



TERMS OF REFERENCE

for the preparation of the
Assessment Report & Source Protection Plan for the

GANARASKA REGION SOURCE PROTECTION AREA

Completed in conjunction with the other Source Protection Areas
in the Trent River Watershed

*Approved by the Minister of the Environment
January 13, 2009*

*Published on the Environmental Registry
January 20, 2009*

PREPARED BY:

***Trent Conservation Coalition Source Protection Committee
c/o Lower Trent Conservation, 714 Murray Street, R.R. 1 Trenton, ON K8V 5P4***



www.trentsourceprotection.on.ca



Ontario

Made possible through the support of the Government of Ontario

SOURCE PROTECTION COMMITTEE COMMITMENT

The Trent Conservation Coalition Source Protection Committee is a multi-stakeholder committee selected to represent municipal, economic, general public and First Nations interests across the Source Protection Region.

The Committee's ultimate role is to develop a Source Protection Plan that establishes policies for preventing, reducing or eliminating threats to sources of drinking water. In developing the plan, the committee members are committed to:

- *Basing policies on the best available science, and where there is uncertainty, being mindful of the precautionary approach*
- *Considering and incorporating voluntarily contributed local and traditional knowledge*
- *Ensuring that public concerns are heard and taken into consideration*
- *Consulting with all stakeholders and in particular with impacted landowners/businesses*
- *Considering all economic impacts*
- *Making decisions that are fair and reasonable through an open and transparent process*
- *Advocating ongoing provincial funding to provide financial assistance to property/business owners, municipalities, agencies, and others for stewardship and other implementation measures*

Note: *The Ministry of the Environment is proposing to pass additional regulations under the Clean Water Act that outline the requirements of the Assessment Report and the Source Protection Plan. Once these regulations are in place, the Terms of Reference may need to be amended to meet the requirements of the regulation.*

EXECUTIVE SUMMARY

Why you should read this document:

This Terms of Reference is a requirement of the *Clean Water Act, 2006*, which was brought into effect by the Ontario government with the passing of the first set of regulations on July 3, 2007. The objective of the *Clean Water Act* is to protect municipal drinking water. The *Clean Water Act* also provides provisions for protecting private supplies of drinking water, through municipal resolutions or Minister of the Environment directives. Systems that can be included are clusters of six or more wells/surface water intakes, wells/intakes located within an area of settlement defined under the Planning Act, or private residences containing a facility regulated under the *Safe Drinking Water Act*. Both water quality and water quantity are considered.

The Terms of Reference is a work plan that outlines the proposed work program. It estimates costs and timelines to undertake the necessary studies and develop a plan to protect the sources of drinking water supplies in the Ganaraska Region Source Protection Area. The Source Protection Plan has the potential to impact municipalities, conservation authorities, other agencies, and watershed residents/business owners.

The Terms of Reference includes:

- A summary of the source protection planning process
- A description and maps of the Source Protection Region and Area
- A description of the Source Protection Committee
- A list of municipalities in the Source Protection Area
- A list of existing municipal drinking water systems
- A list of matters that affect other source protection regions
- The work plan for completing the *Assessment Report*¹ and *Source Protection Plan*.² The work plan includes high level tasks, costs, timelines and indicates who will perform the work.

The Source Protection Committee is posting the draft proposed Terms of Reference for review and comment in late May/June, 2008. A revised draft will be posted for review in late August/September, 2008.

¹ *Assessment Report*: a science-based report, developed locally, which identifies vulnerable areas and summarizes drinking water quality and quantity threats in the Source Protection Areas in the Region.

² *Source Protection Plan*: an action plan, developed locally, which establishes policies for eliminating, reducing, and managing drinking water quantity and quality threats for the Source Protection Areas in the Region.

TABLE OF CONTENTS

1.	Summary of Source Protection Planning Process	...1
2.	Description of the Source Protection Area	...7
3.	Municipalities in the Source Protection Area	...7
4.	Municipal Drinking Water Systems	...8
5.	Other Drinking Water Systems	...9
6.	Matters that Affect Other Source Protection Committees	...9
7.	Detailed Work Plan to Complete Assessment Report	...10
8.	Detailed Work Plan to Complete Source Protection Plan	...13
9.	Source Protection Plan Submission Date	...15

LIST OF TABLES

Table 1:	Trent Conservation Coalition Source Protection Committee	...4
Table 2:	List of Municipalities in Ganaraska Region Source Protection Area	...8
Table 3:	Matters Affecting Other Source Protection Committees	...9

LIST OF FIGURES

Figure 1:	Map of Trent Conservation Coalition Source Protection Region	...2
Figure 2:	Map of Ganaraska Source Protection Area	...3

LIST OF DIAGRAMS

Diagram 1:	Timeline for Source Protection Products	...6
Diagram 2:	Timeline for Developing Terms of Reference	...7

APPENDICES

APPENDIX A: SUMMARY OF MUNICIPAL DRINKING WATER SYSTEMS	...17
Municipal Residential Drinking Water Systems in Ganaraska Region Source Protection Area	
APPENDIX B: ESTIMATED COSTS AND TIMELINES FOR ASSESSMENT REPORT	...18
Estimated Costs and Timelines for Assessment Report: Ganaraska Region Source Protection Area	
APPENDIX C: ESTIMATED COSTS AND TIMELINES FOR SOURCE PROTECTION PLAN	...22
Estimated Costs and Timelines for Source Protection Plan: Ganaraska Region Source Protection Area	

1. SUMMARY OF SOURCE PROTECTION PLANNING PROCESS

The *Clean Water Act, 2006* was brought into effect by the Ontario government with the passing of the first set of regulations on July 3, 2007. The intent of the legislation is to ensure communities are able to protect their municipal drinking water supplies. Communities will identify potential threats to local water sources and take action to reduce or eliminate these threats. The task of developing a plan will involve watershed residents working with municipalities, conservation authorities, property owners, farmers, industry, health officials, community groups, and others. The Act allows for other systems to be considered, including First Nations systems, clusters of private wells, communal systems, and other non-municipal supplies.

The *Clean Water Act, 2006* and associated regulations puts in place a framework for the source protection planning process:

- Establishing Source Protection Regions and Areas
- Establishing Source Protection Authorities
- Establishing Source Protection Committees
- Preparing the Terms of Reference
- Preparing the Assessment Report
- Preparing the Source Protection Plan
- Timelines
- Consultation

The *Clean Water Act, 2006* establishes the Ontario Drinking Water Stewardship Program. The purpose of the program is to provide financial assistance to those whose activities and properties may be affected by the *Clean Water Act, 2006*, persons who administer incentive programs and education and outreach programs that are related to source protection plans, and to other persons or bodies in prescribed circumstances that are related to the protection of drinking water sources. The financial assistance is to be provided in accordance with regulations made under the *Clean Water Act, 2006*.

Source Protection Regions and Areas

Ontario Regulation 284/07 established 40 Source Protection Areas, based primarily on conservation authority watersheds. Thirty-two of these Source Protection Areas were grouped into 11 Source Protection Regions, leaving eight stand-alone Source Protection Areas. The Trent Conservation Coalition Source Protection Region (see Figure 1) is approximately 14,500 square kilometres. The Region includes the entire watershed of the Trent River, stretching from Algonquin Park to the Bay of Quinte and the smaller watersheds in the Ganaraska Region and Lower Trent Region Conservation Authorities' areas of jurisdiction, that flow directly into Lake Ontario and the Bay of Quinte.

The Source Protection Region is comprised of five Source Protection Areas:

- Crowe Valley
- Ganaraska Region
- Kawartha-Haliburton
- Lower Trent
- Otonabee-Peterborough

This Terms of Reference applies to the Ganaraska Region Source Protection Area (see Figure 2). A separate Terms of Reference is being prepared for the Trent River watershed for the other four Source Protection Areas in the Region: Crowe Valley, Kawartha-Haliburton, Lower Trent, Otonabee-Peterborough.

More details about *Source Protection Regions and Areas* can be found in Ontario Regulation 284/07 (Source Protection Areas and Regions).

Source Protection Authorities

There are five Source Protection Authorities in the Trent Conservation Coalition Source Protection Region:

- Crowe Valley
- Ganaraska Region
- Kawartha-Haliburton
- Lower Trent
- Otonabee-Peterborough

Source Protection Authorities are generally the conservation authority boards of directors, which are composed of representatives appointed by municipal councils. Since

Figure 1: Map of Trent Conservation Coalition Source Protection Region

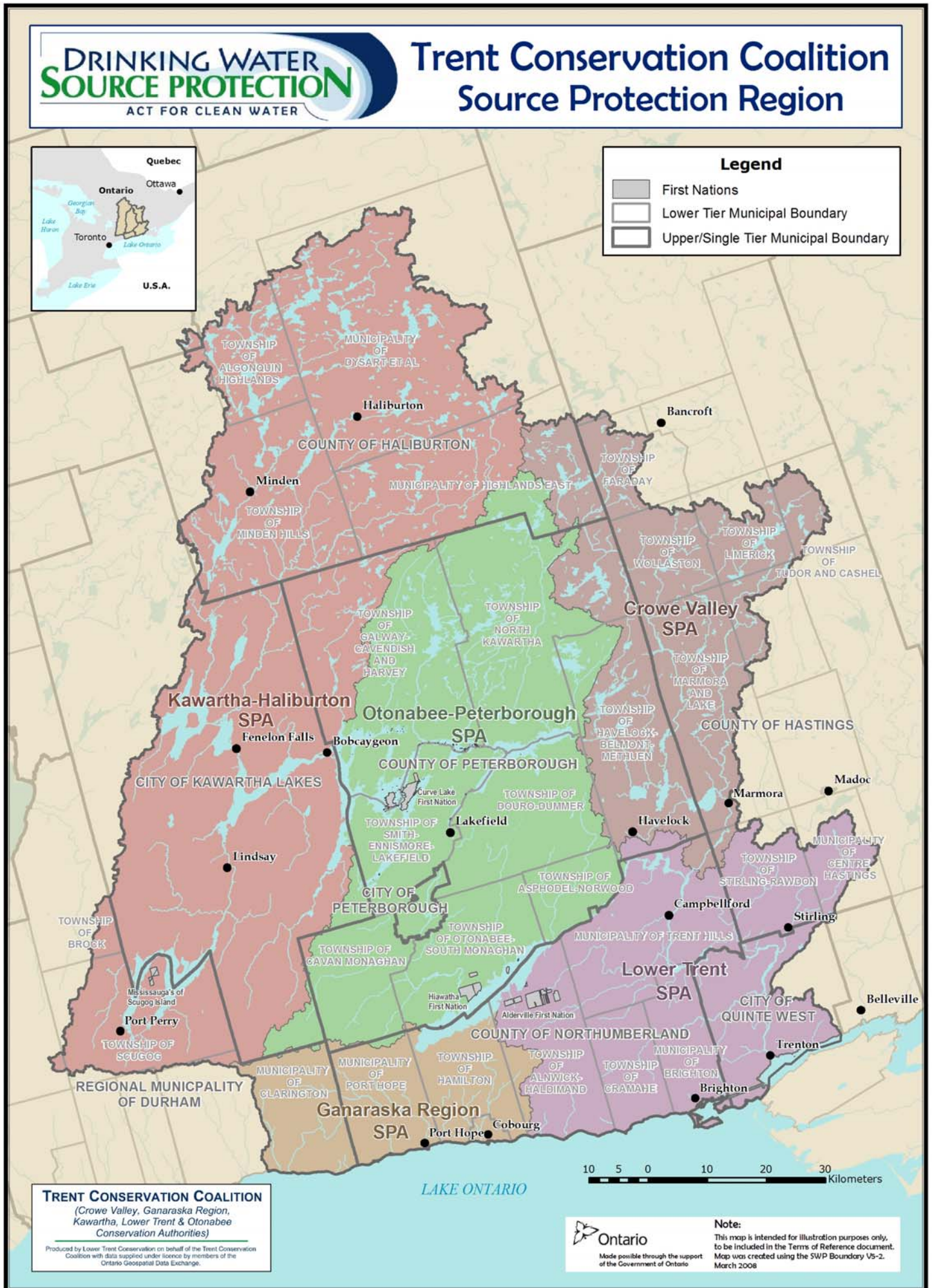
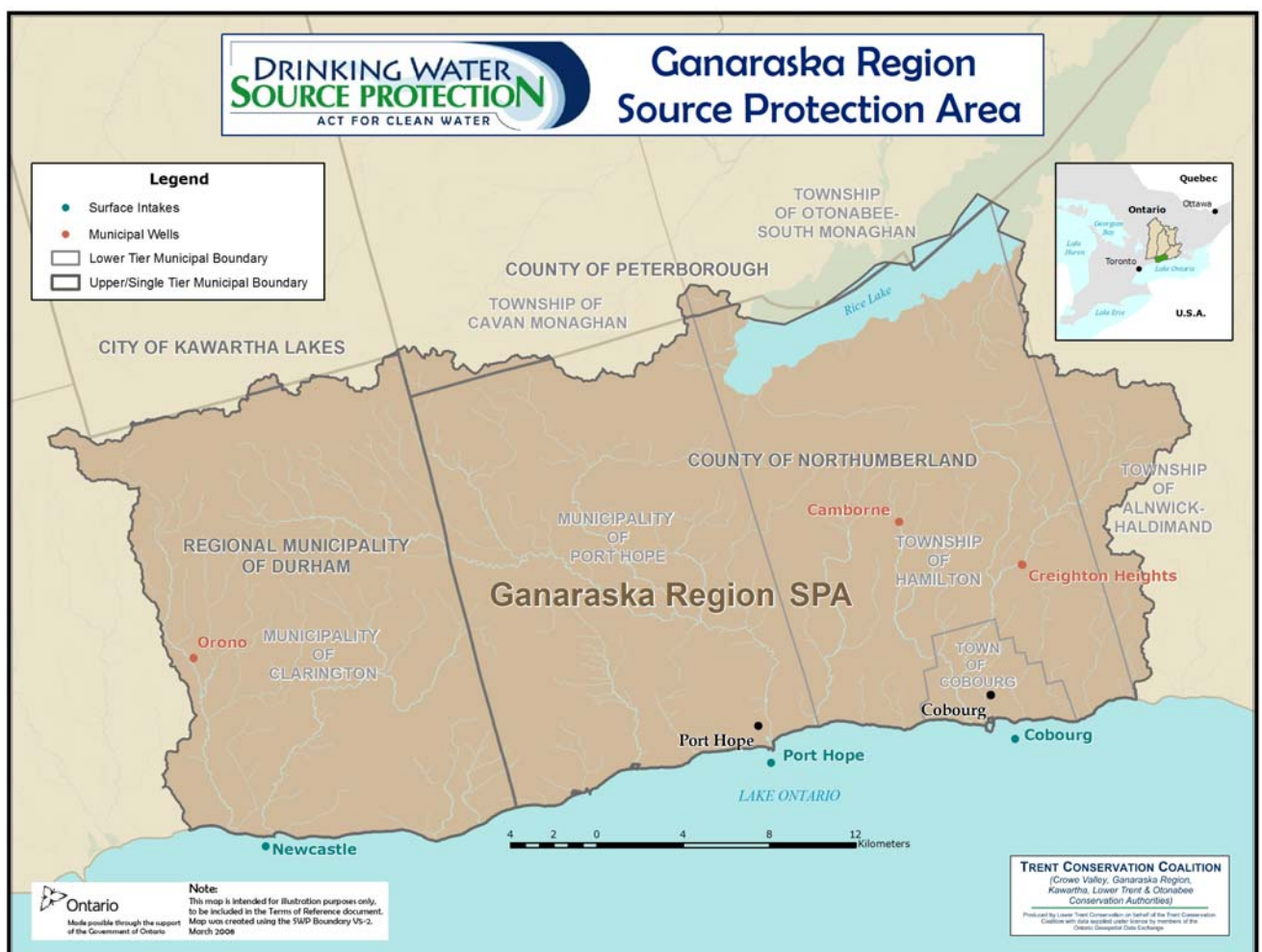


Figure 2: Map of Ganaraska Source Protection Area



some of the Trent Conservation Coalition Source Protection Region extends beyond conservation authority jurisdiction to include the entire Trent River watershed, additional representatives from those municipalities have been appointed to the Source Protection Authority boards (Kawartha-Haliburton, Lower Trent, and Otonabee-Peterborough Source Protection Authorities).

The Regulation designates the Lower Trent Source Protection Authority as the lead Source Protection Authority in the Region. The *Clean Water Act* sets out duties and responsibilities for the source protection authorities in the Region and additional duties and responsibilities for the lead Source Protection Authority. The lead Source Protection Authority has entered into an agreement with the other source protection authorities in the region, as required by the *Clean Water Act*, to identify the interrelationship and interaction among the five authorities. The agreement establishes an Administrative Committee and Management Committee, with representation from all five source protection authorities, which provide for overall project administration, coordination, and management, including allocating resources to the various source protection authorities to carry out source protection work.

The Source Protection Authorities are responsible for appointing the Source Protection Committee and providing support to the committee during the development of the Terms of Reference, Assessment Report and Source Protection Plan.

Source Protection Committee

The Chair of the Trent Conservation Coalition Source Protection Committee was appointed by the Minister of the Environment in August 2007. The Source Protection Committee was established in November 2007 following an open public process. The 24 member multi-stakeholder committee is comprised of the chair, 7 municipal representatives, 7 representatives from the economic/industrial sector, 7 members representing other interests, and 2 First Nations representatives. One additional First Nations seat remains open. Three non-voting liaison members also sit on the Committee, representing the Ministry of the Environment, the Source Protection

Authorities and the Health Units. There is one Source Protection Committee for the entire Source Protection Region.

The Source Protection Committee is tasked with three major jobs:

1. Preparing the Terms of Reference
2. Preparing the Assessment Report
3. Preparing the Source Protection Plan

for the Source Protection Areas in the Region. In carrying out these tasks, the Committee will be consulting broadly with municipalities, First Nations, the public and various sectors.

A list of the Source Protection Committee members is provided in Table 1.

More details about *Source Protection Committees* can be found in Ontario Regulation 288/07 (Source Protection Committees).

Table 1: Trent Conservation Coalition Source Protection Committee		
Name	Sector	Representing
<i>Jim Hunt</i>	Chair	Appointed by the Minister of the Environment
<i>Dave Golem</i>	Municipal	Faraday, Havelock-Belmont-Methuen, Marmora and Lake, Wollaston, Limerick, Tudor and Cashel, Hastings County
<i>Bruce Craig</i>	Municipal	Port Hope, Hamilton, Cobourg, Clarington, Durham Region
<i>Dave Burton</i>	Municipal	Kawartha Lakes, Galway-Cavendish and Harvey, Scugog, Brock, Minden Hills, Dysart et al, Algonquin Highlands, Highlands East, Haliburton County
<i>Gerald McGregor</i>	Municipal	Kawartha Lakes, Galway-Cavendish and Harvey, Scugog, Brock, Minden Hills, Dysart et al, Algonquin Highlands, Highlands East, Haliburton County
<i>Rosemary Kelleher-MacLennan</i>	Municipal	Alnwick/Haldimand, Brighton, Trent Hills, Cramahe, Centre Hastings, Stirling-Rawdon, Quinte West, Northumberland County
<i>Mary Smith</i>	Municipal	Asphodel-Norwood, Cavan Monaghan, Douro-Dummer, Otonabee-South Monaghan, Peterborough, Smith-Ennismore-Lakefield, North Kawartha, Peterborough County
<i>Richard Straka</i>	Municipal	Asphodel-Norwood, Cavan Monaghan, Douro-Dummer, Otonabee-South Monaghan, Peterborough, Smith-Ennismore-Lakefield, North Kawartha, Peterborough County
<i>Beverley Spencer</i>	Commercial/Industrial	Agriculture
<i>Edgar Cornish</i>	Commercial/Industrial	Agriculture
<i>Glenn Milne</i>	Commercial/Industrial	Agriculture
<i>Kerry Doughty</i>	Commercial/Industrial	Aggregate/Mining

Table 1: Trent Conservation Coalition Source Protection Committee		
Name	Sector	Representing
<i>Monica Berdin</i>	Commercial/Industrial	Recreation/Tourism
<i>Rick Johnson</i>	Commercial/Industrial	Large Non Municipal Water Users
<i>Robert Lake</i>	Commercial/Industrial	Economic Development
<i>Mary Jane Conboy</i>	Other Interests	Environmental Non Government Organization (ENGO)
<i>Terry Rees</i>	Other Interests	Waterfront Landowner
<i>Wayne Stiver</i>	Other Interests	Drinking Water Experts
<i>William Cornfield</i>	Other Interests	Drinking Water Experts
<i>Alanna Boulton</i>	Other Interests	Trent-Severn Waterway
<i>Roberta Drew</i>	Other Interests	Public - Rural
<i>Matt Taft</i>	Other Interests	Public - Urban
<i>Tracey Taylor</i>	First Nations	Curve Lake
<i>Pamela Crowe</i>	First Nations	Alderville
<i>Jim Kelleher</i>	Liaison	Source Protection Authority
<i>Debbie Scanlon (interim)</i>	Liaison	Ministry of the Environment
<i>Anne Alexander</i>	Liaison	Health Unit

Terms of Reference

The Terms of Reference outlines the steps to be taken and estimated costs to prepare the Assessment Report and Source Protection Plan. It sets out the roles and responsibilities of municipalities, source protection authorities, source protection committees and others. The Terms of Reference is prepared by a source protection committee and submitted for approval to the Ministry of the Environment by a source protection authority, following public consultation. The Minister of Environment approves, requires amendments, or amends the Terms of Reference.

More specifically, the Terms of Reference includes:

- Maps of the source protection region and areas
- A list of municipalities in the source protection area
- A list of existing and planned municipal drinking water systems
- The work plan for completing the Assessment Report and Source Protection Plan. The work plan includes high level tasks, costs, timelines and indicates who will perform the work.

Ontario Regulation 287/07 (Terms of Reference) outlines the required contents for the *Terms of Reference* and the minimum consultation requirements.

Assessment Report

The Assessment Report is a science-based report developed locally for each source protection area in a region. It identifies the threats to be addressed in Source Protection Plans. It documents vulnerable areas, including present and future municipal groundwater and surface water sources, areas where large regional aquifers are being recharged, and aquifers that are vulnerable to contamination. It also involves measuring how much water exists, both at the surface and below ground, how it moves, and how much water is withdrawn, so that it identifies areas where there are or may be water shortages. Studies required to complete an Assessment Report include:

- water quality assessments
- water budgets
- water quantity stress assessments
- vulnerability studies for municipal wells and surface water intakes

- groundwater studies to identify significant recharge areas and highly vulnerable areas
- threats and issues inventories and assessments
- water quality risks assessments.

More details on the requirements of the *Assessment Report* are provided in the *Clean Water Act* and will be detailed in anticipated regulations and technical rules.

Source Protection Plan

The Source Protection Plan establishes policies on how significant drinking water threats will be reduced or eliminated, identifies who is responsible for taking action, sets timelines for implementation, and describes how progress will be measured. Plans will build on work currently underway and will recognize or reinforce existing management practices that help protect source water quality and quantity.

More details on the requirements of the *Source Protection Plan* are provided in the *Clean Water Act* and will be detailed in anticipated regulations and technical rules.

Timelines

The *Clean Water Act* and its regulations establish timelines for the planning process:

Terms of Reference:

To be submitted to the Source Protection Authority within 12 months of the appointment of the Chair: by August 20, 2008.

To be submitted to Minister of the Environment within 14 months of the appointment of the Chair: by October 20, 2008.

Assessment Report:

To be submitted to Ministry of the Environment within 1 year of the approval of the Terms of Reference: anticipated to be early 2010.

Source Protection Plan:

To be submitted to the Minister of the Environment within 5 years of the appointment of the Chair: by August 20, 2012.

The Province has been providing funding to conservation authorities since 2005 to undertake specific source protection work (watershed studies and municipal technical studies). The work completed must be taken into consideration as the work plan is developed. Diagram 1 illustrates the timelines for the work completed to date and the anticipated timelines for the work yet to be completed.

Diagram 1: Timeline for Source Protection Products								
	2005	2006	2007	2008	2009	2010	2011	2012
Watershed Studies	→							
Municipal Technical Studies		→						
Terms of Reference				→				
Assessment Reports					→			
Source Protection Plans						→		
<i>Clean Water Act, July 3, 2007</i>								

The Terms of Reference Regulation (Ontario Regulation 287/07) and the Time Limits Regulation (Ontario Regulation 285/07) set out the time frame for the preparation of the Terms of Reference, the Assessment Report and the Source Protection Plan.

Consultation

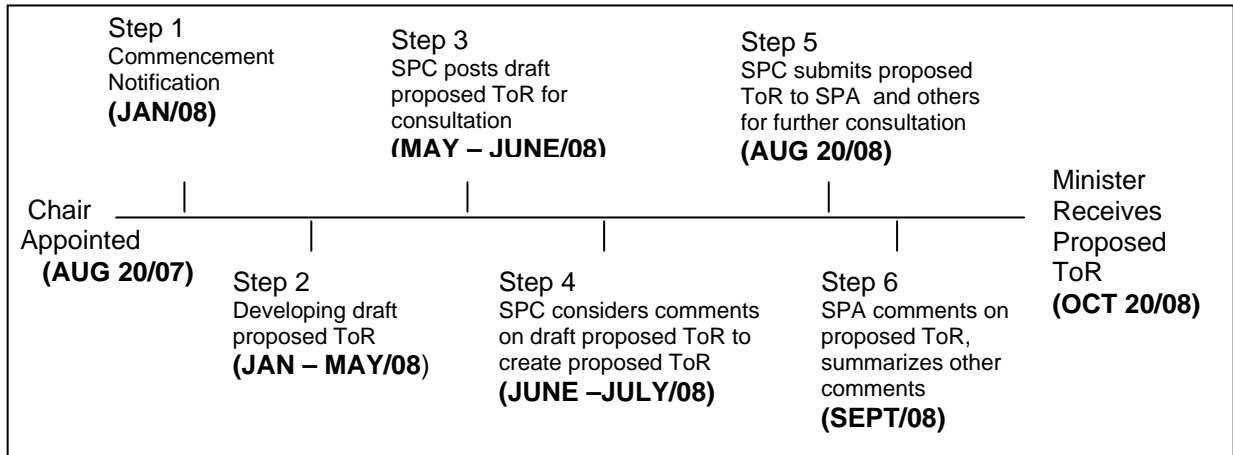
The Source Protection Committee will consult broadly across the watershed at three key stages during the preparation of the:

- Terms of Reference
- Assessment Report
- Source Protection Plan.

Consultation on the Terms of Reference will occur in two stages. The first period for public review will occur in late May/June on the draft proposed Terms of Reference. A second opportunity for public review will occur in late August/September, when the proposed Terms of Reference is submitted to the Source Protection Authorities.

Diagram 2 illustrates the timelines for developing the Terms of Reference and the opportunities for public review and comment.

Diagram 2: Timeline for Developing Terms of Reference



SPC – Source Protection Committee SPA – Source Protection Authority ToR – Terms of Reference

Details on the *consultation requirements* for preparing the Terms of Reference are set out in Ontario Regulation 287/07 (Terms of Reference). It is anticipated that details on the consultation requirements for the Assessment Report and Source Protection Plan will be set out in future regulations.

2. DESCRIPTION OF THE SOURCE PROTECTION AREA

As indicated above, this Terms of Reference outlines the work plan, timelines, cost and responsibility for completing the Assessment Report and Source Protection Plan for the Ganaraska Region Source Protection Area.

The Ganaraska Region Source Protection Area is located along the north shore of Lake Ontario, encompassing 935 square kilometers. It extends west of Highway 115/35 to east of County Road 45 and to Rice Lake in the north. Most of the area flows south to Lake Ontario; the larger watersheds are Wilmot Creek, Ganaraska River and Cobourg Creek. Also emptying into Lake Ontario are several smaller tributaries including Graham Creek, Midtown Creek, and Gage Creek. There are also small watersheds flowing north into Rice Lake (part of the Trent River system). Predominant physiographic features include the Oak Ridges Moraine, Peterborough Drumlin Field, South Slope, and the Lake Iroquois Shoreline (close to Lake Ontario). The population is approximately 60,000. The Town of Cobourg, Municipality of Port Hope (Ward 1), and Newcastle are the largest urban areas. These three communities draw their drinking water from Lake Ontario. There are also three municipal well systems in the area, servicing Camborne, Creighton Heights, and Orono. Approximately 30% of the population relies on private sources of drinking water. While there are four First Nation communities in the remainder of the Source Protection Region, there are no First Nation lands in the Ganaraska Region Source Protection Area.

3. MUNICIPALITIES IN THE SOURCE PROTECTION AREA

Table 2 is a list of the municipalities in the Source Protection Area. Some of these municipalities lie within other Source Protection Areas. The Township of Otonabee-South Monaghan falls only marginally within the Source Protection Area and does not form part of the Source Protection Area as defined in the regulations under the *Clean Water Act, 2006*.

Table 2: List of Municipalities located in Ganaraska Region Source Protection Area	
Alnwick/Haldimand, Township of	
Cavan Monaghan, Township of	
Clarington, Municipality of	
Cobourg, Town of	
Durham, Regional Municipality of	
Hamilton, Township of	
Kawartha Lakes, City of	
Northumberland, County of	
Otonabee-South Monaghan, Township of *	
Peterborough, County of	
Port Hope, Municipality of	
* located only marginally within the Source Protection Area and is not identified as part of the Source Protection Area in the 'Source Protection Areas and Regions Regulation' under the <i>Clean Water Act, 2006</i>	

4. MUNICIPAL DRINKING WATER SYSTEMS

The following are lists and descriptions of the existing municipal drinking water systems in the Ganaraska Region Source Protection Area. No planned drinking water systems have been identified at this time. No systems in the Source Protection Area were identified as being exempt.³

There are six existing drinking water systems in the Ganaraska Region Source Protection Area (see Appendix A). A brief description of each is provided below.

Camborne Well Supply

Township of Hamilton

The Camborne Well Supply is designated as a Small Municipal Residential System. It is comprised of two artesian production wells. The system supplies approximately 65 homes (MOE Drinking Water Inspection Report, November 26, 2007).

Cobourg Surface Water Supply

Town of Cobourg

The Cobourg Water Treatment Plant distribution system is classified as a Large Municipal Residential System. Raw water is drawn from Lake Ontario through a single intake pipe. The system supplies the Town of Cobourg and a stand alone distribution system located in Hamilton Township (north of Highway 401). The population serviced is approximately 17,000, which includes approximately 85 private residences in the Township of Hamilton (MOE Drinking Water Inspection Report, July 30, 2007).

Creighton Heights Well Supply

Township of Hamilton

The Creighton Heights Water Supply is designated as a Large Municipal Residential System. The three wells in the system supply water to 1,000 people in the Creighton Heights and Baltimore areas (Drinking Water Information System, MOE, 2006).

Newcastle Surface Water Supply

Regional Municipality of Durham

The Newcastle Water System is classified as a Large Municipal Residential System. The water source is Lake Ontario, drawn through one intake pipe. It services a population of approximately 8,938 residents (Durham Region Water Bill Accounts, April 2008) in Newcastle and Newtonville. The system includes the Newtonville Water Boosting Pumping Station to service the community of Newtonville (MOE Drinking Water Inspection Report, July 30, 2007).

Orono Well Supply

Regional Municipality of Durham

The Orono Well Supply is a Large Municipal Residential System with two production wells which service approximately 1,779 people (Durham Region Water Bill Accounts, April 2008) in the community of Orono. Changes to this system are anticipated in the near future, as the Regional Municipality of Durham is currently in the process of drilling new well(s).

³ To be considered exempt, a council resolution is required indicating that the municipality intends to discontinue use of the system and apply to revoke the licence/permit; publish a notice of the resolution in a newspaper(s); and send a copy to the local source protection committee.

Both existing wells are located near Wilmot Creek and are considered *Groundwater Under the Direct Influence of Surface Water (GUDI)* with effective in-situ filtration (MOE Drinking Water Inspection Report, May 25, 2004).

In Appendix A, the source has been noted as "Surface Water and Groundwater" because of its GUDI (*Groundwater Under the Direct Influence of Surface Water*) status.

Port Hope Surface Water Supply

Municipality of Port Hope

The Port Hope Drinking Water System has been designated as a Large Municipal Residential System. Raw water is drawn from Lake Ontario through a single intake pipe. The system services an estimated population of 12,500 within Port Hope (Ward 1) (Drinking Water Information System, MOE, 2007).

5. OTHER DRINKING WATER SYSTEMS

The *Clean Water Act* allows for other Drinking Water Systems to be included in the Terms of Reference:

- Drinking Water Systems included by Municipal Council Resolution
- Drinking Water Systems Serving Reserve(s)
- Drinking Water Systems included by the Minister.

No such systems are currently proposed to be included in this Terms of Reference.

6. MATTERS THAT AFFECT OTHER SOURCE PROTECTION COMMITTEES

The Trent Conservation Coalition Source Protection Region is bordered to the west by the CTC and South Georgian Bay – Lake Simcoe Source Protection Regions and to the east by the Quinte Source Protection Region. The Region also shares Lake Ontario as a source of drinking water with several other Source Protection Regions/Areas: Niagara Region, Halton-Hamilton, CTC, Quinte, and Cataraqui.

There is a need for a coordinated approach to communications, information management, technical assessment work, and policy development to assist municipalities that are shared between two or more source protection committees. Sharing methodologies, technical reports, and draft policies will help to collectively save time and effort and will result in more effective Source Protection Plans. It will also assist municipalities that fall into two or more source protection areas by contributing to common policy approaches for risks that occur in more than one area

Table 3 is a list of specific matters that will necessitate consultation with other source protection committees.

Table 3: Matters Affecting Other Source Protection Committees		
Source Protection Committee	Source Protection Area Or Region	Description Of The Matter
Niagara Region, Halton-Hamilton, CTC, Quinte, Cataraqui Source Protection Committees	Niagara Region, Halton-Hamilton, CTC, Quinte, Cataraqui Source Protection Areas/Regions	<p>The Trent Conservation Coalition Source Protection Region watersheds flow into Lake Ontario where there are many surface water intakes. Three Lake Ontario intakes are in the Trent Conservation Coalition Source Protection Region (Ganaraska Region Source Protection Area) and there is one intake in the Bay of Quinte in the Region (Lower Trent Source Protection Area).</p> <p>The regions will need to continue to work together on the Lake Ontario Collaborative project and with Source Protection Regions/Areas not in the Collaborative to ensure a consistent approach to assessing the risks and developing policies to protect the water supply. The regions will also need to consider any Provincial, Federal, International agreements/policies for the</p>

Table 3: Matters Affecting Other Source Protection Committees		
Source Protection Committee	Source Protection Area Or Region	Description Of The Matter
		Great Lakes and any Remedial Action Plans, and consult with the responsible agencies/ministries. The Committees should collectively develop policies to address Great Lakes agreements and targets.
South Georgian Bay - Lake Simcoe and CTC Source Protection Committee	South Georgian Bay - Lake Simcoe and CTC Source Protection Regions	Peer Review of Groundwater Vulnerability Studies for municipal systems should be coordinated between the three Source Protection Regions in Durham Region to ensure a consistent review and consistent products for the Municipality.
CTC Source Protection Committee	CTC Source Protection Region	<p>Significant Groundwater Recharge Areas are being identified as part of the Assessment Reports in each source protection area. These occur where there is a high volume of water moving from the surface into the ground, recharging the groundwater aquifer.</p> <p>Methodologies for mapping Significant Recharge Areas will need to be reviewed to ensure compatible, comparable products with the CTC Source Protection Region (Central Lake Ontario Source Protection Area) and the rest of the Trent Conservation Coalition Source Protection Region. Vulnerability assessments and issues-based evaluations will also need to align.</p> <p>Edge matching for mapping products will be required to ensure a satisfactory product for the affected municipalities.</p>
CTC Source Protection Committee	CTC Source Protection Region	<p>Methodologies for mapping Highly Vulnerable Aquifers will need to be reviewed to ensure that the products are similar to the CTC Source Protection Region (Central Lake Ontario Source Protection Area) and the rest of the Trent Conservation Coalition Source Protection Region. Vulnerability assessments and issues-based evaluations will also need to align.</p> <p>Edge matching for mapping products will be required to ensure a satisfactory product for the affected municipalities.</p>
CTC Source Protection Committee	CTC Source Protection Region	There may be a need to discuss technical findings related to water budgets/groundwater flow with the CTC Source Protection Committee. Groundwater may cross surface watersheds, impacting the quantity of water available in a neighbouring region.
CTC Source Protection Committee	CTC Source Protection Region	The Trent Conservation Coalition Source Protection Committee will work with the CTC Source Protection Committee to develop common approaches/policies to address similar threats and to assist municipalities that lie within both Source Protection Regions.

7. DETAILED WORK PLAN TO COMPLETE ASSESSMENT REPORT

Background studies which will contribute to the completion of the Assessment Report have been underway since 2005. These include:

- Watershed Characterization Reports
- Conceptual Water Budgets
- Tier 1 Water Budget and Water Quantity Stress Assessments
- Delineation of Significant Recharge Areas
- Groundwater and Surface Water Vulnerability Studies (for municipal systems)
- Threats Inventories

- Water Quality Risk Assessments.

This ongoing work has and continues to be led by conservation authorities and municipalities with funding from the Province in accordance with draft Guidance Modules, prepared by the Ministry of the Environment. Consultants have been hired to undertake some of the work.

While the *Clean Water Act* and the draft Guidance Modules provide some direction for completion of the Assessment Report, the final requirements will be unknown until the Province passes Assessment Report regulations and technical rules. The tasks outlined in this work plan are high level and may meet the requirements of the regulations. Details on how to complete the tasks will be outlined in the Assessment Report regulation, technical rules, and provincial guidance documents. If changes are required when the regulations/rules are in place, an amendment to the Terms of Reference will be made.

The timelines, estimated costs, and assignment of responsibility are outlined in Appendix B. The funding to complete the work will be provided to the lead(s) assigned to the task (municipalities or source protection authorities). The costs identified in Appendix B are estimates only and will need to be finalized, once the specific task details are available, through consultation and agreements between the lead Source Protection Authority in the Source Protection Region (Lower Trent), the Ganaraska Region Source Protection Authority, and the municipalities undertaking the work.

The following is a brief summary of the work required to complete the Assessment Report:

Coordinating and Supporting Projects for the Assessment Report

- overall coordination (provided by regional staff working at Lower Trent Conservation on behalf of Trent Conservation Coalition with assistance from local staff in the Ganaraska Region Conservation Authority, e.g. staff time, office support and administration, travel, training)
- Source Protection Committee expenses
- if requested by a municipality, assist with identifying additional systems/well clusters in that municipality that should be included in future Source Protection work
- consultation with Port Hope Remedial Action Plan/Port Hope Area Initiative and other agencies responsible for managing the Great Lakes

Undertaking Communications Initiatives for the Assessment Report

- overall communications/messaging (coordinated by regional staff working at Lower Trent Conservation on behalf of the Trent Conservation Coalition, with local delivery by Ganaraska Region Conservation Authority)
- consideration of linkages with Great Lakes programs
- communications products (displays, publications)
- public events (to promote the protection of sources of drinking water)
- media monitoring
- an effective communications program taking into account the complexity of the area: coordinated with four other source protection authorities in the Region

Information Management for the Assessment Report Preparation

- overall data management (provided by regional staff working at Lower Trent Conservation on behalf of Trent Conservation Coalition, with the Ganaraska Region Conservation Authority preparing local maps and arranging data sharing agreements with local municipalities)
- digital mapping software acquisition and maintenance
- File Transfer Protocol (FTP) Site/Web Portal

Undertaking a Watershed Characterization

- a report for the Ganaraska Region Source Protection Area to characterize the watershed based on existing information (includes physiography, geology, land use, water use, water quality, etc.)

Conducting a Conceptual Water Budget

- conceptual water budget report for the watersheds draining into Lake Ontario in the Ganaraska Region Conservation Authority
- provides an examination of the water balance and flow paths within the watershed (surface water and groundwater)

Conducting a Tier 1 Water Budget and Stress Assessment

- more detailed examination of the hydrological cycle on a subwatershed basis
- water quantity stress assessment for all subwatersheds
- mapping Significant Recharge Areas

Conducting a Tier 2 Water Budget and Stress Assessment

- numerical modeling of potentially stressed watersheds, based on findings of the Tier 1 Water Budget

Conducting a Tier 3 Water Budget and Risk Assessment *(It is unlikely that Tier 3 water budgets will be required; therefore no costs have been identified.)*

- numerical modeling for individual municipal drinking water systems/watersheds that are undergoing stress
- risk assessment to determine if there are present or future water quantity risks

Delineating and applying vulnerability scores to Highly Vulnerable Aquifers

- mapping to identify highly vulnerable aquifers
- assess degree of vulnerability within these areas
- review with neighbouring Source Protection Regions (edge mapping)

Identifying issues, inventorying threats, assessing hazards in Highly Vulnerable Aquifers

- identify issues based on available data/knowledge
- inventory threats and assess the hazards, as required

Assessing Risks in Highly Vulnerable Aquifers

- undertake risk assessment for identified hazards

Applying Vulnerability Scores in Significant Groundwater Recharge Areas

- assess degree of vulnerability within these areas

Identifying issues, inventorying threats, assessing hazards in Significant Groundwater Recharge Areas

- identify issues based on available data/knowledge
- inventory threats and assess the hazards, as required

Assessing Risks in Significant Groundwater Recharge Areas

- undertake risk assessment for identified hazards

Consultation on the overall proposed Assessment Report

- includes public notices in newspapers/internet, public meetings, meetings with impacted landowners
- includes consultation with municipalities, immediately adjacent Source Protection Regions and three additional Source Protection Regions whose watersheds drain into Lake Ontario.
- consultation will be required with regards to 6 drinking water systems
- consultation will be required with the Port Hope Remedial Action Plan/ Port Hope Area Initiative and other persons/bodies responsible for managing/implementing Great Lakes agreements

Revise/Update Assessment Report

- incorporate additional drinking water systems that are brought forward after the Assessment Report is submitted to the Ministry
- incorporate findings from studies that are completed after the Assessment Report is submitted to the Ministry

Vulnerability, Threats/hazards, Risks for the following groups of Drinking Water Systems:

- **Lake Ontario Surface Water Intakes - Lake Ontario Collaborative Project**
Cobourg
Newcastle
Port Hope
This work includes a "watershed type" characterization of the Western Lake Ontario Coastal Zone to help with understanding of sources of possible contamination, to characterize the pathogens, and to understand the

seasonal mixing patterns as part of assessing the risks to municipal drinking water sources.

- **Hamilton Township Wellhead Projects:**

 - Camborne*

 - Creighton Heights*

- **Durham Wellhead Project:**

 - Orono*

Tasks Include:

- Delineating and applying vulnerability scores to Wellhead Protection Areas/Intake Protection Zones; undertaking additional vulnerability studies for groundwater systems under the influence of groundwater, as required (e.g. Orono)
- Identifying issues, inventorying threats, assessing hazards in Wellhead Protection Areas/Intake Protection Zones
- Assessing Risks in Wellhead Protection Areas/Intake Protection Zones

Peer Review of Vulnerability Studies

- Peer Review of Groundwater Vulnerability Studies for Municipal Systems (3)
- Peer Review of Surface Water Vulnerability Studies for Municipal Systems (3)
- Peer review of vulnerability studies for Durham Region systems to be done in conjunction with South Georgian Bay – Lake Simcoe and CTC Source Protection Regions) to ensure consistency for the Regional Municipality of Durham.

8. DETAILED WORK PLAN TO COMPLETE SOURCE PROTECTION PLAN

Work on the Source Protection Plan will commence as the Assessment Report is being finalized. The Source Protection Plan will include policies to address the significant threats. The Province intends to pass Source Protection Plan regulations. The tasks to complete the Source Protection Plan, outlined in this work plan, may need to be revisited (amendment to the Terms of Reference) once the regulations are released. At that point, costs and assignment of responsibility can also be revisited.

The funding to complete the work will be provided to the lead(s) assigned to the task. The costs identified in this Terms of Reference are estimates only and will need to be finalized, once the specific task details are available, through consultation and agreements between the lead Source Protection Authority in the Source Protection Region (Lower Trent) and the Ganaraska Region Source Protection Authority and/or any municipalities who elect to undertake the work.

The following are some anticipated high level tasks which may need to be completed in the preparation of the Source Protection Plan. The timelines, estimated costs, and assignment of responsibility are outlined in Appendix C.

Coordinating and Supporting projects for the Source Protection Plan

- overall coordination (provided by regional staff working at Lower Trent Conservation on behalf of Trent Conservation Coalition with assistance from local staff in the Ganaraska Region Conservation Authority, e.g. staff time, office support and administration, travel, training)
- Source Protection Committee expenses
- consultation with municipalities, Port Hope Remedial Action Plan/ Port Hope Area Initiative and other agencies responsible for managing the Great Lakes, and other agencies

Undertaking Communications initiatives for the Source Protection Plan

- overall communications/messaging(coordinated by regional staff working at Lower Trent Conservation on behalf of the Trent Conservation Coalition, with local delivery by Ganaraska Region Conservation Authority)
- communications products (displays, publications)
- public events (to promote the protection of sources of drinking water)
- media monitoring
- the communications initiatives will be delivered in conjunction with outreach activities through the Ontario Drinking Water Stewardship Program to individuals with private supplies who make up a significant percentage of the region's population

- an effective communications program taking into account the complexity of the area: coordinated with other four source protection authorities in the Region

Information Management for the Source Protection Plan Preparation

- overall data management (provided by regional staff working at Lower Trent Conservation on behalf of Trent Conservation Coalition, with the Ganaraska Region Conservation Authority preparing local maps and arranging data sharing agreements with local municipalities)
- software acquisition and maintenance (digital mapping software licencing is maintained in all four conservation authority offices for the Source Protection program)
- File Transfer Protocol (FTP) Site/Web Portal

Policy Development to address threats (where required/permissible in *Clean Water Act/Regulations*)

- develop policies for eliminating, reducing, and managing drinking water quantity and quality threats
- the policies must take into account the environmental, social, and economic impacts—policies must be appropriate, affordable and effective in protecting sources of drinking water, now and into the future
- consideration must be given to potential sources of funding for implementation—the Ontario Drinking Water Stewardship Program makes provisions for providing financial assistance under the *Clean Water Act, 2006* to those whose activities and properties may be affected by the *Clean Water Act, 2006*
- consultation must take place before putting policies in place with any municipalities, other agencies, landowners that may be impacted by the policies

Policy Development for monitoring (where required/permissible in *Clean Water Act/Regulations*)

- preparation of policies for monitoring programs to fill data gaps, where additional data is required to understand the science
- policies will need to take financial implications into consideration
- policies will need to be developed in consultation with the bodies that will be responsible for monitoring

Policy Development for Great Lakes elements (where required/permissible in *Clean Water Act/Regulations*)

- policies will need to be developed to meet any targets for the Great Lakes, set by the Minister of the Environment, in consultation with other affected source protection regions
- policies will need to take financial implications into consideration

Policy Development Input from Durham Region

- Durham Region staff will develop policies for implementation and provide them as recommendations to the Source Protection Committee

Establishing timelines for policy implementation

- realistic timelines will be established that take into account matters that could affect implementation (schedules for Official Plan updates, financial implications, etc.)
- input will be required from municipalities, conservation authorities and others that may be responsible for implementation

Consultation on the overall proposed Source Protection Plan

- includes public notices in newspapers/internet, public meetings
- notification to impacted landowners in accordance with the regulations, as early as possible
- consultation will be required with regards to six drinking water systems
- includes consultation with municipalities, immediately adjacent Source Protection Regions and three additional Source Protection Regions whose watersheds drain into Lake Ontario.
- consultation will be required with Port Hope Remedial Action Plan/ Port Hope Area Initiative and other persons/bodies responsible for managing/implementing Great Lakes agreements.

9.0 SOURCE PROTECTION PLAN SUBMISSION DATE

The Source Protection Authorities intend to submit the Source Protection Plan to the Minister of the Environment on or before August 20, 2012.

APPENDICES

APPENDIX A: SUMMARY OF MUNICIPAL DRINKING WATER SYSTEMS

APPENDIX B: ESTIMATED COSTS AND TIMELINES FOR ASSESSMENT REPORT

APPENDIX C: ESTIMATED COSTS AND TIMELINES FOR SOURCE PROTECTION PLAN

APPENDIX A: SUMMARY OF MUNICIPAL DRINKING WATER SYSTEMS

Municipal Residential Drinking Water Systems in Ganaraska Region Source Protection Area								
Water System Name	Drinking Water System Number	Water System Status	Source Water Type	Operating Authority	Owner	Number Of Wells	Number Of Intake Cribs**	Exemption Status***
Camborne	220008113	Existing	Groundwater	Hamilton, Township of	Hamilton, Township of	2	0	Not exempt
Cobourg	220000825	Existing	Surface Water	Lakefront Utility Services Inc	Cobourg, Town of	0	1	Not exempt
Creighton Heights	220008104	Existing	Groundwater	Hamilton, Township of	Hamilton, Township of	3	0	Not exempt
Newcastle	220004787	Existing	Surface Water	Durham, Regional Municipality of	Durham, Regional Municipality of	0	1	Not exempt
Orono	220004769	Existing	Surface and Groundwater*	Durham, Regional Municipality of	Durham, Regional Municipality of	2	0	Not exempt
Port Hope	260058006	Existing	Surface Water	Port Hope, Municipality of	Port Hope, Municipality of	0	1	Not exempt
<p>*indicates GUDI well (<i>groundwater under direct influence of surface water</i>)</p> <p>**an offshore structure that surrounds and protects an intake pipe, which supplies water from a lake or river to a treatment plant onshore</p> <p>*** to be considered exempt, a council resolution is required indicating that the municipality intends to discontinue use of the system and apply to revoke the licence/permit; publish a notice of the resolution in a newspaper(s); and send a copy to the local source protection committee</p>								

APPENDIX B: ESTIMATED COSTS AND TIMELINES FOR ASSESSMENT REPORT

Estimated Costs* and Timelines for Assessment Report: Ganaraska Region Source Protection Area											
*NOTE: Estimated costs include funding received/budgeted for work by the Ganaraska Region Conservation Authority, Lower Trent Conservation (lead) and municipalities that have or may undertake work.											
TASKS	LEAD	START DATE	END DATE	ESTIMATED COSTS						SUB-TOTAL	
				2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011		2011-2012
Coordinating and Supporting projects for the Assessment Report	LT SPA & GR SPA	1-Apr-05	31-Dec-09	\$110,275	\$128,807	\$142,047	\$186,000	\$160,000	\$0	\$0	
Undertaking Communications initiatives for the Assessment Report	LT SPA & GR SPA	1-Apr-05	31-Dec-09	\$2,902	\$26,762	\$19,150	\$87,000	\$87,000	\$0	\$0	
Information Management for the Assessment Report Preparation	LT SPA & GR SPA	1-Apr-05	31-Dec-09	\$46,706	\$39,351	\$16,110	\$90,000	\$90,000	\$0	\$0	
Undertaking a Watershed Characterization	LT SPA & GR SPA	1-Apr-05	30-Sep-08	\$49,983	\$100,966	\$43,500	\$0	\$0	\$0	\$0	
Conducting a Conceptual Water Budget	LT SPA & GR SPA	1-Apr-05	30-Sep-07	\$31,680	\$35,000	\$0	\$0	\$0	\$0	\$0	
Conducting a Tier 1 Water Budget and Stress Assessment	LT SPA & GR SPA	1-Apr-07	31-Dec-08	\$0	\$39,973	\$100,625	\$23,195	\$0	\$0	\$0	
Conducting a Tier 2 Water Budget and Stress Assessment	LT SPA & GR SPA	1-Jul-08	30-Jun-09	\$0	\$0	\$0	\$60,000	\$0	\$0	\$0	
Conducting a Tier 3 Water Budget and Risk Assessment	LT SPA & GR SPA			\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Delineating and applying vulnerability scores to Highly Vulnerable Aquifers	LT SPA & GR SPA	1-Apr-09	31-Dec-09	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	

Estimated Costs* and Timelines for Assessment Report: Ganaraska Region Source Protection Area

*NOTE: Estimated costs include funding received/budgeted for work by the Ganaraska Region Conservation Authority, Lower Trent Conservation (lead) and municipalities that have or may undertake work.

TASKS	LEAD	START DATE	END DATE	ESTIMATED COSTS						SUB-TOTAL	
				2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011		2011-2012
Identifying issues, inventorying threats, assessing hazards in Highly Vulnerable Aquifers	LT SPA & GR SPA	1-Apr-09	31-Dec-09	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	
Assessing Risks in Highly Vulnerable Aquifers	LT SPA & GR SPA	1-Apr-09	31-Dec-09	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	
Applying Vulnerability Scores in Significant Groundwater Recharge Areas	LT SPA & GR SPA	1-Jan-09	31-Mar-09	\$0	\$0	\$0	\$3,000	\$0	\$0	\$0	
Identifying issues, inventorying threats, assessing hazards in Significant Groundwater Recharge Areas	LT SPA & GR SPA	1-Jan-09	30-Jun-09	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	
Assessing Risks in Significant Groundwater Recharge Areas	LT SPA & GR SPA	1-Jan-09	30-Jun-09	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	
Consultation on the overall proposed Assessment Report	LT SPA & GR SPA	1-Apr-05	31-Dec-09	\$0	\$0	\$0	\$5,000	\$5,000	\$0	\$0	
Revise/Update Assessment Report	LT SPA & GR SPA	1-Jan-10	30-Jun-12	\$0	\$0	\$0	\$0	\$0	\$20,000	\$20,000	
			sub-total	\$241,546	\$370,859	\$321,432	\$454,195	\$384,000	\$20,000	\$20,000	\$1,812,032
Hamilton Groundwater Projects (Camborne, Creighton Heights)											
Delineating and applying vulnerability scores to Wellhead Protection Areas/Intake Protection Zones	Hamilton Twp	1-Apr-06	30-Jun-09		\$78,000	\$0	\$5,000	\$5,000	\$0	\$0	

Estimated Costs* and Timelines for Assessment Report: Ganaraska Region Source Protection Area

*NOTE: Estimated costs include funding received/budgeted for work by the Ganaraska Region Conservation Authority, Lower Trent Conservation (lead) and municipalities that have or may undertake work.

TASKS	LEAD	START DATE	END DATE	ESTIMATED COSTS						SUB-TOTAL	
				2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011		2011-2012
Identifying issues, inventorying threats, assessing hazards in Wellhead Protection Areas/Intake Protection Zones	Hamilton Twp	1-Apr-06	30-Jun-09		\$18,000	\$20,812	\$14,500	\$14,500	\$0	\$0	
Assessing Risks in Wellhead Protection Areas/Intake Protection Zones	Hamilton Twp	1-Apr-07	30-Jun-09		\$0	\$24,500	\$1,500	\$1,500	\$0	\$0	
Durham Groundwater Projects (Orono)											
Delineating and applying vulnerability scores to Wellhead Protection Areas/Intake Protection Zones	Durham	1-Apr-07	30-Jun-09			\$14,179	\$44,000	\$44,000	\$0	\$0	
Identifying issues, inventorying threats, assessing hazards in Wellhead Protection Areas/Intake Protection Zones	Durham	1-Apr-07	30-Jun-09			\$34,125	\$9,000	\$9,000	\$0	\$0	
Assessing Risks in Wellhead Protection Areas/Intake Protection Zones	Durham	1-Apr-07	30-Jun-09			\$17,719	\$5,000	\$5,000	\$0	\$0	
Lake Ontario Collaborative Surface Water Projects (Newcastle, Port Hope, Cobourg)											

Estimated Costs* and Timelines for Assessment Report: Ganaraska Region Source Protection Area

*NOTE: Estimated costs include funding received/budgeted for work by the Ganaraska Region Conservation Authority, Lower Trent Conservation (lead) and municipalities that have or may undertake work.

TASKS	LEAD	START DATE	END DATE	ESTIMATED COSTS						SUB-TOTAL	
				2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011		2011-2012
Delineating and applying vulnerability scores to Wellhead Protection Areas/Intake Protection Zones	Peel, Regional Municipality of (and GR SPA & LT SPA)	1-Apr-06	30-Jun-09	\$0	\$111,563	\$176,176	\$20,000	\$20,000	\$0	\$0	
Identifying issues, inventorying threats, assessing hazards in Wellhead Protection Areas/Intake Protection Zones	Peel, Regional Municipality of (and GR SPA & LT SPA)	1-Apr-07	30-Jun-09	\$0	\$0	\$167,353	\$20,000	\$20,000	\$0	\$0	
Assessing Risks in Wellhead Protection Areas/Intake Protection Zones	Peel, Regional Municipality of (and GR SPA & LT SPA)	1-Apr-07	30-Jun-09	\$0	\$0	\$43,824	\$10,000	\$10,000	\$0	\$0	
Peer Review of Vulnerability Studies											
Peer Review of Municipal Well Vulnerability Studies	LT SPA & GR SPA	1-Dec-08	30-Jun-09	\$0	\$0	\$0	\$7,500	\$7,500	\$0	\$0	
Peer Review of Municipal Surface Water Intake Vulnerability Studies	LT SPA & GR SPA	1-Dec-08	30-Jun-09	\$0	\$0	\$0	\$7,500	\$7,500	\$0	\$0	
			sub-total	\$0	\$207,563	\$498,688	\$144,000	\$144,000	\$0	\$0	\$994,251
LEGEND											
SPC - Source Protection Committee											
SPA - Source Protection Authority											
LT - Lower Trent											
GR - Ganaraska Region											

APPENDIX C: ESTIMATED COSTS AND TIMELINES FOR SOURCE PROTECTION PLAN

Estimated Costs* and Timelines for Source Protection Plan: Ganaraska Region Source Protection Area											
*NOTE: Estimated costs include funding budgeted for work to be completed by the Ganaraska Region Conservation Authority, Lower Trent Conservation (lead) and municipalities that may undertake the work.											
TASKS	LEAD	START DATE	END DATE	ESTIMATED COSTS							SUB-TOTAL
				2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010 - 2011	2011 - 2012	
Coordinating and Supporting projects for the Source Protection Plan	LT SPA & GR SPA	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$26,000	\$186,000	\$186,000	
Undertaking Communications initiatives for the Source Protection Plan	LT SPA & GR SPA	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$0	\$87,000	\$87,000	
Information Management for the Source Protection Plan Preparation	LT SPA & GR SPA	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$0	\$90,000	\$90,000	
Policy Development to address threats (where required/permisible in <i>Clean Water Act/Regulations</i>)	SPC & LT/GR SPAs	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$4,000	\$10,000	\$10,000	
Policy Development for monitoring (where required/permisible in <i>Clean Water Act/Regulations</i>)	LT SPA & GR SPA	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$0	\$2,000	\$2,000	

Estimated Costs* and Timelines for Source Protection Plan: Ganaraska Region Source Protection Area

*NOTE: Estimated costs include funding budgeted for work to be completed by the Ganaraska Region Conservation Authority, Lower Trent Conservation (lead) and municipalities that may undertake the work.

TASKS	LEAD	START DATE	END DATE	ESTIMATED COSTS						SUB-TOTAL	
				2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010 - 2011		2011 - 2012
Policy Development for Great Lakes elements (where required/missible in <i>Clean Water Act/Regulations</i>)	LT SPA & GR SPA	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$0	\$2,000	\$2,000	
Policy Development Input from Durham Region	Durham Region	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$2,500	\$10,000	\$2,500	
Establishing timelines for policy implementation	SPC & LT/GR SPAs	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$0	\$4,000	\$4,000	
Consultation on the overall proposed Source Protection Plan	LT SPA & GR SPA	1-Jan-10	20-Aug-12	\$0	\$0	\$0	\$0	\$0	\$10,000	\$10,000	
			sub-total	\$0	\$0	\$0	\$0	\$32,500	\$401,000	\$393,500	\$827,000
	LEGEND SPC - Source Protection Committee SPA - Source Protection Authority LT - Lower Trent GR - Ganaraska Region										