

The *Clean Water Act* A Plain Language Guide

This document is provided for guidance purposes only. Nothing in this document absolves the reader from their responsibility to comply with the *Clean Water Act, 2006* and its regulations or any other Provincial or Federal statute. It is also reiterated that this document represents a current state of knowledge in anticipation of future regulations, and as such, many “non-legislated” subject areas discussed in this guide are subject to change.

Table of Contents

| | |
|--|----|
| Summary..... | 3 |
| 1. Introduction to the <i>Clean Water Act</i> | 3 |
| 1.1 Overview | 3 |
| 1.1.1 The <i>Clean Water Act</i> , 2006 | 3 |
| 1.1.2 Watershed-based source water protection..... | 3 |
| 1.2 Scope of Source Water Protection | 4 |
| 1.2.1 Focus on Drinking Water and Sound Science..... | 4 |
| 1.2.2 Source Water Protection on the Great Lakes | 5 |
| 1.2.3 Source protection planning in Northern Ontario | 5 |
| 1.2.4 First Nations drinking water systems in Ontario | 6 |
| 1.3 Essential Terminology..... | 6 |
| 1.4 The Source Protection Process..... | 7 |
| 2. Roles and Responsibilities of Source Protection Partners..... | 8 |
| 2.1 Overview | 8 |
| 2.2 The role of the Source Protection Authority | 9 |
| 2.2.1 Duties of the Source Protection Authority..... | 9 |
| 2.2.2 Lead and local Source Protection Authorities | 9 |
| 2.2.3 Source Protection Authority and Source Protection Committees | 10 |
| 2.2.4 Source Protection Authorities and Municipalities | 11 |
| 2.2.5 Source Protection Authorities and Inspections | 11 |
| 2.3 The role of the Source Protection Committee..... | 12 |
| 2.4 The Municipal Role..... | 13 |
| 2.4.1 Municipalities and source water protection | 13 |
| 2.4.2 Legal Obligations..... | 13 |
| 2.4.3 Municipalities and the Source Protection Committee | 13 |
| 2.4.4 Flexibility in the Municipal Role | 14 |
| 2.4.5 The Municipal Role in Implementation | 14 |
| 2.5 The Role of the Province | 15 |
| 2.6 Obligations of Agencies, Boards and Commissions | 15 |
| 3. Public Involvement in the Source Protection Process | 15 |
| 3.1 Overview | 15 |
| 3.2 Public Information..... | 15 |
| 3.3 Public Consultation..... | 16 |
| 3.4 Public Participation..... | 16 |
| 4. Step 1: The Terms of Reference | 17 |
| 4.1 Overview | 17 |
| 4.2 Approval of the Terms of Reference | 17 |
| 5. Step 2: The Assessment Report..... | 18 |
| 5.1 Overview | 18 |
| 5.2 Contents of the Assessment Report | 19 |
| 5.3 Threats of Potential Concern | 20 |
| 5.4 Freedom of Information and Protection of Privacy | 21 |
| 5.5 Review and Approval of the Assessment Report..... | 22 |
| 6. Step 3: The Source Protection Plan..... | 22 |
| 6.1 Overview | 22 |
| 6.2 Legislated Contents of a Source Protection Plan..... | 23 |
| 6.3 Submission and Approval for Plan | 24 |
| 6.4 Review and Renewal of a source protection plan | 25 |
| 6.5 Prohibitions and Risk Management Plans..... | 25 |
| 6.5.1 New authority | 25 |
| 6.5.2 Risk Management Officials..... | 27 |

| | |
|--|----|
| 6.5.3 Inspections under Part IV | 27 |
| 6.5.4 Risk Assessments | 28 |
| 6.5.5 Risk Management Fees | 29 |
| 7. Step 4: Implementation, Monitoring, Inspections and Enforcement | 29 |
| 7.1 Overview | 29 |
| 7.2 Implementation and Conformity | 29 |
| 7.3 Inspections and Enforcement | 30 |
| 7.4 Monitoring and Reporting | 31 |
| 8. Provisions for Financing Source Protection | 31 |
| 12. Further Information | 32 |

Summary

The *Clean Water Act*, 2006 introduces a new level of protection for Ontario's drinking water resources that focuses on protecting water before it enters the drinking water treatment system. The Act establishes a locally driven, science-based, multi-stakeholder process to protect municipal residential drinking water sources and designated private drinking water sources. This process will promote the shared responsibility of all stakeholders to protect local sources of drinking water.

Source protection involves delineating sources of drinking water, identifying and ranking threats to those sources of drinking water, determining the appropriate response to the drinking water threats, taking action, and monitoring progress. The process follows four major stages: i) creating the source protection structure; ii) preparing the Assessment Report; iii) preparing a Source Protection Plan; and iv) implementing the Source Protection Plan.

This compendium explains the legislative requirements of the *Clean Water Act* in plain language, explaining the scope of the legislation and key terminology, exploring the nature of the new institutions and relationships created by the Act, and providing an overview of the four stages of the process.

1. Introduction to the *Clean Water Act*

1.1 Overview

1.1.1 The *Clean Water Act*, 2006

The Province of Ontario has introduced the *Clean Water Act*. The Act, which received Royal Assent on October 19, 2006, introduces a new level of protection for our drinking water resources that focuses on protecting water before it enters the drinking water treatment system.

The Act is based in large part on recommendations from the Walkerton Inquiry, which called for a watershed based process to protect the sources from which drinking water is drawn.

The *Clean Water Act* will establish a locally driven, science-based, multi-stakeholder process to protect municipal residential drinking water sources and designated private drinking water sources. This process will promote the shared responsibility of all stakeholders to protect local sources of drinking water. This compendium explains the legislative requirements of the *Clean Water Act* in plain language.

1.1.2 Watershed-based source water protection

Our drinking water comes from lakes, rivers, streams or underground aquifers. By their very nature, these drinking water sources are susceptible to contamination, depletion, or other types of stresses. Drinking water sources that are compromised can have an environmental, health and economic cost to

Ontario communities. Taking preventative measures is the best form of public health protection, when it comes to our drinking water.

We can protect our sources of drinking water by managing the influences on them. That is what watershed-based source protection is all about. It involves identifying threats to drinking water sources, assessing the significance of each threat, taking action to reduce or eliminate the threat, and monitoring progress. Protecting water sources at the watershed level makes most sense because water flows across community boundaries. Activities in one community may influence the drinking water of another community 'downstream'.

1.2 Scope of Source Water Protection

1.2.1 Focus on Drinking Water and Sound Science

The *Clean Water Act* has a more narrow focus than other rules governing water resources. This legislation is dedicated to sources of water that have been designated by a municipality as being a current or future source of residential municipal drinking water for the community. Private drinking water systems can be included in a source protection plan if a municipality expressly designates a private system, for example if there is a known concern with a private drinking water source. The Minister of the Environment also has the authority to designate a private drinking water system for inclusion into a source protection plan.

The dedicated focus on drinking water is based on recognition that Ontario's environmental regulations and programs did not sufficiently protect water resources from a public health perspective. During the Walkerton Inquiry, Justice O'Connor found that, prior to the Walkerton tragedy, regulators focused mostly on the ecological and recreational values of water resources. Making water safe to drink was achieved through appropriate treatment only. In his Walkerton Inquiry recommendations, Justice O'Connor called for a reorientation of water resource programs and regulation towards public health protection associated with water consumption.

This strong focus on drinking water sources does not mean that the *Clean Water Act* will result in benefits to public health alone. It is expected that the information gathered and the actions taken to protect drinking water sources will have broader benefits to the management of water resources in the Province.

Another important emphasis of the *Clean Water Act* is its foundation on sound science. Through the source protection process outlined in the legislation, conditions or activities that pose risks to drinking water will undergo a thorough technical assessment and will be ranked based on their level of threat. Those that are assessed and ranked as 'significant threats to drinking water' will require action to mitigate the threat as outlined in a source protection plan. Moderate or low threats may be addressed through monitoring or voluntary measures.

1.2.2 Source Water Protection on the Great Lakes

Ontario is fortunate to have a vast source of high quality drinking water. Eighty percent of Ontarians served by municipal drinking water systems are drawing water from the Great Lakes. Due to their unique characteristics, including their size, their long shoreline, and their bi-national nature, the *Clean Water Act* has specific provisions that apply to the Great Lakes.

For instance, in developing the Terms of Reference, the Assessment Report, and the Source Protection Plan for each source protection area that has water that flows into the Great Lakes, the Source Protection Authority and the Source Protection Committee are required to consider existing national and bi-national agreements to protect the Great Lakes, including the Canada-Ontario Agreement Respecting Great Lakes Water Quality (COA), the Great Lakes Water Quality Agreement (GLWQA), and the Great Lakes Charter, and other agreements as stipulated by regulation.

The *Clean Water Act* also grants the Minister of the Environment authority to set targets related to the use of the Great Lakes as a drinking water source for one or more source protection authorities, that could in part be met through Source Protection Plans. Great Lakes targets may apply to a single source protection area, or to several, in order to address a regional, lake-wide, or Great Lakes Basin-wide issue. For example, a target could relate to a new goal under the Canada-Ontario Agreement Respecting Great Lakes Water Quality relevant to drinking water.

To assist her in setting Great Lakes targets, the Minister has the authority to establish a Great Lakes Advisory Committee under the legislation. The advisory committee would be tasked with advising the Minister on targets related to the Great Lakes as drinking water sources. Targets may also be influenced by information from source protection assessment reports, indicating impacts on a municipality's water intake from broader lake influences. Any target proposed by the Minister would be subject to public consultations, including a posting on the Environmental Bill of Rights website for public comment.

The Source Protection Committee would have the responsibility to determine how best to meet these targets by developing Great Lakes policies within the source protection plan if the Minister requests the source protection authority to prepare a report recommending policies to be included in the SPP to assist in achieving the target. A source protection plan may designate a Great Lake policy to be a "designated Great Lake policy". Policies within a source protection plan would be only one of a number of mechanisms to reach the target. Designated Great Lakes policies in the plan will require conformity like significant threat policies (ie. through municipal Official Plans, zoning, provincial instruments, etc.).

1.2.3 Source protection planning in Northern Ontario

In and around large urban centres in Northern Ontario that are included in existing conservation authority areas, including Thunder Bay (Lakehead Conservation Authority), North Bay (North Bay-Mattawa Conservation Authority), Sault Ste. Marie (Sault Ste. Marie Conservation Authority), Sudbury (Nickel District Conservation Authority), and Timmins (Mattagami Conservation Authority), source protection planning will be conducted following the same process as in southern Ontario. However, in smaller centres and more remote areas of Northern Ontario, watershed-wide planning is more difficult because of the diversity of local governance structures, a shortage of technical and financial resources and the size of the watersheds.

The *Clean Water Act* allows for the protection of sources for municipal drinking water systems in these areas of Northern Ontario that lie outside of conservation authority areas through a locally driven, scoped

planning process. The Minister has the authority to create a new source protection area through regulation and in doing so may also name a person or body to be the source protection authority. Where municipalities exist, a municipality, or a cluster of municipalities, would be permitted to enter into an agreement with the Minister to develop a source protection plan that focuses on specific drinking water threats in specific areas. The Minister may also use this authority to address drinking water systems in unorganized territories.

These source protection plans will not be subject to the same process that applies to source protection plans within conservation authority-based source protection areas. The agreement between the Minister and the municipality (ies) or another body will set out the process for developing a source protection plan. The process may be more limited in its scope, focusing more on threats around wellheads and water intakes, and less on cumulative threats to recharge areas, for example. The Province of Ontario is offering financial assistance to municipalities outside of conservation authority areas to undertake technical studies on their municipal residential drinking water sources. The grants allow those municipalities to pre-screen threats to their municipal drinking water systems to determine where limited source protection plans may be required.

1.2.4 First Nations drinking water systems in Ontario

There are approximately 134 First Nations in Ontario, 43 of which are located within or adjacent to Conservation Authorities. These 43 communities may have an interest in the source protection work being coordinated by the Source Protection Authorities in their area.

It is the Provincial Government's intention to mandate that Source Protection Committees consult with First Nation communities in their source protection areas and solicit their participation in the process, either through working groups or as members of the Source Protection Committee.

The *Clean Water Act* allows a First Nation's drinking water system located within or adjacent to a source protection region to be considered as part of the source protection planning process. The process of including a First Nation system would be initiated by a resolution of a First Nation band council.

The Provincial Government would then have the authority to prescribe for the purposes of source protection planning, a drinking water system that serves a First Nation reserve if the First Nation has requested the system be included in the process.

The *Clean Water Act* has included a 'non-derogation' clause in relation to protection provided for existing aboriginal and treaty rights as recognized and affirmed in section 35 of the *Constitution Act, 1982*. This provision is not intended to have any added legal effect beyond what is already enshrined in the Constitution.

1.3 Essential Terminology

There are a number of new terms and acronyms that are introduced in the source protection process. Below is an overview of the key terms. It should be noted that terms that are defined in this document are "plain language" versions of definitions and terms from the *Clean Water Act, 2006* and draft terminology that is defined and used in the Draft Guidance Modules (October 2006) that have been posted on the Ministry of the Environment's website. This latter document provides guidance for the drinking water

source protection technical studies being undertaken through the Ministry of the Environment's Technical Studies Grant Program. Some of these terms denote definitions that are currently used in the draft assessment report technical guidance but are intended to be further defined in regulations to be drafted under the CWA; the definitions adopted in future regulations may vary from the definitions provided in this document.

Source Protection Areas and Regions: Each source protection plan will focus on a source protection area that represents a watershed. Source protection areas are initially established using the existing 36 conservation authority boundaries as outlined under the *Conservation Authorities Act*. For administrative efficiency, some of these 36 source protection areas are proposed to be grouped together to form larger source protection regions. The Ministry proposes that there be 11 source protection regions created through a Minister's regulation. It is also proposed that there will be 8 remaining source protection areas that are not be grouped together, for a total of nineteen regions and areas. There may be additional source protection areas created outside of existing conservation authority areas.

Drinking water threat: A drinking water threat refers to an activity or condition that adversely affects or could adversely affect the quality or quantity of any water that is or may be used as a source of drinking water. The Ministry of the Environment will provide further guidance on the type of activity or condition that constitutes a drinking water threat.

Imminent threat: Imminent threats are those situations that require immediate notification of authorities to investigate immediately, because the threat of affecting the drinking water is imminent. The types of situations that would qualify as an imminent threat will be defined in guidance materials to be developed by the Ministry of the Environment.

A vulnerable area: There are four types of vulnerable areas within which an activity or a condition may be identified in the assessment report and may require action to reduce a threat to drinking water 1) a surface water intake protection zone, 2) a wellhead protection area, 3) a significant groundwater recharge area, and 4) a highly vulnerable aquifer.

Surface Water Intake Protection Zone: the area of land and water immediately surrounding a water intake in a lake, river or stream.

Wellhead protection area: the surface and underground area surrounding a water well or well field that supplies the water well or wellfield.

Significant groundwater recharge area: once complete, the water budget guidance module will identify which recharge areas, which are defined as areas where an aquifer is replenished through the infiltration of rainfall and snowmelt and the seepage from lakes, streams and wetlands, or from built structures such as storm water management systems , are considered significant.

Highly vulnerable aquifer: an unprotected underground layer of water-bearing permeable rock or unconsolidated materials (gravel, sand, silt, or clay) from which groundwater can be usefully extracted using a water well.

1.4 The Source Protection Process

Source protection involves outlining sources of drinking water, identifying and ranking threats to those sources of drinking water, determining the appropriate response to the drinking water threats, taking

action, and monitoring progress. The process leading up to implementation of source protection plans is expected to take up to five years of planning, and implementation is expected to take several years after that. The entire cycle could take up to eight years in each watershed.

The process follows four major stages:

Stage 1: Creating the source protection structure

The first stage involves establishing the source protection areas; establishing source protection committees; and reaching agreement between the source protection committee and municipalities in each watershed on a terms of reference and work plan for the entire process. This could take nine months to a year.

Stage 2: Preparing the assessment report

The second stage involves drawing a line around the vulnerable areas in a source protection area that are related to a drinking-water system included in the assessment report (wellhead intakes, surface water intakes, vulnerable aquifers and recharge areas), identifying and ranking threats to these vulnerable areas. This could take up to two years.

Stage 3: Preparing a source protection plan

In the third stage, the source protection committee determines the actions required to address threats to drinking water sources. This could take up to three years in some watersheds. It is anticipated that public consultation on the plan will take place throughout this phase.

Stage 4: Implementing the source protection plan

The fourth stage involves implementing the plan at the local and provincial level, which may include introducing bylaws, amending a municipal Official Plan, imposing a prohibition on an activity, or negotiating or imposing a risk management plan where required; monitoring; reporting on progress in implementing the plan; and inspections and enforcement associated with implementing the plan and risk management plans.

It is anticipated that after a period of time, the assessment report and plan will be updated using a modified version of the source protection process. The Minister may order the date by which a review of the plan must begin.

2. Roles and Responsibilities of Source Protection Partners

2.1 Overview

The process established by the *Clean Water Act* to assess drinking water threats and develop plans to respond to these threats represents a new way for municipalities and conservation authorities to work together on a watershed scale. Source protection planning will require collaboration amongst municipalities, Source Protection Authorities, Source Protection Committees, property owners, other stakeholders, and the public.

The legislation provides a high level framework for the new roles and responsibilities under the source protection process. Much of the operational detail has been left to provincial regulation and further guidance material. Importantly, the terms of reference, prepared by each source protection committee in consultation with municipalities, and approved by the Minister of the Environment, will serve to clearly define roles and responsibilities. It is anticipated that the terms of reference will allow for some flexibility in defining these roles and responsibilities amongst the key agencies, to allow for differences from region to region in local capacity and expertise.

The legislation creates obligations for four main groups, the Provincial Government, source protection authorities, source protection committees, and municipalities, working together to develop and implement source protection plans.

The Province establishes the framework, provides guidance, approves plans, and is responsible for implementation and enforcement related to provincial instruments such as permits and approvals.

The Source Protection Authority, in most cases the conservation authority, initially helps to establish the source protection process and establishes the Source Protection Committee. Once the Source Protection Committee is up and running, the Source Protection Authority's role becomes more focused on providing support to the Source Protection Committee in performing its duties, both administrative support as well as scientific and technical assistance.

The Source Protection Committee brings together the key stakeholders in each watershed, and is responsible for preparing the main products in the process – the Terms of Reference, the Assessment Report, and the Source Protection Plan.

Municipalities are the owners of the drinking water system that draw on source water, and are the implementers, and the enforcers of local measures to limit threats to their drinking water. They also house essential information, knowledge and expertise related to land use planning, hydrogeology, and essential infrastructure.

2.2 The role of the Source Protection Authority

2.2.1 Duties of the Source Protection Authority

The Source Protection Authority is a new body created in each watershed, based on existing Conservation Authorities (CAs assume the role of SPA once section 4 of the Act is proclaimed). Initially, it has the important role of laying the groundwork for the new source protection process in each watershed. This includes creating the Source Protection Committees, conducting technical work that will be used in the Assessment Report, and engaging municipalities into the process.

The Source Protection Authority's role will change over time. Once the Source Protection Committees are created, the Source Protection Authority's role becomes focused on supporting the source protection committee in its duties, and providing technical and scientific support to both the Source Protection Committee and municipalities as required. Once the plan is approved, the Source Protection Authority will continue to have a role in monitoring and reporting on progress in implementing the source protection plan, and in amending the Source Protection Plan.

2.2.2 Lead and local Source Protection Authorities

In most cases, the Source Protection Authority will be an existing conservation authority. Where conservation authorities currently exist, there will be 36 source protection areas. It is proposed that some of these areas will be grouped into 19 source protection regions for administrative efficiency. It is also proposed that 8 source protection areas will remain. Where a region is created, one conservation authority will serve as the lead Source Protection Authority for the whole region, although each source protection area in the region will have a source protection authority.

Lead conservation authorities have already been identified and have been provided additional resources by the Provincial Government to help build their capacity. It is anticipated that a regulation will be introduced to appoint the lead SPAs.

According to the *Clean Water Act*, the lead Source Protection Authority has a number of responsibilities related to the local Source Protection Authorities. It will serve as liaison between the Ministry and local conservation authorities. It will also assist local Source Protection Authorities in performing their duties in the source protection process by providing them with scientific, technical and administrative support and resources towards the source protection process. In practical terms, this means that the lead Source Protection Authority has the responsibility to coordinate the planning processes and information management in each local source protection area within a larger source protection region to ensure they do not conflict, and to integrate them at a regional level.

The *Clean Water Act* requires that an agreement be reached between the Source Protection Authorities within a larger region to define and govern the relationship between the lead and the local Source Protection Authorities. The agreement must be reached within 90 days of the creation of the regions by regulation. If the Source Protection Authorities fail to reach an agreement within 90 days, the Minister has the authority to issue his or her own agreement through a Minister's order to the Source Protection Authorities.

The agreement covers the lead Source Protection Authority's powers and duties under the legislation, and coordination, communication and other issues related to the relationship between the lead and local Source Protection Authorities within a region.

One of the matters that may be addressed in the agreement between the lead Source Protection Authority and the local Source Protection Authority is the nature of the relationship between local Source Protection Authorities and the Source Protection Committee for the source protection region during the planning and implementation phases.

A copy of this agreement must be submitted to the Minister of the Environment, and the Minister may require that amendments are made to the agreement. Amendments may also be made by the Source Protection Authorities, with written approval from the Minister.

2.2.3 Source Protection Authority and Source Protection Committees

The lead Source Protection Authority has primary responsibility for establishing a multi-stakeholder Source Protection Committee for the entire source protection region, and for providing ongoing administrative, technical and scientific support to the Source Protection Committee in overseeing and coordinating the planning process.

The Source Protection Authority will undertake work related to the Assessment Report and Source Protection Plan that are assigned to it by the Source Protection Committee in the Terms of Reference work plan.

The lead Source Protection Authority also has the important role of reviewing and commenting on the key products of the Source Protection Committee, including the Terms of Reference, the Assessment Report, and the Source Protection Plan. It is the Source Protection Authority that posts the products for public comment, and submits the products to the Ministry of Environment for approval. Once the Source Protection Plan is approved by the Province, it is the Source Protection Authority's responsibility to ensure that they are made available to the public.

The Source Protection Authority also has the authority to propose amendments to the Source Protection Plan. These amendments would either be initiated by the Source Protection Authority or based on Minister's direction. If the Source Protection Authority proposes an amendment, it must notify affected municipalities and seek their concurrence or comments on the amendments and share these with the Minister for her consideration with the proposed amendments.

The Source Protection Authority also has the responsibility to report out to the public and the government through interim progress reports and annual progress reports.

2.2.4 Source Protection Authorities and Municipalities

In addition to providing support to the Source Protection Committee, Source Protection Authorities will work closely with municipalities throughout the source protection process.

Source Protection Committees must consult municipalities on each key product from the source protection process, the Terms of Reference, the Assessment Report, and the Source Protection Plan. These products will be shared with participating municipalities in each source protection area for their council's endorsement and/or comment prior to being submitted to the Minister of the Environment for her approval.

Conservation authorities and municipalities are already working together on the technical aspects of source protection planning. Conservation authorities are advising municipalities on the progress of components of the technical guidance modules for which provincial funding is available. Conservation authorities and municipalities are working together where municipal information, data and decision making is necessary to facilitate this work. This work will form the foundation of the Assessment Report, and will continue as the Assessment Report is developed in each watershed.

Municipalities with municipal residential drinking water systems will be approached by the Source Protection Authority to provide data or information necessary to complete technical studies for the development of the Assessment Report. Source Protection Authorities and municipalities will also need to coordinate technical, communications, outreach or other work that relates to local source protection activities.

Source Protection Authorities may also offer municipalities assistance with developing communications plans and products to advise municipal councillors and municipal staff of the source protection planning activities and technical work that has been done to date for drinking water systems within those planning regions.

2.2.5 Source Protection Authorities and Inspections

Over the course of developing the Assessment Report and Source Protection Plan, Source Protection Authority staff may be called upon by the Source Protection Committee or municipalities to conduct an inspection on someone's property.

The *Clean Water Act* grants Source Protection Authority staff power of entry. This power of entry can be without consent of the owner and without a warrant if it is directly related to the preparation of an Assessment Report or Source Protection Plan, or is related to conducting a monitoring program required under a Source Protection Plan. The power of entry does not extend to entering a person's home except with a warrant.

Further guidance from the Province is expected regarding training requirements for any staff entering property. It is anticipated that this will include bio-security training for those entering farming property.

An employee or agent of a municipality designated by the Source Protection Authority may exercise the power of entry.

Staff who do enter properties have responsibility to report any imminent threats that they find on the premises to the MOE, that is, any discharge occurring or about to occur if the discharge would result in an imminent threat to municipal or designated drinking water system that is discovered during the visit. The Ministry is then responsible to report back within 30 days to the Source Protection Authority or the municipality if the notice was given by an employee or agent of a municipality on its response to the imminent threat reported.

2.3 The role of the Source Protection Committee

In addition to Source Protection Authorities, the *Clean Water Act* creates a second watershed-level body, the Source Protection Committee. The Source Protection Committee is the primary driver of the process at watershed level.

The *Clean Water Act* provides that there be one Source Protection Committee for each larger Source Protection Region. The lead Source Protection Authority for that region establishes the Source Protection Committee. Where the source protection area is not consolidated into a region, the source protection authority for the area will establish the source protection committee.

The Source Protection Committee will be made up of a mix of stakeholders in the watershed. It is expected to have between 10-20 members depending on the size of the source protection region. Members may include representatives from municipalities, industry, farming and other business representatives, public health and public interest. It is anticipated that a seat will also be offered to a First Nations representative where appropriate.

The Source Protection Committee is responsible for preparing the Terms of Reference, the Assessment Report and the Source Protection Plan. The Source Protection Committee may propose amendments to the Terms of Reference in circumstances expected to be set out in regulation, in consultation with affected municipalities, and updates to the Assessment Report. The Source Protection Committee is also responsible for ensuring that stakeholders and the public in the watershed are consulted.

A regulation is expected that outlines the Source Protection Committee's composition and nomination process. While members of the committee will be appointed by the Source Protection Authority, it is the Minister of the Environment who appoints the chair. The aim is that the Source Protection Committee will be representative of all key stakeholders in the watershed. It is anticipated that where additional input or

expertise from stakeholders is needed, the Source Protection Committee will create working groups and/or sub-committees.

2.4 The Municipal Role

2.4.1 Municipalities and source water protection

Municipalities are a key partner in the source protection process, and will work closely with the Source Protection Committee and Source Protection Authorities in the assessment of threats and development of Source Protection Plans. Municipalities also have the primary role in implementing Source Protection Plans once they are approved.

Some municipalities have already undertaken groundwater studies, or have integrated source protection policies into their Official Plans. These municipalities will bring vital experience and knowledge to the source protection process in their area. Others with fewer resources may require more technical assistance from the Source Protection Authority to participate in the source protection process.

2.4.2 Legal Obligations

Municipalities are legally obligated to cooperate with the Source Protection Committee and Source Protection Authority, and other municipalities in the source protection area, as well as the Ministry of Environment. This includes providing documents, records, technical or scientific studies that relate to sources of drinking water quality or quantity, and helping to obtain such information.

Municipalities will have a major role in the implementation of Source Protection Plans, by bringing their Official Plans and bylaws into conformity with the designated Great Lake policies and significant threat policies. In most instances, municipalities will also be responsible for upholding prohibitions on certain activities or negotiating or imposing and enforcing risk management plans where called for in the Source Protection Plan.

Due to the split in responsibilities for the delivery of drinking water and land use planning between upper and lower tiers in many municipalities, implementation of requirements under a source protection plan will fall to both levels of municipality in some areas of the province. As a result, upper and lower tiers will have to coordinate their involvement in the process and at the point of implementation.

Certain obligations under the Act fall specifically to the municipality that has authority to pass by-laws respecting water production, treatment and storage under the *Municipal Act, 2001*, including enforcement of Part IV (prohibitions on certain activities and the application of risk management plans in some instances), and the designation of other drinking water systems for inclusion in the source protection process.

2.4.3 Municipalities and the Source Protection Committee

In each source protection area, municipalities will be represented by municipal representatives on the Source Protection Committee. The Ministry of the Environment will provide further guidance on the nomination and selection process. In many cases, there will be more municipalities within a source

protection area than there are municipal seats at the Source Protection Committee table. Representation may be enhanced by creating municipal working groups to provide advice to the Source Protection Committee and its municipal members. This would allow representation from a broader range of municipalities within the source protection area.

According to the *Clean Water Act*, all municipalities within a source protection area must be consulted by the Source Protection Committee during the development of the Terms of Reference, the Assessment Report and Source Protection Plan.

The *Clean Water Act* also allows a municipal council to pass a resolution expressing its comments on the proposed source protection plan and may submit the resolution to the Source Protection Authority. These comments would then be submitted with the source protection plan when it is submitted to the Minister of the Environment.

2.4.4 Flexibility in the Municipal Role

A municipality's role will be outlined through the Terms of Reference negotiations between the municipalities and the Source Protection Committee. It is anticipated that the municipal role as defined in the terms of reference may vary from region to region, to reflect differing municipal capacity.

For instance, a municipality with fewer resources and less capacity may have the option to rely heavily on Source Protection Authorities to undertake technical work related to the assessment of threats around municipal water intakes. Municipalities with some expertise and resources may enter into a collaborative agreement with the Source Protection Authority to create efficiencies by working closely together. And some municipalities, with more advanced knowledge and experience with source protection may choose to lead much of the technical work and share this information with the Source Protection Authority and provide it to the Source Protection Committee to add to the overall watershed assessment work.

2.4.5 The Municipal Role in Implementation

Once a plan is prepared by the Source Protection Committee, with municipal and stakeholder input, and approved by the Minister of the Environment, municipalities will be responsible for bringing their Official Plans, by-laws, plans of subdivision and plans of condominium into conformity with the designated Great Lake policies and significant threat policies. The Act provides that municipalities are prohibited from carrying out any undertaking in the future, for example related to land use or public works, which would conflict with a designated Great Lake policy or a significant threat policy set out in the Source Protection Plan.

In most cases, municipalities will also serve as the inspection and enforcement authority under Part IV of the legislation that deals with prohibitions on certain activities and new risk management plan authority.

Depending on what is stipulated in the source protection plan, municipalities may also have some responsibilities related to monitoring threats to drinking water to ensure that progress is being made to address them.

2.5 The Role of the Province

The Province performs a number of roles through the source protection process. The Minister of the Environment and the Lieutenant Governor in Council establish the rules of the source protection process, through the legislation and regulations, and the Ministry of the Environment will provide ongoing guidance at each stage of the process.

MOE staff is expected to follow the source protection process closely, sending liaison officers to Source Protection Committee meetings, and providing ongoing advice to source protection managers within Source Protection Authorities and to the chairs of the Source Protection Committees.

The MOE and the Minister of the Environment is responsible for reviewing and approving the key products of the source protection process, including the terms of reference, the assessment report and the source protection plan.

Finally, it is anticipated that the Provincial Government will have a role to play at the point of implementation. A regulation may identify instruments, such as provincial permits and approvals, that must conform with the designated Great Lakes policies and significant threat policies set out in an approved source protection plan. Where a plan requires that a prescribed permit or approval be created or amended to address a significant drinking water threat, the provincial agency that issued or created the instrument could be legally required to bring the instrument into conformity.

2.6 Obligations of Agencies, Boards and Commissions

Local boards, and provincial ministries, agencies, boards and commissions, and designated administrative authorities under the *Safety and Consumer Statutes Administration Act, 1996* are also obligated by law to provide documents, records or studies related to a source of drinking water upon request to Source Protection Authorities, Source Protection Committees, municipalities or the Ministry of the Environment for the purposes of preparing, amending, updating or reviewing terms of reference, an assessment report or a source protection plan or preparing a report under the Act.

3. Public Involvement in the Source Protection Process

3.1 Overview

Source Protection Authorities and Source Protection Committees have important obligations to keep the public informed and engaged in the source protection process. This will involve close collaboration between the Source Protection Authorities, the Source Protection Committee and with municipalities.

3.2 Public Information

The *Clean Water Act* will make an enormous amount of information accessible to the public for the first time. The Terms of Reference will be released publicly, outlining the work plan for the source protection process. The Assessment Reports, which will identify significant threats to drinking water, will also be publicly released for each watershed. And each of the Source Protection Plans, outlining the obligations of each party to address significant threats, will also be made public.

In addition to these key documents, the Source Protection Authority has an obligation to keep the public informed on an ongoing basis by preparing and publicly releasing annual progress reports and interim progress reports. Following approval of the Source Protection Plan, annual reports will be produced by the Source Protection Authority that document what measures are being taken to address the significant threats identified in the Source Protection Plan. It will also report on monitoring of threats. This report will be submitted to the MOE and made available to the public. Interim progress reports will document how more immediate concerns with drinking water threats will be managed between the approval of the annual report and the submission of the Source Protection Plan. Both reports may also include information on voluntary initiatives being undertaken to protect sources of drinking water.

The Minister of the Environment is also obliged to issue an annual report on drinking water in Ontario, under the *Safe Drinking Water Act*, and is obligated to include a report on progress on source water protection across the Province. This will include a summary of the annual progress reports submitted by Source Protection Authorities.

Information gathered for the purposes of source protection will contain private information. All information handled by the Source Protection Committees, the Source Protection Authorities, and municipalities over the course of the source protection process will be subject to the *Municipal Freedom of Information and Protection of Privacy Act*. Procedures under MFIPPA must be followed to protect private information.

3.3 Public Consultation

Consultation with the public and stakeholders is required at each key point in the source protection process. The *Clean Water Act*, 2006 outlines minimum consultation requirements whereby the Source Protection Committee is responsible for posting the proposed terms of reference and the proposed assessment report for public comment while the source protection authority is responsible for posting the proposed source protection plan for public comment. Written comments about these documents may be submitted to the source protection authority who will submit them to the Ministry of the Environment prior to any approvals being made. Further provincial guidance is anticipated that will elaborate on consultation requirements throughout the source protection process.

There are also prescribed consultation requirements at the point of implementation, associated with the amendment of an Official Plan.

In addition to these legal obligations to consult, Source Protection Committees, Source Protection Authorities, and municipalities may choose to provide additional formal or informal consultation opportunities to help them develop the source protection plan.

3.4 Public Participation

The most direct participation of the public and other stakeholders will be on the multi-stakeholder source protection committee. This representation may be expanded by creating working groups for various sectors or interests that can inform and advise the Source Protection Committee and its members.

The Terms of Reference, the Assessment Reports and the Source Protection Plans cannot be appealed, but many of the policies and instruments that are used by municipalities and the Province to implement the plans can be appealed. The public and stakeholders will therefore have legal and quasi-judicial

recourse to the Ontario Municipal Board, the Environmental Review Tribunal and the courts to appeal these policies and instruments. It should be noted that an appeal will be limited because the policy, by-law or instrument in question must conform with the Source Protection Plan.

The public may also become involved in influencing the content of the regulations under the legislation, each of which will be posted on the EBR public registry for comment before being finalized.

4. Step 1: The Terms of Reference

4.1 Overview

The source protection process is an entirely new process at a new scale, the watershed. The *Clean Water Act* provides very high level direction on the division of the new roles and responsibilities amongst the principle partners- the Source Protection Committee, the Source Protection Authority and municipalities. However, much work will be needed to sort out how these new obligations will work in practice.

The details of the working relationship will be determined through the Terms of Reference that is developed by the Source Protection Committee within each source protection area. The Source Protection Committee must consult with each municipality on the Terms of Reference, and seek Ministerial approval of the Terms of Reference. It is anticipated that the Terms of Reference will allow for flexibility that reflects the different capacity of municipalities and Source Protection Authorities across Ontario.

One of the most important elements of a Terms of Reference is a work plan that identifies what work is assigned to municipalities, Source Protection Authorities, and the Source Protection Committee, respectively. The terms of reference is also expected to include cost estimates for the work to be undertaken in the assessment and planning stages. It will also identify all the drinking water systems included in the assessment report, including those drinking water systems that are designated by a municipal council or Minister to be included in the terms of reference.

The Provincial Government intends to introduce a regulation with respect to the Terms of Reference.

4.2 Approval of the Terms of Reference

When the Terms of Reference is completed by the Source Protection Committee, a summary of unresolved concerns raised by the municipalities during consultation will be prepared by the committee and submitted with the Terms of Reference when it is submitted to the source protection authority and to the Minister of the Environment for her approval.

Each Terms of Reference must be approved by the Minister of the Environment. The Minister may approve the Terms of Reference or provide direction to the Source Protection Authority regarding how the Terms of Reference must be amended. If the Source Protection Authority is required to amend the Terms of Reference, then it must resubmit the amendments to the Minister for his or her approval. If the Source Protection Authority does not resubmit the Terms of Reference, the Minister has the authority to make the amendments she considers appropriate.

Once the Terms of Reference is approved, a notice will be published on the Ontario Environmental Registry. The Source Protection Authority is also required to make the Terms of Reference available to the public on the Internet.

Following approval of the Terms of Reference, the Source Protection Committee may in circumstances set out in regulation propose amendments, in consultation with municipalities. The Minister also has the authority to require further amendments.

5. Step 2: The Assessment Report

5.1 Overview

The source protection process has been designed to be firmly based on science. The first two years of the source protection process is dedicated to the identification of threats to drinking water sources, and a technical assessment of the level of risk that they represent.

The identification and assessment of threats contained in each source protection area's Assessment Report provide the scientific and technical foundation to the entire source protection process. The results of the Assessment Report, based on comprehensive technical studies and modeling, will serve as the rationale for policies set out in the Source Protection Plan.

This amount of information about drinking water sources has never before been compiled in such a systematic, consistent and coordinated way. It will put Ontario at the head of the pack in drinking water information management.

It is the Source Protection Committee's responsibility to prepare the Assessment Report, in consultation with all municipalities in the watershed. Respective roles and responsibilities in preparing the assessment report will be negotiated through the Terms of Reference.

Depending on their capacity, municipalities may elect to undertake the bulk of the assessment work around their wellheads and water intakes. Those with limited capacity will likely rely on the Source Protection Authorities to undertake this work.

Regardless of who undertakes the work, there will be a large amount of information sharing throughout this process, with much of the existing information coming from municipal and provincial sources. The legislation allows Source Protection Authority and municipal staff powers of entry to gather information under certain conditions.

Technical Guidance Modules and Funding for Technical studies

In advance of the legislation being passed, the Ministry of the Environment created guidance documents and provided funding to allow conservation authorities and municipalities to begin the technical work that will contribute to the assessment report.

Most municipalities on groundwater have undertaken extensive groundwater technical studies. The Ministry of the Environment wants conservation authorities and municipalities to build on and integrate this information as much as possible into the watershed assessment report under the *Clean Water Act*. However, some of the data and analysis will be outdated, or incomplete. In some cases, there will be concern over the quality of the information that has been gathered in the past. It is important that

conservation authorities and municipalities are working with consistent and complete information on source water as they identify risks.

The Provincial Government has committed to paying for all work related to technical studies and the development of assessment reports. The Government has committed to a total of \$120 million in provincial funding for technical studies and partnerships to support the development of the science and capacity building necessary for source protection plan development.

To ensure that these studies build on existing work, the Province has developed a grant application process that requires that conservation authorities doing technical studies on drinking water system complete these studies in consultation with municipalities, that past studies be considered and that the applicant demonstrate that they are not duplicating work already completed.

With the help of provincial funding, municipalities and conservation authorities are already at work on aspects of the Assessment Report, including the watershed characterization reports, water budgets, issues evaluation and threats inventories, and vulnerability assessments.

5.2 Contents of the Assessment Report

The assessment report will be made up of a number of elements, each one of which is highly technical in nature. Detailed guidance materials outlining how to conduct each of these parts of the Assessment Report are being developed by the MOE.

The Ministry anticipates that there will be six parts to the Assessment Report:

1) A watershed characterization report, which would pull together information on the watershed including natural characteristics, land uses, water quality, location of municipal drinking water systems, and a preliminary list of drinking water threats. This is the map on which an assessment report would be based.

2) The Municipal Long Term Water Supply Strategy (MLTWSS) would have municipalities evaluate their existing water supplies and future water needs and document measures, programs, and initiatives already implemented to protect water quality and water quantity. The intent of the strategy is to help municipalities identify where they may have an existing water supply shortage or where they predict a future shortage because of growth. The strategy will align with work already completed under the Ontario Municipal Class Environmental Assessment process and the Water Budget/Water Quantity Risk Assessment (part of this report, see #6 below). This strategy will ultimately identify water sources that have met the requirements to be identified as a planned system under the CWA, and/or identify where municipalities should consider undertaking an EA to identify and protect future water supplies as planned systems.

3a) Groundwater Vulnerability Analysis would identify and map vulnerable areas for each existing and planned drinking water system that is required to be considered in the assessment report and that obtains its water from a raw water supply that is groundwater. Vulnerability scores would be assigned for each vulnerable area according to its susceptibility to becoming contaminated. A level of uncertainty would also be assigned. Proposed definitions for highly vulnerable aquifers and significant groundwater recharge areas are being completed by the Ministry of the Environment so their locations can also be mapped.

3b) Surface Water Vulnerability Analysis would identify and map the surface water intake protection zones (IPZs) around each existing and planned drinking water system that is required to be considered in the assessment report and that obtains its water from a raw water supply that is surface water. A vulnerability score and level of uncertainty would be assigned.

4) An Issues Evaluation and Threats Inventory would identify threats and issues that need further assessment to determine if they represent a significant threat to a drinking water source for which a policy in the source protection plan would be required to reduce or eliminate the threat.

Threats (i.e. drinking water threats) are activities or conditions that have the potential to harm (i.e. adversely affect) the quality or quantity of water that is or may be used as a source of drinking water. Threats will include activities or conditions prescribed as drinking water threats in regulation.

The Ministry proposes that issues will be defined as instances where water quality standards are exceeded, levels of contaminants are trending upwards or areas of “stress” for water quantity are found through the use of monitoring data, uses modeling, and interviews with water professionals.

These threats would be mapped out and assigned a ‘hazard rating’ that will feed into the risk assessment. Threats will be evaluated to determine their relative contribution to identified issues.

5) A Water Quality Risk Assessment would determine what level of risk an identified threat represents. If it is found to be a significant drinking water threat, a policy in the source protection plan would be needed to address it. The MOE is developing a sophisticated semi-quantitative approach that it will propose be used for evaluating the drinking water threats to water quality in the delineated vulnerable areas.

6) A Water Budget/Water Quantity Risk Assessment would provide an understanding of groundwater and surface water quantities and flows and where there are “stresses” in the watershed based on provincial thresholds. The risk assessment would look at municipal or other designated wells and intakes where there are significant stresses on those drinking water sources, and estimate the ability of the water supply source to meet current and future demands (e.g. in-stream needs, waste assimilation, recreation) while maintaining drinking water reserve targets.

5.3 Threats of Potential Concern

When conducting a threats inventory, it is anticipated that each watershed will be required to survey common activities that have been identified as potential threats to drinking water sources. To be considered a threat to drinking water, the activity or condition must be able to cause harm if it comes into contact with the drinking water source, and it must have a pathway to get to the source of drinking water.

It is expected that the Provincial Government will identify those activities that could, under certain circumstances, pose a threat to drinking water sources, which need to be surveyed through the assessment of threats process. These could include activities or conditions that could have a chronic or cumulative impact, or activities or conditions that may constitute a low, moderate or significant threat to drinking water. These include:

Direct discharges to surface water, such as sewage treatment effluent and bypasses, and industrial effluent

Activities on the landscape, such as road salt application, de-icing activities, snow storage, stormwater management systems, cemeteries, landfills, on-site septic systems, organic soil-conditioning, septage application, hazardous waste disposal, liquid industrial waste, mine tailings, biosolids application, manure application, fertilizer application, pesticide or herbicide application, and lands with historical contamination.

Storage of potential contaminants that could leak fuels or hydrocarbons, dense non-aqueous phase liquids, organic solvents, some pesticides, fertilizers and manure.

In addition to these activities, the Ministry of the Environment proposes that man-made *pathways that present a risk* of allowing for the transmission of a contaminant into an aquifer or surface water that is a source of drinking water should also be surveyed, inventoried and mapped for the assessment report, including:

| | |
|--|-------------------------|
| Existing and abandoned wells | Pits and quarries |
| Mines | Construction activities |
| Storm water infiltration | Septic systems |
| Sanitary sewer infrastructure | Storm water sewers |
| Storm water ditches | Hard surfacing |
| Irrigation ditches and subsurface tiling | |

5.4 Freedom of Information and Protection of Privacy

Municipal, Source Protection Authority, Source Protection Committee and provincial officials involved in the source water protection process will be handling and sharing large amounts of data that contain private information. All municipal, conservation authority and provincial officials are already covered by the Freedom of Information and Protection of Privacy requirements umbrella. Conservation authority and municipal staff are bound by the requirements of the *Municipal Freedom of Information and Protection of Privacy Act* (MFIPPA), and provincial staff are bound by the provincial *Freedom of Information and Protection of Privacy Act* (FIPPA). These requirements are expected to be extended to cover members of the source protection committees as well.

These Acts provide provincial, municipal and conservation authority officials involved in information sharing the right to access private information. That means that there should be no limitations on information sharing due to privacy concerns between conservation authority and municipal officials. However, it places strict obligations on the officials to keep this information secure and to prevent the private information from public release. This not only includes deliberate disclosure but also inadvertent disclosure such as failure to store private information securely. Officials will be held liable for inappropriate disclosure of private information.

For example, disclosure of the location of a site where a significant threat to drinking water is found would not be considered private information, but personal information such as the name and the address of a property owner of a site would be considered private information that should not be disclosed publicly.

All conservation authority staff involved in the source protection process to date have received MFIPPA training from the Ministry of the Environment. Municipal staff are also given MFIPPA training at the local level. Any new staff hired to perform a source protection-related duty must also receive the appropriate

training. MFIPPA obligations should also be extended by agreement or contract to any consultants and other third party officials who come into contact with private information throughout the source protection process.

5.5 Review and Approval of the Assessment Report

Once finalized, the Assessment Report must be circulated to municipalities for their review and comment. The Source Protection Committee and municipalities will try to resolve any outstanding issues before the Assessment Report is finalized. However, if there remain unresolved issues, the source protection committee provides a summary of these unresolved concerns to the source protection authority with the Assessment Report.

Once completed, the Assessment Report, with the municipal concerns, must be submitted to the Source Protection Authority, and to each municipality. It will also be posted for public comment on the Internet. At this point, information on all significant threats to drinking water will be available to the public.

In order to ensure consistency across source protection areas, all Assessment Reports will be submitted to the MOE Director for approval. Unresolved municipal concerns, comments from the Source Protection Authority, and any written comments received during the public comment period will be submitted with the assessment reports.

Once received, the Director will review and approve the Assessment Report, or return it to the Source Protection Committee with a request that amendments be made. If amendments are required, the report must be resubmitted within a period of time specified by the Director. If it is not submitted within this period of time, the Director may make the changes it considers appropriate.

Once the assessment report is approved by the Director, a notice of approval will be posted on the Environmental Bill of Rights Registry, and the Source Protection Authority will ensure that the report is made available on its website.

Further updates to the assessment report may be made by the Source Protection Committee after the report's approval but before the Source Protection Plan is submitted. Any updates must again be submitted to the Director for review and approval, and the same right to amend the report applies. The Director also has the authority to refuse the updates if it feels that the original report was accurate and complete.

6. Step 3: The Source Protection Plan

6.1 Overview

The Source Protection Plan, once approved, may set out significant threat policies and designated Great Lakes policies to which planning decisions must conform. These policies will affect future activities and land use planning around wellheads and water intakes. It may also provide for the prohibition of certain activities and the use of risk management plans to impose conditions on certain activities under Part IV of the Act. It may also include policies for which municipalities must have regard in other vulnerable source water areas such as moraines, aquifers, headwaters and recharge areas.

The process of developing the plan will bring a broad range of stakeholders together to work out how threats to drinking water can most effectively be mitigated. The development of the plan will be based solidly on the Assessment Report. While each significant threat identified in the Assessment Report will require a policy, the plan may also include policies to protect water quality and water quantity where moderate to low threats to drinking water source exist. There will also be a monitoring component to each plan, to keep an eye on emerging threats, and to track progress in addressing identified threats.

It is the Source Protection Committee that is obligated under the *Clean Water Act* to prepare a Source Protection Plan consistent with the direction in the Terms of Reference and regulations and Director's rules

The Source Protection Committee must consult with municipalities on the plan if some or all of their territory are part of a source protection area, and submit the plan to the Source Protection Authority.

The Source Protection Authority is obligated to send a copy of the proposed Source Protection Plan to all municipalities in which any part of the source protection area is located. The municipal council may pass a resolution expressing its comments on the plan and may submit this to the Source Protection Authority.

The Source Protection Authority must also post the plan publicly and invite the public to submit comments.

Given the number of stakeholders involved, and the issues at stake, disputes will be unavoidable. These disputes may be between competing businesses, between a municipality or conservation authority and a business, or between two municipalities. To the extent possible, these disputes will be resolved by the Source Protection Committee before the Plan is submitted to the Minister.

Where there are remaining outstanding issues, comments from municipalities and the public may be submitted to the Minister along with the Plan and comments from the Source Protection Authority.

6.2 Legislated Contents of a Source Protection Plan

The Source Protection Plan involves four components, including 1) the Assessment Report, 2) policies to reduce or eliminate a significant threat to drinking water, and policies to ensure that certain activities do not become a significant threat, 3) designated policies to help achieve a Great Lakes target (see below, Great Lakes), if requested by the Minister, and 4) policies related to monitoring of threats.

The Source Protection Plan will contain policies to address significant threats identified in the Assessment Report. These policies are expected to apply to classes of activities, as opposed to specific activities on individual properties. For reasons of privacy protection, there should not be any property-specific policies in the SPP.

The *Clean Water Act* allows for a wide range of policies to be included in source protection plans, both existing policies, such as land use planning tools, and new policies, related to the prohibition of certain activities and related risk management plan authority introduced in the *Clean Water Act*.

Policies to reduce or eliminate a significant threat to drinking water could include policies related to

- conditions on particular land uses within specified areas
- conditions on particular activities within specified areas
- addressing existing or historical conditions that threaten drinking water sources
- a specified area in which certain activities are prohibited;

- a specified activity within a specified area for which a risk management plan is required, or a list of activities to which a risk management plan should be applied within a certain area;
- a list of land uses and the area within which the land uses would occur, for which a permit from a risk management official is required in order to receive approval for the land use
- the content of risk management plans required for certain activities or land uses in specified areas
- achieving Great Lakes targets or policies as directed by the Minister of the Environment
- incentive programs and education and outreach programs
- monitoring and reporting requirements to ensure that non-significant threats don't become more serious, and to track the success of measures to reduce significant threats

6.3 Submission and Approval for Plan

Once a Source Protection Plan is completed, the Source Protection Committee submits the source protection plan to the Source Protection Authority. The Source Protection Authority must then provide a copy of the Source Protection Plan to the clerk of each municipality within the source protection area, publish the proposed plan, and provide public notice of the plan and solicit written comments from the public on the plan.

Municipal Councils may pass a resolution endorsing the source protection plan or expressing comments or concerns with the plan. These would be submitted to the Source Protection Authority.

The Source Protection Authority would then submit the plan, its own comments on the plan, any public comments received, and the municipal resolutions and comments, to the Minister of the Environment for her review and approval.

The Minister may approve a Source Protection Plan. At the point of reviewing a plan, the minister may approve the plan or return the plan to the Source Protection Authority to make amendments. Before making that decision, if in the opinion of the Minister an issue requires further consideration, the Minister has the authority to refer any issue within a Source Protection Plan to a hearing by the Environmental Review Tribunal or another body. Once referred to a hearing's office, a hearing may be held within or close to the Source Protection Authority in question. The hearing officer would then receive representations on the proposed Source Protection Plan. The hearing officer would then prepare recommendations within 60 days after the hearing to the Minister, outlining actions to take with respect to the plan.

Once the Minister has considered comments from the public, municipalities, the Source Protection Authority and recommendations from a hearings officer, she may approve the plan or require the Source Protection Authority to amend and resubmit the plan. Once the plan is resubmitted, the Minister may approve it, or make additional amendments to the plan before approving it. If a source protection plan is not resubmitted in the time stipulated by the Minister, the Minister may proceed with making amendments considered appropriate.

In the unlikely event that a Source Protection Authority fails to submit a source protection plan entirely, the Minister may order the Source Protection Authority and the Source Protection Committee to submit documents related the preparation of a plan, and may also required the Source Protection Authority to repay any amount paid to the authority by the Province. The Ministry may also undertake to prepare the Source Protection Plan for the Source Protection Committee.

Amendments to an approved Source Protection Plan may be initiated by the Source Protection Authority. Any affected municipalities must be notified and consulted by the Source Protection Authority of the proposed amendments. If these municipal councils pass resolutions in support of the amendments, the Source Protection Authority may post the proposed amendments for public comment.

The Source Protection Authority would then submit to the Minister of the Environment the proposed amendments, the municipal council resolutions, and any public comments received for the Minister's review and approval. The minister has the same recourse as described above to approve, amend or refer to a hearing the proposed amendments.

If a minister returns a plan to a Source Protection Authority for amendments, and is not satisfied with the amendments, or if the Source Protection Authority fails to return an amended plan, the minister then has the authority to make additional amendments as the Minister considers appropriate.

Following the Minister's approval, the plan will be posted on the Environmental Bill of Rights registry as a notice of approval.

The source protection plan takes effect on the date of the environmental registry posting or on a date specified in the plan and approved by the Minister.

The Source Protection Authority is responsible for making the approved plan available to the public on the Internet.

6.4 Review and Renewal of a source protection plan

At the point at which the Minister approves a Source Protection Plan, she may also approve a date by which a review of a plan must begin. The review would trigger a new process, which may include all the steps in the first process, from the terms of reference through to the preparation of a source protection plan, or a variation of this process.

Independent of this renewal process, amendments may be made based on an assessment of progress. The Minister of the Environment and the Source Protection Authority will monitor progress under each plan as measured against the objectives articulated in the source protection plan. Ongoing monitoring and reporting information communicated through the annual report in each watershed will serve as important information in this ongoing assessment of progress.

In the event that the necessary progress to address a significant threat to drinking water is not being met, despite efforts to implement the actions prescribed in the plan, either the Minister or the Source Protection Authority may request that an amendment be made to the plan to strengthen the action required to meet the objectives.

6.5 Prohibitions and Risk Management Plans

6.5.1 New authority

The *Clean Water Act* provides new authority to those enforcing Part IV, (usually single tier municipalities and municipalities with authority to make by-laws respecting water production, treatment and storage

under the *Municipal Act*, although in some cases, the Province or another designated body), to prohibit certain land uses or activities within a vulnerable area that pose an unacceptable risk to drinking water. An outright prohibition of this kind would typically only be applied to the highest level threat, such as underground chemical storage, in the most sensitive geographic regions, such as within 100 metres of a well.

To be put into effect, the source protection plan would identify and designate an activity in a certain geographic area within a vulnerable area as a prohibited activity. For existing activities, the prohibition would apply 180 days after the source protection plan came into effect. No existing activity would be permitted to be grandfathered. For newly proposed activities, that is, those that would begin after the approval of a source protection plan, the prohibition would have an immediate effect.

Alternatively, the land use or activity may be allowed to proceed under certain conditions. These conditions would be negotiated or imposed through a risk management plan.

Following the approval of a Source Protection Plan, and where a Source Protection Plan allows, a risk management official appointed by the municipality (or other body responsible for the enforcement of Part IV of the Act) will have the authority to establish risk management plans for prescribed activities inside wellhead protection areas and intake protection zones that have been identified as significant drinking water threats.

The use of risk management plans will be restricted to activities that have been identified in an Assessment Report as activities that are or would be a significant drinking water threat in an area within a wellhead protection area or surface water intake protection zone and may only be applied to activities listed in a provincial regulation.

Within these limited circumstances, risk management plans provide a new tool with which municipal officials may negotiate or impose conditions (where agreement cannot be reached) on how activities are carried out by local property owners or occupants (e.g. farmers & businesses). Where necessary, compliance with risk management plans will be enforced.

It is anticipated that the MOE will be providing further guidance that will set out a framework for risk management for the negotiation of risk management plans. The Risk Management Framework may outline appropriate options for risk management actions that would correspond to the level of drinking water threat. This could include close monitoring and reporting, implementing a certified environmental management plan, through to relocation of storage tanks in close proximity to a source of drinking water.

In order to enforce the risk management plan, the risk management official and risk management inspector would be granted powers of entry for inspections, as well as order powers to compel compliance, and to cause work to be done where a property owner fails to do so and to recover costs.

Any risk management plan issued to individual property owners may be appealed to the Environmental Review Tribunal. A risk management official may also refuse to issue or amend a risk management plan to a person who wishes to engage in an activity or land use in an area, which would have the effect of prohibiting the activity altogether. The decision to refuse to issue a risk management plan can also be appealed to the Environmental Review Tribunal.

In either case, the appeal period is 60 days. A person must prepare a written notice to the risk management official and the Environmental Review Tribunal.

Interim Risk Management Plans

The *Clean Water Act* recognizes that while a source protection plan is being developed, there may be a need to address higher priority significant threats to ensure the protection of public health. The *Clean Water Act* provides interim risk management plan authority for a municipality to address these threats once the assessment report is approved by the Ministry of the Environment. The circumstances under which an interim risk management plan would be allowed are expected to be outlined in forthcoming regulation.

Based on an approved assessment report, a municipality and a property owner may agree to a risk management plan to reduce the risk of an activity that is identified in the assessment report as posing a significant threat to a drinking water source.

6.5.2 Risk Management Officials

A body responsible for enforcing Part IV of the Act, eg. a municipality that, in accordance with the source protection plan, must negotiate or impose risk management plans will create two new positions- a risk management official (RMO) whose responsibilities will include negotiating or establishing risk management plans, and a risk management inspector (RMI), to enforce the plans. All Risk Management Officials and Inspectors must also hold specific qualifications, which will be outlined by regulation. The *Clean Water Act* explicitly requires that an official and inspectors must receive proper training specified by regulations before entering property. This could include training in bio-security, health & safety and other relevant protocols.

Municipalities that do not have sufficient resources or qualified personnel to hire an RMO or RMIs for their exclusive use have a number of options available to them.

In prescribed circumstances, a body responsible for enforcing Part IV of the Act, including a municipality may choose to rely on the statements of a 'qualified person' that a proposed risk management plan meets the tests set out in the Act rather than prepare or review the risk management plan itself. The qualifications of such a risk management professional would be defined in regulation.

Municipalities also have the flexibility to delegate their enforcement authority by agreement on a fee for service basis to another municipality, health unit, planning board, the Province, or their local conservation authority.

Finally, municipal councils may decide to pool their resources and hire an RMO or RMI that serves two or more municipalities.

6.5.3 Inspections under Part IV

Where a Risk Management Inspector (RMI) is required to inspect activities to ensure compliance with the plan, he or she must follow rules laid out in the *Clean Water Act*.

Before undertaking any inspections, the RMI must complete training as prescribed by the Ministry of the Environment. It is expected that this would include bio-security training related to agricultural operations.

The RMI may enter property without the consent of the owner or occupier, even without a warrant, in situations where the RMI believes that an activity prescribed in the source protection plan as requiring a risk management plan is being undertaken, or where an RMI believes that there are documents or data

on the property related to such activity. This does not apply to dwellings unless the RMI has a court issued warrant to enter the dwelling.

The inspection must be undertaken at a reasonable time of day, and the RMI must give the owner or occupant reasonable notice of the inspection.

The RMI may ask that another person accompany him or her on the inspection if that person has expert knowledge related to the inspection. No use of force may be used to enter the property.

Once on the property, the RMI must identify him or herself to the owner or occupant. The RMI may require that the owner or occupant answer inquiries or provide needed assistance, make excavations, require that something be set in motion or operate, take samples, measurements or test, examine records and make or retain copies. If a document is removed, the RMI must provide a receipt and return the document as soon as possible. Where necessary, the RMI must restore the property to its former condition.

A warrant for entry may be issued if there is no occupier of the site and the site is locked, or the occupier is preventing the RMI to enter the property and undertake any aspect of the necessary inspection.

6.5.4 Risk Assessments

The *Clean Water Act* provides recourse to property owners or occupants whose activities have become the subject of a risk management plan or prohibition according to the Source Protection Plan, but who have compelling evidence that the activity if carried on at their particular location would not be a significant drinking water threat. This situation may arise when the line drawn around wellheads and water intakes that designate vulnerable areas in the assessment report needs refinement.

If an activity is identified as an activity that is or would be significant threat to drinking water within a particular area in a source protection plan is subject to a risk management plan or prohibition under Part IV of the Act, the property owner or occupant responsible for the activity may avoid the application of a risk management plan or prohibition by submitting a risk assessment to the risk management official that establishes that the activity would not be a significant drinking water threat if carried on at that particular location. The risk assessment would be prepared by a qualified person as outlined by regulation.

The property-specific risk assessment is meant to determine whether assumptions in the assessment report regarding a vulnerable area were accurate for a specific property where an activity is being carried out. The risk assessment is not questioning whether the activity, if conducted in a vulnerable area, would be a significant threat. Rather, it is verifying whether the vulnerability score attributed to an entire vulnerable area (eg. a wellhead protection area) should apply to a specific property if that does not share the same vulnerability characteristics as the rest of the area.

For example, if a vulnerable area includes a shallow aquifer that is vulnerable to surface contamination, a risk assessment could be used to demonstrate that on a particular property, the aquifer is in fact much deeper. As a result, the activity on the property does not represent a great a risk as assumed in the source protection plan. If the risk management official accepts the conclusions of the risk assessment, then the activity at that property will no longer be subject to a risk management plan or prohibition.

The municipal enforcement authority has the option to pass a rule to accept the risk assessment prepared by a qualified person at face value rather than require the risk management official to make an independent determination that the risk assessment should be accepted.

6.5.5 Risk Management Fees

A municipality or its delegated agent (conservation authority, health board or planning board) may charge fees to recover its risk management enforcement costs. Fees that cannot be recovered may be added to the tax roll.

7. Step 4: Implementation, Monitoring, Inspections and Enforcement

7.1 Overview

The process of negotiating the Terms of Reference, preparing the Assessment Report and finalizing the Source Protection Plan is expected to take up to five years. Once the plan is approved, implementation will begin.

Municipalities will play a central role in implementation of the Source Protection Plans. A municipality's Official Plan will have to come into conformity with the designated Great Lakes policies and significant threat polices set out in the Source Protection Plan, as will its zoning by-laws. If a municipality is exercising its new authority to negotiate or establish risk management plans, it will need to building capacity and skills to undertake inspections and enforcement in this new area. It may also involve ongoing monitoring in association with the Source Protection Authorities.

7.2 Implementation and Conformity

Once a Source Protection Plan comes into force, a municipality, local board or Source Protection Authority is legally required to comply with any obligation imposed on it by a significant threat policy or designated Great Lakes policy within a source protection plan.

Any decisions made under the *Planning Act* or the *Condominium Act*, that are made by municipalities, a local board, the Province, or the Ontario Municipal Board or Environmental Review Tribunal, must also conform with policies in source protection plans that address significant threats or a designated Great Lakes policy. For those policies that address anything other than a significant threat, these authorities will have to have regard for the source protection plan policies. Municipalities are not allowed to undertake public works or structural improvements that would conflict with a significant threat policy or designated Great Lakes policy within the source protection plan.

Much like the Oak Ridges Moraine Plan, municipalities will have to bring their Official Plans and zoning by-laws into conformity with source protection plan policies that address significant threats or designated Great Lakes policies. The same would apply, with necessary modifications, to a planning board in an unorganized territory. The source protection plan will stipulate the period of time within which an Official Plan and zoning bylaws must come into conformity.

If the Minister of the Environment is not satisfied that an Official Plan or zoning by-law has been brought into conformity, she may request that the municipality bring it into conformity, or failing that, in conjunction with the Minister of Municipal Affairs, may by order amend the Official Plan or zoning by-law so that it conforms with these policies.

The Province may also be required to bring instruments it has issued into conformity with the significant threat policy or designated Great Lakes policy within source protection plans. Prescribed instruments that will be identified in regulation, which could include provincial permits to take water, certificates of approval, and other provincial approvals, must conform or come into conformity with policies to address significant threats or Great Lakes policies. If a prescribed instrument isn't brought into conformity, the Minister of Environment may request that a prescribed instrument come into conformity, even if it is an approval from a ministry other than the Ministry of the Environment.

In the case of a condition resulting from a past activity (eg. a contaminated site) that has been identified as a significant drinking water threat, if the Minister is of the opinion that the issuance of a prescribed instrument would help address the threat, the Minister may request that a prescribed instrument (eg. a provincial approval, etc), be created. This is in recognition that conditions that have resulted from past activities cannot be regulated in the same manner as ongoing activities.

In the event that a provision of a plan is in conflict with the Provincial Policy Statement, and it is deemed that the provision provides the greatest protection to the quality and quantity of a source of current or future drinking water, it is the provision in the plan that would prevail.

For land uses and activities identified by regulation within areas designated in a source protection plan that require a risk management plan, the municipality will engage the property owner or occupant in negotiations over the terms of the risk management plan. If a risk management plan cannot be agreed to the risk management official may establish one.

Any monitoring that is required under the source protection plan will also have to be undertaken. This could involve source protection authorities, municipalities, or other local boards or agencies.

A source protection plan may also require that a municipality or Source Protection Authority expropriate land, by purchase or lease. Any expropriation undertaken to implement a source protection plan would be done in accordance with the *Expropriations Act*. Limiting the use of land due to specific land use or activity policies in a source protection plan is not considered expropriation.

The *Clean Water Act* provides guidance on what to do in the event of a conflict between a source protection plan and another provincial plan or policy, including those under the Provincial Policy Statement, the *Greenbelt Act*, the *Niagara Escarpment Act*, the *Oak Ridges Moraine Conservation Act*, or the *Places to Grow Act*. The legislation provides a legal test in the event of a conflict, whereby the policy that is most protective of the quality and quantity of source water prevails.

The only exception to this is in the case of conflicts between a provision of the CWA and a provision of the Nutrient Management Act, 2002 or a regulation or instrument made under that Act. In the case of such a conflict, the provision of the CWA prevails.

7.3 Inspections and Enforcement

Municipalities will be responsible for inspection and enforcement of those aspects of the Source Protection Plan that pertain to its Official Plan, zoning by-laws, subdivision plans and condominium

plans. It will also be responsible for new inspection and enforcement where risk management plans are being negotiated or established.

The official with the authority to inspect property must work under certain restrictions. For example, an inspection of a property can only be undertaken if prior notice is given to the owner or occupant. An inspector can only enter a dwelling with a court-issued inspection warrant. No force can be used to carry out an inspection, and can only be conducted at reasonable times. And any adverse effects as a result of an inspection must be restored to the condition before the inspection. Finally, municipalities do have the authority to cause work to be done on properties, but only under limited circumstances. Written notice to the affected property owner is required before the work is undertaken.

If an individual or a corporation is found guilty of an offence under the *Clean Water Act*, they may incur penalties up to \$25,000-\$50,000 a day for individuals for a first and second offence respectively, and up to \$50,000 to \$100,000 a day for a corporation for a first or second offence respectively.

7.4 Monitoring and Reporting

As part of the source protection plan, municipalities or another public body, such as a conservation authority or health board, may be required to conduct ongoing monitoring and reporting on threats to ensure that they do not develop into significant threats to drinking water.

Ongoing monitoring and reporting is also required on an annual basis. The Source Protection Authority is required to prepare an annual report that describes the measures taken to address significant threats or to prevent activities from creating significant threats, as well as the results of monitoring and to describe progress in achieving objectives set out in the source protection plan.

The annual report must be reviewed by the Source Protection Committee so that it may provide comments on achieving the objectives set out in the Source Protection Plan. The Source Protection Committee's comments are then submitted with the annual report to the Ministry of the Environment and the report released publicly by the Source Protection Authority.

A summary of all the annual reports from each watershed will be prepared and released publicly by the Minister of the Environment.

8. Provisions for Financing Source Protection

The *Clean Water Act* has a number of provisions related to financing aspects of source protection.

The *Clean Water Act* establishes an *Ontario Drinking Water Stewardship Program* that will provide financial assistance to rural farmers, small businesses, and other property owners whose activities or properties are affected by a source protection plan. Funding from the program will also be made available to organizations engaged in incentive programs and education and outreach programs that relate to source protection plans. A regulation will be created to further explain eligibility criteria for the funding program.

With respect to new costs associated with risk management plans, the CWA allows a municipality or a the designated public body responsible for risk management plans to recover these costs by charging fees for receiving risk management applications, for establishing a risk management plan, or for a risk management inspector to enter a property for an inspection. If these cannot be collected, they may be added to the municipal tax role.

12. Further Information

The main source of Ministry of Environment information on the *Clean Water Act* can be found at www.ene.gov.on.ca/envision/water/cwa.htm, and technical guidance material can be found at www.ene.gov.on.ca/envision/water/cwa-guidance.htm.

A copy of the Clean Water Act can be found at www.e-laws.gov.on.ca/DBLaws/Source/Statutes/English/2006/S06022_e.htm.

Information about draft regulations to be posted over the coming months can be found on the Environmental Bill of Rights registry at www.ene.gov.on.ca/envision/env_reg/ebr/english/index.htm.

Additional information on source water protection and the *Clean Water Act* can be found on the Conservation Ontario website at www.conservation-ontario.on.ca.