



CREDIT VALLEY SOURCE PROTECTION AUTHORITY

Meeting #: 27
 Date: April 9, 2021, 9:30 a.m.
 Location: Meeting to be Held Electronically

MEMBERS: K. (Karen) Ras (Chair)
 T. (Tom) Adams (Vice Chair)
 J. (John) Brennan
 S. (Stephen) Dasko
 J. (Johanna) Downey
 A. (Ann) Lawlor
 M. (Matt) Mahoney
 M. (Martin) Medeiros
 M. (Michael) Palleschi
 G. (Grant) Peters
 J. (John) Stirk

REGRETS: R. (Ron) Starr

STAFF PRESENT: D. (Deborah) Martin-Downs CAO
 G. (Gayle) Soo Chan Director, Watershed Knowledge
 T. (Tim) Mereu Director, Watershed Management
 J. (Jeff) Payne Director, Corporate Services
 J. (Josh) Campbell Director, Planning & Development Services
 J. (John) Sinnige Associate Director, Watershed Management
 T. (Tamara) Chipperfield Corporate Secretariat
 C. (Claudia) Kasperowicz Administrator, CAO's Office
 R. (Roger) Tharakan Sr. Manager, Financial Services
 J. (Jon) MacMull Sr. Manager, Marketing & Communications
 A. (Andrew) Kett Sr. Manager, Education & Outreach
 A. (Aviva) Patel Sr. Manager, Landscape Science, Inventory & Monitoring
 T. (Terri) LeRoux Sr. Manager, PARCS
 E. (Eric) Baldin Manager, Land Planning & Management
 M. (Min) Young Lee Accountant
 J. (Janet) Ivey Chief Specialist, Watershed Plans & Source Water Protection
 C. (Craig) Jacques Specialist, Watershed Plans & Source Water Protection

A. (Ashoo) Anand
H. (Holly) Nadalin
R. (Rose) Fitzpatrick

Sr. Coordinator, Multicultural Outreach
Program Manager, Community Outreach
Administrator, Corporate Services

OTHERS Learie Miller (Region of Peel).
PRESENT: Joane Mui (KPMG)

1. **APPROVAL OF AGENDA**

01/CVSPA/21

Moved By Tom Adams
Seconded By Stephen Dasko

RESOLVED THAT the agenda be approved as distributed.

CARRIED

2. **DECLARATION OF CONFLICT OF INTEREST**

3. **MINUTES OF PREVIOUS MEETING**

02/CVSPA/21

Moved By Grant Peters
Seconded By John Stirk

RESOLVED THAT the minutes of the 26th meeting of the Credit Valley Source Protection Authority held December 11, 2020 be approved.

CARRIED

4. **PRESENTATION / DELEGATION**

5. **BUSINESS ARISING FROM MINUTES**

6. **NEW BUSINESS STAFF REPORTS**

6.1 **ANNUAL REPORTING (2020) – DRINKING WATER SOURCE PROTECTION PROGRAM**

Attached a Schedule 'A' is a report on the above-mentioned subject as submitted by Janet Ivey, Chief Specialist, Watershed Planning and Source Water Protection; and Gayle Soo Chan, Director, Watershed Knowledge.

03/CVSPA/21

Moved By Ann Lawlor
Seconded By Michael Palleschi

THEREFORE BE IT RESOLVED THAT the report entitled *Annual Reporting (2020) – Drinking Water Source Protection Program* be received and appended to the minutes of this meeting as Schedule ‘A’; and

THAT the CVSPA endorses the recommendation of the CTC Source Protection Committee to report to the Ministry of the Environment, Conservation and Parks that implementation progress of the CTC Source Protection Plan is progressing well, but short of target; and further

THAT that the comments from the CTC Source Protection Committee be incorporated into correspondence from the Chair of the CVSPA 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 endorsement documents.

CARRIED

7. **CORRESPONDENCE/INFORMATION ITEMS DISTRIBUTED TO MEMBERS**
8. **NOTICE OF MOTION**
9. **QUESTION PERIOD**
10. **OTHER BUSINESS**
11. **MEETING ADJOURNED**

On motion the meeting adjourned at 9:40 a.m.

TO: The Chair and Members
of the Board of Directors,
Credit Valley Conservation

SUBJECT: ANNUAL REPORTING (2020) – DRINKING WATER
SOURCE PROTECTION PROGRAM

PURPOSE: Endorsement of the Credit Valley 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 Source Protection Plan was progressing well, but short of target, between January 1 and December 31, 2020.

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 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 1st 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) 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 (Schedule 'A', Appendix 1) 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 1st.

ANALYSIS:

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 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, 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 Region 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). The distribution of existing significant threats across the CVSPA 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, and
- Township of East Garafraxa – No 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.

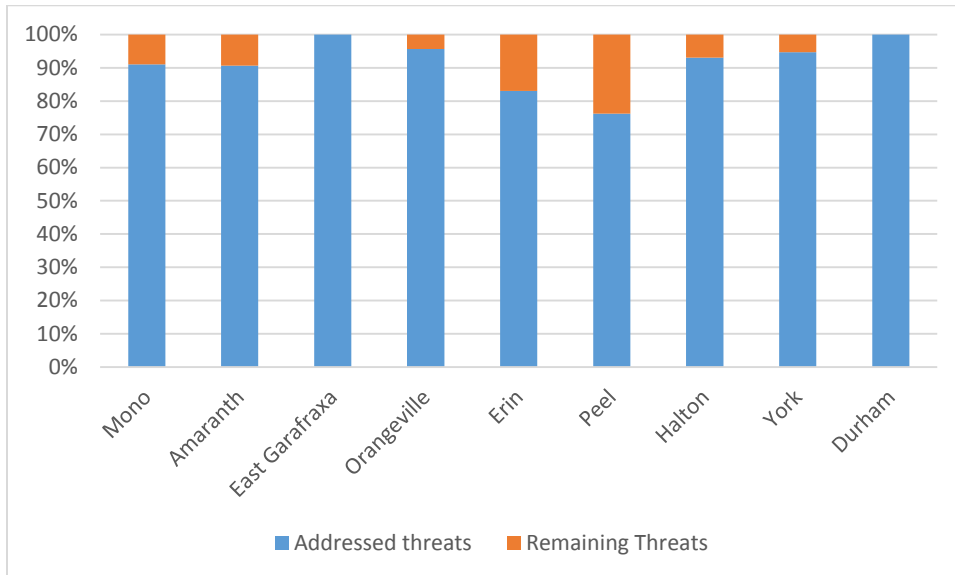


Figure 1: Proportion of significant drinking water threats that remain to be addressed as of December 31, 2020.

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 three-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 (Schedule 'A', Appendix 2) 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 CVSPA (Schedule 'A', Appendix 1). The CVSPA may, at its discretion, submit its own supplementary comments.

COMMUNICATIONS PLAN:

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 (Schedule 'A', Appendix 2) on the CTC website (www.ctcswp.ca).

FINANCIAL IMPLICATIONS:

Funding has been provided to Toronto and Region Conservation Authority (as the lead Source Protection Authority in the CTC Source Protection Region) through a transfer payment agreement with the MECP for the April 1 2020 to March 31 2021 provincial fiscal year. The financial resources to support CVC staff time to advance and maintain the Drinking Water Source Protection Program are provided through this agreement.

Provincial funding for the 2021-2022 fiscal year will be provided to CVC under a new transfer payment agreement as it assumes the role of lead Source Protection Authority for the CTC Source Protection Region (per Schedule 'A' to the December 11, 2020 CVSPA meeting).

RECOMMENDED RESOLUTION:

THEREFORE BE IT RESOLVED THAT the report entitled *Annual Reporting (2020) – Drinking Water Source Protection Program* be received and appended to the minutes of this meeting as Schedule 'A'; and

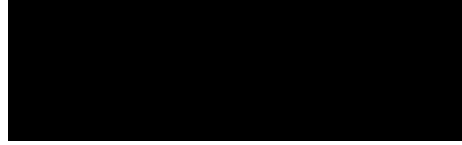
THAT the CVSPA endorses the recommendation of the CTC Source Protection Committee to report to the Ministry of the Environment, Conservation and Parks that implementation progress of the CTC Source Protection Plan is progressing well, but short of target; and further

THAT that the comments from the CTC Source Protection Committee be incorporated into correspondence from the Chair of the CVSPA 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 endorsement documents.

Submitted by:



Janet Ivey
Chief Specialist, Watershed Planning
and Source Water Protection



Gayle Soo Chan
Director, Watershed Knowledge

Recommended by:



Deborah Martin-Downs
Chief Administrative Officer



Source Protection Committee

March 24, 2021

Karen Ras
Chair, Credit Valley Conservation
1255 Old Derry Road
Mississauga, Ontario
L5N 6R4

Dear Karen Ras:

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 Credit Valley 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 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.

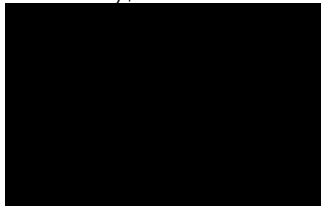
- A policy in the Plan requires about 368 septic systems in the CTC Region to be inspected every 5 years. The COVID-19 pandemic also constrained municipal staff ability to perform on-site inspections; therefore, only one inspection was completed in the CTC Region in 2020. Most of the outstanding inspections (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 Credit Valley 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 Toronto and Region and Central Lake Ontario 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.

Sincerely,



Doug Wright
Chair, CTC Source Protection Committee

Copy to:

Deborah Martin-Downs, Chief Administrative Officer, Credit Valley Conservation
Janet Ivey, Chief Specialist, Watershed Plans and Source Water Protection, Credit Valley Conservation



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 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, 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 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 3.5 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 polices 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/>