



Lakehead Region
Conservation Authority
Conserve Today...For A Better Tomorrow

LAKEHEAD Source Protection AREA

Public Guidance Document

for the

Lakehead Source Protection Committee

Terms of Reference

Lakehead Source Protection Area

(As approved by the Minister of Environment – May 25, 2009)

April 14, 2009

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

*Lakehead Source Protection Area Terms of Reference
(As approved by the Minister of Environment – May 25, 2009)
Prepared By: The Lakehead Source Protection Committee – April 14, 2009*

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Statement from the Lakehead Source Protection Committee

The purpose of the Terms of Reference for Lakehead Source Protection Area is to provide an outline of the work that needs to be undertaken and who is responsible for carrying out the work in order to complete the Assessment Report and Source Protection Plan in accordance to the “Clean Water Act, 2006” and its Regulations. In the preparation of the Draft Proposed Terms of Reference, the Lakehead Source Protection Committee worked closely with the Lakehead Source Protection Authority and member Municipalities to ensure that everyone involved understands the nature and scope of the tasks to be assigned in the Terms of Reference. The Lakehead Source Protection Committee has also considered the following elements when developing the Terms of Reference:

- the drinking water systems that will be included in the Assessment Report;
- the most appropriate lead organizations or bodies who will undertake each major task;
- the development of Source Protection Planning timelines and budgets;
- work that has already been completed that can be used to fulfill the requirements of the Assessment Report and the Source Protection Plan; and
- any issues or other matters that may have an impact on other Source Protection Committees.

It should be noted that, the Draft Proposed Terms of Reference was developed by the Lakehead Source Protection Committee in May and June 2008, in advance of the legislation of the Assessment Report Regulation, Director’s Rules and Source Protection Plan Regulation. In the absence of required legislation, some sections within the Proposed Terms of Reference concerning the work that needs to be undertaken in the future and the budget associated with this work, are estimates based on the best information and guidance from the Ministry of Environment available at the time of development of the document. This is in no way intended to mislead the public but estimates and predictions needed to be made in order to present a complete version of the Proposed Terms of Reference to the Minister of the Environment for approval.

Implementation costs cannot be estimated until it is determined how many local drinking water threats there are and what types of policies will be used to address potential threats. Source Protection Plan policy development is estimated to begin in early 2010. The Lakehead Source Protection Area has repeatedly informed the Ministry of Environment that Municipalities are very concerned about implementation costs and responsibilities associated with implementation and will continue to raise this issue at the Provincial level on behalf of our local Municipalities. The Ministry of Environment needs to provide clear direction of implementation costs and responsibilities to the Source Protection Areas/Regions and Municipalities in this Province in the very near future.

The “Clean Water Act, 2006” clearly states that no compensation will be paid to affected property owners. A financial assistance program called the Ontario Drinking Water Stewardship Program was legislated in June 2008 with the intent of providing some financial assistance to landowners meeting the criteria outlined in the Regulation. The Ontario Drinking Water Stewardship Program currently has guaranteed funding until 2011 to provide grants to undertake “Early Actions” close to Municipal residential drinking water systems in advance of Source Protection Plans. The “Clean Water Act” however, states that the intention of the Ontario

Drinking Water Stewardship Program is to also provide financial assistance to persons whose activities or properties are affected by the “Clean Water Act”. The Lakehead Source Protection Area has and will continue to pressure the Province to continue to fund the Ontario Drinking Water Stewardship Program beyond 2011, in order to provide necessary financial assistance to property owners affected by new policies and risk reduction strategies that may result from approved Source Protection Plans.

The overall objective of the Lakehead Source Protection Committee, in partnership with local Municipalities and the Ontario government, is to protect the quality and quantity of present and future sources of municipal residential drinking water in the Lakehead Source Protection Area. The Lakehead Source Protection Committee will continue to work and consult with stakeholders and participants to gather technical knowledge on which well-informed, consensus-based decisions can be made in an open and consultative manner. The Lakehead Source Protection Committee will aim to propose policies in the Lakehead Source Protection Plan that are appropriate, effective, economical and fair for local Municipalities and will make use of the available science to assess municipal residential drinking water threats and issues. Where there is uncertainty, the Lakehead Source Protection Committee will be mindful of the precautionary approach.

Preface

This document was created for public information purposes of the Source Protection Planning project and provides an overview of the planning area, the proposed work and the process and schedule for preparing an Assessment Report and Source Protection Plan for the Lakehead Source Protection Area. This document is a supplement to the Proposed Terms of Reference for the Lakehead Source Protection Area.

The Ministry of Environment has provided Source Protection Committees across the province with a tool termed the Terms of Reference Wizard to create the outline of the work that needs to be undertaken and who is responsible for carrying out the work in order to complete the Assessment Report and Source Protection Plan as required by Ontario Regulation, 287/07 - Terms of Reference. The full document produced when utilizing the print function in this tool is titled the Proposed Terms of Reference for the Lakehead Source Protection Area and can be downloaded from www.sourceprotection.net. To assist the public in navigating the information provided in the Proposed Terms of Reference for the Lakehead Source Protection Area, a summary of the original document was prepared titled “Proposed Terms of Reference for the Lakehead Source Protection Area- Summary for Public Review” and is provided in Appendix A of this document.

Background

The “Clean Water Act, 2006”, was introduced by the Ontario Government in 2006. On July 3rd, 2007, the Act, along with the first five Regulations were legislated. The purpose of this legislation is to ensure that across the Province of Ontario, watershed communities are able to protect their Municipal drinking water sources from contamination and overuse of our current and future supplies. The best way to protect the sources of our drinking water is by assessing them from a watershed perspective.

How does this affect me?

The "Clean Water Act" and its Regulations will provides communities with the tools and process to protect their Municipal residential drinking water supplies through developing collaborative, locally-driven, science-based protection plans.

The Lakehead Source Protection Committee (SPC) was formed in November 2007 to create the Source Protection Plan for the Lakehead Source Protection Area. There are two Municipal residential drinking water systems in the Lakehead Source Protection Area:

- Bare Point Water Treatment Plant (City of Thunder Bay)
- Rosslyn Village Municipal Drinking Water System (Municipality of Oliver-Paipoonge)

The Lakehead Source Protection Committee through the planning process will identify any potential risks to the water sources for the two Municipal residential drinking water systems and take action to reduce or eliminate these risks. Municipalities, Conservation Authorities, property owners, farmers, industry, community groups and the public will all work together to meet common goals in development of a Source Protection Plan.

Lakehead Source Protection Committee

The Lakehead Source Protection Committee is one of 19 Committees established across the province on a watershed basis to prepare local Source Protection Plans. The composition and size of the Committee is to a certain extent regulated by the Province of Ontario and determined by the size of the Source Protection Area. The Lakehead Source Protection Committee is composed of a provincially appointed Chair, Mr. Bob Hartley, plus nine Members who were appointed by the Lakehead Source Protection Authority.

The Committee by Regulation of the “Clean Water Act” has equal representation across three defined sectors: Municipal, Industry/Economic and Public & Other Interests. There is a designated seat for a First Nations Member which is vacant at the present. The Committee also includes three non-voting Liaison Members, one assigned from each of the Lakehead Source Protection Authority, Thunder Bay District Health Unit and Ministry of Environment.

Lakehead Source Protection Area Terms of Reference
(As approved by the Minister of Environment – May 25, 2009)
Prepared By: The Lakehead Source Protection Committee – April 14, 2009

LAKEHEAD SOURCE PROTECTION COMMITTEE (SPC)

LAKEHEAD SOURCE PROTECTION COMMITTEE CHAIR

Bob Hartley

COMMITTEE MEMBERS

MUNICIPAL SECTOR

Ken McWhirter (Vice Chair)
City of Thunder Bay

James Vukmanich
City of Thunder Bay

Veikko Long
Municipality of Oliver Paipoonge

INDUSTRY & ECONOMIC SECTOR

Guy Jarvis, P.Eng
Thunder Bay Port Authority

Hartley Multamaki, R.P.F.
Forest Industry

Bernie Kamphof
Agriculture

PUBLIC & OTHER INTERESTS SECTOR

Robert Stewart, Ph. D.
Education

Paul McAlister, R.P.F.
Tourism

Ross Chuchman
General Public

FIRST NATIONS

(Vacant) - Fort William First Nation

COMMITTEE LIAISON MEMBERS

Kate Turner
Liaison Coordinator
Ministry of Environment

Mervi Henttonen
General Manager/Secretary-Treasurer
Lakehead Region Conservation Authority
Source Protection Authority

Chris Beveridge
Manager of Environmental Services
Thunder Bay District Health Unit
Public Health Sector

For biographies of the Members of the Lakehead Source Protection Committee please visit www.sourceprotection.net.

Lakehead Source Protection Authority

Under the “Clean Water Act”; the Lakehead Region Conservation Authority Board serves as the Lakehead Source Protection Authority. The role of the Source Protection Authority is to oversee, review and recommend work done by the Source Protection Committee. It is the Source Protection Authority’s responsibility to ensure that information is made available to the public.

Source Protection Planning

Under the “Clean Water Act”; the Source Protection Committee was created to oversee a science-based planning process to develop three key documents between 2008-2012: the Terms of Reference, Assessment Report and Source Protection Plan.

Terms of Reference

The Terms of Reference is the work plan that will outline tasks and duties, who will perform the work and the budget for the development of the Assessment Report and the Source Protection Plan under the timelines specified in the “Clean Water Act, 2006” Regulations. The Proposed Terms of Reference, after under going public review, must be submitted to the Minister of Environment by the Source Protection Authority by October 20, 2008.

Assessment Report

The Assessment Report is a science based report that will identify Municipal residential drinking water sources, the vulnerable areas surrounding the surface and ground water sources and potential threats to both the water quality and quantity of the Municipal residential drinking water in the Lakehead Source Protection Area. Threats to the vulnerable areas will be analyzed and assessed and determined if they pose a significant threat to Municipal residential drinking water systems. The Assessment Report must be submitted to the Director of the Ministry of Environment by the Source Protection Authority by the first anniversary of the date that the Terms of Reference are approved. The Director of the Ministry of Environment will approve the Source Protection Plan and any subsequent revisions to the Plan. There will be opportunities for public and stakeholder consultation throughout the development of the Assessment Report.

Source Protection Plan

The Source Protection Plan is a strategic document for a Source Protection Area that outlines policies and procedures to ensure that all significant and potential threats to the sources of Municipal residential drinking water systems are managed in a way that they will never become significant drinking water risks. The Source Protection Plan may contain policies to assist meeting Great Lakes targets where applicable. Municipalities will play a key role in the implementation and enforcement of the Source Protection Plan which will be monitored and revised as required by the Source Protection Committee. The Source Protection Plan must be submitted to the Minister of Environment by the Source Protection Authority by August 20, 2012. The Minister of Environment will approve the Source Protection Plan and any subsequent revisions to the Plan. There will be opportunities for public and stakeholder consultation throughout the development of the Assessment Report.

Lakehead Source Protection Area

The Lakehead Source Protection Area was created under the “Clean Water Act” and consists of a watershed of 11,526 square kilometres. The rivers and streams in the watershed flow in a predominately southeasterly direction draining into Lake Superior. The population of the defined area is 121,829 with Thunder Bay the major centre with a population of approximately 110,000. The Lakehead Source Protection Area is one of the 19 areas and regions across the province working on the development of a Source Protection Plan. There are four other Source Protection Areas in northern Ontario.



Municipalities

The City of Thunder Bay and Rosslyn Village in the Municipality of Oliver Paipooonge are the only two organized Municipalities within the Lakehead Source Protection Area served by Municipal residential drinking water systems. Approximately 92% of residents in the City of Thunder Bay receive their drinking water from the Bare Point Water Treatment Plant which operates a surface water intake on Lake Superior. An estimated 8% of the residents of the City of Thunder Bay receive their drinking water from private wells accessing ground water sources.

The Municipality of Oliver Paipooonge is the other Municipality with a Municipal residential drinking water system. There are approximately 30 properties in the hamlet of Rosslyn Village on the Municipal residential drinking water system. Approximately 60 residents access the same groundwater aquifer, with private wells, for their supply of drinking water.

There are six other Municipalities in the jurisdiction of the Lakehead Source Protection Area, none of which have Municipal residential drinking water systems. They include the Municipalities of Shuniah and Neebing and the Townships of Dorion, Conmee, O'Connor and Gillies. Residents of these rural communities obtain their drinking water through private groundwater wells. There are unorganized townships outside the jurisdictional boundary of the Lakehead Region Conservation Authority but lie within the boundary of the Lakehead Source Protection Area. The residents of these rural areas also obtain their drinking water through private groundwater wells.

Where does Municipal drinking water come from?

In general terms, a Municipal residential drinking water system is a water treatment and distribution facility that is either owned and operated by the Municipality to provide drinking water to residents in that community. This may be water from groundwater aquifers (wells) or surface water sources.



Lake Superior is the single surface water source that provides Municipal residential drinking water to residents of the City of Thunder Bay. The Bare Point Water Treatment Plant supplies Municipal residential drinking water to over 100,000 residents. Formerly, Thunder Bay residents had had been serviced by two

source water supply systems, the Bare Point Water Treatment Plant and the Loch Lomond Treatment Plant. Loch Lomond supplied Municipal residential drinking water to residents living in a small portion of the south side of the City of Thunder Bay and the Fort William First Nation until February 2008, at which time, Loch Lomond no longer supplied potable water to the Municipal residential drinking water system.



In the Municipality of Oliver Paiponge, residents of Rosslyn Village are provided Municipal residential drinking water from two Municipally managed and operated groundwater wells. Approximately 30 homes obtain their drinking water from the Municipal residential drinking water system.

Future Municipal Residential Drinking Water Systems

A future Municipal residential drinking water system is a drinking water system that is planned to serve a group of residents with Municipal residential drinking water in the future. There are no future Municipal residential drinking water systems identified in the Lakehead Source Protection Area.

First Nations

In the Lakehead Source Protection Area, there is one First Nation community, Fort William First Nation. The First Nation is located directly south of the City of Thunder Bay and receives its residential drinking water from the City of Thunder Bay Municipal residential drinking water system.

Terms of Reference

The work described in the Terms of Reference is guided by the Ministry of Environment through Regulations of the “Clean Water Act, Director’s Rule and Guidance Modules. Provincial guidance provides a level of standardization and consistency across the province pertaining to the technical tasks and who is required to fulfill these tasks in the development of the Assessment Report and the Source Protection Plan. The Terms of Reference outlines:

- 1) Drinking water systems included in the Assessment Report and Source Protection Plan;
- 2) Estimated planning costs; and
- 3) Estimated planning schedule in accordance to the regulated timelines.

Consultation Process (Proposed Terms of Reference)

The Terms of Reference is the first of the three official documents required from the Lakehead Source Protection Committee.

The Proposed Terms of Reference will be posted on the Internet at www.sourceprotection.net and is available to the public as per Ontario Regulation 287/07 under the “Clean Water Act, 2006”. Property owners are requested to submit their official written comments about this document which will be posted for 30 days from August 20, 2008 until September 18, 2008 by mail, fax, email or in person to:

Mr. Bill Bartley, Chair
Lakehead Source Protection Authority
130 Conservation Road, P.O. Box 10427
Thunder Bay, ON P7B 6T8
By Phone: (807) 344-5857
By Fax: (807) 345-9156
E-Mail: comments@lakeheadca.com

Community Engagement (Draft Proposed Terms of Reference)

The Draft Proposed Terms of Reference was previously posted on the Internet at www.sourceprotection.net and was made available to the public as per Ontario Regulation 287/07 under the “Clean Water Act, 2006”. Members of the public were given an opportunity to submit their official written comments about the Draft Proposed Terms of Reference posted for a 35 day period from June 20, 2008 until July 25, 2008 by mail, fax, email or in person to:

Mr. Bob Hartley, Chair
Lakehead Source Protection Committee
130 Conservation Road, P.O. Box 10427
Thunder Bay, ON P7B 6T8
By Phone: (807) 344-5857
By Fax: (807) 345-9156
E-Mail: comments@lakeheadca.com

In addition, residents of the Lakehead Source Protection Area were given the opportunity to attend one of two “Open Houses” held in July 2008. The “Open Houses” provided the public with an opportunity to learn about the “Clean Water Act”, meet the Lakehead Source Protection Committee Members, get an understanding of where their Municipal drinking water sources are and review and comment on the Lakehead Source Protection Area Draft Proposed Terms of Reference.

“Open Houses”

“Open Houses” were held at these locations on the following dates:

Lakehead Region Conservation Authority Boardroom
130 Conservation Road (off Oliver Road)
Tuesday, July 15 2008
10 a.m. – 7 p.m.

Rosslyn Village Community Centre
Rosslyn Road (corner of Vibert and Rosslyn Roads)
Thursday, July 17, 2008
11 a.m. – 7 p.m.

Public Review and Comment

The Source Protection Committee has reviewed all comments received from the public and has amended the Draft Proposed Terms of Reference as appropriate, given the direction from the Ministry of the Environment for the development of the Assessment Report and the Source Protection Plan.

Under the “Clean Water Act”, there are several opportunities for stakeholders including the public, businesses, Municipalities, and First Nations living within the Lakehead Source Protection Area to comment and provide feedback throughout the preparation of the Assessment Report and Source Protection Plan. This Terms of Reference is the first document in the Source Protection Planning process being prepared by the Lakehead Source Protection Committee and we acknowledge that there may be modifications made from time to time to this document and it should therefore be considered a living document.

It should be noted that, the Draft Proposed Terms of Reference was developed by the Lakehead Source Protection Committee in May and June 2008, in advance of the legislation of the Assessment Report Regulation, Director’s Rules and Source Protection Plan Regulation. In the absence of required legislation, some sections within the Proposed Terms of Reference concerning the work that needs to be undertaken in the future and the budget associated with this work, are estimates based on the best information and guidance from the Ministry of Environment available at the time of development of the document. This is in no way intended to mislead the public but estimates and predictions needed to be made in order to present a complete version of the Proposed Terms of Reference to the Minister of the Environment for approval.

Legislated Public Consultation and Notices Required for the Preparation of the Terms of Reference

Activity	Date	Lead
Post Draft Proposed Terms of Reference to Internet – www.sourceprotection.net	June 20, 2008	Source Protection Committee
Print (hard copy) of Draft Proposed Terms of Reference at the public locations: (example: LRCA Office)	June 20, 2008	Source Protection Committee
Publish a notice in the newspaper (Chronicle Journal & The Source) for the public to view the Draft Proposed Terms of Reference on the Internet and designated public venues.	June 20, 2008	Source Protection Committee
Provide a copy of the Draft Proposed Terms of Reference to the	June 20, 2008	Source Protection Committee

Clerks of the Municipalities located in the Lakehead Source Protection Area.		
Provide a copy of the Draft Proposed Terms of Reference to the Chief of the First Nation (Fort William First Nation) located in the Lakehead Source Protection Area.	June 20, 2008	Source Protection Committee
Provide a copy of the Draft Proposed Terms of Reference to groups pursuant to Great Lakes Water Quality Agreement (RAPS, LAMP).	June 20, 2008	Source Protection Committee
Requests for comments within 35 days of the Notice of the Draft Proposed Terms of Reference being published in the newspaper.	June 20, 2008 to July 25, 2008	Source Protection Committee
“Open House” – Draft Proposed Terms of Reference – Boardroom of Lakehead Region Conservation Authority.	July 15, 2008	Source Protection Committee
“Open House” – Draft Proposed Terms of Reference – Rosslyn Village Community Centre	July 17, 2008	Source Protection Committee
Provide a copy of the Proposed Terms of Reference to Source Protection Authority with comments from Municipalities, First Nations and Great Lakes groups.	August 13, 2008	Source Protection Committee
Provide a copy of the Proposed Terms of Reference to the Clerks of the Municipalities located in the Source Protection Area.	August 20, 2008	Source Protection Committee
Provide a copy of the Proposed Terms of Reference to the Chief of First Nation located in the Source Protection Area.	August 20, 2008	Source Protection Committee
Post Proposed Terms of Reference to Internet – www.sourceprotection.net	August 20, 2008	Source Protection Committee
Print (hard copy) of Draft Proposed Terms of Reference at public locations: (example: LRCA Office)	August 20, 2008	Source Protection Committee
Invites comments from the public within 30 days of the Proposed Terms of Reference posted for public review on the Internet and designated public locations.	August 20, 2008	Source Protection Authority
Submits the Proposed Terms of Reference and other documentation to the Minister of Environment for approval	October 20, 2008	Source Protection Authority
Provides the Source Protection Committee with a copy of all the comments received during the 30-day consultation period.	October 20, 2008	Source Protection Authority

Glossary of Terms

Assessment Report: a technical document that is prepared by a Source Protection Committee under Section 15 of the “Clean Water Act, 2006” to record its knowledge of a Source Protection Area and to rank risks to drinking water within that area.

Drinking Water Threat: an existing activity, possible future activity or existing condition that results from a past activity, (a) that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of drinking water.

Drinking Water System: a system of works, excluding plumbing that is established for the purpose of providing users of the system with drinking water.

Source Protection Authority (SPA): a Conservation Authority or other person or body that is required to exercise powers and duties under the “Clean Water Act, 2006”. The Lakehead Source Protection Authority is comprised of the Lakehead Region Conservation Authority Board.

Source Protection Area: those lands and water that have been defined under Ontario Regulation 284/07 as the “study area” for an Assessment Report and a Source Protection Plan.

Source Protection Committee (SPC) : a group of individuals who have been appointed under the “Clean Water Act, 2006” by the Source Protection Authority to coordinate the Source Protection Planning activities for a Source Protection Area.

Source Protection Plan (SPP): a document that is prepared by a Source Protection Committee under Section 22 of the “Clean Water Act, 2006” (and a forthcoming Regulation) to direct Source Protection Planning activities in a Source Protection Area. They are subject to approval by the Ministry of the Environment.

Source Water: untreated water that is found in groundwater aquifers and surface water lakes, rivers and or streams that is used to supply a drinking water system.

Surface Water Intake Protection Zone (IPZ): the area of land and water that contributes to a drinking water system within a specified period of time (i.e. two hours) and that is priority for protection from contamination.

Watershed: the areas of land that drain into a lake, river or a stream.

Wellhead Protection Area (WHPA): the surface and subsurface area surrounding a well that supplies a drinking water system, through which contaminants are reasonably likely to move so as to enter a well.

Appendix 1

Proposed Terms of Reference Summarized for Public Review and Comment

Appendix 2

Proposed Terms of Reference Public Comment Form



Terms of Reference
for the
Lakehead Source Protection Area
Summarized for Public Review and Comment

(As approved by the Minister of Environment – May 25, 2009)

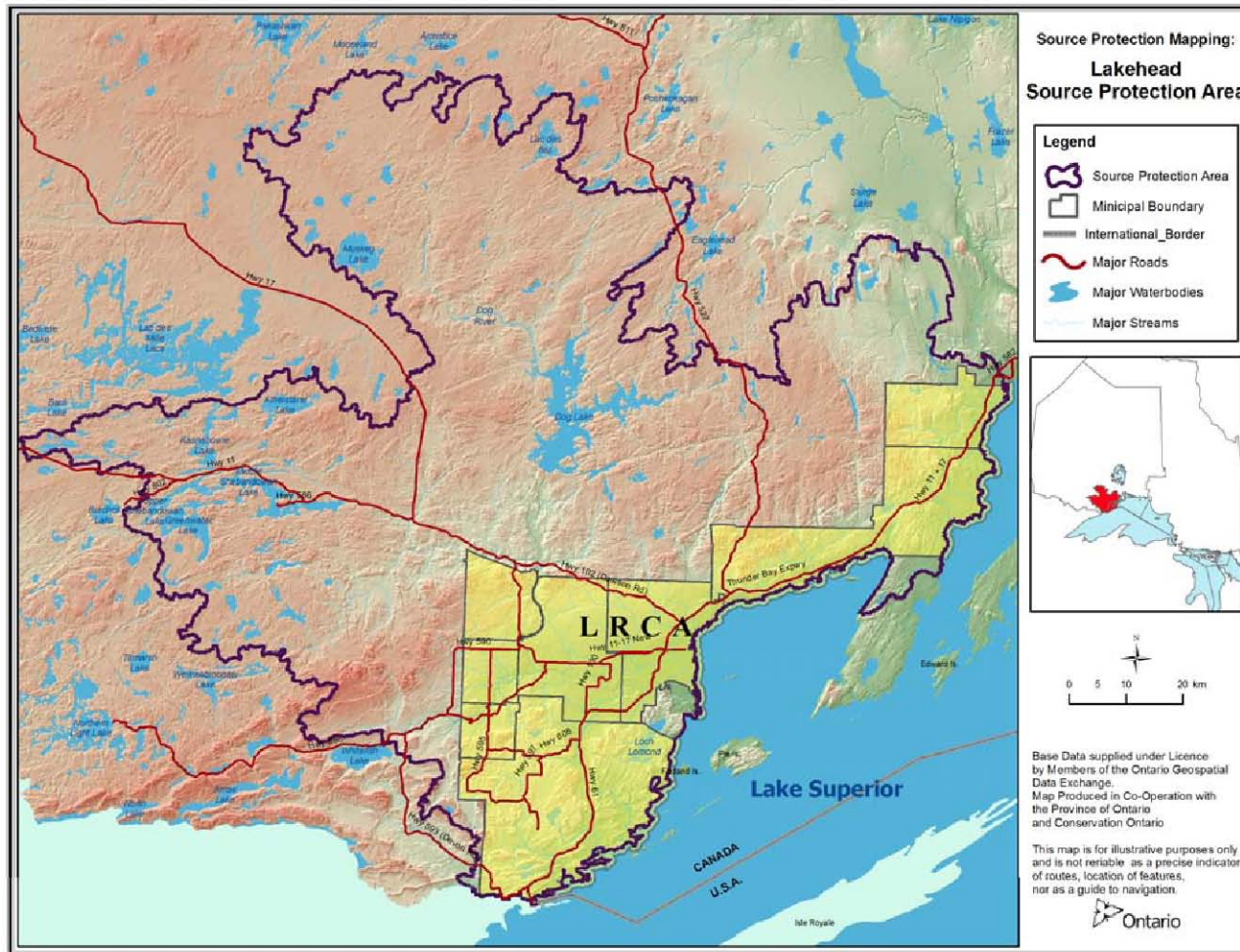
April 14, 2009

*Lakehead Source Protection Area Proposed Terms of Reference
Summarized for Public Review and Comment
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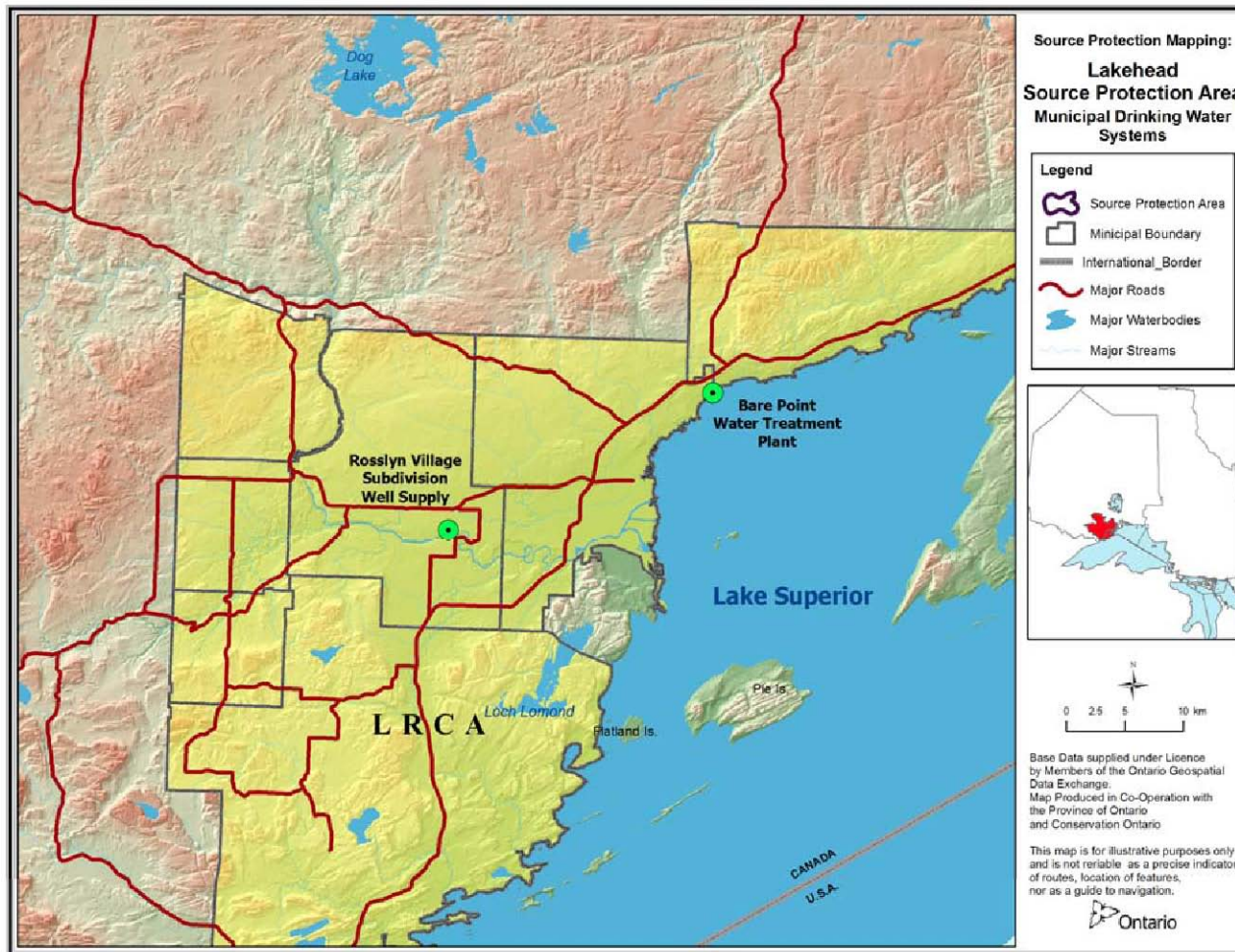
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Map of Lakehead Source Protection Area



Map of Municipal Drinking Water Systems



Lakehead Source Protection Area Proposed Terms of Reference
Summarized for Public Review and Comment
Prepared By: The Lakehead Source Protection Committee – April 14, 2009

List of Municipalities Located in the Lakehead Source Protection Area

Legal Name of Municipality

City of Thunder Bay

Municipality of Oliver Paipoonge

Municipality of Neebing

Municipality of Shuniah

Township of Dorion

Township of Conmee

Township of Gillies

Township of O'Connor



The Date the Source Protection Plan is to be Submitted to the Minister for Approval by the Lakehead Source Protection Authority:

2012-Aug-20

List of Municipal Residential Drinking Water System(s)

Type of System (existing or planned)	Drinking Water System Name	Owner	Operating Authority	Type of Source Water
Existing	ROSSLYN VILLAGE SUBDIVISION WELL SUPPLY	MUNICIPALITY OF OLIVER PAIPOONGE	2017376 ONTARIO LTD. (WATER QUALITY SERVICE)	Groundwater with 2 wells.
Existing	THUNDER BAY (BARE POINT ROAD) WATER TREATMENT PLANT	CITY OF THUNDER BAY	CITY OF THUNDER BAY	Surface Water with 3 surface water intakes.

List of Fully or Partially Exempted Municipal Residential Drinking Water System(s)

NONE IN THE LAKEHEAD SOURCE PROTECTION AREA

List of Drinking Water System(s) Included by Municipal Council Resolution; Council Resolution(s) to Include Drinking Water System(s); Detailed Information on Drinking Water System(s) Included by Municipal Council Resolution:

(Not Municipal Residential Drinking Water Systems)

NONE IN THE LAKEHEAD SOURCE PROTECTION AREA

List of Drinking Water Systems Serving Reserve(s); Detailed Information on Drinking Water System(s) Included by Bands Serving Reserve(s);

(Not Municipal Residential Drinking Water Systems)

NONE IN THE LAKEHEAD SOURCE PROTECTION AREA

Detailed Information on Drinking Water System(s) Included by the Minister of the Environment (Not Municipal Residential Drinking Water Systems)

NONE IN THE LAKEHEAD SOURCE PROTECTION AREA

Council Resolution(s) to Exempt Municipal Residential Drinking Water System(s)

NONE IN THE LAKEHEAD SOURCE PROTECTION AREA

Detailed Work Plan to Complete the Assessment Report Tasks

for Lakehead Source Protection Area

Task – Assessment Report	Assigned Lead(s)	Estimated Start	Estimated Completion	Estimated Cost
Coordinating and supporting projects.	Lakehead Region Conservation Authority	2005-Jan-03	2010-Mar-31	\$2,043,567
Undertaking communications initiatives.	Lakehead Region Conservation Authority	2005-Jan-01	2010-Mar-31	\$135,219
Information management for report preparation.	Lakehead Region Conservation Authority	2005-Jan-03	2010-Mar-31	\$289,353
Undertaking a Watershed Characterization Report.	Lakehead Region Conservation Authority	2005-Oct-03	2008-Mar-01	\$2,450
Conducting a Conceptual Water Budget Report.	Lakehead Region Conservation Authority	2006-Aug-01	2007-Jun-30	\$69,272
Conducting a Tier 1 Water Budget Analysis and Water Quantity Stress Assessment.	Lakehead Region Conservation Authority	2007-Feb-01	2008-Jun-30	\$43,305
Consultation on the overall proposed Assessment Report.	Lakehead Region Conservation Authority	2009-Jan-01	2010-Mar-31	\$55,400
*Other Assessment Report Preparation Tasks:	Lakehead Region Conservation Authority	2008-Oct-01	2010-Mar-31	\$96,000
*Comments: Includes \$25,000.00 allocated for Special Projects and Pilot Studies each fiscal.				

Technical Studies Thunder Bay (Bare Point Road) Water Treatment Plant – Intake Protection Zone

Task – Assessment Report	Assigned Lead(s)	Estimated Start	Estimated Completion	Estimated Cost
Delineating and applying vulnerability scores to Intake Protection Zones (IPZ's).	City of Thunder Bay in partnership with the Lakehead Region Conservation Authority.	2006-June-01	2009-Dec-31	\$108,224
Identifying issues, inventorying threats and assessing hazards in Intake Protection Zones (IPZ's).	City of Thunder Bay in partnership with the Lakehead Region Conservation Authority.	2006-June-01	2009-Dec-31	\$110,724
Assess risk in Intake Protection Zones (IPZ's).	City of Thunder Bay in partnership with the Lakehead Region Conservation Authority.	2007-Apr-02	2009-Dec-31	\$69,973

Technical Studies Rosslyn Village Subdivision Well Supply – Wellhead Protection Area

Task – Assessment Report	Assigned Lead(s)	Estimated Start	Estimated Completion	Estimated Cost
Delineating and applying vulnerability scores to Wellhead Protection Areas (WHPA's).	Lakehead Region Conservation Authority in partnership with the Municipality of Oliver Paipoonge.	2007-May-18	2009-Dec-31	\$34,421
Identifying issues, inventorying threats and assessing hazards in Wellhead Protection Areas (WHPA's).	Lakehead Region Conservation Authority in partnership with the Municipality of Oliver Paipoonge.	2007-May-18	2009-Dec-31	\$27,191
Assess risk in Wellhead Protection Areas (WHPA's).	Lakehead Region Conservation Authority in partnership with the Municipality of Oliver Paipoonge.	2007-May-18	2009-Dec-31	\$48,539

Detailed Work Plan to Complete the Source Protection Plan

Tasks for Lakehead Source Protection Area

Task	Assigned Lead(s)	Estimated Start	Estimated Completion	Estimated Cost
Coordinating and supporting projects for the Source Protection Plan (SPP).	Lakehead Region Conservation Authority	2011-Jan-03	2012-Aug-20	\$1,237,050
Undertaking communications initiatives for the Source Protection Plan.	Lakehead Region Conservation Authority	2011-Jan-03	2012-Aug-20	\$94,290
Information management for Source Protection Plan preparation.	Lakehead Region Conservation Authority	2011-Jan-03	2012-Aug-20	\$144,200
*Policy development to address drinking water threats (where required and/or permissible in Act/Regs).	Lakehead Region Conservation Authority	2011-Jan-03	2012-Aug-20	\$0
*Policy development for monitoring (where required, advisable and/or permissible in Act & Regs).	Lakehead Region Conservation Authority	2011-Jan-03	2012-Aug-20	\$0
Establishing timelines for policy implementation.	Lakehead Region Conservation Authority	2011-Jan-03	2012-Aug-20	\$0
Consultation on the overall proposed Source Protection Plan.	Lakehead Region Conservation Authority	2011-Jan-03	2012-Aug-20	\$64,000
Other Source Protection Plan Preparation Task: Cannot define tasks at this time - Pending Source Protection Plan Regulation and Guidance. Using allocation in 'Other Assessment Report Preparation Tasks' as a guideline.	Lakehead Region Conservation Authority	2011-Jan-03	2012-Aug-20	\$112,000

Comments: Other Source Protection Plan Preparation Includes \$25,000.00 allocated for Special Projects and Pilot Studies for fiscal years 2010/11 and 2011/12 and first three months of 2013 (\$ 8,333.00).

* No cost is shown for this task because it is anticipated that all work will be completed by the Lakehead Source Protection Committee and Lakehead Region Conservation Authority Staff. All Staff and Committee costs are captured under task: "Coordinating and supporting projects for the Source Protection Plan (SPP)".

Summary of Financial Statistics

Tasks Done by Source Protection Area or Drinking Water System	Estimated Costs for Tasks Under the Assessment Report	Estimated Costs for Tasks Under the Source Protection Plan	Subtotal
Lakehead Source Protection Area	\$2,734,566	\$1,651,540	\$4,386,106
Municipal Residential Drinking Water Systems			
Rosslyn Village Subdivision Well Supply	\$110,150	\$0	\$110,150
Thunder Bay (Bare Point Road) Water Treatment Plant	\$288,921	\$0	\$288,921
Total Estimated Costs	\$3,133,637	\$1,651,540	\$4,785,177

Estimated Costs for Tasks by Fiscal Year

Fiscal Year defined as April 1 to March 31

Tasks for the Lakehead Source Protection Area	Fiscal Year 04/05	Fiscal Year 05/06	Fiscal Year 06/07	Fiscal Year 07/08	Fiscal Year 08/09	Fiscal Year 09/10	Fiscal Year 10/11	Fiscal Year 11/12	Fiscal Year 12/13
Coordinating and supporting projects for the Assessment Report.	\$0	\$258,968	\$294,850	\$390,149	\$549,800	\$549,800	\$0	\$0	\$0
Undertaking communications initiatives for the Assessment Report.	\$0	\$2,326	\$29,991	\$29,902	\$36,500	\$36,500	\$0	\$0	\$0
Information management for the Assessment Report preparation.	\$0	\$87,585	\$38,308	\$51,820	\$55,820	\$55,820	\$0	\$0	\$0
Undertaking a Watershed Characterization Report.	\$0	\$0	\$0	\$2,450	\$0	\$0	\$0	\$0	\$0
Conducting a Conceptual Water Budget.	\$0	\$0	\$59,911	\$9,362	\$0	\$0	\$0	\$0	\$0
Conducting a Tier 1 Water Budget Analysis and Water Quantity Stress Assessment.	\$0	\$0	\$0	\$24,590	\$18,715	\$0	\$0	\$0	\$0
Consultation on the overall proposed Assessment Report.	\$0	\$0	\$0	\$0	\$27,700	\$27,700	\$0	\$0	\$0
Other Assessment Report Preparation Tasks.	\$0	\$0	\$0	\$0	\$48,000	\$48,000	\$0	\$0	\$0
Coordinating and supporting projects for the Source Protection Plan (SPP).	\$0	\$0	\$0	\$0	\$0	\$0	\$549,800	\$549,800	\$137,450
Undertaking communications initiatives for the Source Protection Plan.	\$0	\$0	\$0	\$0	\$0	\$0	\$36,500	\$36,500	\$21,290
Information management for Source Protection Plan preparation.	\$0	\$0	\$0	\$0	\$0	\$0	\$55,820	\$55,820	\$32,560

Tasks for the Lakehead Source Protection Area	Fiscal Year 04/05	Fiscal Year 05/06	Fiscal Year 06/07	Fiscal Year 07/08	Fiscal Year 08/09	Fiscal Year 09/10	Fiscal Year 10/11	Fiscal Year 11/12	Fiscal Year 12/13
Policy development to address drinking water threats (where required and/or permissible in Act/Regs).	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Policy development for monitoring (where required, advisable and/or permissible in Act & Regs).	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Establishing timelines for policy implementation.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Consultation on the overall proposed Source Protection Plan.	\$0	\$0	\$0	\$0	\$0	\$0	\$27,500	\$27,500	\$9,000
Other Source Protection Plan Preparation Tasks: Cannot define tasks at this time - Pending Source Protection Plan Regulation and Guidance. Using allocation in 'Other Assessment Report Preparation Tasks' as a guideline.	\$0	\$0	\$0	\$0	\$0	\$0	\$48,000	\$48,000	\$16,000
Delineating and applying vulnerability scores to Wellhead Protection Areas (WHPA's) or Intake Protection Zones (IPZ's).	\$0	\$0	\$68,250	\$20,567	\$40,828	\$13,000	\$0	\$0	\$0
Identifying issues, inventorying threats and assessing hazards in Wellhead Protection Areas (WHPA's) or Intake Protection Zones (IPZ's).	\$0	\$0	\$68,750	\$14,521	\$29,643	\$25,000	\$0	\$0	\$0
Assess risk in Wellhead Protection Areas (WHPA's) or Intake Protection Zones (IPZ's).	\$0	\$0	\$0	\$10,987	\$64,525	\$43,000	\$0	\$0	\$0
Fiscal Year Total	\$0	\$348,879	\$560,059	\$554,347	\$871,531	\$798,820	\$717,620	\$717,620	\$216,300

Process Checklist

Regulatory Process	Completion Date	Done By
Notify Chiefs of Bands whose reserves are located in the Source Protection Area (SPA) on the Commencement of the Terms of Reference.	2008-Feb-08	SPCommittee
Notify Municipal Clerks on the Commencement of the Terms of Reference.	2008-Feb-08	SPCommittee
Post Draft Proposed Terms of Reference on Internet.	2008-Jun-20	SPCommittee
Provide a copy of the Draft Proposed Terms of Reference to the Chiefs of Bands in SPA	2008-Jun-20	SPCommittee
Provide a copy of Draft Proposed Terms of Reference to the Municipal Clerks located in the Source Protection Area.	2008-Jun-20	SPCommittee
Provide copy of the Draft Proposed Terms of Reference to groups created pursuant to Great Lakes Water Quality Agreement & involved in developing/implementing RAPs & LAMPs.	2008-Jun-20	SPCommittee
Provide copy of Draft Proposed Terms of Reference to Chairs of Source Protection Committees who have been listed in table that describes matters that affect other Source Protection Areas.	Not Applicable	SPCommittee
Publish newspaper notice to publicly view Draft Proposed Terms of Reference on Internet and at other locations (as determined by the Source Protection Committee). Notice for consultation on Draft Proposed Terms of Reference includes requests for comments submitted within 35 days of notice published in the newspaper.	2008-Jun-20	SPCommittee
Make the Draft Proposed Terms of Reference available at other locations.	2008-Jun-20	SPCommittee
Give a copy of the comments on Draft Proposed Terms of Reference to the Source Protection Committee.	2008-Aug-06	SPAuthority
Municipal Council Resolutions have been passed agreeing upon work.	To be completed after 20/06/08	SPCommittee
Notice for consultation on Draft Proposed Terms of Reference includes information on public meeting scheduled at least 21 days after newspaper notice is published.	July 15, 2008 and July 17, 2008	SPCommittee
Provide a copy of Proposed Terms of Reference to the Source Protection Authority.	2008-Aug-13	SPCommittee
Provide any unresolved comments from Municipalities and Bands to the Source Protection Authority on the Draft Proposed Terms of Reference.	2008-Aug-13	SPCommittee
Post Proposed Terms of Reference on the Internet for 30 days.	2008-Aug-20	SPCommittee
Receive comments from the 30-day Internet posting from the public, Municipalities, Bands, and other stakeholders.	2008-Aug-20	SPAuthority
Provide a copy of Proposed Terms of Reference to the Chiefs of Bands whose reserves are located in the Source Protection Area.	2008-Aug-20	SPCommittee
Provide a copy of Proposed Terms of Reference to the Clerks of Municipalities located in the Source Protection Area.	2008-Aug-20	SPCommittee
Provide any unresolved comments from Municipalities and Bands to the Minister as part of the approval package for the Proposed Terms of Reference.	2008-Oct-20	SPAuthority
Make provisions to consider Great Lakes Agreements.	Not Applicable	SPCommittee

Full Task Descriptions

Subject Area	Task Name	Full Task Description
Assessment Report Preparation	Coordinating and supporting projects for the Assessment Report.	Undertaking administrative support, staffing, management support and training necessary to provide project coordination for the Assessment Report components and direct support to the Source Protection Committee.
Assessment Report Preparation	Undertaking communications initiatives for the Assessment Report.	Local area engagement, outreach and creation of communications products that support the Assessment Report process.
Assessment Report Preparation	Information management for the Assessment Report preparation.	Conducting overall data management, data sharing agreements, standards, mapping, software and maintenance.
Assessment Report Preparation	Undertaking a Watershed Characterization Report.	Identifying and describing watersheds in the Source Protection Area. May include water quality analysis and Peer Review for water quality analysis. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Conducting a Conceptual Water Budget.	Describing the overall flow system dynamics for each watershed in the Source Protection Area taking into consideration surface water and groundwater features, land cover (e.g. proportion of urban vs. rural uses), human-made structures (e.g. dams, channel diversions, water crossings), and water takings. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Conducting a Tier 1 Water Budget Analysis and Water Quantity Stress Assessment.	Conducting a Tier 1 Water Budget Analysis, Water Quantity Stress Assessment and delineation of Significant Groundwater Recharge Areas (SGRA's). May also include the identification of water quantity concerns and an analysis of uncertainty. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Conducting a Tier 2 Water Budget Analysis and Water Quantity Stress Assessment.	If determined necessary from a Tier 1 Water Budget Analysis and Water Quantity Stress Assessment, conducting a Tier 2 Water Budget Analysis and Water Quantity Stress Assessment and refining the delineation of Significant Groundwater Recharge Areas (SGRA's). May also include the identification of water quantity concerns and an analysis of uncertainty. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Conducting a Tier 3 Water Budget Analysis and Water Quantity Risk Assessment.	If determined necessary from a Tier 2 Water Budget Analysis and Water Quantity Stress Assessment, conducting a Tier 3 Water Budget Analysis and Water Quantity Risk Assessment. May include identifying significant, moderate and low water quantity threats. May also include consultation with property owners/residents/stakeholders impacted by a significant drinking water threat

		Scoring and an analysis of uncertainty. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Delineating and applying vulnerability scores to Highly Vulnerable Aquifers (HVA's).	Delineating the location and extent of Highly Vulnerable Aquifers (HVA's) in the Source Protection Area and applying vulnerability scores. An uncertainty analysis may be included in this task. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Identifying issues, inventorying threats and assessing hazards in Highly Vulnerable Aquifers (HVA's).	Listing and describing drinking water quality issues, inventorying threats and assessing hazards (including uncertainty analysis) in the Highly Vulnerable Aquifers (HVA's). Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Assessing risks in Highly Vulnerable Aquifers (HVA's).	Identifying any significant, moderate, low, and negligible drinking water threats, undertaking an issues evaluation, and analyzing uncertainty in highly vulnerable aquifers. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Applying vulnerability scores to Significant Groundwater Recharge Areas (SGRA's).	Applying vulnerability scores to Significant Groundwater Recharge Areas (SGRA's) in the Source Protection Area (delineated in the Water Budget process). Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Identifying issues, inventorying threats and assessing hazards in Significant Groundwater Recharge Areas (SGRA's).	Listing and describing drinking water quality issues, inventorying threats and assessing hazards (including uncertainty analysis) in the Significant Groundwater Recharge Areas (SGRA's). Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Assessing risk in Significant Groundwater Recharge Areas (SGRA's).	Identifying any significant, moderate, low, and negligible drinking water threats, undertaking an issues evaluation, and analyzing uncertainty in Significant Groundwater Recharge Areas (SGRA's). Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Delineating and applying vulnerability scores to Wellhead Protection Area (WHPA's) and/or Intake Protection Zones (IPZ's).	Delineating the location and extent of the vulnerable area around a drinking water system (Wellhead Protection Areas (WHPA's) for drinking water systems using groundwater and/or Intake Protection Zones (IPZ's) for drinking water systems withdrawing from surface water) in the Source Protection Area and applying a vulnerability score. Uncertainty analysis and peer review may be required. In addition, consultation with property owners/residents/stakeholders affected by the delineation and scoring for these two vulnerable areas may be required. Details on how to complete this task will be available in the

		Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Identifying issues, inventorying threats and assessing hazards in Wellhead Protection Area (WHPA's) and/or Intake Protection Zones (IPZ's).	Listing and describing drinking water quality issues, inventorying threats and assessing hazards (including uncertainty analysis) in Wellhead Protection Area (WHPA's) and/or Intake Protection Zones (IPZ's). Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Assess risk in Wellhead Protection Area (WHPA's) and/or Intake Protection Zones (IPZ's).	Identifying any significant, moderate, low, and negligible drinking water threats, undertaking an issues evaluation, and analyzing uncertainty in Wellhead Protection Area (WHPA's) and/or Intake Protection Zones (IPZ's). Consultation may be required with stakeholders impacted by significant drinking water threats scoring. Consultation with adjacent Source Protection Areas or Regions may also be required for shared Great Lakes drinking water issues. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Consultation on the overall proposed Assessment Report.	Meeting the legislative and regulatory requirements on the consultation and submission process of the proposed Assessment Report. Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules and Guidance when they are legislated.
Assessment Report Preparation	Other Assessment Report Preparation Tasks:	If required, add other tasks to complete the Assessment Report. Describe in detail. These tasks to be determined once the Assessment Report Regulation, Director's Rules and Guidance are legislated.
Source Protection Plan Preparation	Coordinating and supporting projects for the Source Protection Plan (SPP).	Undertaking administrative support, staffing, management support, and training necessary to provide project coordination for the Source Protection Plan components and direct support to the Source Protection Committee.
Source Protection Plan Preparation	Undertaking communications initiatives for the Source Protection Plan.	Local area engagement, outreach and creation of communications products that support the Source Protection Plan process.
Source Protection Plan Preparation	Information management for Source Protection Plan preparation.	Conducting overall data management, data sharing agreements, standards, mapping, software and maintenance.
Source Protection Plan Preparation	Policy development to address drinking water threats (where required and/or permissible in Act & Regs)	Policy development to address drinking water threats (where required and/or permissible in the Act and source protection plan regulation). Detailed requirements and guidance will be provided in the Source Protection Plan Regulation and Guidance Document when they are legislated.
Source Protection Plan Preparation	Policy development for monitoring (where required, advisable and/or permissible in Act & Regs)	Policy development for monitoring activities (where required, advisable and/or permissible in the "Act" and Source Protection Plan Regulation), including determining who is responsible for implementing these policies. Detailed requirements and guidance will be provided in the Source Protection Plan

		Regulation and Guidance Document when they are legislated.
Source Protection Plan Preparation	Policy development for Great Lakes elements (where required/permissible in Act & Regs)	Policy development for Great Lakes associated elements (where directed by the Minister and required or permissible in the Act and Source Protection Plan Regulation), including monitoring policies to assist in implementing and determining the effectiveness of achieving Great Lake target(s) policies, determining who is responsible for implementing those policies, and determining the need to identify any of these policies as "designated Great Lakes policies". Detailed requirements and guidance will be provided in the Source Protection Plan Regulation and Guidance Document when they are legislated.
Source Protection Plan Preparation	Establishing timelines for policy implementation.	Establishing timelines for policy implementation after all policies for the Source Protection Plan are developed, giving consideration to the policies developed, key players affected, capacity for implementation, the assessed risks, and natural, social, and economic considerations, including local community interests/needs. Detailed requirements and guidance will be provided in the Source Protection Plan Regulation and Guidance Document when they are legislated.
Source Protection Plan Preparation	Consultation on the overall proposed Source Protection Plan.	Consultation and submission process of the overall proposed Source Protection Plan. Details on how to conduct the consultations on the overall proposed Source Protection Plan will be provided in the Source Protection Plan Regulation and Guidance Document when they are legislated.
Source Protection Plan Preparation	Other Source Protection Plan Preparation Tasks:	If required, add other tasks to complete the Source Protection Plan. Describe in detail. These tasks to be determined once the Source Protection Plan Regulation and Guidance Document are legislated.