



Approved Terms of Reference for Sault Ste. Marie
Region Source Protection Area

Sault Ste. Marie Region Source Protection Committee

Approved February 5, 2009

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Glossary of Terms

[Note: the abridged definitions in this glossary have been prepared to assist readers of this Terms of Reference document. For additional definitions, please refer to provincial legislation, regulations, and technical standards].

Assessment report means a technical document that is prepared by a source protection committee under Section 15 of the *Clean Water Act, 2006* (and forthcoming regulations) to record its knowledge of a source protection area, and to rank *risks* to *drinking water* within that area. Each report is approved by the Ontario Ministry of the Environment.

Clean Water Act, 2006 means the legislation passed by the Ontario government outlining the rules and regulations for the Drinking Water Source Protection program. Its purpose "to protect existing and future sources of drinking water."

Drinking water means (a) water intended for human consumption or (b) water that is required by an Act, regulation, order, municipal by-law or other document issued under the authority of an Act, (i) to be potable, or (ii) to meet or exceed the requirements of the prescribed drinking water quality standards.

Drinking water system means a system of works, excluding plumbing, that is established for the purpose of providing users of the system with *drinking water* and that includes, (a) any thing used for the collection, production, treatment, storage, supply or distribution of water, (b) any thing related to the management of residue from the treatment process or the management of the discharge of a substance into the natural environment from the treatment system, and (c) a well or intake that serves as the source or entry point of raw water supply for the system.

Drinking water threat means an activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of *drinking water*.

Highly vulnerable aquifer (HVA) means an area where (a) water is conveyed through the ground and (b) pollutants on the surface could readily enter the groundwater and contaminate it.

Intake protection zone (IPZ) means the area of land and water that contributes *source water* to a *drinking water system* intake within a specified distance, period of flow time (for example, two hours), and/or watershed area.

MOE means the Ontario Ministry of the Environment

Precautionary Approach means when there is some degree of uncertainty related to the data or data gaps which are used to make a decision about a perceived risk then a cautious approach will be taken such as an appropriate effort to mitigate the risk.

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Risk means the likelihood of a drinking water threat (a) rendering a drinking water source impaired, unusable or unsustainable, or (b) compromising the effectiveness of a drinking water treatment process, resulting in the potential for adverse human health effects.

Safe Drinking Water Act, 2002 (SDWA) means the legislation passed by the Ontario government with the purposes of "1) To recognize that the people of Ontario are entitled to expect their drinking water to be safe. 2) To provide for the protection of human health and the prevention of drinking water health hazards through the control and regulation of drinking water systems and drinking water testing."

Significant groundwater recharge area (SGRA) means an area in which (a) there is a high volume of water moving from the surface into the ground and (b) groundwater serves either as *source water* or the water that supplies a coldwater ecosystem.

Source protection means a program of education, stewardship, planning, infrastructure, and regulation activities that together serve to help prevent the contamination or overuse of *source water*.

Source protection area means those lands and waters that have been defined under Ontario Regulation 284/07 as the "study area" for an *assessment report* and a *source protection plan* under the *Clean Water Act, 2006*.

Source protection authority (SPA) means a conservation authority or other person or body that is required to exercise powers and duties under the *Clean Water Act, 2006*. The Sault Ste. Marie Region Source Protection Authority is composed of the Board of Directors of the Sault Ste. Marie Region Conservation Authority.

Source protection committee (SPC) means a group of individuals who have been appointed under the *Clean Water Act, 2006* by a *source protection authority* to coordinate *source protection* activities for a *source protection area*. The Sault Ste. Marie Region Source Protection Committee is composed of a provincially appointed Chair (Mr. Subhash Verma, P. Eng.), plus 8 other members who were appointed by the Sault Ste. Marie Region Source Protection Authority from the community. There are three members who represent municipalities, two who represents the aggregate and water distribution sector, and three who represent other interests such as environmental organizations and the general public. The Source Protection Committee also includes four non-voting representatives from: (1) the Sault Ste. Marie Source Protection Authority, (2) Algoma Public Health, (3) the Ontario Ministry of the Environment, (4) Batchewana First Nation.

Source protection plan (SPP) means a document that is prepared by a *source protection committee* under Section 22 of the *Clean Water Act, 2006* (and forthcoming regulations) to direct *source protection* activities in a *source protection area*. Each plan is approved by the Ontario Ministry of the Environment.

Source protection region (SPR) means two or more *source protection areas* that have been grouped together under Ontario Regulation 284/07.

Source water means untreated water that is found in groundwater aquifers and surface water lakes and rivers that is used to supply a *drinking water system*.

Tier 1 Water Budget means the simplified , yet structured means to estimate water flow volumes and compared to consumptive demand.

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Tier 2 Water Budget means the use of more detailed and complex tools to estimate water flow volumes and compared to consumptive demand

Vulnerable area means (a) a *significant groundwater recharge area*, (b) a *highly vulnerable aquifer*, (c) a *surface water intake protection zone*, or (d) a *wellhead protection area*.

Water budget means a description and analysis of the overall movement of water within each watershed in the *source protection area* taking into consideration surface water and groundwater features, land cover (e.g. proportion of urban versus rural uses), human-made structures (e.g. dams, channel diversions, water crossings), and water takings.

Watershed means the area of land that contributes water to a lake, river, or stream.

Watershed characterization means a general description of the *watersheds*, communities, *source water*, *drinking water systems*, patterns of water use, and *drinking water matters* within a given *source protection area*.

Wellhead protection area (WHPA) means the surface and subsurface area surrounding a well that supplies a *drinking water system*, through which contaminants are reasonably likely to move so as to eventually reach the well.

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Source Protection Committee Mission Statement

The Mission of the Sault Ste. Marie Region Source Protection Committee, in cooperation with local and provincial authorities, is to develop and maintain a science-based regulatory framework that aims to protect the quality and quantity of drinking water sources for residents of Sault Ste. Marie and area.

Background

The Province of Ontario has embarked on a comprehensive study of all 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 a Source Protection Committee and geographic study areas called Source Protection Regions and Source Protection Areas. The Source Protection Committee (SPC) has the responsibility to guide the development of source protection plans for each of the Source Protection Areas (SPA) within their respective Source Protection Region (SPR).

The first step for the SPC in preparing a source protection plan is to develop a comprehensive Terms of Reference (ToR) that will outline the technical studies required, the cost and who will perform the work. In the first set of regulations passed under the *Clean Water Act, 2006* this work plan referred to as a *Terms of Reference Regulation 287/07* outlines the requirements for how to develop the ToR, the content and the minimum consultation requirements to get local input included. Prior to the *Clean Water Act, 2006* local municipalities and conservation authorities have been promoting and implementing source water protection for decades. 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 SPC develops a work plan for source protection plan (SPP), it is imperative that this new governance structure builds on the success and momentum of existing partnerships and watershed initiatives.

Introduction

This document represents the ToR for developing a source protection plan for the Sault Ste. Marie Region SPA (Figure 1). The ToR needs to focus on two principal products, the Assessment Report and the Source Protection Plan. The tasks required to complete each of these products started before the *Clean Water Act, 2006* was enacted. The Ministry of the Environment (MOE) has provided funding since 2005 to initiate watershed and technical studies that would integrate into the assessment report and ultimately into source protection plans.

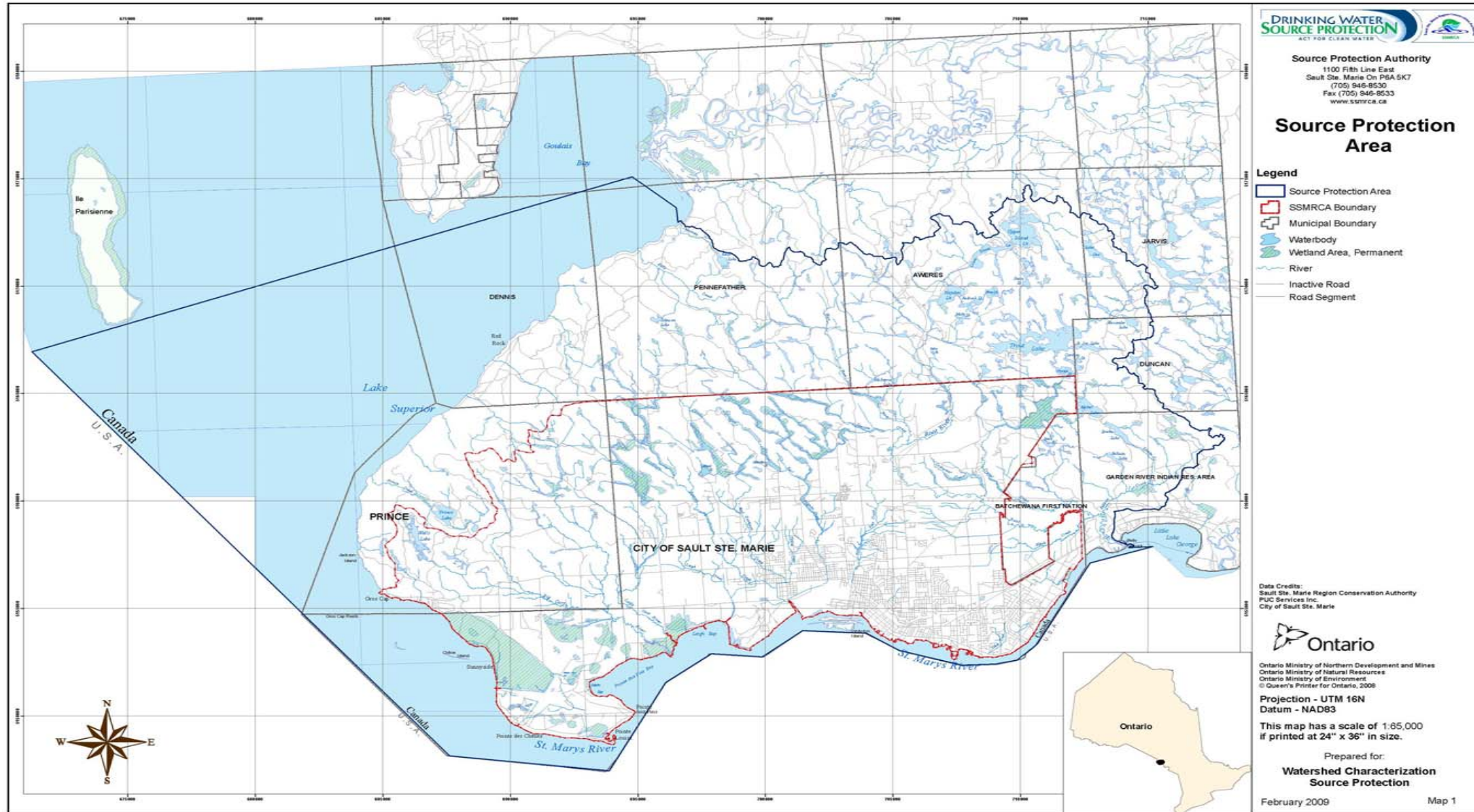
Our Source Protection Area

The Sault Ste. Marie Source Region Source Protection Area (SSMR-SPA) is situated within the District of Algoma, along the north shore of the St. Marys River and Lake Superior. The planning area encompasses the Single Tier Municipalities of Sault Ste. Marie and the Township of Prince, portions of the townships of Dennis, Pennefather, Aweres, Jarvis, Duncan as well as a small area of the Garden River First Nation and the Batchewana First Nation. Both Lake Superior and the St. Marys River are shared resources of Canada and the United States. The boundary of the planning region extends out to the international border along its entire width. The land-based area of the planning region is 522 km² while the total area of the planning region is 775 km² including the land and water based areas.

All watersheds within the study area drain southward, and typically drain areas within both the Precambrian uplands and the terraced clay lowlands. A number of smaller subwatersheds are adjacent to the St. Marys River, which flow directly to the river. The Source Protection Planning Area includes the Canadian component of the St. Marys watershed. The SSMR-SPA consists of a number of smaller watersheds each independently draining into both the St. Marys River and Lake Superior. There are 34 subwatersheds associated with 10 major river/creek systems.

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Map of Source Protection Area



List of Municipalities Located in the Sault Ste. Marie Region Source Protection Area

Legal Name of Municipality
Sault Ste. Marie, The Corporation of the City of
Prince, Township of
Sault North Planning Board

There are two First Nations within the SSMR-SPA: Garden River First Nation and Batchewana First Nation. Garden River First Nation has its own drinking water system and the Batchewana First Nation is utilizing the Sault Ste. Marie municipal drinking water system.

There are several unorganized townships located within the boundary of the SSMR-SPA which are under the jurisdiction of the Sault North Planning Board. Although not defined as a municipality, it is responsible for planning decisions within its borders.

Municipal Residential Drinking Water System

Type of System (existing or planned)	Drinking Water System Number	Drinking Water System Name	Owner	Operating Authority	Type of Source Water (surface, ground, both)
Existing	260006685	SAULT STE MARIE WATER SUPPLY SYSTEM	THE PUBLIC UTILITIES COMMISSION OF THE CORPORATION OF THE CITY OF SAULT STE. MARIE	PUC SERVICES INC.	Surface and Groundwater

Our Team

Source Protection Committee

The SPC is responsible to guide the development of the assessment report and the source protection plan. The SPC will work in cooperation with the SPA to establish work plans and set goals and priorities for source water protection. The SPC will enlist the public and peer review groups to guide technical study requirements, ensure input from local municipalities and provide advice on source protection plan requirements.

Source Protection Authority

The Sault Ste. Marie Region SPA is responsible for financial management of the source water protection program and to provide input on SPC products such as the assessment report and source protection plan. The SPA consists of the existing Board of Directors for the conservation authority. The SPA provides the technical resources and staffing that the SPC needs to achieve the requirements of the Clean Water Act. Staff support for the development of the source protection plan includes staff from the SSMR - SPA. Staff positions dedicated to the source protection program include: a project coordinator, water resources engineer, communication specialist, a GIS specialist, and an SPC administrative assistant.

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Assessment Report

In its simplest form, the assessment report will be a summary of the general watershed characteristics, a summary of the municipal technical studies showing the location of vulnerable areas as well as a list of the water quality and quantity risks around municipal drinking water systems. Watershed characteristics have been studied under the watershed characterization process and water budgeting across the entire Source Protection Area.

The table below outlines the tasks required for the assessment reports including a description of the task, the lead for the task, cost estimate and timeline. Due to the strong relationship between the authority and local municipalities, all of the work completed to date has been led by the Sault Ste. Marie Source Protection Authority.

Once the terms of reference has been approved by the MOE, the Source Protection Committee has one year to complete the assessment report.

The Work Plan to Complete the Assessment Report

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By Source Protection Area/ Drinking Water System Name	Task	Assigned Lead(s)	Estimated Completion Date	Estimated Cost
Sault Ste. Marie Region Source Protection Area	Coordinating and supporting projects for the assessment report	SSMR-SPA	2012-Jan-15	\$3,165,246
	Undertaking communications initiatives for the assessment report	SSMR-SPA	2012-Jan-15	\$162,049
	Information management for the assessment report preparation	SSMR-SPA	2012-Jan-15	\$213,361
	Undertaking a watershed characterization	SSMR-SPA	2008-Jun-30	\$5,300
	Conducting a conceptual water budget	SSMR-SPA	2007-Apr-01	\$111,697
	Conducting a tier 1 water budget analysis and stress assessment	SSMR-SPA	2008-Aug-30	\$118,623
	Conducting a tier 2 water budget analysis and stress assessment	SSMR-SPA	2008-Aug-30	
	Conducting a tier 3 water budget analysis and water quantity risk assessment	SSMR-SPA	2009-Aug-30	\$121,310
	Delineating and applying vulnerability scores to HVAs	SSMR-SPA	2008-Dec-31	\$5,000
	Assessing risks in HVAs	SSMR-SPA	2009-Aug-31	\$7,500
	Applying vulnerability scores to SGRAs	SSMR-SPA	2008-Dec-31	\$200,000
	Identifying issues, inventorying threats and assessing hazards in SGRAs	SSMR-SPA	2009-Aug-31	\$13,180
	Assessing risk in SGRAs	SSMR-SPA	2009-Aug-31	\$7,500
	Delineating and applying vulnerability scores to WHPAs or IPZs	SSMR-SPA	2008-Dec-31	\$5,000
	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	SSMR-SPA	2009-Aug-31	\$10,000
	Assess risk in WHPAs or IPZs	SSMR-SPA	2009-Aug-31	\$10,000
	Consultation on the overall proposed assessment report	SSMR-SPA	2010-Jan-01	\$10,000

Source Protection Plan

The source protection plan (SPP) is a legislated requirement in the *Clean Water Act, 2006* (CWA) that the SPC must develop for the SPA. Although the (CWA) provides a general framework for the SPP, the specific details regarding content and methods will only be available once the province develops and enacts a regulation. The anticipated date for a final regulation on the SPP is spring 2009.

The SPP will be a policy document that address actions required to protect and enhance drinking water in the source protection area. The SPC will establish criteria for policy development, priority areas based on the assessment report, monitoring and implementation requirements. The SPC will make use of the available science to assess drinking water threats and issues and where there is uncertainty we will be mindful of the precautionary approach.

The table below highlights the principle tasks required for the creation of an SPP. Through the review of the ToR, feedback will be requested from local municipalities on the roles and implementation of these tasks. Due to the absence of the source protection plan regulation, cost estimates and timelines have not been finalized. Only general timelines can be set at this point in the process. The overall timelines are reflected in the multi-year schedule which provides a schematic of the start date and completion date for the major source protection tasks.

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
Sault Ste. Marie Region Source Protection Area	Policy development to address drinking water threats (where required and/or permissible in Act/Regs)	SSMR-SPA	2012-Jan-15	\$15,000
	Policy development for monitoring (where required, advisable and/or permissible in Act & Regs)	SSMR-SPA	2012-Jan-15	\$15,000
	Policy development for Great Lakes elements (where required/permissible in Act & Regs)	SSMR-SPA	2012-Jan-15	\$15,000
	Establishing timelines for policy implementation	SSMR-SPA	2012-Jan-15	\$15,000
	Other Source Protection Plan Preparation Tasks	SSMR-SPA	2012-Jan-15	\$20,000

The Date the Source Protection Plan is to be Submitted to the Minister for Approval by the Sault Ste. Marie Region Source Protection Authority:

2012-January-15

Detailed Information

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	260006685	SAULT STE MARIE WATER SUPPLY SYSTEM	PUBLIC UTILITIES COMMISSION OF THE CITY OF SAULT STE. MARIE	PUC SERVICES INC.	Surface and Groundwater	6
Number of Surface Water Intakes	Comments					
1	Operated under the Public Utilities Commission by a Commission of three Commissioners					

Please refer to Appendix 2 for a list of drinking water systems that are not covered by the Source Protection Planning process unless elevated through municipal resolution.

Detailed Work Plan to Complete the Assessment Report

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Coordinating and supporting projects for the assessment report	SSMR-SPA	2005-Mar-07	2012-Jan-15
Comments		Defined Geographic Area		Estimated Cost
The coordination and support of the Source Protection Committee is an ongoing necessity throughout the SPPlanning process. Thereby should not be linked directly to the time period required to complete the assessment report but rather the anticipated end date for the source protection plan.				\$3,165,246

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Undertaking communications initiatives for the assessment report	SSMR-SPA	2005-Mar-07	2012-Jan-15
Comments		Defined Geographic Area		Estimated Cost
<p>Communications is an ongoing necessity throughout the SPPlanning process Regulations require public consultation for the assessment report and any follow-up required. Thereby should not be linked directly to the time period required to complete the assessment report but rather the anticipated end date for the source protection plan.</p> <p>Communications include education and outreach materials and website information not limited to the following topics: well decommissioning, septic systems, best management practices, Clean Water Act, water quality, water conservation, pollution prevention, pesticides and pharmaceuticals, household waste depot.</p>				\$162,049

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Information management for the assessment report preparation	SSMR-SPA	2005-May-16	2012-Jan-15
Comments		Defined Geographic Area		Estimated Cost
Information management is an ongoing investment throughout the SPPlanning cycle. Thereby should not be linked directly to the time period required to complete the assessment report but rather the anticipated end date for the				\$213,361

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<p>source protection plan. If final Assessment Report regulations require the archiving and accessibility of data and its management for a 15 year period then the information management portion of the assessment report should be included as an on-going expense paid to the Source Protection Authority</p>		
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By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Undertaking a watershed characterization	SSMR-SPA	2005-Sep-01	2008-Jun-30
Comments		Defined Geographic Area		Estimated Cost
<p>The draft watershed characterization was sent to Conservation Ontario for peer evaluation in August 2007. Peer review comments were received by the SSMR-SPA in January 2008. Revisions as outlined by the peer reviewers were completed in June 2008. Costs for 2008/09 include the cost of printing the Watershed Characterization and the cost of CD's and distribution</p>				\$5,300

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Conducting a conceptual water budget	SSMR-SPA	2006-Jan-09	2007-Apr-01
Comments		Defined Geographic Area		Estimated Cost
<p>The final draft of the conceptual water budget was completed on November 6, 2006. The extension to April 1, 2007 is to incorporate the technical costs that were billed at a later date - after the fiscal year end.</p>				\$111,697

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Conducting a tier 1 water budget analysis and stress assessment	SSMR-SPA	2006-Dec-01	2008-Aug-30
Comments		Defined Geographic Area		Estimated Cost
<p>The Tier 1 and Tier 2 reports are being combined for this Source Protection Area - Operational costs will include the cost of printing the Conceptual and Tier 1/2 Documents</p>				\$118,623
	Task	Assigned Lead(s)	Estimated Start	Estimated

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By Source Protection Area			Date	Completion Date
Sault Ste. Marie Region Source Protection Area	Conducting a tier 2 water budget analysis and stress assessment	SSMR-SPA	2007-Mar-01	2008-Aug-30
Comments		Defined Geographic Area		Estimated Cost
Please see comments on the Tier 1 water budget analysis and stress assessment. The budget for the Tier 2 water budget was included in the Tier 1 budget figure.				

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Conducting a tier 3 water budget analysis and water quantity risk assessment	SSMR-SPA	2008-Jul-01	2009-Aug-30
Comments		Defined Geographic Area		Estimated Cost
				\$121,310

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Delineating and applying vulnerability scores to HVAs	SSMR-SPA	2007-Jul-03	2008-Dec-31
Comments		Defined Geographic Area		Estimated Cost
Will be revisited after the regulations have been passed.				\$5,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Assessing risks in HVAs	SSMR-SPA	2008-Dec-01	2009-Aug-31
Comments		Defined Geographic Area		Estimated Cost
Will be revisited after the regulations have been passed.				\$7,500

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By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Applying vulnerability scores to SGRAs	SSMR-SPA	2008-Aug-11	2008-Dec-31
Comments		Defined Geographic Area		Estimated Cost
Hydrologic study proposed in the SGRA that has not yet been addressed. Will be revisited after the regulations have been passed.				\$200,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Identifying issues, inventorying threats and assessing hazards in SGRAs	SSMR-SPA	2007-Apr-02	2009-Aug-31
Comments		Defined Geographic Area		Estimated Cost
Will be revisited after the regulations have been passed.				\$13,180

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Assessing risk in SGRAs	SSMR-SPA	2008-Dec-01	2009-Aug-31
Comments		Defined Geographic Area		Estimated Cost
Will be revisited after the regulations have passed				\$7,500

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Delineating and applying vulnerability scores to WHPAs or IPZs	SSMR-SPA	2006-Jun-06	2008-Dec-31
Comments		Defined Geographic Area		Estimated Cost
Will be revisited after the regulations have passed.				\$5,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	SSMR-SPA	2007-Nov-07	2009-Aug-31
Comments		Defined Geographic Area		Estimated Cost
Will be revisited after the regulations have passed				\$10,000

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By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Assess risk in WHPAs or IPZs	SSMR-SPA	2007-Nov-07	2009-Aug-31
Comments		Defined Geographic Area		Estimated Cost
Will be revisited after the regulations have passed. Includes costs for peer reviews				\$10,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Consultation on the overall proposed assessment report	SSMR-SPA	2008-Aug-04	2010-Jan-01
Comments		Defined Geographic Area		Estimated Cost
				\$10,000

Detailed Work Plan to Complete the Source Protection Plan

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Policy development to address drinking water threats (where required and/or permissible in Act/Regs)	SSMR-SPA	2009-Nov-02	2012-Jan-15
Comments		Defined Geographic Area		Estimated Cost
				\$15,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Policy development for monitoring (where required, advisable and/or permissible in Act & Regs)	SSMR-SPA	2009-Nov-02	2012-Jan-15
Comments		Defined Geographic Area		Estimated Cost
				\$15,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Policy development for Great Lakes elements (where required/permissible in Act & Regs)	SSMR-SPA	2009-Nov-02	2012-Jan-15
Comments		Defined Geographic Area		Estimated Cost
Anticipate the development of Great Lake targets in the future and will revisit the terms of reference as required				\$15,000

By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Establishing timelines for policy implementation	SSMR-SPA	2009-Nov-02	2012-Jan-15
Comments		Defined Geographic Area		Estimated Cost
				\$15,000

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By Source Protection Area	Task	Assigned Lead(s)	Estimated Start Date	Estimated Completion Date
Sault Ste. Marie Region Source Protection Area	Other Source Protection Plan Preparation Tasks	SSMR-SPA	2008-Apr-01	2012-Jan-15
Comments		Defined Geographic Area		Estimated Cost
There may be some unanticipated costs with the development of the Source Protection Plan. No details are available at this time.				\$20,000

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
	Sault Ste. Marie Region Source Protection Area	\$4,165,766	\$80,000	\$4,245,766
Municipal Residential Drinking Water Systems				
	SAULT STE MARIE WATER SUPPLY SYSTEM			
Total Estimated Costs		\$4,165,766	\$80,000	\$4,245,766

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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
Sault Ste. Marie Region Source Protection Area	Coordinating and supporting projects for the assessment report	\$250,000	\$313,077	\$348,011	\$405,958	\$483,200	\$490,000	\$500,000	\$375,000
	Undertaking communications initiatives for the assessment report	\$3,333	\$3,569	\$16,949	\$25,697	\$30,000	\$30,000	\$30,000	\$22,500
	Information management for the assessment report preparation	\$0	\$52,097	\$1,323	\$39,942	\$30,000	\$30,000	\$30,000	\$30,000
	Undertaking a watershed characterization	\$0	\$3,500	\$0	\$0	\$1,800	\$0	\$0	\$0
	Conducting a conceptual water budget	\$0	\$25,297	\$76,463	\$9,937	\$0	\$0	\$0	\$0
	Conducting a tier 1 water budget analysis and stress assessment	\$0	\$0	\$2,599	\$94,225	\$21,800	\$0	\$0	\$0
	Conducting a tier 2 water budget analysis and stress assessment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Conducting a tier 3 water budget analysis and water quantity risk assessment	\$0	\$0	\$0	\$0	\$98,200	\$23,110	\$0	\$0
	Delineating and applying vulnerability scores to HVAs	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0
	Assessing risks in HVAs	\$0	\$0	\$0	\$0	\$5,000	\$2,500	\$0	\$0
	Applying vulnerability scores to SGRAs	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0
	Identifying issues, inventorying threats and assessing hazards in SGRAs	\$0	\$0	\$0	\$1,680	\$9,000	\$2,500	\$0	\$0
	Assessing risk in SGRAs	\$0	\$0	\$0	\$0	\$5,000	\$2,500	\$0	\$0

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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
	Delineating and applying vulnerability scores to WHPAs or IPZs	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0
	Identifying issues, inventorying threats and assessing hazards in WHPAs or IPZs	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$0	\$0
	Assess risk in WHPAs or IPZs	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$0	\$0
	Consultation on the overall proposed assessment report	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$0	\$0
	Policy development to address drinking water threats (where required and/or permissible in Act/Regs)	\$0	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$5,000
	Policy development for monitoring (where required, advisable and/or permissible in Act & Regs)	\$0	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$5,000
	Policy development for Great Lakes elements (where required/permissible in Act & Regs)	\$0	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$5,000
	Establishing timelines for policy implementation	\$0	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$5,000
	Other Source Protection Plan Preparation Tasks	\$0	\$0	\$0	\$0	\$5,000	\$5,000	\$5,000	\$5,000
Fiscal Year Total		\$253,333	\$397,541	\$445,344	\$577,438	\$914,000	\$620,610	\$585,000	\$452,500

Terms of Reference

Process Checklist

Regulatory Process	Completion Date	Completed By
Give a copy of the comments on proposed terms of reference to the source protection committee.	2008-Sep-22	SPAuthority
Make the draft proposed terms of reference available at other locations.	2008-May-20	SPCommittee
Make the proposed terms of reference available at other locations.	2008-Aug-20	SPCommittee
Notice for consultation on draft proposed ToR includes information on public meeting scheduled at least 21 days after newspaper notice is published.	2008-May-20	SPCommittee
Notify band Chiefs on the commencement of the terms of reference.	2008-Feb-05	SPCommittee
Notify municipal clerks on the commencement of the terms of reference.	2008-Jan-21	SPCommittee
Post proposed terms of reference on the Internet for 30 days.	2008-Aug-20	SPCommittee
Post draft proposed terms of reference on Internet.	2008-May-20	SPCommittee
Provide a copy of draft to the chiefs of bands whose reserves are located in the source protection area.	2008-May-20	SPCommittee
Provide a copy of draft proposed terms of reference to the clerks of municipalities located in the source protection area.	2008-May-20	SPCommittee
Provide a copy of proposed terms of reference to the source protection authority.	2008-Aug-20	SPCommittee
Provide a copy of proposed terms of reference to the chiefs of bands whose reserves are located in the source protection area.	2008-Aug-20	SPCommittee
Provide a copy of proposed terms of reference to the clerks of municipalities located in the source protection area.	2008-Aug-20	SPCommittee
Give copy of draft proposed ToR to groups created pursuant to Great Lakes Water Quality Agreement & involved in developing/implementing RAPs & LaMPs.	2008-May-20	SPCommittee
Provide any unresolved comments from municipalities and bands to the Minister as part of the approval package for the proposed terms of reference.	2008-Oct-20	SPAuthority
Provide any unresolved comments from municipalities and bands to the source protection authority on the draft proposed terms of reference.	2008-Sep-20	SPCommittee
Make provisions to consider Great Lakes Agreements.	2008-Aug-18	SPCommittee
Publish newspaper notice to publicly view draft proposed ToR on Internet and at other locations (as determined by the source protection committee).	2008-May-20	SPCommittee
Receive comments from the 30 day Internet posting from the public, municipalities, bands, and other stakeholders.	2008-Sep-19	SPAuthority
Notice for consultation on draft proposed ToR includes requests for comments submitted within 35 days of notice published in the newspaper.	2008-Jun-23	SPCommittee
Municipal council resolutions have been passed agreeing upon work.	Not Applicable	SPCommittee
Provide copy of draft proposed ToR to chairs of SPCs who have been listed in table that describes matters that affect other source protection areas.	Not Applicable	SPCommittee

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Appendix 1: 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.
	Undertaking communications initiatives for the assessment report	Local area engagement, outreach and creation of communications products that support the assessment report process.
	Information management for the assessment report preparation	Conducting overall data management, data sharing agreements, standards, mapping, software and maintenance.
	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.
	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.
	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.
	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.
	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.
	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.

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Subject Area	Task Name	Full Task Description
Assessment Report Preparation	Assessing risks in HVAs	Identifying any significant, moderate, low, and negligible drinking water threats, undertaking an issues evaluation, and analysing 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.
	Applying vulnerability scores to SGRAs	Applying vulnerability scores to significant groundwater recharge areas 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.
	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. Details on how to complete this task will be available in the Assessment Report regulation, Director's rules, and guidance when they are developed.
	Assessing risk in SGRAs	Identifying any significant, moderate, low, and negligible drinking water threats, undertaking an issues evaluation, and analysing uncertainty in significant groundwater recharge areas. Details on how to complete this task will be available in the Assessment Report regulation, Director's rules, and guidance when they are developed.
	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 for drinking water systems using groundwater or intake protection zones 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.
	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 and/or intake protection zones. Details on how to complete this task will be available in the Assessment Report regulation, Director's rules, and guidance when they are developed.
	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 or intake protection zones. 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.
	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.
	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.

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Subject Area	Task Name	Full Task Description
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.
	Information management for source protection plan preparation	Conducting overall data management, data sharing agreements, standards, mapping, software and maintenance.
	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.
	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.
	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.
	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.
	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.
	Other Source Protection Plan Preparation Tasks	If required, add other tasks to complete the source protection plan. Not known at this time, will revisit on the release of appropriate regulations

Appendix 2: List of Drinking Water Systems Not Included in Source Protection Planning

ACHIEVEMENT HOUSE INC. WELL SUPPLY
AWERES PUBLIC SCHOOL WELL SUPPLY
BEAUMONT TRAILER PARK WELL SUPPLY
CAMP KORAH WELL SUPPLY
EVERGREEN MOTEL WELL SUPPLY
FISHERS TRAILER PARK
HARVBAR INVESTMENT CO. LTD - ADAM'S ANTIQUE WELL SUPPLY
LANDSLIDE TRAILER PARK WELL SUPPLY
LYONS CAMPGROUND WELL SUPPLY
NORTHLAND TRAILER PARK WELL SUPPLY
PEACE TREE WOODS SUBDIVISION WELL SUPPLY
PIONEER PARK WELL SUPPLY
R.M. MOORE PUBLIC SCHOOL WELL SUPPLY
ROOT RIVER TRAILER COURT WELL SUPPLY
RUPERT ACRES LTD. WELL SUPPLY
SAULT STE. MARIE AIRPORT WELL SUPPLY
SHETLAND PARK WELL SUPPLY
TOWNSHIP OF PRINCE WELL SUPPLY
WAASA GIIWAAMDAAN WELL SUPPLY
WATERWAYS (DEVLIN SUBDIVISION) WELL SUPPLY

Data is based on current MOE information as available to the Source Protection Authority