Stewardship Program. Continued provincial funding is encouraged to ensure the protection of drinking water sources.

6.3.5 Stewardship Programs

Decommissioning of Abandoned Wells that serve as Transport Pathways

Intent:
To encourage the establishment of a program to assist with the decommissioning of abandoned wells that may pose a significant drinking water threat to municipal water supplies.

Rationale:
Often these wells are located on private property and the proper decommissioning or upgrading of the structure is cost prohibitive. A specific transport pathway policy to support ongoing stewardship programs to decommission abandoned wells will reduce the ability of contaminants to enter the groundwater within vulnerable areas. This may further reduce the vulnerability of an area and the number of identified threats.

6.3.6 Specify Action

Support On-Site Re-inspection Program under Ontario Building Code

Intent:
Rely on the existing onsite sewage system inspection program implemented through the *Ontario Building Code Act* to ensure existing and future onsite sewage systems do not become a significant drinking water threat to municipal drinking water supplies.

Rationale:
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage
Part IV tools cannot be used to prohibit sewage threats. Therefore, it was concluded the best approach to manage existing and future onsite sewage systems would be to manage them through the required maintenance inspection program under the *Ontario Building Code Act*. The onsite sewage system maintenance inspection program supports the implementation of the *Clean Water Act, 2006* by providing a consistent approach for determining if on-site sewage systems are functioning as designed. The intent is to bring all systems into compliance with the Ontario Building Code. Prohibition of uses that rely on these small onsite sewage systems is not considered to be a viable option as some of the vulnerable areas in Norfolk County do not have municipal services available.

Policy NC-NB-3.2 has been included to ensure that if a new onsite sewage system or holding tank is proposed or an existing system/tank is being replaced, all efforts should be made, if physically possible given the lot size and location of the system relative to the use, etc., to ensure the new system is located outside an area where these activities would be a significant drinking water threat (i.e. WHPA-A or WHPA-B with a vulnerability score equal to 10).

Encourage Appropriate Siting, Design and Maintenance Standards for the Establishment and Operation of Liquid Hydrocarbon Pipeline

Intent:
The location and siting of liquid hydrocarbon pipelines is not controlled by Norfolk County, therefore, managing this activity through direction and recommendations to the appropriate approval authorities is the most effective approach for this local threat.

Rationale:
There are no threats identified within Norfolk County in the Assessment Report and therefore, it is anticipated the implementation of this policy is limited. Any threats identified can only be significant in the County's WHPAs; vulnerability scores for the current Intake Protection Zones (IPZs) are too low. The primary concern regarding this threat relates to a potential spill from a liquid hydrocarbon pipeline. Encouraging the National Energy Board and the Ontario Energy Board to advise the Source Protection Authority and Norfolk County of any proposed pipeline will assist Norfolk County in identifying early in the process whether a proposed pipeline will affect the County's municipal drinking water supply.

Spill Prevention, Spill Contingency and Emergency Response Plans along highways, railway lines or shipping lanes

Intent:
To ensure that emergency plans, contingency plans and spill containment plans are updated with respect to spills that occur within wellhead protection areas or IPZs.

Rationale:
Municipal emergency services are often the first responders to events that may adversely impact a source of municipal drinking water. Therefore, spill prevention and contingency/response plans should be updated to include maps that clearly detail the vulnerable areas. Quick and effective response to spills may prevent an emergency from affecting a municipal drinking water source.

Additionally, updates to the current spill prevention and contingency/response plans can act as a communication tool for Norfolk County and the public to ensure residents are aware of the location of wellhead protection areas or intake protection zones and knowledgeable regarding the appropriate response in the event of a spill in these areas.

Environmental Compliance Approval and Consultation

Intent:
To ensure that Norfolk County is aware of new or amended Environmental Compliance Approvals (ECA) to ensure appropriate terms and conditions are included to protect municipal drinking water sources.

Rationale:
Although the Environmental Compliance Approval process is considered a rigorous process, often Norfolk County is not aware of amendments or applications for ECAs until the ECA is posted on the Environmental Bill of Rights Registry. Norfolk County is requesting the Ministry of the Environment, Conservation and Parks work with Norfolk County to establish a process to share documentation and consult Norfolk County on the issuance and/or notification of Prescribed Instruments that relate to activities that are a significant drinking water threat.

Water Quantity Supply and Demand Management

Intent:
To ensure that Norfolk County manage Simcoe's drinking water supply system using the latest and most accurate information available.

Rationale:
Although Norfolk County has a Water Supply Master Plan and water conservation plans, Tier 3 water budget considerations are not currently included. Policies that direct the County to update these plans using the findings from the Long Point Region Tier 3 Water Budget and Local Area Risk Assessment ensure that municipal water allocation, water conservation targets and best management practices accurately reflect current supply and demand in areas where consumptive water taking is or would be a significant drinking water threat.

Maintenance of Tier 3 Water Budget Model

Intent:
To ensure that the Long Point Region Water Budget and Local Area Risk Assessment is funded and maintained for ongoing use.

Rationale:
The Long Point Region Water Budget and Local Area Risk Assessment is a large, complex, multi-year study. The models used in the study are not only critical to the Tier 3 process but also valuable tools that can be used in other water quantity and quality studies and to make informed planning and regulatory decisions at the municipal and provincial levels of government. During the July 6, 2017 Lake Erie Region Source Protection Committee (SPC) meeting, several members expressed support for sustainable model management – a sentiment echoed by SPC chairs across the province. Maintenance of the Tier 3 models will be a costly endeavor, beyond

the funding capabilities of Norfolk County. The Ministry of the Environment, Conservation and Parks and Climate should take on the responsibility of funding model maintenance to support municipal water quantity policy implementation efforts.

Identifying Additional Water Supplies

Intent:
To encourage Norfolk County to locate an additional water supply outside the water quantity vulnerable area (WHPA-Q) to reduce the water quantity risks.

Rationale:
The Local Area Risk Assessment simulated drawdown for the Cedar St. Wellfield exceeded the amount of Safe Additional Available Drawdown (SAAD) in wells 2A, 3, 4, and 5 during all groundwater risk scenarios and resulted in the designation of a significant risk. Discussions with Norfolk regarding conservation efforts that have been implemented by the County revealed that no further reduction in water use would be possible and, modeling various risk management measures scenarios to optimize the existing system were not successful at reducing the risk level of the WHPA-Q. The preferred measure to manage water quantity risk is to source additional drinking water supplies outside the vulnerable area. A new municipal well at the proposed Northeast Well Field location would create a WHPA-Q that is separate and distinct from the other WHPA-Qs and possibly lower the risk level of the Simcoe WHPA-Q.

Water Quantity Policy Implementation

Intent:
To ensure that Norfolk County receives the resources required to make water management decisions and implement water quantity policies.

Rationale:
Norfolk County has limited resources and capacity to implement water quantity policies and, options to generate funding have been exhausted. Norfolk County's preference is to request that the Ministry of the Environment, Conservation and Parks provide financial support to ensure that any existing and future consumptive water taking within the WHPA-Q1 ceases to be or never becomes a significant drinking water threat.

High Use Watershed Designation

Intent:
To ensure that the Ministry of the Environment, Conservation and Parks consider reassessing Norfolk County's High Use Watershed Designation.

Rationale:
Norfolk County is a designated a High Use Watershed under the *Ontario Water Resources Act, 1990*. The County was assigned this designation because of high water use and geological characteristics of the area. Under the designation, Permit To Take Water applications from a number of high water use industries are prohibited unless specific criteria are met.

Recent findings from the Long Point Region, Catfish Creek and Kettle Creek Tier 2 Water Quantity Stress Assessment and the Long Point Region Tier 3 Water Budget and Local Area Risk Assessment indicate that Simcoe is currently the only area in Norfolk County that has a

significant water quantity risk. Policies to manage that risk have been developed and included in this Source Protection Plan. Norfolk County is of the opinion that the high use watershed designation is no longer accurate and should be reassessed by the Ministry.

Prioritization of Water Use

Intent:
To encourage the Ministry of the Environment, Conservation and Parks and Climate to consider prioritizing permitted water takings in Simcoe.

Rationale:
The Permit To Take Water program currently does not prioritize permit applications based on use – applications are assessed on a first-come-first-serve basis. Findings of the Long Point Region Tier 3 Water Budget and Local Area Risk Assessment indicate that Simcoe has a significant water quantity risk. As a result of the risk level designation and given Norfolk County's challenges securing new drinking water supplies, prioritization of Simcoe's water supplies should be considered where a permitted takings could impact the sustainability of that system.

6.4 Summary of Comments Received During Pre-Consultation

The pre-consultation process began on June 24, 2019. This update did not include any policy or map amendments for Norfolk County. For a complete draft of the Source Protection Plan, agencies were directed to www.sourcewater.ca

Agencies were given until July 29, 2019 to provide comments. This period was the first opportunity for agencies to provide comments on the draft updates to the Plan.

The following **Table 6-1** summarizes the results of the pre-consultation for Norfolk County within the Long Point Region Source Protection Area.

Table 6-1: Summary of Pre-Consultation Comments – Norfolk County	
Summary of Comment	**How Comment was Addressed**
Ministry of the Environment, Conservation and Parks	
Policies OC-CW-1.1.1, NC-CW-1.1.1, EC-CW-1.1.1, and HC-CW-1.1.1 could use some punctuation to improve readability.	Punctuation added to improve readability
Throughout the documents, the short name for the sewage storage threat sub-category should be corrected to "Sewage Storage – Treatment or Holding Tanks."	Text removed
The draft amendment includes policies addressing the Establishment and Operation of a Liquid Hydrocarbon Pipeline, and states that policies apply in WHPA-A & B with a vulnerability score of 10. While the assessment report has been edited to remove references to the previously-approved local threat for pipelines and has now listed pipelines in the list of prescribed threats, it is unclear whether the assessment for where this threat would be a significant, moderate, or low threat	• This threat has only been assessed for the Otterville Wellfield, County of Oxford as that is the only municipal system that included updated Wellhead Protection Areas (WHPAs), vulnerability scoring and a threats assessment. • The reference to hazard scores in Volume 1, Appendix B has been replaced by a reference to the Source Water Protection

Table 6-1: Summary of Pre-Consultation Comments – Norfolk County	
Summary of Comment	**How Comment was Addressed**
in the source protection area has been done. We note that there are three subcategories of the pipeline threat (above ground, below ground, and within or under a water body)which can be significant in WHPA A-B with a vulnerability score of 10. In IPZ 1-2 and WHPA-E with a vulnerability score of 9 or 10, two of the subcategories (above ground and within or under a water body) can be significant. We would like to know whether this prescribed threat has been assessed across the source protection area, including for the surface water intakes. Volume 1, Appendix B retains text noting pipeline hazard scores provided by the Director, which seems a relic from when pipelines were a local threat and omit reference to IPZ scores or 9 or 10. Corresponding policies should be updated to reflect the areas where this activity would be a significant threat; at present there are no policies for the Haldimand and Norfolk intakes with a vulnerability score of 9. While the 2018 General Regulation amendments permit the exclusion of pipeline policies (O.Reg. 287/07, ss. 31(2)), a description of the process and information used to reach the conclusion that there is no reasonable prospect a pipeline will ever be established or operated in the IPZs scoring 9 is required (O.Reg. 287/07, ss. 40(2), paragraph 7). This rationale would also need to be included in the updated explanatory document. We appreciate you sharing this information with our office.	Tables of Drinking Water Threats and circumstances. Additionally, the vulnerable areas where significant threats occur was updated to include WHPA-E and IPZs. • Policies across the Source Protection Area were reviewed and applicable, updated, to ensure they reflect the areas where this activity would be a significant threat. • Additional text has been added to the Haldimand and Norfolk sections of the Explanatory Document to provide additional context.

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7.0 POLICY DEVELOPMENT WITHIN HALDIMAND COUNTY

7.1 Municipal Support

To date, the municipalities within the Long Point Region Source Protection Area, including Haldimand County have been actively involved with the development of the Source Protection Plan policies. Haldimand County has been present at various meetings hosted by the Lake Erie Source Protection Region in order to develop locally implementable policies. These policies have been reviewed by municipal staff and council.

7.2 Financial Considerations

In reviewing the policies with the Lake Erie Source Protection Region staff, Haldimand County staff evaluated the potential work load for the implementation of these policies. As with other municipalities within the Lake Erie Source Protection Region, Haldimand County has great concerns about the financial burden implementation might cause for not only Haldimand County but the affected property owners.

There are and will continue to be direct financial costs to Haldimand County to implement the Source Protection Plan policies. The intent was to use policy options other than relying upon on the *Clean Water Act, 2006* Part IV tools. As a small municipality Haldimand County has limitations from a budgetary perspective, and given the context of the drinking water threats relative to the Intake Protection Zones Haldimand County is confident that the policies presented without the use of the Part IV tools are suitable to appropriately address any significant drinking water threats.

There are also additional labour and administrative costs incurred to implement Source Protection Plan policies related to, for example, Official Plan and Zoning By-law amendments and annual reporting requirements.

7.3 Policy Intent and Rationale

Haldimand County is located in the eastern part of the Long Point Region Source Protection Area. Intake Protection Zone One (1) is located inland (Forebay Intake) and within the property of the Water Treatment Plant grounds which is currently owned by Haldimand County. Therefore, this area is protected from many of the identified drinking water threats based on current measures to ensure the safety and quality of the raw water supply. These measures are outlined in the Haldimand County Official Plan and other municipal documents. Intake Protection Zone Two (2) was delineated south east of the Forebay intake within the Ontario Power Generation property. This area has been used for power generation and based on current and projected land use activities, many of the drinking water threat activities are unlikely to exist or occur in the future.

The review of the current and projected land uses indicates that there is currently a high level of protection of the raw water from the prescribed drinking water threats. Therefore, the policies developed reflect this current assessment as presented in the Assessment Report found online at www.sourcewater.ca.

Based on the percent impervious surface area presented in the Assessment report, policies were not required to address significant drinking water threat activities from the application of road salt.

In Haldimand County there are no existing sanitary sewer pipes, sewage treatment by-passes or combined sewer discharges located in Intake Protection Zones 1 or 2. There are no enumerated existing occurrences of handling and storage of fuel or storage of snow activities within Intake Protection Zones 1 or 2. There are also no activities related to the establishment and operation of liquid hydrocarbon pipeline as the vulnerability scores for the current IPZs are too low. As such there are no policies included in the Haldimand County section of the Long Point Region Source Protection Plan to address the existing occurrence of the above listed activities.

7.3.1 Prescribed Instruments

Ministry of the Environment, Conservation and Parks: Prohibit Environmental Certificates of Approvals

Intent:
The Ministry of the Environment, Conservation and Parks is required to prohibit activities within the Environmental Compliance Approval process where they would be significant drinking water threats under Subsection 39 of the *Clean Water Act, 2006*.

Rationale:
Although the Environmental Compliance Approval process is considered to be rigorous, denial of an application is preferred with respect to future waste and sewage activities, from a policy perspective. This policy would eliminate the option of allowing these sites to be located within vulnerable areas where significant drinking water threats would occur in the future if the activity were undertaken. The risks presented by these types of facilities warrant prohibition of future occurrences. Based on a review of the current and future land uses, the likelihood of these applications occurring within the significant drinking threat area is minimal.

Ministry of the Environment, Conservation and Parks : Review and Amend Environmental Certificates of Approvals

Intent:
The Ministry of the Environment, Conservation and Parks is required to review activities within the Environmental Compliance Approval process where they would be significant drinking water threats under Subsection 39 of the *Clean Water Act, 2006*. Environmental Compliance Approvals should not be granted unless terms and conditions are imposed that, when implemented, will ensure that the activity does not become a significant drinking water threat.

Rationale:
Policies using the Prescribed Instrument tool rely on the existing responsibility of the Ministry of the Environment, Conservation and Parks to protect drinking water sources. It is a priority of Haldimand County to use existing regulatory tools when available to address the existing threat(s) within the County. Environmental Compliance Approvals have been a longstanding requirement for waste disposal and sewage, and the criteria used to assess applications for an Environmental Compliance Approval are thorough. Requiring the Ministry to review Environmental Compliance Approvals in light of the circumstances that make the activity a significant drinking water threat will serve to ensure that additional terms and conditions are added to Environmental Compliance Approvals, where necessary. In some cases the policies request for additional criteria to be included in these approvals. This criteria is important to

ensure the protection of drinking water sources and should be considered to be included, if not already, within the approved Environmental Compliance Approval.

Ministry of Agriculture, Food and Rural Affairs (OMFARA) and/or Ministry of the Environment, Conservation and Parks (MECP): Non-Agricultural Source Material Plans and Nutrient Management Plans / Strategies

Intent:
The Ministry of the Environment, Conservation and Parks or Ministry of Agriculture, Food and Rural Affairs, as applicable, are required to review and amend or prohibit the approval of Non-Agricultural Source Material (NASM) Plans or Nutrient Management Plans or Strategies to ensure these threats are managed such that they do not become a significant drinking water threat.

Rationale:
Haldimand County determined the use of Prescribed Instruments as the preferred approach to address these threats as the current and projected land use of IPZ 1 and 2 would not allow for agricultural activities to occur. As the Source Protection Committee is required to include policies for future significant drinking water threat, the protocol for Nutrient Management Plans and strategies was recently and extensively reviewed and updated by the Province. These revisions are an important addition in the management of drinking water threats and the County will rely on OMAFRA and/or MECP to include measures to protect drinking water sources. If these activities would occur that do not require a Nutrient Management Plan, education and outreach programs will be implemented to ensure that the person engaging in the activity is aware of current best practices and the location of the property with respect to the drinking water intake.

Based on current land use, this activity is very unlikely to occur in the future on the current Ontario Power Generation and Water Treatment plant lands.

Ministry of the Environment, Conservation and Parks (MECP): Conditions Sites

Intent:
The Ministry of the Environment, Conservation and Parks and Climate Chaneg is required to: ensure that all Prescribed Instruments issued for Condition Sites include terms and conditions, as appropriate, to ensure that the risk to drinking water sources is managed; ensure that Prescribed Instruments include a condition requiring the instrument holder to report on the actions taken and the status of the site to the Ministry of the Environment, Conservation and Parks , Source Protection Authority and the municipality on an annual basis; and provide to Haldimand County a copy of the new or revised Prescribed Instrument.

Rationale:

<u>Conditions</u>
A condition is contamination that is the result of past activities. Haldimand County has determined that the approach to addressing conditions will require a combination of a number of policy approaches. The use of Prescribed Instruments is the preferred choice where there is an existing instrument available to be utilized or if a new instrument is to be issued that it appropriately manages the risks. Through the review process, Haldimand County has opted to use the refined wording developed by LESPR municipalities and the Ministry of Environment

and Climate Change for this policy to ensure that updates on the actions taken by the instrument holder are reported to Haldimand County on an annual basis and that any new or revised Prescribed Instrument is provided to Haldimand County. These policies will assist in the County obtaining additional information on and a clear understanding of the requirements for these sites.

7.3.2 Land Use Planning

Intent:
To manage or prohibit activities within Official Plans and Zoning by-laws, as applicable, to conform with the significant threat policies set out in the Source Protection Plan, in accordance with the requirements of the *Clean Water Act, 2006.*

Rationale:
The handling and storage of fuel
The handling and storage of Dense Non- Aqueous Phase Liquids (DNAPLs)
The handling and storage of Organic Solvents
The Official Plan is a readily available and accessible policy document and incorporating a policy regarding the prohibition of the above activities into the Official Plan supports the requirement to ensure these activities cease to be significant drinking water threats, where applicable. The potential for this storage to occur in the designated lands is minimal in the future. Prohibition of handling and storage of fuel and the prohibition of the handling and storage of DNAPLs are intended to remove the future potential threat from the area. Appropriate restrictions can be applied through amendment to the zoning bylaw on a site specific basis to prohibit the activity.

The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage- onsite sewage systems, discharge from a stormwater management facility
The policy for onsite sewage systems builds on existing regulation/programs and existing legislation can be utilized to effectively ensure that this threat does not become significant. The *Clean Water Act, 2006* requires that the Source Protection Plan address all 'would be' significant drinking water threats, regardless of their feasibility within an Intake Protection Zone. It is highly unlikely for these systems to be installed in the designated areas in the future. Official Plan and zoning amendments provide assurances that significant threat activities can and will be regulated.

For the discharge from a stormwater management facility, the policy builds on existing regulation/programs; existing legislation can be utilized to effectively ensure that this threat does not become significant. Official Plan and zoning amendments provide assurances that significant threat activities can and will be regulated. The policy requires new developments to include integrated treatment approaches and explore new technologies to reduce the risk to drinking water sources. If possible this discharge should occur outside of the vulnerable areas to ensure the protection of drinking water sources.

The handling and storage of pesticides and commercial fertilizer
Haldimand County determined within the Intake Protection Zones, new large-scale manufacturing and warehousing facilities are not permitted. Further, the above activities should not be permitted closest to the municipal drinking water source. There are alternative locations where any new facilities can locate.

The handling and storage of road salt

Haldimand County supports the use of best management practices to promote the efficient use of road salts and the use of alternatives. The primary concern relates to parking lots which are normally associated with multiple residential unit developments and employment, institutional or commercial land uses. These types of developments are subject to site plan control. For this reason, it is recommended that the Official Plan be amended to include policies to ensure that any new development is designed and maintained based on best management practices as well as the County update its salt management plans to protect the intake protection zones.

Conditions

As contamination is extremely difficult, costly and sometimes impossible to rectify, prevention of contamination is the best strategy to ensure the protection, conservation and careful management of water resources in order to meet both present and future needs. Official Plan policies should be updated to incorporate the requirement for the completion of an environmental screening process using a contaminated sites protocol as part of a complete *Planning Act* application. The protocol would outline when a Record of Site Condition would be required as part of the application. It is noted that there are limitation with a Record of Site Condition, as it does not deal with offsite impacts.

7.3.3 Education and Outreach

Intent:

To request Haldimand County to work with other implementing bodies where desirable to develop, continue or enhance stewardship and outreach and education programs directed at any, or all, significant drinking water threat activities where it may be deemed necessary.

Rationale:

Haldimand County supports Education and Outreach programs to address all significant drinking water threats and provide information to the residents of Haldimand County on the protection of drinking water sources. It is the intent of this policy to also be applied to any existing activities where no current drinking water threat policy exits. This is due to the certainty of Haldimand County and the Source Protection Committee that these activities will not occur before the Source Protection Plan is approved based on current and future land use approvals.

Currently, Haldimand County participates in programs to reduce the impact of sewage treatment plants discharges on the local water supply. The policies support the continuation of these programs by enhancing the knowledge of operators, general public and elected officials on the performance and operation of these plants and the benefits of participating in existing best management practice programs.

Establishment, Operation or Maintenance of a Waste Disposal Site, within the Meaning of Part IV of the Environmental Protection Act (where an ECA is not required)

Haldimand County will prepare and implement an education and outreach program with a focus on the proper handling, storage and disposal of wastes. As there are currently only two properties potentially affected, the intent of this program will be to specifically address current practices on both properties. Given the limited area where this policy will apply Haldimand County feels as though it will achieve the goals of the *Clean Water Act, 2006* and that a policy to prohibit or regulate waste disposal sites where an ECA is not required is not necessary.

The Application of Commercial Fertilizer
The Application of Pesticides
The Handling and Storage of Commercial Fertilizer

The Handling and Storage of Pesticides
The Handling and Storage of Dense Non-Aqueous Phase Liquid (DNAPL)
The Handling and Storage of Organic Solvents
The use of land as livestock grazing or pasturing land, an outdoor confinement area or farm animal yard

For the application of commercial fertilizer and pesticides to land, Haldimand County will prepare and implement an education and outreach program to encourage best management practices on the lands within the vulnerable areas. The program will also outline requirements for proper handling and storage as well as the steps to be taken if a spill or leak is detected. As there are currently only two properties, the intent of this program will be to specifically address current practices on both properties and look to alternatives to ensure the protection of drinking water sources.

Education and outreach programs for the handling and storage of DNAPLs and organic solvents will include information regarding the requirements for proper storage and steps that should be taken if there is a leak or spill detected.

As future activities with respect to livestock grazing or pasturing, or an outdoor confinement area or farm animal yard, are highly unlikely to occur in the future, these policies will aim to address any potential future activities within these two properties.

7.3.4 Specify Action

Conditions

A co-operative information exchange amongst Haldimand County, the Source Protection Authority and the Ministry of the Environment, Conservation and Parks is an essential part of addressing contaminated sites. Policies have been included to set out the requirement for specific information sharing process including the scope of information to be shared and meeting timelines. By incorporating specific language into the Source Protection Plan, a framework for building upon current practices has been established which was a primary objective of the County. These efforts will be augmented by the prioritization of any abatement activities by the Ministry in areas with the greatest potential risk to drinking water sources.

Haldimand County is currently aware of the ongoing activities at the identified condition site.

Support On-Site Re-inspection Program under Ontario Building Code

Intent:
Rely on the existing onsite sewage system re-inspection program implemented through the *Ontario Building Code Act* to ensure existing and future onsite sewage systems do not become a risk to municipal drinking water supplies.

Rationale:
Part IV tools cannot be used to prohibit onsite sewage threats. Therefore, it was concluded that the best approach to manage future onsite sewage systems would be to manage them through the required maintenance inspection program under the *Ontario Building Code Act*. The onsite sewage system maintenance inspection program supports the implementation of the *Clean Water Act, 2006* by providing a consistent approach for determining if on-site sewage systems are functioning as designed. The intent is to bring all systems in compliance with the Ontario Building Code. Prohibition of uses that rely on these small onsite sewage systems was not

considered by the County to be a viable option as not all areas of the County have municipal services available.

The management of runoff that contains chemical used in the de-icing of aircraft

There were no existing threats associated with aircraft de-icing noted in the assessment report. Further, based on land use activities surrounding existing municipal intakes, the potential for an airport to be constructed in the future that is of a size that might rank as a significant threat is minimal. Accordingly, it was concluded that the most effective policy to address this threat was the through the encouragement of best management practices when reviewing environmental assessments for proposed airports in this area.

Participation in the Grand River Watershed Wastewater Optimization Program

This program specifically looks at targets and best management practices for the storage of sewage and sewage treatment plant effluent discharges. If these activities were to occur in the future within the vulnerable areas, participation in this program would allow for the use of best management practices to reduce the risk to drinking water sources.

Prioritization of Inspections for Industrial Effluent Discharges

There is a need for the Ministry of the Environment, Conservation and Parks to use the data published in the approved Assessment Reports to determine where their limited resources are required for inspections. These inspections should be focused on facilities within the vulnerable areas to ensure the protection of drinking water supplies.

Emergency Management for Industrial Operators

In order for Haldimand County to ensure the protection of their drinking water sources, the industrial operators within the significant drinking water threat areas should provide their emergency planning documents including updates to Haldimand County for review. This would ensure that the appropriate measures are included to protect the municipal intake.

Training of pesticide permit holders and Ministry of the Environment, Conservation and Parks Inspections

There is a need for the development of training materials for pesticide permit holders to include information with respect to source water protection. Inspections by the Ministry of the Environment, Conservation and Parks Ministry of the Environment, Conservation and Parks should be focused in these areas.

Winter Maintenance and Salt Management Plans

Haldimand County shall amend their winter maintenance and salt management plans to identity the Intake Protection Zones to ensure the protection of drinking water sources. These will also include updating these plans to ensure all best management practices are captured.

Private contractors will also be contacted to request a review of their salt management plans to ensure their current practices include measures to protect drinking water sources. The intent is to education these contractors on the issues of the handling and storage of road salt and suggest amendments to current practices, if required, to address these potential drinking water threats.

Incentive Programs

The intent of including policies for incentive programs is to encourage the development and implementation of incentive programs to aid in the implementation of Source Water Protection

initiatives. Further, policy developers and the Source Protection Committee felt strongly that the Ministry of the Environment, Conservation and Parks should be requested to continue to fund the Ontario Drinking Water Stewardship Program to assist landowners to manage or cease to conduct activities that are identified as a significant drinking water threat on their properties.

7.3.5 Strategic Action

Spill Prevention, Spill Contingency and Emergency Response Plans along highways, railway lines or shipping lanes

Intent:
To ensure that emergency plans, contingency plans and spill containment plans are updated with respect to spills that occur within wellhead protection areas along highways or railways.

Rationale:
Municipal emergency services are often the first responders to events that may adversely impact a source of municipal drinking water. Therefore spill prevention plans; contingency plans and response plans should be updated to include maps that clearly detail the vulnerable areas. Quick and effective response to spills could prevent an emergency from affecting a municipal drinking water source. Additionally, updates to the current spill prevention plans, contingency plans and response plans could act as a communication tool for the municipalities and the public to ensure residents are aware of the location of wellhead protection areas and knowledgeable regarding the appropriate response in the event of a spill in these areas.

Further requests to business, industries and industrial operators will be made to ensure that their emergency contingency plans included the delineated Intake Protection Zones and measures to protect the municipal drinking water supplies.

7.4 Summary of Comments Received During Pre-Consultation

The pre-consultation process began on June 24, 2019. This update did not include any policy or map amendments for Haldimand County. For a complete draft of the Source Protection Plan, agencies were directed to www.sourcewater.ca

Agencies were given until July 29, 2019 to provide comments. This period was the first opportunity for agencies to provide comments on the draft updates to the Plan.

The following **Table 7-1** summarizes the results of the pre-consultation for Haldimand County within the Long Point Region Source Protection Area.

Table 7-1: Summary of Pre Consultation Comments – Haldimand County	
Summary of Comment	**How Comment was Addressed**
Ministry of the Environment, Conservation and Parks	
Policies OC-CW-1.1.1, NC-CW-1.1.1, EC-CW-1.1.1, and HC-CW-1.1.1 could use some punctuation to improve readability.	Punctuation added to improve readability
Throughout the documents, the short name for the sewage storage threat sub-category should be corrected to “Sewage Storage – Treatment or Holding Tanks.”	Text removed

Table 7-1: Summary of Pre Consultation Comments – Haldimand County	
Summary of Comment	**How Comment was Addressed**
The draft amendment includes policies addressing the Establishment and Operation of a Liquid Hydrocarbon Pipeline, and states that policies apply in WHPA-A & B with a vulnerability score of 10. While the assessment report has been edited to remove references to the previously-approved local threat for pipelines and has now listed pipelines in the list of prescribed threats, it is unclear whether the assessment for where this threat would be a significant, moderate, or low threat in the source protection area has been done. We note that there are three subcategories of the pipeline threat (above ground, below ground, and within or under a water body)which can be significant in WHPA A-B with a vulnerability score of 10. In IPZ 1-2 and WHPA-E with a vulnerability score of 9 or 10, two of the subcategories (above ground and within or under a water body) can be significant. We would like to know whether this prescribed threat has been assessed across the source protection area, including for the surface water intakes. Volume 1, Appendix B retains text noting pipeline hazard scores provided by the Director, which seems a relic from when pipelines were a local threat and omit reference to IPZ scores or 9 or 10. Corresponding policies should be updated to reflect the areas where this activity would be a significant threat; at present there are no policies for the Haldimand and Norfolk intakes with a vulnerability score of 9. While the 2018 General Regulation amendments permit the exclusion of pipeline policies (O.Reg. 287/07, ss. 31(2)), a description of the process and information used to reach the conclusion that there is no reasonable prospect a pipeline will ever be established or operated in the IPZs scoring 9 is required (O.Reg. 287/07, ss. 40(2), paragraph 7). This rationale would also need to be included in the updated explanatory document. We appreciate you sharing this information with our office.	• This threat has only been assessed for the Otterville Wellfield, County of Oxford as that is the only municipal system that included updated Wellhead Protection Areas (WHPAs), vulnerability scoring and a threats assessment. • The reference to hazard scores in Volume 1, Appendix B has been replaced by a reference to the Source Water Protection Tables of Drinking Water Threats and circumstances. Additionally, the vulnerable areas where significant threats occur was updated to include WHPA-E and IPZs. • Policies across the Source Protection Area were reviewed and applicable, updated, to ensure they reflect the areas where this activity would be a significant threat. • Additional text has been added to the Haldimand and Norfolk sections of the Explanatory Document to provide additional context.

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8.0 ELGIN COUNTY – MUNICIPALITY OF BAYHAM POLICY RATIONALE

8.1 Municipal Support

To date, the municipalities within the Long Point Region Source Protection Area, including the Municipality of Bayham, have been actively involved with the development of the Source Protection Plan policies.

The Municipality of Bayham has been present at various meetings hosted by the Lake Erie Source Protection Region to develop policies that take into account the local situation and needs. These policies have been reviewed by municipal staff and council. Early engagement with the municipal council began in the fall of 2014 with staff presentations and participation at various council meetings.

8.2 Financial Considerations

In reviewing the policies with the Lake Erie Source Protection Region staff, the Municipality of Bayham staff evaluated the potential work load for the implementation of these policies. As with other municipalities within the Long Point Region Source Protection Area, the Municipality has great concerns about the financial burden implementation might cause for not only the Municipality but the affected property owners. In the opinion of the Municipality, adequate provincial funding is essential to facilitate implementation of these policies.

Additional labour and administrative costs are and will continue to be incurred to implement the Ontario Building Code requirements for the mandatory onsite sewage inspections. Staff resources are also required to implement education and outreach programs. There are also additional labour and administrative costs incurred to implement Source Protection Plan policies related to, for example, Official Plan and Zoning By-law amendments and annual reporting.

8.3 Policy Intent and Rationale

Review of current and projected land uses indicates that there is a high level of protection of the municipal raw water from the prescribed drinking water threats. Therefore, the policies developed reflect this current assessment as presented in the Assessment Report available online at www.sourcewater.ca.

Based on the percentage of impervious surface area presented in the Assessment report, policies were not required to address significant drinking water threat activities from the application of road salt.

Currently there are no enumerated, existing occurrences of the following significant drinking water threat activities identified within the vulnerable area associated with the Municipality of Bayham: waste disposal sites; sewage systems with a design flow greater than 10,000 Litres a day; storage of sewage; sewage treatment plant effluent discharges; handling and storage of road salt, snow, fuel, dense non-aqueous phase liquids, or organic solvents; or management of run-off that contains chemicals used in the de-icing of aircraft.

8.3.1 Part IV Policies

Section 57 Prohibition

Intent:
These policies are intended to prohibit activities under Section 57 of the *Clean Water Act, 2006* in vulnerable areas where the activities would be a significant drinking water threat if they are or would be established.

Rationale:
Based on a review of current and projected land uses in the areas where the following activities could be a significant drinking water threat, staff is confident these activities are unlikely to occur in the future in the Municipality of Bayham.

The application, handling and storage of agricultural source material (ASM)
The risks presented by the application of ASM in a WHPA-A warrants prohibition of existing application and future application, handling and storage occurrences. This policy is consistent with the established policy direction on the *Nutrient Management Act.* The *Nutrient Management Act* currently prohibits the application of agricultural source material within 100 metres of a drinking water well where Nutrient Management Plans and/or Strategies are in place. The storage of ASM also poses a significant risk to drinking water sources within a WHPA-A, and therefore any future storage is prohibited in this area.

The handling and storage of non- agricultural source material (NASM)
The risks presented by the handling and storage of non-agricultural source material warrants prohibition of future storage within WHPA-A. The *Nutrient Management Act* currently prohibits the storage and application of agricultural source material within 100 metres of a drinking water well. Prohibiting the storage of NASM in this area is consistent with the established policy direction of the *Nutrient Management Act*.

The application of commercial fertilizer
The risk presented by the application of commercial nitrogen-based fertilizer warrants prohibition of existing and future application within WHPA-A and the Issue Contributing Area (NIT) to adequately address the threat activity, specifically given the elevated nitrate levels in the supply wells and resulting nitrate Issue identified for these wells. Nitrogen-based commercial fertilizer is the most likely source of the nitrate in the municipal supply wells.

The handling and storage of commercial fertilizer, pesticides, fuel, and the storage of snow
The risks presented by the handling and storage of, pesticides, fuel, and, the storage of snow within the vulnerable WHPA-A warrant the future prohibition of these activities. Based on a review of the current and projected land uses, there are alternative locations within the Municipality outside of these vulnerable areas where new facilities can locate. The risks presented by the handling and storage of nitrogen-based commercial fertilizer within WHPA-A and Issue Contributing Area (NIT) where the vulnerability is 10, warrant the existing and future prohibition of this activity. Commercial fertilizer can be stored and handled at locations outside this area. The circumstances which generally make the storage of snow a significant drinking water threat (i.e. snow stored above grade on an area greater than 1 hectare) are not anticipated to occur within the vulnerable areas. Similarly, the quantities which make the handling and storage of commercial fertilizer, pesticides, and fuel a significant drinking water threat warrant the prohibition of these activities within the most vulnerable wellhead areas. The large volumes required would generally not apply to a small-scale operator or individual who is storing these materials for their own personal use/gain. The impacts of this policy are anticipated to be negligible.

The handling and storage of dense non-aqueous phase (DNAPLs) and organic solvents

The risks presented by these types of activities warrant prohibition of future occurrences within the most vulnerable wellhead/intake protection zones. There are alternative locations within the Municipality where new activities can locate that are outside the 'prohibited areas'. The impact of this policy on landowners/businesses is anticipated to be negligible.

Farm animal yards and outdoor confinement areas

The risks presented by these activities warrant prohibition of future occurrences within WHPA-A. These types of activities can generate the same level of risk to drinking water supplies as the application or storage of agricultural source material. The proposed prohibition of these activities is consistent with the approach taken with respect to the application and storage of ASM and the established policy direction of the *Nutrient Management Act*. The area affected by this prohibition is relatively confined and consequently the projected impact on the agricultural community in the Municipality is anticipated to be negligible.

Section 58 Risk Management Plans

Intent:

These policies are intended to require the development of Risk Management Plans under Section 58 of the *Clean Water Act, 2006* for current or future activities. Risk Management Plans are used where the threat cannot be effectively managed through other approaches.

Rationale:

Risk Management Plans, established, under Section 58 of the *Clean Water Act, 2006* are used as a tool to manage existing and future drinking water threats. This tool is used to "fill the gap" where land use policy or other existing legislation cannot regulate a significant drinking water threat. This tool is particularly effective in dealing with existing significant drinking water threat activities, where prohibition will likely impose undue hardship on property owners, businesses, etc. Risk Management Plans provide an opportunity to work with property owners/proponents to manage a threat.

The application and storage of agricultural source material (ASM)

For a livestock operation that does not have or do not require a Nutrient Management Plan or Strategy, a Risk Management Plan is an effective means to regulate the existing application and storage of ASM. Existing agricultural operations without a Nutrient Management Plan/Strategy include livestock operations with less than 300 Nutrient Units. It is anticipated that the number of livestock operations that meet these circumstances is nominal and this approach is deemed appropriate. A Risk Management Plan may be similar in nature to a Nutrient Management Plan/Strategy and therefore would be a tool that is familiar to the agricultural community.

The application, handling and storage of pesticide

The existing and future application, and existing handling and storage of pesticides can be effectively addressed through the establishment of Risk Management Plans. Although the policy would result in costs to the Municipality, the use of Risk Management Plans to manage the instances where pesticides are applied is the best option to manage this activity because land use planning tools cannot be used to manage activities. Given the relatively few existing threats in the Municipality for the handling, storage and application of pesticides to land, this tool is considered to be the most appropriate to manage this activity. This tool is also preferred over others (i.e. Part IV prohibition) particularly given the potential negative impacts such restrictions would have on the Municipality's agricultural community.

The application, handling, and storage of commercial fertilizer

The application of commercial fertilizer is generally covered under the *Nutrient Management Act*. However, not all agricultural operations or land uses are subject to the policies of the *Nutrient Management Act* and traditional land use planning tools can not address the application of fertilizer. In addition, the *Nutrient Management Act* does not cover the handling and storage of commercial fertilizer. These activities are difficult to regulate with any other tool, therefore the Municipality of Bayham has determined a Risk Management Plan is the most effective approach to manage the existing and future application and existing storage, particularly where the land use or agricultural operations are not subject to the *Nutrient Management Act*.

The handling and storage of a dense non-aqueous phase liquid (DNAPLs) - WHPA- B/C

The use of Risk Management Plans ensures that the future handling and storage of DNAPLs in WHPA-B and C are adequately managed to ensure these activities do not become a significant drinking water threat. Although this policy will result in costs to the Municipality, the use of Risk Management Plans to manage the future instances identified within the vulnerable areas where DNAPLs are currently being stored and handled is the best option to manage this threat.

The use of land as livestock grazing or pasturing land, an outdoor confinement area of a farm animal yard

Prohibition was only used to manage future occurrences of farm animal yards or outdoor confinement areas in the highest vulnerability areas to limit the potential impacts it would have on the Municipality of Bayham's agricultural community. A Nutrient Management Plan and/or Strategy can be an effective tool to manage these threats. However, not all agricultural operations are subject to *Nutrient Management Act* and therefore, are not required to have Nutrient Management Plans and/or Strategies. In addition, the *Nutrient Management Act* does not regulate livestock grazing or pasturing. Therefore, a Risk Management Plan is an effective means to regulate these activities. The Risk Management Plan may be scoped to the requirements of a Nutrient Management Plan/Strategy to ensure consistency within the agricultural community.

Section 59 Restricted Land Use

Intent:

Designate all land uses where activities are designated for the purposes of Section 57 and/or 58 of the *Clean Water Act, 2006* as Restricted Land uses under Section 59 of the *Clean Water Act, 2006*.

Rationale:

These policies were developed to require all applications under the *Planning Act, Condominium Act* and Ontario *Building Code Act* where activities are, or would be, a significant drinking water threat to be reviewed by the Risk Management Official, who would then advise the applicant if Section 57 (Prohibition) or Section 58 (Risk Management Plans) of the *Clean Water Act, 2006* apply.

The policies enable the Risk Management Official to pre-screen applications for activities identified as a significant drinking water threat within vulnerable areas.

8.3.2 Prescribed Instruments

Ministry of the Environment, Conservation and Parks: Prohibit Environmental Compliance Approvals

Intent:
The Ministry of the Environment, Conservation and Parks (MECP) is required to prohibit significant drinking water threats through the Environmental Compliance Approval.

Rationale:
The Municipality of Bayham's preference is to rely on existing legislation, as much as possible, to regulate prescribed drinking water threats. The Environmental Compliance Approval process is an established process that can effectively regulate and restrict uses and activities.

New waste disposal sites within the meaning of Part IV of the *Environmental Protection Act*, New onsite sewage systems or sewage works

The risks presented by these activities warrant prohibition of future occurrences. The Municipality is confident that alternative locations outside vulnerable wellhead areas are available to accommodate these activities. As a result, prohibition of these activities through the Environmental Compliance Approval process will not have a significant impact on the municipality or property owners.

Ministry of the Environment, Conservation and Parks: Review and Amend Environmental Compliance Approvals

Intent:
The Ministry of the Environment, Conservation and Parks is required to review or prepare Environmental Compliance Approvals to ensure that appropriate terms and conditions are incorporated that when implemented reduce the risk to drinking water. The Ministry of the Environment, Conservation and Parks will amend existing Environmental Compliance Approvals (if necessary) to include these terms and conditions and will not grant future Environmental Compliance Approvals unless these terms and conditions are included.

Rationale:
Policies using the Prescribed Instrument tool rely on the existing responsibility of the Ministry of the Environment, Conservation and Parks to protect drinking water sources. It is a priority of the Municipality to use existing regulatory tools when available to address existing threat(s) within the Municipality of Bayham. Environmental Compliance Approvals have been a longstanding requirement for waste disposal and sewage, and the criteria used to assess these Environmental Compliance Approvals are thorough. Requiring the Ministry to review Environmental Compliance Approvals in light of the circumstances that make the activity a significant drinking water threat will serve to ensure that additional terms and conditions are added to Environmental Compliance Approvals, where necessary.

Ministry of Agriculture, Food and Rural Affairs: Prohibit Non-Agricultural Source Material Plans

Intent:
The Ministry of the Environment, Conservation and Parks or the Ministry of Agriculture, Food and Rural Affairs (OMAFRA), as applicable, are required to prohibit the application of non-agricultural source material within the Environmental Compliance Approval process or in

accordance with the *Nutrient Management Act* where they would be a significant drinking water threat under Subsection 39 (7) of the *Clean Water Act, 2006*.

Rationale:
The risks presented by the application of non-agricultural source material in a WHPA warrants prohibition of this activity within these most vulnerable areas. The *Nutrient Management Act* currently prohibits the application of non-agricultural source material within 100 metres of a municipal well. Therefore, prohibition within WHPA-A is consistent with this established policy approach of the *Nutrient Management Act*. The Municipality's preference is to use existing regulatory tools where possible. Therefore, prohibition through this Prescribed Instrument is desirable.

Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and/or Ministry of the Environment, Conservation and Parks (MECP): Review and Amend Non-Agricultural Source Material Plans and Nutrient Management Plans / Strategies

Intent:
The Ministry of the Environment, Conservation and Parks or Ministry of Agriculture, Food and Rural Affairs, as applicable, are required to review and, if necessary, amend Non-Agricultural Source Material (NASM) Plans or Nutrient Management Plans or Strategies to ensure these threats are managed such that they do not become a significant drinking water threat.

Rationale:
Policies using the Prescribed Instrument tool rely on the authorities of the Ministry of the Environment, Conservation and Parks and the Ministry of Agriculture, Food and Rural Affairs to protect drinking water sources through their respective approval processes. It is generally a priority of the Municipality to use existing regulatory tools where available and effective for addressing a particular threat activity. Environmental Compliance Approvals have been a longstanding requirement for waste disposal and sewage, and the criteria used to assess these Certificates are thorough. Similarly, NASM plans under the *Nutrient Management Act* have comprehensive requirements and criteria that are used to address NASM. Requiring these Ministries to review Environmental Compliance Approvals and NASM plans in light of the circumstances that make the activity a significant drinking water threat will serve to ensure that terms and conditions are added to these approvals, where necessary.

8.3.3 Land Use Planning

Intent:
To manage or prohibit significant drinking water threat activities within Official Plans and Zoning by-laws.

Rationale:
On-site sewage systems with a design flow equal to or less than 10, 000 Litres
The Municipality concluded the best approach to prevent future onsite sewage systems of this design is to amend their Official Plan to direct land uses relying on this activity to a location on the same property where the activity would not be considered a significant drinking water threat. There are areas outside of the vulnerable areas of the WHPAs where this type of development could locate. Amendments to the Municipality of Bayham Official Plan policies will be required to implement this policy.

On-site sewage systems with a design flow greater than 10,000 Litres
Part IV tools of the *Clean Water Act, 2006* cannot be used to prohibit onsite sewage threats. The Municipality concluded the best approach to prevent future onsite sewage systems of this design is to prohibit developments which rely on these types of onsite sewage systems through land use planning in the most vulnerable wellhead protection areas. There are other areas outside of the vulnerable areas of the WHPAs that development can locate. Amendments to the Municipality of Bayham Official Plan policies will be required to implement this policy.

The handling and storage of road salt
The Municipality of Bayham supports the use of best management practices to promote the efficient use of road salts and the use of alternatives. The primary concern relates to parking lots which are normally associated with multiple residential unit developments and employment, institutional or commercial land uses. It is unlikely that these types of development will occur within the vulnerable area in the future. In such an event that these types of development were to occur they are subject to site plan control. For this reason, it is recommended that the Official Plan be amended to include policies to ensure that any new development is designed and maintained based on best management practices and that a salt impact assessment and/or salt management plan has been completed to the satisfaction of the Municipality.

8.3.4 Education and Outreach

Education and Outreach Programs: Municipality and Conservation Authority delivered

Intent:
To request the Municipality of Bayham to work with other implementing bodies, where appropriate, to develop or enhance stewardship or outreach and education programs directed at any or all, significant drinking water threat activities where it may be deemed necessary.

Rationale:

Establishment, Operation or Maintenance of a Waste Disposal Site, within the Meaning of Part IV of the Environmental Protection Act (where an ECA is not required)
The Municipality will prepare and implement an education and outreach program with a focus on the proper handling, storage and disposal of wastes. Given the limited area where this policy will apply the Municipality feels as though it will achieve the goals of the *Clean Water Act, 2006* and that a policy to prohibit or regulate waste disposal sites where an ECA is not necessary.

The storage of ASM, the application, handling and storage of NASM and livestock grazing, pasturing, outdoor confinement areas and farm animal yards
An education and outreach program will complement the proposed management/regulation (e.g. Prohibition or Risk Management) of these activities within vulnerable areas.

The application of commercial fertilizer or pesticides
Other tools (e.g. Risk Management Plans) have been used to manage this activity on agricultural land and non-agricultural uses. An education and outreach program for the application of commercial fertilizer or pesticides is intended to complement the other tools proposed to manage these activities.

The handling and storage of dense non-aqueous phase liquid (DNAPLs) and organic solvents
The Municipality is concerned that there are various issues relating to the use of DNAPLs and organic solvents in all land uses and activities. Many DNAPLs and organic solvents are readily

available and are found within commonly used products. Therefore, the use of education and outreach programs which promote the use of alternative products is considered appropriate to complement the other tools proposed to manage this significant drinking water threat.

8.3.5 Incentive Programs

Intent:
To encourage funding of programs, which encourage the protection of existing and future drinking water sources from significant drinking water threats.

Rationale:
As a supplemental policy, the Municipality of Bayham supports incentive programs to assist property owners with the cost of implementing beneficial practices to protect drinking water sources. Where possible, incentives will be utilized with other tools to achieve risk reduction. The province has assisted (directly/in-directly) in the funding of programs such as the Ontario Drinking Water Stewardship Program. Continued provincially funding is encouraged to ensure the protection of drinking water sources.

8.3.6 Stewardship Programs

Decommissioning of Abandoned Wells that serve as Transport Pathways

Intent:
To encourage the establishment of a program to assist with the decommissioning of abandoned wells that may pose a significant drinking water threat to municipal water supplies.

Rationale:
Often these wells are located on private property and the proper decommissioning or upgrading of the structure is cost prohibitive. A specific transport pathway policy to support ongoing stewardship programs to decommission abandoned wells will reduce the ability of contaminants to enter the groundwater within vulnerable areas. For some water sources this may further reduce the vulnerability of a vulnerable area and the number of identified threats.

8.3.7 Specify Action

Support On-Site Re-inspection Program under Ontario Building Code

Intent:
Rely on the existing onsite sewage system inspection program recently implemented through the *Ontario Building Code Act* to ensure existing and future onsite sewage systems do not become a significant drinking water threat to municipal drinking water supplies.

Rationale:
<u>The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage</u>
Part IV tools cannot be used to prohibit sewage threats. Therefore, it was concluded the best approach to manage onsite sewage systems less than or equal to 10,000 Litres per day would be to manage them through the required maintenance inspection program under the *Ontario Building Code Act*. The onsite sewage system maintenance inspection program supports the implementation of the *Clean Water Act, 2006* by providing a consistent approach for determining if on-site sewage systems are functioning as designed. The intent is to bring all systems into compliance with the Ontario Building Code.

Policy EC-MC-3.2 has been included to ensure that if a new onsite sewage system or holding tank is proposed or an existing system/tank is being replaced, all efforts should be made, if physically possible given the lot size and location of the system relative to the use, etc., to ensure the new system is located outside an area where these activities would be a significant drinking water threat.

The management of runoff that contains chemical used in the de-icing of aircraft

There were no existing threats associated with aircraft de-icing noted in the assessment report. Further, based on land use activities surrounding existing municipal water sources, the potential for an airport to be constructed in the future that is of a size that might rank as a significant threat is minimal. Accordingly, it was concluded that the most effective policy to address this threat was through the encouragement of best management practices when reviewing environmental assessments for proposed airports in this area.

Winter Maintenance and Salt Management Plans

The Municipality of Bayham shall amend their winter maintenance and salt management plans to identity the wellhead protection areas to ensure the protection of drinking water sources. These will also include updating these plans to ensure all best management practices are captured.

Encourage Appropriate Siting, Design and Maintenance Standards for the Establishment and Operation of a Liquid Hydrocarbon Pipeline

Intent:
The location and siting of liquid hydrocarbon pipelines is not controlled by the Municipality of Bayham, therefore, managing this activity through direction and recommendations to the appropriate approval authorities is the most effective approach for this local threat.

Rationale:
There are no threats identified within the Municipality of Bayham in the Assessment Report and therefore, it is anticipated the implementation of this policy is limited. The primary concern regarding this threat relates to a potential spill from a pipeline. Encouraging the National Energy Board and the Ontario Energy Board to advise the Source Protection Authority and the Municipality of Bayham of any proposed pipeline will assist the Municipality in identifying early in the process whether a proposed pipeline will affect the Municipality's municipal drinking water supply.

Spill Prevention, Spill Contingency and Emergency Response Plans along highways, railway lines or shipping lanes

Intent:
To ensure that emergency plans, contingency plans and spill containment plans are updated with respect to spills that occur within wellhead protection areas.

Rationale:
Municipal emergency services are often the first responders to events that may adversely impact a source of municipal drinking water. Therefore, spill prevention and contingency/response plans should be updated to include maps that clearly detail the vulnerable areas. Quick and effective response to spills may prevent an emergency from affecting a municipal drinking water source.

Additionally, updates to the current spill prevention and contingency/response plans can act as a communication tool for the Municipality of Bayham and the public and ensure residents are aware of the location of wellhead protection areas and knowledgeable regarding the appropriate response in the event of a spill in these area.

8.4 Summary of Comments Received During Pre-consultation

In accordance with the Ontario *Clean Water Act, 2006,* implementing bodies were notified of and participated in pre-consultation, on behalf of the Source Protection Committee, for updates made to the Long Point Region Source Protection Plan.

The pre-consultation process began on June 24, 2019. This update did not include any policy or map amendments for the Municipality of Bayham. For a complete draft of the Source Protection Plan, agencies were directed to www.sourcewater.ca

Agencies were given until July 29, 2019 to provide comments. This period was the first opportunity for agencies to provide comments on the draft updates to the Plan.

The following **Table 8-1** summarizes the results of the pre-consultation for the Municipality of Bayham within the Long Point Region Source Protection Area.

Table 8-1: Summary of Pre Consultation Comments – Municipality of Bayham	
Summary of Comment	**How Comment was Addressed**
Ministry of the Environment, Conservation and Parks	
Policies OC-CW-1.1.1, NC-CW-1.1.1, EC-CW-1.1.1, and HC-CW-1.1.1 could use some punctuation to improve readability.	Punctuation added to improve readability
Throughout the documents, the short name for the sewage storage threat sub-category should be corrected to “Sewage Storage – Treatment or Holding Tanks.”	Text removed
The draft amendment includes policies addressing the Establishment and Operation of a Liquid Hydrocarbon Pipeline, and states that policies apply in WHPA-A & B with a vulnerability score of 10. While the assessment report has been edited to remove references to the previously-approved local threat for pipelines and has now listed pipelines in the list of prescribed threats, it is unclear whether the assessment for where this threat would be a significant, moderate, or low threat in the source protection area has been done. We note that there are three subcategories of the pipeline threat (above ground, below ground, and within or under a water body)which can be significant in WHPA A-B with a vulnerability score of 10. In IPZ 1-2 and WHPA-E with a vulnerability score of 9 or 10, two of the subcategories (above ground and within or under a water body) can be significant. We would like to know whether this prescribed threat has been assessed	• This threat has only been assessed for the Otterville Wellfield, County of Oxford as that is the only municipal system that included updated Wellhead Protection Areas (WHPAs), vulnerability scoring and a threats assessment. • The reference to hazard scores in Volume 1, Appendix B has been replaced by a reference to the Source Water Protection Tables of Drinking Water Threats and circumstances. Additionally, the vulnerable areas where significant threats occur was updated to include WHPA-E and IPZs. • Policies across the Source Protection Area were reviewed and applicable, updated, to ensure they reflect the areas where this activity would be a significant threat. • Additional text has been added to the

Table 8-1: Summary of Pre Consultation Comments – Municipality of Bayham	
Summary of Comment	**How Comment was Addressed**
across the source protection area, including for the surface water intakes. Volume 1, Appendix B retains text noting pipeline hazard scores provided by the Director, which seems a relic from when pipelines were a local threat and omit reference to IPZ scores or 9 or 10. Corresponding policies should be updated to reflect the areas where this activity would be a significant threat; at present there are no policies for the Haldimand and Norfolk intakes with a vulnerability score of 9. While the 2018 General Regulation amendments permit the exclusion of pipeline policies (O.Reg. 287/07, ss. 31(2)), a description of the process and information used to reach the conclusion that there is no reasonable prospect a pipeline will ever be established or operated in the IPZs scoring 9 is required (O.Reg. 287/07, ss. 40(2), paragraph 7). This rationale would also need to be included in the updated explanatory document. We appreciate you sharing this information with our office.	Haldimand and Norfolk sections of the Explanatory Document to provide additional context.

9.0 SUMMARY OF COMMENTS RECEIVED DURING THE CONSULTATION ON THE DRAFT UPDATED SOURCE PROTECTION PLAN

In accordance with O. Reg. 287/07 made under the Ontario *Clean Water Act, 2006,* The Grand River Conservation Authority on behalf of the Lake Erie Source Protection Committee posted the draft Updated Source Protection Plan for public consultation between September 23 and October 27, 2019. During this time one public open house was held on October 1, 2019 at the Norwich Community Centre. Comments were received from the Ministry of the Environment, Conservation and Parks (MECP) during the public consultation period.

Detailed public consultation comments and how they were addressed for previous iterations of the Long Point Region Source Protection Plan are available upon request.

Table 9-1 is a synopsis of the comments received during the public consultation period. Comments or statements that did not require consideration are not detailed in the Table.

Table 9-1: Synopsis of Comments Received on the draft updated Long Point Region Source Protection Plan	
Comment Received	**How Comment was Addressed**
Ministry of the Environment, Conservation and Parks (MECP)	
Throughout the documents, the reference to the tables of drinking water threats is inconsistent. In Vol 2, this has been written as “Source Water Protection Tables of Drinking Water Threats (swpip.ca) and Circumstances,”; we suggest this should be revised to be consistent with the way it is referenced in Vol 1 with the URL at the end of the title.	“swpip.ca” moved to the end of the title.
We note that the revised portions of the Explanatory Document were not circulated during pre-consultation and were not posted on the internet. Section 50 of O.Reg. 287/07 requires that the updated portions of the Explanatory Document should be posted on the internet along with the amendment. As a reminder, please ensure the Explanatory Document reflects the most current version of the plan when the amended source protection plan is posted on the web. We recommend that the information provided by Oxford County be included in the section explaining the reasons for the policies that apply in the nitrate issue contributing area.	Additional information added to the Oxford section of the Explanatory Document regarding Significant Drinking Water Threat management in a nitrate ICA, specifically the use of Risk Management Plans and onsite sewage system maintenance inspection programs.

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