

CENTRAL LAKE ONTARIO SOURCE PROTECTION AUTHORITY

A G E N D A THIRTEENTH CLOSPA MEETING

Tuesday, April 12, 2022 – 5:00 p.m.
MEETING LOCATION: VIRTUAL MEETING
ACCESS DETAILS TO BE PROVIDED

CIRCULATION LIST

Authority	Bob Chapman, Chair	Authority	C. Darling, Chief Administrative Officer
Members:	Elizabeth Roy, Vice Chair	Staff:	B. Boardman, Executive/Accounting Administrator
	Dave Barton		R. Catulli, Director, Corporate Services
	Ron Hooper		J. Davidson, Director, Watershed Planning & Natural Heritage
	Janice Jones		L. Hastings, Marketing & Communications Coordinator
	Chris Leahy		D. Hope, Land Management & Operations Supervisor
	Sterling Lee		C. Jones, Director, Planning & Regulation
	Tito-Dante Marimpietri		P. Lowe, Director, Community Engagement
	Ian McDougall		P. Sisson, Director, Engineering & Field Operations
	Don Mitchell		L.Vaja, Executive Assistant/Health & Safety Administrator/Recording Secretary
	John Neal		R. Wilmot, GIS Systems Supervisor
	Brian Nicholson		
	David Pickles		
	Corinna Traill	Others:	Janet Ivey, Project Manager, CTC Source Protection Region
	Steve Yamada		



AGENDA ITEM:

SUPPORTING DOCUMENTS

- 1. CALL TO ORDER**
- 2. DECLARATIONS of interest by members on any matters herein contained**
- 3. ADOPTION OF MINUTES of April 20, 2021** pg. SP-1
- 4. CHIEF ADMINISTRATIVE OFFICER**
(1) Staff Report #SP-021-22 pg. SP-3
Re: Annual Reporting – Drinking Water Source Protection
- 5. CONFIDENTIAL MATTERS – None**
- 6. NEW AND UNFINISHED BUSINESS**

ADJOURNMENT

A G E N D A
SUPPORTING DOCUMENTS

MEETING OF: CLOSPA
DATE: Tuesday, April 12, 2022
TIME: 5:00 p.m.
LOCATION: Virtual Meeting

CENTRAL LAKE ONTARIO SOURCE PROTECTION AUTHORITY

MINUTES NO. 12 TWELVETH CLOSPA MEETING

Tuesday, April 20, 2021 – 5:00 p.m.

MEETING LOCATION: VIRTUAL MEETING THROUGH ZOOM

Authority	Bob Chapman, Chair	Authority	C. Darling, Chief Administrative Officer
Members:	Ron Hooper Janice Jones Sterling Lee Tito-Dante Marimpietri Ian McDougall Don Mitchell Rhonda Mulcahy John Neal David Pickles Corinna Traill	Staff:	B. Boardman, Executive/Accounting Administrator/Recording Secretary R. Catulli, Director, Corporate Services J. Davidson, Director, Watershed Planning & Natural Heritage Steve Holysh, ORMGP Co-Manager/Senior Hydrogeologist D. Hope, Land Management & Operations Supervisor C. Jones, Director, Planning & Regulation P. Lowe, Director, Community Engagement P. Sisson, Director, Engineering & Field Operations L. Vaja, Executive Assistant/Health & Safety Administrator R. Wilmot, GIS Systems Supervisor
Absent:	Dave Barton Brian Nicholson Elizabeth Roy, Vice Chair Steve Yamada	Others:	Janet Ivey, CVC Craig Jacques, CVC

The Chair called the meeting to order at 5:02 p.m.

DECLARATIONS of interest by members on any matters herein contained - *None*

ADOPTION OF MINUTES of May 12, 2020 (Agenda pg. SP-1)

Res. #SP-1 Moved by S. Lee
 Seconded by R. Mulcahy

THAT the minutes of May 12, 2020 be adopted as circulated.
CARRIED

Cont'd

CHIEF ADMINISTRATIVE OFFICER

- (1) Staff Report #SP-019-21 (Agenda pg. SP-3)
Re: CTC Source Protection Region Change in Lead Source Protection Authority

Res. #SP-2 Moved by I. McDougall
Seconded by D. Pickles

*WHEREAS almost 100% of the remaining Significant Drinking Water Threats that are within the CTC Source Protection Region are located within the Credit Valley Source Protection Authority, and
WHEREAS the CTC Management Committee consisting of the CAOs of the Credit Valley, Toronto and Region, and Central Lake Ontario Conservation Authorities have directed staff to transfer Lead Source Protection Authority responsibilities from the Toronto and Region Conservation Authority to the Credit Valley Conservation Authority;
THEREFORE, BE IT RESOLVED THAT the Central Lake Ontario Source Protection Authority endorse the request that the Minister of the Environment, Conservation and Parks designate Credit Valley Source Protection Authority as the Lead Source Protection Authority for the CTC Source Protection Region under Ontario Regulation 284/07.
CARRIED*

- (2) Staff Report #SP-020-21 (Agenda pg. SP-5)
Re: Annual Reporting – Drinking Water Source Protection

Res. #SP-3 Moved by I. McDougall
Seconded by D. Pickles

*THAT Staff Report #SP-020-21 be received for information, and
THAT the CLOSPA endorses the recommendation of the CTC SPC to report to the Ministry of the Environment, Conservation and Parks that the CTC Source Protection Plan is progressing well, but short of target, and
THAT that the comments from the CTC Source Protection Committee be incorporated into correspondence from the Chair of the CLOSPA to the Ministry of the Environment, Conservation and Parks by the May 1st reporting deadline and that staff be directed to submit the Annual Progress Report and accompanying documents.
CARRIED*

ADJOURNMENT

Res. #SP-3 Moved by I. McDougall
Seconded by D. Pickles

*THAT the meeting adjourn.
CARRIED*

The meeting adjourned at 5:05 p.m.

REPORT

CENTRAL LAKE ONTARIO SOURCE PROTECTION AUTHORITY

DATE: April 12, 2022
FILE: NSPG1
S.R.: SP-021-22
MEMO TO: Chair and Members, CLOSPA Board of Directors
FROM: Chris Darling, Chief Administrative Officer
SUBJECT: **Annual Reporting – Drinking Water Source Protection**

APPROVED BY C.A.O. 

BACKGROUND:

The Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Plan (the Plan) has been in effect since December 31, 2015, having the objectives of:

1. Protecting the quality and quantity of existing and future drinking water sources in the CTC Source Protection Region,
2. Ensuring 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 source protection plan implementation to the Ministry of the Environment, Conservation and Parks (the Ministry), under section 46 of the Clean Water Act, 2006. The 2021 annual report will be the fifth such report.

Annual reports are prepared using the information provided by municipalities, provincial ministries, and other implementing bodies, as required by the monitoring policies in the Plan, the Clean Water Act, and associated regulations. Reports from implementing bodies are submitted to the SPA annually by February 1st 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.

The annual progress report is presented to the CTC Source Protection Committee (the 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. The Ministry provides three standard options for Source Protection Committees to select from: 1) progressing well/on target, 2) satisfactory, or 3) limited progress.

The annual progress report and comments received from the Committee 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 report to the Ministry by May 2nd.

ANALYSIS:

Within the Central Lake Ontario Source Protection Area (CLOSPA), the policies municipalities are required to apply to address significant drinking water threats either have been implemented or are in the process of being implemented. At the time the CTC Source Protection Plan was made effective, 14 significant drinking water threats were present in the Central Lake Ontario part of the source protection region. These threats have all been removed as a result of actions taken by the Region of Durham, the Township of Uxbridge, and the Province. A summary of these actions follows below:

- 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 review 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.
- Durham Region has established business processes to identify potential significant drinking water threats, including a thorough review of Planning Act/Building Permit applications.
- 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.
- CLOSPA municipalities have reported that amending Official Plans for conformity with the CTC SPP is 'in progress' or 'complete'. Most CLOSPA municipalities are expected to align their conformity obligations under the Clean Water Act, 2006 when completing their conformity with the Growth Plan for the Greater Golden Horseshoe as part of the Municipal Comprehensive Review.
- 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. The Region of Durham continues to implement education and outreach initiatives to comply with policies in the CTC SPP. In particular, the Region has developed and distributed educational materials for the General Public and target audiences, collaborated with local organizations, and produced source protection content for their websites (<https://www.durham.ca/en/living-here/source-water-protection-new.aspx>) and social media. The Region has engaged and provided education and outreach materials to properties with significant threats. Low and moderate threats were targeted for distribution in 2021 and were distributed as pandemic related restrictions permit.
- The City of Pickering also reported that they produced two videos in 2021 about water resources protection as part of its Litter and Plastics Challenge: Every Piece Counts campaign.

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, only 325 (about 5%) remain to be addressed. For these reasons, the Committee determined that the 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 existing significant threats. Figure 1 illustrates the number of RMPs in place, completed or in progress at the end of 2021, and still required to be completed. As no significant prescribed drinking water threats were originally identified for the City of Toronto, that municipality does not appear in the figure.

Overall, 150 RMPs are in place within the CTC Region. Eleven of these were established in 2021, with an additional 29 in the process of being completed at the end of the year. An estimated 205 RMPs for existing significant threats remain to be negotiated, with 198 of these required to be in place by the end of 2023. There are no outstanding RMPs within Durham Region. Almost all the remaining RMPs (195) are for properties in the Credit River watershed. Outstanding threats are largely associated with the application and storage of road salt, snow storage, the application and storage of pesticides and agricultural source materials (e.g., manure), and the handling and storage of some types of chemicals.

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.

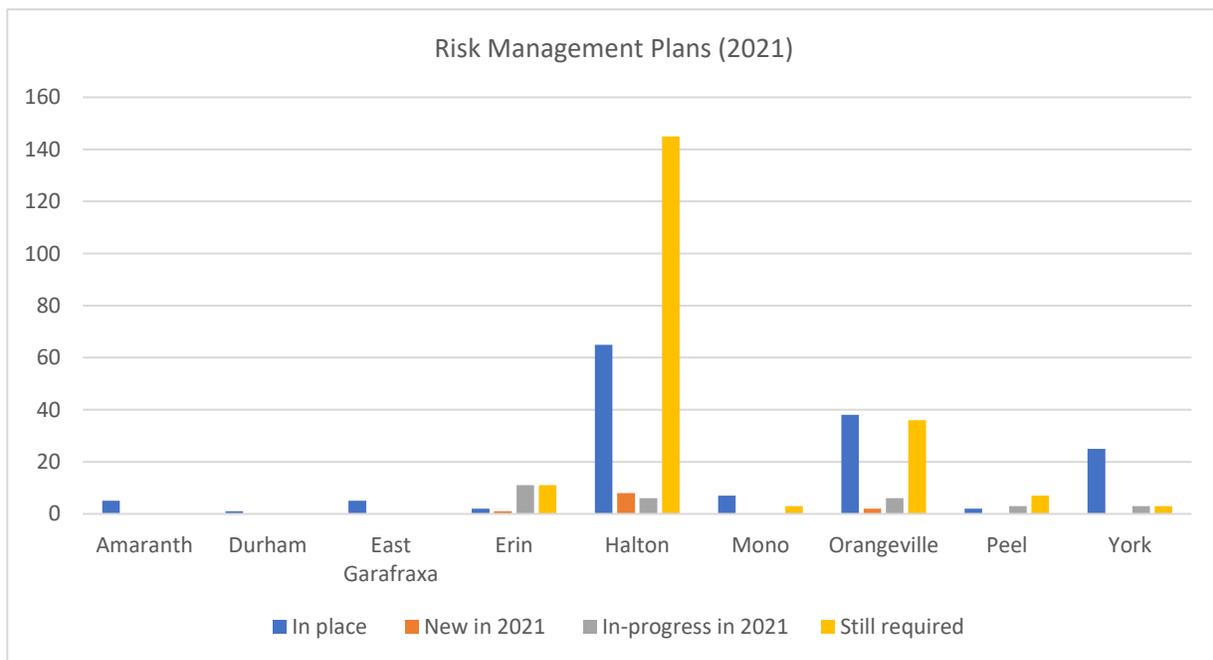


Figure 1: Number of risk management plans in place, newly created in 2021, in-progress in 2021, and still required to address significant drinking water threats as of December 31, 2021.

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 5-year inspection cycle. Most of these inspections (150) will be within the Credit River watershed. The single required Risk Management Plan within the part of Durham Region within the CTC SPR was inspected in 2021 and found to be in compliance.

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.

The Committee's comments are summarized in a letter from Chair Doug Wright, and with the final plain-language annual progress report, are appended as Schedule 'A'.

The CLOSPA may, at its discretion, submit its own comments on the progress towards implementation of the CTC Source Protection Plan.

COMMUNICATIONS PLAN:

Following the 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 report to the Ministry by May 2, 2022. Additionally, staff will post the annual report on the CTC website (www.ctcswp.ca).

FINANCIAL IMPLICATIONS:

About \$575,000 in provincial funding has been committed to Credit Valley Conservation (as the lead Source Protection Authority in the CTC Source Protection Region) through a transfer payment agreement with the Ministry for the April 1, 2021 to March 31, 2022 fiscal year. The financial resources to support CVC, TRCA, and CLOCA staff time to advance and maintain the Drinking Water Source Protection Program are provided through this agreement.

Provincial funding for the 2022-2024 fiscal years will be provided to CVC under a new transfer payment agreement.

RECOMMENDATIONS:

*THAT Staff Report #SP-021-22 be received for information, and
THAT the CLOSPA endorses the recommendation of the CTC SPC to report to the Ministry of the Environment, Conservation and Parks that the CTC Source Protection Plan is progressing well, but short of target, and
THAT that the comments from the CTC Source Protection Committee be incorporated into correspondence from the Chair of the CLOSPA to the Ministry of the Environment, Conservation and Parks by the May 2nd reporting deadline and that staff be directed to submit the Annual Progress Report and accompanying endorsement documents.*

Attach.

CD/lv
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CTC Source Protection Region

Source Protection Committee



March 23, 2022

Bob Chapman
Chair, Central Lake Ontario Source Protection Authority
100 Whiting Avenue
Oshawa, ON
L1H 3T3

Dear Bob Chapman:

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 Central Lake Ontario Source Protection Authority (CLOSPA) 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.

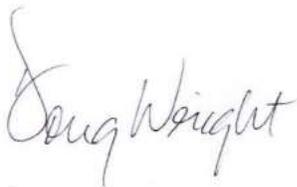
These reasons contributed to the Committee's conclusion that overall progress in achieving the Plan's objectives falls short of target. Continued monitoring and assessment of raw water quality is required to determine whether the policies in the plan are sufficient to prevent future drinking water issues.

The remaining significant drinking water threats to be addressed and RMPs required in CTC all fall within the Toronto and Region and Credit Valley Source Protection Authorities. There are no septic system inspections required within the CLOSPA jurisdiction.

The CLOSPA 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 Toronto and Region 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.

Sincerely,



Doug Wright
Chair, CTC Source Protection Committee

Attachment A: Source Protection Annual Progress Report (2021)

CTC Source Protection Region

Source Protection Committee



Copy to:

Chris Darling, Chief Administrative Officer, Central Lake Ontario 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 km² 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 polices 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/>