



Supported by Toronto and Region Conservation Authority

## **Toronto and Region Source Protection Authority Meeting Agenda**

April 22, 2022

9:30 A.M.

The meeting will be conducted via a video conference  
Members of the public may view the livestream at the following link:

<https://video.isilive.ca/trca/live.html>

### **Pages**

- |      |   |    |
|------|---|----|
| 1.   | CALL TO ORDER   |    |
| 2.   | ACKNOWLEDGEMENT OF INDIGENOUS TERRITORY   |    |
| 3.   | MINUTES OF MEETING HELD ON APRIL 30, 2021   |    |
| 3.1. | Minutes Link  | 3  |
| 4.   | DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF   |    |
| 5.   | DELEGATIONS   |    |
| 6.   | PRESENTATIONS   |    |
| 7.   | CORRESPONDENCE  |    |
| 7.1. | A letter dated February 23, 2022 from the Hon. David Piccini, Minister of the Environment, Conservation and Parks, in regard to Approval of Amendment to Toronto and Region Source Protection Authority Assessment Report | 20 |

**8. SECTION I - ITEMS FOR TORONTO AND REGION SOURCE PROTECTION AUTHORITY ACTION**

**8.1. ANNUAL REPORT (2021) – DRINKING WATER SOURCE PROTECTION PROGRAM**

22

Endorse Credit Valley Source Protection Authority, as the Lead Source Protection Authority, to report to the Ministry of the Environment, Conservation and Parks that implementation progress of the Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan was progressing well, but short of target, between January 1 and December 31, 2021.

**9. SECTION III - ITEMS FOR THE INFORMATION OF THE TORONTO AND REGION SOURCE PROTECTION AUTHORITY**

**10. NEW BUSINESS**

NEXT MEETING OF THE TORONTO AND REGION SOURCE PROTECTION AUTHORITY TO BE CONFIRMED

John MacKenzie, Chief Executive Officer

/jh

**11. ADJOURNMENT**



Supported by Toronto and Region Conservation Authority

**Toronto and Region Source Protection Authority Meeting was held via videoconference, on Friday, April 30, 2021, pursuant to section C.12, of the TRCA's Board of Directors Administrative By-Law. The Chair Jennifer Innis, called the meeting to order at 9:31 a.m.**

**PRESENT**

Jennifer Innis	Chair
Jack Heath	Vice-Chair
Kevin Ashe	Member
Ronald Chopowick	Member
Dipika Damerla	Member
Joanne Dies	Member
Joe DiPaola	Member
Jennifer Drake	Member
Paula Fletcher ( <i>in: 9:43 a.m.</i> )	Member
Xiao Han	Member
Gordon Highet	Member
Linda Jackson	Member
Mike Layton	Member
Josh Matlow	Member
Basudeb Mukherjee	Member
Michael Palleschi	Member
James Pasternak	Member
Steve Pellegrini	Member
Anthony Perruzza ( <i>in: 9:34 a.m.</i> )	Member
Rowena Santos	Member
Don Sinclair	Member
Connie Tang	Member
Estair Van Wagner	Member

**ABSENT**

Paul Ainslie	Member
Shelley Carroll	Member
Chris Fonseca	Member
Maria Kelleher	Member
Gino Rosati	Member

The Chair recited the Acknowledgement of Indigenous Territory.

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**RES.#SPA1/21 - MINUTES**

Moved by: Steve Pellegrini  
Seconded by: Linda Jackson

**THAT the Minutes of Meeting held on January 29, 2021, be approved.**

**CARRIED**

**RES.#SPA2/21 - ANNUAL REPORT (2020) – DRINKING WATER SOURCE PROTECTION PROGRAM**

Endorsement of the Annual Progress Report to the Ministry of the Environment, Conservation and Parks that implementation progress of the Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan was progressing well, but short of target, between January 1 and December 31, 2020.

Moved by: Jack Heath  
Seconded by: Jennifer Drake

**WHEREAS Credit Valley-Toronto and Region-Central Lake Ontario (CTC) Source Protection Region staff prepared a summary of the progress in 2020 with respect to implementation of the CTC Source Protection Plan;**

**AND WHEREAS the CTC Source Protection Committee endorsed the 2020 Annual Progress Report with comments;**

**THEREFORE, LET BE IT RESOLVED THAT the report entitled Annual Reporting (2020) – Drinking Water Source Protection Program be received;**

**THAT the Toronto and Region Source Protection Authority (TRSPA) endorse the recommendation of the CTC Source Protection Committee to report to the Ministry of the Environment, Conservation and Parks (MECP) that implementation progress of the CTC Source Protection Plan is progressing well, but short of target;**

**AND FURTHER THAT that Toronto and Region Conservation Authority (TRCA) staff work with staff from Credit Valley Conservation Authority to submit the Annual Progress Report to the MECP with accompanying documents, as required.**

**CARRIED**

**BACKGROUND**

The CTC Source Protection Plan (the Plan) came into effect December 31, 2015, providing a framework of policies to protect the quality and quantity of the source waters for municipal drinking water systems located in the CTC Source Protection Region. The objectives of the Plan are:

1. To protect existing and future drinking water sources in the CTC Source Protection Region; and
2. To ensure that existing activities cease to be, or do not become, significant drinking water threats, and that new activities never become significant drinking water threats.

Source Protection Authorities (SPAs) are required to submit annual reports on Plan implementation progress to the Ministry of the Environment, Conservation and Parks (MECP) under section 46 of the *Clean Water Act 2006* (CWA). The report on 2020 implementation progress will be the fourth such report since the Plan came into effect.

Annual progress reports are prepared using data provided by municipalities and provincial ministries as required by the monitoring policies in the Plan and in accordance with section 81 of the CWA and section 65 of Ontario Regulation 287/07. Municipal and provincial reports are required to be submitted to the SPA annually by February 1<sup>st</sup> and reflect implementation efforts from the previous calendar year, January 1 to December 31, 2020.

Staff aggregate and evaluate implementation data to populate two reporting templates provided by the MECP: 1) a summary-level annual progress report and 2) a more detailed supplemental form. Staff summarized the content of these reports and presented this information to the CTC Source Protection Committee (Committee) on March 23, 2021. The Committee is required to review and comment on the extent to which, in its opinion, the objectives set out in the Plan are being achieved. Comments received from the Committee (Attachment 2) are being presented to the Credit Valley, Central Lake Ontario, and Toronto and Region Source Protection Authorities for endorsement in April 2021, prior to submission of the annual progress report to the Province by May 1, 2021.

## **RATIONALE**

The MECP provides three standard options for Source Protection Committees to select from in commenting on the extent to which the objectives of the Plan are being achieved: 1) progressing well/on target; 2) satisfactory; or 3) limited progress. At Meeting #2/21 held on March 23, 2021, the Committee indicated that Plan implementation is progressing well, but short of target, consistent with the modified language used to describe 2019 implementation progress.

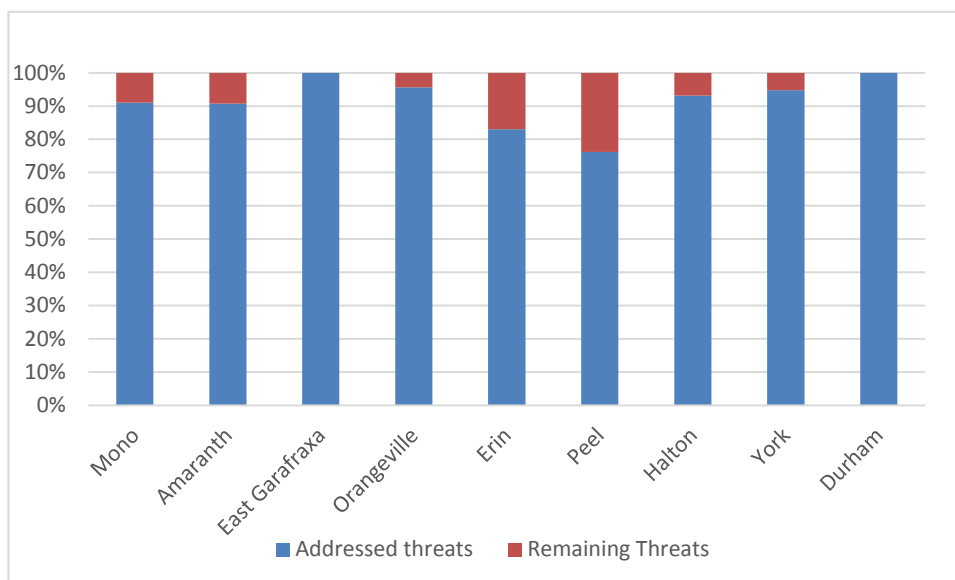
At the time the Plan was made effective in 2015, 10,583 significant drinking water threats were identified in the CTC Source Protection Region (CTC SPR). Since then, field verification has reduced that number to 6,077 significant threats. At the end of the current reporting period, only 362 (about 6%) significant threats remain to be addressed, down from 424 at the end of 2019. Further, 96% of legally binding policies to address significant drinking water threats have been implemented and all municipalities in the CTC SPR have established processes to ensure that land use planning decisions conform to the Plan.

As a result, the Committee determined that implementation of the Plan is progressing well overall. However, the Committee expressed concern regarding rising chloride and sodium concentrations in some municipal supply wells as well as the limited progress made in 2020 in negotiating risk management plans and inspecting septic systems.

Outstanding significant drinking water threats are predominantly associated with application of road salt; livestock grazing, pasturing, or outdoor confinement areas; and agricultural source materials. Of the remaining 362 significant threats, 360 are in the Credit Valley Source Protection Area (CVSPA), and 2 are in the TRSPA. The distribution of existing significant threats across the CTC SPR is as follows:

- Town of Mono - 6 threats,
- Township of Amaranth – 4 threats,
- Region of Peel – 10 threats (including those enumerated in 2019 for a new drinking water well in Alton),
- Region of Halton – 215 threats,
- Town of Orangeville – 95 threats,
- Town of Erin – 30 threats,
- Township of East Garafraxa – no threats.
- York Region – 2 threats

Figure 1 illustrates the proportion of significant threats that remain to be addressed by municipality. As no significant prescribed drinking water threats were originally identified for the City of Toronto, that municipality does not appear in the figure.



*Figure 1: Proportion of significant drinking water threats that remain to be addressed as of December 31, 2020.*

Most of the outstanding significant threats will be addressed through risk management plans (RMPs) negotiated with property owners and businesses by municipal Risk Management Officials. Following a request by the Committee in 2020, the MECP approved a 3-year extension to the December 31, 2020 deadline to complete RMPs for existing significant threats. Municipalities have prepared work plans to achieve the new December 31, 2023 deadline. Implementation challenges identified by municipal staff include the time-consuming nature of the threat verification and RMP negotiation process, the priority placed on RMPs initiated through the land use planning and building permit process, and additional complexities in negotiating agricultural RMPs (seasonal availability, multiple threats, regulatory burden).

In 2020, the COVID-19 pandemic constrained the ability of municipal risk management officials to engage property and business owners, conduct site visits, and perform RMP and septic system inspections. With continued pandemic impacts, substantive effort will be required to complete an estimated 205 RMPs by the December 31, 2023 deadline.

For these reasons, the Committee concluded progress in achieving the Plan's objectives falls short of target.

The plain-language annual progress report (Attachment 1) includes a more complete summary of Plan implementation progress by implementing body and policy tool. The annual report is accompanied by comments provided from the Source Protection Committee to the TRSPA (Attachment 2). The TRSPA may, at its discretion, submit its own supplementary comments.

#### **Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan**

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

**Strategy 2 – Manage our regional water resources for current and future generations**

## **FINANCIAL DETAILS**

Funding has been provided to Toronto and Region Conservation Authority (as the lead Source Protection Authority in the CTC SPR) through a transfer payment agreement with the MECP for the April 1, 2020 to March 3, 2021 provincial fiscal year. At Meeting #2/20, held on January 29, 2021, through Res.#SPA6/20, the [TRSPA endorsed](#) the transfer of the lead Source Protection Authority responsibilities from TRCA to Credit Valley Conservation (CVC). The Province is in the process of negotiating a new agreement for April 1, 2021 to March 31, 2022 with CVC that will cover expenses for the CTC SPR. The financial resources to support TRCA staff time to advance and maintain the Drinking Water Source Protection Program are provided through these agreements.

## **DETAILS OF WORK TO BE DONE**

Following endorsement of the annual progress report by the Credit Valley, Toronto and Region, and Central Lake Ontario Source Protection Authorities, staff will submit the annual progress reporting results to the MECP by May 1, 2021. Additionally, staff will post the annual progress report (Attachment 1) on the CTC website ([www.ctcswp.ca](http://www.ctcswp.ca)).

**Report prepared by: Donald Ford, Senior Manager, Hydrogeology and Source Water Protection**

**Email: [don.ford@trca.ca](mailto:don.ford@trca.ca)**

**For Information contact: Don Ford, Senior Manager, Hydrogeology and Source Water Protection**

**Emails: [don.ford@trca.ca](mailto:don.ford@trca.ca)**

**Date: April 12, 2021**

**Attachments: 2**

Attachment 1: CTC Source Protection Region 2020 Annual Progress Report

Attachment 2: Correspondence from Douglas Wright, Chair, CTC SPC

# CTC Source Protection Region 2020 Annual Progress Report | 05/01/2021

## I. Introduction

This annual progress report outlines the progress made in implementing our source protection plan for the Credit Valley, Toronto and Region, and Central Lake Ontario (CTC) Source Protection Areas, as required by the *Clean Water Act, 2006* and regulations, for the 2020 calendar year. Together, these source protection areas form the CTC Source Protection Region, as shown in the image below.

Protecting the sources of our drinking water is the first step in a multi-barrier approach to safeguard the quality and quantity of our water supplies. The source protection plan is the culmination of extensive science-based assessment, research, consultation, and collaboration with local stakeholders and the Province. When policies in the plan are implemented it ensures that activities carried out near municipal wells and lake-based intakes will not pose significant risk to drinking water supplies.





## II. A message from your local Source Protection Committee

- ☒ **P : Progressing Well/Short of Target – The majority of the protection plan policies have been implemented and/or are progressing well, but remains short of target in achieving the plan’s objectives.**
- ☐ **S : Satisfactory – Some of the source protection plan policies have been implemented and/or are progressing.**
- ☐ **L : Limited progress – A few of the source protection plan policies have been implemented and/or are progressing.**

This is the fourth Annual Report on implementation of the Drinking Water Source Protection Program in the CTC Source Protection Region since the CTC Source Protection Plan (the Plan) took effect on December 31, 2015. All stakeholders responsible for implementation of policies in the Plan reported on their progress during the previous calendar year.

At the time the Plan was made effective in 2015, 10,583 significant drinking water threats were identified in the CTC Region. Since then, field verification has reduced that number to 6,077 significant threats. At the end of the current reporting period, only 362 (about 6%) significant threats remain to be addressed.

Further, 96% of legally-binding policies to address significant drinking water threats have been implemented and all municipalities in the CTC Region have established processes to ensure that land use planning decisions conform to the Plan. As a result, the CTC Source Protection Committee (Committee) determined that implementation of the Plan is progressing well overall.

However, the Committee expressed concern regarding the limited progress made in 2020 in negotiating risk management plans and inspecting septic systems. The COVID-19 pandemic constrained the ability of municipal staff to engage property and business owners and conduct site visits and inspections. With continued pandemic impacts, substantive effort will be required to complete an estimated 205 RMPs by the December 31, 2023 deadline.

Under the Plan, municipalities monitor and report on raw water quality from wells in vulnerable areas with known drinking water issues. The Committee also expressed concern regarding the results of monitoring conducted in 2020 that suggested increasing sodium and chloride concentrations or trends for some of the municipal wells with identified issues within the CTC Region.

For these reasons, the Committee concluded that progress in achieving the Plan’s objectives falls short of target.

### III. Our Watershed

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

The CTC Source Protection Region contains over 25 large and small watersheds and spans over 3,800 km<sup>2</sup> of land, from the Oak Ridges Moraine in the north to Lake Ontario in the south. The region contains portions of the Niagara Escarpment, Oak Ridges Moraine, Greenbelt, Lake Ontario, and the most densely populated area of Canada. The CTC Source Protection Region includes 25 local municipalities and eight single tier, regional or county municipalities, 66 municipal supply wells, and 16 municipal surface water intakes in Lake Ontario. The region is complex and diverse in terms of geology, physiography, population, and development pressures. There are many, often conflicting, water uses including, drinking water supply, recreation, irrigation, agriculture, commercial and industrial uses, and ecosystem needs.

The Credit Valley Source Protection Area is formed by one main watercourse, the Credit River, and a number of smaller Lake Ontario tributaries. Nearly 1500 km of streams and creeks empty into the Credit River including Black Creek, Silver Creek, West Credit River, Shaw's Creek, East Credit River, Fletchers Creek, Caledon Creek, and several others. There are thirteen municipal water systems operating in the source protection area, two are surface water based – accessing Lake Ontario as the source; the remainder are groundwater-based. There are no municipal drinking water sources taking from the Credit River.

The Toronto and Region Source Protection Area comprises nine watersheds, plus their collective Lake Ontario waterfront shorelines, to incorporate portions of six upper-tier and 15 lower-tier municipalities. These nine watersheds include Carruthers, Duffins, Etobicoke, Highland, Mimico, and Petticoat Creeks, as well the Don, Humber and Rouge Rivers. Close to 5 million people live within the source protection area with the population expected to grow significantly in the years to come. There are ten municipal water systems operating in the source protection area, five are surface water based – accessing Lake Ontario as the source; the remainder are groundwater-based.

The Central Lake Ontario Source Protection Area is fully contained within the Regional Municipality of Durham. There are numerous watersheds within its boundaries, with the five major watersheds originating at the Oak Ridges Moraine. These major watersheds are Lynde, Oshawa, Farewell, Bowmanville, and Soper Creeks. There are no municipal wells within the source protection area; all municipal drinking water comes from Lake Ontario. There are three municipal drinking water systems: Whitby, Oshawa, and Bowmanville.

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

### 1. Source Protection Plan Policies

P: Progressing Well/On Target

There are 129 policies in the CTC Source Protection Plan. These are intended to address: 21 prescribed and 2 local types of drinking water threats, other actions considered necessary to protect drinking water sources, and monitoring of implementation. Some policies are implemented by a single stakeholder, others by multiple stakeholders.

As of the end of 2020, most legally binding policies (96%) that address significant drinking water threats are implemented. Furthermore, approximately 94% of existing significant drinking water threats on the landscape have been addressed (i.e., eliminated or managed).

### 2. Municipal Progress: Addressing Risks on the Ground

P - Progressing Well/On Target

Municipalities in our source protection region are required to review and update their Official Plans to ensure they conform with the local source protection plans the next time they undertake an Official Plan review under the *Planning Act*. Municipalities in the CTC Source Protection Region are also amending their Official Plans as required to conform with the Growth Plan for the Greater Golden Horseshoe, 2020. The Growth Plan requires that all upper tier municipalities complete their review by summer 2022 and lower tier municipalities by summer 2023.

As of December 2020, over 85% of municipalities within the CTC have completed or are in the process of completing their conformity exercise with the CTC Source Protection Plan.

### 3. Septic Inspections

L - Limited progress (COVID-19 pandemic limited progress in 2020)

Within the CTC Source Protection Region, there are 368 septic system inspections that are to be completed every five years to satisfy the requirements of the Mandatory Septic System Inspection Protocol. The first round of inspections was completed in 2017. The second round of mandatory inspections is required to be completed for most of these systems by 2022.

Due to the COVID-19 pandemic, municipal sewage inspection programs were put on hold or delayed in 2020; with only 1 septic system inspected. The inspection of this system confirmed it was functioning as designed and did not require maintenance.

## 4. Risk Management Plans

L - Limited progress (COVID-19 pandemic limited progress in 2020)

The COVID-19 pandemic significantly impacted the ability of Risk Management Officials to negotiate and establish RMPs throughout much of this reporting year. Pandemic related challenges included: field work constraints due to health and safety considerations requiring development of alternative processes, provincial lockdowns/restrictions coinciding with property and business owner availability, the increased burden to business owners, and the impact to staff recruitment affecting municipal capacity.

In 2020, 14 Risk Management Plans (RMPs) were established in the CTC, with an additional 43 Risk Management Plans in the process of being completed as of the end of the year. Overall, 118 Risk Management Plans are in place within the CTC Source Protection Region. A further 205 Risk Management Plans are required to be completed by the Dec. 31, 2023 deadline. The pandemic is expected to continue to affect risk management activities into 2021.

There were 101 inspections carried out in 2020 by a Risk Management Inspector for prohibited or regulated activities; the most inspections completed in any year to date. There was 100% compliance for Risk Management Plans and prohibited activities that were inspected.

## 5. Provincial Progress: Addressing Risks on the Ground

P: Progressing Well/On Target

Ontario ministries review applications for new or amended 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 our Source Protection Plan to address activities that pose a significant risk to sources of drinking water. The Province has established Standard Operating Policies to ensure that approvals take into account the science generated through the Drinking Water Source Protection Program and policies in the Source Protection Plan. Where necessary, conditions are added to provincial approvals to ensure that an activity does not pose a significant threat to sources of drinking water.

By December 2018, the province had completed their review of all previously issued approvals where the activity could have resulted in a significant threat within the CTC. Through 2020, provincial ministries continue to review applications for new or amended approvals for conformity with the CTC Source Protection Plan.

## 6. Source Protection Awareness and Change in Behaviour

Municipalities and conservation authorities within the CTC Source Protection Region work with landowners and business owners to help safeguard our sources of drinking water. All municipalities across the CTC have established education and outreach programs, which contribute to enhancing awareness of source water protection.

In 2020, the pandemic limited some approaches to spreading source protection awareness, however 2020 efforts included:

- Orangeville added 5 new drinking water protection zone road signs and continued education and outreach efforts to: raise awareness of source protection; promote salt use best management practices; and notify residents and property owners about sodium and chloride impacted drinking water sources.
- Municipal staff working on the Waterloo-Wellington Children's Water Festival pivoted to assisting in the development of a series of grade-specific online educational videos that showcase the importance of water through curriculum related activities.
- A financial incentive program was established by a municipality to encourage homeowners to purchase efficient water softeners to reduce salt use.
- Education and outreach materials encouraging adoption of low impact development (LID) practices were developed and distributed throughout a municipality.

## 7. Source Protection Plan Policies: Summary of Delays

The development of a Joint Municipal Water Supply Management Model (policy DEM-6) for several area municipalities within Dufferin County remains in progress and is anticipated in 2021.

Provincewide, all Source Protection Plans were required to include policies to address significant drinking water threats. The CTC Source Protection Committee chose to also include policies to address moderate and low drinking water threats. These moderate and low drinking water threat policies relate to the application of road salt, the handling and storage of certain chemicals and provision of education and outreach materials. Since the implementation of these moderate and low threat policies (SAL-10, SAL-12, SAL-13, DNAP -3, OS -3, GEN-8) is non-legally binding, their execution varies across the source protection region.

## 8. Source Water Quality: Monitoring and Actions

Fourteen drinking water issues have been identified at four drinking water systems in our Source Protection Region. For these drinking water systems, the Source Protection Plan requires that the municipality establish more frequent raw water quality monitoring to help further characterize water quality concentrations and trends.

Monitoring will help determine if implementation of Plan policies is improving the raw water quality for these systems, however further data is still needed. On the ground actions, education and monitoring efforts are continuing to try to improve these raw water quality trends.

An assessment of the 2020 status of the identified water quality issues is provided below:

Orangeville Drinking Water System (5 municipal wells)

- Sodium: Well 6 - A decreasing trend/concentration has been observed.
- Sodium: Wells 9A, 9B - An increasing trend/concentration has been observed.
- Chloride: Well 6 - A decreasing trend/concentration has been observed.
- Chloride: Wells 9A, 9B, 10, 11 - An increasing trend/concentration has been observed.

Acton Drinking Water System (2 municipal wells)

- Nitrates: Davidson Wells 1 and 2 - No change in trend/concentration.

Georgetown Drinking Water System (3 municipal wells)

- Chloride: Cedarvale Wells 1, 4, and 4A - No change in trend/concentration.

Inglewood Drinking Water System (1 municipal well)

- Pathogens: Well 2 - This well was disconnected in 2020 and is planned for decommissioning in 2021; therefore the municipality has discontinued monitoring this issue there.

## 9. Science-based Assessment Reports: Work Plans

No work plans were required to be implemented for our assessment reports.

## 10. More from the Watershed

Despite the impacts of the pandemic in 2020, implementation of policies to protect drinking water sources across the CTC resulted in several other noteworthy accomplishments, including the following:

- The Lake Ontario Collaborative Group's (Policy LO-G-3) Lake Ontario Water Quality Forecasting System provides Water Treatment Plant operators with better understanding of lake currents in the event of a significant spill.
- Orangeville adopted a Water Conservation Plan (Policy DEM-4); committing them to water conservation initiatives to help reduce water use.
- Wellington County updated their Emergency Response Procedures to reference source water protection mapping and notification procedure to involve the Risk Management Official if needed.
- In Erin, a Drinking Water Threat Disclosure Report was developed for municipal wellhead protection areas where significant drinking water threats are possible; resulting in useful report submissions.
- Across the CTC, remote or virtual work procedures were developed to support risk management policy implementation.

For more information about source protection implementation in the CTC Source Protection Region, please see our story map, which is available on our website: <https://ctcswp.ca/>





## Source Protection Committee

March 24, 2021

Jennifer Innis  
Chair, Toronto and Region Conservation Authority  
101 Exchange Avenue  
Vaughan, ON  
L4K 5R6

Dear Jennifer Innis:

The Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan (the Plan) has been in effect since December 31, 2015, with the primary objective to protect current and future sources of drinking water from contamination and overuse.

In accordance with Ontario Regulation 287/07, the Toronto and Region Source Protection Authority is required to submit an annual progress report to the Ministry of the Environment, Conservation and Parks (MECP) by May 1, 2021. The fourth CTC annual progress report documents the status of policy implementation, progress in achieving the source protection plan objectives, and implementation efforts between January 1 and December 31, 2020 (see attached).

On March 23, 2021, the CTC Source Protection Committee reviewed the annual progress report and passed the following resolutions:

IT IS RECOMMENDED THAT the CTC Source Protection Committee receive the staff report Implementation of CTC Source Protection Plan in 2020 – Annual Progress Report for information;

AND THAT in the opinion of the CTC Source Protection Committee, implementation of the Source Protection Plan has progressed well, but remains short of target in achieving the plan's objectives;

AND FURTHER THAT CTC staff be directed to submit the CTC Source Protection Committee's comments on implementation progress to the Credit Valley, Toronto and Region, and Central Lake Ontario Source Protection Authorities for inclusion in the annual progress report.

At the time the Plan was made effective in 2015, 10,583 significant drinking water threats were identified in the CTC Source Protection Region. Since then, field verification has reduced that number to 6,077 significant threats. At the end of the current reporting period, only 362 (about 6%) significant threats remain to be addressed. Additionally, most policies that address significant drinking water threats are implemented or in progress. Therefore, the CTC Source Protection Committee (Committee) determined that implementation of the CTC Source Protection Plan is progressing well overall.

However, the Committee expressed concern regarding the limited progress made in 2020 in some areas:

- Some policies in the Plan require the establishment of risk management plans (RMPs) to address significant drinking water threats. Currently, only 118 RMPs have been established in the CTC Region. At the request of the Committee, the MECP

authorized a 3-year extension to the deadline to complete RMPs. About 205 RMPs remain to be negotiated by the new December 31, 2023 deadline. In 2020, the COVID-19 pandemic constrained the ability of municipal risk management officials to engage property and business owners and conduct site visits. With continued pandemic impacts, substantive effort will be required to complete outstanding RMPs by the 2023 deadline.

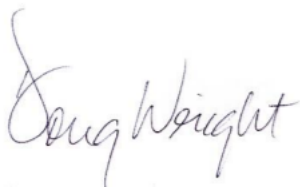
- A policy in the Plan requires about 368 septic systems in the CTC Region to be inspected every 5 years. The COVID-19 pandemic also constrained municipal staff ability to perform on-site inspections; therefore, only one inspection was completed in the CTC Region in 2020. Most of the outstanding inspections (about 350) are required to be completed by 2022.
- Under the Plan, municipalities monitor and report on raw water quality from wells in vulnerable areas with known drinking water issues. Monitoring in 2020 suggested increasing sodium and chloride concentrations or trends for most of the municipal wells with identified issues for the Town of Orangeville.

For these reasons, the Committee concluded that progress in achieving the Plan's objectives falls short of target. Continued monitoring and assessment of raw water quality is required to determine whether the policies in the Plan are sufficient to prevent future drinking water issues.

The Toronto and Region Source Protection Authority (SPA) is now tasked with considering the annual progress report and submitting it to the MECP together with any comments the SPA wishes to make. Similarly, both Central Lake Ontario and Credit Valley SPAs are reviewing the comments received from the CTC Source Protection Committee and will report their assessment of implementation status to the Ministry within the same timeframe.

If you have any questions regarding this letter, or the CTC Source Protection Plan 2020 Annual Progress Report, please contact Janet Ivey at 437-247-8078 or [janet.ivey@cvc.ca](mailto:janet.ivey@cvc.ca).

Sincerely,



Doug Wright  
Chair, CTC Source Protection Committee

Copy to:

John MacKenzie, Chief Executive Officer, Toronto and Region Conservation Authority  
Janet Ivey, Chief Specialist, Watershed Plans and Source Water Protection, Credit Valley Conservation

## **ADJOURNMENT**

ON MOTION by Mike Layton, the meeting was adjourned at 9:45 a.m., on Friday, April 30, 2021.

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Jennifer Innis  
Chair

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John MacKenzie  
Secretary-Treasurer

/am

**Ministry of the Environment,  
Conservation and Parks**

**Ministère de l'Environnement,  
de la Protection de la nature et des  
Parcs**

Office of the Minister

Bureau du ministre

777 Bay Street, 5th Floor  
Toronto ON M7A 2J3  
Tel.: 416-314-6790

777, rue Bay, 5<sup>e</sup> étage  
Toronto (Ontario) M7A 2J3  
Tél. : 416.314.6790



357-2021-3409

February 23, 2022

Ms. Jennifer Innis  
Chair, Toronto and Region Source  
Protection Authority  
5 Shoreham Drive  
Toronto ON M3N 1S4

Mr. Douglas Wright  
Chair, CTC Source Protection Committee  
C/O Toronto and Region Source Protection  
Authority  
5 Shoreham Drive  
Toronto ON M3N 1S4

Dear Ms. Innis and Mr. Wright:

It is a pleasure to inform you that the ministry has completed the review of the amended assessment report for the Toronto and Region Source Protection Area and source protection plan for the CTC Source Protection Region, developed in accordance with the *Clean Water Act, 2006*. To ensure that the quality and quantity of Ontario's municipal drinking water sources continue to be protected, I approve the amendments pursuant to section 34 of the *Clean Water Act, 2006*. These amendments will take effect on the day a notice of this decision is posted to Ontario's Environmental Registry.

The approval of these amendments does not make any changes to the order under section 36 of the *Clean Water Act, 2006* that governs the future review of the plan.

I appreciate the dedication of the local municipalities, source protection authorities and committees, and all our partners and stakeholders for their work and contributions to these amendments. Our strong protection framework will continue to help ensure Ontario's drinking water is held to high safety standards and that sources of drinking water in the province are protected for future generations.

Sincerely,

David Piccini  
Minister of the Environment, Conservation and Parks

c: Janet Ivey, Chief Specialist, Watershed Plans and Source Water Protection, CTC  
Source Protection Region  
Quentin Hanchard, Chief Administrative Officer, Credit Valley Conservation Authority

John MacKenzie, Chief Executive Officer, Toronto and Region Source Protection Authority

Kirsten Corrigan, Director, Conservation and Source Protection Branch, MECP

Jennifer Moulton, Manager, Conservation and Source Protection Branch, MECP

Angelune DesLauriers, Program Analyst, MECP

Beth Forrest, Liaison Officer, MECP

### Section I – Items for the Toronto and Region Source Protection Authority Action

**TO:** Chair and Members of the Toronto and Region Source Protection Authority  
Action  
Friday, April 22, 2022 Meeting

**FROM:** Laurie Nelson, Director, Policy Planning

**RE:** **ANNUAL REPORT (2021) – DRINKING WATER SOURCE PROTECTION PROGRAM**

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#### KEY ISSUE

Endorse Credit Valley Source Protection Authority, as the Lead Source Protection Authority, to report to the Ministry of the Environment, Conservation and Parks that implementation progress of the Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan was progressing well, but short of target, between January 1 and December 31, 2021.

#### RECOMMENDATION

**THAT the report entitled Annual Report (2021) – Drinking Water Source Protection Program be received;**

**AND FURTHER THAT the Toronto and Region Source Protection Authority (TRSPA) endorse the recommendation of the Credit Valley-Toronto and Region-Central Lake Ontario (CTC) Source Protection Committee to report to the Ministry of the Environment, Conservation and Parks (MECP) that the implementation progress of the CTC Source Protection Plan is progressing well, but short of target.**

#### BACKGROUND

The Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan (the Plan) came into effect December 31, 2015, providing a framework of policies to protect the quality and quantity of the source waters for municipal drinking water systems located in the CTC Source Protection Region. The objectives of the Plan are:

1. To protect existing and future drinking water sources in the CTC Source Protection Region; and
2. To ensure that existing activities cease to be, or do not become, significant drinking water threats, and that new activities never become significant drinking water threats.

Source Protection Authorities (SPAs) are required to submit annual reports on Plan implementation progress to the Ministry of the Environment, Conservation and Parks (MECP) under section 46 of the *Clean Water Act 2006* (CWA). The report on 2021 implementation progress will be the fifth such report since the Plan came into effect.

Annual progress reports are prepared using data provided by municipalities and provincial ministries as required by the monitoring policies in the Plan and in accordance with section 81 of the CWA and section 65 of Ontario Regulation 287/07. Reports from implementing bodies are submitted to the SPA annually by February 1<sup>st</sup> and reflect implementation efforts from the previous calendar year, January 1 to December 31, 2021.

Staff assess implementation and populate two reporting templates provided by the Ministry: 1) a public-facing annual progress report and 2) a more detailed supplemental form submitted only to the Ministry.

## Item 8.1

The annual report is presented this to the CTC Source Protection Committee (Committee) for its review. The Committee is required to comment on the extent to which, in its opinion, the objectives set out in the Plan are being achieved. Comments received from the Committee (Attachment 1) are being presented to the Credit Valley, Central Lake Ontario, and Toronto and Region Source Protection Authorities for endorsement in April 2022, prior to submission of the annual progress report to the province by May 1<sup>st</sup>.

### **RATIONALE**

The CTC Source Protection Committee reviewed a draft of the annual report at Meeting #2/22 held on March 22, 2022. Following discussion, the Committee concluded that Plan implementation is progressing well, but short of target.

Almost all (96%) of the Plan's legally binding policies to address significant drinking water threats have been implemented, and all municipalities have established processes to ensure that land use planning decisions conform to the Plan. Of the more than 10,000 significant drinking water threats identified in the CTC Region when the Plan came into effect in 2015, 325 (about 5%) remain to be addressed, (only 3 within TRCA's jurisdiction). For these reasons, the Committee determined that implementation of the Plan is progressing well overall.

However, the Committee expressed concern that fewer than half of the required risk management plans (RMPs) have been established to address significant threats. While 150 RMPs are in place within the CTC Region, an estimated 205 RMPs remain to be negotiated, (only 3 within TRCA's jurisdiction). Most of the outstanding RMPs are required to be in place by the end of 2023.

As building relationships and negotiating RMPs with business and property owners is a time-consuming process, it is unlikely that all municipalities in the CTC Region will meet the 2023 implementation deadline. For the past two years, the COVID-19 pandemic has constrained the ability of municipalities to engage property and business owners and conduct site visits.

The Committee will continue to work with source protection authority and municipal staff to review source protection plan policies requiring RMPs and seek ways to advance risk management plan completion.

The Committee also noted that some municipal septic system inspection programs were delayed in 2020 and 2021 because of the pandemic. Two hundred and thirty-one inspections (or 77% of the total required) remain to be completed by the end of 2022, the final year of the five-year inspection cycle. About 80 of the remaining inspections will be within the TRCA jurisdiction.

Finally, water quality analysis suggests increasing sodium and chloride concentrations in the raw water from most of the municipal wells with identified issues in the drinking water systems for Orangeville and Georgetown.

For these reasons, the Committee concluded that progress in achieving the plan's objectives falls short of target. This assessment of implementation progress is consistent with annual reports from 2020 and 2019.

### **Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan**

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

**Strategy 2 – Manage our regional water resources for current and future generations**

## Item 8.1

### **FINANCIAL DETAILS**

Funding has been provided to Toronto and Region Conservation Authority through Credit Valley Conservation (as the lead Source Protection Authority in the CTC Source Protection Region) through a transfer payment agreement with the MECP for the April 1 2021 to March 31 2022 provincial fiscal year. Negotiations are now underway with the MECP for a two-year funding agreement to March 31, 2024. The financial resources to support TRCA staff time to advance and maintain the Drinking Water Source Protection Program are provided through these agreements through account 121-91

### **DETAILS OF WORK TO BE DONE**

Following endorsement of the annual progress report by the Credit Valley, Toronto and Region, and Central Lake Ontario Source Protection Authorities, CTC SPR staff will submit the annual progress reporting results to the MECP by May 1, 2022. Additionally, staff will post the annual progress report (Attachment 2) on the CTC website ([www.ctcswp.ca](http://www.ctcswp.ca)).

**Report prepared by: Don Ford, extension 5369**

**Emails: [Don.Ford@trca.ca](mailto:Don.Ford@trca.ca)**

**For Information contact: Don Ford, extension 5369**

**Emails: [Don.Ford@trca.ca](mailto:Don.Ford@trca.ca)**

**Date: April 11, 2022**

**Attachments: 2**

Attachment 1: Correspondence from Doug Wright, Chair, CTC SPC

Attachment 2: CTC Source Protection 2021 Annual Progress Report



## CTC Source Protection Region

Source Protection Committee



March 23, 2022

Jennifer Innis  
Chair, Toronto and Region Source Protection Authority  
101 Exchange Avenue  
Vaughan, ON  
L4K 5R6

Dear Jennifer Innis:

The Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan has been in effect since December 31, 2015, having the primary objective of protecting current and future sources of drinking water from contamination and overuse.

In accordance with Ontario Regulation 287/07, the Toronto and Region Source Protection Authority (TRSPA) is required to submit an annual progress report to the Ministry of the Environment, Conservation and Parks (MECP) by May 1, 2022. The fifth CTC annual progress report documents the status of policy implementation, progress in achieving the source protection plan objectives, and implementation efforts between January 1 and December 31, 2021 (see attached).

On March 22, 2022, the CTC Source Protection Committee (the Committee) reviewed the annual progress report and passed the following resolutions:

THAT the CTC Source Protection Committee receive the staff report  
Implementation of CTC Source Protection Plan (2021) – Annual Progress  
Report for information;

AND THAT in the opinion of the CTC Source Protection Committee,  
implementation of the Source Protection Plan has progressed well but is  
short of target in achieving the plan's objectives.

AND THAT CTC staff be directed to submit the CTC Source Protection  
Committee's comments on implementation progress to the Credit Valley,  
Toronto and Region, and Central Lake Ontario Source Protection  
Authorities for inclusion in the annual progress report.

At the time the Plan was made effective in 2015, over 10,000 significant drinking water threats were identified in the CTC Source Protection Region. Since then, field verification has reduced that number to 6,195 significant threats. At the end of the current reporting period, only 325 (about 5%) significant threats remain to be addressed. Additionally, 96% of legally binding policies that address significant drinking water threats are implemented. Thus, the Committee determined that implementation of the CTC Source Protection Plan is progressing well overall.

Notwithstanding, the Committee notes the continued limited progress in establishing risk management plans (RMPs) for existing significant drinking water threats. The Committee acknowledges that the COVID-19 pandemic constrained the ability of municipal risk management officials to engage property and business owners and conduct site visits over

the past two years. Nevertheless, while 150 RMPs have been established in the CTC Region, another 198 RMPs remain to be negotiated by the December 31, 2023 implementation deadline. It is therefore unlikely that all municipalities in the CTC Region will meet the 2023 implementation deadline.

The Committee will continue to work with source protection authority and municipal staff to review source protection plan policies requiring RMPs and seek ways to advance RMP completion.

The Committee noted as well that completion of septic system inspections also has been delayed by the pandemic. After limited progress in conducting inspections in 2020, inspections satisfactorily in 2021. However, 231 inspections (77% of the total required) remain to be completed in 2022, the final year of the 5-year inspection cycle.

The Committee draws attention to a final point. Under the source protection plan, municipalities monitor and report on raw water quality from wells in vulnerable areas with known drinking water issues. Trend analysis suggests increasing sodium and chloride concentrations for most of the municipal wells with identified issues in the drinking water systems for Orangeville and Georgetown.

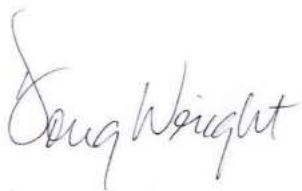
These reasons contributed to the Committee's conclusion that overall progress in achieving the Plan's objectives falls short of target. Continued monitoring and assessment of raw water quality is required to determine whether the policies in the plan are sufficient to prevent future drinking water issues.

Specific to the TRSPA jurisdiction, three significant drinking water threats remain to be addressed and three RMPs are needed. About 80 of the remaining septic system inspections are within the TRSPA jurisdiction.

The TRSPA is now tasked with considering the annual progress report and submitting it to the MECP together with any comments the SPA wishes to make. Similarly, both Central Lake Ontario and Credit Valley SPAs are reviewing the comments received from the CTC Source Protection Committee and will report their assessment of implementation status to the Ministry within the same timeframe.

If you have any questions regarding this letter, or the CTC Source Protection Plan 2021 Annual Progress Report, please contact Janet Ivey at 437-247-8078 or [janet.ivey@cvc.ca](mailto:janet.ivey@cvc.ca).

Sincerely,

A handwritten signature in blue ink that reads "Doug Wright". The signature is written in a cursive, flowing style.

Doug Wright  
Chair, CTC Source Protection Committee

Attachment A: Source Protection Annual Progress Report (2021)

## CTC Source Protection Region

Source Protection Committee



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Copy to:

John MacKenzie, Chief Executive Officer, Toronto and Region Conservation Authority  
Janet Ivey, Chief Specialist, Watershed Plans and Source Water Protection, Credit Valley  
Conservation

# CTC Source Protection Region 2021 Annual Progress Report

## I. Introduction

Source protection plans are created under the *Clean Water Act, 2006*. This annual report summarizes the progress made by December 31, 2021 in implementing the source protection plan for municipal drinking water systems in the Credit Valley, Toronto and Region, and Central Lake Ontario (CTC) Source Protection Region.

Protecting the sources of our drinking water is the first step in a multi-barrier approach to safeguard the quality and quantity of our water supplies. The source protection plan is the culmination of extensive science-based assessment, research, consultation, and collaboration with local stakeholders and the provincial government. When policies in the plan are implemented it ensures that activities carried out near municipal wells and lake-based intakes will not pose significant risk to drinking water supplies.

We acknowledge and recognize the efforts made by municipalities, stakeholders and the CTC Source Protection Committee in the development and implementation of the Source Protection Plan.



### II. A message from your local Source Protection Committee

**P : Progressing Well/but Short of Target – The majority of the source plan policies have been implemented and/or are progressing; but some fall short of target.**

This is the fifth Annual Report on implementation of the CTC Source Protection Plan (Plan) since it took effect on December 31, 2015. All stakeholders responsible for Plan policy implementation reported on their progress in 2021.

Most of the legally binding policies (96%) that address significant drinking water threats are implemented in the CTC Region. All municipalities have established processes to ensure that land use planning decisions conform to the Plan.

At the time the Plan came into effect in 2015, over 10,000 significant drinking water threats were identified in the CTC Region. Since then, field verification has reduced that number to 6,195 significant threats. Only 325 existing significant drinking water threats remain to be addressed, of these 322 are within the Credit River Watershed. Since 95% of significant threats have been addressed, the CTC Source Protection Committee determined that implementation of the Plan is progressing well overall.

However, the Committee expressed concern that fewer than half of the required risk management plans (RMPs) had been established to address significant threats and noted that it is unlikely that all municipalities will achieve the 2023 deadline for completion of RMPs. The COVID-19 pandemic has constrained the ability of municipalities to engage property and business owners and conduct site visits and septic system inspections.

Further, water quality analysis suggests increasing sodium and chloride concentrations in the raw water from most of the municipal wells with identified issues in the drinking water systems for Orangeville and Georgetown.

As a result, the Committee concluded that implementation of the Plan is progressing well, but remains short of target.

The Committee will continue to work with source protection authority and municipal staff to review source protection plan policies requiring RMPs and identify ways to advance RMP completion.

### III. Our Watershed

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

The CTC Source Protection Region contains over 25 large and small watersheds and spans over 3,800 km<sup>2</sup> of land, from the Oak Ridges Moraine in the north to Lake Ontario in the south. The region contains portions of the Niagara Escarpment, Oak Ridges Moraine, Greenbelt, Lake Ontario, and the most densely populated area of Canada. The CTC Source Protection Region includes 25 local municipalities and eight single tier, regional or county municipalities, 64 municipal supply wells, and 16 municipal surface water intakes in Lake Ontario. The region is complex and diverse in terms of geology, physiography, population, and development pressures. There are many, often conflicting, water uses including, drinking water supply, recreation, irrigation, agriculture, commercial and industrial uses, and ecosystem needs.

The Credit Valley Source Protection Area is formed by one main watercourse, the Credit River, and a number of smaller Lake Ontario tributaries. Nearly 1500 km of streams and creeks empty into the Credit River including Black Creek, Silver Creek, West Credit River, Shaw's Creek, East Credit River, Fletchers Creek, Caledon Creek, and several others. There are thirteen municipal water systems operating in the source protection area, two are surface water based – accessing Lake Ontario as the source; the remainder are groundwater-based. There are no municipal drinking water sources taking from the Credit River. About 1 million people make the Credit watershed their home.

The Toronto and Region Source Protection Area comprises numerous watersheds, plus their collective Lake Ontario waterfront shorelines, to incorporate portions of six upper-tier and 15 lower-tier municipalities. The nine major watersheds are Carruthers, Duffins, Etobicoke, Highland, Mimico, and Petticoat Creeks, and also the Don, Humber and Rouge Rivers. More than 5 million people live within the source protection area with the population expected to grow significantly in the years to come. There are ten municipal water systems operating in the source protection area, five are surface water based – accessing Lake Ontario as the source; the remainder are groundwater-based.

The Central Lake Ontario Source Protection Area is fully contained within the Regional Municipality of Durham. There are numerous watersheds within its boundaries, with the five major watersheds originating at the Oak Ridges Moraine. These major watersheds are Lynde, Oshawa, Farewell, Bowmanville, and Soper Creeks. There are no municipal wells within the source protection area; all municipal drinking water comes from Lake Ontario. There are three municipal drinking water systems: Whitby, Oshawa, and Bowmanville.

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

#### 1. Source Protection Plan Policies

P : Progressing Well/On Target

There are 129 policies in the CTC Source Protection Plan. The policies address: 21 types of threats prescribed in regulation and 2 types of local drinking water threats, other actions considered necessary to protect drinking water sources, and monitoring of implementation. Some policies are implemented by a single stakeholder, others by multiple stakeholders.

As of the end of 2021, most legally binding policies (96%) that address significant drinking water threats are implemented. Furthermore, about 95% of existing significant drinking water threats have been addressed (i.e., eliminated or managed).

#### 2. Municipal Progress: Addressing Risks on the Ground

P : Progressing Well/On Target

Municipalities in our source protection region are required to review and update their Official Plans to ensure they conform with local source protection plans the next time they undertake an Official Plan review under the *Planning Act*. Municipalities in the CTC Source Protection Region are also amending their Official Plans as required to conform with the Growth Plan for the Greater Golden Horseshoe, 2020. The Growth Plan requires that all upper tier municipalities complete their review by summer 2022 and lower tier municipalities by summer 2023.

As of December 2021, 81% of municipalities within the CTC have completed or are in the process of completing their conformity exercise with the CTC Source Protection Plan.

#### 3. Septic Inspections

S : Satisfactory

Within the CTC Region, 300 septic systems are expected to be inspected every 5 years to satisfy the requirements of the Ontario Building Code. In 2021, 64 inspections were completed, representing 21% of the total inspections required over the 5-year cycle.

Some municipal septic inspection programs were delayed in 2020 and 2021 because of the COVID-19 pandemic. Two hundred and thirty-one inspections (or 77%) remain to be completed by the end of 2022, the final year of the 5-year inspection cycle.

Of the systems inspected in 2021, 95% did not require any maintenance work, while 5% required minor maintenance. None required major maintenance.

### 4. Risk Management Plans

L : Limited progress (COVID-19 pandemic limited progress in 2021)

The CTC Source Protection Plan contains policies that require the development of Risk Management Plans (RMPs) to manage some drinking water threats.

Screening processes are in place at municipalities to ensure applications for future development are reviewed appropriately for potential threat activities and source protection policy application.

Overall, 150 RMPs are in place within the CTC. Eleven of these RMPs were established in 2021, with an additional 29 RMPs in the process of being completed as of the end of the year. As was the case in 2020, progress on RMPs was affected by pandemic related restrictions and challenges.

An estimated 205 RMPs remain to be negotiated to address existing significant threats, with 198 of these required to be in place by the end of 2023. As building relationships and negotiating RMPs with business and property owners is a time-consuming process, it is unlikely that all municipalities in the CTC Region will achieve the 2023 deadline for completion of RMPs.

There were 113 inspections carried out in 2021 by a Risk Management Inspector for prohibited or regulated activities; the most inspections completed in any year to date. There was 100% compliance with RMPs and prohibited activities that were inspected.



### 5. Provincial Progress: Addressing Risks on the Ground

P : Progressing Well/On Target

Ontario ministries review applications for new or amended 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 our plan to address activities that pose a significant risk to sources of drinking water. The Province has established Standard Operating Policies to ensure that approvals take into account the science generated through the Drinking Water Source Protection Program and policies in the plan. Where necessary, conditions are added to approvals to ensure that the activity does not pose a significant threat to sources of drinking water. The Ministries have reported 100% completion of previously issued provincial approvals in our source protection region.

Provincial ministries also consider source protection vulnerability when prioritizing sites for planned or proactive inspections. Ministry staff continue to receive training on the source protection program, their annual reporting requirements, and recent amendments to the Director's Technical Rules.

### 6. Source Protection Awareness and Change in Behaviour

Municipalities, conservation authorities and other implementing bodies within the CTC Source Protection Region work with landowners and business owners to help safeguard our sources of drinking water. All municipalities across the CTC have established education and outreach programs, which contribute to enhancing awareness of source water protection. Examples of 2021 efforts to build awareness include:

- Wellington County collaborated with a neighbouring municipality on a virtual Children's Water Festival in May, that drew participation from 178 schools.
- Peel Region and Credit Valley Conservation are using their Rural Water Quality Program to support implementation of agricultural Risk Management Plans.
- The City of Pickering produced two videos in 2021 about water resources protection as part of its Litter and Plastics Challenge: Every Piece Counts campaign.
- Peel Region supported landowners in the decommissioning of 35 unused private wells through their Private Well Abandonment Program in 2021, eliminating potential transport pathways for contaminants to reach aquifers.
- Peel Region initiated a Pilot Program for use of winter maintenance best management practices at the Region's municipal wells.
- York Region supplied spill kits to businesses in source protection vulnerable areas
- The Lake Ontario Collaborative Group partners (Peel, Toronto, Durham) continued to develop the Lake Ontario Hydrodynamic and Water Quality Forecasting System, including the addition of new monitoring stations and modelling solutions, as well as updating spills notification protocols.

### 7. Source Protection Plan Policies: Summary of Delays

The development of a Joint Municipal Water Supply Management Model (policy DEM-6) for several area municipalities within Dufferin County is nearing completion as 3 of 4 municipal councils passed resolutions to execute the agreement.

Provincewide, all Source Protection Plans were required to include policies to address significant drinking water threats. The CTC Source Protection Committee chose to also include policies to address moderate and low drinking water threats. These moderate and low drinking water threat policies relate to the application of road salt, the handling and storage of certain chemicals and provision of education and outreach materials. Since the implementation of these moderate and low threat policies (SAL-10, SAL-12, SAL-13, DNAP -3, OS -3, GEN-8) is non-legally binding, their implementation status varies across the source protection region.

### 8. Source Water Quality: Monitoring and Actions

Fourteen drinking water issues have been identified at wells in four drinking water systems in our Source Protection Region. For these drinking water systems, the Source Protection Plan requires that the municipality establish more frequent raw water quality monitoring to help further characterize concentrations and trends. All municipalities have monitoring and treatment systems in place to ensure that municipal drinking water meets the requirements under the *Safe Drinking Water Act, 2002*.

In the Orangeville Drinking Water System, five wells have been identified with chloride issues and three wells with sodium issues. While chloride concentrations in two of the wells continue to rise, levels in three of the wells appear to have stabilized over the last few years. Sodium concentrations in most of the affected wells are increasing.

In the Acton Drinking Water System, two wells have been identified with nitrate issues. Nitrate concentrations appear to be stable or increasing slightly.

In the Georgetown Drinking Water System, three wells have been identified with chloride issues and concentrations are increasing.

A pathogen issue was previously identified at 1 well in the Inglewood Drinking Water System. This well was decommissioned in 2021 and is no longer used as a source of drinking water.

Over time, monitoring will help determine if implementation of Plan policies and other actions are improving the raw water quality for these systems.

### 9. Science-based Assessment Reports: Work Plans

The Source Protection Committee is guiding a multi-year comprehensive review and update of the CTC Source Protection Plan and Assessment Reports under s.36 of the *Clean Water Act, 2006*.

### 10. More from the Watershed

To learn more about our source protection region, visit our website at <https://ctcswp.ca/>