

**DRINKING WATER  
SOURCE PROTECTION**

Our Actions Matter

**TRENT  
CONSERVATION  
COALITION  
SOURCE PROTECTION  
REGION**

# 2023 Annual Progress Report Trent Source Protection Plan



Prepared by:

Trent Conservation Coalition Source Protection Region



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

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On behalf of the Trent Conversation Coalition Source Protection Committee, it is my pleasure to introduce the 2023 Annual Progress Report on the implementation of the Trent and Ganaraska Source Protection Plans. We have now completed 9 years of implementation and it is encouraging to see our Source Protection Plan Policies being implemented across our vast region.

It is hard to believe that we are approaching the 24th anniversary of the Walkerton water tragedy. As a result of that series of tragic events, we have learned lessons and we are now and better equipped to deal with potential future perils. The Source Protection Program in Ontario is a perfect example of how we can learn from adversity and reduce the risk of history repeating itself. But we must never become complacent. This Annual Report provides a snap shot of where we are in the program and details of how the Source Protection Plans are being implemented.

As always, our main objective is to protect sources of drinking water. This concept of source water protection was identified as the first barrier in a multi-barrier approach to safer drinking water by the Walkerton Commission. Our assessment reports and Source Protection Plans are science-based and as new science emerges our staff and committee will respond with appropriate amendments.

I am pleased to announce that in December, 2023, an extensive amendment package under section 36 of the Clean Water Act, 2006, was submitted to the Ministry of the Environment, Conservation and Parks for approval. This effort was the culmination of 5 years of research and consultation to adapt to new Technical Rules and to address some policy changes. Our Source Protection Committee reviewed and approved all the amendments.

- (Continued on next page)

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

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In 2023, our regional staff also continued to provide expertise to people who do not receive their water from municipal systems. Our stance has always been that everyone should have safe drinking water. We are working with other Source Protection Regions in Eastern Ontario to provide webinars that explain best practices to assist people with private drinking water systems. We hope to continue this program into the future.

Our Annual Report summarizes the achievements of the Risk Management Officials, the municipalities and the provincial ministries that are required to implement the many policies in our Source Protection Plan. Through this exercise the committee can judge the level of progress made and the effectiveness of the Source Protection Plan policies as well as identify any challenges with implementing the Plan.

Each year, as we prepare these Annual Reports, there is an opportunity to reflect on the magnitude and importance of the work we do to protect sources of municipal drinking water. I encourage you to read this report to follow our progress.

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

# 1. INTRODUCTION

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The Trent Conservation Coalition Source Protection Region's sixth Annual Progress Report for the Trent Source Protection Plan (SPP) provides a status update of implementation since the SPP came into effect on January 1<sup>st</sup>, 2015 through to December 31<sup>st</sup>, 2023.

This report is produced by the Trent Conservation Coalition (TCC) for:

- Residents and businesses within the watershed
- Trent Conservation Coalition Source Protection Committee (SPC), and
- Municipalities and other local stakeholders.

A separate Annual Progress Report for the Ganaraska Source Protection Plan is also available.

The format of this report is based on broad categories, identified by the Ministry of the Environment, Conservation and Parks (MECP), to facilitate legislative reporting and tracking of progress made towards the implementation of the Trent Source Protection Plan, and other source protection plans across the province.

# 1.1 CLEAN WATER ACT, 2006

In response to the *Report of the Walkerton Inquiry (The Honourable Dennis R. O'Connor, 2002)* and its recommendation for a multi-barrier approach to providing safe drinking water, the Ontario government passed the *Clean Water Act, 2006* (the *Act*). The purpose of the *Act* is to protect sources of municipal drinking water through collaborative, watershed-based source protection plans that are locally developed and based on science.

## How is it protected?

Under the *Clean Water Act*, local **source protection plans** are in place across Ontario.



These plans protect municipal drinking water sources from contamination and overuse

More than

**10**

million people are protected through the Ontario Drinking Water Source Protection Program



We all **play a role** in keeping our sources of drinking water clean and abundant

[conservationontario.ca](http://conservationontario.ca)

<sup>1</sup>Statistics Canada, 2013

## 1.2 SOURCE PROTECTION PROGRAM

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The *Clean Water Act* led to the creation of the Drinking Water Source Protection (DWSP) program, which established 19 source protection regions and 38 source protection areas in Ontario. The DWSP program protects current and future municipal residential drinking water sources from contamination and overuse by developing collaborative watershed-based source protection plans. A source protection plan is the first barrier in a multi-barrier approach.

The Trent Source Protection Plan includes mandatory and strategic policies that have been developed by the Trent Conservation Coalition Source Protection Committee in consultation with provincial ministries, municipalities, businesses, landowners and other stakeholders. The plan identifies the party that is responsible for implementing a policy (implementing bodies). The implementing bodies are required by the *Clean Water Act* and its regulations to report on the implementation progress of policies in the Plan.

## 1.3 OUR WATERSHED

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### **The Trent Conservation Coalition Source Protection Region**

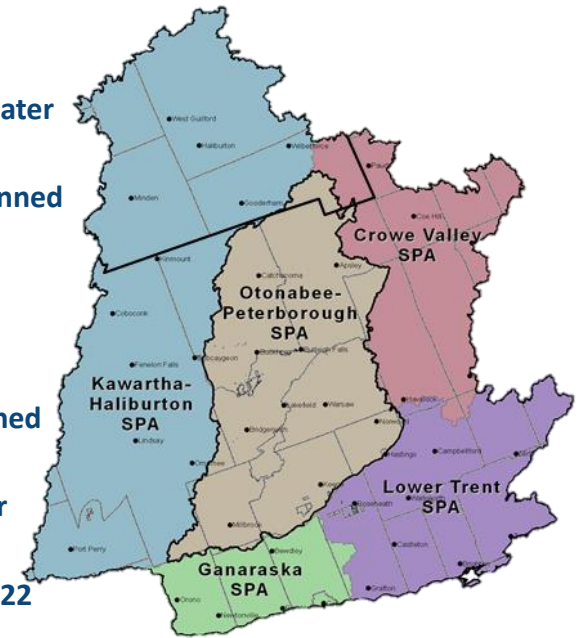
The Trent Conservation Coalition (TCC) Source Protection Region is comprised of five source protection areas. The Trent Source Protection Plan (SPP) applies to the source protection areas, identified below, that are within the Trent River Watershed. The Ganaraska Source Protection Plan is a separate plan for the Ganaraska Source Protection Area. This report was prepared based on annual reporting information submitted by implementing bodies for the Trent Source Protection Plan.

- Kawartha-Haliburton Source Protection Authority;
- Otonabee-Peterborough Source Protection Authority;
- Crowe Valley Source Protection Authority;
- Lower Trent Source Protection Authority.

# 1.3 OUR WATERSHED

## TCC Source Protection Region Quick Facts:

- Population in the TCC: 400,000 (including Ganaraska)
- Area: TCC = 14,500 km<sup>2</sup>
- Area: Trent River Watershed= 12,900 km<sup>2</sup>
- Number of drinking water systems in the TCC SPR: 53 (includes one planned groundwater system)
- Number of drinking water systems in the Trent River Watershed: 47 (includes one planned groundwater system)
- Number of surface water systems in the TCC SPR: 18
- Number of surface water systems in the Trent River Watershed: 15
- Number of groundwater systems in the TCC SPR: 35 (includes one planned system)
- Number of groundwater systems in the Trent River Watershed: 32 (includes one planned system)
- Population serviced by municipal residential drinking water systems in the Trent River Watershed: more than 150,000
- Number of municipalities in the TCC SPR with residential drinking water systems: 27 (22 lower tier, 5 upper tier)
- Number of municipalities in the TCC SPR with at least part of a vulnerable area in their jurisdiction: 43 (38 lower tier, 5 upper tier)
- Number of policies in the Trent Source Protection Plan: 138
- Number of Issue Contributing Areas in the Trent Source Protection Plan: 1 (Stirling system)
- Effective date of the Trent Source Protection Plan: January 1, 2015





# 1.3 OUR WATERSHED

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## Otonabee-Peterborough Source Protection Area

The Otonabee-Peterborough Source Protection Area (O-P SPA) has an approximate population of 147,446 and includes portions of twelve (12) municipalities and three (3) First Nations Reserves. It covers approximately 3,365 km<sup>2</sup> and is comprised of the Otonabee Region Watershed (1,915 km<sup>2</sup>) and areas to the north (1,365 km<sup>2</sup>) which include portions of Haliburton and Peterborough Counties.

Approximately 62% of the population, or 91,508 people, obtain drinking water from eleven (11) municipal residential drinking water systems in the O-P SPA. Three (3) municipal drinking water systems, Lakefield, Peterborough and Hastings, draw from surface water sources (the latter extends into the Municipality of Trent Hills in the Lower Trent Source Protection Area). Eight (8) residential drinking water systems draw on groundwater to serve approximately 3% of the population, or 4,929 people, in the communities of Alpine Village/Pirates Glen, Birch Point Estates, Buckhorn Lake Estates, Crystal Springs Subdivision, Keene Heights Subdivision, Millbrook, Norwood, and Pinewood.

There are two (2) populated First Nation Reserves in the O-P SPA, Curve Lake and Hiawatha, with a combined population of approximately 1,543 that is primarily served by private wells.



# 1.3 OUR WATERSHED

## Kawartha-Haliburton Source Protection Area

The Kawartha-Haliburton Source Protection Area (K-H SPA) is comprised of watersheds that represent the jurisdiction of Kawartha Conservation, and an additional watershed area to the North primarily within Haliburton County.

The K-H SPA covers an area of 5,406 km<sup>2</sup> and is located within the southcentral region of Ontario, fringing on the Greater Toronto Area to the south and Algonquin Park to the north. There are 11 municipalities within or partially within the Source Protection Area. Approximately 45% of the population, or 38,050 people, obtain their drinking water from 22 municipal residential drinking water systems in the K-H SPA.

There are six existing municipal residential drinking water systems in the source protection area that obtain their water from surface water sources. These systems serve about 22,350 people in the communities of Bobcaygeon, Fenelon Falls, Kinmount, Lindsay, Norland and Southview Estates.

There are 16 existing municipal residential drinking water systems in the source protection area that obtain their water from groundwater sources. These systems serve about 15,700 people in the communities of Blackstock, Canadiana Shores, Greenbank, Janetville, Kings Bay, Lutterworth Pines, Manorview, Mariposa Estates, Minden, Pleasant Point, Port Perry, Sonya, Victoria Glen, Victoria Place, Woodfield, and Woods of Manilla.

The Mississaugas of Scugog Island First Nation is located within the Source Protection Area.



# 1.3 OUR WATERSHED

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## Crowe Valley Source Protection Area

The Crowe Valley Source Protection Area covers an area of approximately 2,006 km<sup>2</sup> and includes the entire Crowe River watershed. There are 10 municipalities located within or partially within the Crowe Valley Source Protection Area. The total population of these municipalities is 46,074 (Statistics Canada, 2021), and about 12,446 of them are located within the source protection area boundary.

Drinking water systems in the Crowe Valley Source Protection Area include municipal and non-municipal systems of various sizes that draw raw water from both groundwater and surface water sources.

About 35% of the population in the Crowe Valley Source Protection Area (approximately 3,700 people) obtains their drinking water from four municipal residential drinking water systems.

There is one existing municipal residential surface water supply system in the source protection area that obtains water from a surface water source. This system serves about 1,300 people in the community of Marmora.

There are three existing municipal residential groundwater supply systems in the source protection area that obtain their water from groundwater sources. These systems serve about 2,400 people.



# 1.3 OUR WATERSHED

## Lower Trent Source Protection Area

The Lower Trent Source Protection Area includes the area under the jurisdiction of the Lower Trent Region Conservation Authority (2070 km<sup>2</sup>) and the area outside of Conservation Authority jurisdiction between the Lower Trent, Otonabee, and Crowe Valley watersheds (45 km<sup>2</sup>). The Lower Trent Source Protection Area is bordered on the south by Lake Ontario and the Bay of Quinte. Rice Lake forms the northwestern boundary of the region. Several tributary streams including Cold, Rawdon, Salt, Squires (Hoards), Percy, Burnley (Mill), Trout, and Mayhew Creeks empty into the Trent River. Shelter Valley, Barnum House, Lakeport/Colborne and Butler Creeks empty into Lake Ontario while DND and Meyers Creeks empty into the Bay of Quinte.

There are nine municipalities located within or partially within the Lower Trent Source Protection Area. The total population of these municipalities is 112,469 (Statistics Canada, 2021) and more than 88,000 of them are located within the source protection area boundary.

About 60% of the source protection area population (over 48,400 people) in the Lower Trent Source Protection Area obtains their drinking water from 10 municipal residential drinking water systems.

There are six existing municipal residential surface water supply systems in the source protection area that serve about 36,600 people in the communities of Bayside, Campbellford, Frankford, Hastings, Trenton and Warkworth.

There are four existing municipal residential groundwater supply systems in the source protection area that obtain their water from groundwater sources. These systems serve about 11,800 people in the communities of Brighton, Colborne, Grafton and Stirling.

The Alderville First Nation, located south of Rice Lake, is the only First Nation in the Lower Trent Source Protection Area. The reserve has a population of approximately 575 and a population density of 50 people/km<sup>2</sup> with most residents of Alderville First Nation being serviced by private wells.



**LOWER TRENT**  
CONSERVATION

# 1.3 OUR WATERSHED

## LOCATION OF MUNICIPAL WELLS AND INTAKES SUBJECT TO *THE CLEAN WATER ACT*




## 2. A MESSAGE FROM YOUR SOURCE PROTECTION COMMITTEE

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The scoring system below is used to assess the progress achieved from January 1<sup>st</sup>, 2015 to December 31<sup>st</sup>, 2023 related to implementing policies in the Trent Source Protection Plan.

Our progress score on achieving source protection plan objectives in this reporting period is as follows:

	<b>P: Progressing well / on target:</b> Most of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.
	<b>S: Satisfactory:</b> Some of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.
	<b>L: Limited progress made:</b> A few source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.

The rationale for the Source Protection Committee (SPC) to select the “progress score” is as follows: The SPC arrived at this consensus based on a summary of information provided by Source Protection Authorities through the Annual Progress Report templates and a draft Annual Progress Report presented on March 26, 2024 at a TCC Source Protection Committee meeting. The SPC reviewed the sections in the below report, including a review of the scoring proposed by each Source Protection Authority. The SPC then assessed the progress score by applying the criteria above. The committee settled on the progress score of “**Progressing well/on target**” because implementation of the Trent Source Protection Plan policies are mostly complete across all four SPAs.

## 2.1 METHOD OF EVALUATION

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Implementation of the Trent Source Protection Plan is an important element of a multi-barrier approach to protecting municipal residential drinking water sources. To evaluate implementation effectiveness, a monitoring component is included for each policy. The Ministry of the Environment, Conservation and Parks (MECP) has identified a reporting process for the monitoring component that includes the preparation of an Annual Progress Report. In order to report on implementation progress to the MECP, the implementing bodies submit information on their progress through use of a standardized template to the Source Protection Authorities and the Region. This information is then used to develop this Annual Progress Report.

# 3. PROGRESS ON SOURCE PROTECTION PLAN IMPLEMENTATION

## 3.1 SOURCE PROTECTION PLAN POLICIES

Across the Trent Conservation Coalition Source Protection Region, all policies that address significant drinking water threats are implemented, in progress or have been evaluated and determined to require no further action(s).

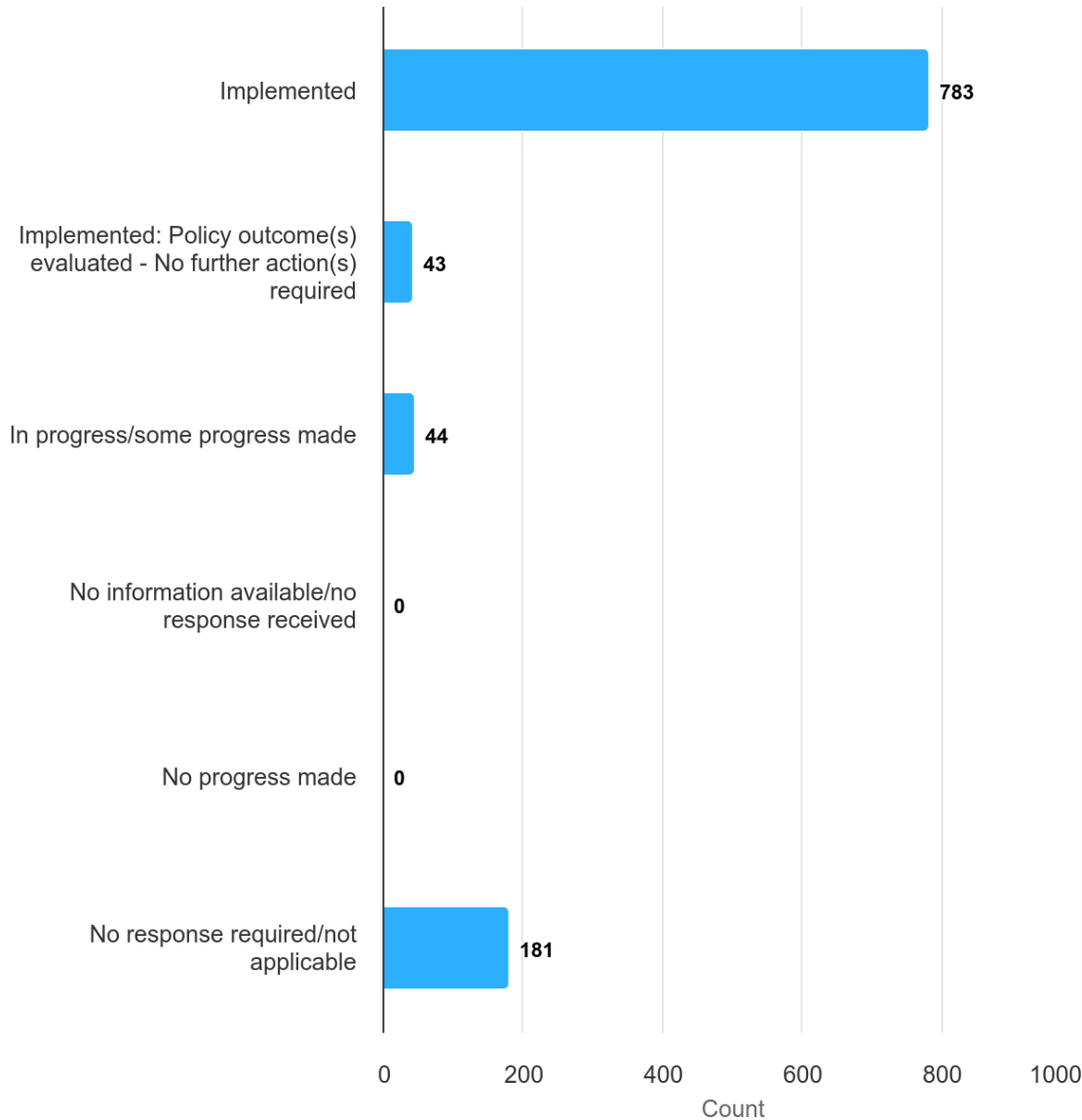
The percentage of policy progress across the Trent Source Protection Plan was determined through the following information:

Source Protection Area	Percent Policies Implemented, In progress or evaluated as no further action required	Progress Score Assigned by SPA
Otonabee-Peterborough	100%	P: Progressing well / on target
Kawartha-Haliburton	100%	P: Progressing well / on target
Crowe Valley	100%	P: Progressing well / on target
Lower Trent	100%	P: Progressing well / on target

Our overall progress score across the Trent Source Protection Plan on achieving source protection plan objectives in this reporting period is as follows:

✓	<b>P: Progressing well / on target: Most of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.</b>
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## Policy Implementation Status for all of TCC (including Ganaraska):

- 79% Implemented
- 4% In Progress
- 17% Not Applicable

## 3.2 MUNICIPAL PROGRESS – ADDRESSING RISKS ON THE GROUND

Municipalities and approval authorities under the *Planning Act* are the Implementing Bodies for 56 policies in the Trent Source Protection Plan. The jurisdictions of 43 municipalities lies within the Trent Conservation Coalition Source Protection Region, however of those, 27 municipalities (22 lower tier and 5 upper tier) contain vulnerable areas where Source Protection Plan polices apply.

For the Trent Source Protection Plan, a summary of key information and progress scores is as follows:

Source Protection Area	% Official Plan Policies Implemented	% Zoning By-Law Policies Implemented	% Emergency Management Policies Implemented	Progress Score assigned by SPA
Otonabee-Peterborough	100%	89%	100%	P: Progressing well / on target
Kawartha-Haliburton	67%	75%	100%	P: Progressing well / on target
Crowe Valley	100%	100%	100%	P: Progressing well / on target
Lower Trent	71%	67%	100%	P: Progressing well / on target

For the above table, it is important to note that although some work is in progress, including waiting on council approval for updates, zero municipalities report they have not started.

## 3.2 MUNICIPAL PROGRESS – ADDRESSING RISKS ON THE GROUND

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Under the category “% Official Plan and Zoning By-Law Policies Implemented” all of the municipalities are in process of implementing. The majority of municipalities have amended their Official Plans, or are waiting for municipal council approval of these amendments. All municipalities have implemented source protection into their Emergency Management Plans.

Our overall progress score on achieving source protection plan objectives in this reporting period is as follows:



**P: Progressing well / on target: Most of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.**

## 3.3 SEPTIC INSPECTIONS

While outside the scope of the *Clean Water Act*, The Ontario Building Code (OBC) requires that septic system threats be subject to a mandatory inspection program. Based on the location of individual septic systems, the responsibility to undertake these inspections may be that of the local Health Unit/department, municipality, or Conservation Authority depending on which body is empowered as the principal authority (municipalities).

Compliance Date Summary	
Existing	5 years from notice on EBR (November 3, 2019)
Future	When the plan takes effect (January 1, 2015)

Compliance dates for existing sewage system inspections (those constructed by the following date) are set by the s. 1.10.2.4 (2)(a)(i)(A) of [O. Reg. 315/10: BUILDING CODE](#) to be five years after the date of publishing of the Assessment Report on the Environmental Bill of Rights. Or, five years after the construction of the sewage system, in the case of a sewage system constructed on or after the date of publication. The EBR Registry Number is [012-2699](#) and was posted November 3<sup>rd</sup>, 2014 therefore the compliance date for most existing sewage systems is November 3<sup>rd</sup>, 2019, and every five years after.

## 3.3 SEPTIC INSPECTIONS

The progress of septic inspections for the Trent Source Protection Authorities is as follows:

SPA (Compliance period)	Inspection Agency(ies)	# Systems Requiring Inspection (for 5 year compliance period)	# Inspections (this reporting period)	# Requiring Maintenance	# and (% Complete)
Otonabee-Peterborough	Municipal Building Inspectors (Douro-Dummer) and Peterborough Public Health	194	8	1 (2%)	175 (90%)
Kawartha-Haliburton	Municipal Building Inspectors	390	116	4 (3%)	303(78%)
Crowe Valley	Municipal Building Inspectors and Peterborough Public Health (Havelock)	45	1	0 (0%)	14 (31%)
Lower Trent	Municipal Building Officials and Septic Inspectors	156	5	1 (20%)	119 (76%)

## 3.3 SEPTIC INSPECTIONS

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For Kawartha-Haliburton, Crowe Valley and Lower Trent, 2023 marked year 3 of their 5-year cycle for inspections.

It should be noted that overall, 100% of existing septic threats were inspected in accordance with the previous 5-year compliance period from the Ontario Building Code.

Of the inspections completed in 2023, 5% required maintenance, mostly minor, and 95% function as required.

Due to the shifting five year cycles of sewage system reporting there are varied levels of completion among the Source Protection Areas.

For Otonabee-Peterborough, 2023 is year 5 of their second 5-year cycle, and 19 inspections are currently out of date. Otonabee-Peterborough achieved 100% compliance for the previous period.

### 3.3 SEPTIC INSPECTIONS

Source Protection Area	Standard Operating Procedures in place for future threats?
Otonabee-Peterborough	100%
Kawartha-Haliburton	100%
Crowe Valley	100%
Lower Trent	100%

All municipalities and/or health units have standard operating procedures to ensure OBC compliance and thus ensure that future septic systems do not become significant threats.

Our progress score on achieving source protection plan objectives in this reporting period is as follows:



**P: Progressing well / on target: Most of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.**

## 3.4 RISK MANAGEMENT PLANS

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Risk Management Officials (RMOs) are the Implementing Body for 39 policies in the Trent Source Protection Plan, and utilize the following tools which were established under Part IV of the *Act*, to manage threats: Prohibition (s.57); Risk Management Plans (s.58); and, Restricted Land Uses (s.59).

Compliance Date Summary	
Existing	8 years from plan taking effect (January 1, 2023)
Future	When the plan takes effect (January 1, 2015)

Existing threats have a 5-year compliance date. Future threat policies are effective when the plan takes effect. In 2020, the MECP approved an extension of 2 years due to COVID-19 and other delays.



## 3.4 RISK MANAGEMENT PLANS

Source Protection Area	# RMP's Established in Reporting Period	# Significant Threats Managed	# of Threats remaining to be managed	# Inspections
Otonabee-Peterborough	0	0	2	3
Kawartha-Haliburton	0	0	9	67
Crowe Valley	0	0	0	0
Lower Trent	5	6	0	24

Five (5) Risk Management Plans have been established for this reporting period. These 5 plans collectively manage a total of 6 significant drinking water threats. Risk Management Officials report an ongoing effort to refine the number of significant drinking water threats based on information gathered from site visits, direct contacts and other means. The number of threats remaining has been revised to not include septic threats, and as a result as reduced to 11 (8 Fuel, 3 DNAPL).

The total number of inspections carried out by a Risk Management Official was 94. The compliance rate with the Risk Management Plans established is 100%.

A total of 97 Section 59 notices were issued for this reporting period. The processes to screen development applications is reported to be working and some municipalities continue to fine tune their screening processes to improve efficiencies.

## 3.4 RISK MANAGEMENT PLANS

The contact details for the Risk Management Officials can found on the Trent Conservation Coalition website:

<http://trentsourceprotection.on.ca/risk-management/contact-your-risk-management-official-inspector>.



**P: Progressing well / on target: Most of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.**

## 3.5 PROVINCIAL PROGRESS: ADDRESSING RISKS ON THE GROUND

Five provincial ministries reported on progress of 27 policies in our Source Protection Plan.

The ministries listed below have implemented 93% of the TCC policies. The remaining 7% are reported to be in progress. The table below summarizes the progress achieved for policy implementation as reported by each ministry:

Implementing Body	Policy Implementation Complete (%)	Policy Implementation in Progress (%)	Policy Implementation Not Started (%)
Ministry of Agriculture, Food, and Rural Affairs (OMAFRA)	(100%)		
Ministry of the Environment, Conservation and Parks (MECP)	(100%)		
Ministry of Natural Resources and Forestry (MNRF)	(100%)		
Ministry of Transportation (MTO)	(60%)	(40%)	
Ministry of Municipal Affairs and Housing (MMAH)		(100%)	

## 3.5 PROVINCIAL PROGRESS: ADDRESSING RISKS ON THE GROUND

For existing threats, Ontario ministries listed above are reviewing previously issued provincial approvals (i.e., prescribed instruments, such as environmental compliance approvals under the Environmental Protection Act) where they have been identified as a tool in the Trent Source Protection Plan to address existing activities that pose a significant risk to sources of drinking water. The provincial approvals are being amended or revoked where necessary to conform with the Trent Source Protection Plan policies. Our policies set out a timeline of 5 years to complete the review and make any necessary changes.

The Ministry of the Environment, Conservation and Parks reports that the percent progress made on prescribed instruments (PI) review is 100% for the following categories:

- Waste disposal sites – landfilling and storage
- Sewage Works/Wastewater
- Municipal Drinking Water Licences & Drinking Water Works Permits

The Ontario Ministry of Agriculture, Food and Rural Affairs reports that the percent progress made on prescribed instruments (PI) review is 100% for the following categories:

- Nutrient Management Strategies (NMS)
- Non-Agricultural Source Material (NASM) Plans

The Ministry of Transportation reports that a process is in place to ensure Prescribed Instrument holders comply with the terms and conditions of their Prescribed Instrument.

For future threats, Ministries reported that 100% are implemented, with standard operating procedures in place where applications are reviewed to ensure the proposed activities conform to our policies.



**P: Progressing well / on target: Most of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.**

## 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

Ten (10) policies in the Trent Source Protection Plan utilize the education and outreach (E & O) tool to influence behavior and encourage the voluntary adoption of practices to better protect sources of municipal drinking water.

Road signage was identified as an effective E & O tool to raise awareness of the Drinking Water Source Protection Program (DWSPP) and the importance of protecting sources of municipal drinking water. Drinking Water Protection Zone signs have been installed in vulnerable areas across the Trent Conservation Source Protection Region. To date, all required Drinking Water Protection Zone signs have been installed in the four Source Protection Authorities, including 255 under the Trent Source Protection Plan.



# 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

Regionally, the threat from Road Salt was a key focus for E & O this year with the continuation of the Salt Responsibly campaign. This included stickers to be placed on road salt boxes; and an interactive story map with information, science and actions that the public can take to reduce the threat of road salt on our sources of drinking water. Education and outreach efforts were also involved in spreading the news of our upcoming Section 36 Amendment, as well as raising awareness for the new Best Practices for non-municipal drinking water systems.

**Drinking Water**

**Protection Zone**

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- Spread salt sparingly and evenly
- Clean up salt spills
- Keep lid closed

For more information scan the QR code with your smartphone or visit [conservationontario.ca](http://conservationontario.ca)

**SALT RESPONSIBLY**

- Shovel or plow before applying salt
- Salt contaminated runoff can enter ground & surface water sources
- A little salt goes a long way. Apply sparingly
- Salt (rock) becomes less effective as the temperature drops. Try an alternative.
- Keep lid closed to protect from rain/snow

**Drinking Water Protection Zone**

**DRINKING WATER SOURCE PROTECTION**  
Our Action Network

For more information scan the QR code or visit [conservationontario.ca](http://conservationontario.ca)

## 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

Fuel threats, and specifically fuel oil tanks were again a key focus of education and outreach this reporting period. This included information products related to fuel storage and handling, and information provided to local fuel suppliers. Social media posts related to fuel threats were also used in 2023 to remind residents of their potential to impact drinking water sources. Social media posts were also used to communicate changes and solicit comments related to fuel policies as a result of the proposed Section 36 Amendments to the Trent Source Protection Plan.

Education and outreach activities were integrated into Risk Management Official activities and included best management practices as risk management measures in risk management plans. Specific activities related to fuel threats included the installation of fuel tank stickers and fill pipe tags identifying that the location is in a Vulnerable Area and providing provincial Spills Action Centre contact number.



## 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

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### Otonabee-Peterborough Source Protection Authority

Ongoing Education and Outreach efforts are primarily targeted to those undertaking activities that are, or would be significant drinking water threats. Through agreements between the Conservation Authority and eight municipalities, information related to significant drinking water threats and the Drinking Water Source Protection Program are made available at office location, websites and on social media platforms.

Information related to specific drinking water threats such as Road Salt, Snow Storage, DNAPLs and Organic Solvents, Fuel, Sewage, and Pesticides was communicated through social media posts throughout the year. Messages related to water quality, water quantity, stormwater, sewage, road salt and other threats were integrated into presentations, educational activities and displays delivered virtually and in person. This information was shared at various events including the East Central Farm Show, Peterborough Children's Water Festival, Celebrate Havelock, and Millbrook Street Festival.

Information products including brochures and factsheets are made publicly available electronically, and in hard copy and used to support ongoing education and outreach efforts. These products include information related to threats, and activities such as buying or selling property.



## 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

### Otonabee-Peterborough Source Protection Authority - continued

Throughout 2023, existing information materials and website content was updated to ensure it remains current, relevant and AODA compliant.

The Risk Management Office also regularly provides information and access to online resources including systems summaries with maps, local municipal waste disposal sites and services in their communications with stakeholders. Other activities included seasonal social media campaigns and distribution of information to affected landowners and tenants in vulnerable areas to help them better understand how to protect municipal sources of drinking water.



## 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

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### Kawartha-Haliburton Source Protection Authority

#### Education and Outreach efforts in 2023 included:

- Attendance at the East Central Farm Show and the Country Living Show. RMO and Conservation Authority staff attended these events to share information on the SWP program and stewardships initiatives. The vulnerable area posters and road sign were a great draw for people to the booth.
- Direct mailouts to landowners impacted by the S.36 Amendments.
- Municipalities and Kawartha Conservation staff continue to share both CO and Kawartha Conservation's custom made education and outreach materials throughout the year.

## 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

### Crowe Valley Source Protection Authority

Advertisements in community guides. Learning opportunities typically directed at special events such as water festivals, with education and outreach targeted at those activities that would be significant drinking water threats. Websites updates, and Conservation Ontario infographics and factsheets used and shared. Promotion of Salt Responsibly campaign.



## 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

### Lower Trent Source Protection Authority

Education and outreach this reporting period included a variety of approaches to reach a broad audience. This included use of traditional media, such as advertising in the Community Guide, as well as 15 social media posts reaching over 7,000 people. DWSP information on Lower Trent Conservation website was consistently updated. LTC also supported and promoted the Road sign and Salt Responsibly campaigns to raise awareness.

Youth education was also a priority. Approximately 1200 students, teachers and parents were engaged through the Tri-County Children's Water Festival, as well as ~1100 children through virtual and in-person programming. Over 800 people were also reached through presentations and participation at community events, including LTC Farewell to frost, Quinte West Wellness Expo, and the Hastings County Plowing Match.



DRINKING WATER  
SOURCE PROTECTION  
Our Actions Matter

## 3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

Our progress score for each Source Protection Authority on achieving source protection plan objectives in this reporting period is as follows:

Source Protection Authority	Status
Otonabee-Peterborough	P: Progressing well / on target
Kawartha-Haliburton	P: Progressing well / on target
Crowe Valley	P: Progressing well / on target
Lower Trent	P: Progressing well / on target

Our overall progress score on achieving source protection plan objectives in this reporting period is as follows:



**P: Progressing well / on target: Most of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.**

## 3.7 SOURCE PROTECTION PLAN POLICIES: SUMMARY OF DELAYS

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The Trent Conservation Coalition Source Protection Region, not including Ganaraska, reports no significant delays in policy implementation. However, policy implementation challenges were addressed through our S.36 Amendment, submitted in December, 2023, which upon release of this Report is waiting final approval from the Ministry of the Environment, Conservation and Parks. Through this process, policy wording has been improved to assist in overall Trent Source Protection Plan implementation.

## 3.8 SOURCE WATER QUALITY: MONITORING AND ACTIONS

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A water quality issue, as identified by the Source Protection Committee, is where a contaminant is present at a level of concern or showing an upward trend and threatens the municipal drinking water source. The issue contributing area (ICA) is an area of land or water where activities are contributing to the water quality issue.

These activities are classified as significant threats to drinking water.

### Stirling Water System

Stirling wells were identified as having an E. coli issue in the raw untreated water. Observations this year showed no change in concentration or trends. In response to the issue, the municipality engaged in the following activities:

- Reported annually by February 1<sup>st</sup> to the Lower Trent Source Protection Authority
- A new less vulnerable well was brought on line in 2020 to reduce risk of E. coli. RMPs continue to be developed to reduce the amount of E. coli entering Rawdon Creek
- Monitored the identified issue through data as provided in the Stirling-Rawdon annual water report. The report also identified the municipality continues to track Total Coliform (TC) hits
- Undertook hydrological studies showing the wells are Groundwater Under the Direct Influence (GUDI) of surface water and there is in situ filtration.
- Completed all septic inspections in the Stirling Issue Contributing Area
- All identified significant drinking water threats have been managed by RMPs
- Completed Education & Outreach activities including advertorials in local newspaper, attendance at local events, updated factsheets and door-to-door visits in the Issue Contributing Area

## 3.9 SCIENCE BASED ASSESSMENT REPORTS: WORK PLANS

Water Budget - Technical Rule #30.1 for Stirling-Rawdon a Tier 3 water budget was included in the 2018 Section 36 work plan, however still requires MECP support and funding to proceed. To be reviewed in 2024 upon approval of new Assessment Report.



## 4. MORE FROM THE WATERSHED

Find out more information about DWSP and what's happening in the TCC SPR at [trentsourceprotection.on.ca](https://trentsourceprotection.on.ca) including details on:

- *The Clean Water Act*
- The Trent Conservation Coalition Source Protection Region
- The four Source Protection Authorities that make up the Trent Source Protection Plan
- Publications and resources such as the source protection plans and assessment reports
- Am I affected? / policy mapping tool
- Best Practices for Non-Municipal Source Protection



Alternatively, for more information, please contact your local Source Protection Authority:

Source Protection Authority	SPA Lead Contact:
 <p><b>Otonabee</b> CONSERVATION</p>	<p><b>Meredith Carter</b>            Manager, Watershed Management Program            Otonabee Region Conservation Authority            705-745-5791 x223            mcarter@otonabeeconservation.com</p>
 <p><b>KAWARTHA</b> CONSERVATION  <small>Discover · Protect · Restore</small></p>	<p><b>Jenna Stephens</b>            Risk Management Official /Source Protection Technician            Kawartha-Haliburton Source Protection Authority            (705) 328-2271 x 224            jstephens@kawarthaconservation.com</p>
 <p><b>Crowe Valley</b> Conservation</p>	<p><b>Andrew McIntyre</b>            Crowe Valley Source Protection Authority            Risk Management Official / Source Water Protection Specialist            (613) 472-3137            andrew.mcintyre@crowevalley.com</p>
 <p><b>LOWER TRENT</b> CONSERVATION</p>	<p><b>Anne Anderson</b>            Special Project Coordinator            Lower Trent Source Protection Authority            (613) 394-4829 x 219            anne.anderson@ltc.on.ca</p>