

1. Introduction and Background

Following the tragedy in Walkerton (May, 2000) when the town's drinking water became contaminated with a specific strain of *Escherichia coli* (*E. coli*) and campylobacter bacteria, Justice O'Connor presided over the Walkerton Inquiry. Justice O'Connor made 121 recommendations in a two part report which recommended a multi-barrier approach to protecting Ontario's drinking water. Many of Justice O'Connor's recommendations were implemented with the introduction of the Safe Drinking Water Act, 2002 (SDWA). The SDWA spoke to the treatment, distribution and testing of drinking water as well as the training of operators and notification protocols. The Clean Water Act, 2006 (CWA) addressed O'Connor's recommendations pertaining to the watershed based protection of drinking water sources referred to as Drinking Water Source Protection.

The Clean Water Act, 2006 required the establishment of Source Protection Committees who would oversee this process locally. The Source Protection Committee developed and consulted on a work plan document called the Terms of Reference before submitting it to the Minister of the Environment for Approval. Based on the approved Terms of Reference the Source Protection Committee was to complete an Assessment Report and Source Protection Plan. The Assessment Report is a science-based document that forms the basis of the Source Protection Plan. The Plan is to contain policies to reduce the threats (identified in the Assessment Report) to the drinking water sources.

The Clean Water Act, 2006 requires that Assessment Reports be completed for areas within Source Protection Areas of a Source Protection Region (SPR). The Assessment Reports are to contain detailed information which identify vulnerable areas associated with drinking water systems, assess the level of vulnerability, identify issues related to the drinking water sources, identify activities within those vulnerable areas which pose threats to the systems, and assess the risk due to threats. These Assessment Reports are being completed for the 3 Source Protection Areas of the Thames-Sydenham and Region SPR as shown in the following [Map 1.1](#).

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1.1. Document Overview

This Assessment Report is modular in nature. It is comprised of a several Sections and Appendices. The Sections are in effect a summary of various technical studies which are described later in this section. Each of the Sections is summarized in Section Summaries contained in [Appendix 2](#). Material pertinent to a specific drinking water system is also summarized in System Summaries included in [Appendix 3](#). Maps form a large part of the content of the Assessment Report, and are contained in [Appendix 1](#). Tabloid sized (11"x17") maps are included in this report, and may be printed on letter sized paper and remain mostly legible. The entire document is available on Compact Disk (CD) complete with the appendices to the Assessment Report.

Each Section of the Assessment Report is outlined below:

Introduction and Background (Section 1)

The first section provides an overview of the process and background behind the Assessment Report. It refers to mapping products related to the extent of the Source Protection Region and Source Protection Areas as well as the municipal partners involved in developing the Source Protection Plan.

Watershed Characterization (Section 2)

The Watershed Characterization Reports for the region were completed in 2008. A 3 volume report was produced for the Thames Watershed and Region which included the Upper Thames River Source Protection Area and the Lower Thames Valley Source Protection Area. A summary of the report was developed which included all of the mapping products used in the Watershed Characterization Report. The summary of the Thames Watershed and Region Watershed Characterization Report is included in [Appendix 5](#). The summary and the full Watershed Characterization Reports are available in portable document formation (Adobe pdf) on Compact Disk (CD).

Water Budget and Water Quantity Stress Assessment (Section 3)

A Conceptual Water Budget was developed for the Thames-Sydenham and Region. This report is included as **Appendix 6** of this Assessment Report. The Conceptual Water Budget compiles water quantity information from the region, such as precipitation and water takings, for use in the Tier 1 Water Budget. In the Tier 1 Water Budget a preliminary stress assessment, indicating the potential for stress in sub-watersheds of the region, is undertaken. The potential for stress is then considered to decide on whether additional work is required to refine the water budget in that area. If the potential stress could affect a drinking water system included in the Terms of Reference for the region (generally municipal drinking water systems), the additional refinement will be completed through a Tier 2 and potentially a Tier 3 Water Budget. If however the potential stress does not have an impact on the water systems in the area, the work should be undertaken through different programs. The Tier 1 Water Budget is included in **Appendix 7** of this report. As the Tier 1 water budget did not identify a potential for stress which would affect a municipal drinking water system in the Lower Thames Valley Source Protection Area, no Tier 2 or Tier 3 Water Budgets are included in this Assessment Report.

Vulnerability Assessment (Section 4)

The Vulnerability Assessment section includes the identification of the vulnerable areas, the assessment of vulnerability within those areas and the uncertainty in that assessment as required by the Clean Water Act. The work related to this section was undertaken through a number of technical studies which were generally completed on the geographic scale of the upper tier municipalities (counties). This section summarizes the work completed on a Source Protection Area basis for each type of vulnerable area. The work is also summarized for each drinking water system in the System Summaries included as **Appendix 3**. A peer review of the vulnerability assessment work was undertaken.

Issues Evaluation (Section 5)

The Issues Evaluation Section describes the methods applied and the findings of the issues evaluation process across the Source Protection Area. The detailed methodology for the issues evaluation process is included in **Appendix 8**. A table of issues identified is included in the Issues Evaluation section as well as a description of the impact of identifying an issue and

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additional work required to determine the activities which may be contributing to the issue. The findings reported in this section are also included in the system summaries in [Appendix 3](#).

Conditions Assessment (Section 6)

The Conditions Assessment section of the Assessment Report includes a description of the work undertaken to assess the potential conditions (drinking water threats due to past activities) which have been identified to date. This is an ongoing process which requires additional work.

Threats and Risk Assessment (Section 7)

The Threats and Risk Assessment section of this Assessment Report includes a list of the types of threats which are or would be a risk to drinking water systems in the region and the number of locations where significant threats are believed to be undertaken. It is not the intent of this report to identify individuals who are believed to be engaged in those activities. Policies developed in the Source Protection Plan will be focused on general types of activities which are or would be threats to drinking water. This section also outlines the additional work required to investigate those activities believed to be threats. As with the other sections, an overview of this information is also presented in the system summaries included in [Appendix 3](#).

Great Lakes (Section 8)

The Great Lakes section includes the required references to other work undertaken in the region related to Great Lakes water quality and how the Assessment Report supports and compliments that work and vice-versa. It identifies additional work required in this area once all the Assessment Reports for Source Protection Areas which drain into the Great Lakes are completed. Of special relevance to this section are the drinking water quality issues identified at Great Lakes intakes in the Lower Thames Valley SPA, which can be found in section 5 of the Assessment Report.

Data Gaps and Next Steps (Section 9)

Data gaps and next steps are listed in this section. Data gaps could be those such as infrequent groundwater sampling, inaccurate tile drainage network information, etc. Many of the next steps involve work plans to fill the data gaps or additional work required to reduce the

uncertainty related to various components of the Assessment Report. Data gaps and next steps pertaining to an individual system are also listed in the system summaries included in **Appendix 3**.

1.2. Clean Water Act Rules and Regulations

The Clean Water Act, 2006 established the requirements to develop a Source Protection Plan and set up the framework to develop that plan. In order to define the work and enable aspects of the work to be completed, regulations and rules were required. The development of these rules and regulations was led by the Drinking Water Source Protection Branch of the Ministry of the Environment. These regulations were developed through consultation with stakeholders including the Source Protection Committee chairs and committees and the staff of the Conservation Authorities working with the Source Protection Committees. Many consultation sessions were held with sector representatives of those who may be impacted by the rules and regulations.

1.2.1. Regulations

A regulation was introduced to establish Source Protection Areas and Regions (O. Reg 284/07). This regulation established the Thames-Sydenham and Region Source Protection Region and the three Source Protection Areas within the region which are described in the sections to follow. This Source Protection Region was a recognition of the partnerships already established by the Conservation Authorities to allow them to begin to prepare for the work which the Clean Water Act would require.

A regulation was introduced to establish Source Protection Committees (O. Reg 288/07). The regulation described the make-up of the committees and also the process for establishing the committees. The regulation required that the Source Protection Authorities in the region form the committee while the chair was to be appointed by the Minister of the Environment.

A General Regulation (O. Reg 287/07) was also introduced which determines much of the process behind developing Terms of References, Assessment Reports and Source Protection

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Plans. The General Regulation also establishes the 21 activities which can be considered drinking water threats, called the Prescribed Drinking Water Threats. The General Regulation was created by merging and updating a number of separate regulations. The General Regulation identifies the requirements for an Assessment Report along with sections of the Clean Water Act and the rules described below. The requirements of the Act, Regulation and rules are summarized in the Assessment Report Checklist which is included as **Appendix 10**. The checklist indicates where the requirements have been satisfied in this Assessment Report.

A regulation was introduced to regulate the service of documents (O. Reg 231/07). The regulation described the methods of giving and serving documents and the individuals who may be given or served a document.

1.2.2. Technical Rules

In order to fully define the contents of, and methodologies used in, developing Assessment Reports, the Ministry of the Environment (MOE) released Technical Rules: Assessment Reports (December 12, 2008). During the drafting of this report, the Director (MOE) was in the process of amending those rules (November 2009). Although many of those amendments have been incorporated into this report, time did not allow all of those amendments to be reflected in all parts of the report. Those aspects of the amendments not addressed in this report will need to be incorporated into an amended Assessment Report.

The Technical Rules: Assessment Report replaced interim guidance which was developed by MOE to guide much of the technical work initiated in 2006 and 2007. The guidance was developed in a modular manner with each module describing a specific component of the work. Much of the technical work followed those guidance modules which provided the basis for the organization of many of the technical studies. The guidance modules were detailed and descriptive. The organization of this report is partially reflective of those modules.

1.2.3. Local Guidance Documents

The rules and regulations leave room for local discretion by the Source Protection Committee and system operating authorities. In many cases local guidance documents were required to

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provide consistent guidance across the region. This local guidance developed by the Thames-Sydenham and Region in consultation with municipality staff and consultants includes:

- Issues Evaluation Methodology
- Threats and Risk Assessment
- Transport Pathways Consideration

The local guidance was intended to provide local interpretation and application of the technical rules. These methodologies were reflected in the work undertaken by consultants on behalf of the project leads for the technical studies. Where appropriate these local guidance documents are referenced in this report.

1.2.4. Tables of Drinking Water Threats

Along with the technical rules the province released 'Tables of Drinking Water Threats' which list the vulnerability and establish the circumstances under which threats can be considered significant, moderate or low. Two tables are provided which describe the activities related to chemical and pathogen threats separately. The MOE threats tables, as they are commonly called, describe the specific circumstances which affect the risk level of the activity. Circumstances include such factors as the volume of contaminant, the method of release, the type of contaminant, the density or area that the activity is undertaken in, etc. The tables are organized by Prescribed Drinking Water Threats (activities) established in the General Regulation (O. Reg. 287/07).

These circumstances, along with the vulnerability assessment of the vulnerable areas, determine the level of risk associated with an activity in a particular location.

1.2.5. Mapping Symbology

Along with the Technical Rules: Assessment Report, the province also released and updated guidance on Assessment Report mapping standards, called the Mapping Symbology for the Clean Water Act (Version 3.0, April 2009). This guidance will allow mapping products produced in the 19 Source Protection Regions in the province to have a consistent look. This guidance

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has been used to develop the various mapping products included in this Assessment Report and the supporting studies. As the mapping symbology has been updated over the period that much of the work was undertaken, it is likely that not all aspects of the mapping products meet the current MOE guidance. Similarly, much of the work undertaken in the technical studies met the symbology of the time that the work was undertaken. In many cases this work has been updated to meet more recent versions of the rules and where possible the related mapping products have been updated to meet the guidance at the time of the updating. No efforts have, or will be, undertaken to update all of the previously completed technical studies to the evolving mapping standards. Where the mapping symbology included in the Assessment Report substantially affects the products presented, updates to these products may be required. As such care must be taken in comparing mapping products in the Assessment Report to the Technical work that they are sourced from. A careful review of the legend is required before interpreting the products.

1.2.6. Source Protection Plan

Following the completion of the Assessment Report, a Source Protection Plan must be developed by the Source Protection Committee. The focus of the Source Protection Plan is to reduce or manage the risks to drinking water sources. The Source Protection Plan will contain policies focused on activities which are identified as threats. Although a regulation defining the scope and content of a Source Protection Plan has not yet been introduced, the province has consulted on a discussion paper which will form the basis for a Source Protection Plan regulation. The discussion paper outlines the nature of the policies which would be described in a future regulation. These policies may include:

- education and outreach programs (leading to voluntary risk reduction)
- incentive programs (leading to voluntary risk reduction)
- land-use planning approaches (e.g., official plans, zoning by-laws, site plan controls, development permits)
- new or amended provincial instruments (e.g., Certificates of Approval)
- risk management plans
- prohibition

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- restricted land uses.

The discussion paper outlines that the more restrictive policies listed above would only be able to be applied to significant drinking water threats. Similarly the policies related to significant threats are mandatory and must be implemented, whereas the policies related to moderate and low drinking water threats leave some discretion to the implementer. The Source Protection Plan may also include various policies related to monitoring.

1.3. Source Protection Committee

Source Protection Areas were established through O. Reg 284/07. This regulation established the Lower Thames Valley Source Protection Authority, the St. Clair Region Source Protection Authority and the Upper Thames River Source Protection Authority. This regulation also combined the three Source Protection Authorities into the Thames-Sydenham and Region Source Protection Region, building on a partnership that these three Conservation Authorities established to prepare for Source Protection Planning.

In the Thames-Sydenham and Region the three Source Protection Areas have Conservation Authorities which as specified in the Clean Water Act will perform the powers and duties of a Source Protection Authority. As such the Conservation Authorities were required to form a Source Protection Committee (SPC) for the region. They are also required to provide support to that committee. In order to carry out their responsibilities, each Conservation Authority meets individually as a Source Protection Authority. While many of their responsibilities are able to be undertaken individually, in this manner the Conservation Authorities (and Source Protection Authorities, as appropriate) established various committees to undertake those items which required collective involvement of the Conservation Authorities or Source Protection Authorities.

A management committee was established to undertake the day to day administration related to the program. The management committee includes the general managers of the three Conservation Authorities who meet regularly with the Source Protection Project Manager. The Management Committee among other things ensures that the Source Protection Committee has the resources to undertake their responsibilities as funded by the MOE.

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A striking committee was formed with representation from all three Source Protection Authorities to form the Source Protection Committee. The striking committee provided recommendations to the Source Protection Authorities for appointment. When members of the Source Protection Committee require reappointment or to fill vacancies on the Source Protection Committee the striking committee will be required to be re-established.

The Clean Water Act identifies the general makeup of the Source Protection Committee as having one third of its members representing each of municipalities, sectors and other stakeholders. The Conservation Authorities in the region further refined the makeup of each third and established a striking committee to form the Source Protection Committee on behalf of the three Source Protection Authorities in the region. A discussion paper was developed and distributed to the municipalities in the region for their input. Consultation with First Nations was also undertaken to encourage their participation on the Source Protection Committee. Those discussions continue today in hopes that the available seats on the Source Protection Committee can be filled by appointment of representatives of the eight First Nations in the Region. First Nations involvement in other aspects of the project is also encouraged including the participation in relevant technical studies and input into the Watershed Characterization Report and Terms of Reference.

The makeup and representation of the Source Protection Committee is summarized in the following table:

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Table 1-1 SPC members and representation

Sector		Committee	
Chair		Robert Bedggood	
Municipalities		Chatham-Kent	Sheldon Parsons
		Lambton	Darrell Randell
		London	Patrick Donnelly
		Middlesex	James Maudsley
		Elgin	Brent Clutterbuck
		Oxford	Pat Sobeski
		Perth, Stratford, St. Marys, Huron	Joe Salter
Sectors	Agriculture	John Van Dorp	
		Patrick Feryn	
		Don McCabe	
	Industry/ Commercial	Dean Edwardson	
		Earl Morwood	
	Aggregate/Oil and Gas	Aggregate and Quarries	Paul Hymus
		Oil and Gas	Joe Van Overberghe
Other		Richard Philp	
		Doug McGee	
		Joseph Kerr	
		Carl Kennes	
		Valerie M'Garry	
		Margaret Misk-Evans	
		Charles Sharina	
First Nations	To be determined		
Liaisons	Medical Officers of Health	Province	Jim Reffle
	Province	Source Protection Authority	Teresa McLellan
	Source Protection Authority		Murray Blackie

Once established the Source Protection Committee was required to establish rules of order and operating procedures. The Source Protection Committee's rules of order are posted on the region's web site at the address included in the footers of this report. In order to guide them through the Source Protection planning process the Source Protection Committee developed a Mission Statement and Guiding Principals. The Source Protection Committee's guiding principals and mission statement are summarized as follows:

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Table 1-2 SPC Mission Statement and Guiding Principals

Mission Statement Protect sources of drinking water by developing a plan based on science and local cooperation.
Guiding Principles We value: <ul style="list-style-type: none">• Fair and reasonable solutions• Consensus within our diverse area group• Clarity of information• Open communication• Respecting diversity of opinion

More detail on the committee's Mission Statement and Guiding Principals are posted on the region's web site, listed in the footer of this page.

The Source Protection Committee meets regularly to review and assess work conducted for the Assessment Report, to consider amendments to the Terms of Reference, and to discuss source protection planning for the region. The meeting agenda and minutes are available at the region's web site.

Role of the Conservation Authorities

The Conservation Authorities provide the resources to the SPC to complete their work. This includes the provision of technical and administrative staff such as hydrogeology, engineering, geographic information system and communications specialists. This team is lead by the Source Protection Project Manager, Chris Tasker and technical leads at each of the Source Protection Authorities. The lead at the Lower Thames Valley Source Protection Authority is Jack Robertson, Water Management Supervisor.

1.4. Terms of Reference

The first major task of the Source Protection Committee was to come up with a work plan that will guide the source protection planning process for the following five years. The work plan – called the Terms of Reference, was developed with input from municipalities and stakeholders. The Terms of Reference outlines who does what, when it will happen and how much it will cost. It guides the Source Protection Committee through the completion of the Assessment Report and the Source Protection Plan.

Two municipal working groups, for surface water and groundwater related studies, were established to help complete the work plan for the Terms of Reference. The groups were chaired by SPC members and comprised of municipal staff and water treatment plant operators, who provided technical input.

Public Open Houses on the Terms of Reference were held in September of 2008 at Ridgetown, St. Marys and Wyoming. A follow-up Public Meeting was held in London. In addition, comments were received through the posting of the Terms of Reference on the region's website. The SPC submitted the proposed Terms of Reference to the Source Protection Authorities (SPAs) on December 18, 2008. Comments were received by the SPAs and submitted to the Minister of the Environment for approval. The Terms of Reference for the Lower Thames Valley Source Protection Area were approved by the Minister of the Environment on April 20, 2009. This approval set the due date of this Assessment Report one year from the posting of the approval of the Terms of Reference.

1.5. Thames-Sydenham and Region Source Protection Region

The Thames-Sydenham and Region Source Protection Region is located in southwestern Ontario bounded by Lake Erie in the south and by Lake Huron to the north of the western end of the region. It is surrounded by the Lake Erie Source Protection Region to the east and the Essex Region Source Protection Area to the west of its southern end. To the north and west of the northern part of the region is the Ausable-Bayfield Maitland Valley Source Protection Region. The region is shown in [map 1.1](#).

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The Thames-Sydenham and Region is comprised of three Source Protection Areas. The Upper Thames River Source Protection Area is to the north and east of the region. The Lower Thames Valley Source Protection Area is to the south and west of the Upper Thames River Source Protection Area while the St Clair Region Source Protection Area is north of the Lower Thames Valley Source Protection Area. The three Source Protection Areas are also shown in **Map 1.1**.

1.5.1. Lower Thames Valley Source Protection Area

The Lower Thames Valley Source Protection Area (LTVSPA) includes parts of the municipalities listed in **Table 1.3** below.

Table 1-3 Municipalities in the LTVSPA

Chatham-Kent	Lakeshore
Elgin	Leamington
Essex	London
Middlesex	Middlesex Centre
Dutton/Dunwich	Newbury
Southwold	Southwest Middlesex
St. Thomas	Strathroy-Caradoc
West Elgin	

The region also includes four First Nations reserves as shown on Map 1.1. Caldwell First Nation is also established in the area near Rondeau Bay; however they currently do not have a reserve. Table **1.4** lists the First Nation communities in the region and the source of their drinking water.

Table 1-4 First Nations of the LTVSPA

Chippewas of the Thames First Nation
Delaware Nation Council
Munsee-Delaware Nation

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Oneida Nation of the Thames

The municipalities receive most of their drinking water from intakes on Lake Erie. There are 2 municipal groundwater systems located in the region. Private wells supply the remainder of the water to the residents of the region. **Map 1.2** shows the location of the intakes and wells in the area.

The largest settlement in the area is Chatham, however parts of London, Middlesex, Lambton and Elgin Counties are in the regions. Settlement areas are shown in **Map 1.3**. The approximate population of these settlement areas is indicated by the relative size of the symbol indicating the location of the settlement. These populations have been included based on available information or estimated based on the number of parcels in the settlement area.

More details on the area, its water systems and the population of the area are included in section 2.0 - Watershed Characterization.

1.6. Technical Studies

The Assessment Report is a summary and compilation of a number of technical reports.

Technical reports were completed on the following areas:

- Watershed Characterization
- Conceptual Water Budget
- Various levels of Water Budgets (Tier 1, 2 or 3)
- Municipal Technical Studies

The Municipal Technical Studies were completed through partnerships between the municipalities and the Conservation Authorities. Leads for each study were established. The studies were lead by the Conservation Authorities (CAs) or by a municipality. Most of the municipal technical studies were organized based on the geographic extent of the upper tier municipalities (counties). Municipal involvement in the Municipal Technical Studies was through staff responsible for the operation of the drinking water systems participation in steering

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committees for these projects. The watershed characterization and the conceptual water budget studies were led by the CAs and completed by CA staff.

Certain components of the technical studies were subjected to peer review. Many of these studies are still ongoing however the components from the studies have been compiled into these Assessment Reports.

Vulnerability Assessment technical reports were peer reviewed by a four member peer review committee comprised of hydrodynamic and groundwater modeling experts with experience in vulnerability assessment studies.

1.7. Consultation

Regulations require consultation on the Assessment Reports. This consultation, much like that on the Terms of Reference requires a public meeting and posting of the Assessment Report for comment. Two posting periods are required: one posted by the Source Protection Committee for consultation on the draft proposed Assessment Report; and the second posted by the Source Protection Authority for comments on the proposed Assessment Report. The proposed Assessment Report is then submitted to the Ministry of the Environment along with comments received in the final posting period. The Director may then approve the Assessment Report or require changes to the report.

The Source Protection Committee identified the need to undertake a more detailed and locally focused consultation on the contents of the Assessment Report. A multi-phase consultation plan was developed and is included in **Appendix 4** (and on the web site). The plan identifies three consultation phases. The first two phases of consultation provide a more local focus on the vulnerable areas associated with the municipal water supplies. The first phase includes the (peer reviewed) vulnerability assessment of the areas while the second phase adds discussion on the threats and issues identified in the vulnerable areas. Both phases included individual correspondence with property owners in the proposed vulnerable areas as well as advertisements in local newspapers. Maps of the areas and fact sheets were distributed with

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invitations to attend the local meetings. These materials were also made available on the region's web site.

The third phase of consultation is the required public meeting and posting of the draft proposed, and then the proposed Assessment Report for comment. This phase is more of a regional focus involving open houses in each of the Source Protection Areas.

The draft proposed Assessment Report must be published on the internet for a 35 day comment period, and copies made available to stakeholders including the public. A copy of the notice of the posting of the draft proposed Assessment Report is to be published in newspapers and distributed to the municipality clerks, First Nations band chiefs, landowners (engaging in an activity known by the SPC that is or would be a significant threat), other SPCs listed in the Terms of Reference, persons or bodies related to Great Lakes Water Quality Agreements, Remedial Action Plans and Lake wide Management Plans for their comments. At least 21 days after publishing the draft proposed report on the internet, the required public meeting must take place.

The proposed Assessment Report must be published on the internet for a 30 day comment period, and copies of the report submitted to municipal clerks and band chiefs.

Future phases will involve similar consultation on amendments and updates to the Assessment Reports.

1.8. Schedule

The due date of the Assessment Report was set with the posting of the approval of the Terms of Reference for the Source Protection Area. The Clean Water Act identifies that Assessment Report are to be submitted within one year of the posting of the approval of the Terms of Reference. This due date has no consideration of the complexity or quantity of work related to the submission of the Assessment Reports. Further, the rules which outlined the contents of the Assessment Report and the work required to complete the Assessment Reports had not been

released at the time of approval of the Terms of Reference. As a result many of the components of the Assessment Report were not able to be completed in time for the submission of the Assessment Report. This was recognized in amendments to the Technical Rules: Assessment Report which allowed for certain data gaps, provided a work plan was included that outlined the work to be undertaken to fill those data gaps. The types of data gaps allowed by the revised rules are described in the Data Gaps and Next Steps section of this Assessment Report. The following schedule describes at high level the work required to complete the Assessment Report and the rest of the Source Protection Planning process.

Figure 1 Source Protection Planning Schedule

1.9. Local Acceptance, Approvals and Next Steps

The Assessment Report consultation plan illustrates a number of review and acceptance stages in the development of the Assessment Reports for the Source Protection Areas. This ultimately culminates in the approval of the Assessment Reports by the Director of Source Protection Planning for the Ministry of the Environment.

Local acceptance of the Assessment Reports is also included in the consultation process. Prior to inclusion in the Assessment Report the components have been reviewed and accepted by the Source Protection Committee. This review included

- presentations to the Source Protection Committee by those undertaking the work,
- peer review of the work;
- review of the products from the technical studies which are to be included in the Assessment Report;
- review of summary level information included in the Assessment Report in the form of section summaries and system summaries; and
- ultimately the acceptance of the Assessment Report.

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Municipal and other local involvement in the development of the Assessment Report has been included in many ways. Municipalities have been involved in many of the technical studies throughout the region especially those which are focused on the sources of drinking water for their municipal systems. Operating Authority staff participated in technical steering committees on these projects. Where appropriate, operating authority staff has kept their commissions or councils up to date on the completion of the technical work. Updates on progress on Source Protection Planning have also been distributed to municipalities throughout the work on the Assessment Report. Municipal comments were also requested on the Watershed Characterization Reports and the Conceptual Water Budget. Representatives on the Source Protection Committee have been instrumental in keeping their representation updated on the Source Protection Planning process including organizing and attending meetings with stakeholders.

During the first two phases of the consultation, municipal staff and councils were circulated invitations to the open houses and offers were made of presentations to municipal councils. Municipal Planners were invited to attend a municipal planners forum where the materials included in the Assessment Reports were discussed.

The third phase of consultation is comprised of two steps: consulting on the draft proposed Assessment Report, and then on the proposed Assessment Report. In the third phase of consultation, the notice of publishing of the draft proposed Assessment Report must be sent to municipal clerks and band chiefs. The draft proposed Assessment Report will be distributed on Compact Disc (CD) to the municipalities and First Nations for their comments. It is hoped that through ongoing involvement in the Assessment Report development process as discussed above, the municipal input has been adequately addressed in the Assessment Report. Municipalities, First Nations and other stakeholders will have 35 days from the time the notice is posted to review and provide comments on the draft proposed Assessment Report. These comments are to be considered by the Source Protection Committee in finalizing the proposed Assessment Report.

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The proposed Assessment Report will be posted on the Internet for a 30 day comment period. This posting asks for comments to be submitted to the Source Protection Authority. Further, a copy of the proposed Assessment Report must be submitted to the municipal clerks and band chiefs.

In submitting the Assessment Report to the Ministry of the Environment, the Source Protection Authority is to include any outstanding comments including any municipal or First Nations concerns over the Assessment Reports. The Director can approve the Assessment Report as submitted or require amendments to the Assessment Report.

1.9.1. Engaging First Nations

While the First Nations have been encouraged to participate in the development of the Assessment Report in a number of ways, to date that participation has been rather limited and very informal in nature. First Nations forums were set up in 2008-2009 across the region. To date First Nations have not nominated anyone to participate on the Source Protection Committee, however a couple participants have attended various Source Protection Committee meetings informally. A First Nations liaison hired by the Conservation Authorities has been instrumental in the involvement of First Nation communities in many aspects of Source Protection Planning. Recently interest has been expressed in the participation in some of the technical studies, however that work has yet to be initiated. Comments received from the First Nations will be considered by the Source Protection Committee along with others received during this posting.

1.9.2. Amendments to the Assessment Report

As there are a number of data gaps in the Assessment Report submitted, amendments to the Assessment Report, prior to the submission of the Source Protection Plan in 2012, is anticipated. The Data Gaps section of this report identifies those gaps and discusses plans to fill those gaps.

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Assessment Report can also be amended at any time that the Source Protection Committee becomes aware of the need to amend the reports. Many of the data gaps identified in the Data Gaps and Next Steps section of the Assessment Report will require amendments to the Assessment Report. Further, changes in understanding or factors such as land use which may have an impact on the Assessment Report may be brought to the attention of the Source Protection Committee. As a result of this new information or understanding the Source Protection Committee may amend the Assessment Report. The Source Protection Committee will also need to consider amendments to the Assessment Report when the Source Protection Plan is reviewed. The period for review of the Source Protection Plan will be established by the Minister in the approval of the Source Protection Plan.

Any amendments to the Assessment Report would require consultation of those affected by the amendments.