

2021 Source Protection Annual Progress Report

I. Introduction

Trent Annual Progress Report outlines progress made in implementing our source protection plan for:

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

Ganaraska Annual Progress Report outlines progress made in implementing our source protection plan for:

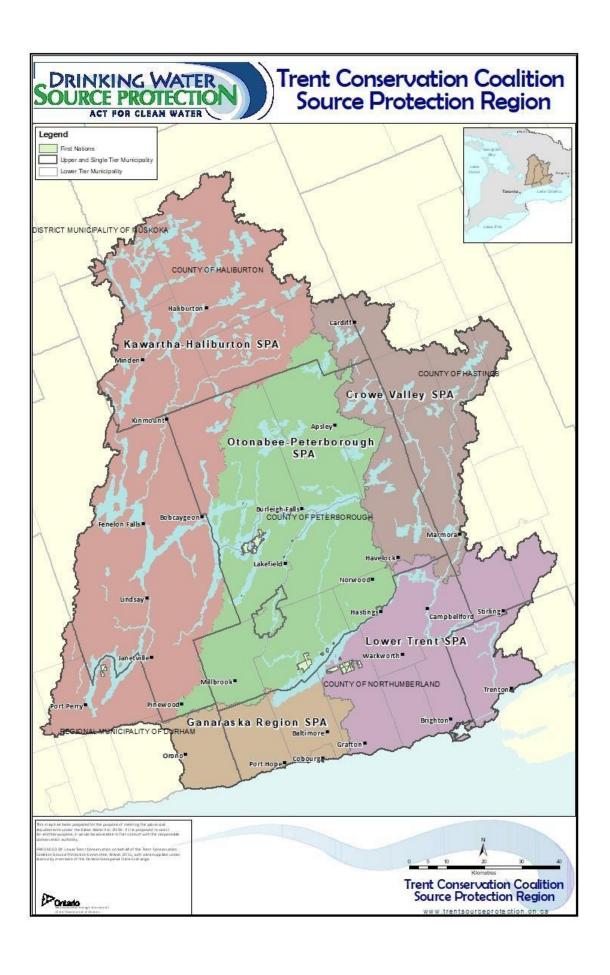
• Ganaraska Region Source Protection Authority.

II. A message from your local Source Protection Committee

P: Progressing Well/On Target – The majority of the source protection plan policies have been implemented and/or are progressing.

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 Trent Source Protection Plan policies are mostly complete, or in progress, across all four SPAs.



III. Our Watershed

The Trent Conservation Coalition (TCC) Source Protection Region is comprised of five source protection areas, four of which comprise the Trent River Watershed, and one for the Ganaraska Watershed. The Trent Source Protection Plan (SPP) applies to the Trent River Watershed, and the Ganaraska Source Protection Plan covers the latter. This report was prepared based on annual reporting information submitted by implementing bodies within these watersheds.

- Kawartha-Haliburton Source Protection Authority;
- Otonabee-Peterborough Source Protection Authority;
- Crowe Valley Source Protection Authority;
- Lower Trent Source Protection Authority;
- Ganaraska Region Source Protection Authority.
- Population in the TCC: 400,000
- Area: TCC = 14,500 km2
- Area: Trent River Watershed= 12.900 km2
- Number of drinking water systems in the TCC SPR: 53 (includes one planned groundwater system)
- Number of municipalities in the TCC SPR with residential drinking water systems: 24 (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

From Ganaraska:

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

To learn more, please read our assessment report(s) and source protection plan(s)

IV. At a Glance: Progress on Source Protection Plan Implementation

1. Source Protection Plan Policies

From Trent Conservation Coalition except Ganaraska:

P: Progressing Well/On Target

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

From Ganaraska:

P: Progressing Well/On Target

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

2. Municipal Progress: Addressing Risks on the Ground

From Trent Conservation Coalition except Ganaraska:

27 municipalities (22 lower tier and 5 upper tier) contain vulnerable areas where Source Protection Plan polices apply.

P: Progressing Well / On Target

Municipalities in our source protection region also are required to take the next step to review and update their Official Plan to ensure it conforms with the local source protection plans the next time they undertake an Official Plan review under the Planning Act. All municipalities have amended or are in the process of amending their Official Plan to conform with the source protection plans for our region. The completion status of these amendments is:

Otonabee-Peterborough Source Protection Area = 89%

Kawartha-Haliburton Source Protection Area = 67%

Crowe Valley Source Protection Area = 100%

Lower Trent Source Protection Area = 71%

All municipalities (100%) in our source protection region have processes in place to ensure that their day-to-day planning decisions conform with our source protection plans.

The Plan also includes policies related to Emergency Management. The status of Municipalities updating their Emergency Management Plans to incorporate Source Water is as follows:

Otonabee-Peterborough Source Protection Area = 86%

Kawartha-Haliburton Source Protection Area = 100% Crowe Valley Source Protection Area = 100% Lower Trent Source Protection Area = 86%.

Within this category, each Source Protection Authority approved a progress score in the context of their Source Protection Area. All Source Protection Authorities were given a score of P: Progressing Well / On target.

From Ganaraska:

Municipalities in our source protection region also are required to take the next step to review and update their Official Plan to ensure it conforms with the local source protection plans the next time they undertake an Official Plan review under the Planning Act. 100% of Municipalities have amended or are in the process of amending their Official Plan to conform with the Source Protection Plan.

All municipalities (100%) in our source protection region have processes in place to ensure that their day-to-day planning decisions conform with our source protection plans.

The Plan also includes policies related to Emergency Management. All municipalities (100%) have ensured updates to Emergency Management Plans are in place, in progress, not Applicable or the policy outcome has been evaluated and no further action required.

3. Septic Inspections

From Trent Conservation Coalition except Ganaraska:

P: Progressing Well/On Target

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

For Kawartha-Haliburton, Crowe Valley and Lower Trent SPAs, 2021 marked the start, or year 1, of their next 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.

For Otonabee-Peterborough, 2021 is year 3 of their second 5-year cycle, hence why despite completing 25 new inspections, the cumulative percentage of inspections completed is still 59%. Additionally, due to changes to the Norwood Drinking Water System, the number of septic systems seen as significant threats increased from 185 to 212. Otonabee-Peterborough achieved 100% compliance for the previous period.

Kawartha-Haliburton completed 32 new inspections, 9% of their total.

Lower-Trent completed 109 new inspections, 70% of their total.

Crowe-Valley completed 11 new inspections, 24% of their total.

Of the inspections completed in 2021, 7% required maintenance, and 93% function as required.

From Ganaraska:

P: Progressing Well/On Target

For the reporting window, 100% of on-site sewage systems have been inspected in accordance with the Ontario Building Code. Inspection results found that all (100%) are functioning as designed or carrying out required pump-outs.

4. Risk Management Plans

From Trent Conservation Coalition except Ganaraska:

P: Progressing Well/On Target.

Twenty-one (21) Risk Management Plans have been established for this reporting period. These 21 plans collectively manage a total of 39 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 decreased for each Source Protection Authority.

The total number of inspections carried out by a Risk Management Official was 33. The compliance rate with the Risk Management Plans established is 99% (1 in O-P).

A total of 138 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.

From Ganaraska:

P: Progressing Well/On Target.

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.

5. Provincial Progress: Addressing Risks on the Ground

From Trent Conservation Coalition including Ganaraska:

P: Progressing Well/On Target

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 and 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.

For Ganaraska:

P: Progressing Well/On Target

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

6. Source Protection Awareness and Change in Behaviour

Regionally, the need to expand the awareness of the Road Sign program became a key focus for E and 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; a photo op with Minister of the Environment, Conservation and Parks, David Piccini; an interactive map displaying sign locations across the region, and educational quiz. Drinking Water Protection Zone (DWPZ) signs have been installed in vulnerable areas across the Trent Conservation Source Protection Region. To date, all required DWPZ signs have been installed in the four Source Protection Authorities, including 255 under the Trent Source Protection Plan and 8 in Ganaraska.

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.

In both regions, information related to specific drinking water threats such as Road Salt, Snow Storage, DNAPLs and Organic Solvents, Fuel, Sewage, and Pesticide was communicated through social media posts throughout the year.

7. Source Protection Plan Policies: Summary of Delays

From Trent Conservation Coalition except Ganaraska:

All policies are implemented, in progress or evaluated as no further action required. However, policy implementation challenges are being addressed through our Workplan and upcoming S.36 Update, and policy wording can always be improved to assist in overall Trent Source Protection Plan implementation.

From Ganaraska:

All policies are implemented, in progress or evaluated as no further action required.

8. Source Water Quality: Monitoring and Actions

From Trent Conservation Coalition excluding Ganaraska:

Drinking Water System: Stirling

Issue: E. Coli

Observations; No change in concentration

In response to the issue, the municipality engaged in the following activities:

- Reported annually by February 1st 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.
- Completed 16 RMPs managing 34 prescribed threats (on the basis of subcategories listed in the Table of Drinking Water Threats)
- Completed Education and Outreach activities including advertorials in local newspaper, attendance at local events, updated factsheets and door-to-door visits in the Issue Contributing Area.

From Ganaraska:

In our 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.

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 requires MECP support and funding to proceed.

Additionally, In the fall of 2018, a work plan was submitted to the Ministry, outlining activities proposed to update the Assessment Report and 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.

10. More from the Watershed

http://trentsourceprotection.on.ca/

Individual progress reports for the Trent and Ganaraska Source Protection Regions are also available from https://trentsourceprotection.on.ca/resources/reports-legislation