

Terms of Reference



Approved February 2009



Quinte Region

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Executive Summary

Terms of Reference - Importance

The *Clean Water Act, 2006* has been enacted in Ontario to ensure that sources of municipal drinking water are protected both in terms of quality and quantity. Source Protection Committees have been formed across the province to develop Source Protection Plans to achieve the goal of protecting drinking water sources. The Source Protection Committees are multi-sectored to represent a broad range of interests within Source Protection Region (See Quinte Source Protection Region Map Page 3).

As the first major task the Act requires Source Protection Committees to prepare a Terms of Reference for the preparation of an Assessment Report and Source Protection Plan for the Source Protection Area. This Terms of Reference will basically define what work needs to be done to develop a plan, who does the work, how it will be accomplished and when it will be completed and what it will cost.

Conservation Authorities, Municipalities, the Mohawks of the Bay of Quinte, the Ontario Government and the general public all have a role to play in the development of these plans. The entire process must be open, transparent and understandable to ensure effective protection of public drinking water sources, the water quality across the Source Protection Region and that of the Great Lakes as defined by the Clean Water Act. Through this approach the Quinte Source Protection Committee will encourage input of local knowledge and aboriginal traditional knowledge from the appropriate local sources.

This Terms of Reference document will describe the Quinte Source Protection Region, outline the municipal drinking water systems within the region and describe in detail the scope of work that needs to be done to develop a Source Protection Plan for this region.

The work to date has been carried out by following a set of guidance documents provided by the province. Once the Assessment Report Regulations, Director's Rules and Source Protection Plan Regulation pass, these documents will guide the completion of the remaining work.

The Clean Water Act allows for the Minister of Environment, a municipality or the Mohawks of the Bay of Quinte to include other systems in the Source Protection Planning process. At the time of this draft there are no such systems in the Quinte Region. If a new system is added in the future the Terms of Reference may have to be amended.

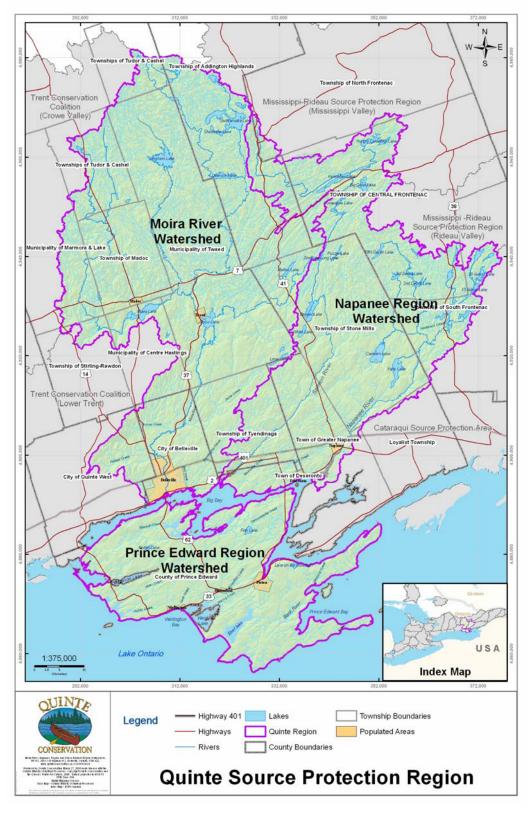
The Source Protection Committee is circulating this Terms of Reference to municipalities, the Mohawks of the Bay of Quinte, Conservation Authorities and

the general public. All municipal residential drinking water systems are currently being studied by conservation authorities in cooperation with local municipalities. This Terms of Reference summarizes the work to date, and proposes high level tasks required to complete the Source Protection Plans.

Note: The Ministry of the Environment has not released Regulations on either the Assessment Report or the Source Protection Plans. Once these Regulations are developed, the Terms of Reference will likely require amendment.

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Quinte Source Protection Region Map



Task Definitions

Terms of Reference:

The **Terms of Reference** is a work plan that outlines the work that needs to be done to complete the Assessment Report and Source Protection Plan.

Assessment Report:

The **Assessment Report** will be a summary of the scientific information about the region including water quality and quantity risks. To date the Quinte Source Protection Authority has completed a Watershed Characterization Report and a Conceptual Water Budget Report. As well, a Tier 1 (more detailed) Water Budget Report and studies on all the municipal drinking water systems are currently under way. Past water quality data is being compiled for the Assessment Report. There will also be an opportunity to include other local and traditional knowledge from municipalities, various interest groups, the general public and the Mohawks of the Bay of Quinte.

The pending Assessment Report Regulation and Director's Rules will outline what will be required in the Assessment Report.

Source Protection Plan:

The **Source Protection Plan** will be a policy document, which is an action plan for eliminating, reducing, and managing water quantity and quality risks in the Quinte Source Protection Region. The plan will address threats and issues within vulnerable areas that have been identified in the Assessment Report. The Source Protection Committee will consider the local science and conditions, as well as economic impact when recommending components of a Source Protection Plan.

Once the Source Protection Plan has been written and accepted by the Minister of the Environment the local municipalities will be required to update their Official Plans and Zoning Bylaws to reflect the requirements of the Source Protection Plan. The municipalities will then have a role in the implementation of the Source Protection Plan.

Note: For all three tasks listed above, the municipalities in the Quinte Region, the Mohawks of the Bay of Quinte, interest groups and the general public will be invited to participate, add input and make suggestions to the Source Protection Committee.

Background

The Province of Ontario has embarked on a comprehensive study of watersheds in the province with the end goal of producing source protection plans, which will outline scientific approaches to managing water quality and quantity risks for drinking water supplies. The Clean Water Act, 2006 was brought into effect with the passing of the first set of Regulations on July 3, 2007. The legislation and associated Regulations puts in place a framework for establishing Source Protection Committees and geographic study areas called Source Protection Regions. The Source Protection Committee has the responsibility to guide the development of source protection plans for each Source Protection Region. The first step for the Source Protection Committee to prepare the Source Protection Plan is to develop a comprehensive Terms of Reference that will outline the technical studies required, the cost and who will perform the work. Regulation 287/07 outlines the requirements for how to develop the Terms of Reference, the content and the minimum consultation requirements to get local input included.

For many years, conservation authorities and municipalities have been developing watershed protection and management plans and programs dealing with floodplain management and regulation, hazard lands planning, recreation, environmental conservation including the protection of headwaters and source water areas. Through watershed studies, landowner incentive programs and regional partnerships for water resource management, a significant wealth of information and progress has been made at the local level to protect our watersheds. Therefore, as the Source Protection Committee develops a work plan for source protection plan, it is imperative that this new governance structure builds on the success and momentum of existing partnerships and watershed initiatives.

Terms of Reference Structure

The following section outlines the structure of the Terms of Reference document.

- 1) The Quinte Source Protection Region
- 2) Governance for the Source Protection Program
- 3) The Quinte Region Source Protection Committee (QR SPC)
- 4) QR SPC Mission Statement
- 5) Objective
- 6) Scope
- 7) Deliverables
- 8) Resources available
- 9) Costs

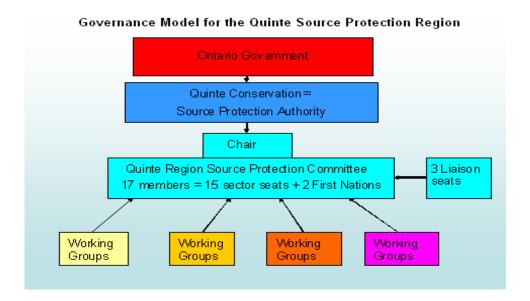
- 10) Decision making process
- 11)Schedule
- 12) Success factors/risks and restraints

1) The Quinte Source Protection Region

The Quinte Source Protection Region is the jurisdiction of the Quinte Conservation Authority. The Quinte Conservation Authority was formed when the Moira River, Napanee Region (including the Salmon River watershed) and Prince Edward Region Conservation Authorities amalgamated into one Conservation Authority (See Quinte Source Protection Region Map Page 3).

2) Governance for the Source Protection Program

The Source Protection Program is funded and directed by the Government of Ontario, specifically the Ministry of the Environment with assistance from the Ministry of Natural Resources. The program is being delivered locally in Southern Ontario and some parts of Northern Ontario by Conservation Authorities. For the purposes of the program the Quinte Conservation's Executive Board becomes the Quinte Source Protection Authority. This board oversees the staff, the financial functions and the work of the Quinte Source Protection Committee. The Quinte Region Source Protection Committee is a multi sectoral committee that will develop the Assessment Report and write the Source Protection Plan with input from the municipalities, the Mohawks of the Bay of Quinte, various stakeholder groups, the general public and working groups that may form throughout this region. Working groups could form based on individual drinking water systems or representing varying interests such as agriculture, industry or other interests.



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List of Municipalities in the Quinte Source Protection Region

Name of Municipality
The Corporation of the County of Prince Edward
The Corporation of the City of Belleville
The City of Quinte West
The Corporation of the Municipality of Centre Hastings
The Townships of Tudor and Cashel
The Town of Deseronto
The Municipality of Marmora and Lake
The Municipality of Tweed
The Corporation of the Township of Madoc
The Township of Tyendinaga
The Township of Stone Mills
The Township of Stirling-Rawdon
The Township of North Frontenac
The Township of Central Frontenac
The Township of South Frontenac
The Corporation of the Township of Addington Highlands
The Town of Greater Napanee
The County of Frontenac
The Corporation of Loyalist Township
The County of Lennox and Addington
The County of Hastings

3) Quinte Region Source Protection Committee

Member	Sector	Group Represented	
Max Christie	Chair		
Angela Genereaux	Economic	Small Business	
Gary Fox	Economic	Agriculture	
Heather Lang	Economic	Agriculture	
Rahmathulla Marikkar	Economic	Large Business	
Terry Shea	Economic	Tourism and Recreation	
Todd Kring	The Mohawks of the	Mohawks of the Bay of Quinte	
	Bay of Quinte		
Curtis Maracle	The Mohawks of the	Mohawks of the Bay of Quinte	
	Bay of Quinte		
Clarence Zieman	Municipal	Town of Deseronto and Greater Napanee	
Garnet Thompson	Municipal	City of Belleville	
Jo-Anne Albert	Municipal	Tweed, Centre Hastings and Marmora and Lake	
Ron Hamilton	Municipal	*Group 5	
Sandy Latchford	Municipal	Prince Edward County	
Doug Parker	Other Interests	General Public	
Eric Bauer	Other Interests	General Public	
Mel Plewes	Other Interests	General Public	
Phil Norton	Other Interests	General Public	
Terry Kennedy	Other Interests	Environmental	
Roger Cole	Liaison	Quinte Region Source Protection Authority	
Daniella Molnar	Liaison	Ministry of the Environment	
Andrew Landy	Liaison	Health Unit	

^{*} **Group 5**: City of Quinte West, Township of Tyendinaga, Township of Stirling-Rawdon, Township of Tudor Cashel, Township of Madoc, Township of Addington Highlands, Township of North Frontenac, Township of Central Frontenac, Township of South Frontenac, Township of Stone Mills, Loyalist Township, Hastings County, Lennox and Addington County, and Frontenac County.

4) Mission Statement

Mission Statement:

To develop a locally shaped comprehensive plan for the sustainable protection of public drinking water sources in the Quinte Source Protection Region that is both science based and reflective of local knowledge and experience and that will serve to enhance confidence in public drinking water sources.

Guiding Principles and Practices

To Lead:

- Preparation, presentation and promotion of the Source Water Protection Plan (SWPP)
- Involvement of the Public in the development of the SWPP
- Education of the Source Protection Committee (SPC) and the public in issues related to protecting source water
- Promotion of effective stewardship practices regarding environmental resources in areas requiring source water protection for public water supply
- Advocacy for protection of public source water and vulnerable areas

To Support

- Long term implementation of the SWPP including the preparation of a review of the SWPP
- Science based research and monitoring activities of Quinte Conservation staff
- Quinte Source Protection Authority (QSPA) in an approval process for the SWPP
- Presentations to, and consultations with, Municipalities in the Quinte Source Protection Region
- Provision of advice to QSPA, Quinte staff, municipalities, residents, landowners and groups

To Facilitate

- Open and inclusive public consultation through promoting awareness, stimulating discussion, gathering feedback
- Utilization of a consensus approach to decision-making
- · Heightened public awareness of the importance of protecting source water
- Development of confidence in public source water
- Continued improvement of all processes related to the sustainable protection of public drinking water sources in the Quinte Source Protection Region

5) Objective

The objective of this Terms of Reference is to outline what work needs to be done, who will do the work, what it will cost and when it will be done in order to develop an Assessment Report that describes the scientific knowledge of the region related to drinking water sources and write a Source Protection Plan that will be appropriate, affordable and effective in protecting those sources of drinking water, now and into the future.

6) Scope

Although the Clean Water Act focuses primarily on municipal drinking water systems, the scientific knowledge including a comprehensive watershed characterization and water budget is based on the entire Source Protection Region. The Watershed Characterization Report has been completed by the Quinte Source Protection Authority staff. As well, staff have completed a Conceptual Water Budget and are working on a Tier 1 (more detailed) Water Budget.

The Ministry of the Environment has also been funding technical studies for municipal drinking water systems. These studies are identifying vulnerable areas around municipal intakes and wells. The studies also provide an inventory of potential threats to drinking water systems. (See List of Municipal systems)

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List of Municipal Residential Drinking Water Systems

Type of System	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Type of Source Water (surface, ground, both)
Existing	220002226	A.L. Dafoe Water Treatment Plant	Greater Napanee, The Corporation of the Town of	Greater Napanee Utilities	Surface Water
Existing	220005697	Ameliasburgh Hamlet Water Treatment Plant	Prince Edward, The Corporation of the County of	Prince Edward, The Corporation of the County of	Surface Water
Existing	220001628	Gerry O'Connor Water Treatment Plant	Belleville, The Corporation of the City of	Belleville, The Corporation of the City of	Surface Water
Existing	220001584	Deloro Well Supply	Marmora and Lake, The Corporation of the Municipality of	Marmora and Lake, The Corporation of the Municipality of	Groundwater
Existing	220001593	Deseronto Water Treatment Plant	Deseronto, Town of	Greater Napanee Utilities	Surface Water
Existing	220001575	Madoc Well Supply	Centre Hastings, The Corporation of the Municipality of	Centre Hastings, The Corporation of the Municipality of	Groundwater
Existing	220005704	Peats Point Subdivision Well Supply	Prince Edward, The Corporation of the County of	Prince Edward, The Corporation of the County of	Groundwater
Existing	220000987	Picton Water Treatment Plant	Prince Edward, The Corporation of the County of	Prince Edward, The Corporation of the County of	Surface Water
Existing	220004359	Point Anne Hamlet Water Treatment Plant	Belleville, The Corporation of the City of	Belleville, The Corporation of the City of	Surface and Groundwater
Existing	220001557	Tweed Well Supply	Tweed, The Corporation of the Municipality of	Ontario Clean Water Agency, Nanticoke Hub	Groundwater
Existing	220008729	Wellington Water Treatment Plant	Prince Edward, The Corporation of the County of	Prince Edward, The Corporation of the County of	Surface Water

Other Drinking Water Systems

The Clean Water Act allows the Minister of the Environment, municipalities and the Mohawks of the Bay of Quinte to include (elevate) other systems into the Source Protection Planning process. These other systems include: (a) clusters of 6 or more private wells that draw water from the same aquifer, and (b) those systems that supply both public and private facilities such as schools, community centres, health care facilities, children's camps and trailer parks, and (c) drinking water systems that are located on the Tyendinaga Mohawk Territory.

At this time the Quinte Source Protection Committee has not been informed of any such systems that will be recommended for elevation. Furthermore the Ministry of the Environment has advised municipalities not to elevate systems until further direction is released by the province on the implications of such elevations.

If, in the future, a system is elevated the Terms of Reference may be amended accordingly.

The Quinte Source Protection Committee must also consider matters related to drinking water that may affect other Source Protection Committees. (See List of Matters that Affect Other SPCs). The Clean Water Act also requires Source Protection Committees whose areas drain into the Great Lakes to consider and incorporate Great Lakes water quality objectives into their Source Protection Plans.

List of Matter(s) that Affect Other Source Protection Committees

Source Protection Committees Affected	Source Protection Area	Description of Matter
Trent Conservation Coalition Source Protection Committee	Trent Conservation Coalition Source Protection Region	Contributing watersheds for the surface intakes in the Bay of Quinte within the Quinte Source Protection Region (Belleville, Point Anne and Deseronto) extend into the Trent Conservation Coalition Source Protection Region. It will be necessary to consult with the Trent Conservation Coalition Source Protection Committee and the consultants conducting the technical studies in both regions to share information and ensure a common approach is taken during the Assessment Report stage and during the Source Protection Planning process.
Trent Conservation Coalition Source Protection Committee	Trent Conservation Coalition Source Protection Region	The Bayside Intake is located in the Trent Conservation Coalition Source Protection Region but its Intake Protection Zone includes a portion of Prince Edward County which is in the Quinte Source Protection Region. Therefore consultation will be required with both Source Protection Committees and the municipalities involved to ensure that the Assessment Report and associated Source Protection Plan are acceptable to all parties involved.
Trent Conservation Coalition Source Protection Committee	Trent Conservation Coalition Source Protection Region	The Trenton Water Treatment Plant located in the Trent Conservation Coalition Source Protection Region, provides drinking water to several communities in Prince Edward County. Communication and consultation may be required if there are any issues that arise as a result of this arrangement.
Trent Conservation Coalition Source Protection Committee	Trent Conservation Coalition Source Protection Region	The Trent Conservation Coalition Source Protection Committee and the Quinte Source Protection Committee will have to communicate and possibly work together to ensure that any Lake Ontario or Bay of Quinte targets are addressed in the Assessment Report and Source Protection Planning stage.

Source Protection Committees Affected	Source Protection Area	Description of Matter
Cataraqui Source Protection Committee	Cataraqui Source Protection Area	The Cataraqui Source Protection Committee and the Quinte Source Protection Committee will have to communicate and possibly work together to ensure that any Lake Ontario or Bay of Quinte targets are addressed in the Assessment Report and Source Protection Planning stage. Environmental agencies in New York State may also have an interest in our source protection work on the Lake. The Committees can compare technical findings about surface water resources, and can collectively discuss how proposed policies relate to Great Lakes agreements and targets
Cataraqui Source Protection Committee	Cataraqui Source Protection Area	The primary Napanee intake located in the Cataraqui Source Protection Area provides drinking water to the town of Greater Napanee, which is located in the Quinte Source Protection Region. Communication and consultation may be required if there are any issues that arise as a result of this arrangement. There will be a need to discuss both technical findings and planning recommendations for this source with the Cataraqui SPC, perhaps as part of broader discussions about source protection in the Bay of Quinte.
Cataraqui Source Protection Committee	Cataraqui Source Protection Area	The eastern end of the Bay of Quinte Area of Concern (AOC) includes areas in both the Cataraqui and Quinte. There will be a need for the Committees to work together (and with the Trent Conservation Coalition SPC). Drinking Water Source Protection research and planning may assist the communities around the Bay to achieve the objectives of the Remedial Action Plan for the AOC.

Source Protection Committees Affected	Source Protection Area	Description of Matter
Trent Conservation Coalition, Cataraqui and the Mississippi Rideau Source Protection Committees	Trent Conservation Coalition, Cataraqui and the Mississippi Rideau Source Protection Areas	The Source Protection Committees in Eastern Ontario will need to understand how information related to Drinking Water Source Protection is being organized and stored by Municipalities and Source Protection Authorities who are undertaking assessment and planning work. They will also need to create protocols for sharing it with others in the community. Under the umbrella of legislation and regulations, there may be opportunities to develop shared local approaches to information management.
Trent Conservation Coalition, Cataraqui and the Mississippi Rideau Source Protection Committees	Trent Conservation Coalition, Cataraqui and the Mississippi Rideau Source Protection Areas	There is a need for a coordinated approach to communications, information management, technical assessment work, and Source Protection Planning in municipalities that are shared between two or more Source Protection Committees. This approach will build on an established record of open communication and sharing amongst the Eastern Ontario SPCs and conservation authority staff. All will need to strive to coordinate our efforts across watershed boundaries where possible, recognizing that this will facilitate implementation activities by the municipalities.

Source Protection Committees Affected	Source Protection Area	Description of Matter
Trent Conservation Coalition, Cataraqui and the Mississippi Rideau Source Protection Committees	Trent Conservation Coalition, Cataraqui and the Mississippi Rideau Source Protection Areas	There will be a need to discuss both technical findings and policy recommendations related to groundwater with the neighbouring Source Protection Committees. Groundwater resources in Eastern Ontario may flow between surface watersheds, such that the protection of one aquifer is of common interest to two or more Source Protection Committees. For example, geologic formations in the Quinte Source Protection Area may recharge groundwater aquifers that supply public and private wells in that of the Cataraqui Region. 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 at a given location, and the receiving aquifer discharges to a coldwater ecosystem and/or a municipal residential drinking water system. It will be helpful to compare mapping of these features across surface watershed boundaries, and then to either eliminate discrepancies or document a rationale for their existence. Much of the groundwater in the Quinte Source Protection Area is considered highly vulnerable to contamination from the surface, owing to the shallow overburden and fractures in the bedrock. There will be a need for the Source Protection Committees in Eastern Ontario, which share this condition, to look at how such aquifers are delineated and protected. There may also be opportunities to share lessons learned with the other Source Protection Committees that face this challenge elsewhere in Ontario.

Source Protection Committees Affected	Source Protection Area	Description of Matter
Trent Conservation Coalition, Cataraqui and the Mississippi Rideau Source Protection Committees	Trent Conservation Coalition, Cataraqui and the Mississippi Rideau Source Protection Areas	The Quinte Source Protection Committee will work with the adjacent SPCs (and others across Ontario) to share draft Source Protection Plan policies. SPCs will need to work together to assess the costs and benefits of various policy alternatives for addressing a risk. Sharing draft policies will help to collectively save time and effort and will likely result in clearer and 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.
Cataraqui Source Protection Committee	Cataraqui Source Protection Area	The entire Quinte area ultimately drains to the Cataraqui Source Protection Region. While it is likely impossible to track and quantify chronic contamination from the Quinte area, acute contamination from spills poses a risk to downstream communities such as Bath and Amherstview. There will be a need to consider existing agreements, policies, and emergency response plans, and to discuss technical findings and planning recommendations with the Cataraqui Source Protection Region.

7) Deliverables

The Clean Water Act and associated regulations outline the legislative requirements for deliverables in the Source Protection Program. Two tables have been developed to indicate the Work Plan to Complete the Assessment Report and the Work Plan to Complete the Source Protection Plan. These Tables outline the required deliverables in detail.

The Work Plan to Complete the Assessment Report

By Source Protection Area/ Drinking Water System Name	Task	Assigned Lead(s)	Estimated Completion Date	Estimated Cost
Quinte Source Protection Region	Coordinating and supporting projects for the Assessment Report	Quinte Source Protection Authority	2009-Oct- 30	\$2,708,172
Quinte Source Protection Region	Undertaking communications initiatives for the Assessment Report	Quinte Source Protection Authority	2009-Oct- 20	\$72,227
Quinte Source Protection Region	Information management for the Assessment Report preparation	Quinte Source Protection Authority	2009-Oct- 20	\$110,811
Quinte Source Protection Region	Undertaking a Watershed Characterization	Quinte Source Protection Authority	2008-Mar- 31	\$38,538
Quinte Source Protection Region	Conducting a Conceptual Water Budget	Quinte Source Protection Authority	2007-Jan- 12	\$210,349
Quinte Source Protection Region	Conducting a Tier 1 Water Budget Analysis and Stress Assessment	Quinte Source Protection Authority	2009-Mar- 31	\$249,120

By Source Protection Area/ Drinking Water System Name	Task	Assigned Lead(s)	Estimated Completion Date	Estimated Cost
Quinte Source Protection Region	Conducting a Tier 2 Water Budget Analysis and Stress Assessment	Quinte Source Protection Authority	2009-Mar- 31	\$96,000
Quinte Source Protection Region	Delineating and applying vulnerability scores to Highly Vulnerable Areas (HVAs)	Quinte Source Protection Authority	2008-Mar- 31	\$6,946
Quinte Source Protection Region	Identifying issues, inventorying threats and assessing hazards in HVAs	Quinte Source Protection Authority	2009-Sep- 30	\$0
Quinte Source Protection Region	Consultation on the overall proposed Assessment Report	Quinte Source Protection Authority	2009-Oct- 20	\$35,000
Municipal Residential Drinking Water Systems				
Point Anne Hamlet Water Treatment Plant	Delineating and applying vulnerability scores to Wellhead Protection Areas (WHPAs) or Intake Protection Zones (IPZs)	Quinte Source Protection Authority	2009-Mar- 31	\$50,000
A.L. Dafoe Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2007-Mar- 31	\$42,000
Deloro Well Supply	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2007-Dec- 31	\$38,000
Madoc Well Supply	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2006-Dec- 15	\$60,500
Tweed Well Supply	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2005-Jun- 30	\$15,000

By Source Protection Area/ Drinking Water System Name	Task	Assigned Lead(s)	Estimated Completion Date	Estimated Cost
Peats Point Subdivision Well Supply	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$36,500
Point Anne Hamlet Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2007-Mar- 31	\$42,000
Ameliasburgh Hamlet Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$5,000
Wellington Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$95,913
Picton Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$126,100
Madoc Well Supply	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2008-Oct- 31	\$40,000
Gerry O Connor Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2007-Mar- 31	\$42,000
Deseronto Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2006-Mar- 31	\$48,000
Picton Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$95,784
Madoc Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2008-Oct- 31	\$15,000

By Source Protection Area/ Drinking Water System Name	Task	Assigned Lead(s)	Estimated Completion Date	Estimated Cost
Madoc Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2008-Sep- 15	\$33,000
Peats Point Subdivision Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$15,000
Wellington Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$55,784
Ameliasburgh Hamlet Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2008-Mar- 31	\$0
Point Anne Hamlet Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$10,000
Point Anne Hamlet Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Mar- 31	\$11,000
Deseronto Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Mar- 31	\$20,500
A.L. Dafoe Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Mar- 31	\$31,000
Peats Point Subdivision Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2008-Sep- 30	\$0
Tweed Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2008-Sep- 30	\$33,000

By Source Protection Area/ Drinking Water System Name	Task	Assigned Lead(s)	Estimated Completion Date	Estimated Cost
Deloro Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Dec- 31	\$33,000
Gerry O Connor Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Mar- 31	\$26,000
Picton Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$34,608
Madoc Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Sep- 30	\$12,000
Tweed Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Sep- 30	\$12,000
Peats Point Subdivision Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Sep- 30	\$0
A.L. Dafoe Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Oct- 31	\$12,000
Deseronto Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Oct- 31	\$10,000
Point Anne Hamlet Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Oct- 31	\$4,000
Point Anne Hamlet Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$10,000

By Source Protection Area/ Drinking Water System Name	Task	Assigned Lead(s)	Estimated Completion Date	Estimated Cost
Ameliasburgh Hamlet Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Mar- 31	\$0
Gerry O Connor Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Oct- 31	\$4,000
Peats Point Subdivision Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$15,000
Madoc Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Oct- 31	\$15,000
Deloro Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2007-Dec- 31	\$9,000
Wellington Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2009-Mar- 31	\$14,608
Drinking Water Systems By Municipal Resolution				
Drinking Water Systems By Band Resolution				
Fully or Partially Exempt Drinking Water Systems				
Drinking Water Systems Included By Minister				

The Work Plan to Complete the Source Protection Plan

By Source Protection Area/ Drinking Water System Name	Task		Assigned Lead(s)	Estimated Completion Date	Estimated Cost
Quinte Source Protection		ng and supporting projects for the otection Plan (SPP)	Quinte Source Protection Authority	2012-Aug-21	\$2,190,000
Region Quinte Source Protection		ng communications initiatives for	Quinte Source Protection	2012-Aug-20	\$70,000
Region		Protection Plan	Authority	=0 1= 7 long =0	4.6,000
Quinte Source Protection Region		n management for Source Plan preparation	Quinte Source Protection Authority	2012-Aug-20	\$50,000
Quinte Source Protection Region	Policy dev water threa	elopment to address drinking ats (where required and/or e in Act/Regs)	Quinte Source Protection Authority	2012-Aug-20	\$0 *
Quinte Source Protection Region	Policy dev	elopment for monitoring (where disable and/or permissible in Act	Quinte Source Protection Authority	2012-Aug-20	\$0 *
Quinte Source Protection Region	•	elopment for Great Lakes where required/permissible in Act	Quinte Source Protection Authority	2012-Aug-20	\$0 *
Quinte Source Protection Region	Establishir implement	ng timelines for policy ation	Quinte Source Protection Authority	2012-Aug-20	\$0 *
Quinte Source Protection Region		on on the overall proposed Source	Quinte Source Protection Authority	2012-Aug-20	\$70,000
	Municipal Residential Drinking Water None		- racine	1	1
Drinking Water Systems By Municipal Resolution		None			
Drinking Water Systems By Band None Resolution					
Fully or Partially Exempt Drinking None Water Systems					
Drinking Water Systems Included By Mone Minister					

[•] It is anticipated that much of this work will be done in-house by staff and the SPC. The budget for staff and SPC is already accounted for in the first line of this chart. If the pending rules and regulation indicate that more work is require than what can be done in-house this line item will be amended.

8) Resources Available

The delivery of the Source Protection Program will be made possible by calling on many resources that are available. These resources include a core staff at Quinte Conservation, the Source Protection Authority, the Source Protection Committee, municipal staff and councils, First Nation staff and Band Council, Conservation Ontario, the Ministry of Natural Resources, the Ministry of the Environment, the local Health Units and various stakeholder and working groups.

The core staff at Quinte Conservation includes a Project Manager and various experts whose job is to support the work of the Source Protection Committee and engage all the partners throughout the process.

Quinte Region Source Protection Staff

Staff Member	Position
Terry Murphy	General Manager
Keith Taylor	Project Manager
Bryon Keene	Water Resources Manager
Mark Boone	Hydrogeologist
Lucille Fragomeni	Communications Manager
Julie Munro	Surface Water Specialist
Amy Dickens	GIS/Database Specialist
Lynette Lambert	Environmental/Water Quality Technician
Alana Nunn	Stewardship Coordinator
Nicole McAnally	SWP Administrative Assistant

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Quinte Source Protection Authority

Member	Municipality Represented
Robert Sager, Vice Chair	Township of Madoc
Jackie Denyes	City of Belleville
Justin Bray	Municipality of Tweed
Egerton Boyce	City of Belleville
Terry Cassidy	City of Quinte West
Stead Covert	Tudor & Cashel Townships
Eythel Grant	Township of Addington Highlands
Rita Cimprich	Municipality of Marmora & Lake
Dale Grant	Township of Stirling-Rawdon
Tom Simpson	Municipality of Centre Hastings
Tom Lafferty	City of Belleville
Roger Cole, Chair	Town of Greater Napanee
Gary Smith	Township of Central Frontenac
John Wise	Township of Stone Mills
William Robinson	Township of South Frontenac
Carl Bresee	Loyalist Township
Fred Lang	Tyendinaga Township
Edgar Tumak	Town of Deseronto
Wayne Drake	County of Prince Edward
George Underhill	County of Prince Edward
John Thompson	County of Prince Edward
Brian Marisett	County of Prince Edward
Nathan Koutroulides	County of Prince Edward
John Drechsler	County of Prince Edward
Stacey Hatch	County of Prince Edward
Monica Alyea	County of Prince Edward

The Source Protection Authority is made up of the Quinte Conservation Executive Committee and oversees the staff and the Source Protection Committee.

The Source Protection Committee is made up of members representing municipal, economic and public sectors as well as Liaison members from the Ministry of the Environment, the Health Unit and the Source Protection Authority.

Staff and councils of all municipalities and the Mohawks of the Bay of Quinte will be asked for input throughout the process.

Conservation Ontario will continue to offer support for the delivery of the Source Protection Program.

The Ministry of Natural Resources coordinates the transfer payments to the Source Protection Authority and assists with the development of the Water Budget work.

The Ministry of the Environment is responsible for developing policies and guidance for the program. They are also funding technical studies for municipal systems that are necessary to complete the Assessment Report.

There will be an effort to communicate with stakeholder groups and potentially working groups from various sectors in order to hear comments and suggestions and gain local knowledge. The Source Protection Committee has invited municipalities to form working groups around their municipal drinking water systems. Other working groups are being considered to represent complex sectors such as agriculture, industry and environment.

9) Cost

This section reflects not only the cost of the program to date but also the projected costs of the future work that needs to be carried out. The past costs are very accurate whereas the future costs are based on estimates. As several regulations have not been passed yet, it is difficult to anticipate the costs. However the cost laid out in the Terms of Reference will only be updated if there are major changes to the work being proposed. A more accurate budget will be presented through annual business plans. An example of a major change would be if a new municipal treatment system were to be brought into the Source Protection Planning process.

See Appendix A (Estimated Cost for Tasks By Fiscal Year)

10) Decision Making Process

It is critical to understand the decision making process throughout the Source Protection Program. One of the benefits of the program is that local Source Protection Committees prepare local reports and plans, with input from local municipalities, the Mohawks of the Bay of Quinte and stakeholders in order to develop Source Protection Plans that suit the local situation. Decisions at the Source Protection Committee level will be made by consensus whenever possible.

The Terms of Reference, the Assessment Report and the Source Protection Plan will be submitted to the Source Protection Authority to ensure that the work is complete before it is forwarded to the Minister of the Environment for approval.

Once approved by the Minister, the Source Protection Plan will be incorporated into municipal zoning bylaws and official plans

It should also be noted that First Nation involvement in the process is completely voluntary but comments, suggestions and traditional knowledge will be sought through the Assessment Report stage and the Source Protection Planning stage.

11) Schedule

The schedule outlined in the following chart is determined for the most part by the legislative requirements of the Clean Water Act and the associated regulations. The dates provided indicate the last possible date for each task, however there is nothing preventing the committee from being ahead of schedule.

Process Checklist

Regulatory Process	Completion Date	Done By
Give a copy of the comments described above to the Source Protection Committee.	2008-Sep-20	SP Authority
Make the Draft Proposed Terms of Reference available at other locations.	2008-May-09	SP Committee
Make the Draft Proposed Terms of Reference available at other locations.	2008-Aug-20	SP Committee
Municipal council resolutions have been passed agreeing upon work.	Not Applicable	SP Committee

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Regulatory Process	Completion Date	Done By
Notice must include information on a public meeting scheduled at least 21 days after the notice is published in the newspaper.	2008-May-09	SP Committee
Notification to band chiefs on the commencement of the Draft Proposed Terms of Reference.	2008-Jan-09	SP Committee
Notification sent to the municipal clerks on the commencement of the Draft Proposed Terms of Reference.	2007-Dec-19	SP Committee
Post the Draft Proposed Terms of Reference on the Internet for 30 days.	2008-Aug-20	SP Committee
Posting of the Draft Proposed Terms of Reference on Internet.	2008-May-09	SP Committee
Provide a copy of the Draft Proposed Terms of Reference to the chiefs of bands whose reserves are located in the Source Protection Area.	2008-May-09	SP Committee
Provide a copy of the Draft Proposed Terms of Reference to the clerks of municipalities located in the Source Protection Area.	2008-May-09	SP Committee
Provide a copy of the Draft Proposed Terms of Reference to the Source Protection Authority.	2008-Aug-20	SP Committee
Provide a copy of the Draft Proposed Terms of Reference to the chiefs of bands whose reserves are located in the Source Protection Area.	2008-Aug-20	SP Committee
Provide a copy of the Draft Proposed Terms of Reference to the clerks of municipalities located in the Source Protection Area.	2008-Aug-20	SP Committee
Provide a copy of the Draft Proposed Terms of Reference to groups that were established pursuant to the Great Lakes Water Quality Agreement of 1978 and involved in the development or implementation of Remedial Action Plans (RAP) and Lakewide Management Plans (LaMP's).	2008-May-09	SP Committee

Regulatory Process	Completion Date	Done By
Provide a copy of the Draft Proposed Terms of Reference to the Chairs of Source Protection Committees who have been listed in the table that describes matters that affect other Source Protection Regions.	2008-May-09	SP Committee
Provide any unresolved comments from municipalities and bands to the Minister as part of the approval package for the Terms of Reference.	2008-Oct-20	SP Authority
Provide any unresolved comments from municipalities and bands to the Source Protection Authority.	2008-Aug-20	SP Committee
Provisions have been made to consider Great Lakes Agreements.	2012-Apr-02	SP Committee
Publish a notice in newspaper for the public to view the Draft Proposed Terms of Reference on the Internet and at other locations (as determined by the Source Protection Committee).	2008-May-09	SP Committee
Receive comments from the 30 day Internet posting from the public, municipalities, bands, and other stakeholders.	2008-Sep-20	SP Authority
Requests for comments within 35 days of the notice of the Draft Proposed Terms of Rreference being published in the newspaper.	2008-May-09	SP Committee

12) Success factors/risks and restraints

As with any plan there are factors that bring about success and factors that hinder the process.

Success Factors

- 1) A local watershed approach is appropriate when dealing with water issues.
- Most people agree with the goal of providing a safe supply of drinking water.
- 3) The Government has committed funding for the planning process.
- 4) The Clean Water Act requires an open and transparent process with consultation built in throughout.
- 5) A qualified staff and Source Protection Committee have been assembled to carry out the work.
- 6) The scientific work that is being done is the most comprehensive work about source water for municipalities ever done in Ontario.

Risk Factors

- If the guidance and requirements of the Act and regulations are too complicated it will make it difficult for Source Protection Committees to succeed. It may also result in stakeholders not participating to the desired level. Solution: Strive to keep it simple.
- 2) If there is a delay in the passing of regulations it could impact the timing of the delivery of the program. Solution: Stay on schedule with the regulations and allow for flexibility on deadline if the delay is a result of late regulations.
- 3) If government over regulates the process it will hamper the flexibility required to write local plans to suit the local conditions. Solution: The government needs to recognize that flexibility is important and it may not be necessary to regulate all aspects such as data management.
- 4) Municipalities have already expressed concerns over the implementation costs once the plans are accepted. This may affect the level of municipal participation in the process. Solution: The government needs to be clear on how implementation will be carried out and to what level they are prepared to fund the associated costs.
- 5) We have already seen that public misconceptions and negativity around the Clean Water Act exists in some sectors. Rumours about meters on wells and septic inspection have persisted. Solution: Improve messaging at the provincial level. Most Source Protection Authorities have tried to address the rumours but a provincial effort is also required.

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6) Unknown factors such as how many drinking water systems will be added to the process by the Minister, the municipalities and the Mohawks of the Bay of Quinte, will cause some uncertainty at the local level. Solution: The government needs to consider very carefully the impact of elevating other systems into the Source Protection Planning Process. If the intention is to include many more systems such as clusters of private wells, then the level of effort required and the appropriate funding must also be recognized and addressed.

Final Statement

This Terms of Reference document is a snapshot of what has happened to date in the Quinte Source Protection Region and what lies ahead as we develop a Source Protection Plan. This particular draft is by no means the final Terms of Reference but is being circulated for discussion purposes. All comments received will be reviewed and considered by the Source Protection Committee before the final draft is submitted. The final draft will be submitted to the Minister of the Environment on October 20th, 2008.

If you have any questions or comments about this draft please forward them to:

Keith Taylor Project Manager

ktaylor@quinteconservation.ca

List of Appendices

Appendix A Estimated Cost for Tasks by Fiscal Year

- generated by Wizard

Appendix B Detailed Work Plan to Complete Assessment Report

- generated by Wizard

Appendix C Detailed Work Plan to Complete Source Protection Plan

- generated by Wizard

Appendix D Detailed Information on Municipal Residential Drinking

Water Systems

- generated by Wizard

Appendix E Summary of Financial Statistics

- generated by Wizard

Terms of Reference

Appendix A: Estimated Costs for Tasks by Fiscal Year

Fiscal Year defined as April 1 to March 31

Drinking Water System Category / Source Protection Area	Tasks	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
Quinte Source									
Protection Region									
	Coordinating and supporting projects for the Assessment Report	\$0	\$538,609	\$641,023	\$437,407	\$691,133	\$400,000	\$0	\$0
	Undertaking communications initiatives for the Assessment Report	\$0	\$1,640	\$30,122	\$10,465	\$20,000	\$10,000	\$0	\$0
	Information management for the Assessment Report preparation	\$0	\$68,702	\$17,109	\$0	\$15,000	\$10,000	\$0	\$0
	Undertaking a Watershed Characterization	\$0	\$17,835	\$20,703	\$0	\$0	\$0	\$0	\$0
	Conducting a Conceptual Water Budget	\$0	\$135,519	\$74,831	\$0	\$0	\$0	\$0	\$0

Drinking Water System Category / Source Protection Area	Tasks	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
	Conducting a Tier 1 Water Budget Analysis and Stress Assessment	\$0	\$0	\$35,920	\$143,200	\$70,000	\$0	\$0	\$0
	Conducting a Tier 2 Water Budget Analysis and Stress Assessment	\$0	\$0	\$0	\$0	\$96,000	\$0	\$0	\$0
	Delineating and applying vulnerability scores to HVAs	\$0	\$0	\$5,000	\$1,946	\$0	\$0	\$0	\$0
	Identifying issues, inventorying threats and assessing hazards in HVAs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Consultation on the overall proposed Assessment Report	\$0	\$0	\$0	\$0	\$20,000	\$15,000	\$0	\$0
	Coordinating and supporting projects for the Source Protection Plan (SPP)	\$0	\$0	\$0	\$0	\$0	\$300,000	\$720,000	\$740,000

Drinking Water System Category / Source Protection Area	Tasks	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
	Undertaking communications initiatives for the Source Protection Plan	\$0	\$0	\$0	\$0	\$0	\$10,000	\$20,000	\$20,000
	Information management for Source Protection Plan preparation	\$0	\$0	\$0	\$0	\$0	\$5,000	\$15,000	\$15,000
	Policy development to address drinking water threats (where required and/or permissible in Act/Regs)	\$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
	Policy development for Great Lakes elements (where required/permissible in Act & Regs)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Drinking Water System Category / Source Protection Area	Tasks	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
	Establishing timelines for policy implementation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Consultation on the overall proposed Source Protection Plan	\$0	\$0	\$0	\$0	\$0	\$10,000	\$20,000	\$20,000
Municipal Residential Drinking Water Systems									
	Delineating and applying vulnerability scores to WHPAs or IPZs	\$0	\$137,563	\$303,951	\$44,500	\$155,000	\$0	\$0	\$0
	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	\$0	\$0	\$200,069	\$83,000	\$96,000	\$0	\$0	\$0
	Assess risk in WHPAs or IPZs	\$0	\$0	\$29,216	\$9,000	\$114,000	\$0	\$0	\$0

Drinking Water System Category / Source Protection Area	Tasks	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
Drinking Water Systems By Municipal Resolution									
Drinking Water Systems by Band Resolution									
Drinking Water Systems Included by Minister									
Fiscal Year Total		\$0	\$899,867	\$1,357,943	\$729,518	\$1,277,133	\$760,000	\$775,000	\$795,000

Appendix B: Detailed Work Plan to Complete the Assessment Report

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source	Coordinating and supporting projects	Quinte Source Protection	2005-Jul-04	2009-Oct-30
Protection Region	for the Assessment Report	Authority		
Comments		Defined Geographic Area		Estimated Cost
This task includes coordinating and supporting projects for the development and completion of the Terms of Reference and Assessment Report including staff wages, benefits, support cost and training. It also includes Source Protection Committee per diems and support.		Quinte Source Protection Region		\$2,708,172

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source	Undertaking communications	Quinte Source Protection	2005-Apr-01	2009-Oct-20
Protection Region	initiatives for the Assessment Report	Authority		
Comments		Defined Geographic Area		Estimated Cost
The costs reflected h	nere represent the communications	Quinte Source Protection Region		\$72,227
efforts throughout the	e process which include the			
development and ma	aintenance of a dedicated website and			
other communication	products for the Assessment Report.			

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source	Information management for the	Quinte Source Protection	2005-Apr-01	2009-Oct-20
Protection Region	Assessment Report preparation	Authority		
Comments		Defined Geographic Area		Estimated Cost
These costs include software licenses and maintenance and the overall management of data acquired for the purposes of the Assessment Report work.		Quinte Source Protection Region	\$110,811	

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source	Undertaking a Watershed	Quinte Source Protection	2005-Sep-01	2008-Mar-31
Protection Region	Characterization	Authority		
Comments		Defined Geographic Area		Estimated Cost
Characterization Rein the Coordinating a Protection Plan (SPI	ning and writing the Watershed port is reflected in the staff cost shown and supporting projects for the Source P) section. The costs shown here as a professional writer/editor and	The Watershed Characterization describes the total Quinte Source Region. This includes all of Princ County. This also includes the Nalmon River and Napanee River There are also some smaller water adjacent to the major watersheds included in the Quinte Source Pro These watersheds drain into the Name of Source Processing Country (Name of Source Processing Country (N	e Protection te Edward Moira River, r watersheds. ersheds that that are otection Region.	\$38,538

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source	Conducting a Conceptual Water	Quinte Source Protection	2005-Jun-30	2007-Jan-12
Protection Region	Budget	Authority		
Comments		Defined Geographic Area		Estimated Cost
These costs include outside consulting firms assisting with the development of ground and surface water models and peer review costs.		Quinte Source Protection Region		\$210,349

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source	Conducting a Tier 1 Water Budget	Quinte Source Protection	2006-Apr-01	2009-Mar-31
Protection Region	Analysis and Stress Assessment	Authority		
Comments		Defined Geographic Area	Estimated Cost	
These costs include assistance from outside consulting firms to develop models and peer review costs.		Quinte Source Protection Regi	\$249,120	

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date	
Quinte Source Protection Region	Conducting a Tier 2 Water Budget Analysis and Stress Assessment	Quinte Source Protection Authority	2008-Jun-02	2009-Mar-31	
Comments		Defined Geographic Area	Defined Geographic Area		
It is anticipated that a Tier 2 Water Budget might be necessary in some areas of the watershed.		Specific locations to conduct a identified in the Tier 1 exercise	\$96,000		

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Delineating and applying vulnerability scores to Highly Vulnerable Aquifers (HVAs)	Quinte Source Protection Authority	2006-Apr-01	2008-Mar-31
Comments		Defined Geographic Area		Estimated Cost
The expenditures here were related to field analysis.		Quinte Source Protection Region		\$6,946

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Identifying issues, inventorying threats and assessing hazards in HVAs	Quinte Source Protection Authority	2008-Oct-01	2009-Sep-30
Comments		Defined Geographic Area		Estimated Cost
This task will be done primarily in-house using existing staff with input from the SPC and municipalities. Therefore it is not anticipated that there will be significant funding required over and above the staff wages and committee costs.		Identified Highly Vulnerable Aqui Quinte Source Protection Region		\$0

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source	Consultation on the overall Proposed	Quinte Source Protection	2008-Oct-20	2009-Oct-20
Protection Region	Assessment Report	Authority		
Comments		Defined Geographic Area		Estimated Cost
These expenditures involve open houses, mail outs to municipalities, First Nation and stakeholder groups and other consultation efforts as required. There will also be consultation with groups associated with Remedial Action Plans and Lake Management Plans.		Quinte Source Protection Region		\$35,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Point Anne Hamlet Water Treatment Plant	Delineating and applying vulnerability scores to Wellhead Protection Areas (WHPAs) or Intake Protection Zones (IPZs)	Quinte Source Protection Authority	2008-Apr-30	2009-Mar-31
Comments		Defined Geographic Area		Estimated Cost
The Point Anne Intake delivers water to a concrete well casing prior to the treatment facility. The casing is perforated which allows ground infiltration into the raw water. As a result, it will be necessary to delineate a wellhead protection area around this casing.		Bay of Quinte - East of Belleville		\$50,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
A.L. Dafoe Water	Delineating and applying vulnerability	Quinte Source Protection	2006-Apr-01	2007-Mar-31
Treatment Plant	scores to WHPAs or IPZs	Authority		
Comments		Defined Geographic Area		Estimated Cost
The intake is located in the Napanee River and is a backup supply for the Town of Napanee, (the main intake for the town is located within the jurisdiction of the Cataraqui Source Protection Area). The Intake Protection Zone is based on the two hour time of travel upstream of the intake.		Napanee River		\$42,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Deloro Well	Delineating and applying vulnerability	Quinte Source Protection	2007-Apr-02	2007-Dec-31
Supply	scores to WHPAs or IPZs	Authority		
Comments		Defined Geographic Area		Estimated Cost
This task focuses on the delineation of the WHPA and applying vulnerability scores for the Deloro Well. Peer review is accounted for in the estimated costs for this task. Consultations are accounted for under "Formal consultations for the Assessment Report tasks".		Village of Deloro		\$38,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Madoc Well	Delineating and applying vulnerability	Quinte Source Protection	2006-Apr-03	2006-Dec-15
Supply	scores to WHPAs or IPZs	Authority		
Comments		Defined Geographic Area		Estimated Cost
This work included collection of field data.		Village of Madoc		\$60,500

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Tweed Well	Delineating and applying vulnerability	Quinte Source Protection	2005-Apr-04	2005-Jun-30
Supply	scores to WHPAs or IPZs	Authority	·	
Comments	•	Defined Geographic Area		Estimated Cost
This work is complete.		Village of Tweed		\$15,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Peats Point Subdivision Well Supply	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2008-Jan-02	2009-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This well is a GUDI well and therefore will also need to		Bay of Quinte - Peats Point	_	\$36,500
have IPZ delineation	work done.			

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Point Anne Hamlet Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2006-Apr-01	2007-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This work is complete.		Bay of Quinte - East of Belleville		\$42,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Ameliasburgh Hamlet Water	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2007-Apr-02	2009-Mar-31
Treatment Plant	Scores to WHFAS OF IFZS	Authority		
Comments		Defined Geographic Area		Estimated Cost
The work is being done in house so the costs are reflected in the staff wages section. The watershed is being flown for Lidar photography to verify the contours and watershed boundary. This will help determine the IPZs.		Roblin Lake area		\$5,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Wellington Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2006-Jan-02	2009-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This intake is being studied as part of the Lake Ontario Collaborative Study		Lake Ontario near Wellington		\$95,913

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Picton Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2006-Jan-02	2009-Mar-31
Comments	COCIOC TO VITIL AC SI II ZE	Defined Geographic Area	L	Estimated Cost
The work on this intake was started as part of the Lake Ontario Collaborative Study. It has become obvious that this intake is more complicated than most Lake Ontario intakes. There it is going to be studied individually starting in June 2008.		Picton Bay - Picton		\$126,100

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Madoc Well Supply	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2008-Jun-02	2008-Oct-31
Comments		Defined Geographic Area		Estimated Cost
This well is a Groundwater Under the Direct Influence of Surface water (GUDI) and therefore require a IPZ study for the creek near the well.		Village of madoc		\$40,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Gerry O Connor Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2006-Apr-03	2007-Mar-31
Comments		Defined Geographic Area		Estimated Cost
Intake Protection Zones have been drafted but require fine tuning once guidance is provided by the province.		Bay of Quinte - Belleville		\$42,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Deseronto Water Treatment Plant	Delineating and applying vulnerability scores to WHPAs or IPZs	Quinte Source Protection Authority	2005-Apr-01	2006-Mar-31
Comments		Defined Geographic Area		Estimated Cost
The intake protection zone has been drafted but will be fine tuned once the guidance is provided by the province		Bay of Quinte - Deseronto area		\$48,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Picton Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2006-Jan-02	2009-Mar-31
Comments		Defined Geographic Area		Estimated Cost
Ontario Collaboration this intake is more of	rake was started as part of the Lake ve Study. It has become obvious that complicated than most Lake Ontario going to be studied individually starting	Picton Bay - Picton		\$95,784

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Madoc Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2008-Jun-02	2008-Oct-31
Comments		Defined Geographic Area		Estimated Cost
This work is related to the IPZ (GUDI) work		Vialige of Madoc		\$15,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Madoc Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Apr-02	2008-Sep-15
Comments		Defined Geographic Area		Estimated Cost
This work is compl	ete.	Village of Madoc		\$33,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Peats Point Subdivision Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2008-Apr-01	2009-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This work is being of	lone for the IPZ (GUDI)	Bay of Quinte - Peats Point		\$15,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Wellington Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2006-Jan-02	2009-Mar-31
Comments	•	Defined Geographic Area	·	Estimated Cost
This intake is being studied as part of the Lake Ontario Collaborative Study		Lake Ontario near Wellington		\$55,784

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Ameliasburgh Hamlet Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Apr-02	2008-Mar-31
Comments		Defined Geographic Area		Estimated Cost
The work is being done in house so costs are reflected in the staff wages section.		Roblin Lake area		\$0

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Point Anne Hamlet Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2008-Apr-01	2009-Mar-31
Comments	·	Defined Geographic Area		Estimated Cost
Identifying issues, inventorying threats and assessing hazards in WHPA.		Bay of Quinte - East of Bellevill	le	\$10,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Point Anne Hamlet Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2006-Apr-01	2007-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This task will be completed for its IPZ.		Bay of Quinte - East of Belleville		\$11,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Deseronto Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2006-Apr-01	2007-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This work is completed.		Bay of Quinte - Deseronto are	a	\$20,500

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
A.L. Dafoe Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2006-Apr-01	2007-Mar-31
Comments		Defined Geographic Area	•	Estimated Cost
Within the Intake Protection Zones 1 and 2 an issues evaluation and inventory of threats has taken place.		Napanee River		\$31,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Peats Point Subdivision Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Apr-02	2008-Sep-30
Comments	•	Defined Geographic Area		Estimated Cost
This work is being done in house and therefore the cost is reflected in the overall staffing costs.		Bay of Quinte - Peats Point		\$0

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Tweed Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Apr-02	2008-Sep-30
Comments		Defined Geographic Area		Estimated Cost
This work is complete.		Village of Tweed		\$33,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Deloro Well Supply	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2007-Apr-02	2007-Dec-31
Comments		Defined Geographic Area		Estimated Cost
This work is comp	lete.	Village of Deloro	_	\$33,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Gerry O Connor Water Treatment Plant	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Quinte Source Protection Authority	2006-Apr-01	2007-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This work is complete.		Bay of Quinte - Belleville		\$26,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Picton Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2006-Jan-02	2009-Mar-31
Comments		Defined Geographic Area	l	Estimated Cost
The work on this intake was started as part of the Lake Ontario Collaborative Study. It has become obvious that this intake is more complicated than most Lake Ontario intakes. There it is going to be studied individually starting in June 2008.		Picton Bay - Picton		\$34,608

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Madoc Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Apr-01	2008-Sep-30
Comments		Defined Geographic Area	•	Estimated Cost
The consultant is waiting for the Ministry of the Environment to create look up tables for potential contaminates before completing this work.		Village of Madoc area		\$12,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Tweed Well	Assess risk in WHPAs or IPZs	Quinte Source Protection	2008-Apr-04	2008-Sep-30
Supply		Authority		
Comments		Defined Geographic Area		Estimated Cost
The consultant is waiting for the Ministry of the Environment to create look up tables for potential contaminates before completing this work.		Village of Tweed		\$12,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Peats Point Subdivision Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Apr-07	2008-Sep-30
Comments		Defined Geographic Area		Estimated Cost
This work is being done in house and therefore the cost is reflected in the overall staffing costs.		Bay of Quinte - Peats Point		\$0

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
A.L. Dafoe Water	Assess risk in WHPAs or IPZs	Quinte Source Protection	2006-Apr-01	2008-Oct-31
Treatment Plant		Authority		
Comments		Defined Geographic Area		Estimated Cost
	aiting for the Ministry of the Environment	Napanee River		\$12,000
-	oles for potential contaminates before			
completing this world	₹.			

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Deseronto Water	Assess risk in WHPAs or IPZs	Quinte Source Protection	2006-Apr-01	2008-Oct-31
Treatment Plant		Authority		
Comments		Defined Geographic Area		Estimated Cost
	aiting for the Ministry of the Environment	Bay of Quinte at Deseronto		\$10,000
-	oles for potential contaminates before			
completing this work	ζ.			

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Point Anne Hamlet Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2006-Apr-01	2008-Oct-31
Comments		Defined Geographic Area		Estimated Cost
For assessing risks in its IPZ. The consultant is waiting for the Ministry of the Environment to create look up tables for potential contaminates before completing this work.		Bay of Quinte - East of Belleville		\$4,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Point Anne Hamlet Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Apr-01	2009-Mar-31
Comments		Defined Geographic Area		Estimated Cost
Assessing risks in its WHPA.		Bay of Quinte - East of Bellevil	le	\$10,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Ameliasburgh Hamlet Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2007-Apr-02	2008-Mar-31
Comments		Defined Geographic Area	·	Estimated Cost
This work is being done in house and therefore the cost is reflected in the overall staffing costs.		Roblin Lake area		\$0

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Gerry O Connor Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2006-Apr-01	2008-Oct-31
Comments		Defined Geographic Area	•	Estimated Cost
	aiting for the Ministry of the Environment bles for potential contaminates before	Bay of Quinte - Belleville area		\$4,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Peats Point Subdivision Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2008-Apr-01	2009-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This work is for the IPZ (GUDI)		Bay of Quinte - Peats Point		\$15,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Madoc Well	Assess risk in WHPAs or IPZs	Quinte Source Protection	2008-Jun-02	2008-Oct-31
Supply		Authority		
Comments		Defined Geographic Area		Estimated Cost
This work is for the IPZ (GUDI)		Village of Madoc		\$15,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Deloro Well Supply	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2007-Apr-02	2007-Dec-31
Comments		Defined Geographic Area		Estimated Cost
This work is complete but will be checked once look up tables are provided.		Village of Deloro		\$9,000

By Drinking Water System Name	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Wellington Water Treatment Plant	Assess risk in WHPAs or IPZs	Quinte Source Protection Authority	2006-Jan-02	2009-Mar-31
Comments		Defined Geographic Area		Estimated Cost
This intake is being studied as part of the Lake Ontario Collaborative Study		Lake Ontario near Wellington		\$14,608

Appendix C Detailed Work Plan to Complete the Source Protection Plan

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Coordinating and supporting projects for the Source Protection Plan (SPP)	Quinte Source Protection Authority	2009-Nov-02	2012-Aug-21
Comments		Defined Geographic Area		Estimated Cost
funding requirement been projected with the fiscal year 2012/ pro-rated to take into until the due date for (October 20, 2012). Protection Program	Quinte Source Protection Region Quinte Source Protection Region		\$2,190,000	

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Undertaking communications initiatives for the Source Protection Plan	Quinte Source Protection Authority	2009-Aug-20	2012-Aug-20
Comments		Defined Geographic Area		Estimated Cost
The costs reflected here represent the communications efforts throughout the process which include the maintenance of a dedicated website and other communication products for the Source Protection Plan.		Quinte Source Protection Regio	n	\$70,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Information management for Source Protection Plan preparation	Quinte Source Protection Authority	2009-Aug-20	2012-Aug-20
Comments		Defined Geographic Area		Estimated Cost
These costs include software licenses and maintenance and the overall management of data acquired for the purposes of the Source Protection Plan work.		Quinte Source Protection Region		\$50,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Policy development to address drinking water threats (where required and/or permissible in Act/Regs)	Quinte Source Protection Authority	2009-Aug-20	2012-Aug-20
Comments		Defined Geographic Area		Estimated Cost
This task will be done primarily in-house using existing staff with input from the SPC and municipalities. Therefore it is not anticipated that there will be significant funding required over and above the staff wages and committee costs.		Quinte Source Protection Region		\$0

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Policy development for monitoring (where required, advisable and/or permissible in Act & Regs)	Quinte Source Protection Authority	2009-Aug-20	2012-Aug-20
Comments		Defined Geographic Area		Estimated Cost
with input from the S not anticipated that	ne primarily in-house using existing staff SPC and municipalities. Therefore it is there will be significant funding required staff wages and committee costs.	Quinte Source Protection Region		\$0

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Policy development for Great Lakes elements (where required/permissible in Act & Regs)	Quinte Source Protection Authority	2009-Aug-20	2012-Aug-20
Comments		Defined Geographic Area		Estimated Cost
with input from the solution anticipated that	ne primarily in-house using existing staff SPC and municipalities. Therefore it is there will be significant funding required staff wages and committee costs.	Quinte Source Protection Region		\$0

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Establishing timelines for policy implementation	Quinte Source Protection Authority	2009-Aug-20	2012-Aug-20
Comments	,	Defined Geographic Area		Estimated Cost
with input from the S not anticipated that	te primarily in-house using existing staff SPC and municipalities. Therefore it is there will be significant funding required staff wages and committee costs.	Quinte Source Protection Region		\$0

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Quinte Source Protection Region	Consultation on the overall Proposed Source Protection Plan	Quinte Source Protection Authority	2009-Aug-20	2012-Aug-20
Comments		Defined Geographic Area		Estimated Cost
municipalities, First other consultation e	involve open houses, mail outs to Nation and stakeholder groups and fforts as required. There will also be oups associated with Remedial Action nagement Plans.	Quinte Source Protection Region		\$70,000

Appendix D: Detailed Information on Municipal Residential Drinking Water System(s)

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220000987	Picton Water Treatment Plant	Prince Edward, The Corporation of the County of	Prince Edward, The Corporation of the County of	Surface Water	
Number of	Comments					
Surface Water Intakes						
2		n for the intake is being consi selp reduce the water quality r			ended further into th	ne Picton

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220008729	Wellington Water Treatment Plant	Prince Edward, The Corporation of the County of	Prince Edward, The Corporation of the County of	Surface Water	
Number of Surface Water Intakes	Comments					
1	Intake in Lake	e Ontario 1.6 km off shore				

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220005697	Ameliasburgh Hamlet Water Treatment Plant	Prince Edward, The Corporation of the County of	Prince Edward, The Corporation of the County of	Surface Water	
Number of Surface Water Intakes	Comments					
1		located in Roblin Lake. This The delineation of the Intake				ed in the

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220005704	Peats Point Subdivision Well Supply	Prince Edward, The Corporation of the County of	Prince Edward, The Corporation of the County of	Groundwater	1
Number of Surface Water Intakes	Comments					
	The well at P	eats Point is a GUDI and will	require an IPZ stud	y as well as the WHF	PA work.	

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220001628	Gerry O Connor Water Treatment Plant	Belleville, The Corporation of the City of	Belleville, The Corporation of the City of	Surface Water	0
Number of Surface Water Intakes	Comments					
2	Intakes are lo	cated in the Bay of Quinte.				

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220004359	Point Anne Hamlet Water Treatment Plant	Belleville, The Corporation of the City of	Belleville, The Corporation of the City of	Surface and Groundwater	1
Number of Surface Water Intakes	Comments					
1	This is primar	rily a surface water system bu	it ground water also	o infiltrates into the s	ystems.	

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220001593	Deseronto Water Treatment Plant	Deseronto, Town of	Greater Napanee Utilities	Surface Water	
Number of Surface Water Intakes	Comments					
1	The intake is	in the Bay of Quinte 480 m of	ffshore.			

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220002226	A.L. Dafoe Water Treatment Plant	Greater Napanee, The Corporation of the Town of	Greater Napanee Utilities	Surface Water	
Number of	Comments					
Surface Water						
Intakes						
1		ckup intake for the Town of N the Cataraqui Source Protect		he Napanee River.	The primary intake	in the

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220001557	Tweed Well Supply	Tweed, The Corporation of the Municipality of	Ontario Clean Water Agency, Nanticoke Hub	Groundwater	2
Number of Surface Water Intakes	Comments					
	There are two wells that supply the Tweed Water Treatment Plant.					

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220001575	Madoc Well Supply	Centre Hastings, The Corporation of the Municipality of	Ontario Clean Water Agency	Groundwater	2
Number of Surface Water Intakes	Comments					
	There are two wells that are used as a source of water for the municipal water system in the Village of Madoc.					

Drinking Water System Type (planned or existing)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Source Water Type (surface, ground, both)	Number of Wells
Existing	220001584	Deloro Well Supply	Marmora and Lake, The Corporation of the Municipality of	Marmora and Lake, The Corporation of the Municipality of	Groundwater	1
Number of Surface Water Intakes	Comments					
	The Wellhead Protection Area around this well was originally done as part of the 2003 Groundwater studies. The work needed to be upgraded for the purposes of the Source Protection Program.					

Appendix E : 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
	Quinte Source Protection Region	\$3,527,164	\$2,380,000	\$5,907,164
Municipal Residential Drinking Water Systems				
	A.L. Dafoe Water Treatment Plant	\$85,000		\$85,000
	Ameliasburgh Hamlet Water Treatment Plant	\$5,000		\$5,000
	Deloro Well Supply	\$80,000		\$80,000
	Deseronto Water Treatment Plant	\$78,500		\$78,500
	Gerry O Connor Water Treatment Plant	\$72,000		\$72,000
	Madoc Well Supply	\$175,500		\$175,500
	Peats Point Subdivision Well Supply	\$66,500		\$66,500
	Picton Water Treatment Plant	\$256,493		\$256,493
	Point Anne Hamlet Water Treatment Plant	\$127,000		\$127,000
	Tweed Well Supply	\$60,000		\$60,000
	Wellington Water Treatment Plant	\$166,305		\$166,305

Quinte Region Source Protection Committee

Terms of Reference

Drinking Water			
Systems By Municipal			
Resolution			
Drinking Water			
Systems By Band			
Resolutions			
Drinking Water			
Systems Included By			
Minister			
Total Estimated Costs	\$4,776,461	\$2,380,000	\$7,156,461

Appendix F: 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	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 developed.
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 developed.
Assessment Report Preparation	Conducting a Tier 1 Water Budget Analysis and Stress Assessment	Conducting a Tier 1 water budget analysis, stress assessment, and delineation of significant groundwater recharge areas. 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 developed.

Subject Area	Task Name	Full Task Description
Assessment Report Preparation	Conducting a Tier 2 Water Budget Analysis and Stress Assessment	If determined necessary from a Tier 1 Water Budget Analysis and Stress Assessment, conducting a Tier 2 Water Budget Analysis and Stress Assessment, and refining the delineation of significant groundwater recharge areas. 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 developed.
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 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 developed.
Assessment Report Preparation	Delineating and applying vulnerability scores to HVAs	Delineating the location and extent of Highly Vulnerable Aquifers (HVAs) 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 developed.
Assessment Report Preparation	Identifying issues, inventorying threats and assessing hazards in HVAs	Listing and describing drinking water quality issues, inventorying threats and assessing hazards (including uncertainty analysis) in the 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 developed.
Assessment Report Preparation	Assessing risks in HVAs	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 developed.
Assessment Report Preparation	Applying vulnerability scores to SGRAs	Applying vulnerability scores to Significant Groundwater Recharge Areas (SGRAs) 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 developed.

Subject Area	Task Name	Full Task Description
Assessment Report Preparation	Identifying issues, inventorying threats and assessing hazards in SGRAs	Listing and describing drinking water quality issues, inventorying threats and assessing hazards (including uncertainty analysis) in the Significant Groundwater Recharge Areas (SGRAs). Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules, and guidance when they are developed.
Assessment Report Preparation	Assessing risk in SGRAs	Identifying any significant, moderate, low, and negligible drinking water threats, undertaking an issues evaluation, and analyzing uncertainty in Significant Groundwater Recharge Areas (SGRAs). Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules, and guidance when they are developed.
Assessment Report Preparation	Delineating and applying vulnerability scores to WHPAs or IPZs	Delineating the location and extent of the vulnerable area around a drinking water system (Wellhead Protection Areas (WHPAs) for drinking water systems using groundwater or Intake Protection Zones (IPZs) 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 developed.
Assessment Report Preparation	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	Listing and describing drinking water quality issues, inventorying threats and assessing hazards (including uncertainty analysis) in Wellhead Protection Areas (WHPAs) and/or Intake Protection Zones (IPZs). Details on how to complete this task will be available in the Assessment Report Regulation, Director's Rules, and guidance when they are developed.
Assessment Report Preparation	Assess risk in WHPAs or IPZs	Identifying any significant, moderate, low, and negligible drinking water threats, undertaking an issues evaluation, and analysing uncertainty in Wellhead Protection Areas (WHPAs) or Intake Protection Zones (IPZs). 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 developed.

Subject Area	Task Name	Full Task Description
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 developed.
Assessment Report Preparation		If required, add other tasks to complete the Assessment Report. Describe in detail.
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 developed.
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 developed.

Subject Area	Task Name	Full Task Description
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 developed.
Source Protection Plan Preparation	Establishing timelines for policy implementation	Establishing timelines for policy implementation after all policies for the SPP 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 developed.
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 developed.
Source Protection Plan Preparation		If required, add other tasks to complete the Source Protection Plan. Describe in detail.

Appendix G : Terms of Reference Timelines

