

2021 Annual Progress Report Ganaraska Source Protection Plan



Prepared by:

Ganaraska Conservation & Trent
Conservation Coalition Source
Protection Region



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



On behalf of the Trent Conservation Coalition Source Protection Committee, it is my pleasure to introduce our 2021 Annual Progress Report which outlines the implementation status of the Trent and Ganaraska Source Protection Plans. I am so proud of all the work our Committee and staff have accomplished this year, to facilitate the fulfillment of our plans.

The year 2021 will be remembered as the second year that the COVID-19 pandemic dominated the health news. The pandemic has reminded us about how important it is to safeguard our health.

A similar reminder occurred in the spring of 2000, when the Walkerton water tragedy demonstrated the enormous health risks, when their drinking water system failed on multiple levels, beginning with insufficient protection of the drinking water sources. The Source Protection Program has emerged from that tragedy, using science and locally developed policies across 19 Source Protection Regions, throughout the province. The Trent Conservation Coalition is the largest and most complex region in the province and the policies in our Source Protection Plans are being implemented in the most vulnerable areas around our 53 municipal drinking water systems.

The Municipalities, Risk Management Officials and Provincial Ministries that have been identified as implementers for the various policies in the Source Protection Plans are required to report each year on their progress. The results are summarized in this Annual Report.

- (Continued on next page)

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

Meanwhile, the Source Protection Committee has been working on amendments to the Source Protection Plan to make the policies more effective and to adjust to continuously improving science and new technical rules for the program. This is an arduous task and will require consultation with the public and stakeholders including our municipalities and First Nations. If everything proceeds as planned, the amendments will be submitted to the Ministry of Environment, Conservation and Parks for their approval in 2023. These improvements will constitute the first substantial overhaul of our plans since they were originally approved in January, 2015.

However, at this time I am pleased to report that much has been accomplished this year to meet the objectives of our Source Protection Plans. For example, there was a major push to negotiate many more Risk Management Plans this year, to help manage significant threats to municipal drinking water.

I encourage you to read this progress report, in the hope that you will gain an understanding of the magnitude and importance of the work we do to protect sources of municipal drinking water.

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

1. INTRODUCTION

The Trent Conservation Coalition Source Protection Region's fifth Annual Progress Report for the Ganaraska Source Protection Plan (SPP) provides a status update of implementation since the SPP came into effect on January 1st, 2015 through to December 31st, 2021.

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 Trent 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

¹Statistics Canada, 2013

1.2 SOURCE PROTECTION PROGRAM

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

The Trent Conservation Coalition Source Protection Region

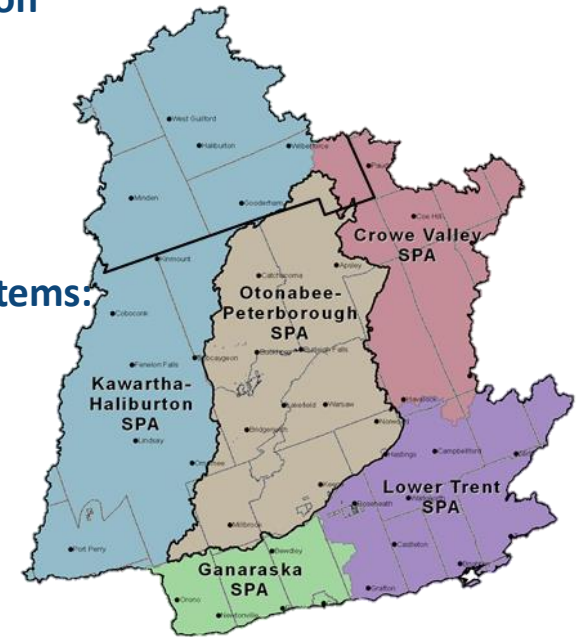
The Trent Conservation Coalition (TCC) Source Protection Region is comprised of five source protection areas. The Trent Source Protection Plan (SPP) applies to the source protection areas, identified below, that are within the Trent River Watershed. The Ganaraska Source Protection Plan is a separate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

Ganaraska Region Source Protection Area Quick Facts:

- Part of the Trent Conservation Coalition Source Protection Region
- Area: 930 km²
- Number of Drinking Water Systems in the Ganaraska SPP: 6
- Number of surface water systems in the Ganaraska SPP: 3
- Number of groundwater systems in the Ganaraska SPP: 3
- Population serviced by municipal residential drinking water systems: more than 45,000
- Number of policies in the Ganaraska SPP: 137
- Effective date of the Ganaraska SPP: January 1, 2015



1.3 OUR WATERSHED

Ganaraska Source Protection Area

The Ganaraska Region Source Protection Area covers 930 km² of land that extends from the Wilmot Creek watershed in the west to the Cobourg Creek watershed in the east, and from the crest of the Oak Ridges Moraine and Rice Lake in the north to Lake Ontario in the south. The major watersheds include Wilmot Creek, Graham Creek, the Ganaraska River, Gages Creek and Cobourg Creek. In addition, four groups of smaller watersheds drain to either Lake Ontario or Rice Lake.

Drinking water systems in the Ganaraska Region Source Protection Area include municipal and non-municipal systems of various sizes that draw raw water from both groundwater and surface water sources. About 70% of the population in the Ganaraska Region Source Protection Area (over 45,000 people) obtain their drinking water from six municipal residential drinking water systems.

There are three existing municipal residential surface water supply systems in the Ganaraska Region Source Protection Area that obtain their water from surface water sources (all of them from Lake Ontario). These systems serve more than 40,000 people in the communities of Cobourg, Newcastle and Port Hope.

There are three existing municipal residential groundwater supply systems in the Ganaraska Region Source Protection Area that obtain their water from groundwater sources. These systems serve more than 2,700 people in the communities of Camborne, Creighton Heights and Orono. There are no municipal residential drinking water systems in the Ganaraska Region Source Protection Area that are considered to be Groundwater Under the Direct Influence (GUDI) of surface water.

1.3 OUR WATERSHED


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



2. A MESSAGE FROM YOUR SOURCE PROTECTION COMMITTEE

The scoring system below is used to assess the progress achieved from January 1st, 2015 to December 31st, 2021 related to implementing policies in the Ganaraska Source Protection Plan.

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.
	S: Satisfactory: Some of the source protection plan policies have been implemented and/or are progressing according to the timelines in the source protection plan.
	L: Limited progress made: 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 31, 2022 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 Ganaraska Source Protection Plan policies are mostly complete across the Source Protection area.

2.1 METHOD OF EVALUATION

Implementation of the Ganaraska 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 (100%) that address significant drinking water threats are implemented, in progress or have been evaluated and determined to require no further action(s).

Our overall progress score across the Trent Source Protection Plan 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.

3.2 MUNICIPAL PROGRESS – ADDRESSING RISKS ON THE GROUND

Municipalities and Approval Authorities under the *Planning Act* are the Implementing Body for 36 policies in the Ganaraska Source Protection Plan. These can be summarized into the following categories:

Category	Compliance Date Summary	# of policies	# Complete, In Progress or Not Applicable / No Information Received or Policy Outcome Evaluated and No further action required
Local Threats	1 year of plan taking effect	13	100%
Education & Outreach	2 years of the plan taking effect	6	100%
Sewage Connection and Transport Pathway By-Laws	8 years of the plan taking effect (5 Years OP + an additional 3 years for Zoning By-Law compliance)	2	100%
Standard Operating Procedures for Screening Permit Applications	8 years of the plan taking effect (5 Years OP + an additional 3 years for Zoning By-Law compliance)	2	100%
Update Official Plans to include Source Water Protection	5 years of the plan taking effect	2	100%
Emergency Management	1-2 years of plan taking effect	4	100%
Asset Management	2 years of the plan taking effect	1	100%
Climate Change Data Collection	When plan takes effect	1	100%
Land Acquisition	When plan takes effect	1	100%

3.2 MUNICIPAL PROGRESS – ADDRESSING RISKS ON THE GROUND

(continued)

Category	Compliance Date Summary	# of policies	# Complete, In Progress or Not Applicable / No Information Received or Policy Outcome Evaluated and No further action required
Road Salt Vulnerable Area Planning	8 years of the plan taking effect (5 Years OP + an additional 3 years for Zoning By-Law compliance)	1	100%
Sewage (Policy to address future septic systems under OBC proposed to be installed in the future) & Wastewater (Policy to address future wastewater collection system)	8 years of the plan taking effect (5 Years OP + an additional 3 years for Zoning By-Law compliance)	2	100%
Waste Disposal - Policy to Prohibit future waste disposal sites addressed by Prescribed Instruments	8 years of the plan taking effect (5 Years OP + an additional 3 years for Zoning By-Law compliance)	1	100%

3.2 MUNICIPAL PROGRESS – ADDRESSING RISKS ON THE GROUND

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 septic 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 3rd, 2014 therefore the compliance date for existing septic's is November 3rd, 2019, and every five years after.

3.3 SEPTIC INSPECTIONS

Existing septic systems are only located in the Township of Hamilton. In 2016, 10 septic inspections were conducted. It was reported that 100% percent of existing septic threats have been inspected in accordance with OBC, of which 100% are functioning as required. Due to COVID-19 complications, septic re-inspections did not occur in 2021, but are being planned for completion in 2022.

100% of municipalities and/or health unit/department have standard operating procedures to ensure OBC compliance and thus ensure that future septic systems do not become significant threats and are inspected.



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

Risk Management Officials (RMOs) are the Implementing Body for 39 policies in the Ganaraska 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. The new deadline is December 31, 2022.

3.4 RISK MANAGEMENT PLANS

# RMP's Established Complete	# Significant Threats Managed	# of Threats remaining to be managed	# Inspections	# Section 59 Notices
3	3	3	3	0

Three Risk Management Plans (RMPs) were established prior to January 1, 2021. Two of these plans manage two significant drinking water threats associated with marina fuel storage at two separate facilities. One RMP manages two agricultural threats (application of agricultural source material and application of pesticide) on one (1) property. The remaining three properties with potential need for an RMP around DNAPLs are being investigated.

The total number of inspections carried out by a Risk Management Officials / Inspectors in 2021 was 3. The compliance rate with the Risk Management Plans was 100%.

Risk Management Officials operating with the Ganaraska Region Source Protection Authority issued a total of 0 Section 59 notices for the period of January 1, 2015 to December 31, 2021. The processes to screen development applications is reported to be working well.

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

Four provincial ministries reported on progress of 21 policies in the Ganaraska Source Protection Plan.

Information pertaining to the Ganaraska SPP was extracted from the provincial reporting tool, but due to the scale of provincial reporting, data is available only for the entire TCC Region and not available specifically for the Ganaraska SPP.

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)	(90%)	(10%)	
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

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.

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.

3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

Ten (10) policies in the Ganaraska 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 and the importance of protecting sources of municipal drinking water. Road signage indicating vulnerable areas have been installed in all municipalities and the Municipality of Port Hope is considering signage in the future, although not a policy requirement. Signage is 100% complete.



3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

Regionally, the need to expand the awareness of the Road Sign program became a key focus for E & O this year, with the introduction of a new initiative to engage the public. This included a new video and song that's reached over 1000 views on YouTube, an interactive map displaying sign locations across the region, and a fun quiz to inform the public of all ages. The Ganaraska Conservation office in Port Hope was the host of a media event and photo op with David Paccini, the Minister of the Environment, Conservation and Parks.



3.6 AWARENESS AND CHANGES IN BEHAVIOUR – EDUCATION & OUTREACH

Fuel threats, and specifically fuel oil tanks were a main 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 2021 to remind residents of their potential to impact drinking water sources.

Education and outreach activities were integrated into RMO 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

Other education and outreach activities over the past seven years included:

- Ongoing delivery of the Ganaraska Region Conservation Authority Clean Water-Healthy Land Financial Assistance Program;
- Conducted collaborative outreach through the East Central Farm Stewardship Collaborative to Risk Management Officials regarding funding opportunities for agricultural producers in vulnerable areas;
- Assisted municipalities in implementing Source Protection Municipal Implementation Fund (SPMIF) projects such as the Township of Hamilton acquired SPMIF funding to assist with septic inspections by offering free pump outs as part of the inspection.
- Creation of communication products by the Regional Municipality of Durham, the Town of Cobourg and the Township of Hamilton.
- Dissemination of general source water protection information through social media platforms.

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

The Ganaraska Region Source Protection Authority reports no significant delays in policy implementation. However, policy wording can always be improved to assist in overall Ganaraska Source Protection Plan implementation.

3.8 SOURCE WATER QUALITY: MONITORING AND ACTIONS

In the TCC/GRSP source protection region/area, no issues have been identified in our local science-based assessment report(s) regarding the quality of the source(s) of municipal drinking water.

3.9 SCIENCE BASED ASSESSMENT REPORTS: WORK PLANS

Since January 1, 2015, no additional scientific work was required in order to further protect sources of municipal residential drinking water sources. In the fall of 2018, a work plan was submitted to the Ministry, outlining activities proposed to update the Ganaraska Assessment Report and Ganaraska Source Protection Plan. These activities include:

- Updates based on changes to the Director's Technical Rules;
- Changes in scientific information; and,
- Lessons learned from policy implementation.
- Work is underway to implement the work plan by 2023.



4. MORE FROM THE WATERSHED

Find out more information about DWSP and what's happening in the TCC SPR at 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

To learn more about Source Protection in the Ganaraska Region Source Protection Authority, visit webpage at <http://www.grca.on.ca/source-water-protection/>



To learn more about the Trent Conservation Coalition Source Protection Region, visit our homepage at <http://www.trentsourceprotection.on.ca>

