

DRINKING WATER SOURCE PROTECTION

ACT FOR CLEAN WATER

TRENT
CONSERVATION
COALITION
SOURCE PROTECTION
REGION

2015 Implementation Summary Report Trent and Ganaraska Source Protection Plans



“The first barrier to the contamination of drinking water involves protecting the sources of drinking water.”

*Justice Dennis O'Connor,
Walkerton Inquiry 2002*



Prepared by Trent Conservation Coalition



OTONABEE
CONSERVATION

June 8, 2016

Message from the Chair of Source Protection Committee of the Trent Conservation Coalition



I am pleased with the progress made in the first year of implementation of the Trent and Ganaraska Source Protection Plans. The key accomplishments are outlined in this 2015 Summary Report.

The safety of our drinking water is vitally important not only for the people within the region of the Trent Conservation Coalition but also for all of Ontario. Half of the total population of the region is served by fifty-two municipal residential drinking water systems which include thirty-four ground water systems and eighteen surface water systems. At least one additional ground water system is being planned for the immediate future within the region.

Source water protection plans are the first barrier in a multi barrier approach recommended by Justice O'Connor in his report on the Walkerton Inquiry. The Trent Conservation Coalition formed the Source Protection Committee as an instrument to establish source protection planning for municipal water supply systems within the region. The Source Protection Committee worked diligently to create the Trent and Ganaraska Source Protection Plans.

These plans were approved on October 23, 2014 by the Ontario Minister of Environment and Climate Change. They became effective on January 1, 2015 and since that time the Source Protection Committee together with staff and the Source Protection Authorities for the region have been working with key stakeholders and implementers toward the implementation of the policies set out within the Source Protection plans.

Together with our many partner agencies we are working to protect sources of municipal water supply including initial efforts made towards setting up offices for risk management officials, implementing the Source Protection policies where there are earlier compliance dates, and implementing those policies that address the most pressing concerns. There is much work that still has to be done. This process will be ongoing and will evolve as more threats are identified and policies are fine-tuned. We will monitor implementation to determine if there are changes necessary in order to arrive at the intended outcomes.

Drinking water source protection is an essential front line defense in the multi barrier approach. We will continue to work with all the implementation agencies including municipalities and provincial authorities to continue to build a process which is resilient, proactive, and administratively optimal in an effort to implement our Source Protection plans. It is by working harmoniously that we can ensure the successful implementation and maximum protection to our constituency. The report particularizes the early efforts toward safeguarding our sources of municipal drinking water in the region providing context for initiatives in other regions throughout the province.

The *Clean Water Act* has as its goal the protection of all sources of drinking water within the Province of Ontario. I encourage you to read this first summary report on implementation of the Source Protection plans for the Trent Conservation Coalition which is the local embodiment of this worthy provincial initiative.

Jim Hunt, Chair of the Trent Conservation Coalition Source Protection Committee.

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1. Introduction

In this report you will find highlights of the status of implementation in the Trent Conservation Coalition (TCC) Source Protection Region organized by Implementing Body.

This first implementation summary report for activities in 2015 represents actions and efforts across fifteen categories of implementing bodies including: Approval Authority (*Planning Act*), Conservation Authority, Source Protection Authorities, Environment Canada, Ministry of Natural Resources and Forestry (MNR), Ministry of the Environment and Climate Change (MOECC), Ministry of Transportation (MTO), Ontario Ministry of Agriculture and Food and Rural Affairs (OMAFRA), owner of the pipeline, municipalities, relevant airport authorities or operators and Risk Management Officials (RMOs).

There are approximately 400,000 residents in the Trent Conservation Coalition Source Protection Region (SPR). The TCC contains 37 municipalities and 53 municipal residential drinking water systems. Although vulnerable areas make up less than 1% of the area, over 210,000 people are protected by 154 policies designed by the multi-stakeholder Source Protection Committee.

The drinking water source protection program is a shared responsibility. TCC's partnerships within the TCC as well as with neighbouring jurisdictions and agencies is essential to achieving successful implementation of the Trent and Ganaraska Source Protection Plans. Although this report provides a snapshot of the first year of formal implementation, we recognize there is still much work to be done to ensure successful implementation of the Trent and Ganaraska Source Protection Plans.

We thank all the organizations and individuals who have contributed to the progress and successes that this report describes.

2. Ontario Clean Water Act 2006

On July 3rd 2007, Ontario's *Clean Water Act 2006* received royal assent. This relatively new law resulted from many of the recommendations that came out of the Walkerton inquiry, and aims to protect existing and future sources of municipal drinking water. The Act enshrines source protection in law, outlines a planning framework to develop and implement science-based policies in order to protect municipal sources of drinking water.

The objective of the Act is to establish a collaborative, locally driven, science based, multi-stakeholder process with the principle concept of prevention in the safeguarding of our drinking water for our communities and our health.

The Act prescribes the creation of Source Protection Plans with the goal of managing or eliminating activities that are, or could become, significant drinking water threats. The *Clean Water Act 2006* provides several tools to accomplish the goal including land use planning, prescribed instruments, risk management plans, prohibition, restricted land uses and education & outreach.

The Source Protection Committee, Source Protection Authorities and Conservation Authority staff worked with municipalities, provincial ministries, businesses, landowners and other stakeholders to decide which combination of tools will work best in local circumstances.

This document summarizes annual reporting required for 2015 under section 81 of the *Clean Water Act 2006* from the Risk Management Officials, and provides a 2015 implementation summary report for the Trent and Ganaraska monitoring policies developed by the multi-stakeholder Trent Conservation Coalition Source Protection Committee (SPC).

3. Annual Reporting Requirements

There are three different types of reports required by *Clean Water Act 2006* legislation and the associated main regulation 287/07.

Monitoring Policies

The first required report is required by the monitoring policies in Trent and Ganaraska Source Protection Plans. The reports must be submitted annually by implementing bodies to the Source Protection Authorities by February 1st for actions in the preceding calendar year. Highlights of the 43 unique monitoring policies in the Trent and Ganaraska Source Protection Plans summarized in this report.

Risk Management Officials Annual Reporting

The second is the annual reporting by Risk Management Officials as prescribed by section 81 of the *Clean Water Act 2006*. These reports must be submitted annually to the Source Protection Authorities by February 1st each year. There are 34 policies (including monitoring policies) where Risk Management Officials must report annually back to the respective Source Protection Authorities on status of implementation for each policy.

Annual Progress Report

The third and final annual reporting requirement is known as an annual progress report. This reports on a number of section 46 performance measures which are still under development. The results from the 2015 summary will be augmented with future implementation summaries and the additional section 46 performance measures to create a TCC annual progress report which is to be provided to the MOECC in May 2018.

4. General Statistics for the Trent Conservation Coalition Source Protection Region

- Number of drinking water systems: 53 (includes one planned groundwater system)
- Number of surface water systems: 18
- Number of groundwater systems: 35 (includes one planned system)
- Population Served by municipal drinking water systems: more than 210,000
- Number of municipalities with drinking water systems: 37
- Number of municipalities with at least part of a vulnerable areas within their jurisdiction: 52
- Number of policies: 154
- Number of Issue Contributing Areas: 1 (down from 2 in 2014-15)
- Effective date of the Trent and Ganaraska Source Protection Plans: January 1, 2015
- Number of Risk Management Officials: 10
- Number of Alternate Risk Management Officials: 5

5. 2015 Implementation Summary Report by Implementing Body

The following section summarizes the 2015 activities as reported on by various implementing bodies.

a. Risk Management Official (RMO)

The policies RMOs are required to implement and report on as per section 81 of the *Clean Water Act* 2006 and section 65 of O.Reg. 287/07 for by February 1st for activities in preceding calendar year are as follows:

Implementer	Policy Category	Policy No.
Risk Management Official	General	G-1(1-2,4); G-7(1); G-8(1-4); G-9(1)
	Sewage Systems	S-9; S-10
	Agriculture	A-1(1-3); A-4(1-3)
	Fuel	F-1; F-2(1-2)
	Road Salt	R-1(1-2); R-5; R-6
	Waste Disposal Sites	W-3, W-4(1,2)
	DNAPLs and Organic Solvents	D-1; D-2; D-3(1-2)
	Non-Agricultural Source Material	N-2; N-3
	Snow Storage	O-1(3); O-2
	Aircraft De-icing	P-1(1,4)
Aquaculture	Q-1; Q-2	

Across TCC there are ten RMOs, implementing 39 policies. Six RMOs are Conservation Authority staff working on behalf of municipalities. These RMO's include:

- Abigail Morkem for Lower Trent Source Protection Authority municipalities;
- Amy Dickens for the Municipality of Marmora and Lake;
- Brian Morrison for the Township of Hamilton;
- Mark Majchrowski for the City of Kawartha Lakes;
- Terri Cox for Otonabee-Peterborough Source Protection Authority municipalities;
- Vicki Woolfrey for the Municipality of Highlands East.

Four RMO's are municipal staff providing direct municipal services. These RMO's include:

- Greg Lymer for the Regional Municipality of Durham;
- Ian Clendening for Minden Hills;
- Jennifer Leno for the Town of Cobourg;
- Matt Tracey for Quinte West.

Many Conservation Authorities and municipalities have hired Risk Management Inspectors, details of which will be reported on in future implementation summaries and annual reports.

The list of RMOs by system is as follows:

System Name	RMO	System Name	RMO
Alpine Village	Terri Cox	Kinmount	Ian Clendening, Mark Majchrowski
Bayside	Matt Tracey	Lakefield	Terri Cox
Birch Point	Mark Majchrowski	Lindsay	Mark Majchrowski
Blackstock	Greg Lymer	Lutterworth Pines	Ian Clendening
Bobcaygeon	Mark Majchrowski	Manorview	Mark Majchrowski
Brighton	Abigail Morkem	Mariposa Estates	Mark Majchrowski, Greg Lymer
Buckhorn Lake Estates	Terri Cox	Marmora	Amy Dickens
Camborne	Brian Morrison	Millbrook	Terri Cox
Campbellford	Abigail Morkem	Minden	Ian Clendening
Canadiana Shores	Mark Majchrowski	Newcastle	Greg Lymer
Cardiff	Vicki Woolfrey	Norland	Mark Majchrowski
Cobourg	Jennifer Leno	Norwood	Terri Cox
Colborne	Abigail Morkem	Orono	Greg Lymer
Creighton Heights	Brian Morrison	Peterborough	Terri Cox
Crystal Springs	Terri Cox	Pinewood	Mark Majchrowski
Dyno Estates	Vicki Woolfrey	Pleasant Point	Mark Majchrowski
Fenelon Falls	Mark Majchrowski	Port Hope	No threats requiring RMOs
Frankford	Matt Tracey	Port Perry	Greg Lymer
Lansdowne (formerly Fraserville)	Terri Cox	Sonya	Mark Majchrowski
Grafton	Abigail Morkem	Southview Estates	Mark Majchrowski
Greenbank	Greg Lymer	Stirling	Abigail Morkem
Hastings	Abigail Morkem, Terri Cox	Trenton	Matt Tracey
Havelock	Terri Cox	Victoria Glen	Mark Majchrowski
Janetville	Mark Majchrowski	Victoria Place	Mark Majchrowski
Keene Heights	Terri Cox	Warkworth	Abigail Morkem
King's Bay	Mark Majchrowski	Woodfield	Mark Majchrowski
		Woods of Manilla	Mark Majchrowski

In 2015, the first year of implementation, RMO's were responsible for:

- Assuring that the RMO office was established;
- Reviewing verified threats;
- Establishing a work plan on how threats are to be addressed;
- Participation in working groups including regional RMO working group and neighbouring/shared jurisdictional RMO working groups, E & O working groups, and participation in agricultural workshops;
- Development of section 59 screening process including development of municipal guidance, and meetings with municipalities to review and test procedures;
- In some cases, establishing Risk Management Plans.

In years two and three it can be expected that the number of Risk Management Plans established will increase. Other activities may include:

- Ongoing prioritization and negotiation of Risk Management Plans and threat verification for fuel, agriculture and road salt including pre-consultation with affected parties;
- Refinement of section 59 screening process to ensure permit applications are circulated to the RMO office;
- Assist with obtaining letters of conformity.

Section 65 of O.Reg 287/07 details the requirements for RMO reporting and is summarized below for 2015 in Table 1:

s.65 Prescribed Information	2015
The number of risk management plans agreed to by the Risk Management Official	9 (3 Agriculture, 6 Fuel)
The number of plans the risk management official refused to agree to	0
The number of orders issued	0
The number of notices given to and the number of notices given by the Risk Management Official	1
The number of inspections carried out related to enforcement as set out under s. 62 of the Act	2 (1 Agriculture, 1 Fuel)
The number of risk assessments submitted	0
The number of times the Risk Management Official caused a thing to be done	0
The total number of prosecutions and the number of prosecutions that resulted in a conviction	0

Table 1 – Summary of s.65 O.Reg 287/07 requirements

In addition to the prescribed information, RMOs also submitted the following information:

Additional Information	2015
Number of s.59 notices issued	57

Table 2 – Additional Information – Number of Section 59 notices issued

Finally, RMOs provided a list of locations where vulnerable area mapping updates could be prioritized, likely through the Section 36 Terms of Reference legislated procedure. Areas identified include:

- *Lots S and B, Registered Plan No. 8P and Part of West Half of Lot 18, Concession 6, geographic Township of Ops, City of Kawartha Lakes.* The drainage ditch was diverted to the east and off of the property. This diversion will change the extent of the intake protection zone (IPZ) for the Lindsay municipal surface water system;
- *84 Adelaide St. S., Lindsay, ON.* The IPZ for the Lindsay municipal surface water system only covers the westerly portion of the property and there may be a requirement to construct new sanitary sewer lines to the east of the existing, developed portion of the property. Storm drainage infrastructure can be considered a type of transport pathway and as such this will likely change the threat assessment mapping in the future.

b. Municipalities

The following summarizes implementation of policies in the Trent and Ganaraska Source Protection Plans as provided in monitoring policy reports from municipalities. The list of reporting municipalities by system is as follows:

System Name	Municipality	System Name	Municipality
Alpine Village	Municipality of Trent Lakes	Kinmount	City of Kawartha Lakes
Bayside	City of Quinte West	Lakefield	Township of Selwyn
Birch Point	City of Kawartha Lakes	Lindsay	City of Kawartha Lakes
Blackstock	Regional Municipality of Durham	Lutterworth Pines	Township of Minden Hills
Bobcaygeon	City of Kawartha Lakes	Manorview	City of Kawartha Lakes
Brighton	Municipality of Brighton	Mariposa Estates	City of Kawartha Lakes
Buckhorn Lake Estates	Municipality of Trent Lakes	Marmora	Municipality of Marmora and Lake
Camborne	Township of Hamilton; Northumberland County	Millbrook	Township of Cavan Monaghan
Campbellford	Municipality of Trent Hills	Minden	Township of Minden Hills
Canadiana Shores	City of Kawartha Lakes	Newcastle	Regional Municipality of Durham; Municipality of Clarington
Cardiff	Municipality of Highlands East	Norland	City of Kawartha Lakes
Cobourg	Town of Cobourg; Northumberland County	Norwood	Township of Asphodel-Norwood
Colborne	Township of Cramahe	Orono	Regional Municipality of Durham; Municipality of Clarington
Creighton Heights	Township of Hamilton; Northumberland County	Peterborough	City of Peterborough
Crystal Springs	Township of Otonabee-South Monaghan	Pinewood	City of Kawartha Lakes
Dyno Estates	Municipality of Highlands East	Pleasant Point	City of Kawartha Lakes
Fenelon Falls	City of Kawartha Lakes	Port Hope	Municipality of Port Hope; Northumberland County
Frankford	City of Quinte West	Port Perry	Regional Municipality of Durham
Lansdowne	Township of Cavan Monaghan	Sonya	City of Kawartha Lakes
Grafton	Township of Alnwick/Haldimand	Southview Estates	City of Kawartha Lakes
Greenbank	Regional Municipality of Durham	Stirling	Township of Stirling-Rawdon
Hastings	Municipality of Trent Hills	Trenton	City of Quinte West
Havelock	Township of Havelock-Belmont-Methuen	Victoria Glen	City of Kawartha Lakes
Janetville	City of Kawartha Lakes	Victoria Place	City of Kawartha Lakes
Keene Heights	Township of Otonabee-South Monaghan	Warkworth	Municipality of Trent Hills
King's Bay	City of Kawartha Lakes	Woodfield	City of Kawartha Lakes
		Woods of Manilla	City of Kawartha Lakes

The policies municipalities are required to report by February 1st for activities in preceding calendar year are as follows:

Implementer	Policy Category	Policy No.
Municipality	General	G-1(1-2); G-3(1-2); G-5(1-7); G-6(3-5); G-11(1-2)
	Sewage Systems	S-1(1-2); S-4(1-2); S-6(1-4); S-8(2-3)
	Snow Storage	O-1(1-2)
	Other	OT-1(1-3); OT-2(1-3); OT-3(1-2); OT-4(1,3)
	Local Threats	L-1(1-4), L-2 (8-11)
	Issues Monitoring	I-1

Implementation summaries were received from all municipalities and a summary of municipal annual reporting highlights are summarized below:

- G-1(1-2) Transition Provisions: Transition provisions do not require reporting.
- G-3(1-2) Land Acquisition in Vulnerable Areas: Land acquisitions are reported to be challenging in some cases, with most municipalities simply considering Land Acquisitions as required by the policy. Some municipalities created a land acquisitions form. Some lands are already owned by municipalities with by-laws in place prohibiting the selling of the lands in the future. There was one land purchase by the Municipality of Trent Hills.
- G-5(1-7) Education & Outreach Program: Programs were initiated either through agreements with Conservation Authorities, or locally through internal municipal program integration. Types of initiatives across TCC included radio spots, factsheet production and distribution, production of videos, updating websites, door to door visits, advertorials, displays and attendance at special events.
- G-6(3-5) Signage for Vulnerable Areas: Most municipalities had purchased and installed approximately 160 signs prior to 2015, with the remainder (anticipating to use 2016 Source Protection Municipal Implementation Fund money to complete signage purchase and installation of an additional 60 signs.
- G-11(1-2) Emergency Response Planning: Identified as challenging to implement by many municipalities due to wording of the policy being inconsistent with wording in municipal Master Emergency Plans. Most municipalities have included or are in the process of including vulnerable area maps in Master Emergency Response Plans.
- S-1(1-2) Septic Inspections: Septic Inspections are underway in every municipality. Several municipalities have entered into agreements with upper-tier municipalities for the purpose of delegating the enforcement of Part 8 (Sewage Systems) under the Ontario Building Code Act within their respective municipality. Health Units have been delegated the responsibility to enforce the provisions of this Act and the building code related to sewage systems. Part 8 governs the designs, construction, operation and maintenance of various classes of sewage systems with a daily flow less than 10,000 litres per day. Additional information will be provided in the 2016 report once the compliance date of 5 years from the date of posting of the Assessment Report has passed (January 2017).
- S-4(1-2) Septic Connection By-Law: Many municipalities have implemented this required by-law.
- S-6(1-4) Emergency Response for wastewater and asset management: All municipalities where this policy applies reported that requirements for this policy are either in-progress or complete. Primary discussions including topics related to mapping and communications are ongoing.

- O-1(1-2) Snow Storage: The one (1) threat in the Municipality of Trent Hills is to be relocated to lands in the Campbellford Business Park lots 7 and 8, Concession 5. An alternative site has also been established for 2016-2017 snow storage season.
- OT-1(1-3) Transport Corridors: Some local Emergency Response (ER) Plans have been updated but as this policy has a strategic legal effect, additional support is required to ensure compliance.
- OT-2(1-3) Transport Pathways: Approximately 50% of municipalities have implemented the transport pathway by-law which is excellent considering it is a strategic policy. The E & O factsheet detailing the notification process is working since several SPAs have received notifications.
- OT-3(1-2) Extension of Education Programs into First Nation reserves: Municipalities with First Nations reserves identified they will assist with education programs when requested to do so by the First Nations.
- OT-4(1, 3) Collection of Climate Change Data: Most municipalities did not report on this strategic policy directly, however municipalities (often and for many environmental parameters via Conservation Authorities) monitor environmental features and functions through existing monitoring programs such as the Provincial Water Quality Monitoring Network (PWQMN), Provincial Groundwater Monitoring Network (PGMN), Stream Gauges and the Ontario Benthos Biomonitoring Network (OBBN). The data is used to further the understanding of vulnerable areas especially through modeling and climate change scenario analysis. Barriers to the data collection include lack of funding and lack of guidance. Many municipalities are also engaged in the development of Climate Change Action Plans and related activities through other programs that are relevant, but not directly related to the Source Protection Program.
- L-1(1-4) Landscaping that promotes waterfowl congregation: Required signage has been installed, waterfowl management plans have been developed or are in process and by-laws are in place or in process.
- L-2 (8-11): Oil pipeline spill policies are generally complete with the initial gap analysis in regards to water treatment plant emergency plans, and with updates underway. No activations of the Emergency Response plan in 2015.
- I-1 Nitrate Issue: Due to decommissioning of Blackstock Well WM-1, there is no required monitoring of this policy and the issue has been removed from the Trent Source Protection Plan through an Ontario Regulation 287/07 section 51 update.
- I-2: The Township of Stirling-Rawdon provided their Ontario Clean Water Agency annual report which tracks Total Coliform. The original hydrogeological studies determined that although the wells are GUDI, the surrounding sub surface provides “effective in-situ filtration”, thus not requiring chemically assisted filtration within the treatment process train. MOECC is currently evaluating the concept of “effective in-situ filtration” as part of a wider O.Reg 903 *Ontario Water Resources Act 1990* update, which may affect the designation (GUDI with effective in-situ filtration) of the Stirling wells.

c. Approval Authority under the *Planning Act*

The policies the Approval Authorities under the *Planning Act* are required to report by February 1st for activities in preceding calendar year on the following policies:

Implementer	Policy Category	Policy No.
Approval Authority under the <i>Planning Act</i>	General	G-1(1-4); G-7(2); G-9(2-3); G-10(1-2)
	Sewage Systems	S-3(2); S-4(3); S-5(1-2); S-7(1)
	Road Salt	R-4(3)
	Waste Disposal Sites	W-2(2)

Details of policies to be implemented and reported on by Approval Authorities include:

- G-1(1-4) Transition Provisions: Transition Provisions do not require reporting.
- G-7(2) Update Official Plan to consider policies that use Section 57 Prohibition: See summary table below.
- G-9(2-3) Update Official Plan to consider Section 59 Restricted Land Uses: See summary table
- G-10(1-2) General Provisions for Policies that use Land Use Planning: indicates timeline required for updating and does not require reporting.
- S-3(2) Future Prohibition of a sewage system that would be a future significant threat: See summary table below.
- S-4(3) Sewage Systems Existing Connection to Municipal: See summary table below.
- S-5(1-2) Policy to address future septic systems under OBC proposed to be installed in the future: See summary table below.
- S-7(1) Policy to address future wastewater collection system: See summary table below.
- R-4(3) Road Salt Vulnerable Area Planning: See summary table below.
- W-2(2) Policy to prohibit future waste disposal sites addressed by Prescribed Instruments: See summary table below.

The status of Approval Authority (single, upper and lower tier) implementation of above policies is as follows:

System Name	Planning Authority	Planning Authority / Status
Alpine Village	Municipality of Trent Lakes	In progress
Bayside	City of Quinte West	Complete in 2015
Birch Point	City of Kawartha Lakes	To be completed in 2017
Blackstock	Regional Municipality of Durham	To be complete in 2016, Scugog Township Official Plan Update Ongoing
Bobcaygeon	City of Kawartha Lakes	To be completed in 2017
Brighton	Municipality of Brighton	To introduce a policy during its 5 year Official Plan review, Northumberland County Complete
Buckhorn Lake Estates	Municipality of Trent Lakes	In progress
Camborne	Township of Hamilton	To be completed in 2017, Northumberland County Complete
Campbellford	Municipality of Trent Hills	Trent Hills to begin in 2016, Northumberland County Complete

Canadiana Shores	City of Kawartha Lakes	To be completed in 2017
Cardiff	Municipality of Highlands East	County of Haliburton drafted and to include in 2016, Municipality of Highlands East Draft OP Prepared in 2015
Cobourg	Town of Cobourg	Review and update in progress, Northumberland County complete
Colborne	Township of Cramahe	In Progress to be completed in 2016/17, Northumberland County Complete
Creighton Heights	Township of Hamilton	To be completed in 2017, Northumberland County Complete
Crystal Springs	Township of Otonabee-South Monaghan	In progress
Dyno Estates	Municipality of Highlands East	County of Haliburton drafted and to include in 2016, Municipality of Highlands East Draft OP Prepared
Fenelon Falls	City of Kawartha Lakes	To be completed in 2017
Frankford	City of Quinte West	Complete in 2015
Lansdowne (formerly Fraserville)	Township of Cavan Monaghan	In progress
Grafton	Township of Alnwick/Haldimand	Complete, Northumberland County Complete
Greenbank	Regional Municipality of Durham	To be complete in 2016, Scugog Township Official Plan Update Ongoing
Hastings	Municipality of Trent Hills	Trent Hills to begin in 2016, Northumberland County Complete
Havelock	Township of Havelock-Belmont-Methuen	In progress
Janetville	City of Kawartha Lakes	To be completed in 2017
Keene Heights	Township of Otonabee-South Monaghan	In progress
King's Bay	City of Kawartha Lakes	To be completed in 2017
Kinmount	City of Kawartha Lakes	County of Haliburton drafted and to include in 2016, CKL To be completed in 2017
Lakefield	Township of Selwyn	In progress
Lindsay	City of Kawartha Lakes	To be completed in 2017
Lutterworth Pines	Township of Minden Hills	County of Haliburton drafted and to include in 2016, Minden Hills under review
Manorview	City of Kawartha Lakes	To be completed in 2017
Mariposa Estates	City of Kawartha Lakes	To be completed in 2017
Marmora	Municipality of Marmora and Lake	In Progress, Hastings County Draft Official Plan Prepared

Millbrook	Township of Cavan Monaghan	In progress
Minden	Township of Minden Hills	County of Haliburton drafted and to include in 2016, Minden Hills under review
Newcastle	Regional Municipality of Durham	To be complete in 2016; Clarington proposed Official Plan revised to include updates.
Norland	City of Kawartha Lakes	To be completed in 2017
Norwood	Township of Asphodel-Norwood	In progress
Orono	Regional Municipality of Durham	To be complete in 2016; Clarington proposed Official Plan revised to include updates.
Peterborough	City of Peterborough	In progress
Pinewood	City of Kawartha Lakes	To be completed in 2017
Pleasant Point	City of Kawartha Lakes	To be completed in 2017
Port Hope	Port Hope, Municipality of	Draft Official Plan (under review) contain provisions; Northumberland County complete.
Port Perry	Regional Municipality of Durham	To be complete in 2016, Scugog Township Official Plan Update Ongoing
Sonya	City of Kawartha Lakes	To be completed in 2017
Southview Estates	City of Kawartha Lakes	To be completed in 2017
Stirling	Township of Stirling-Rawdon	In Progress to be completed in 2016/17, Hastings County Draft OP Prepared
Trenton	City of Quinte West	Complete in 2015
Victoria Glen	City of Kawartha Lakes	To be completed in 2017
Victoria Place	City of Kawartha Lakes	To be completed in 2017
Warkworth	Municipality of Trent Hills	Trent Hills to begin in 2016, Northumberland County Complete
Woodfield	City of Kawartha Lakes	To be completed in 2017
Woods of Manilla	City of Kawartha Lakes	To be completed in 2017

Planning Authorities are well on their way to implement the relevant Trent and Ganaraska Source Protection Plan policies in a timely manner. Regular meetings with planners from across the TCC ensure consistency and provide opportunities for discussion and knowledge transfer.

Overall, every Approval Authority tasked with implementing these policies has either completed implementation, is in process of completing, or has plans to incorporate the policies during their five year review cycle. The compliance date for these policies is five years for the Official Plan and a subsequent three years for implementing the associated zoning by-laws.

d. Conservation Authorities and Source Protection Authority

The policies the Conservation Authorities and Source Protection Authority are required to report by February 1st for activities in preceding calendar year are as follows:

Implementer	Policy No.	
Conservation Authorities	General	G-4(1-3)
	Other	OT-4(1-3)
Source Protection Authority	Aircraft De-icing	P-1(3)

Additional details of the policy to be implemented and reported on by Conservation Authorities and the Source Protection Authorities are as follows:

- G-4(1-3) Support of Incentive Programs: Incentive Programs such as the Ontario Drinking Water Stewardship Program (ODSWP) were not funded in 2015. CAs provided input to the MOECC and Conservation Ontario in support of re-establishing the ODWSP or creation of a new program. However several funding programs accessed by landowners in vulnerable areas to address threats including:
 - ✓ GRCA’s Clean Water-Healthy Land Financial Assistance Program (e.g. agricultural best management practices);
 - ✓ LTC’s Stewardship program titled: “Healthy Lands Clean Water – A landowner stewardship program” (e.g. fencing, oil drip trays);
 - ✓ CVCA, KRCA and ORCA are working with municipalities to potentially leverage existing programs, or potentially develop new programs for 2016.
- OT-4(1-3) Collection of Climate Change Data: Conservation Authorities monitor environmental features and functions through the Monitoring Programs (e.g. PWQMN, PGMN, Stream Gauges, and OBBN). Generally climate change considerations are given to vulnerable areas on an ongoing basis and as new studies are conducted. Many Conservation Authorities are also engaged in the development of Climate Change Action Plans and related activities through other programs that are relevant, but not directly related to the Source Protection Program.
- P-1(3) Request Information from Relevant Airport Authorities or Operators: This is not applicable in 2015 and as above there are no reported existing or future threats as no airports exist or are planned within vulnerable areas.

e. Environment Canada

The only policy Environment Canada is to consider and potentially report by February 1st for activities in preceding calendar year is as follows:

Implementer	Policy Category	Policy No.
Environment Canada	Other	OT-4(1,3)

No direct reporting was received by Environment Canada, however Environment Canada makes available data such as temperature, precipitation, degree days, relative humidity, wind speed and direction, monthly summaries, averages, and extremes. Also available is water level and water flow data from the Water Survey of Canada (WSC). WSC is the

national authority responsible for the collection, interpretation and dissemination of standardized water resource data and information in Canada. There are 36 active and 13 historic Environment Canada hydrometric stations in the TCC watershed that provide standardized water resource data and information for potential use by TCC.

f. Ministry of Agriculture, Food, and Rural Affairs (OMAFRA)

The policies OMAFRA is required to report by February 1st for activities in preceding calendar year are as follows:

Implementer	Policy Category	Policy No.
Ministry of Agriculture, Food, and Rural Affairs	General	G-1(1-2,4); G-2(1-2)
	Agriculture	A-2(1-3); A-4(4)
	Non-Agricultural Source Material	N-1

Additional details of the policies to be implemented and reported on by OMAFRA are:

- G-1(1-2, 4) Transition Provisions: Transition Provisions do not require reporting.
- G-2(1-2) General Provisions for Policies that used Prescribed Instruments.
- A-2(1-3) Agriculture: Review/Inspect properties in vulnerable areas within one year, and review all Prescribed Instruments within three (3) years to determine compliance with policies.
- A-4(4) Agriculture: Prohibition in WHPA A or IPZ – 1 where Prescribed Instrument Required.
- N-1 Non Agricultural Source Material: Review all Prescribed Instruments within three (3) years to determine compliance with policies.

The Ontario Ministry of Agriculture, Food, and Rural Affairs reported on February 3, 2016 that between January 1, 2015 and December 31, 2015, one surface water Agricultural Source Material (ASM) Nutrient Management Strategy, zero new groundwater ASM Nutrient management Strategies and zero new NASM plans were approved within the Trent Conservation Coalition Source Protection Region.

The one surface water ASM Nutrient Plan occurred in Southview Estates with reported excellent communication between the City of Kawartha Lakes Risk Management Official and OMAFRA which resulted in conditions added into the Prescribed Instrument (ASM Nutrient Plan) to ensure policies in the Trent Source Protection Plan were complied with.

g. Ministry of the Environment and Climate Change (MOECC)

The policies the MOECC is required to report by February 1st for activities in preceding calendar year are as follows:

Implementer	Policy Category	Policy No.
Ministry of the Environment and Climate Change	General	G-1(1-2,4); G-2(1-2)
	Sewage Systems	S-2(1-2); S-3(1,3); S-7(2); S-8(1)
	Agriculture	A-2(1-2,4); A-3; A-4(4)
	Waste Disposal Sites	W-1; W-2(1)
	Other	OT-1(4-7); OT-2(4,5); OT-4(1-3); OT-5(1-2)

The Ministry of the Environment and Climate Change provided a report on March 17, 2016 providing some details about MOECC implementation activities in TCC.

MOECC is currently identifying instruments that are in place in areas where these would be significant drinking water threats activities, so that they can be reviewed to determine if changes are needed to meet the intent of the source protection policies. The ministry has established a three-year timeline from the effective date of each source protection plan to complete this work.

MOECC reports that there are eighteen proposed waste hauled sewage sites determined to be a moderate or Low threat. The MOECC provides additional information indicating that if the ministry issues an Environmental Compliance Approval authorizing the land application of hauled sewage in locations where the activity would be a moderate or low threat, it will include terms and conditions that require the site to be designed, constructed and operated in a manner that meets acceptable standards that are protective of the environment and drinking water sources. MOECC also reported they are strengthening application and review requirements in these locations.

Additional details of the policies to be implemented and reported on by MOECC are:

- G-1(1-2, 4) Transition Provisions: Transition Provisions do not require reporting.
- G-2(1-2) General Provisions for Policies that used Prescribed Instruments. No prescribed Instruments reviews or inspections were completed in 2015.
- S-2(1-2), S-3(1,3), S-7(2) and S-8(1) Sewage Works, Sewage Systems and Storm water Management Facilities: There are no existing significant threat Sewage Works, Sewage Systems or Storm water Management Facilities requiring a Prescribed Instrument.
- A-2(1-2, 4), A-3, A-4(4) Agriculture Significant Threats requiring Prescribed Instrument: MOECC reported since there are no significant threats the prioritization activity was not required in 2015.
- W-1 and W-2(1) Waste Disposal Sites: There are zero (0) sites that may be significant, however MOECC reports that there are eighteen proposed Waste hauled sewage sites determined to be a moderate or low threat.
- OT-1(4-7): MOECC reports successful integrating source protection information into the ministry's spills response. The spill response and notification procedures have been updated to ensure that in the event of a spill in a vulnerable area, prompt action and communication occurs with the affected municipalities, agencies and authorities within relevant source protection area(s) so that drinking water system operators can take appropriate measures.
- OT-2(4,5) Risk Based Analysis of compliance with O.Reg 903, OT-4(1-3) Climate Change Data Collection and OT-5(1-2) Collaboration with other jurisdictions: These have a strategic legal effect and the ministry reports it has established a working group to further analyze how to best achieve the policy objectives across all source protection plans.

h. Ministry of Natural Resources and Forestry (MNRF)

The policy MNRF is should report by February 1st for activities in preceding calendar year is as follows:

Implementer	Policy Category	Policy No.
Ministry of Natural Resources and Forestry	Other	OT-4(1-3)

The Ministry of Natural Resources and Forestry provided a report on May 25, 2016. In the report, MNRF indicated that in November 2015, Ontario released a provincial Climate Change Strategy which outlines the province’s vision, long-term objectives and high-level measures to address climate change and achieve Ontario’s greenhouse gas emissions reduction target of 80% below 1990 levels by 2050. Included in the Strategy is a commitment to develop a new provincial climate change modeling collaborative as a one-window repository for information about climate change impacts and projections across Ontario, and implications for policy makers and natural resource managers.

In addition, MNRF reported it is in the process of developing a Natural Resource Climate Adaptation Strategy that will complement Ontario’s Climate Change Strategy and Action Plan and integrate climate change adaptation efforts across the ministry’s mandate. The Strategy is being designed to advance research, monitoring, operational and policy efforts across the province to sustainable manage natural resources and increase resilience of natural systems to climate change impacts, and will serve as a framework to guide Ministry programs in climate change action.

Finally, the MNRF reported it continues to deliver on the commitments of the Canada-Ontario Agreement (COA) on Great Lakes Water Quality and Ecosystem Health, under the climate change annex to improve understanding of the effects of climate change on water quality and ecosystem health.

i. Ministry of Transportation (MTO)

The policies MTO is required to report by February 1st for activities in preceding calendar year are as follows:

Implementer	Policy Category	Policy No.
Ministry of Transportation	General	G-6(1-2,5)
	Road Salt	R-2(1-2); R-3(1-3); R-4(1-2)

MTO provided a report on April 15, 2016 providing details about MTO implementation activities in TCC.

Additional details of the policies to be implemented and reported on by MTO are as follows:

- G-6(1-2,5) Signage for Vulnerable Areas: MTO worked in collaboration with MOECC and in consultation with source protection authorities and regions, designed, planned, manufactured and began to install provincial signs as part of an education and outreach program to identify the location of vulnerable drinking water areas. However no signs were installed on TCC highways in 2015.
- R-2(1-2) and R-4(1-2) Road Salt Management Plans: The MTO Salt Management Plan contains best management practices to ensure application rate, timing and location of salt to reduce the potential for salt-related surface water run-off and groundwater infiltration. MTO ensure the Salt Management Plan meets the objectives of Environment Canada’s Code of Practice for Environmental Management of Road Salts.

Contractors working on the provincial highway network (In TCC this is highways 401, 115 and 35) are required to conform to the Salt Management Plan. With respect to research initiatives and pilot projects.

- R-3(1-3) Road Salt Research and Development: MTO reports they pilot new practices and technologies for road salt application and the management of runoff. This includes new ways to apply winter materials to reduce the quantity and increase the effectiveness. In 2015 MTO tested pre-wet salt compared to pre-treated salt with data collection complete and analysis currently under way. A final report is to be prepared with the findings.
- Of note and not required by the Trent or Ganaraska Source Protection Plans is MTO’s support of considering source water protection during the planning and environmental assessment (EA) processes for MTO activities to minimize impacts on source water.

j. Relevant Airport Authorities or Operators

The policy the relevant airport authorities or operators should consider is as follows:

Implementer	Policy Category	Policy No.
Relevant Airport Authorities or Operators	Aircraft De-icing	P-1(2)

Additional details of the policy that should be implemented and reported on by relevant airport authorities or operators is as follows:

- P-1(2) includes design standards for managing aircraft de-icing fluid;
- This is not applicable in 2015 since there are no reported existing or future threats as no airports exist or are planned within vulnerable areas.

6. Conclusion

Ontarians depend on clean and reliable drinking water. Each Implementing Body has a role to play in protecting source water by preventing significant drinking water threats.

Despite the accomplishments illustrated in this report, there is still more work to be done. Implementing Bodies need to continue the work of implementing the policies developed by the Trent Conservation Coalition Source Protection Committee. Working together, we can move towards the common objective of protecting municipal drinking water sources using the tools provided in the *Clean Water Act 2006*.

The TCC will report again in 2016 and 2017. In May 2018, TCC Source Protection Authorities will provide a more detailed summary including *Clean Water Act 2006* section 46 performance measures. The TCC will also analyze trends observed in the reporting data, and report on how well we are achieving the purposes of the relatively new legislation.

We hope all Ontarians, and in particular those who rely on TCC municipal drinking water sources will take pride in the accomplishments that this first Annual Implementation Summary Report describes. Every day, people in communities across the TCC watersheds and the rest of Ontario have the opportunity to be drinking water source protection stewards and leaders. We hope you will seek out those opportunities and will work with us, and your own community, to protect sources of drinking water to keep it clean and reliable not only for today but for future generations.



Photo above: 2015 Trent Conservation Coalition Source Protection Committee