

CENTRAL LAKE ONTARIO SOURCE PROTECTION AUTHORITY

A G E N D A FIFTEENTH CLOSPA MEETING

Tuesday, April 16, 2024 – 5:00 p.m.

HYBRID MEETING LOCATION: VIRTUAL THROUGH TEAMS (ACCESS DETAILS PROVIDED)
OR 100 WHITING AVENUE, OSHAWA, AUTHORITY'S ADMINISTRATIVE OFFICE, BOARDROOM

CIRCULATION LIST

Authority	Elizabeth Roy, Chair	Authority	C. Darling, Chief Administrative Officer
Members:	Bob Chapman, Vice Chair	Staff:	B. Boardman, Executive/Accounting Administrator
	Marilyn Crawford		R. Catulli, Director, Corporate Services
	Sami Elhajjeh		J. Davidson, Director, Watershed Planning & Natural Heritage
	Bruce Garrod		L. Hastings, Communications Specialist
	Ron Hooper		D. Hope, Conservation Lands & Education Manager
	Rick Kerr		C. Jones, Director, Planning & Regulation
	Chris Leahy		P. Sisson, Director, Engineering, Field Operations & Education
	Tito-Dante Marimpietri		L.Vaja, Executive Assistant/Health & Safety Administrator/ Recording Secretary
	Ian McDougall		R. Wilmot, Information Management & Technology Manager
	Rhonda Mulcahy		
	John Neal		
	David Pickles	Others:	Benham Doulatyari, Senior Manager, Watershed Plans & Source Protection, Credit Valley Conservation
	Maleeha Shahid		
	Corinna Traill		

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 18, 2023** pg. SP-1
- 4. CHIEF ADMINISTRATIVE OFFICER**
(1) Staff Report #SP-023-24 pg. SP-40
Re: Annual Reporting – Drinking Water Source Protection

Presentation - Benham Doulatyari, Senior Manager, Watershed Plans & Source Protection, Credit Valley Conservation
- 5. CONFIDENTIAL MATTERS – None**
- 6. NEW AND UNFINISHED BUSINESS**

ADJOURNMENT

A G E N D A

SUPPORTING DOCUMENTS

MEETING OF: CLOSPA

DATE: Tuesday, April 16, 2024

TIME: 5:00 p.m.

LOCATION: Hybrid Meeting

CENTRAL LAKE ONTARIO SOURCE PROTECTION AUTHORITY

MINUTES NO. 14 FOURTEENTH CLOSPA MEETING

Tuesday, April 18, 2023 – 5:00 p.m.

MEETING LOCATION: HYBRID - Virtual Through Zoom and/or in person Or 100 Whiting Avenue, Oshawa,

Authority	Elizabeth Roy – Chair	Authority	C. Darling, Chief Administrative Officer
Members:	Bob Chapman – Vice Chair	Staff:	B. Boardman, Executive/Accounting Administrator
	Marilyn Crawford		R. Catulli, Director, Corporate Services
	Sami Elhajjeh		J. Davidson, Director, Watershed Planning & Natural Heritage
	Bruce Garrod		L. Hastings, Communications Specialist
	Rick Kerr		D. Hope, Conservation Lands & Education Manager
	Chris Leahy		C. Jones, Director, Planning & Regulation
	Tito-Dante Marimpietri		P. Sisson, Director, Engineering, Field Operations & Education
	Ian McDougall		L.Vaja, Executive Assistant/Health & Safety Administrator/ Recording Secretary
	Rhonda Mulcahy		R. Wilmot, Information Management & Technology Manager
	Steve Yamada		

Absent:	Ron Hooper	Others:	Benham Doulatyari, Senior Manager, Watershed Plans & Source Protection, Credit Valley Conservation
	John Neal		
	David Pickles		
	Corinna Trill		

The Chair called the meeting to order at 5:04 p.m.

DECLARATIONS of interest by members on any matters herein contained – None

ADOPTION OF MINUTES of April 22, 2022 (Agenda pg. SP-1)

Res. #SP-1 Moved by S. Yamada
Seconded by B. Chapman

THAT the minutes of April 22, 2022 be adopted as circulated.
CARRIED

Cont'd

CHIEF ADMINISTRATIVE OFFICER

(1) Staff Report #SP-022-23 (Agenda pg. SP-3)
Re: Annual Reporting – Drinking Water Source Protection

Benham Doulatyari, Senior Manager, Watershed Plans & Source Protection, Credit Valley Conservation made a presentation to the Board (attached **H1-H37**)

Res. #SP-2 Moved by R. Mulcahy
Seconded by M. Crawford

*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 endorsement documents.*
CARRIED

ADJOURNMENT

Res. #SP-3 Moved by B. Chapman
Seconded by R. Kerr

THAT the meeting adjourn.
CARRIED

The meeting adjourned at 5:25 p.m.

ELIZABETH ROY, CHAIR

CHRIS DARLING, CHIEF ADMINISTRATIVE OFFICER

Central Lake Ontario Source Protection Authority

April 18, 2023

Behnam Doulatyari

Senior Manager Watershed Plans & Source Protection
Credit Valley Conservation

H-2

Drinking Water Source Protection

SP-4



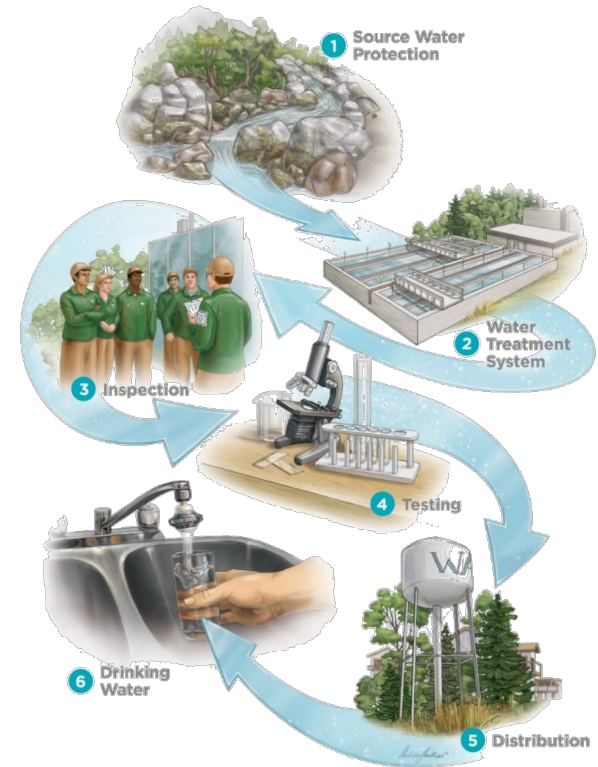
What is Source Water Protection?

The History

- Bacterial contamination of Walkerton municipal water supply in 2000. Seven deaths; thousands left with severe, long-term illnesses.
- Justice O'Connor's Inquiry in 2002: recommendations to protect drinking water from source to tap.

The Clean Water Act (2006)

- The purpose of the Act is to protect existing and future sources of drinking water from contamination or depletion.
- The Drinking Water Source Protection Program is a multi-stakeholder, collaborative, locally-driven process to protect municipal residential drinking water sources.
- Municipalities may also bring in other systems (private, non-residential). First Nations have the option to join.



**Multi-Barrier Approach:
Protecting from Source to Tap**

Source: <https://www.ontario.ca/page/source-protection>

Ministry of the Environment, Conservation and Parks

11-5

- Maintain legislative/regulatory foundation and scientific framework. Collaborate across ministries.
- The Minister's roles include approving amendments to source protection plans and issuing orders for reviews and updates, as well as appointing source protection committee chairs.
- The Minister has other powers under the Legislation such as the power to make regulations, to require Official Plans to come into conformity with source protection plans, to require hearings or to require changes to be made.

Source Protection Authority (SPA)

- Maintain source protection committees and provide admin, technical and scientific support to committee.
- Develop amendments to source protection plans.
- Undertake annual reporting and maintain access to data and information.
- Support municipalities in fulfilling their implementation responsibilities, and undertake other functions related to SPA role (provide advice and technical services to municipalities, businesses, landowners and others about plan policies and source protection program).

Source Protection Committee

- Responsible for preparing local assessment reports and source protection plans and reviewing and updating them in accordance with Minister's orders.
- Chair appointed by Minister.
- Members appointed by source protection authority – 1/3 municipal, 1/3 economic (agricultural, commercial, business/industrial), 1/3 other (environment, health, public).
- Ministry rep sits on committee.
- 12 have additional seats dedicated to First Nation representatives.
- Meets ~ 4x year.

Source Protection Plan

- Action plan that addresses risks to sources of drinking water within vulnerable areas around municipal residential drinking water systems.
- Includes the **Assessment Report** which sets out the technical (science-based) information related to drinking water systems and their vulnerable areas, risk assessments, maps and activities that pose a threat to source water.

Implementing Bodies

- Province, municipalities, conservation authorities.
- Responsible for undertaking the actions directed by the source protection plan

SP-7

H-6

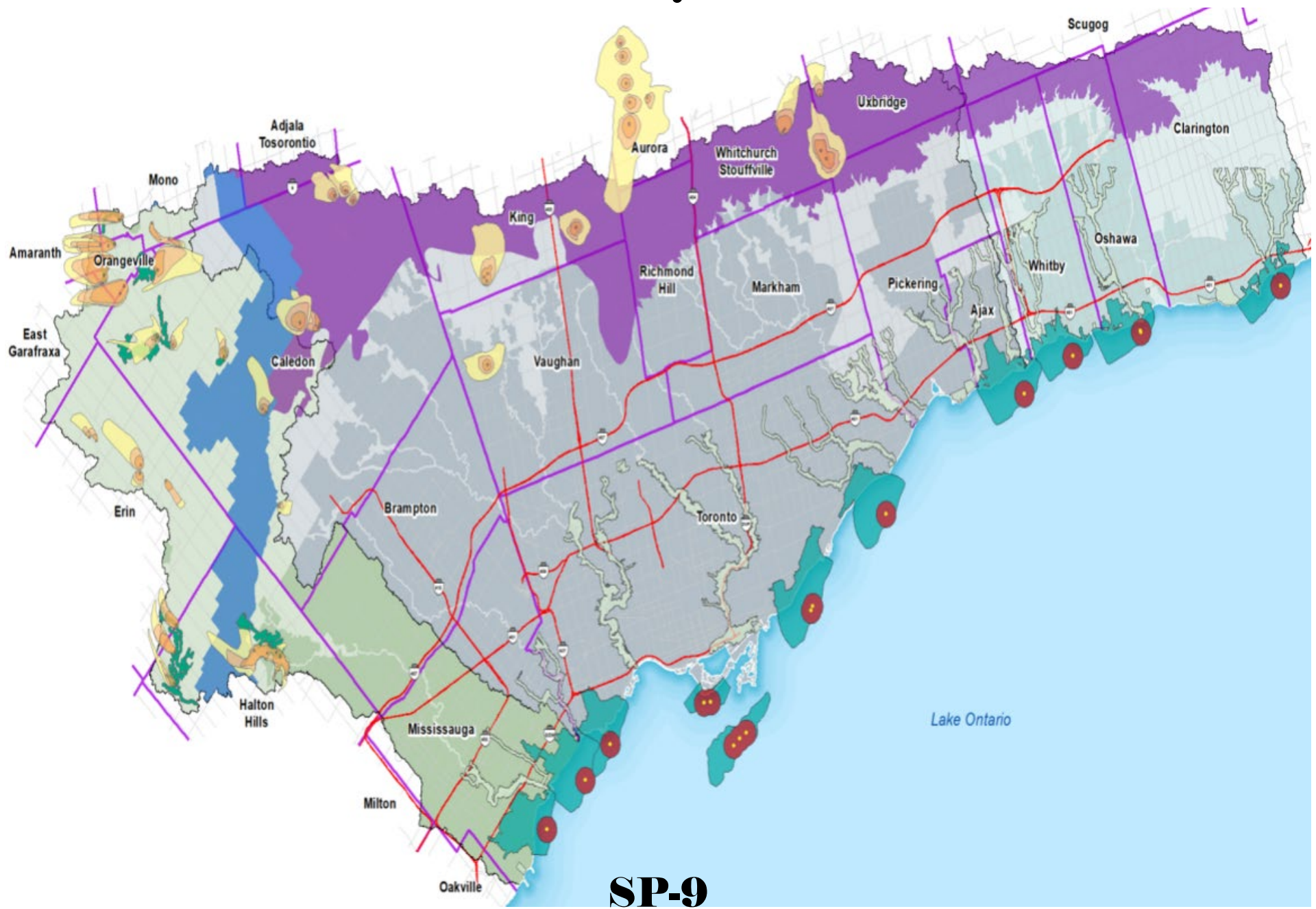
CTC Source Protection Plan Annual Progress Report

SP-8



CTC: 33 municipalities, over 60 wells and 16 intakes

H-7



SP-9

H-8

Preparing the annual report

Feb 1st

Municipal, provincial reports to SPA



SPA aggregates, assesses progress and populates MECP templates, online tool



Mar 23rd

SPC receives report, comments on progress



April

CVSPA, TRSPA, CLOSPA receive reports, comment, endorse



May 1st

Annual Report due to MECP

SP-10

Grading progress

- Overall assessment of progress made in plan implementation since the plan came into effect (2015) and not just for the reporting year
- Grading options (overall and for components)
 - **Progressing Well/On Target** – The majority of the source protection plan policies have been implemented and/or are progressing.
 - **Satisfactory** – Some of the source protection plan policies have been implemented and/or are progressing.
 - **Limited progress** – A few of source protection plan policies have been implemented and/or are progressing.

H-10

Grading progress

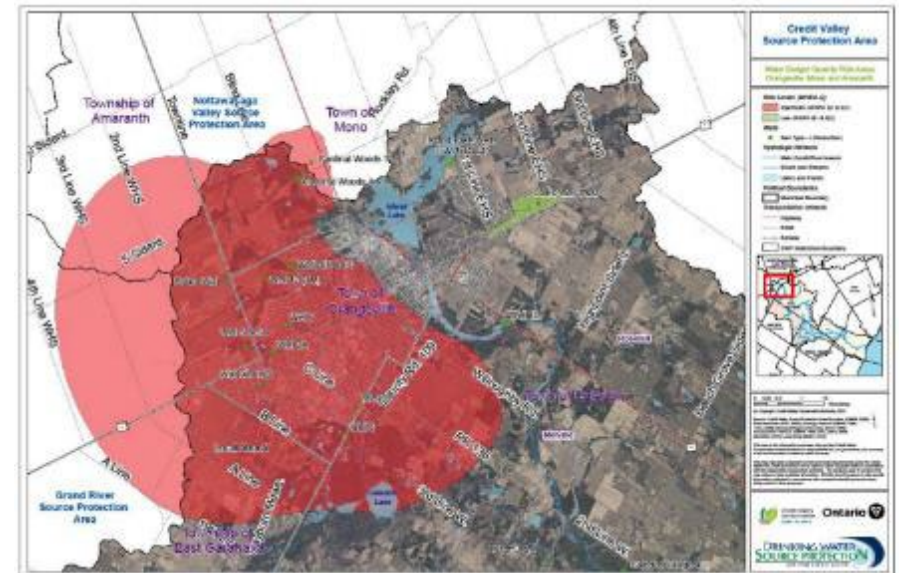
- Past reports
 - 2016-2017, 2018 – overall progressing well/on target
 - 2019, 2020, 2021 – overall progressing well/short of target

Progress Report

Annual report section	Grade	
	2022 proposed	2021
SPP policies & addressing significant risks <ul style="list-style-type: none"> • 129 policies addressing 21 prescribed, 2 local threats • 88% Legally Binding SDWT policies implemented • 97% of existing SDWTs managed <ul style="list-style-type: none"> • 301 existing SDWTs remain to be addressed • Road salt, snow storage, ASM, DNAPLs 	Progressing well	Progressing well
Municipal progress: addressing risks on the ground <ul style="list-style-type: none"> • 94% of municipalities are in progress or have completed OP conformity. 	Progressing well	Progressing well

Other SPP Policies

- DEM-6 policy, joint water management agreement in effect (March 2023)
- Voluntary implementation of moderate/low threat policies is variable
 - 74% implemented, 23% in progress
 - SAL-12, SAL-13, DNAP-3



Progress Report

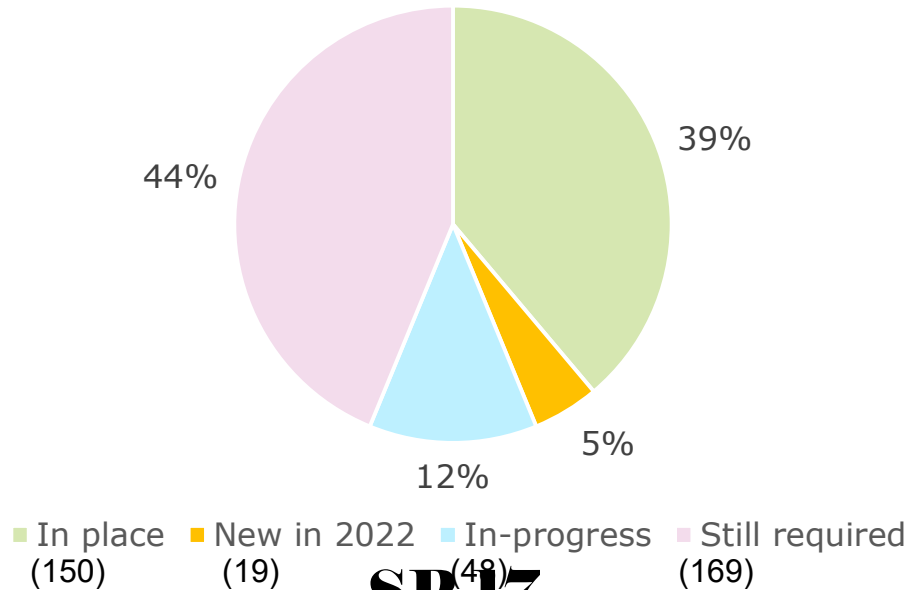
Annual report section	Grade	
	2022 proposed	2021
Septic inspections <ul style="list-style-type: none">• 295 required every 5 years (by end 2022)• 37 inspections (13%) completed in 2022• Challenges in 2022 because of COVID-19 pandemic• Both municipalities prioritizing inspection in 2023• 95% did not require maintenance; 5% required minor maintenance	Limited progress	Limited progress

Progress Report

Annual report section	Grade	
	2022 proposed	2021
Provincial progress: addressing risks on the ground <ul style="list-style-type: none">Existing approvals reviewed by 2019SOPs in place for new approvals	Progressing well	Progressing well

H-15

Annual report section	Grade	
	2022 proposed	2021
Risk management plans <ul style="list-style-type: none"> 150 RMPs in place overall About 169 more RMPs needed; 163 by end of 2023 118 inspections completed (highest annual total), 100% compliance of inspected RMPs/prohibitions 	Limited progress	Limited progress



H-16

Source protection awareness and change in behavior

- Phase 1 of the Lake Ontario Collaborative Group partners (Peel, Toronto, Durham) Lake Ontario Water Quality Forecasting System was completed, allowing forecasting of potential impacts from contaminant spills to their water treatment plant intakes.
- Wellington County municipalities collaborated on 3 Smart about Salt training events for municipal staff and 2 sessions for private contractors

Source protection awareness and change in behavior

- Peel Region endorsed a Source Water Protection Incentive Program to help reduce costs incurred by affected landowners and business owners who must comply with a Risk Management Plan
- Credit Valley Conservation is promoting source water protection best practices thorough education and outreach to owners of non-municipal drinking water sources

Source water quality monitoring

- Drinking Water Issue: A substantiated condition relating to the quality of quantity of water that interferes or is anticipated to soon interfere with the use of a drinking water source by a municipal residential system or designated system.
- 13 drinking water issues identified at wells in 4 municipal DWSs in CTC
- CA and municipal staff reviewing water quality trend analyses

SPA Comments

SPA recommends “**progressing well, but short of target**” as described in Attachment 1 to the report

H-20

CTC Program Update

SP-22



Amendments To Source Protection Plans

s.34 Amendment (CWA)
(SPA Proposes)

i.e. New/expanded systems
Completion of technical work
Implementation challenges

s.35 Order (CWA)
(Minister's Order)

i.e. Minister's discretion
(SPA unable to obtain municipal
Support for amendments)

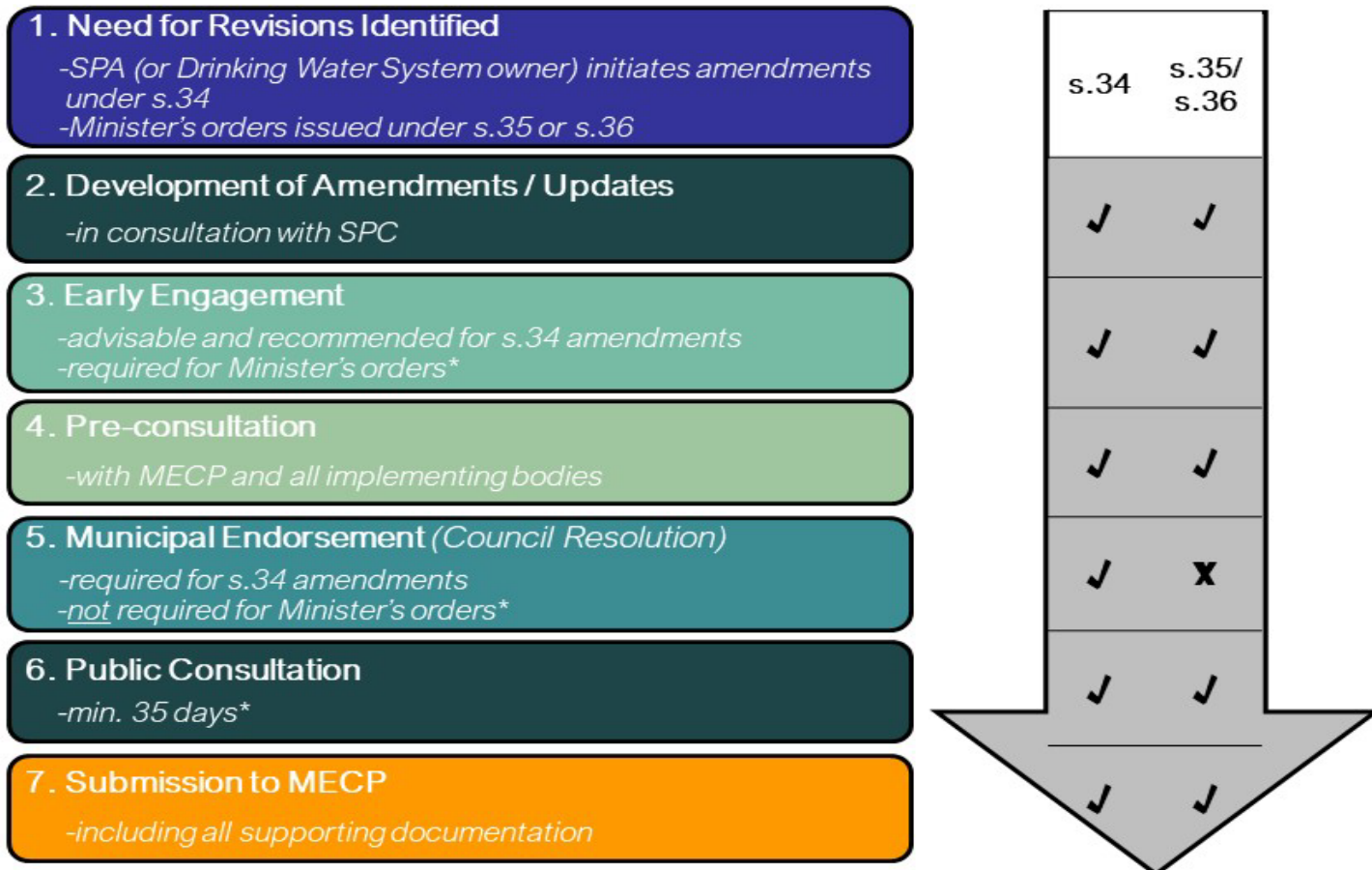
s.36 Update (CWA)
(Mandatory Review)

i.e. Most SPP revisions
e.g. new policies, new technical work

s.51 (O. Reg. 287/07)
(SPA's Discretion)

i.e. Minor administrative errors
e.g. correction of typographic errors

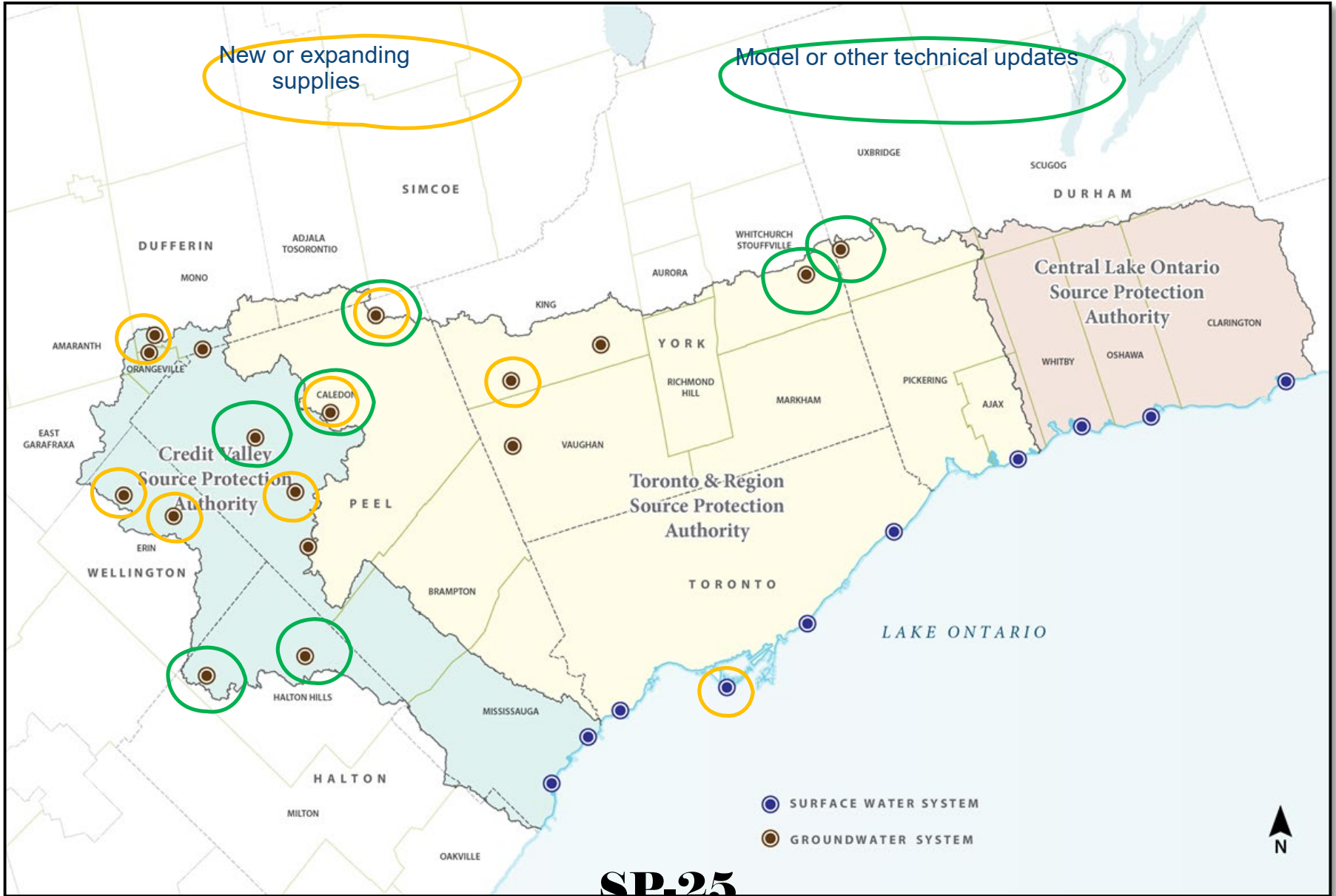
Amendment Process



*Note: unless otherwise specified in Minister's order

Figure 1: Assessment report and plan revision process under the Clean Water Act (MECP, 2019).

Changing Municipal Drinking Water Systems



Upcoming Amendments and Consultations

- Current s. 34 amendment
 - Pre-consultation packages March 10th
 - Municipal feedback April 14th
 - Council Endorsements end of May
 - Public Consultation June 5th – July 12th
- **York Region:**
Nobleton
replacement PW3
- **Peel Region:**
increased pumping
Palgrave well 4, new
Caledon East well 6,
WHPA delineation
Caledon Village 3B
- **Toronto:** new
Island intakes, new
ABTP outfall
- **Policy:** DNAP-1 and
OS-1, definitions of
existing threat
activity, transition
policy

Upcoming Amendments and Consultations

Drinking Water System	Anticipated Timeline		
	Pre-Consultation	Public Consultation	Submission Date
Town of Erin (Erin/Hillsburgh) (s. 34)	2023-2024	2023-2024	2024
York Region/Stouffville well 3 ICA	2023-2024	2024	2024
Town of Orangeville new Pullen water supply (s. 34)	2023-2024	2024	2024
Durham Region GW model update (Uxville) (s. 36)	2023-2024	2024	2024-2025
Halton Region GW model (Georgetown/Acton) (s. 36)	2023-2024	2024	2024-2025
Orangeville Tier 3 update	TBD	TBD	TBD
York Region (Nobleton new supply)	2025-2026	TBD	TBD
Peel Region (potential Inglewood new supply)	TBD	TBD	TBD

Section 36 update

- 2023
 - Technical work focusing on policy and TPA
 - Establishing timelines for municipal work
- 2024
 - Workplan for outstanding tasks
 - Establishing consultation timelines

Examples of Ongoing Projects

- Needs assessment for ICA policies, local threat policies
- Water Quality trends and ICA analysis
- Update of Agricultural policies including evaluation of prohibitions outside WHPA – A
- Update of FUEL policies
- Update of Salt and Snow policies
- Assessment of IS calculation methods
- TP reporting protocol

CTC RMO Update

CTC RMO Update: RMP Challenges and Opportunities

Clean Water Act and CTC SPP

- **CWA Section 58** – Regulated Activities (RMPs)
- **CWA Section 59** – Restricted Land Uses (planning and building permit applications)
- **CTC Source Protection Plan:** The RMO must be satisfied that a RMP will reduce the potential for adverse effects to a drinking water source, so that the activity ceases to be, or does not become, a significant threat.
 - Once RMP is established there are reporting / inspection requirements
- CTC Plan initially indicated that RMPs to address existing threats were to be established by the end of 2020, subsequently extended to end of 2023 (extension largely overlapped with duration of pandemic restrictions)

RMP Activities in 2022 and early 2023

- Outreach letters and/or phone calls to landowners to initiate engagement in RMP process
- Re-engagement with landowners where RMP discussions began pre-COVID
- In-person visits where feasible (more limited opportunities for agricultural properties)
- Coordination of approach to landowners at municipal boundaries (e.g., Wellington-Halton)

Section 58 Notices and Orders

- Initiating very limited use of S.58(7) Notices (intent to establish RMP) for landowners who have had draft RMP for 1+ years and are no longer constructively engaging with staff
 - S.58(7) Notice must include 120 or more days of notice to allow for further negotiation
 - S.58(7) Notice would be followed by S.58(10) Order to establish RMP if agreement not reached and/or landowner will not sign off
- Relationship building is very important to ultimate success of program, although RMOs can use notices/orders to impose RMPS, such actions may result in long-term adversarial relationship and potential for appeals to OLT.

RMP Challenges

- Very limited return on outreach efforts (e.g., 10-15% of landowners respond to letters, and many lack alternative method of contact)
- For agricultural properties negotiation window is limited to ~November to March and was further impacted by restrictions in 2021 & 2022

RMP Challenges

- Obtaining final sign off can be significant obstacle, even when process is constructive overall
 - provincial or federal agencies at sites with existing threats
 - some winter maintenance contractors reluctant to obtain Smart About Salt certification
- Staff resources are finite, and the same staff complete most or all aspects of the program (e.g., development reviews, Section 34 & 36 amendments in multiple Source Protection Regions)

RMP Opportunities

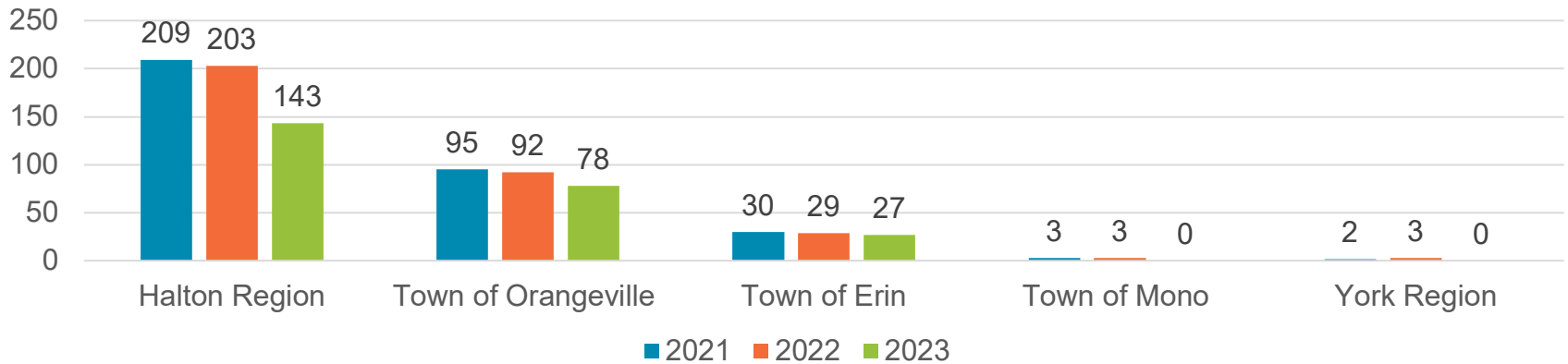
- Filling new positions and/or back-filling vacant positions to support Source Protection implementation
- Anticipate continued opportunities for in-person discussion, relationship building, consistent contacts
- Since start of 2023, six RMPs have been established
- Approximately 40 draft RMPs in progress and/or awaiting sign off by landowners/operators with landowners who require RMPs

RMP Opportunities

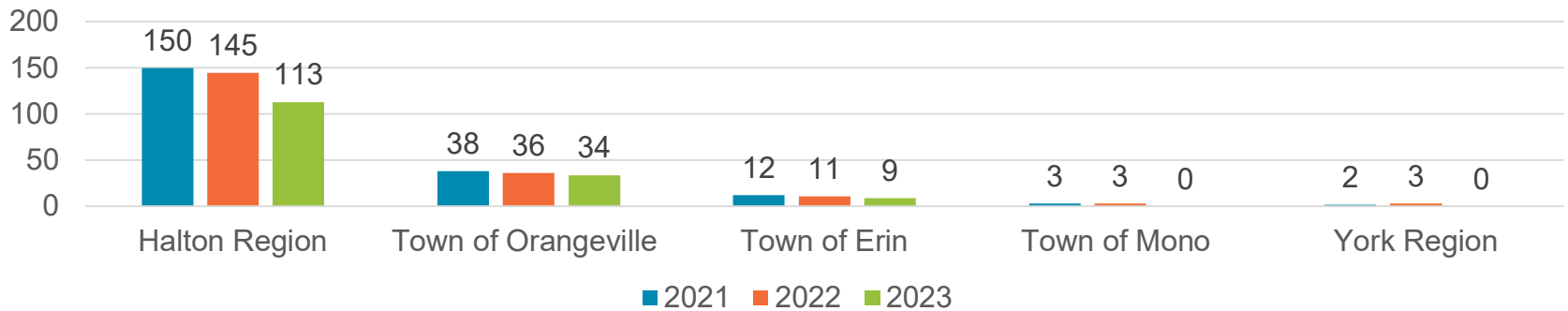
- Increasing number of Smart About Salt certified contractors
- Review of incoming development application also provides some opportunities to establish RMPs for existing threats
- Working with SPC members where they can assist with communicating

Outstanding SDWTs & RMPs

Outstanding Existing SDWTs



Outstanding RMPs



Next Steps

- Final extension considered by MECP
- Maximum two years
- Next steps:
 - CTC staff will develop workplan template by end of April
 - RMOs submit package by the end of June
 - Submission to MECP
 - Council endorsement

REPORT

CENTRAL LAKE ONTARIO SOURCE PROTECTION AUTHORITY

DATE: April 16, 2024
FILE: NSPG1
S.R.: SP-023-24 **APPROVED BY C.A.O.** _____
MEMO TO: Chair and Members, CLOSPA Board of Directors
FROM: Chris Darling, Chief Administrative Officer
SUBJECT: **Annual Reporting – Drinking Water Source Protection**

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 (MECP), under section 46 of the *Clean Water Act*, 2006. The 2023 annual report will be the seventh such report.

Annual reports are prepared using 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, 2023.

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 2024, prior to submission of the annual report to the Ministry by May 1st.

ANALYSIS:

The CTC Source Protection Committee reviewed a draft of the annual report at *Meeting #2/24 held on March 20, 2024*. Following discussion, the committee concluded that Plan implementation is “**progressing well, but short of target**”. This is consistent with the modified language used in the 2019 through 2022 annual reports. The CTC Source Protection Committee report on annual reporting can be found in [Appendix 1](#).

Within the Central Lake Ontario Source Protection Area (CLOSPA), the policy’s municipalities are required to apply to address significant drinking water threats have either 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.

Cont’d

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:

- CTC planning staff hosted a source protection session for municipal planners across the region to introduce/refresh knowledge on source protection and municipal planners’ role in implementation. This included discussions on local drinking water source protection concerns in our region and Q&A session to allow a better understanding of source water protection.
- 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's (Peel, Toronto, Durham) Lake Ontario Water Quality Forecasting System (LOWQFS) continued to undergo development and improvements to how it monitors and analyses spill events and possible impacts, as part of Decision Support System updates in 2023. The LOWQFS was also presented at several 2023 conferences.
- Most CLOSPA municipalities have reported that amending Official Plans for conformity with the CTC SPP as ‘needs updating to reflect amended SPP’. CLOSPA municipalities are expected to align their Official Plans and Zoning bylaws to the requirements of the Plan after the new Region of Durham Official Plan (Envision Durham) has been approved sometime this year by the Minister of Municipal Affairs and Housing..

Municipality	Official Plan	Zoning By-Law Conformity
Regional Municipality of Durham	In Progress/Updates Underway	Not Applicable
Town of Ajax	Not Started	In Progress/Updates Underway
Municipality of Clarington	Needs updating to reflect amended SPP	Not Started
City of Oshawa	Needs updating to reflect amended SPP	Not Started
City of Pickering	Completed	Not Applicable
Township of Scugog	Needs updating to reflect amended SPP	Not Started
Township of Uxbridge	Completed, but Under appeal	Completed
Town of Whitby	Needs updating to reflect amended SPP	Not Started

There are no outstanding Risk Management Plans or septic system inspections within CLOSPA.

Implementation Highlights

Last year, at the meeting on March 23, 2023, the CTC Source Protection Committee reiterated their concern around water quality trends at municipal production wells and the need for further assessment. In response, staff initiated a multi-phase investigation, including development of a publicly accessible automated water quality reporting tool to allow for comprehensive assessment of trends across CTC for the annual reporting cycle. This investigation is ongoing; however, the reporting tool has already been developed in partnership with the Oak Ridge's Moraine Ground Water Program (ORMGP) and can be found at:

[CTC Source Protection Region Municipal Wells Water Quality Status, Trends, and Projections \(owrc.github.io\)](https://owrc.github.io)

NEXT STEPS:

The annual progress report and the Committee's comments will be presented to the Credit Valley, Central Lake Ontario, and Toronto and Region Source Protection Authorities (SPAs) for endorsement at meetings in April 2024. 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, 2024. Additionally, staff will post the annual progress report and supplemental form (**Appendix 2 and 3**) on the CTC website (www.ctcswp.ca).

RECOMMENDATIONS:

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 endorsement documents.

Attach.

CD/lv
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**TO: Chair and Members of the Source Protection Committee
Meeting #2/24, March 20, 2024**

**FROM: Behnam Doulatyari, Senior Manager, Watershed Plans and
Source Water Protection**

RE: CTC Source Protection Plan Annual Progress Report 2023

RECOMMENDATION

THAT the CTC Source Protection Committee receive the staff report CTC Source Protection Plan Annual Progress Report 2023 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 FURTHER THAT CTC staff be directed to present the CTC Source Protection Committee's comments along with the Annual Progress Report 2023 to the Credit Valley, Toronto and Region, and Central Lake Ontario Source Protection Authorities for submission to the Ministry of the Environment, Conservation and Parks.

EXECUTIVE SUMMARY

CTC Source Protection Plan implementation progress has been analysed by staff and is summarized below. Reports on implementation progress are received from implementing bodies, including municipalities and provincial ministries on an annual basis. The 2023 Annual Progress Report has been prepared for review by the CTC Source Protection Committee and Source Protection Authority Boards prior to its submission to the Ministry of the Environment, Conservation and Parks.

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
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 implementation progress to the Ministry of the Environment, Conservation and Parks (MECP) under section 46 of the *Clean Water Act, 2006* (the Act). The 2023 report on implementation progress will be the seventh such report since the Plan came into effect.

Annual progress reports are prepared using data provided by municipalities, provincial ministries, and other implementing bodies as required by the monitoring policies in the Plan and in accordance with section 81 of the Act and section 65 of Ontario Regulation 287/07. Municipal and provincial reports are required to be submitted to SPAs annually by February 1st and reflect implementation efforts from the previous calendar year, January 1 to December 31, 2023.

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. Annual reports must be shared with the CTC Source Protection Committee (SPC) at least 30 days before being submitted to the Director, Conservation and Source Protection Branch, of the MECP.

Last year, the CTC migrated to the online Electronic Annual Reporting (EAR) platform to streamline collating and assessing reported data from implementing bodies. For this year, the implementation status of policies are being answered directly in a new online policy interface (<https://policy.swpip.ca/>) instead of through section 2 of EAR. This change provides SPAs with the implementation status of each municipality and meets the intent of section 46 of the Act by also making the information available to the public.

The SPC is required to review the annual progress report and provide written comments to the SPAs about the extent to which, in the opinion of the SPC, the objectives set out in the plan are being achieved by the measures described in the report.

The plain-language draft annual progress report (**Attachment 1**) includes a summary of Plan implementation, highlighting municipal progress in aligning Official Plans with the source protection plan, septic system inspections, and risk management plans, provincial implementation progress, and water quality monitoring results.

The supplemental form (**Attachment 2**) includes two questions that require SPC input.

1. In the opinion of the Source Protection Committee, to what extent have the objectives of the source protection plan been achieved in this reporting period? (Question ID 350)
2. Please provide comments to explain how the Source Protection Committee arrived at its opinion. Include a summary of any discussions that might have been had amongst the Source Protection Committee members, especially where no consensus was reached. (Question ID 351)

The MECP has clarified that notwithstanding the reference to “in this reporting period”, the intent of this question is to reflect progress made in plan implementation since it came into

effect (2015), and not just in the previous year. Three response options are provided by the MECP:

- Progressing well/on-target – The majority of the source protection plan policies have been implemented and/or are progressing.
- Satisfactory – Some of the source protection plan policies have been implemented and/or are progressing.
- Limited progress – A few source protection plan policies have been implemented and/or are progressing.

Staff recommend the response included in Section II of Attachment 1 and described more fulsomely below.

Highlights

Source Protection Plan Policies

As of the end of 2023, 89% of legally binding policies that address significant drinking water threats have been implemented. Similarly, as of the end of 2023, 90% of non-legally binding policies that address significant drinking water threats have been implemented, and the rest are in progress, or have been considered and do not require further action. Sixty-nine percent of policies addressing Moderate and Low threats have been implemented and the remainder are in progress.

Furthermore, approximately 98% of existing significant drinking water threats have been addressed through policy implementation or removed through threats verification.

Septic Inspections

The Ontario Building Code requires that small sewage systems identified as significant drinking water threats be inspected every five years through a mandatory program. Within the CTC Region, 279 septic systems are currently identified as requiring inspections every 5 years to satisfy the requirements of the Ontario Building Code.

In 2023, 108 inspections were completed, representing 39% of the total inspections required over the 5-year cycle. **Table 1** below shows the number of completed and outstanding inspections across the CTC SPR. Of the systems inspected in 2023, 48% did not require any maintenance work, 34% required minor maintenance, and 18% required major maintenance.

At the conclusion of 2023, there are fifteen septic systems in Erin whose inspection was outstanding due to landowner refusing entry, and therefore compliance orders are being sought. Halton Hills is awaiting confirmation that one further system has been decommissioned. In York Region, two local municipalities reported ongoing inspection delays for twenty-nine septic systems and are following up on next steps including final notices and possible compliance orders.

Table 1. Septic system maintenance inspections across CTC (2018-2023)

Municipality	2018	2019	2020	2021	2022	2023	Outstanding Inspections
Dufferin (Amaranth, East Garafraxa, Mono)	0	12	0	0	0	0	0
Orangeville	0	0	0	2	0	0	0
Erin	0	0	0	0	0	107	15
Caledon	0	0	0	8	7	0	0
Halton Hills	2	1	1	50	5	1	1
York (Whitchurch-Stouffville, Vaughan)	0	0	0	0	25	0	29
Durham (Uxbridge)	0	0	0	4	0	0	0

Risk Management Plans

Risk management plans (RMPs) are site specific documents that outline the actions required to address significant drinking water threats. These are negotiated with property owners and businesses by municipal Risk Management Officials (RMOs).

A total of thirty-three RMPs were signed in 2023 in the CTC Source Protection Region, compared to nineteen in 2022. As of the end of 2023, there were 182 RMPs in place across CTC. **Figure 1** illustrates the number of RMPs currently in place, finalized or in-progress, and still required at the end of 2023.

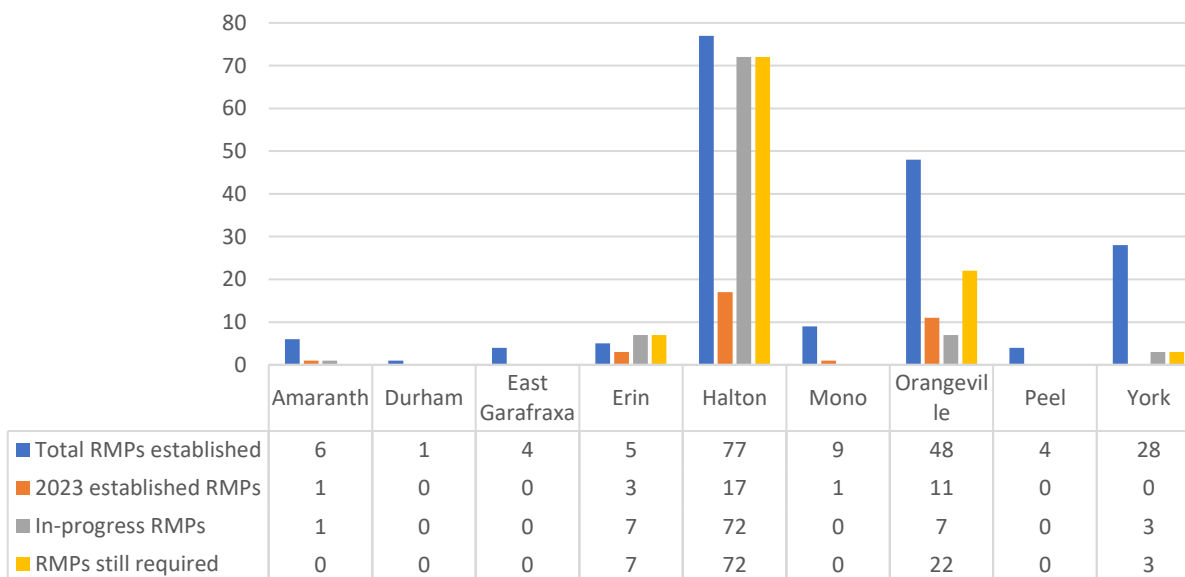


Figure 1. Total RMPs established, RMPs established in 2023, RMPs in-progress at end of 2023, and RMPs still required at end of 2023.

The total number of significant drinking water threats that remain to be addressed in the CTC as of the end of 2023, was 241, down from 301 at the end of 2022. Outstanding significant threats are predominantly associated with application and storage of road salt, snow storage, sewage,

application and storage of agricultural source materials, commercial fertilizer and pesticides, and handling and storage of dense non-aqueous phase liquids.

Of these 241 significant threats, 160 are considered “existing” threats and are identified as requiring RMPs to manage them. “Existing” threats are, in general terms, activities that were occurring on the landscape before the Source Protection Plan was approved. The 2015 approval of the CTC Source Protection Plan, set the deadline for completion of RMPs for existing threats as December 31, 2020, as per policy T-6.

In 2020, following a request by the SPC, the MECP approved a 3-year extension to the original deadline to complete RMPs for existing significant threats identified at the time of the initial Source Protection Plan approval in 2015. The deadline was further revised, to December 31, 2025, after the SPC authorized a 2-year extension that was approved by the MECP in November 2023.

At the conclusion of 2023, there were about 104 RMPs that remain to be negotiated to manage existing significant threats. A quarterly update on the number of outstanding existing significant drinking water threats and risk managements plans can be found in **Table 1**.

Table 1. CTC outstanding existing significant drinking water threat and risk management plan progress*

Municipality	Outstanding existing significant threats or risk management plans	As of January 1, 2023	As of June 30, 2023	As of January 1, 2024*
Town of Erin	# of significant drinking water threats	29	25	18
Town of Erin	# of risk management plans	11	7	7
Halton Region	# of significant drinking water threats	165	124	95
Halton Region	# of risk management plans	116	95	72
Town of Orangeville	# of significant drinking water threats	66	39	42
Town of Orangeville	# of risk management plans	34	30	22

*York Region identified three RMPs that are required to address existing significant threats due to property ownership changes. These properties had previously had RMPs established.

There were 185 inspections carried out by municipal Risk Management Inspectors in 2023 for prohibited or risk managed activities. Three of these inspections identified persons engaging in a drinking water threat activity without a risk management plan as required by the CTC Source Protection Plan. Municipal staff worked with these property owners to negotiate new or amended Risk Management Plans to cover the newly identified significant threats.

Provincial Prescribed Instruments

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 the CTC Source Protection Plan, to address activities that pose a significant risk to sources of drinking water. Where necessary, conditions are added to approvals to ensure that the activity does not pose a significant threat to sources of drinking water.

Provincial ministries screen 100% of applicable incoming applications in accordance with CTC Source Protection Plan prescribed instrument policies. In 2023, ministries conducted detailed review of nine new applications within CTC: one Fuel Handling/Storage, one Permit To Take Water, six Wastewater/Sewage Works and one Nutrient Management Strategy. One Fuel Handling/Storage, one Permit To Take Water and one Nutrient Management Strategy were determined to be significant drinking water threats and had conditions included within the instrument to manage the threat. The six Wastewater/Sewage Works applications were reported as not being significant drinking water threats.

The ministries have reported 100% completion of review of previously issued provincial approvals in our source protection region. Three newly identified existing ECAs for wastewater/sewage works were identified as requiring a detailed review for source protection within the CTC in 2023, all were determined not be a significant threat.

Source Water Quality

SPA staff have been working with municipal partners on development of updated statistical method to better assess trends in groundwater quality, specifically focused on nitrate, sodium and chloride. The following summary of CTC issues is based on the results of that approach as presented in the *CTC SPR Water Quality Assessment Technical Report* at Meeting #3/23.

Thirteen drinking water issues are currently identified at wells in three drinking water systems in the CTC Source Protection Region.

In the Orangeville Drinking Water System (DWS), five wells have been identified with chloride issues and three wells with sodium issues. Chloride concentrations continue to increase in all five wells (6, 9A, 9B, 10, and 11). Sodium concentrations in the affected wells continue to increase (6, 9A, and 9B).

In the Acton DWS, Davidson 1 and 2 wells have been identified with nitrate issues, analysis suggests concentrations appear to be decreasing.

In the Georgetown DWS, Cedarvale 1A, 4 and 4A wells have been identified with chloride issues and concentrations continue to increase.

As part of the comprehensive review of the CTC Source Protection Plan under section 36 of the *Clean Water Act, 2006*, current drinking water issues are being reassessed. As noted above, the

first phase of an investigation to consider these issues and water quality concerns for municipal supplies was presented at Meeting #3/23. The second phase is included in Agenda Item 7.1c with the intention to support water quality trend analysis, and issue identification, monitoring and potential delisting. Work on the third phase involving hydrogeological assessment of wells with existing *issues* to determine the likely cause of the observed statistical trend based on all available data will start in the second quarter of 2024. Work on phase 4 of the project to develop an automated water quality reporting tool in collaboration with ORMGP platform is anticipated to be completed in the second quarter of 2024.

Discussion

Results presented above show good overall progress in implementation of the plan. Progress on RMP establishment and septic inspections are below targets in a few municipalities but have improved compared to the past three years. Recognizing, among other things, the resources and time required for inspections and negotiations, staff recommend an overall assessment of “progressing well, but short of target” for 2023. This is consistent with the modified language used in the 2019 through 2022 annual reports.

Next Steps

The annual progress report and the SPC’s assessment and comments on CTC Source Protection Plan implementation will be presented to the Credit Valley, Central Lake Ontario, and Toronto and Region Source Protection Authorities (SPAs) for their consideration at meetings in April 2023. Following SPA direction, staff will submit the annual progress report and supplementary form to MECP by May 1, 2024. Following submission to the province, the annual progress report will be posted to the CTC website (ctcswp.ca).

Report prepared by:

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Date: March 13, 2024

Attachments (2):

Attachment 1: 2023 CTC Source Protection Plan Annual Progress Report
Attachment 2: 2023 CTC Source Protection Plan Supplementary Report

CTC Source Protection Plan Annual Progress Report 2023

I. Introduction

Source protection plans are created under the *Clean Water Act, 2006*. This annual report summarizes the progress made by December 31, 2023 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/Short of Target – The majority of the source protection plan policies have been implemented and/or are progressing.

This is the seventh 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 2023.

89% of the legally binding policies 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 6,133 significant threats. 241 significant drinking water threats remain to be addressed, almost all of these within the Credit River Watershed. Furthermore, 98% of existing significant drinking water threats have been addressed through policy implementation or removed through threats verification.

Approximately 64% of the required risk management plans (RMPs) have been established to address significant threats. Three municipalities (Halton Region, Town of Erin, Town of Orangeville) with outstanding risk management plans made good progress on RMP establishment in 2023, but will need continued strong efforts to achieve the 2025 deadline for completion of RMPs to address existing significant threats.

In 2023, 108 mandatory septic system inspections were completed. Four municipalities (Town of Erin, Town of Halton Hills, Town of Whitchurch-Stouffville, City of Vaughan) collectively identified 45 overdue septic inspections as of the conclusion of 2023, and are taking steps to have those systems come into compliance.

Sodium and chloride concentrations in the raw water from municipal wells with identified issues in the drinking water systems for Orangeville and Georgetown continued to show increases in 2023. The CTC Region is collaborating with municipalities and the Oak Ridges Moraine Groundwater Program on how to improve reporting of rising sodium and chloride concentrations across the CTC.

As a result, the Committee concluded that implementation of the Plan has progressed well but is short of target in achieving the plan's objectives.

III. Our Watershed

To learn more, please read our assessment reports and source protection plan.

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. 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: 22 types of threats prescribed in regulation and 1 type of local drinking water threat; other actions considered necessary to protect drinking water sources; and implementation monitoring. Some policies are implemented by a single stakeholder, others by multiple stakeholders.

As of the end of 2023, 89% of legally binding policies and 90% of non-legally binding policies that address significant drinking water threats have been implemented, and the rest are in progress, or have been considered and did not require further action. 69% of policies addressing moderate and low threats have been implemented and the rest are in progress. Furthermore, approximately 98% 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

It is a requirement that municipalities ensure their Official Plan (OP), and where appropriate Zoning by-law, conforms with the local source protection plan. As of December 31, 2023, out of 33 municipalities in CTC Source Protection Region, 30 municipalities have completed or are in the process of completing their OP conformity exercise. With regards to Zoning by-laws, 12 municipalities have completed or are in the process of completing their conformity exercise.

3. Septic Inspections

S: Satisfactory (inspection progress varies across the CTC)

Within the CTC Region, 279 septic systems are expected to be inspected every 5 years to satisfy the requirements of the Ontario Building Code. Municipal septic inspection programs experienced delays in recent years because of the COVID-19 pandemic and resource limitations.

In 2023, 108 inspections were completed, representing 39% of the total inspections required over the 5-year cycle. Of the systems inspected in 2023, 48% did not require any maintenance work, while 34% required minor maintenance. Eighteen percent required major maintenance.

Municipalities identified 45 overdue septic inspections as of the conclusion of 2023, and are taking steps for those systems to come into compliance.

4. Risk Management Plans

S: Satisfactory (progress varies across the CTC)

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, 182 RMPs are in place within the CTC. Thirty-three of these RMPs were successfully established in 2023, the most since 2019. An additional 91 RMPs are in the process of being negotiated as of the end of the year.

There remain 106 RMPs to be negotiated to address significant threats, with 101 of these required in Halton Region, and the Towns of Orangeville and Erin. Strong efforts by these three municipalities are required to achieve the end of 2025 deadline for completion of RMPs to address existing significant threats.

There were 185 inspections carried out in 2023 by Risk Management Inspectors for prohibited or regulated activities; the most inspections completed in any year to date. There was 98% 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 (ECAs) 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. Where necessary, conditions are added to approvals to ensure that the activity does not pose a significant threat to sources of drinking water.

Provincial ministries screen 100% of applicable incoming applications in accordance with CTC Source Protection Plan prescribed instrument policies. In 2023, ministries conducted detailed review of nine new applications within CTC: one Fuel Handling/Storage, one Permit To Take Water, six Wastewater/Sewage Works and one Nutrient Management Strategy. One Fuel Handling/Storage, one Permit To Take Water and one Nutrient Management Strategy were determined to be significant drinking water threats and had conditions included within the instrument to manage the threat. The six Wastewater/Sewage Works applications were determined not to be significant drinking water threats.

The ministries have previously reported 100% completion of review of previously issued provincial approvals in our source protection region. Three newly identified existing ECAs for Wastewater/Sewage Works were identified as requiring a detailed review for protection within the CTC in 2023, all were determined not be a significant threat.

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 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. Municipalities across the CTC have established education and outreach programs, which contribute to enhancing awareness of source water protection. Examples of 2023 efforts to build awareness include:

- Orangeville marked its first full year of their water softener rebate program, to promote water conservation and reduce salt loading to municipal sewers
- Wellington County municipalities hosted forty education and outreach events targeted to: several municipal departments, maintenance contractors, septic system owners, communities and schools. Stickers and metals tags listing the Spills Action Centre number and location were handed out to property owners in vulnerable areas
- York Region has initiated a sodium and chloride research and mitigation pilot project in Stouffville
- The Lake Ontario Collaborative Group's (Peel, Toronto, Durham) Lake Ontario Water Quality Forecasting System was presented at several 2023 conferences
- Credit Valley Conservation continued education and outreach to owners of non-municipal drinking water sources to promote source water protection best practices

7. Source Protection Plan Policies: Summary of Delays

A number of policies associated with implementation of outstanding Risk Management Plans to address existing threats, remain in progress for three municipalities.

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-12, SAL-13, DNAP-3, OS-3) are non-legally binding, their implementation status varies across the source protection region.

Official Plan and By-Law Zoning updates to conform with the CTC Source Protection Plan continue to be undertaken as these documents are updated.

8. Source Water Quality: Monitoring and Actions

Thirteen drinking water issues have been identified at wells in three 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 of the *Safe Drinking Water Act, 2002*.

Over the past year, the CTC has been working with municipal partners to develop updated statistical methods to better assess trends in groundwater quality, focused on nitrate, sodium and chloride. The intention is to support water quality trend analysis, and issue identification, monitoring and potential delisting. The following analysis is based, where possible, on these updated methods.

In the Orangeville Drinking Water System, five wells have been identified with chloride issues and three wells with sodium issues. Chloride concentrations continue to increase in all five wells. Sodium concentrations in the affected wells also continue to increase.

In the Acton Drinking Water System, two wells have been identified with nitrate issues and concentrations appear to be declining.

In the Georgetown Drinking Water System, three wells have been identified with chloride issues and concentrations continue to increase.

Over time, appropriate monitoring will help determine if implementation of Plan policies and other actions are improving the raw water quality for these systems. Further assessment to improve water quality trend analysis across the CTC Region is continuing in 2024.

9. Science-based Assessment Reports: Work Plans

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

Review of the 2021 Technical Rules is ongoing and 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*.

In 2023, the CTC continued work on updated water quality trend analysis and issues identification methods.

10. More from the Watershed

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



APPENDIX 3

Source Water Protection Annual Report

2023 - Supplemental Form

SPR - CTC

Report Id	Completed	Question	
10	True	As applicable to your source protection region/area, indicate if all relevant implementing bodies submitted a status update/annual report to the source protection authority for the previous reporting year. If "No" is selected for any implementing body(ies), then please complete the Comments field below with details including the name of the specific implementing body along with an explanation, if available, for not submitting a status update/annual report as required by a monitoring policy. *NOTE: Where a listed implementing body(ies) is not applicable/relevant to your source protection region/area, then simply select "No" and explain that it is not an applicable implementing body in your source protection region/area in the Comments field text box.	
Response			Answer
Risk Management Official			Yes
Municipality			Yes
Conservation Authority			Yes
Local Health Unit			No
MECP - Waste Disposal Sites - Landfilling and Storage			Yes
MECP - Wastewater/Sewage Works			Yes
MECP - Pesticides			Yes
MECP - Hauled Sewage/Biosolids			Yes
MECP - Hauled Sewage/Biosolids Inspections			Yes
MECP - Permit to Take Water			Yes
MECP - Permit to Take Water Inspections			Yes
MECP - Municipal Residential Drinking Water Systems			Yes
MECP - Municipal Residential Drinking Water Systems Inspections			Yes
MECP - Source Protection			Yes
MECP - Waste Disposal Sites - Landfilling and Storage Inspections			Yes
MECP - Wastewater/Sewage Works Inspections			Yes
MECP - Conditions Sites			No
MECP - NMA - ASM and NASM Inspections			Yes
MECP - Environmental Monitoring			No
MECP - Fuel			Yes
MECP - Great Lakes			Yes



APPENDIX 3

Source Water Protection Annual Report

2023 - Supplemental Form

SPR - CTC

MECP - Spills Response	Yes
MECP - Wells	No
OMAFRA	Yes
MNRF	Yes
MTO	Yes
MMAH	Yes
MGCS-TSSA	Yes
MENDM	No
Provincial Board/Commission	Yes
Federal Departments/Agencies/Commissions/Crown Corporations	No
Private Entity/Company	No
Association/Organization	No

Comment: Local Health Unit - Not applicable implementing body: cooperation on policy SWG-7 only.
 MECP Condition Sites - Not applicable implementing body: no identified conditions sites in CTC.
 MECP Environmental Monitoring - Not applicable implementing body, see policy LO-G-2 for cooperation with LOCG
 MECP Wells - not applicable implementing body
 MENDM - Not applicable implementing body
 Federal Departments/Agencies/Commissions/Crown Corporations - Not applicable implementing body
 Private Entity/Company - Not applicable implementing body
 Association/Organization - Not applicable implementing body

Note: CTC has is hosting a introductory/refresher session for municipal planning staff across CTC on Drinking Source Water Protection in late March 2024. This session will go over the basics of source protection, including implementation and reporting.



APPENDIX 3

Source Water Protection Annual Report

2023 - Supplemental Form

SPR - CTC

Report Id	Completed	Question	Category
20	True	Did the Source Protection Authority indicate the status of all threat policies as contained in their source protection plan? Please provide details in the response field text box in the Policy Interface for policies with a "No Progress Made" and "No information available/no response received" implementation status especially for legally-binding policies that address significant drinking water threat activities and for any moderate/low threat policies that use prescribed instruments and Planning Act tools.	Implementation status of source protection plan policies
Answer:		Yes	
Comment:			

Report Id	Completed	Question	Category
21	True	Did the source protection authority(ies) confirm the accuracy of the implementation status of all threat policies as contained in their source protection plan and located on the policy interface database for the current reporting year?	Monitoring Policy Implementation
Answer:		Yes	
Comment:			

Report Id	Completed	Question	Category
22	True	Did all source protection authority(ies) confirm that if a policy is significant and legally binding and has not been implemented by a person or a body by the implementation date specified in the policy, that there are written comments that include a description of the failure and the reasons for the failure as per O.Reg 287/07 s.52(1) 1.?	Monitoring Policy Implementation
Answer:		Yes	
Comment:			



APPENDIX 3

Source Water Protection Annual Report

2023 - Supplemental Form

SPR - CTC

Report Id	Completed	Question									
30	True	Number of risk management plans agreed to or established within the source protection area/region (to address existing and future threats) in this reporting period (i.e., annual total).									
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Current Year</th> <th style="text-align: center;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">33</td> <td style="text-align: center;">180</td> </tr> <tr> <td>Provincial Total</td> <td style="text-align: center; border-top: 1px solid black;">33</td> <td style="text-align: center; border-top: 1px solid black;">180</td> </tr> </tbody> </table>		Current Year	Cumulative Count		33	180	Provincial Total	33	180
	Current Year	Cumulative Count									
	33	180									
Provincial Total	33	180									
Comment:											

Report Id	Completed	Question									
31	True	Number of properties (i.e., parcels) with risk management plans agreed to or established in this reporting period.									
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Current Year</th> <th style="text-align: center;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">34</td> <td style="text-align: center;">212</td> </tr> <tr> <td>Provincial Total</td> <td style="text-align: center; border-top: 1px solid black;">34</td> <td style="text-align: center; border-top: 1px solid black;">212</td> </tr> </tbody> </table>		Current Year	Cumulative Count		34	212	Provincial Total	34	212
	Current Year	Cumulative Count									
	34	212									
Provincial Total	34	212									
Comment:											

Report Id	Completed	Question									
32	True	How many existing* significant drinking water threats have been managed through the established risk management plans in this reporting period (* meaning engaged in OR enumerated as existing significant threats)?									
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Current Year</th> <th style="text-align: center;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">59</td> <td style="text-align: center;">338</td> </tr> <tr> <td>Provincial Total</td> <td style="text-align: center; border-top: 1px solid black;">59</td> <td style="text-align: center; border-top: 1px solid black;">338</td> </tr> </tbody> </table>		Current Year	Cumulative Count		59	338	Provincial Total	59	338
	Current Year	Cumulative Count									
	59	338									
Provincial Total	59	338									
Comment:											



APPENDIX 3

Source Water Protection Annual Report

2023 - Supplemental Form

SPR - CTC

Report Id	Completed	Question	Current Year	Cumulative Count
40	True	How many section 59 notices were issued in this reporting period for activities to which neither a prohibition (section 57) nor a risk management plan (section 58) policy applied, as per ss. 59(2)(a) of the Clean Water Act?	21	272
Provincial Total			21	272
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
41	True	How many section 59 notices were issued in this reporting period for activities to which a risk management plan (section 58) policy applied, as per ss. 59(2)(b) of the Clean Water Act?	9	79
Provincial Total			9	79
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
61	True	State the total number of inspections (including any follow-up site visits) that were carried out for activities (existing or future) that are prohibited under section 57 of the Clean Water Act in this reporting period. If no inspections were conducted in the previous calendar year, please explain.	42	210
Provincial Total			42	210
Comment:				



APPENDIX 3

Source Water Protection Annual Report

2023 - Supplemental Form

SPR - CTC

Report Id	Completed	Question	Current Year	Cumulative Count
62	True	Among the inspections conducted for section 57, how many showed that activities were taking place on the landscape even though they were prohibited (i.e., in contravention) under section 57 of the Clean Water Act in this reporting period?	0	0
Provincial Total			0	0
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
63	True	How many new properties were identified with s.57 prohibited activities during the reporting year (do not include properties established outside of this reporting year)?	0	0
Provincial Total			0	0
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
70	True	How many existing significant drinking water threats have been prohibited as a result of section 57 prohibitions in this reporting period?	0	34
Provincial Total			0	34
Comment:				



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Report Id	Completed	Question						
80	True	State the total number of inspections (including any follow-up site visits) that were carried out for activities that require a risk management plan under section 58 of the Clean Water Act in this reporting period. If no inspections were conducted in the previous calendar year, please explain.						
		<table border="1"> <thead> <tr> <th>Current Year</th> <th>Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">143</td> <td style="text-align: center;">433</td> </tr> <tr> <td style="text-align: center;">143</td> <td style="text-align: center;">433</td> </tr> </tbody> </table>	Current Year	Cumulative Count	143	433	143	433
Current Year	Cumulative Count							
143	433							
143	433							
Provincial Total		143 433						
Comment:								

Report Id	Completed	Question						
81	True	Among the inspections conducted for section 58, how many were in contravention with section 58 of the Clean Water Act in this reporting period (i.e., person engaging in a drinking water threat activity without a risk management plan as required by the source protection plan)?						
		<table border="1"> <thead> <tr> <th>Current Year</th> <th>Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	Current Year	Cumulative Count	3	4	3	4
Current Year	Cumulative Count							
3	4							
3	4							
Provincial Total		3 4						
Comment:								



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Report Id	Completed	Question	Current Year	Cumulative Count
82	True	Among the inspections for section 58, how many were in non-compliance with the specific contents of the risk management plan in this reporting period? (NOTE: Please only include those inspections that showed non-compliance with measures/conditions to manage the actual threat activity.)	0	1
Provincial Total			0	1
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
83	True	State the total number of notices issued where there were cases of contraventions and/or non-compliance found with section 57 in this reporting period.	0	0
Provincial Total			0	0
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
84	True	State the total number of notices issued where there were cases of contraventions and/or non-compliance found with section 58 in this reporting period.	1	1
Provincial Total			1	1
Comment:				



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Report Id	Completed	Question									
85	True	State the total number of orders issued for contraventions and/or non-compliance found with section 57 in this reporting period.									
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Current Year</th> <th style="text-align: center;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Provincial Total</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>		Current Year	Cumulative Count		0	0	Provincial Total	0	0
	Current Year	Cumulative Count									
	0	0									
Provincial Total	0	0									
Comment:											

Report Id	Completed	Question									
86	True	State the total number of orders issued for contraventions and/or non-compliance found with section 58 in this reporting period.									
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center;">Current Year</th> <th style="text-align: center;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Provincial Total</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>		Current Year	Cumulative Count		0	0	Provincial Total	0	0
	Current Year	Cumulative Count									
	0	0									
Provincial Total	0	0									
Comment:											

Report Id	Completed	Question
220	True	List the municipality(ies) (including upper-, lower-, and single-tier) within the source protection region/area that are required to complete Official Plan and Zoning exercises to conform to the latest source protection plan, and indicate the status of those exercises for each applicable municipality. "Latest source protection plan" means the first approved plan or any subsequent approved plan update. *NOTE: Applies to every municipality affected by land use planning or Part IV type policies. Where the official plan and/or zoning by-law status for any particular municipality needs to be changed/updated, then please do so by deleting the entry for that particular municipality by clicking on the red "-" (minus) sign and then re-select the municipality name from the drop down list of municipalities followed by selecting the updated status of the conformity exercise for the official plan and zoning by-law from the drop down list for that particular municipality. After doing so, please be sure to add the municipality as your response by clicking on the green plus sign.
Municipality	Official Plan	Zoning By Law
Township of King	Completed	Completed



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Township of East Garafraxa	Completed	In Progress/Updates Underway
City of Pickering	Completed	Not Applicable
City of Toronto	Completed	Not Applicable
Peel, Regional Municipality of	Completed	Not Applicable
York, Regional Municipality of	Completed	Not Applicable
Township of Uxbridge	Completed, but Under appeal	Completed
Dufferin, County of	Completed, but Under appeal	Not Applicable
Town of Markham	In Progress/Updates Underway	Completed
City of Vaughan	In Progress/Updates Underway	In Progress/Updates Underway
Town of Caledon	In Progress/Updates Underway	In Progress/Updates Underway
Town of Mono	In Progress/Updates Underway	In Progress/Updates Underway
Town of Oakville	In Progress/Updates Underway	In Progress/Updates Underway
Town of Richmond Hill	In Progress/Updates Underway	In Progress/Updates Underway
Township of Amaranth	In Progress/Updates Underway	In Progress/Updates Underway
Durham, Regional Municipality of	In Progress/Updates Underway	Not Applicable
Halton, Regional Municipality of	In Progress/Updates Underway	Not Applicable
Town of Aurora	In Progress/Updates Underway	Not Started
Town of Halton Hills	In Progress/Updates Underway	Not Started
Town of Milton	In Progress/Updates Underway	Not Started
Town of Orangeville	In Progress/Updates Underway	Not Started
Town of Whitchurch-Stouffville	In Progress/Updates Underway	Not Started
Township of Adjala-Tosorontio	In Progress/Updates Underway	Not Started
Town of Erin	Needs updating to reflect amended SPP	In Progress/Updates Underway
Simcoe, County of	Needs updating to reflect amended SPP	Not Applicable
Wellington, County of	Needs updating to reflect amended SPP	Not Applicable
City of Oshawa	Needs updating to reflect amended SPP	Not Started
Municipality of Clarington	Needs updating to reflect amended SPP	Not Started



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Town of Whitby	Needs updating to reflect amended SPP	Not Started
Township of Scugog	Needs updating to reflect amended SPP	Not Started
City of Brampton	Not Applicable	Not Applicable
City of Mississauga	Not Applicable	Not Applicable
Town of Ajax	Not Started	In Progress/Updates Underway

Comment:

Report Id	Completed	Question	Current Year	Cumulative Count
240	True	State the number of source water protection signs installed on provincial highways in the source protection region/area in this reporting period.	0	0
Provincial Total			0	0
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
241	True	State the number of source water protection signs installed on municipal roads in the source protection region/area in this reporting period.	0	8
Provincial Total			0	8
Comment:				



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Report Id	Completed	Question						
242	True	State the number of source water protection signs installed at other locations (if applicable) in the source protection region/area in this reporting period.						
		<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;">Current Year</th> <th style="text-align: left;">Cumulative Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>	Current Year	Cumulative Count	0	0	0	0
Current Year	Cumulative Count							
0	0							
0	0							
Provincial Total								
Comment: Our best information suggests there are about 61 cumulative signs installed at other locations across CTC.								

Report Id	Completed	Question	Category
260	True	Current total overall number of on-site sewage systems that are assessed as significant drinking water threat activities and that are required to be inspected every five years in accordance with the Ontario Building Code.	Sewage System Inspections
Answer:	279		
Comment:			

Report Id	Completed	Question	Category
261	True	Of those requiring inspections, how many inspections of on-site sewage systems were due to be carried out in this reporting period? If not applicable or no inspections of on-site sewage systems were due to be carried out in this reporting period because they were already inspected earlier within the inspection cycle or will be inspected in a future year within the cycle, then please enter "0" and state either explanation in the comment field.	Sewage System Inspections
Answer:	153		
Comment:			



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Report Id	Completed	Question	Current Year	Cumulative Count
262	True	How many on-site sewage system inspections were completed in this reporting period?	108	491
Provincial Total			108	491
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
263	True	How many of the inspected on-site sewage systems required minor maintenance work in this reporting period?	37	80
Provincial Total			37	80
Comment:				

Report Id	Completed	Question	Current Year	Cumulative Count
264	True	How many of the inspected on-site sewage systems required major maintenance work (e.g., tank replacement, etc.) in this reporting period?	19	27
Provincial Total			19	27
Comment:				



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Report Id	Completed	Question	Category
265	True	How many of the inspected on-site sewage systems required no maintenance work?	Sewage System Inspections
Answer:	52		
Comment:			



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Report Id	Completed	Question	
266	True	For those on-site sewage systems that were not inspected in this reporting period but should have been inspected, and are now out of compliance, please indicate why they were not all inspected from among the reasons below. [Note: For municipalities that have not yet initiated the mandatory on-site sewage system inspection program, please see the next reportable to provide your response if this is the case].	
		Response	Answer
		landowner refused entry, compliance order being sought	Yes
		inspections delayed/postponed due to COVID-19 restrictions	No
		vulnerable area changed and on-site sewage system(s) no longer a threat activity	No
		other. Please specify in the comment box below.	Yes
<p>Comment: Three municipalities reported systems that were not inspected in 2023, but were due for inspection. Erin: for 15 systems, compliance orders are being sought as landowners refused entry. Halton Hills: for 1 system, staff are seeking confirmation the system has been decommissioned and would no longer require an inspection. York Region: for 27 systems in Whitchurch-Stouffville and 2 systems in Vaughan, ongoing inspection delays resulted from challenges relating to: limited staff resources for area municipalities, residential financial constraints, seasonal weather obstacles, and difficulties enforcing compliance with property owners who have leased their homes to tenants. Next steps include issuing of final notices and possible compliance orders.</p>			



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Report Id Completed Question

270 True Complete the information below regarding environmental monitoring of drinking water issues identified in accordance with the Technical Rules within your source protection region/area. Begin by selecting the drinking water system, the specific well or intake, the drinking water issue, the delineation status, and the observation of the concentration. [OPTIONAL]: In the comments field, describe any actions or behavioural changes that might be contributing to reported changes in the concentration of the issue or parameter. Where the drinking water issue, well or intake, delineation status, or observation of any previously listed drinking water system needs to be changed/updated, then please do so by deleting the entry for that particular drinking water system by clicking on the red minus sign on the right side of the entry and then re-select the drinking water system from the dropdown list of drinking water systems followed by selecting the associated well or intake, the drinking water issue, its delineation status, and the observation from the dropdown list for that particular drinking water system. After doing so, please be sure to add the drinking water system as your response by clicking on the green plus sign on the right side of the entry. If this reportable is not applicable to your source protection region/area, please indicate as such by choosing "No system with issues," "Not Known/Available," "No issue," "Not applicable," and "No observation," respectively, under the drop down menu options under each of the categories of this reportable. Do not leave blank.

DWIS Number	DWIS Name	Issue	ICA Delinated	Observation
220003252	Orangeville Well Supply	Sodium	Yes	Increasing Concentration / Trend
220003252	Orangeville Well Supply	Sodium	Yes	Increasing Concentration / Trend
220003252	Orangeville Well Supply	Sodium	Yes	Increasing Concentration / Trend
220003252	Orangeville Well Supply	Chloride	Yes	Increasing Concentration / Trend
220003252	Orangeville Well Supply	Chloride	Yes	Increasing Concentration / Trend
220003252	Orangeville Well Supply	Chloride	Yes	Increasing Concentration / Trend
220003252	Orangeville Well Supply	Chloride	Yes	Increasing Concentration / Trend
220003252	Orangeville Well Supply	Chloride	Yes	Increasing Concentration / Trend
220003252	Orangeville Well Supply	Chloride	Yes	Increasing Concentration / Trend
220001655	Georgetown Well Supply	Chloride	Yes	Increasing Concentration / Trend
220001655	Georgetown Well Supply	Chloride	Yes	Increasing Concentration / Trend
220001655	Georgetown Well Supply	Chloride	Yes	Increasing Concentration / Trend
220001673	Acton Well Supply	Nitrate	Yes	Decreasing Concentration / Trend
220001673	Acton Well Supply	Nitrate	Yes	Decreasing Concentration / Trend
220004037	Inglewood Well Supply	-- Decommissioned --	--Not Applicable --	-- No Observation --



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Comment: CTC has proposed switching to an updated statistical analysis method using General Additive Models (GAMs), as opposed to relying on linear projections for trend analysis of identified issues. The observations for 2023, are based on the results of that approach as presented in the CTC SPR Water Quality Assessment Technical Report at CTC SPC Meeting #3/23.

In the Orangeville Drinking Water System (DWS), five wells have been identified with chloride issues and three wells with sodium issues. Chloride concentrations continue to increase in all five wells (6, 9A, 9B, 10, and 11). Sodium concentrations in the affected wells continue to increase (6, 9A, and 9B).

In the Acton DWS, Davidson 1 and 2 wells have been identified with nitrate issues, analysis suggests concentrations appear to be decreasing.

In the Georgetown DWS, Cedarvale 1A, 4 and 4A wells have been identified with chloride issues and concentrations continue to increase.

In York Region, staff are continuing their investigation into a possible future identification of an issue for sodium and chloride at Stouffville PW3.

Regarding the Inglewood Well supply: Inglewood Well No. 2 previously had an identified issue for pathogens. This well was disconnected in 2020, decommissioned in 2021, and therefore removed from the CVSPA Assessment Report and CTC Source Protection Plan in May 2022. Accordingly, the municipality has discontinued monitoring this former issue there.

Across CTC, staff will be continuing the broader water quality/issues assessment of municipal drinking water supplies in 2024.

Report Id	Completed	Question	Current Year	Cumulative Count
280	True	How many notices about transport pathways (meaning a condition of land resulting from human activity (e.g., pits and quarries, improperly abandoned wells, geothermal system, etc.) that increases the vulnerability of a raw water supply of a drinking water system) did the source protection authority receive from municipalities in this reporting period (as per O. Reg. 287/07, ss. 27(3))?	0	1
Provincial Total			0	1
Comment: The development of a formal transport pathway notification process is expected to be finalized in 2024.				



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Report Id	Completed	Question	Response	Answer
281	True	Where transport pathway notices were received, indicate the action(s) taken by the source protection region/area in response to receiving these notices:		
			Provided information to municipalities about changes in vulnerability	No
			Provided notice to Source Protection Committee for information	No
			Situation continues to be monitored	No
Comment: Not applicable, as no Transport Pathway notifications were received in 2023. The development of a formal transport pathway notification process is expected to be finalized in 2024.				



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Report Id	Completed	Question	
300	True	[OPTIONAL]: If and where there are successful examples for each of the following initiatives in the source protection region/area (including from local municipalities, residents and businesses) that occurred in this reporting period that the authority wishes to highlight, then please indicate in the Comments field below. In your comments, please include details for each of the selected topics. Please limit the descriptions provided (e.g., one example for each topic or more could be included when the source protection authority feels they are exceptional/quite successful).	
		Response	Answer
		Education and Outreach (in description include details, if available, on type and percentage of target population reached, outcome(s) achieved, etc.)	Yes
		Incentives (in description include details, if available, on outcome(s) achieved, how widely available was the incentive, etc.)	Yes
		Stewardship Programs	No
		Best Management Practices	Yes
		Pilot Programs	Yes
		Research	Yes
		Specify Action (e.g., road salt management, municipal by-laws, legislative or regulatory amendments, mapping, review of fuel codes, new airport facility design standards to manage runoff of chemicals from de-icing of aircraft, instrumentation, etc.)	No
		Climate Change (e.g., data collection)	No
		Spill prevention/spill contingency/emergency response plan updates	Yes
		Transport pathways	No
		Water quantity	No
		Great Lakes	No
		Other policies (i.e., strategic action, etc.)	Yes



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Comment: E&O:

- Wellington County municipalities hosted forty education and outreach events targeted to: several municipal departments, maintenance contractors, septic system owners, communities and schools. Stickers and metals tags listing the Spills Action Centre number and location were handed out to property owners in vulnerable areas. Staff participated in the Waterloo-Wellington Children's Groundwater Festival, which occurred in both virtual and in-person formats in 2023, to deliver water protection messages including source protection
- RMO's distributed salt bin stickers, promoting best practices for salt storage
- Credit Valley Conservation continued education and outreach to owners of non-municipal drinking water sources to promote source water protection best practices

Incentives

- Orangeville marked its first full year of their water softener rebate program, to promote water conservation and reduce salt loading to municipal sewers

BMP's

- In Wellington County municipalities, staff managed and assisted in the delivery of six Septic Social Events to educate and answer questions from residents about the mandatory septic inspection program,

Research/Pilot programs

- York Region is continuing a sodium and chloride research and mitigation pilot project in Stouffville
- CTC staff have been working to improve issues identification methods and issues delisting criterion.

Spill contingency/Strategic Action

- The Lake Ontario Collaborative Group's (Peel, Toronto, Durham) Lake Ontario Water Quality Forecasting System (LOWQFS) continued to undergo development and improvements to how it monitors and analyses spill events and possible impacts, as part of Decision Support System updates in 2023. The LOWQFS was also presented at several 2023 conferences.



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Report Id Completed Question

305 True

Complete the table below with the count data for each significant drinking water threat activity/local threat activity/condition being engaged in (i.e., enumerated as 'existing' significant threats) at the time of source protection plan approval or approval of amendments that include new / changing protection zones. Please use the best available information/desktop exercises, reports from Risk Management Officials, and other implementing bodies to provide the counts below. For convenience, the count data from the previous reporting year have been copied over, but please be sure to review, edit, and confirm the counts for accuracy in the table below. [CWA Section 46(1)(a)]

The running tally consists of the formula: A+B-C-D where:

A = Number of significant drinking water threats estimated when the source protection plan was first approved

B = Number of additional significant drinking water threats counted after the first source protection plan approval (not part of the original estimate)

C = Number of significant drinking water threats included in A that were determined through field verification to no longer exist because: (i) the threat was not actually engaged in at a particular location after all OR (ii) it was no longer engaged in (e.g., land may still have an agricultural operation but owner is no longer applying pesticides for their own reasons)

D = Number of significant drinking water threats addressed because a policy is implemented. (It is understood that multiple policies/policy tools may address a single threat on the landscape. If any one policy is implemented and directed at that single threat it is considered addressed.)

In the comments box below summarize any remaining significant threats needing to be addressed for each source protection authority and what actions will be taken to eliminate those threats. If all threats have been addressed for each source protection authority(ies) write "All known significant threats have been addressed" in the comments box. Note that this summary response will be posted under the objective summary section 2 of the report.

ThreatId	Threat	A	B	C	D
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	11	6	10	7
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	172	78	153	222
3	The application of agricultural source material to land.	0	7	47	12
4	The storage of agricultural source material.	65	6	47	12
		39	12	42	2



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5	The management of agricultural source material.	0	0	0	0
6	The application of non-agricultural source material to land.	9	2	8	0
7	The handling and storage of non-agricultural source material.	0	0	0	0
8	The application of commercial fertilizer to land.	57	25	51	24
9	The handling and storage of commercial fertilizer.	89	13	99	2
10	The application of pesticide to land.	126	48	143	23
11	The handling and storage of pesticide.	110	17	127	0
12	The application of road salt.	546	8	619	478
		9			6
13	The handling and storage of road salt.	117	81	935	291
		1			
14	The storage of snow.	60	111	0	131
15	The handling and storage of fuel.	366	12	350	27
16	The handling and storage of a dense non-aqueous phase liquid.	287	63	245	89
17	The handling and storage of an organic solvent.	68	2	64	6
18	The management of runoff that contains chemicals used in the de-icing of aircraft.	0	0	0	0
19	Water taking from an aquifer without returning the water to the same aquifer or surface water body	233	0	0	233
20	Reducing recharge of an aquifer	3	0	0	3
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.	176	4	167	4
22	The establishment and operation of a liquid hydrocarbon pipeline	12	0	0	12
1000	Water conditioning salts from water softeners	0	0	0	0



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1001	Transportation of specified substances along corridors	0	0	0	0
1002	Spill of Tritium from Nuclear Generating Station	2	0	0	2
1003	Handling storage of fuel	0	0	0	0
1004	Transportation, storage and handling of diesel/gasoline	0	0	0	0
1005	Transportation of Agricultural and Non-Agricultural Source Materials	0	0	0	0
1006	International Shipping Channel within IPZ2	0	0	0	0
1007	Transportation of hazardous substances along transportation corridors	0	0	0	0
1008	Transportation or Storage and Handling of Fuel in an Event Based Area	0	0	0	0
1009	Waterfowl	0	0	0	0
1010	Local condition	0	0	0	0
	587	611			
	6	7			
			Totals:	10073	488
				4444	5876

Comment: There are 16 other identified significant threats to CTC Lake Ontario intakes (4 WWTP disinfection failures, 6 WWTP bypasses, 4 STS breaks, and 2 petroleum storage spills) from within the CTC area, not identified in this table. There are another 9 significant threats (4 pipeline breaks, 1 bulk storage spill, 3 WWTP disinfection failures, and 1 mini tank spill) to CTC Lake Ontario intakes from locations outside the CTC, also not included in this table.

MECP Calc (C+D)/(A+B): 98 %



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310	True	Please provide comments below to explain the overall progress made in addressing existing significant threat activities and include the percentage of overall progress made within the comments provided. The percentage of overall progress made in addressing local threats and conditions that are taking place on the landscape is determined by taking the total number in column D (i.e., significant drinking water threat addressed because policy is implemented) from the table above (reportable 305) adding it to C (i.e., significant threats determined through field verification to no longer be threats) and dividing it by the number that is derived by adding the total numbers in columns A and B. In other words, overall progress made = $(C+D)/(A + B)$.	Addressing existing enumerated threats
Answer:		Percentage of overall progress: ~97.7%	

Comment:

Report Id	Completed	Question	Category
320	True	If applicable, where the 2013/2017 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 30.1: Water Budget Tier 3 not included in your original assessment report(s).	Assessment report information gaps
Answer:		Not applicable	

Comment:

Report Id	Completed	Question	Category
321	True	If applicable, where the 2013/2017 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 50.1: GUDI for WHPA-E or F not included in your original assessment report(s).	Assessment report information gaps
Answer:		Not applicable	

Comment:



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Report Id	Completed	Question	Category
322	True	If applicable, where the 2013/2017 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 116: Issue Contributing Area not included in your original assessment report(s).	Assessment report information gaps
Answer:		Not applicable	
Comment:		Note: Rule 116 has been removed from the most recent approved Technical Rules (2021).	

Report Id	Completed	Question	Category
323	True	[OPTIONAL] If applicable where the 2021 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 30.1: Water Budget Tier 3 not included in your original assessment report(s).	Assessment report information gaps
Answer:		Not applicable	
Comment:		<p>No work plans were required to be implemented for our assessment report(s).</p> <p>Tier 3 Water Budget updates are planned for Town of Orangeville and Halton Region.</p> <p>Review of the 2021 Technical rules is ongoing and 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. In 2023, the CTC continued work on updated water quality trend analysis and issues identification methods.</p>	



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Report Id	Completed	Question	Category
324	True	[OPTIONAL] Where the 2021 technical rules were used for the assessment report update/amendment, provide a summary of steps taken to further assess or implement the plans of work described in technical rule 50.1: GUDI for WHPA-E or F not included in your original assessment report(s).	Assessment report information gaps
Answer:		Not applicable	
Comment:			



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Report Id	Completed	Question	Category
330	True	Does the source protection authority have any other item(s) on which it wishes to report? If so, please explain.	Other reporting items
Answer:		<p>Regarding SPP policy T-6 (extension to s.58 RMP completion deadline): In 2020, the CTC Source Protection Committee authorized a 3-year extension (to December 31, 2023) for the completion of outstanding risk management plans (RMPs) that were originally required to be finalized by December 31, 2020. The 3-year extension, was further approved by the Ministry of Environment, Conservation and Parks. The CTC Source Protection Region provided a work plan on establishing the remaining outstanding RMPs, to the Ministry, on April 29, 2021. In March 2023, the CTC Source Protection Committee authorized a further 2-year extension (to December 31, 2025) to this deadline, which was approved by the Ministry of Environment, Conservation and Parks in November 2023. Staff from the three impacted municipalities sought and received support for their ongoing RMP implementation from their respective councils in late 2023.</p> <p>On Mar. 20, 2024, the CTC Source Protection Committee received an annual update on municipal progress in completing RMPs to address existing significant drinking water threats, as per the revised deadline. Thirty-three RMPs to address outstanding existing significant threats were completed in 2023, relative to the target of forty-four in the revised workplan to complete RMPs by December 2025. The shortfall was attributed to a number of factors, including: agricultural RMP negotiation window limitations and limited availability; ongoing need for reengagement with property owners; desire to maintain positive relations with property owners; property ownership changes; slow progress for upper level government properties; low response to outreach attempts; resistance to final sign-off; and limited staff resources/turnover.</p> <p>Regarding SPP policy DEM-6 (development of Joint Municipal Water Supply Management Model for 4 Dufferin municipalities): The Joint Municipal Water Supply Management Model agreement was executed in early 2023 by the four partner municipalities: Township of Amaranth, Township of East Garafraxa, Town of Mono, and Town of Orangeville. This completes a requirement of CTC Source Protection Plan policy DEM-6. The intent of the Agreement is to facilitate the planning, management and protection of water sources to ensure sustainability of a long-term water supply in each of these municipalities, in particular the WHPA-Q1 area. A WHPA-Q1 is the area where activities that take water without returning it to the same source may be a water quantity threat. The agreement commits the four municipalities to: meet and share information, undertake model updates based on threshold triggers and conditions, complete risk assessment and peer review. The terms also lay out apportionment of costs, and a dispute resolution mechanism.</p>	
Comment:			



APPENDIX 3

Source Water Protection Annual Report

2023 - Supplemental Form

SPR - CTC

Report Id	Completed	Question	
350	True	In the opinion of the Source Protection Committee, to what extent have the objectives of the source protection plan been achieved in this reporting period?	
Response			Answer
Progressing Well - The majority of the policies from the approved original or an amended source protection plan have been implemented and/or are progressing well			Yes
Satisfactory - Some of the policies from the approved original or an amended source protection plan have been implemented and/or are progressing well			No
Limited Progress made - A few of the policies from the approved original or an amended source protection plan have been implemented and/or are progressing well			No
<p>Comment: In its review of the 2023 Annual Progress Report, the CTC Source Protection Committee again chose a modified assessment of progress in achieving the source protection's objectives. Specifically, the SPC indicated that in their opinion: implementation of the Source Protection Plan has progressed well but is short of target in achieving the plan's objectives.</p>			



APPENDIX 3

Source Water Protection Annual Report

2023 - Supplemental Form

SPR - CTC

Report Id	Completed	Question	Category
351	True	Please provide comments to explain how the Source Protection Committee arrived at its opinion. Include a summary of any discussions that might have been had amongst the Source Protection Committee members, especially where no consensus was reached.	Achievement of source protection plan objectives
Answer:		Staff of the CTC Source Protection Region conducted a detailed analysis of the data received from policy implementing bodies and developed the draft 2023 Annual Progress Report and Supplementary Report. The CTC Source Protection Committee (SPC) was provided the draft 2023 Annual Progress Report and Supplementary Report on March 14, 2024, including a recommendation from staff regarding implementation progress. At its March 20, 2024 meeting, the SPC concurred with staff that implementation of the Source Protection Plan has progressed well but is short of target in achieving the plan's objectives.	
Comment:			