

CTC SOURCE PROTECTION COMMITTEE MEETING #3/20

Chair: Douglas Wright

AGENDA

Monday, November 23, 2020 1:00 to 4:00 PM

Zoom Virtual Meeting¹

Page <u>Number</u>

- 1. Welcome and Call to Order
- 2. Roll Call and Certification of Quorum 15 Members Constitute a Quorum (2/3 of Members plus Chair)
- 3. Chair's Remarks
 - 3.1 Introduction of new CTC Program Manager and program update
- 4. Review of Agenda

THAT the agenda of November 23, 2020 be approved as distributed.

- 4. Disclosure of Pecuniary Interest
- 5. Minutes of Previous Meetings

THAT the minutes of the Part 1 and Part 2 meetings on April 29, 2020, and the meeting on May 13, 2020, be approved as circulated.

- 5.1 Business arising from Previous Minutes
 - Risk Management Plan extension municipal work plan development and letters to municipal council
- 6. Committee Business
 - 6.1 Presentations
 - a. 2019 Annual Progress Reporting Summary
 Presentation by T. Pesheva, Liaison Officer Source Protection
 Programs Branch, Ministry of the Environment, Conservation and Parks
 - b. New Enwave Toronto Island Water Treatment Plant Intake
 Presentation by B. Snodgrass, City of Toronto. Related to item 6.2.e.

THAT presentations 6.1.a and 6.1.b be received. THAT the Report to Committee 6.2.e be received for information.

- 6.2 Reports to Committee
 - a. CTC Source Protection Region Change in Lead Source Protection
 Authority



b.

C.

7.

Update on Amendments under Section 34 of the Clean Water Act

Newmarket - Aurora Wellfields WHPA (Water Quality) Update

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	d.	Proposed 2021 CTC Source Protection Committee Meeting Schedule	71
	e.	A New Enwave – Toronto Island Water Treatment Plant Intake	73
THAT	Γ Report	s to Committee 6.2.a through 6.2.d be received for information.	
6.3	Other	Business	
Corre	esponde	ence	
THAT	Γ the cor	respondence be received.	
7.1 L	of wir water Proted	garding endorsement of the Lake Erie SPC report on over-application of the maintenance chemicals to protect sources of municipal drinking. From G. Soo Chan, Director, Watershed Knowledge, CTC Source ction Region, Dated June 29, 2020, to W. Wright-Cascaden, Chair, Lake ource Protection Committee.	78
7.2 L	Mana From 2020,	garding a request for an extension of the deadline to complete Risk gement Plans in the CTC SPR by three years to December 31, 2023. D. Wright, Chair, CTC Source Protection Committee, Dated June 29, to K. Katona, Director, Source Protection Programs Branch, Ministry of extronment, Conservation and Parks.	79
7.3 L	Regio Munic	garding a Natural Heritage Discussion Paper in support of the Inal Official Plan Review. From G. Milne, Regional Clerk, Regional ipality of Halton, Dated July 23, 2020 to Gayle Soo Chan, Director, shed Knowledge, CTC Source Protection Region.	81
7.4 L	timeli Prote Sourc and P	garding the request for an extension of the policy implementation ne related to Section 58 Risk Management Plans, CTC Source ction Plan. From D. Scanlon, Manager, Source Protection Approvals — e Protection Programs Branch, Ministry of the Environment, Conservation arks, Dated July 29, 2020 to Gayle Soo Chan, Director, Watershed edge, CTC Source Protection Region.	167
7.5 L	the Di Act, 2 Proted	garding CTC SPR comments on the 2020 Proposed Amendments to irector's Technical Rules: Assessment Report under the Clean Water 006. From J. Ivey, Chief Specialist, Watershed Plans and Source Water ction, Credit Valley Conservation, Dated November 2, 2020 to Debbie, Source Water Protection Lead, Conservation Ontario.	169

¹ CTC Source Protection Committee meetings are video recorded for the purpose of minute taking.

7.6 Letter regarding CTC SPR comments on the 2020 Proposed Amendments to

the Director's Technical Rules: Assessment Report under the Clean Water Act, 2006. From J. Ivey, Chief Specialist, Watershed Plans and Source Water Protection, Credit Valley Conservation, Dated November 9, 2020 to George



Jacoub, Water Research Scientist – Hydrologist – Source Protection Programs Branch, Ministry of the Environment, Conservation and Parks.

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8. Next Meeting

Tuesday February 23, 2021 – virtual meeting.

9. Adjourn

THAT the CTC Source Protection Committee meeting of November 23, 2020 be adjourned.

TO: Chair and Members of the CTC Source Protection

Committee, Meeting #3/20

DATE: November 23, 2020

FROM: Janet Ivey, Chief Specialist - Watershed Plans and Source Water Protection,

Credit Valley Conservation

RE: CTC Source Protection Region change in Lead Source Protection Authority

KEY ISSUE

Change in Lead Source Protection Authority for the Credit Valley, Toronto and Region, and Central Lake Ontario Source Protection Region.

RECOMMENDATION

IT IS RECOMMENDED THAT the CTC Source Protection Committee receive the report on CTC Source Protection Region change in Lead Source Protection Authority for information.

BACKGROUND

Under Ontario Regulation 284/07, the Credit Valley Source Protection Area (SPA) was grouped with the Central Lake Ontario and Toronto and Region SPAs and called the CTC Source Protection Region (CTC SPR). The Toronto and Region SPA was identified as the Lead Source Protection Authority. All legal and transfer payment agreements are made between the Province and the Lead SPA on behalf of the SPR. The Lead and supporting SPA responsibilities are outlined in an annual Transfer Payment Agreement (TPA) that is negotiated and drawn between the Lead SPA and the Province.

Under the TPA, the Lead SPA is charged with general administration of the program, including establishment and management of the Source Protection Committee (SPC) that deliberates and makes policy decisions for the SPR. Two additional types of agreement exist: an agreement between the 3 SPAs outlining the division of responsibilities and work, and agreements between each SPA and its Conservation Authority (CA) to authorize the Board of the CA to also act as the Board of the SPA.

Ontario Regulation 284/07 gives a Management Committee comprised of the CAOs of the CAs the authority to request the Province make a change in Lead SPA. Precedence for a shift in Lead SPA for an SPR exists (e.g., Saugeen Valley CA to Grey Sauble CA for the Saugeen, Grey Sauble, Northern Bruce Peninsula SPR).

Change of Lead SPA

The CTC CAOs Management Committee recently agreed to submit a request to the Ministry of Environment, Consevation and Parks (MECP) to shift the Lead SPA responsibilities from the TRSPA to the CVSPA. The proposed change was endorsed by the CTC SPR Chair subsequent to the CTC submission of the 2019 CTC SPR annual report regarding the implementation of the Source Protection Plan.

The rationale for this request is primarily based on the fact that the total count for remaining Significant Drinking Water Threats (SDWTs) in the CTC region is 424, and of these, the majority (422) are located within the CVSPA (2 in the TRSPA and 0 in the CLOSPA). In 2015, when the Source Protection Plan became effective, the TRSPA and CLOSPA had 479 and 8 reported SDWTs respectively, while the CVSPA had 10,116. This distribution of SDWTs was revealed during the completion of the first Assessment Reports circa 2012.

A phone conversation was held on June 9, 2020 with representatives of MECP to discuss options to authorize a change in Lead SPA from Toronto and Region to Credt Valley in April 2021, at the beginning of the Provincial 2021-2022 fiscal year. Implications for the current fiscal year's TPA were discussed and three procedural options were outlined, as follows:

- Maintain the current TPA and TRSPA as the Lead SPA until April 2021, but shift the Lead SPA responsibilities through an internal agreement between the SPAs. The CTC SPR would then initiate a formal request to amend the regulation identifying the Lead SPA for the 2021-2022 Provincial fiscal year.
- 2) The Province could terminate the current TPA with the TRSPA and prepare a new TPA with the CVSPA as the lead. Should the TPA be terminated, this would entail a reporting of funds spent to date, processing of refunds if necessary, and then a newly prepared TPA along with a revised workplan inclusive of allocations. The CTC SPR does not currently have the staff resources to complete this work in advance of spring 2021.
- 3) Legally draft a 'Consent to Assignment' agreement which would provide permission to the TRSPA to assign duties to the CVSPA. This instrument has never been used as a source water proteciton tool, and thus would have to modified through a legal process which could be lengthy.

Option 1 was recommended for two reasons. Firstly, the current fiscal year's TPA between the MECP and the TRCA was only recently signed (Apr 30, 2020). The legal, accounting, and administrative process to to modify an existing TPA would be lengthy. The CTC SPR Program Manager position was vacant between May and October 2020 and was only recently filled by the CVSPA. A supporting coordinator position has recently been advertised. It was determined that as CTC SPR staff had to assume the responsibilities of the Program Manager during the interim to ensure that critical timelines were met, it is prudent that time not be lost in an administrative disruption at this time.

Secondly, while the Lead SPA change could be 'accommodated' by a revision in the TPA without a change in the regulation (as was done for the Saugeen-Grey Sauble lead SPA change), regulatory change is eventually required. As a result, the Province suggests that the CTC SPR shift the responsibilities internally for this year, and initiate the formal regulatory change process in the 2021-2022 fiscal year. MECP will provide the CTC SPR with a list of items that should be considered when initiating the request to amend the regulation.

Option 1 was approved by the CAO Management Committee in order that there is no major disruption in administration of the CTC SPR. It has been agreed that the CVSPA, with the support of SPR staff, will manage the interim progress and financial reporting under the existing 2020-2021 TPA. This decision was discussed and endorsed by the Chair of the CTC SPR.

Negotiations for renewed TPAs typically start in the fall and the Province will engage with CVSPA for that task. As well, the Province advised that they may consider reaching out to all of the SPRs to determine who else may be interested in proceeding with a group amendment. The formal shift in Lead SPA for the Saugeen, Grey Sauble, Northern Bruce Peninsula SPR will be included in this grouping.

DETAILS OF WORK TO BE DONE

TRCA, CVC, and CLOCA have signed a Letter Agreement that will serve as the interim agreement to transfer Lead SPA responsibilities from TRSPA to CVSPA for the 2020-2021 fiscal year (attached). The development of this Agreement was informed by consultation with MECP staff and prepared by TRCA's Legal Counsel. Work on the 2021-2022 TPA with the Province is expected to begin shorlty. A potential list of activities has already been provided to the MECP via Conservation Ontario.

Report prepared by:

Gayle Soo Chan, Director, Watershed Knowledge, Credit Valley Conservation

T: 905-670-1615, ext. 254

Email: Gayle.SooChan@cvc.ca

Janet Ivey, Chief Specialist, Watershed Plans and Source Water Protection, Credit Valley Conservation

T: 905-670-1615, ext. 379 Email: <u>Janet.ivey@cvc.ca</u>

Date: November 11, 2020

Attachments: 1

TRCA, CVC, CLOCA Letter agreement



October 21, 2020

Deborah Martin-Downs CAO Credit Valley Conservation Authority 1255 Old Derry Road Mississauga, ON Deb.Martindowns@cvc.ca

Chris Darling CAO Central Lake Ontario Conservation Authority 100 Whiting Avenue Oshawa, ON CDarling@cloca.com

VIA EMAIL

Dear Ms. Martin-Downs and Mr. Darling:

Re: Letter Agreement for Transfer of Lead Source Protection Authority Responsibilities from Toronto and Region Conservation Authority to Credit **Valley Conservation Authority**

This letter will serve as an interim agreement ("Letter Agreement") between Toronto and Region Conservation Authority ("TRCA"), and Credit Valley Conservation Authority ("CVC") and Central Lake Ontario Conservation Authority ("CLOCA") governing the division of responsibilities and funding arrangements for the fiscal year 2020-2021 in respect of Drinking Water Source Protection under the Clean Water Act, 2006. This Letter Agreement is premised on an in-principle agreement between the parties to transfer the role of Lead Source Protection Authority ("Lead SPA") from TRCA to CVC, and a commitment from the Ministry of Environment, Conservation and Parks ("MECP") to amend Ontario Regulation 284/07 in 2021-2022 to assign the role of Lead SPA to CVC.

Prior to the commencement of the 2021-2022 fiscal year, the parties shall execute a further agreement which shall set out detailed terms and conditions for a) the exercise and performance of the Lead SPA's powers and duties, and b) other matters related to the relationship between the Lead SPA and the other source protection authorities in the source protection region.

BACKGROUND

Under Ontario Regulation 284/07, the Credit Valley Source Protection Area was grouped with the Central Lake Ontario and Toronto and Region Source Protection Areas to form the CTC Source Protection Region. TRCA was identified as the Lead SPA. The Lead SPA is charged

with general administration of the program including the establishment and management of the Source Protection Committee. All legal and transfer payment agreements are made between MECP and TRCA, as the Lead SPA, on behalf of the other two conservation authorities. The transfer payment agreement between MECP and TRCA is dated April 1, 2020.

The Management Committee comprised of the CEO/CAOs of the three conservation authorities recently agreed to submit a request to MECP to shift the lead authority responsibilities from TRCA to CVC. The rationale for the request is primarily that the total count for remaining Significant Drinking Water Threats in the CTC Source Protection Region is 424, and of these the majority (422) are located within CVC's source protection jurisdiction.

MECP has agreed that this shift in responsibility can be formalized through an amendment to Ontario Regulation 284/07 in 2021-2022 to assign the role of Lead SPA to CVC. A transfer payment agreement between MECP and CVC would be executed for the 2021-2022 fiscal year. MECP recommended that an interim agreement be established between the three conservation authorities to provide for the shift in responsibilities and funding for the current fiscal year.

AGREEMENT FOR INTERIM TRANSFER OF RESPONSIBILITIES AND FUNDING

The transfer of responsibilities shall become effective on the date this Letter Agreement is signed by all parties.

Schedule A to this Letter Agreement further outlines the interim transfer of responsibilities between the parties for the current fiscal year. Schedule B to this Letter Agreement outlines estimated funding arrangements for the current fiscal year, and requirements for CVC submission of invoices to TRCA for reimbursement.

CVC agrees to work together with TRCA to carry out the obligations of the Recipient under the transfer payment agreement between MECP and TRCA, which is appended as Schedule C to this Letter Agreement. CVC further agrees that where TRCA is required to submit documents to MECP, which rely on information received from CVC, that CVC shall execute any document or attestation required by TRCA, acting reasonably.

This Letter Agreement does not affect the existing responsibilities or associated cost estimates under the TPA 2020-2021 for CLOCA.

AMENDMENT TO ONTARIO REGULATION 284/07

The parties agree to work cooperatively with MECP to effect an amendment to Ontario Regulation 284/07 in 2021-2022 to assign the role of Lead SPA to CVC.

ACCEPTANCE

If the above terms are acceptable, please so indicate by signing this Letter Agreement in the space provided below and returning a signed copy to the undersigned.

Yours truly,

	TORONTO AND REGION CONSERVATION AUTHORITY
	Name: John Mackenzie Title: Chief Executive Officer
Accepted and agreed to this <u>3rd</u> day	of November , 2020.
	CREDIT VALLEY CONSERVATION AUTHORITY
	By: Dehrul Mart Drum
	By: Jf Payor
Accepted and agreed to this 6th day	of November , 2020.
	CENTRAL LAKE ONTARIO CONSERVATION AUTHORITY
	By:
	Ву:

SCHEDULE A TRANSFER OF RESPONSIBILITIES

The following responsibilities shall transfer from TRCA to CVC for the 2020-2021 fiscal year:

- Assist the Toronto and Region and Central Lake Ontario Source Protection Authorities in exercising and performing their powers and duties under the Act;
- b) Provide scientific, technical, planning, communications, direction and administrative support and resources to Toronto and Region and Central Lake Ontario Source Protection Authorities, as well as the CTC Source Protection Committee;
- c) Serve as a liaison between the Ministry and the Toronto and Region and Central Lake Ontario Source Protection Authorities;
- d) Submit the proposed Terms of Reference for the source protection areas in the CTC Source Protection Region, as well as the CTC Source Protection Plan to the Minister;
- e) Submit the Assessment Reports for the source protection areas in the CTC Source Protection Region to the Director, as described in the *Act*;
- f) Prepare and submit to the Minister, amendments to the CTC Source Protection Plan if ordered to do so by the Minister;
- g) In consultation with Toronto and Region and Central Lake Ontario Source Protection Authorities, be responsible for all official postings of information and Notices required by the *Clean Water Act, 2006* and its regulations, however, TRCA shall remain responsible for the website;
- h) Establish and appoint new members to the CTC Source Protection Committee for the CTC Source Protection Region;
- In consultation with the Toronto and Region and Central Lake Ontario Source Protection Authorities, recommend appointment of a CTC Source Protection Committee Chair to the Minister of the Environment, Conservation and Parks, as required;
- j) Co-ordinate the preparation of Terms of Reference, Assessment Reports and the CTC Source Protection Plan, as well as any amendments to these documents, so that they do not conflict with each another;
- k) Manage all financial transactions on behalf of the CTC SPR including invoicing for work performed by the participating SPAs
- Coordinate the submission of 2021-22 fiscal year activities and negotiate funding with the MECP on behalf of the CTC SPR.
- m) Provide leadership guidance to the CTC Project Manager on strategic matters.
- n) Assist the CTC Source Protection Committee in exercising and performing its powers and duties under the *Act*;
- Consider decisions and recommendations from the Management Committee regarding any significant changes to the Program or the staff organization of the Program; and
- p) Carry out any other functions prescribed by the regulations or as agreed to by the Parties.

SCHEDULE B TRANSFER OF FUNDING

Estimated Funding Arrangements for Current Fiscal Year

See attachment.

Billing Terms

CVC shall include the following supporting information for all invoices submitted to TRCA:

- a cover letter specifying the expenditure period for which reimbursement is claimed, as well as the total amount of the claims, and confirming receipt of payment for previous claims;
- (b) attestation signed by an authorized representative of CVC that all expenditures claimed are for approved funding under the terms of this Letter Agreement, and certifying the accuracy of the information provided in support of the claim.

TRCA shall pay CVC within thirty business days of receipt of an invoice, provided that the invoice is accompanied by any relevant requested supporting documentation listed above.

ATTACHMENT TO SCHEDULE B

D.1 Staffing (Please list approved project team)	Total Budgeted Time for Project (FTE)	Total Approved Budget	ESTIMATED YTD Actuals (Spent to Date)	Explanation of Associated Expenses and Variance	Budget Forecast Sept 1, 2020 through March 31, 2021	Projected Difference (Savings/costs)	Projected FTE Value at Year End
Program Manager	1.00			Position will be filled October 2020-March 2021. 6 months at 50% anticipated			0.48
Program Coordinator	0.50			Position will be filled October 2020-March 2021. 6 months at 50% anticipated			#DIV/0!
GIS Specialist	0.25			Figures to July 31,2020			0.24
Communications Specialist	0.10			Time spent in Q2 Figures to July 31, 2020			0.06
Toronto and Region SPA Lead	0.10			Figures to July 31,2020			0.12
TRSPA Technical Support	0.30			Figures to July 31,2020			0.21
TRSPA Planning Support	0.15			Figures to July 31,2020			0.14
Credit Valley SPA Issues Lead	0.05			months. PM work billed seperately and will be			0.05
Interim Project Manager CVC	0.25			Placeholder for now. CTC PM work to meet legislated deadlines. Used PM rate. August billing will reflect this charge. Billed at 50% of rate to reflect % of duties covered. This includes August billing.			#DIV/0!
Credit Valley SPA Program Lead	0.10			Reflects actuals to July 31, 2020			0.04
Credit Valley SPA Technical Support	0.40			Reflects actuals to July 31, 2020			0.05
Credit Valley SPA Technical Support	0.20			Reflects actuals to July 31, 2020			0.00
Credit Valley SPA Planning Support	0.10			Reflects actuals to July 31, 2020			0.01
Credit Valley SPA GIS Lead	0.10			Reflects actuals to July 31, 2020			0.01
Central Lake OntarioProgram Lead	0.20			April - June 2020 - reflects actuals			0.06
Central Lake Ontario Technical Support	0.20			April - June 2020 - reflects actuals			0.00
CLOSPA Planning Support	0.05			April - June 2020 - reflects actuals			0.00
	4.05						#DIV/0!

D.2 Budget Category: Non-Staff Budget (Please add/delete rows as needed to reflect the terms of your agreement)	Total Approved Budget	YTD Actuals (Spent to Date)	Explanation of Associated Expenses and Variance	Budget Forecast January 1, 2020 through March 31, 2020	Projected Difference (Savings)
Staff Travel			No variance anticipated. Transfer from SPC Costs of 10% (\$1,515) expected to recover additional travel.		
SPC Costs	_		\$2800/meeting x4 Note perdiems not paid for 2 meetings in 2019 and 2 in 2020		
SPC Mileage			What happened to 2019 \$ (allowed to be carried over?)		
SPC Insurance			Assumed paid by TRCA		
Information Management (includes latitude geocortex software, Azure Cloud srevice			Assumed paid. ESRI license renewal and most other IM/IT expenses are anticipated in Q4. Savings for website hosting and maintenance fees are attributed to transitioning to cloud based hosting services.		
Other Costs (Newspaper Advertising)			Liability fees for CTC SPC anticipated in Q4; Bus rental for member orientation was not approved, but was in Agreement. Program Manager was instructed to save funds allocated to bus rental (1 K).		

Total Approved Budget	YTD Actuals (Spent to Date)	Budget Forecast January 1, 2020 through March 31, 2020	Total Projected Difference (Savings)

Schedule C MECP/TRCA Transfer Payment Agreement

ONTARIO TRANSFER PAYMENT AGREEMENT

TPON Case No.: 2019-11-1-1423587464 Other File No. DWSP 2020-21 Toronto and Region

THE AGREEMENT is effective as of April 1, 2020

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO as represented by the Minister of the Environment, Conservation and Parks

(the "Province")

- and -

TORONTO AND REGION CONSERVATION AUTHORITY

(the "Recipient")

CONSIDERATION

In consideration of the mutual covenants and agreements contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, the Province and the Recipient agree as follows:

1.0 ENTIRE AGREEMENT

1.1 The Agreement, together with:

Schedule "A" - General Terms and Conditions

Schedule "B" - Project Specific Information and Additional Provisions

Schedule "C" - Project

Schedule "D" - Budget

Schedule "E" - Payment Plan Schedule "F" - Reports, and

Schedule "F" - Reports, and

any amending agreement entered into as provided for in section 4.1,

constitutes the entire agreement between the Parties with respect to the subject

Ontario Transfer Payment Agreement
Transfer Payment Ontario Case No. 2019-11

Transfer Payment Ontario Case No. 2019-11-1-1423587464 ; Other File No. DWSP 2020-21 Toronto and Region

matter contained in the Agreement and supersedes all prior oral or written representations and agreements.

2.0 CONFLICT OR INCONSISTENCY

- 2.1 **Conflict or Inconsistency.** In the event of a conflict or inconsistency between the Additional Provisions and the provisions in Schedule "A", the following rules will apply:
 - (a) the Parties will interpret any Additional Provisions in so far as possible, in a way that preserves the intention of the Parties as expressed in Schedule "A"; and
 - (b) where it is not possible to interpret the Additional Provisions in a way that is consistent with the provisions in Schedule "A", the Additional Provisions will prevail over the provisions in Schedule "A" to the extent of the inconsistency.

3.0 COUNTERPARTS

3.1 The Agreement may be executed in any number of counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

4.0 AMENDING THE AGREEMENT

4.1 The Agreement may only be amended by a written agreement duly executed by the Parties.

5.0 ACKNOWLEDGEMENT

- 5.1 The Recipient acknowledges that:
 - (a) by receiving Funds it may become subject to legislation applicable to organizations that receive funding from the Government of Ontario, including the *Broader Public Sector Accountability Act, 2010* (Ontario), the *Public Sector Salary Disclosure Act, 1996* (Ontario), and the *Auditor General Act* (Ontario);
 - (b) Her Majesty the Queen in Right of Ontario has issued expenses, perquisites, and procurement directives and guidelines pursuant to the *Broader Public Sector Accountability Act, 2010* (Ontario);
 - (c) the Funds are:
 - (i) to assist the Recipient to carry out the Project and not to provide goods or services to the Province;

- (ii) funding for the purposes of the Public Sector Salary Disclosure Act, 1996 (Ontario);
- (d) the Province is not responsible for carrying out the Project; and
- the Province is bound by the Freedom of Information and Protection of (e) Privacy Act (Ontario) and that any information provided to the Province in connection with the Project or otherwise in connection with the Agreement may be subject to disclosure in accordance with that Act.

The Parties have executed the Agreement on the dates set out below.

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO as represented by the Minister of the Environment, **Conservation and Parks**

May 15, 2020

Date

Name: Chloe Stuart

Title: Assistant Deputy Minister, Land and Water Division

TORONTO AND REGION CONSERVATION **AUTHORITY**

Name: John MacKenzie

Title: Chief Executive O Tree!

I have authority to bind the Recipient.

SCHEDULE "A" GENERAL TERMS AND CONDITIONS

A1.0 INTERPRETATION AND DEFINITIONS

- A1.1 Interpretation. For the purposes of interpretation:
 - (a) words in the singular include the plural and vice-versa;
 - (b) words in one gender include all genders;
 - (c) the headings do not form part of the Agreement; they are for reference only and will not affect the interpretation of the Agreement;
 - (d) any reference to dollars or currency will be in Canadian dollars and currency; and
 - (e) "include", "includes" and "including" denote that the subsequent list is not exhaustive.
- A1.2 **Definitions.** In the Agreement, the following terms will have the following meanings:
 - "Additional Provisions" means the terms and conditions set out in Schedule "B".
 - "Agreement" means this agreement entered into between the Province and the Recipient, all of the schedules listed in section 1.1, and any amending agreement entered into pursuant to section 4.1.
 - "Budget" means the budget attached to the Agreement as Schedule "D".
 - "Business Day" means any working day, Monday to Friday inclusive, excluding statutory and other holidays, namely: New Year's Day; Family Day; Good Friday; Easter Monday; Victoria Day; Canada Day; Civic Holiday; Labour Day; Thanksgiving Day; Remembrance Day; Christmas Day; Boxing Day and any other day on which the Province has elected to be closed for business.
 - "Effective Date" means the date set out at the top of the Agreement.
 - "Event of Default" has the meaning ascribed to it in section A13.1.
 - "Expiry Date" means the expiry date set out in Schedule "B".
 - "Funding Year" means:
 - (a) in the case of the first Funding Year, the period commencing on the

Effective Date and ending on the following March 31; and

(b) in the case of Funding Years subsequent to the first Funding Year, the period commencing on April 1 following the end of the previous Funding Year and ending on the following March 31.

"Funds" means the money the Province provides to the Recipient pursuant to the Agreement.

"Indemnified Parties" means Her Majesty the Queen in Right of Ontario, Her ministers, agents, appointees, and employees.

"Maximum Funds" means the maximum Funds set out in Schedule "B".

"Notice" means any communication given or required to be given pursuant to the Agreement.

"Notice Period" means the period of time within which the Recipient is required to remedy an Event of Default pursuant to section A13.3(b), and includes any such period or periods of time by which the Province extends that time in accordance with section A13.4.

"Parties" means the Province and the Recipient.

"Party" means either the Province or the Recipient.

"Project" means the undertaking described in Schedule "C".

"Reports" means the reports described in Schedule "F".

A2.0 REPRESENTATIONS, WARRANTIES, AND COVENANTS

- A2.1 General. The Recipient represents, warrants, and covenants that:
 - (a) it is, and will continue to be, a validly existing legal entity with full power to fulfill its obligations under the Agreement;
 - (b) it has, and will continue to have, the experience and expertise necessary to carry out the Project;
 - (c) it is in compliance with, and will continue to comply with, all federal and provincial laws and regulations, all municipal by-laws, and any other orders, rules, and by-laws related to any aspect of the Project, the Funds, or both; and
 - (d) unless otherwise provided for in the Agreement, any information the Recipient provided to the Province in support of its request for funds

(including information relating to any eligibility requirements) was true and complete at the time the Recipient provided it and will continue to be true and complete.

- Execution of Agreement. The Recipient represents and warrants that it has: A2.2
 - the full power and authority to enter into the Agreement; and (a)
 - taken all necessary actions to authorize the execution of the Agreement. (b)
- Governance. The Recipient represents, warrants, and covenants that it has, A2.3 will maintain in writing, and will follow:
 - a code of conduct and ethical responsibilities for all persons at all levels (a) of the Recipient's organization;
 - procedures to enable the Recipient's ongoing effective functioning; (b)
 - decision-making mechanisms for the Recipient; (c)
 - procedures to enable the Recipient to manage Funds prudently and (d) effectively;
 - procedures to enable the Recipient to complete the Project successfully; (e)
 - procedures to enable the Recipient to identify risks to the completion of **(f)** the Project and strategies to address the identified risks, all in a timely manner;
 - procedures to enable the preparation and submission of all Reports (g) required pursuant to Article A7.0; and
 - procedures to enable the Recipient to address such other matters as the (h) Recipient considers necessary to enable the Recipient to carry out its obligations under the Agreement.
- Supporting Proof. Upon the request of the Province, the Recipient will A2.4 provide the Province with proof of the matters referred to in Article A2.0.

TERM OF THE AGREEMENT A3.0

Term. The term of the Agreement will commence on the Effective Date and will A3.1 expire on the Expiry Date unless terminated earlier pursuant to Article A11.0, Article A12.0, or Article A13.0.

A4.0 FUNDS AND CARRYING OUT THE PROJECT

A4.1 Funds Provided. The Province will:

- (a) provide the Recipient up to the Maximum Funds for the purpose of carrying out the Project;
- (b) provide the Funds to the Recipient in accordance with the payment plan attached to the Agreement as Schedule "E"; and
- (c) deposit the Funds into an account designated by the Recipient provided that the account:
 - (i) resides at a Canadian financial institution; and
 - (ii) is in the name of the Recipient.

A4.2 Limitation on Payment of Funds. Despite section A4.1:

- the Province is not obligated to provide any Funds to the Recipient until the Recipient provides the certificates of insurance or other proof as the Province may request pursuant to section A10.2;
- (b) the Province is not obligated to provide instalments of Funds until it is satisfied with the progress of the Project;
- the Province may adjust the amount of Funds it provides to the Recipient in any Funding Year based upon the Province's assessment of the information the Recipient provides to the Province pursuant to section A7.1; or
- if, pursuant to the *Financial Administration Act* (Ontario), the Province does not receive the necessary appropriation from the Ontario Legislature for payment under the Agreement, the Province is not obligated to make any such payment, and, as a consequence, the Province may:
 - (i) reduce the amount of Funds and, in consultation with the Recipient, change the Project; or
 - (ii) terminate the Agreement pursuant to section A12.1.

A4.3 Use of Funds and Carry Out the Project. The Recipient will do all of the following:

- (a) carry out the Project in accordance with the Agreement;
- (b) use the Funds only for the purpose of carrying out the Project:

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- (c) spend the Funds only in accordance with the Budget;
- (d) not use the Funds to cover any cost that has been or will be funded or reimbursed by one or more of any third party, ministry, agency, or organization of the Government of Ontario.
- A4.4 Interest Bearing Account. If the Province provides Funds before the Recipient's immediate need for the Funds, the Recipient will place the Funds in an interest bearing account in the name of the Recipient at a Canadian financial institution.
- A4.5 Interest. If the Recipient earns any interest on the Funds, the Province may:
 - (a) deduct an amount equal to the interest from any further instalments of Funds; or
 - (b) demand from the Recipient the payment of an amount equal to the interest.
- A4.6 **Rebates, Credits, and Refunds.** The Province will calculate Funds based on the actual costs to the Recipient to carry out the Project, less any costs (including taxes) for which the Recipient has received, will receive, or is eligible to receive, a rebate, credit, or refund.
- A5.0 RECIPIENT'S ACQUISITION OF GOODS OR SERVICES, AND DISPOSAL OF ASSETS
- A5.1 **Acquisition.** If the Recipient acquires goods, services, or both with the Funds, it will:
 - (a) do so through a process that promotes the best value for money; and
 - (b) comply with the *Broader Public Sector Accountability Act, 2010* (Ontario), including any procurement directive issued thereunder, to the extent applicable.
- A5.2 **Disposal.** The Recipient will not, without the Province's prior written consent, sell, lease, or otherwise dispose of any asset purchased or created with the Funds or for which Funds were provided, the cost of which exceeded the amount as provided for in Schedule "B" at the time of purchase.
- A6.0 CONFLICT OF INTEREST
- A6.1 **No Conflict of Interest.** The Recipient will carry out the Project and use the Funds without an actual, potential, or perceived conflict of interest.

- A6.2 **Conflict of Interest Includes.** For the purposes of Article A6.0, a conflict of interest includes any circumstances where:
 - (a) the Recipient; or
 - (b) any person who has the capacity to influence the Recipient's decisions,

has outside commitments, relationships, or financial interests that could, or could be seen to, interfere with the Recipient's objective, unbiased, and impartial judgment relating to the Project, the use of the Funds, or both.

A6.3 **Disclosure to Province.** The Recipient will:

- disclose to the Province, without delay, any situation that a reasonable person would interpret as an actual, potential, or perceived conflict of interest; and
- (b) comply with any terms and conditions that the Province may prescribe as a result of the disclosure.

A7.0 REPORTS, ACCOUNTING, AND REVIEW

A7.1 **Preparation and Submission.** The Recipient will:

- (a) submit to the Province at the address referred to in section A17.1, all Reports in accordance with the timelines and content requirements as provided for in Schedule "F", or in a form as specified by the Province from time to time;
- (b) submit to the Province at the address referred to in section A17.1, any other reports as may be requested by the Province in accordance with the timelines and content requirements specified by the Province;
- (c) ensure that all Reports and other reports are completed to the satisfaction of the Province; and
- (d) ensure that all Reports and other reports are signed on behalf of the Recipient by an authorized signing officer.

A7.2 Record Maintenance. The Recipient will keep and maintain:

- (a) all financial records (including invoices) relating to the Funds or otherwise to the Project in a manner consistent with generally accepted accounting principles; and
- (b) all non-financial documents and records relating to the Funds or otherwise to the Project.

- A7.3 Inspection. The Province, any authorized representative, or any independent auditor identified by the Province may, at the Province's expense, upon twenty-four hours' Notice to the Recipient and during normal business hours, enter upon the Recipient's premises to review the progress of the Project and the Recipient's allocation and expenditure of the Funds and, for these purposes, the Province, any authorized representative, or any independent auditor identified by the Province may take one or more of the following actions:
 - (a) inspect and copy the records and documents referred to in section A7.2;
 - (b) remove any copies made pursuant to section A7.3(a) from the Recipient's premises; and
 - (c) conduct an audit or investigation of the Recipient in respect of the expenditure of the Funds, the Project, or both.
- A7.4 **Disclosure.** To assist in respect of the rights provided for in section A7.3, the Recipient will disclose any information requested by the Province, any authorized representatives, or any independent auditor identified by the Province, and will do so in the form requested by the Province, any authorized representative, or any independent auditor identified by the Province, as the case may be.
- A7.5 **No Control of Records.** No provision of the Agreement will be construed so as to give the Province any control whatsoever over the Recipient's records.
- A7.6 Auditor General. The Province's rights under Article A7.0 are in addition to any rights provided to the Auditor General pursuant to section 9.1 of the Auditor General Act (Ontario).

A8.0 COMMUNICATIONS REQUIREMENTS

- A8.1 **Acknowledge Support.** Unless otherwise directed by the Province, the Recipient will:
 - (a) acknowledge the support of the Province for the Project; and
 - (b) ensure that the acknowledgement referred to in section A8.1(a) is in a form and manner as directed by the Province.
- A8.2 **Publication.** The Recipient will indicate, in any of its Project-related publications, whether written, oral, or visual, that the views expressed in the publication are the views of the Recipient and do not necessarily reflect those of the Province.

A9.0 INDEMNITY

A9.1 Indemnification. The Recipient will indemnify and hold harmless the Indemnified Parties from and against any and all liability, loss, costs, damages, and expenses (including legal, expert and consultant fees), causes of action, actions, claims, demands, lawsuits, or other proceedings, by whomever made, sustained, incurred, brought, or prosecuted, in any way arising out of or in connection with the Project or otherwise in connection with the Agreement, unless solely caused by the negligence or wilful misconduct of the Indemnified Parties.

A10.0 INSURANCE

- A10.1 Recipient's Insurance. The Recipient represents, warrants, and covenants that it has, and will maintain, at its own cost and expense, with insurers having a secure A.M. Best rating of B+ or greater, or the equivalent, all the necessary and appropriate insurance that a prudent person carrying out a project similar to the Project would maintain, including commercial general liability insurance on an occurrence basis for third party bodily injury, personal injury, and property damage, to an inclusive limit of not less than the amount provided for in Schedule "B" per occurrence. The insurance policy will include the following:
 - (a) the Indemnified Parties as additional insureds with respect to liability arising in the course of performance of the Recipient's obligations under, or otherwise in connection with, the Agreement;
 - (b) a cross-liability clause;
 - (c) contractual liability coverage; and
 - (d) a 30-day written notice of cancellation.

A10.2 **Proof of Insurance.** The Recipient will:

- (a) provide to the Province, either:
 - (i) certificates of insurance that confirm the insurance coverage as provided for in section A10.1; or
 - (ii) other proof that confirms the insurance coverage as provided for in section A10.1; and
- (b) upon the request of the Province, provide to the Province a copy of any insurance policy.

A11.0 TERMINATION ON NOTICE

- A11.1 **Termination on Notice.** The Province may terminate the Agreement at any time without liability, penalty, or costs upon giving at least 30 days' Notice to the Recipient.
- A11.2 Consequences of Termination on Notice by the Province. If the Province terminates the Agreement pursuant to section A11.1, the Province may take one or more of the following actions:
 - (a) cancel further instalments of Funds;
 - (b) demand from the Recipient the payment of any Funds remaining in the possession or under the control of the Recipient; and
 - (c) determine the reasonable costs for the Recipient to wind down the Project, and do either or both of the following:
 - (i) permit the Recipient to offset such costs against the amount the Recipient owes pursuant to section A11.2(b); and
 - (ii) subject to section A4.1(a), provide Funds to the Recipient to cover such costs.

A12.0 TERMINATION WHERE NO APPROPRIATION

- A12.1 **Termination Where No Appropriation.** If, as provided for in section A4.2(d), the Province does not receive the necessary appropriation from the Ontario Legislature for any payment the Province is to make pursuant to the Agreement, the Province may terminate the Agreement immediately without liability, penalty, or costs by giving Notice to the Recipient.
- A12.2 Consequences of Termination Where No Appropriation. If the Province terminates the Agreement pursuant to section A12.1, the Province may take one or more of the following actions:
 - (a) cancel further instalments of Funds;
 - (b) demand from the Recipient the payment of any Funds remaining in the possession or under the control of the Recipient; and
 - (c) determine the reasonable costs for the Recipient to wind down the Project and permit the Recipient to offset such costs against the amount owing pursuant to section A12.2(b).
- A12.3 No Additional Funds. If, pursuant to section A12.2(c), the Province determines that the costs to wind down the Project exceed the Funds remaining in the possession or under the control of the Recipient, the Province will not

provide additional Funds to the Recipient.

A13.0 EVENT OF DEFAULT, CORRECTIVE ACTION, AND TERMINATION FOR DEFAULT

- A13.1 **Events of Default.** Each of the following events will constitute an Event of Default:
 - (a) in the opinion of the Province, the Recipient breaches any representation, warranty, covenant, or other material term of the Agreement, including failing to do any of the following in accordance with the terms and conditions of the Agreement:
 - (i) carry out the Project;
 - (ii) use or spend Funds; or
 - (iii) provide, in accordance with section A7.1, Reports or such other reports as may have been requested pursuant to section A7.1(b);
 - (b) the Recipient's operations, its financial condition, or its organizational structure, changes such that it no longer meets one or more of the eligibility requirements of the program under which the Province provides the Funds;
 - (c) the Recipient makes an assignment, proposal, compromise, or arrangement for the benefit of creditors, or a creditor makes an application for an order adjudging the Recipient bankrupt, or applies for the appointment of a receiver; or
 - (d) the Recipient ceases to operate.
- A13.2 Consequences of Events of Default and Corrective Action. If an Event of Default occurs, the Province may, at any time, take one or more of the following actions:
 - (a) initiate any action the Province considers necessary in order to facilitate the successful continuation or completion of the Project;
 - (b) provide the Recipient with an opportunity to remedy the Event of Default;
 - (c) suspend the payment of Funds for such period as the Province determines appropriate:
 - (d) reduce the amount of the Funds:
 - (e) cancel further instalments of Funds:

- (f) demand from the Recipient the payment of any Funds remaining in the possession or under the control of the Recipient;
- (g) demand from the Recipient the payment of an amount equal to any Funds the Recipient used, but did not use in accordance with the Agreement;
- (h) demand from the Recipient the payment of an amount equal to any Funds the Province provided to the Recipient; and
- (i) terminate the Agreement at any time, including immediately, without liability, penalty or costs to the Province upon giving Notice to the Recipient.
- A13.3 Opportunity to Remedy. If, in accordance with section A13.2(b), the Province provides the Recipient with an opportunity to remedy the Event of Default, the Province will give Notice to the Recipient of:
 - (a) the particulars of the Event of Default; and
 - (b) the Notice Period.
- A13.4 Recipient not Remedying. If the Province provided the Recipient with an opportunity to remedy the Event of Default pursuant to section A13.2(b), and:
 - the Recipient does not remedy the Event of Default within the Notice Period;
 - (b) it becomes apparent to the Province that the Recipient cannot completely remedy the Event of Default within the Notice Period; or
 - (c) the Recipient is not proceeding to remedy the Event of Default in a way that is satisfactory to the Province,

the Province may extend the Notice Period, or initiate any one or more of the actions provided for in sections A13.2(a), (c), (d), (e), (f), (g), (h), and (i).

A13.5 **When Termination Effective.** Termination under Article will take effect as provided for in the Notice.

A14.0 FUNDS AT THE END OF A FUNDING YEAR

A14.1 Funds at the End of a Funding Year. Without limiting any rights of the Province under Article A13.0, if the Recipient has not spent all of the Funds allocated for the Funding Year as provided for in the Budget, the Province may take one or both of the following actions:

- (a) demand from the Recipient payment of the unspent Funds; and
- (b) adjust the amount of any further instalments of Funds accordingly.

A15.0 FUNDS UPON EXPIRY

A15.1 **Funds Upon Expiry.** The Recipient will, upon expiry of the Agreement, pay to the Province any Funds remaining in its possession or under its control.

A16.0 DEBT DUE AND PAYMENT

- A16.1 Payment of Overpayment. If at any time the Province provides Funds in excess of the amount to which the Recipient is entitled under the Agreement, the Province may:
 - (a) deduct an amount equal to the excess Funds from any further instalments of Funds; or
 - (b) demand that the Recipient pay an amount equal to the excess Funds to the Province.

A16.2 **Debt Due.** If, pursuant to the Agreement:

- (a) the Province demands from the Recipient the payment of any Funds or an amount equal to any Funds; or
- (b) the Recipient owes any Funds or an amount equal to any Funds to the Province, whether or not the Province has demanded their payment,

such Funds or other amount will be deemed to be a debt due and owing to the Province by the Recipient, and the Recipient will pay the amount to the Province immediately, unless the Province directs otherwise.

- A16.3 Interest Rate. The Province may charge the Recipient interest on any money owing by the Recipient at the then current interest rate charged by the Province of Ontario on accounts receivable.
- A16.4 Payment of Money to Province. The Recipient will pay any money owing to the Province by cheque payable to the "Ontario Minister of Finance" and delivered to the Province as provided for in Schedule "B".
- A16.5 **Fails to Pay.** Without limiting the application of section 43 of the *Financial Administration Act* (Ontario), if the Recipient fails to pay any amount owing under the Agreement, Her Majesty the Queen in Right of Ontario may deduct any unpaid amount from any money payable to the Recipient by Her Majesty the Queen in Right of Ontario.

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A17.0 NOTICE

- A17.1 **Notice in Writing and Addressed.** Notice will be in writing and will be delivered by email, postage-prepaid mail, personal delivery, or fax, and will be addressed to the Province and the Recipient respectively as provided for Schedule "B", or as either Party later designates to the other by Notice.
- A17.2 Notice Given. Notice will be deemed to have been given:
 - (a) in the case of postage-prepaid mail, five Business Days after the Notice is mailed; or
 - (b) in the case of email, personal delivery, or fax, one Business Day after the Notice is delivered.
- A17.3 **Postal Disruption.** Despite section A17.2(a), in the event of a postal disruption:
 - (a) Notice by postage-prepaid mail will not be deemed to be given; and
 - (b) the Party giving Notice will give Notice by email, personal delivery, or fax.

A18.0 CONSENT BY PROVINCE AND COMPLIANCE BY RECIPIENT

A18.1 Consent. When the Province provides its consent pursuant to the Agreement, it may impose any terms and conditions on such consent and the Recipient will comply with such terms and conditions.

A19.0 SEVERABILITY OF PROVISIONS

A19.1 Invalidity or Unenforceability of Any Provision. The invalidity or unenforceability of any provision of the Agreement will not affect the validity or enforceability of any other provision of the Agreement. Any invalid or unenforceable provision will be deemed to be severed.

A20.0 WAIVER

- A20.1 **Waiver Request.** Either Party may, in accordance with the Notice provision set out in Article A17.0, ask the other Party to waive an obligation under the Agreement.
- A20.2 **Waiver Applies.** Any waiver a Party grants in response to a request made pursuant to section A20.1 will:
 - (a) be valid only if the Party granting the waiver provides it in writing; and

(b) apply only to the specific obligation referred to in the waiver.

A21.0 INDEPENDENT PARTIES

A21.1 Parties Independent. The Recipient is not an agent, joint venturer, partner, or employee of the Province, and the Recipient will not represent itself in any way that might be taken by a reasonable person to suggest that it is, or take any actions that could establish or imply such a relationship.

A22.0 ASSIGNMENT OF AGREEMENT OR FUNDS

- A22.1 **No Assignment.** The Recipient will not, without the prior written consent of the Province, assign any of its rights or obligations under the Agreement.
- A22.2 **Agreement Binding.** All rights and obligations contained in the Agreement will extend to and be binding on the Parties' respective heirs, executors, administrators, successors, and permitted assigns.

A23.0 GOVERNING LAW

A23.1 Governing Law. The Agreement and the rights, obligations, and relations of the Parties will be governed by and construed in accordance with the laws of the Province of Ontario and the applicable federal laws of Canada. Any actions or proceedings arising in connection with the Agreement will be conducted in the courts of Ontario, which will have exclusive jurisdiction over such proceedings.

A24.0 FURTHER ASSURANCES

A24.1 Agreement into Effect. The Recipient will provide such further assurances as the Province may request from time to time with respect to any matter to which the Agreement pertains, and will otherwise do or cause to be done all acts or things necessary to implement and carry into effect the terms and conditions of the Agreement to their full extent.

A25.0 JOINT AND SEVERAL LIABILITY

A25.1 **Joint and Several Liability.** Where the Recipient is comprised of more than one entity, all such entities will be jointly and severally liable to the Province for the fulfillment of the obligations of the Recipient under the Agreement.

A26.0 RIGHTS AND REMEDIES CUMULATIVE

A26.1 Rights and Remedies Cumulative. The rights and remedies of the Province under the Agreement are cumulative and are in addition to, and not in substitution for, any of its rights and remedies provided by law or in equity.

A27.0 FAILURE TO COMPLY WITH OTHER AGREEMENTS

A27.1 Other Agreements. If the Recipient:

- (a) has failed to comply with any term, condition, or obligation under any other agreement with Her Majesty the Queen in Right of Ontario or one of Her agencies (a "Failure");
- (b) has been provided with notice of such Failure in accordance with the requirements of such other agreement;
- (c) has, if applicable, failed to rectify such Failure in accordance with the requirements of such other agreement; and
- (d) such Failure is continuing,

the Province may suspend the payment of Funds for such period as the Province determines appropriate.

A28.0 SURVIVAL

Survival. The following Articles and sections, and all applicable cross-referenced sections and schedules, will continue in full force and effect for a period of seven years from the date of expiry or termination of the Agreement: Article 1.0, Article 3.0, Article A1.0 and any other applicable definitions, section A2.1(a), sections A4.2(d), A4.5, section A5.2, section A7.1 (to the extent that the Recipient has not provided the Reports or other reports as may have been requested to the satisfaction of the Province), sections A7.2, A7.3, A7.4, A7.5, A7.6, Article A8.0, Article A9.0, section A11.2, sections A12.2, A12.3, sections A13.1, A13.2(d), (e), (f), (g) and (h), Article A15.0, Article A16.0, Article A17.0, Article A19.0, section A22.2, Article A23.0, Article A25.0, Article A26.0, Article A27.0 and Article A28.0.

- END OF GENERAL TERMS AND CONDITIONS -

SCHEDULE "B" PROJECT SPECIFIC INFORMATION AND ADDITIONAL PROVISIONS

Project Specific Information

Maximum Funds			
Expiry Date	90 days after the final report due date in Schedule "F"		
Amount for the purposes of section A5.2 (Disposal) of Schedule "A"			
Insurance			
Contact information for the purposes of Notice to the Province	Name: Ministry of the Environment, Conservation and Parks Source Protection Programs Branch Address: 40 St. Clair Avenue West, 14th Floor, Toronto ON, M4V 1M2 Attention: Pat Kinch, Manager Email: Telephone:		
Contact information for the purposes of Notice to the Recipient	Name: Toronto and Region Conservation Authority Address: 101 Exchange Avenue, Vaughan, ON, L4K 5R6 Attention: Jennifer Stephens, Project Manager Email: Telephone:		

Contact information for the senior financial person in the Recipient organization (e.g., CFO, CAO) – to respond as required to requests from the Province related	Name: Michael Tolensky Position: Chief Financial and Operating Officer Address: 101 Exchange Avenue, Vaughan, ON, L4K 5R6 Email:
Recipient's Canada Revenue Agency Business Number	Telephone: 10808 8584
Recipient's TPCR Registration ID	50260

Additional Provisions

- B.1 [intentionally deleted to preserve numbering]
- B.2 The following subsection is added to section 5.1:
 - (f) the Funds are being provided to the Recipient in furtherance of a public purpose as determined by the Province.
- B.3 The following article is added following Article 5.0:

6.0 TRANSMISSION

- 6.1 The Agreement may be validly executed and delivered by means of transmission of signed facsimile or by email transmission of an electronically scanned original signature (such as in PDF file format).
- B.4 The following definitions are added to section A1.2 in alphabetical order:
 - "Act" means the Clean Water Act, 2006 as amended from time to time.
 - "AR" means an assessment report for a Source Protection Area or Source Protection Region that is required by the Act.
 - "CA" means an entity established by or under the Conservation Authorities Act or a predecessor of the Conservation Authorities Act.

"CTC" means the Credit Valley, Toronto and Region, Central Lake Ontario Source Protection Region which, pursuant to Ontario Regulation 284/07: Source Protection Areas and Regions, made under the Act, incorporates the Credit Valley, Toronto and Region, and Central Lake Ontario SPAs.

"Director" means the Director of the Source Protection Programs Branch of the Ministry.

"Director's Technical Rules" means the rules established by the Director under the Act which set out requirements relating to risk assessments, risk management plans and any matter that is authorized or required to be included in an AR.

"**DWS**" means drinking water system and has the same meaning as in the *Safe Drinking Water Act, 2002* as amended from time to time.

"FTE" means a full-time equivalent staff position, calculated by using the number of working hours that represents one full-time employee during a one-year period.

"GIS" means geographic information system which is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographically referenced data.

"Implementing Bodies" means persons or a public body as defined by the Act responsible for implementing SPP policies.

"IPZ" means intake protection zone, an area around a municipal drinking water intake where contaminants from land activities can reach and pollute the drinking water supply.

"Management Committee" means the committee established to provide regional oversight on the Project activities covered under this Agreement and may include membership from the SPA board and key program staff.

"MFIPPA" means the Municipal Freedom of Information and Protection of Privacy Act (Ontario).

"Minister" means the Ontario Minister of the Environment, Conservation and Parks.

"Ministry" means the Ontario Ministry of the Environment, Conservation and Parks.

When "Ministry" and/or "Minister" are referred to in this Agreement, the reference is to the "Ministry" and/or "Minister" as the regulator.

"Payment Plan" means the payment plan attached to the Agreement as
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Schedule "E".

- "Proceeding" means any action, claim, demand, lawsuit, or other proceeding that anyone makes, brings or prosecutes as a result of or in connection with the Project or with any other part of the Agreement.
- "Significant Groundwater Recharge Area" and "SGRA" is a vulnerable area defined by the Act and refers to an area that recharges water to the underlying aquifer in accordance with the Director's Technical Rules.
- "Source Protection Area" means a drinking water source protection area as established under the Act.
- "Source Protection Authority" and "SPA" mean a source protection authority which has the same meaning as in the Act, namely a CA or other person or body that, under subsection 4 (2) or section 5 of the Act, is required to exercise and perform the powers and duties of a drinking water source protection authority under the Act, as set out in Ontario Regulation 284/07: Source Protection Areas and Regions, made under the Act.
- "Source Protection Committee" and "SPC" mean a committee established under section 7 of the Act for a SPA or SPR established (a) by subsection 4 (1) of the Act or (b) by Ontario Regulation 288/07: Source Protection Committees, made under the Act.
- "Source Protection Plan" and "SPP" mean any of the source protection plans for a SPA or SPR prepared under the Act.
- "Source Protection Region" and "SPR" mean a drinking water source protection region established by Ontario Regulation 288/07: Source Protection Committees, made under the Act.
- "Tables of Drinking Water Threats" means the Ministry publication titled "Table of Drinking Water Threats: Clean Water Act, 2006" dated December 12, 2008, as amended from time to time and refers to the circumstances under which the prescribed drinking water threats to water quality set out in section 1.1 of Ontario Regulation 287/07: General, made under the Act pose a significant, moderate and low risk to drinking water.
- "TPCR" means the Government of Ontario's Transfer Payment Common Registration system.
- "Transport Pathways" means a condition of land resulting from human activity that increases the vulnerability of a raw water supply of a DWS.

"Vulnerable Area" means any of (a) a SGRA, (b) a highly vulnerable aquifer, (c) a surface water IPZ, or (d) a WHPA, and refers to areas where drinking water threats may pose a risk to drinking water sources.

"WHPA" means wellhead protection area, the land area around a drinking water well where contaminants from land activities can reach and pollute the well water supply.

- B.5 The following subsection is added to section A2.1:
 - (e) it has and will continue to have for the term of the Agreement, adequate financial resources to cover normal operating expenses and be a going concern.
- B.6 [intentionally deleted to preserve numbering]
- B.7 The following section is added to Article A2.0:
 - A2.5 TPCR. The Recipient represents, warrants, and covenants that:
 - (a) it has completed its registration in TPCR; and
 - (b) it will update its information in TPCR as needed to maintain accuracy.
- B.8 Subsection A4.1(b) is deleted and replaced by the following:
 - (b) provide the Funds to the Recipient in accordance with the Payment Plan, each payment being conditional upon the corresponding criteria being met and subject to adjustment pursuant to the terms and conditions of the Agreement including section A4.9; and
- B.9 [intentionally deleted to preserve numbering]
- B.10 [intentionally deleted to preserve numbering]
- B.11 [intentionally deleted to preserve numbering]
- B.12 [intentionally deleted to preserve numbering]
- B.13 Article A4.0 is amended by adding the following new sections:
 - A4.7 **Project Over Budget.** The Recipient acknowledges that should Project expenses exceed the amount of the Funds allocated in the Budget, the Province is not responsible for any additional funding and the Recipient undertakes to incur all further costs necessary to complete the Project.

- A4.8 Intellectual Property. The Province is not the owner of any intellectual property generated as a result of the Agreement.
- A4.9 Cash Flow Management. In order to more accurately reflect the Recipient's anticipated cash flow needs (as conveyed to the Province), the Province may delay or divide any instalment of the Funds set out in the Payment Plan. If the instalment amount is so delayed or divided by the Province, the Recipient may request another payment by providing Notice to the Province including a cash flow forecast until the next Report is due and confirmation of the amount of the Funds already spent to date. The Province may provide another payment based on the information so provided.
- A4.10 **Budget Flexibility.** Despite subsection A4.3(c), the Recipient may apply limited Budget flexibility as described in section D.2.1 of Schedule "D".
- B.14 Article A5.0 is amended by adding the following new section:
 - A5.3 **Termination Provisions.** Further to section A5.1, if the Recipient acquires goods, services, or both, with the Funds, the Recipient will use best efforts to include in any associated agreement, a termination provision that enables the Recipient to wind down the Project in a reasonable manner at minimal cost.
- B.15 Article A7.0 is amended by adding the following new section:
 - A7.7 **Purpose of Receiving Reports.** For clarity, the Province receives Reports or other reports to confirm whether the Recipient is meeting the terms and conditions of the Agreement. The Province does not derive any advice, data or other benefit from such Reports or reports.
- B.16 Subsection A8.1(a) is deleted and replaced by the following:
 - (a) acknowledge the support of the Province for the Project using the statement "This project has received funding support from the Government of Ontario. Such support does not indicate endorsement by the Government of Ontario of the contents of this material.";
- B.17 Article A8.0 is further amended by adding the following new sections:
 - A8.3 Open Data. Subject to applicable laws, the Recipient gives its consent to the Province for the public release of any information provided under this Agreement including but not limited to the following information, whether in hard copy or in electronic form, on the internet or otherwise: Recipient name, Recipient contact information, Recipient address or general location, amount of Maximum Funds, amount of Funds, Project description, Project objectives/goals, Project location, Project results reported by the Recipient, Budget and any analysis, audit or evaluation

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- reports relating to the Project or to the Agreement performed by either Party. However, the Province and the Recipient agree that such permission does not apply to the following: NIL
- A8.4 Announcements. The Recipient shall not publicly announce receiving the Funds or anything to do with the Agreement, including requesting the presence of the Minister of the Environment, Conservation and Parks at one or more Project events, until permitted by the Province.
- A8.5 **Use of Ontario logo**. The Recipient may only use the Ontario logo by requesting and obtaining written approval from the Province on use and placement. The placement of the logo on the Recipient's materials will clearly identify the Government of Ontario as a funder, funding supporter or sponsor, and not as a partner or similar.
- B.18 **Conjunctions.** Where any sections in this Agreement have been modified to add or delete an item from a list, the "and" or "or" conjunction used before the last item on the list shall be deemed to have been moved to the penultimate item on the modified list.
- B.19 [intentionally deleted to preserve numbering]
- B.20 Section A10.2 is deleted in its entirety and replaced with the following:
 - 10.2 **Proof of Insurance.** The Recipient will:
 - (a) provide to the Province, either:
 - (i) certificates of insurance that confirm the insurance coverage required by section A10.1; or
 - (ii) other proof that confirms the insurance coverage required by section 10.1; and
 - (b) in the event of a Proceeding, and upon the Province's request, the Recipient will provide to the Province a copy of any of the Recipient's insurance policies that relate to the Project or otherwise to the Agreement, or both.
- B.21 The following event is added to section A13.1:
 - (e) the Recipient fails to respond to any inquiry of the Province pertaining to the *Public Sector Salary Disclosure Act*, 1996 (Ontario).

B.22 The following consequence is added to section A13.2:

(j) demand the repayment of an amount equal to, at the discretion of the Province, either the interest earned on the amount demanded under subsection (f), (g) or (h), or, in the event that the Recipient did not place the Funds in an interest bearing account in accordance with section A4.4, the interest imputed to be earned on such amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of the Event of Default;

B.23 The following subsections are added to section A16.1:

- deduct from any further instalments of Funds an amount equal to, at the discretion of the Province, either the interest earned on the amount deducted under subsection (a) or, in the event that the Recipient did not place the Funds in an interest bearing account in accordance with section A4.4, the interest imputed to be earned on said amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of overpayment;
- (d) demand that the Recipient pay an amount to the Province equal to, at the discretion of the Province, either the interest earned on the amount deducted under subsection (b) or, in the event that the Recipient did not place the Funds in an interest bearing account in accordance with section A4.4, the interest imputed to be earned on said amount based on the then current interest rate charged by the Province of Ontario on accounts receivable, calculated from the date of overpayment;
- (e) deduct the amounts referred to in both subsection (a) and (c) from any further instalments of Funds; or
- (f) demand that the Recipient pay an amount equal to the amounts referred to in both subsection (b) and (d).

B.24 Article A17.0 is amended as follows:

- (a) Each of sections A17.1, A17.2 and A17.3 in Article A17.0 of Schedule "A" is amended by deleting the word "fax" wherever it appears.
- (b) A new section is added following Section A17.3 (Postal Disruption):
 - A17.4 **Notice by Telephone.** For clarity, Notice may not be given or received by telephone, despite the inclusion of a telephone number (if any) in the table in Schedule "B".

- B.25 The following sections are added to section A28.1, Survival, in chronological order: subsection A2.1(c), section A4.7, section A4.8, section A8.3, section A8.5, subsection A13.2(j), Article A29.0, Article A32.0 and section A34.1.
- B.26 The following new provisions are added following Article A28.0 (Survival)

A29.0 FIRST NATION AND MÉTIS CONSULTATION

A29.1 **Notification.** The Recipient agrees to immediately notify the Province if any First Nation or Métis community raises any concerns about the Project having a potential impact on protected rights.

A30.0 ACCESSIBILITY

- A30.1 **Meetings and Events.** As the Funds are being provided to the Recipient for a public purpose and are public funds, in using the Funds for meetings, events or similar, the Recipient should consider the accessibility needs of attendees with disabilities, both in terms of physical access to the event/meeting space, as well as access to the event/meeting contents and proceedings. The Recipient will use best efforts to accommodate these needs.
- A30.2 **Meetings and Events Examples.** For assistance with the Recipient's commitment pursuant to section A30.1, examples of areas where accessibility should be considered include: refreshment and dietary arrangements; communications (e.g. alternate formats large print, screen readers, Braille, audio format; assistive technologies); and venue selection.
- A30.3 **Venues.** As the Funds are being provided to the Recipient for a public purpose and are public funds, in using the Funds for venues at which the public will be in attendance, the Recipient should consider the accessibility needs of attendees with disabilities when selecting a venue, both in terms of exterior and interior access. The Recipient will use best efforts to accommodate these needs.
- A30.4 Venue Examples. For assistance with the Recipient's commitment pursuant to section A30.3, examples of areas where accessibility should be considered include: parking, sidewalks/paths of travel, accessible transit, entrances and lobbies, elevators, accessible washrooms, hallways and corridors, and meeting and conference rooms.

A31.0 ENVIRONMENTAL INITIATIVES

A31.1 **Meetings.** As the Funds are being provided to the Recipient for a public purpose and are public funds, in using the Funds for meetings, the Recipient

- will use best efforts to hold virtual meetings instead of requiring attendees to travel to meetings in person.
- A31.2 **Printing.** As the Funds are being provided to the Recipient for a public purpose and are public funds, in using the Funds for printing, the Recipient will use best efforts to:
 - (a) minimize the need to print documents by scanning and e-mailing documents that might otherwise be printed;
 - (b) print or copy double-sided and in black and white when printing or copying is necessary; and
 - (c) purchase paper from environmentally responsible sources.
- A31.3 Environmentally Responsible Sources. For assistance with the Recipient's commitments under subsection A31.2(c), environmentally responsible sources provide virgin bulk paper certified by third party verified forest certification systems such as Forest Stewardship Council, CSA Group or Sustainable Forest Initiative.

A32.0 PERSONAL INFORMATION and PARTICIPATION BY MINORS

- A32.1 **Permissions.** The Recipient represents, warrants and covenants that it has or will receive permission to disclose the personal information of all individuals whose personal information is disclosed in the Agreement or during the Project, Reports or other reports, and, in the case of minors, the legal guardian or parent has provided such permission on behalf of the minor.
- A32.2 Consent of Legal Guardian. The Recipient acknowledges that it is the responsibility of the Recipient to obtain express written consent from the legal guardian of any minors who are involved in any way with the Project.
- A33.0 [intentionally deleted to preserve numbering]

A34.0 FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

A34.1 **MFIPPA**. The Province acknowledges that the Recipient is bound by MFIPPA and that any information provided to the Recipient in connection with the Project or otherwise in connection with the Agreement may be subject to disclosure in accordance with MFIPPA.

- END OF ADDITIONAL PROVISIONS -

SCHEDULE "C" PROJECT

C.1 BACKGROUND

The Act, in force since 2007, is the legal foundation for a multi-stakeholder, collaborative, locally-driven science-based process to protect drinking water sources. It requires the establishment of ARs which identify activities on the landscape that pose the greatest risk to drinking water sources; these activities are prohibited or managed through local SPPs.

The Act established 38 watershed-based Source Protection Areas. These 38 areas are grouped into 19 planning units comprised of stand-alone Source Protection Areas or SPRs. The 19 SPAs and SPRs are represented by a SPC, and each SPC is led by a Minister-appointed chair.

Through the leadership of the SPAs and SPCs, as of 2016 all 38 Source Protection Areas are covered by an SPP which is being implemented by municipalities and provincial bodies and agencies. Progress is reported annually to the Ministry and summarized in the Minister's Annual Report on Drinking Water.

As the local watershed-level agencies, lead SPAs have an important leadership role for source protection under the Act. They are required to establish and maintain the SPC, provide administrative, technical and scientific support to the SPC, carry out locally initiated amendments to the AR and SPP such as for the inclusion of new or changing municipal residential DWSs, maintain source protection program data to inform local decision-making, monitor SPP implementation, prepare an annual progress report for the Minister to report on local progress, support municipalities in fulfilling their SPP implementation responsibilities, and undertake other functions related to their role including providing advice and technical services to municipal staff, businesses, landowners or other persons about the SPP and the overall drinking water source protection program.

C.1A DRINKING WATER SOURCE PROTECTION PROGRAM

The Drinking Water Source Protection 2020-21 Program provides funding to support CAs continue to fulfill their responsibilities under the Act and play a coordinating role in the updating of ARs and SPPs as needed.

The Recipient is receiving funding support for this public interest program to lead and deliver the local source protection program for CTC.

C.2 PROJECT OBJECTIVE

The objective of the Project is to maintain an effective multi-faceted support framework for local source protection work in CTC. This framework will include maintaining source Ontario Transfer Payment Agreement

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protection expertise in CTC to support source protection activities as prescribed under the Act, its regulations and rules for CTC and the updating of the SPP as needed.

C.3 SCOPE OF PROJECT

The Recipient will engage local and regional stakeholders, provide source protection expertise and coordinate local activities that support the implementation and updating of the SPP, and fulfill the monitoring and reporting requirements under the SPP for CTC as necessary, as developed for CTC under the Act.

- C.3.1 The Recipient will maintain local governance and capacity to facilitate and coordinate source protection initiatives for CTC, which will include:
 - Providing program updates as they arise to the SPA board (two meetings per each member SPA of CTC).
 - Hosting two CTC Management Committee meetings, if necessary, for the purposes of program oversight, issues management, and SPP related approvals.
- C.3.2 The Recipient will provide maintenance and operation of an informed and engaged SPC for CTC to guide the local planning process. This includes undertaking the following activities in accordance with Ontario Regulation 288/07: Source Protection Committees, made under the Act as amended from time to time:
 - Hosting and facilitating 4 meetings of the SPC.
 - Participate in Ministry-hosted SPC Chairs' meetings as scheduled when invited.
- C.3.3 The Recipient will monitor and report on SPP implementation progress within CTC, in accordance with requirements set out in the Act, Ontario Regulation 287/07: General, made under the Act and Ministry guidance. This includes undertaking the following activities:
 - Supporting local municipalities and Implementing Bodies in meeting their responsibilities under monitoring policies and the Act's reporting requirements;
 - Receiving and maintaining information related to the monitoring policy summaries from Implementing Bodies, including analyzing and interpreting the information received to report on implementation progress to local stakeholders.
 - Coordinating the submission of annual reporting requirements from Implementing Bodies, amalgamating information, and analyzing and interpreting the information received.
 - Analyzing the effectiveness of the SPP policies.
 - Developing and posting publicly the annual progress report on the implementation of the SPP.
 - Submitting the annual progress report to the Ministry.

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- C.3.4 The Recipient will retain records in accordance with legislative requirements. This includes, but is not limited to, undertaking the following activities:
 - Maintain digital documentation and backups of local source protection information used to produce the AR and SPP to comply with the requirements of the Act.
 - Ensuring CTC's ARs, SPP, any amendments and annual progress reports are available on the internet.
- C.3.5 The Recipient will undertake amendments to CTC's SPP under Section 51 of Ontario Regulation 287/07: General, made under the Act, for minor/administrative revisions.
 - If changes to local ARs and SPP under section 51 of the Act have been made, the Recipient will advise the Ministry of said changes and ensure that any new or amended data including SPP policies and geospatial data reflecting new or updated Vulnerable Area delineations are provided to the Ministry.
- C.3.6 The Recipient will issue confirmation notices to municipal DWS owners under section 48 (1.1) of Ontario Regulation 287/07: General, made under the Act and follow protocols outlined in Ministry guidance for new and changing municipal residential DWSs. This includes notices for the following DWS if work is complete:
 - Town of Orangeville
 - Town of Erin
- C.3.7 The Recipient will prepare locally initiated amendments to CTC's ARs and SPP under section 34 of the Act and Ministry guidance to incorporate technical assessments completed for any new or expanding municipal residential DWSs. This includes undertaking the following activities:
 - S.34 Amendment #1 to incorporate technical work and related policies for the new Aurora wellfield in the Regional Municipality of York.
 - S.34 Amendment #2 to incorporate technical work and related policies for Caledon Village Well 3B in the Region of Peel and update the orientation and size of other WHPAs where they have been changed as a result of new monitoring information.
 - o To incorporate results of tasks identified in section C.3.10.

- C.3.8 The Recipient will review information it receives from municipalities regarding a proposal to create or modify Transport Pathways in WHPAs or IPZs, or from municipalities or Risk Management Officials as a result of field-verified knowledge of existing Transport Pathways, to determine if AR(s) or SPP should be revised.
- C.3.9 The Recipient will undertake work to update the AR and SPP under section 36 of the Act to address changes to the Director's Technical Rules and Tables of Drinking Water Threats by completing defined tasks set out in the Minister's Order. This includes the following task from Table 1 of the Ministry's Section 36 Supplemental Guidance Bulletin #3:
 - Director's Technical Rule change pertaining to the addition of circumstances for the establishment and operation of liquid hydrocarbon pipelines as a drinking water threat. Update ARs and SPP to capture pipelines under the prescribed circumstances or text to explain why policies are not warranted.
- C.3.10 The Recipient will address challenges with SPP policies substantiated through annual progress reporting by reviewing options and developing recommendations for the CTC SPC to consider on how to address the challenges including new policy wording where applicable. This includes undertaking the following activities:
 - Review options for addressing challenges with policy SAL-10: review methodology used to delineate Highly Vulnerable Aquifers to determine how to address challenges highlighted by municipalities where Highly Vulnerable Aquifers cover a large portion of the municipality.
 - Revise definition of Existing Drinking Water Threat and Transition Provision, to ensure that the effective date and terminology is appropriate.
- C.3.11 The Recipient will undertake consultation requirements related to AR and SPP updates by completing stakeholder and municipal engagement through the use of email, telephone and in limited instances in-person, on proposed changes. This includes undertaking the following activities for section 34 amendments and requirements specified in the Minister's Order under section 36 of the Act:
 - Early engagement with the Ministry on draft AR and SPP updates for section 34 amendments and in accordance with Minister's Order under section 36 of the Act.
 - Undertake pre-consultation and public consultation, including public notices, with the Ministry, municipalities and Implementing Bodies impacted by section 34 Amendment #2 noted in C.3.7.

- C.3.12 The Recipient will participate in any ongoing consultation on proposed amendments (Phase 2) to the Director's Technical Rules and if applicable assess and undertake initial work on implementing any new, when approved, amendments, including Tables of Drinking Water Threats only as directed by the Ministry.
- C.3.13 The Recipient will provide advice and program support to municipal staff to resolve issues with CTC's SPP policy implementation and identify whether updates to AR and SPP are necessary to improve implementation or address water quality or quantity issues. This includes undertaking the following activities:
 - Host 2 meetings, including 1 in person meeting, of the CTC municipal planners working group.
 - Host 3 meetings, including 1 in person meeting, of the CTC municipal implementation working group.
- C.3.14 Upon request, the Recipient will provide advice to stakeholders on the review of local applications / planning proposals / decisions in Vulnerable Areas to ensure CTC's SPP policies are considered where required.
- C.3.15 The Recipient will provide support to municipal residential DWS owners on requirements under the Act and its regulations for water quality risk assessments on new and expanding drinking water wells and intakes. This includes undertaking the following activities:
 - Meet with and provide guidance and advice to owners of new Aurora wellfield in the Regional Municipality of York and Caledon Village well 3B in the Region of Peel.
 - Meet with and provide guidance and advice to DWS owners in the Region of Peel updating the orientation and size of WHPAs
- C.3.16 The Recipient will keep municipal councils and councillors informed of local source protection program progress and municipal obligations. This includes undertaking the following activities:
 - Attend municipal council meetings to provide presentations on the source protection program in the Town of Caledon and the Township of Uxbridge.
- C.3.17 The Recipient will maintain the local source protection program, including issues management and participation in, and organization of local, regional and provincial meetings to advance local source protection programs.

C.4 PROJECT TIMELINES

The following are the timelines for the Project:

Project Activity/Sub-activity	Start Date	End Date		
Constant Estimate Color of Early Colors (Colors Colors)	a salah da ka	Service Control of the Service		
Maintenance of local governance and capacity to acilitate and coordinate source protection initiatives for CTC. (Section C.3.1)	1-Apr-20	31-Mar-21		
Maintain an informed and engaged SPC for CTC to guide the local planning process. (Section C.3.2)	1-Apr-20	31-Mar-21		
Anticipated meeting dates: Meeting 1 – June 2020 Meeting 2 – October 2020 Meeting 3 – January 2021 Meeting 4 – March 2021				
Monitoring and reporting on SPP implementation progress within CTC in accordance with requirements set out in Act and Ontario Regulation 287/07: General made under the Act and Ministry guidance. (Section C.3.3)	1-Apr-20	31-Mar-21		
Specifically, • Submit annual progress report to Ministry.		Within timeframe specified by O.Reg. 287/07.		
Retaining records in accordance with legislative requirements (Section C.3.4)	1-Apr-20	31-Mar-21		
Undertaking amendments to CTC's SPP under Section 51 of Ontario Regulation 287/07: General, made under the Act, for minor/administrative revisions. (Section C.3.5)	1-Apr-20	30-Sep-20		
Issuance of confirmation notices to municipal DWS owners under section 48 (1.1) of Ontario Regulation 287/07: General, made under the Act and follow protocols outlined in Ministry guidance for new and changing municipal residential DWSs (Section C.3.6)	1-Apr-20	31-Mar-21		
Preparing locally initiated amendments to CTC's ARs and SPP under section 34 of the Act and Ministry guidance to incorporate technical assessments completed for any new or expanding municipal residential DWSs. (Section C.3.7):				
S.34 Amendment #1 – to incorporate technical work and related policies for the new Aurora wellfield in the Regional Municipality of York.	1-Apr-20	31-May-20		
ividinoipanty of Forts.	1-Apr-20	30-Nov-20		

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Project Activity/Sub-activity	Start Date	End Date
senssi tutimagarian tolong yan-o-yati		
 S.34 Amendment #2 – to incorporate technical work and related policies for Caledon Village Well 3B in the Region of Peel, update the orientation and size of other WHPAs where they have been changed as a result of new monitoring information, and incorporate results of work identified in section C.3.10. 	je i	
Reviewing information received from municipalities regarding a proposal to create or modify Transport Pathways in WHPAs or IPZs, or from municipalities or Risk Management Officials as a result of field-verified knowledge of existing Transport Pathways, to determine if AR(s) or SPP(s) should be revised. (SectionC.3.8)	1-Apr-20	31-Mar-21
Undertake work to update the SPP (under section 36 of the Act) to address changes to the Director's Technical Rules and Tables of Drinking Water Threats by completing tasks from Table 1 of the Ministry's Section 36 Supplemental Guidance Bulletin #3. (Section C.3.9)	3	
Director's Technical Rule change pertaining to the addition of circumstances for the establishment and operation of a liquid hydrocarbon pipelines as a drinking water threat. Update AR and SPP to capture pipelines under the prescribed circumstances or text to explain why policies are not warranted.	1-Apr-20	3-Nov-20
Undertake the tasks identified in sections C.3.10 to C.3.11 inclusive	1-Apr-20	30-Nov-20
Undertake the tasks identified in sections C.3.12 to C.3.17 inclusive	1-Apr-20	31-Mar-21

C.5 PROJECT PARTICIPANTS

The Project will be undertaken by the following Project team members:

Organization	Participant Name and Title	Role and responsibility of the participant/organization in the Project
Recipient (CTC)	Project Manager (1.0 FTE)	Responsible for overseeing and facilitating AR and SPP work set out in Section C3 of the Agreement.

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		Day-to-day project management, issues management, staff coordination, budget reporting, communications and consultation, primary contact for stakeholders.
Recipient (CTC)	GIS Specialist (0.25 FTE)	Maintenance of CTC contribution to annual reporting database, s. 34 Amendments; provision of support and advice on the review of local applications and decisions in vulnerable areas.
Recipient (CTC)	Communications Specialist (0.10 FTE)	Support for maintenance of the CTC website, consultation requirements and assistance with preparation of annual report.
Toronto and Region SPA	Program Lead (0.10 FTE)	Assist with day-day integration of program into SPA business, support for CTC SPC, Lead for s.34 at SPA; Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Toronto and Region SPA	Technical Support (0.30 FTE)	Lead for drafting new text for AR to incorporate amendments, support for annual reporting, support for CTC SPC; Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Toronto and Region SPA	Planning Support (0.15 FTE)	Support for review of transition provision and definition of existing drinking water threat. Provision of support and advice on the review of local applications and decisions in vulnerable areas
Credit Valley SPA	Issues Lead (0.05 FTE)	Assist with day-day integration of program into SPA business, support for CTC SPC. Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Credit Valley SPA	Program Lead (0.10 FTE)	Assist with day-day integration of program into SPA business, support for CTC SPC. Lead for s.34 amendment at SPA. Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Credit Valley SPA	Technical Support (0.40 FTE)	Lead for drafting new text for AR to incorporate amendments, support for annual reporting, support for CTC SPC. Provision of support and advice on the

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		review of local applications and decisions in vulnerable areas.
Credit Valley SPA	Technical Support (0.20 FTE)	Support for s.34 Amendment at SPA. Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Credit Valley SPA	Planning Support (0.10 FTE)	Support for review of transition provision and definition of existing drinking water threats. Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Credit Valley SPA	GIS Lead (0.10 FTE)	Lead for s.34 mapping at SPA. Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Central Lake Ontario SPA	Program Lead (0.15 FTE)	Lead for records retention and provision of mapping for SPA. Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Central Lake Ontario SPA	Technical Support (0.15 FTE)	Lead for drafting new text for AR to incorporate amendments, support for annual reporting support for CTC SPC.
Central Lake Ontario SPA	Planning Support (0.05 FTE)	Support for review of transition provision and definition of existing drinking water threat. Provision of support and advice on the review of local applications and decisions in vulnerable areas.
Total FTE	3.20	

Should there be any changes to the above-noted Project team members, the Recipient will advise the Province forthwith. Changes include additions, replacements and vacancies.

C.6 PERFORMANCE MEASURES AND TARGETS

C.6.1 Scope Obligations

The following summarizes the goods, services or other outputs that the Recipient will be producing in undertaking the Recipient's Project.

Description of Products	Number
CTC SPP Annual Report	Per section C.3.3
Section 51 Amendment of the CTC SPP	Per section C.3.5
Confirmation notices to municipal DWS owners under section 48 (1.1)	Per section C.3.6
Section 34 Amendment #1 of the CTC SPP	Per section C.3.7
Section 34 Amendment #2 of the CTC SPP	Per section C.3.7

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C.6.2 Targets to Measure Success

In carrying out the Project, the Recipient will use the following measures and aim to meet the following targets to measure its success in meeting the Project objective(s):

Objective(s)	Performance Measures	Performance Targets
To maintain an effective multi-faceted support framework for local source protection work in CTC	Ability to meet deadlines	 Annual reporting requirements completed and submitted to Ministry on time.
To maintain an effective multi-faceted support framework for local source protection work in CTC	Ability to provide access to local source protection data	 SPA maintains/presents data that is current and accessible.
To maintain an effective multi-faceted support framework for local source protection work in CTC	Functionality of SPC	SPC achieves quorum at all its meetings
To maintain an effective multi-faceted support framework for local source protection work in CTC	Usefulness of info provided	 Municipalities and municipal councils have an awareness of their role in drinking water source protection 100% of Implementing Bodies identified in local SPPs are familiar with their policy implementation obligations
To maintain an effective multi-faceted support framework for local source protection work in CTC	Responsiveness to issues	 Policy challenges are identified and addressed through updates to the SPP.
To maintain an effective multi-faceted support framework for local source protection work in CTC	Timeliness of information provided	 All municipal residential drinking water systems that are online have been included or identified for future inclusion in the local SPP.
To maintain an effective multi-faceted support framework for local source protection	Fulfillment of legislative consultation requirements	All municipalities impacted by proposed AR and SPP amendments and updates

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work in CTC	ili	•	are consulted and provided opportunities to comment 100% of AR and SPP
			amendments/ updates are shared with MECP for early engagement comments

- END OF PROJECT DESCRIPTION AND TIMELINES -

SCHEDULE "D" BUDGET

D.1 BUDGET TABLE

Column Legend

A = B + C + D + E + F + G, where:

A = Project budget;

B = Amount from the Funds

C = Recipient contribution (confirmed)

D = Other cash contributions (confirmed)

E = Other in-kind contributions (confirmed)

F = Requested contributions (unconfirmed)

G = Balance to be secured

Project Expenditures				ontributions		G Balance to be secured	
	A Project budget	B Amount from the Funds	C Recipient		F Requested		
STAFF						Pro Hell	
CTC Project Manager (1.0 FTE)							
CTC GIS Specialist (0.25 FTE)							

Project Expenditures							
	A B Amount from the Funds	C Recipient	D Cash	E In-kind	F Requested	G Balance to be secured	
CTC Communications Specialist (0.10 FTE)							
Toronto and Region Program Lead (0.10 FTE)	· ·						
Toronto and Region Technical Support (0.30 FTE)							
Toronto and Region Planning Support (0.15 FTE)	1						
Credit Valley Issues Lead (0.05 FTE)							- 37
Credit Valley Program Lead (0.10 FTE)							
Credit Valley Technical Support (0.40 FTE)							
Credit Valley Technical Support (0.20 FTE)			an element				u #1

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				Other Co	ntributions		
Project Expenditures	A A Amount from the Funds	C Recipient	D Cash	E In-kind	F Requested	G Balance to be secured	
Credit Valley Planning Support (0.10 FTE)							
Credit Valley GIS Lead (0.10 FTE)							
Central Lake Ontario Program Lead (0.15 FTE)							
Central Lake Ontario Technical Support (0.15 FTE)							
Central Lake Ontario Planning Support (0.05 FTE)							
Sub-total							

Project Expenditures			Other Contributions					
	A Project budget B Amount from the Funds	C Recipient	D Cash	E In-kind	F Requested	G Balance to be secured		
Staff travel to support activities in Section C.3. Staff travel to meet with municipalities \$1500 Staff travel to meet with municipal councils/councillors \$300 Attendance at 1 regional program managers meeting \$100 Meetings with municipalities for S.34 amendment \$100								
Sub-total								
OTHER		- CENTROLES		21/210		- El alter	2000	
SPC member per diems (\$2800 per meeting x 4 meetings)	2 1 1 1 2	Macer		12		9 118	100 A (2.0)	

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	A Project budget	B Amount from the Funds	Other Contributions				
Project Expenditures			C Recipient	D Cash	E In-kind	F Requested	G Balance to be secured
SPC member mileage (\$1000 per meeting x 4 meetings)							
SPC member Liability insurance							
Latitude Geocortex software							
Azure Cloud Service							
Newspaper advertising to support S.34 consultation							
Sub-total						112-14	
TOTALS			15.48			100	

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D.2 NOTES TO BUDGET TABLE

D.2.1 Budget Table Columns

- (a) **Total Project Amount.** If the budget for the Project exceeds the total amount for column A by 10%, the Recipient will notify the Province forthwith.
- (b) Standard Budget Flexibility. The Recipient may move Funds between expense lines in column B, Amount from the Funds, in the Budget table in section D.1 without approval from the Province, except as limited below:
 - (i) Funds in column B, Amount from the Funds, cannot be moved to any expense lines under the Budget category "Other" (if any);
 - (ii) The Recipient may not reduce the Funds allocated to any expense line by more than ten percent (10%) of its allocation as shown in the Budget table; and
 - (iii) The Recipient may not increase the Funds allocated to any expense line by more than twenty percent (20%) of its allocation as shown in the Budget table.
- (c) [intentionally deleted to preserve numbering]
- (d) [intentionally deleted to preserve numbering]
- (e) [intentionally deleted to preserve numbering]
- (f) [intentionally deleted to preserve numbering]
- (g) [intentionally deleted to preserve numbering]
- (h) Acknowledgement. The Province acknowledges that the Recipient may, in its sole discretion, reallocate the amounts in columns C, D, E and F, among the expense lines in the Budget table. The Recipient acknowledges that should such reallocations be made; the Province may reassess its contribution to the Project and take such actions as permitted in accordance with the Agreement.

D.2.2 Expense Eligibility

The following Budget notes are intended to provide clarity to the Recipient on how the Funds may be spent.

(a) Ineligible costs – For clarity, in addition to any other costs identified or described as ineligible in the Agreement, the following is a non-exhaustive list of costs for

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which the Province will not provide any Funds, unless explicitly stated otherwise in this Agreement:

- (i) Fundraising any costs related to developing a business case, funding proposal or other activity with a similar aim;
- (ii) **Lobbying** any costs related to activities undertaken with the actual or perceived intention of lobbying;
- (iii) Non-Project costs any costs not directly related to the Project;
- (iv) Pre-Project costs any costs incurred prior to the Effective Date;
- (v) Purchase of equipment or capital items tangible property that has a lifespan longer than one year or the length of the Project, whichever is less, but does not include consumables or items with a value less than \$100;
- (vi) Overhead fixed or variable costs incurred by the Recipient regardless of the Project (e.g. mortgage, rent, insurance, hydro for the Recipient's regular operations, except for staff);
- (vii) Honoraria amounts voluntarily paid by the Recipient for services or other contribution to the Project;
- (viii) **Professional association dues** any costs related to Project participants' professional association dues/fees.
- (ix) Hospitality for meetings any hospitality costs associated with any meetings listed in Section C.3 of this Agreement.
- (x) **Refundable expenses** costs deemed ineligible in accordance with section A4.6 of Schedule "A"; and
- (xi) Any costs which the Province informs the Recipient it considers, in its sole discretion, to be an inappropriate expenditure of public funds.
- (b) Staffing costs noted in the budget table in D.1. include direct costs (salaries, Benefits) and project administration expenses, support services and some overhead costs of no more than \$95,005.15
- (c) Administration Expenses (under "Other") Administration expenses are comprised of disbursements such as postage/courier charges, photocopying charges, office supplies, and financial institution service fees incurred in carrying out the Project. The Funds may not be used for avoidable financial institution service fees (e.g. NSF charges). For clarity, administration expenses do not include items such as salary and wages, rent, travel, accommodation and meal expenses, computers, legal fees, audit fees, engineering fees, and other

professional fees. Notwithstanding anything contained herein, the portion of administration expenses covered by the Funds shall not include: N/A.

- (d) Support Services (under "Other") Support services refer to the time spent by staff in human resources, finance, information technology, and communications departments providing administrative support that can be reasonably attributable to the Project. Project managers and key Project participants are not included in support services. Notwithstanding anything contained herein, the portion of support services covered by the Funds shall not include: N/A.
- (e) Equipment/Capital Item Rental The Province may approve the purchase instead of the rental of equipment or capital items that fulfill the following criteria: (i) the equipment or capital item is being used on multiple occasions throughout the Project; (ii) total rental costs are greater than the one-time purchase cost; and (iii) without the Project, it is unlikely that the Recipient would purchase the equipment or capital item. If wishing to purchase the equipment or capital item using the Funds, the Recipient must request approval from the Province prior to acquisition of the equipment or capital item.
- (f) Transportation (under "Travel and Hospitality") Transportation refers to the provision of transportation for meetings or events to the Recipient's staff or contractors or meeting/event attendees if specified in the Budget. The amount from the Funds used for transportation will be calculated according to the rates in the Ontario Government's Travel, Meal and Hospitality Expenses Directive that is current as of the date that the expense is incurred. Transportation will be by the most practical and economical method; tickets (e.g. train, airplane) purchased must be for economy/coach class and when renting a vehicle, the Funds may only be used for a compact model or its equivalent unless approval for a different model is obtained from the Province prior to rental. The Funds under this Budget line may not be used for:
 - transportation for meeting/event attendees when the distance to the meeting or event venue is less than: N/A km.
- (g) Accommodation (under "Travel and Hospitality") Accommodation refers to the provision of accommodation for meetings or events to the Recipient's staff or contractors or other meeting/event attendees if specified in the Budget. Accommodation will be in a standard room; the Funds may not be used for hotel suites, executive floors or concierge levels. The Funds under this Budget line may not be used for:
 - accommodation for the Recipient's staff or contractors when the distance to the meeting or event venue is less than 100 km;
 - accommodation for meeting/event attendees; or
 - penalties incurred for non-cancellation of guaranteed hotel reservations.
- (h) Food and Beverage (under "Travel and Hospitality") The Recipient may use the Funds for the provision of food or beverages to the Recipient's staff or contractors

when travelling for Project-related work. The Funds may only be used for meals during such travel periods, subject to the limitations below. The amount from the Funds used for food or beverage will be calculated according to the rates in the Ontario Government's Travel, Meal and Hospitality Expenses Directive that is current as of the date that the expense is incurred. The Recipient may only use the Funds for food and beverage if it is collecting and retaining itemized receipts that verify the expenditure. In addition, the Funds under this Budget line may not be used for:

- non-meal food and beverages;
- alcohol;
- meals when the travel period is less than 5 hours, calculated from the time the Recipient's staff or contractor leaves their normal place of business (or reasonable alternative origin) to the time the Recipient's staff or contractor returns to the normal place of business (or reasonable alternative destination);
- meals during travel when travel is a part of the Recipient's staff's or contractor's regular job duties.
- Services Costs for services may include reasonable disbursements in addition to fees. However, the Funds may not be used for the following disbursements: N/A.

D.2.3 Pre-Agreement Procurements

(a) [intentionally deleted to preserve numbering]

- END OF BUDGET -

SCHEDULE "E" **PAYMENT PLAN**

E.1 PAYMENT TABLE

CRITERIA	AMOUNT
Following Province execution of Agreement evidencing approval of Recipient Project proposal	
Following Province approval of first interim progress report and first financial progress report as set out in Schedule "F"	
Following Province approval of draft final report as set out in Schedule "F"	
TOTAL	

NOTE: The amounts above may be adjusted pursuant to the terms and conditions of the Agreement, including section A4.9 (as found in section B.13 of Schedule "B").

- END OF PAYMENT PLAN -

SCHEDULE "F" REPORTS

F.1 REPORT TABLE

Name of Report	Due Date		
1. Additional Funding Report(s)	An on-going obligation of the Recipient following the Recipient's receipt of notification that it will be receiving additional funding for the Project		
2. Procurement Report(s)	Immediately following selection of preferred proponent if applicable		
3. Interim Progress Report(s)	#1 - 10/30/2020		
4. Financial Progress Report(s)	#1 - 10/30/2020		
5. Draft Final Report	02/26/2021		
6. Final Report	04/30/2021		
7. Reports as specified from time to time	On a date or dates specified by the Province.		

F.2 REPORT DUE DATE

Except as noted below, if the due date of any Report falls on a non-Business Day, the due date is deemed to be the next Business Day.

For any Report due on March 31 in a year when March 31 is not on a Business Day, the due date of such report is deemed to be the Business Day immediately prior to March 31.

F.3 REPORTING TEMPLATES

When reporting to the Province, the Recipient will use the templates provided by the Province (if any).

F.4 SUPPORTING DOCUMENTATION

For clarity, the Province may request supporting documentation from the Recipient as part of the Reports submitted as described in this schedule.

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F.5 REPORT DETAILS

F.5.1 Additional Funding Reports. Additional Funding Reports will set out:

- (a) an accounting of any other funding received or to be received by the Recipient if not already set out in the Agreement, including the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding is supporting; and
- (b) confirmation that there is no overlap of funding from the Province and from the other funding entities.

F.5.2 Procurement Reports. Procurement Reports will set out:

- (a) a description of the procurement process followed by the Recipient to acquire goods or services required to perform the Project; and
- (b) a justification for the selection of the preferred proponent which evidences value for money, including, if applicable, confirmation from the supplier that they are the sole supplier of the goods.

F.5.3 Interim Progress Reports. Interim Progress Reports will set out:

- (a) actions undertaken to the date of the report including key milestones achieved, with reference to specific paragraphs of section C.3 (Scope of Project) including the performance measures listed in section C.6.1;
- (b) progress achieved to date on the performance targets listed in section C.6.2 and how they relate to the objective(s)/desired outcomes of the Project identified in section C.2;
- (c) for any staff position covered in whole or in part by some or all the Funds, confirmation of the time spent by the staff person on the Project;
- (d) any variances from the timelines, the reasons for such variances and the strategy used to correct the variances; and
- (e) a statement confirming the Recipient is in compliance with the terms and conditions of the Agreement except as disclosed in the interim progress report, signed by the Chief Operating Officer, the Board chair or equivalent.

F.5.4 Financial Progress Reports. Financial Progress Reports will set out:

(a) an interim accounting of all Project expenditures to date (both and specifically from the Funds) signed by the Chief Financial Officer, the Board chair or equivalent, confirming actual Project expenditures and providing an explanation for any variances from the Budget;

- (b) identification of Funds reallocated in accordance with section A4.10 (as found in section B.13), including rationales for the reallocations;
- (c) an accounting of any other funding received by the Recipient, the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding is supporting as well as a statement confirming that there is no overlap of funding from the Province and from any other organization; and
- (d) a high-level monthly spending forecast (e.g. total per month) for the remainder of the Project.

F.5.5 **Draft Final Report.** The Draft Final Report will:

(a) include draft versions of all the information required for the Final Report as described below except for (e).

F.5.5 **Final Report.** The Final Report will set out:

- (a) actions undertaken in carrying out the Project including key milestones achieved, with reference to specific paragraphs of section C.3 (Scope of Project) including the performance measures listed in section C.6.1;
- (b) a description of to what extent the performance targets listed in section C.6.2 were met:
- (c) a description of to what extent the Project objectives/desired outcomes as identified in section C.2 were met and set out lessons learned;
- (d) for any staff position covered in whole or in part by the some or all the Funds, confirmation of the time spent by the staff person on the Project;
- (e) a final accounting of all Project expenditures (both and specifically from the Funds) signed by the Chief Financial Officer, the Board chair or equivalent, confirming actual Project expenditures and providing an explanation for any variances from the Budget;
- (f) an accounting of any unspent Funds and an explanation as to why there are remaining Funds;
- (g) an accounting of any interest earned in accordance with section A4.4;
- (h) identification of Funds reallocated in accordance with section A4.10 (as found in section B.13), including rationales for the reallocations;

- (i) a final accounting of the other funding received by the Recipient, the identification of the funding organization, the amount and the specific aspect of the Project that the additional funding supported as well as a statement confirming that there has been no overlap of funding from the Province and from any other organization; and
- (j) a statement signed by the Chief Operating Officer, the Board chair or equivalent confirming Recipient compliance with the terms and conditions of the Agreement, except as disclosed in the final report.
- F.5.6 Other Reports. The Province will specify the timing and content of any other Reports as may be necessary.

- END OF REPORTING -

TO: Chair and Members of the CTC Source Protection

Committee, Meeting #3/20

DATE: November 23, 2020

FROM: Janet Ivey, Chief Specialist - Watershed Plans and Source Water Protection,

Credit Valley Conservation

RE: Update on Amendments under Section 34 of the Clean Water Act

KEY ISSUE

Update on the current status of planned amendments to the Assessment Reports (ARs) and Source Protection Plan (SPP) under Section 34 of the Clean Water Act.

RECOMMENDATION

IT IS RECOMMENDED THAT the CTC Source Protection Committee receive the report Update on Amendments under Section 34 of the Clean Water Act for information.

BACKGROUND

Under Section 34 of the Clean Water Act, a Source Protection Authority (SPA) may propose amendments to the Source Protection Plan under certain circumstances, including when a municipality intends to apply for a new, replacement, or altered municipal drinking water system under Section 32 of the Safe Drinking Water Act. Changes to drinking water systems need to be incorporated into Assessment Reports in order for the Source Protection Plan policies to apply. Section 34 revisions to the ARs are generally more frequent and outside of the periodic update required under Section 36 of the Clean Water Act (every 5 years on average).

The responsibility for technical approval of the amendments shifted from the SPAs to the Province in 2018, though the SPAs are still required to check for completeness (against the Technical Rules), accept, and amend the Assessment Reports. The CTC SPC's main role in the S. 34 amendment process is to receive and provide comment on the technical work and proposed amendments to the ARs and SPP, prior to the SPA's submission to MECP for approval.

The process for Section 34 amendments for new or changing municipal residential drinking water systems is described in the following steps:

- SPA or drinking water system owner (municipality) initiates amendments under S. 34 and undertakes technical work (mapping of vulnerable areas, determining vulnerability scores);
- Early engagement with the Source Protection Programs Branch of the Ministry of the Environment, Conservation and Parks (MECP) for review and comment on technical work;
- SPA issues an administrative notice to the drinking water system owner when satisfied the technical work is complete and consistent with the Director's Technical Rules. The notice includes the required amendments to the AR and SPP and an anticipated timeline for the amendments;

- 4. Integration of the revisions into the AR and SPP by SPA staff, in consultation with the SPC:
- 5. SPA engages in pre-consultation with implementing bodies (e.g., affected municipalities and ministries);
- 6. SPA requires municipal endorsement, via Council resolutions, for locally initiated amendments under Section 34;
- 7. SPA engages in public consultation (minimum 35 days);
- 8. SPC receives revisions to the AR and SPP, and the results of consultation, and endorses the submission to the MECP;
- 9. SPA meeting to submit the amendments to MECP for approval.

Status Update

At SPC meeting #2/20, the CTC Program Manager provided a verbal update identifying several upcoming Section 34 amendments. At that time, technical work (e.g., modelling updates) for many of the amendments was underway by municipalities. This work was expected to be complete and associated reports on proposed amendments to the relevant Assessment Report(s) brought to the SPC by October 2020. However, some technical work has been delayed.

The status of the "in progress" amendments is summarized as follows, with revised timelines shown in Table 1:

- Newmarket Aurora Wellfields WHPA (Water Quality) Update: This amendment is at Step 8 in the process described above. A separate report to the CTC SPC provides more information on this amendment.
- The following S. 34 amendments are in the early stages (Steps 1-2 in the process described above):
 - Peel Region groundwater model update: CTC staff anticipated Section 34 amendments associated with an update to the Peel groundwater model in October. The model update could alter delineations and vulnerability scoring for all of Peel's drinking water systems. This would also trigger the need to revise the associated drinking water threat enumerations. This work was, however, temporarily suspended due to model delivery delays and technical review comments.
 - Enwave Toronto Island Water Treatment Plant Intake. A separate report to the CTC SPC provides more information on this amendment.
 - o Town of Erin Urban Centre Water Servicing Class Environmental Assessment
 - Town of Orangeville New Municipal Water Supply Class Environmental Assessment
 - Durham Region groundwater model update (Uxville)

TABLE 1. SECTION 34 AMENDMENTS IN PROGRESS WITHIN THE CTC SOURCE PROTECTION REGION.

Drinking Water System	Anticipated Timeline				
	Pre-Consultation	Public Consultation	Submission Date		
Newmarket-Aurora wellfields WHPA	Oct 30 – Dec 12, 2019	February 2020	January 2021		
Peel Region groundwater model update	January 2021	Spring 2021	Summer 2021		
Durham Region groundwater model update (Uxville)	To be determined	To be determined	To be determined		
New Toronto Island intakes	2022	2022	2022		
Town of Erin water supply	Fall 2021	Winter 2021	Spring 2022		
Town of Orangeville new water supply	Summer 2021	Fall 2021	Winter 2021		

DETAILS OF WORK TO BE DONE

Staff will continue to work with the municipalities to complete technical work and provide updates to the SPC on the status of S. 34 amendments.

Report prepared by:

Janet Ivey, Chief Specialist, Watershed Plans and Source Water Protection, Credit Valley Conservation

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T: 905-670-1615, extension 254 Email: Gayle.SooChan@cvc.ca

TO: Chair and Members of the Source Protection Committee

Meeting #3/20

DATE: November 23, 2020

FROM: Don Ford, Senior Manager, Hydrogeology and Source Water Protection, Toronto

and Region Conservation Authority

RE: Newmarket – Aurora Wellfields WHPA (Water Quality) Update

KEY ISSUE

Results of public consultation and next steps – Updates to the Wellhead Protection Areas for the Aurora Wellfield

RECOMMENDATION

IT IS RECOMMENDED THAT the CTC SPC endorse the technical work completed for the Aurora - Newmarket Wellfields for incorporation into the Approved Toronto and Region Assessment Report and the CTC Source Protection Plan;

AND FURTHER THAT staff and the Toronto and Region Source Protection Authority be directed to complete the actions necessary to submit the revised Toronto and Region Assessment Report and the CTC Source Protection Plan to the Ministry of Environment, Conservation, and Parks for approval.

BACKGROUND

The Yonge Street Aquifer (YSA) Well Capacity Restoration Environmental Assessment project identified a new well location in Aurora aimed at recovering lost well capacity due to aging infrastructure and water quality issues within the existing YSA well system. In 2016, a new production well was constructed in Aurora (Aurora PW7). Although the existing maximum permitted water taking rates for the other YSA wells and the overall YSA maximum permitted capacity will remain the same, the changes in water takings will alter the existing Aurora and Newmarket Wellhead Protection Areas (WHPAs).

A Drinking Water Works Permit (DWWP) is required prior to activation of Aurora PW7. The Ministry of Environment, Conservation and Parks (MECP) will have a condition in the DWWP requiring an update to the Approved Assessment Reports for the Toronto and Region (TRSPA) and Lake Simcoe and Couchiching/Black River Source Protection Areas, as well as the Approved Source Protection Plans for the South Georgian Bay Lake Simcoe (SGBLS) and Credit Valley, Toronto and Region and Central Lake Ontario (CTC) Source Protection Regions.

In accordance with the *Clean Water Act, 2006*, the YSA water supply system underwent a vulnerability assessment in 2007 (EarthFx and Azimuth, 2007 – revised in 2009) and a drinking water quality threats assessment in 2010 (Stantec, 2010). The introduction of Aurora PW7 to the YSA water supply system required an update to the YSA vulnerability and threats assessment.

York Region staff presented the updated wellhead protection areas to the CTC SPC October 8, 2019. CTC SPC Resolution #18/19 accepted the technical work for inclusion in the TRSPA Assessment Report and directed staff to complete the public consultation process and report back to the committee.

Public Consultation

CTC and SGBLS staff completed a 35-day consultation process in February 2020. No comments were received from the public, but ongoing discussions and meetings with the MECP resulted in minor changes to the mapping of the extents of WHPAs B, C, and D. Within the TRSPA, these included a small expansion of the WHPA-D to the south. However, the increased area is less than 1 ha, and virtually indistinguishable from the previous mapping. There were no changes to the enumeration of significant drinking water threats in the TRSPA jurisdiction, since significant threats are not possible in a WHPA-D.

MECP has provided preliminary direction to CTC and SGBLS staff regarding consultation on the minor changes to the mapping. Where the extent of vulnerable areas is reduced, MECP recommends notifying landowners or businesses that based on updated science and modeling, the area they are in is no longer identified as an area where significant drinking water threats can occur, and that therefore source protection plan policies no longer apply. This circumstance does not apply within the CTC Source Protection Region as significant threats are not possible in a WHPA-D.

Impact of changes on CTC Source Protection Plan Policies

The existing Source Protection Plan policies will adequately protect the new Aurora well with no additional policies anticipated as part of this amendment. Policies directed at the application of road salt (SAL 10-13), the handling and storage of dense non-aqueous phase liquids (DNAP-3), and the handling and storage of organic solvents (OS-3) will apply to moderate and low threats in the WHPA-D.

DETAILS OF WORK TO BE DONE

TRSPA staff will work with York Region staff and their consultant to resolve MECP's outstanding technical questions and incorporate the final technical results and revised mapping into the Approved Toronto and Region Assessment Report and CTC Source Protection Plan (as described in Attachment A). TRSPA staff will then take the final documentation to the Toronto and Region Source Protection Authority and submit the amendment to the Ministry of Environment, Conservation and Parks for approval in 2021.

Report prepared by:

Don Ford, Senior Manager, Hydrogeology and Source Water Protection, Toronto and Region Conservation Authority

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Scott Lister, Source Water Protection Program Manager and Risk Management Official, Regional Municipality of York

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Date: November 12, 2020

Attachments: 1

List of Anticipated Amendments to the TRSPA Assessment Report and CTC Source Protection

Plan

Attachment A – List of Anticipated Amendments to the TRSPA Assessment Report and CTC Source Protection Plan

No.	Section	Brief Description of Proposed Amendment		
TRSPA Assessment Report				
1.	Preface, Figure ES.7	Update figure to include WHPA-D for Aurora Well PW7.		
2.	Chapter 2, Section 2.3.2	Update text to reflect addition of Aurora DWS.		
3.	Chapter 2, Figure 2.7	Addition of Aurora DWS.		
4.	Chapter 2, Table 2.7	Addition of Aurora DWS.		
5.	Chapter 2, Section 2.4.7	Update text to reflect addition of Aurora Wellfield.		
6.	Chapter 4, Section 4.2	Addition of Aurora DWS.		
7.	Chapter 4, Figure 4.5	Update figure to include WHPA-D for Aurora Well PW7.		
8.	Chapter 4, Section 4.4	Addition of Aurora DWS.		
9.	Chapter 4, New Figure	Wellhead Protection Area mapping for Aurora Well PW7.		
10.	Chapter 4, New Figure	Intrinsic Vulnerability mapping for Aurora Well PW7.		
11.	Chapter 4, New Figure	Vulnerability Scoring for Aurora Well PW7.		
12.	Chapter 4, Table 4.5	Uncertainty - Addition of Aurora DWS.		
13.	Chapter 4, Section 4.4.7	Update text regarding uncertainty, if appropriate.		
14.	Chapter 5	Statement that no SDWT in Aurora DWS WHPA-D.		
15.	Chapter 7	Update Bibliography to include new reference to foundation report.		
16.	Appendix D, Section D2-1	Update section to include Aurora Drinking Water System.		
17.	Appendix D, Table D2-1	Update table with new technical report.		
18.	Appendix D, Section D2-5	Update Reference List to include new foundation report.		
19.	Appendix E, Table E4-1	Update table with Aurora Well PW7.		
20.	Appendix E, Section E4-2	Update section to incorporate results from Aurora DWS.		
21.	Appendix E, Section E4-3	Add section to discuss Aurora DWS.		
22.	Appendix E, Section E4-4	Update Reference List to include new foundation report.		
23.	Appendix E, New Figure	Aurora DWS – Impervious Surface Areas		
24.	Appendix E, New Figure	Aurora DWS – Managed Lands		
25.	Appendix E, New Figure	Aurora DWS – Livestock Density		
CTC Source Protection Plan				
26.	Figure 2.2	Update figure to include Aurora DWS.		

TO: Chair and Members of the Source Protection Committee

Meeting #3/20

DATE: November 23, 2020

FROM: Janet Ivey, Chief Specialist, Watershed Plans and Source Water Protection,

Credit Valley Conservation

RE: Proposed 2021 CTC Source Protection Committee Meeting Schedule

KEY ISSUE

Meeting schedule of the CTC Source Protection Committee (SPC) for 2021.

RECOMMENDATION

IT IS RECOMMENDED THAT CTC Source Protection Committee members approve the 2021 CTC SPC meeting schedule, and direct staff to post the approved schedule on the CTC Source Protection Region website.

BACKGROUND

CTC Source Protection Region staff propose four meetings in 2021 so that the CTC Source Protection Committee (CTC SPC) can continue to support municipal and Conservation Authority staff implementation of the Source Protection Plan. In addition to CTC SPC meetings, the Amendments and Municipal Implementation Working Groups will be convened as necessary, to guide progress and make recommendations to the CTC SPC for their action.

CTC SPC meetings are expected to be held virtually in 2021. In-person meetings will be considered when advisable, in consideration of applicable Provincial, conservation authority, and municipal COVID-19 guidance and policies.

Meeting Date	Time
Tuesday February 23, 2021	1:00-4:00 pm
Tuesday May 18, 2021	1:00-4:00 pm
Tuesday September 21, 2021	1:00-4:00 pm
Tuesday December 7, 2021	1:00-4:00 pm

DETAILS OF WORK TO BE DONE

Staff will post the approved schedule of meeting dates on the CTC SPR website (www.ctcswp.ca). Meeting dates may be revised as necessary to accommodate program developments or requests by the Working Groups.

Report prepared by:

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T: 905-670-1615, ext. 379

Email: Janet.ivey@cvc.ca

Date: November 11, 2020

TO: Chair and Members of the CTC Source Protection

Committee, Meeting #3/20

DATE: November 23, 2020

FROM: Don Ford, Senior Manager, Hydrogeology and Source Water Protection, Toronto

and Region Conservation Authority

RE: A new Enwaye – Toronto Island Water Treatment Plant intake

KEY ISSUE

Report to the CTC Source Protection Committee (SPC) to introduce an upcoming Section 34 amendment for a new deep water intake for the Toronto Island Water Treatment Plant.

RECOMMENDATION

THAT the CTC Source Protection Committee receive the report on a new Enwave – Toronto Island Water Treatment Plant intake for information.

BACKGROUND

Enwave Energy Corporation (Enwave) provides cooling to over 80 buildings in downtown Toronto through a District Energy System that uses cooling energy from the City of Toronto's drinking water infrastructure through a system of heat exchangers. To respond to growing demand for cooling in Toronto's downtown core, Enwave and the City of Toronto, as co-proponents, have undertaken a Municipal Class Environmental Assessment (MCEA) study to examine expanding the existing Deep Lake Water Cooling (DLWC) system (Figure 1).

The existing DLWC system pipes treated potable water through heat exchangers and then to the City's potable water distribution system. The cooling system water is an independent system from the drinking water supply system. Following consultation with the community and key stakeholders, the study identified a preferred solution to expand the DLWC supply. The preferred solution includes the addition of up to two new intakes deep into Lake Ontario at the Island Water Treatment Plant (WTP). Raw water would bypass the WTP and be delivered to an energy transfer station and cooling plant before being discharged back to the Toronto Harbour. This new system using raw water would be supplementary and parallel to the existing system using potable water.

The Island WTP currently has two inactive shallow intakes and three active deep lake intakes. To provide for the required hydraulic capacity at the intake manifold, a fourth intake at the Island WTP is needed. Under most conditions, the fourth intake will supply the new cooling system, but when needed, the piping configuration will allow water drawn through the fourth intake to supply raw water to the Island WTP. One of the existing shallow intake pipes at the Island WTP is expected to be slip lined and extended as part of construction of the new fourth deep intake. A fifth deep intake could be constructed in the future.

The MCEA was initiated in January 2020, a virtual public meeting was held in the summer of 2020, the Notice of Completion was issued on Sept 11, 2020, and the mandatory 30-day public review period is complete. Project implementation will be through a design—build project

anticipated to run from Fall 2020 through to May 2023, with commissioning and initiating the water supply in May 2023.

Section 34 Amendment

Changes to municipal drinking water systems need to be incorporated into Assessment Reports in order for the Source Protection Plan policies to apply. A Section 34 amendment will be required under the Clean Water Act for the changes to the Toronto Island intakes.

The City of Toronto has undertaken the needed technical studies to support amendments to the Toronto and Region Source Protection Area Assessment Report in parallel with the MECA study, and they are nearing completion. The timing of the proposed Section 34 amendments, including technical work and mandatory consultation, will be determined by the timing of the completion of the new fourth intake, but is not expected before 2022.

Figure 2 shows the current two shallow and three deep Island WTP intakes and associated Intake Proteciton Zones (IPZs). IPZ 1s are based on a 1 km radium from the intake; IPZ 2s are based on a 2-hour time of travel from the lake to the intake. The IPZ-3s (Event-based areas) Required Section 34 amendments to the text and mapping of the Toronto and Region Source Protection Area Assessment Report are expected to include:

- Addition of IPZs 1 and 2 for the new fourth intake, and deletion of the existing IPZs 1, 2, and 3 for the east shallow intake that will be incorporated into the new intake; and
- Incorporation of technical results from IPZ 3 (modelled) evaluations related to the new fourth intake and for an anticipated new future location of the Ashbridges Bay Treatment Plant outfall that would affect all intakes. Construction of the new outfall has been initiated, with an anticipated completion date of 2025.

No changes are anticipated to the policies of the CTC Source Protection Plan (SPP), resulting from the new intake. However, changes will be required to mapping in the SPP.

DETAILS OF WORK TO BE DONE

CTC staff and City of Toronto staff are working together to identify the anticipated required amendments to the Assessment Report and Source Protection Plan. Staff will continue to update the CTC SPC regarding the timing of Section 34 amendments for this project.

Report prepared by:

Bill Snodgrass, Source Protection Risk Management Senior Engineer, City of Toronto T: 647-216-2417

Email: Bill.Snodgrass@toronto.ca

Janet Ivey, Chief Specialist, Watershed Plans and Source Water Protection, Credit Valley Conservation

T: 905-670-1615, ext. 379 Email: <u>Janet.ivey@cvc.ca</u>

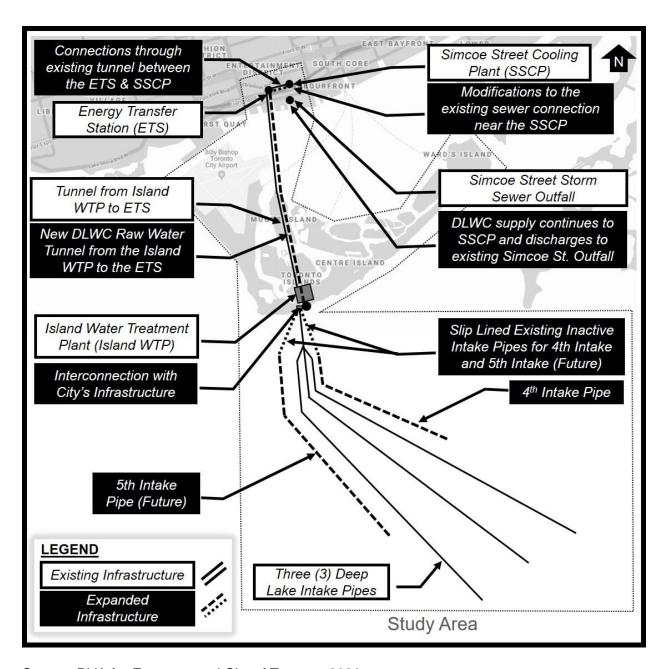
Don Ford, Senior Manager, Hydrogeology and Source Water Protection, Toronto and Region Conservation Authority

Tel: 416-661-6600, ext. 5369

Email: don.ford@trca.ca

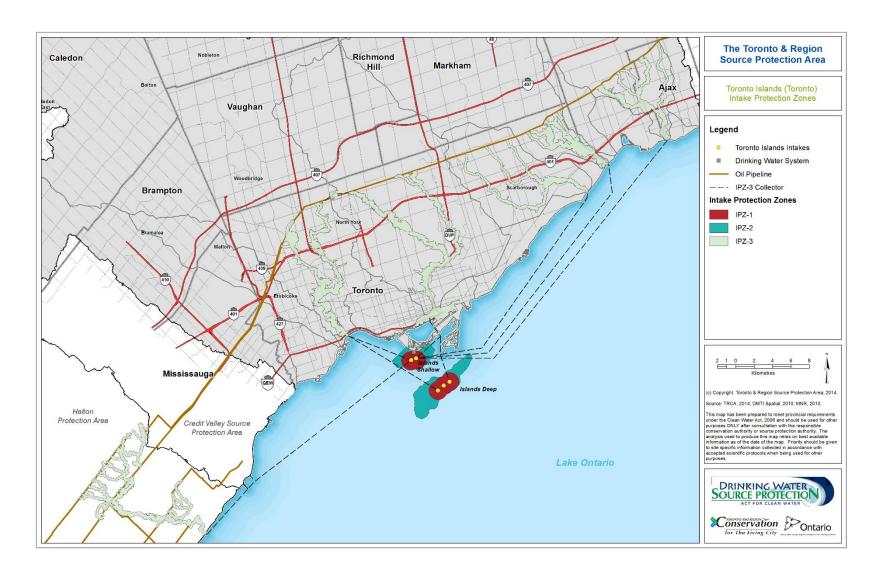
Date: November 12, 2020

Figure 1: Proposed Toronto Island Intakes



Source: RVA for Envwave and City of Toronto, 2020.

Figure 2: Current Toronto Island Intakes with IPZs





5 Shoreham Drive, Downsview, ON M3N 1S4 T. 416-661-6600 ext. 5633 | sourcewater@trca.on.ca

CTC Source Protection Region

Source Protection Committee

June 29, 2020

Wendy Wright-Cascaden Chair, Lake Erie Source Protection Committee 400 Clyde Road, PO Box 729 Cambridge ON. N1R 5W6

Dear Ms. Wright-Cascaden:

On May 13th, 2020, the Credit Valley - Toronto and Region - Central Lake Ontario (CTC) Source Protection Committee (SPC) received Report #9.2 entitled "Support for Actions to Address Over-Application of Winter Maintenance Chemicals to Protect Sources of Municipal Drinking Water". This report included a recommendation that the CTC SPC endorse the Lake Erie Source Protection Committee's Report # SPC-19-12-02.

I am writing to inform you that the CTC SPC agreed to support and endorse the recommendations outlined in the Lake Erie SPC report (Attachments 1, 2). The CTC Source Protection Region continues to monitor increasing sodium and chloride concentrations in municipal wells in the Town of Orangeville and Halton Region and supports changes that could mitigate the impacts of winter maintenance chemicals on drinking water sources.

Thank you for the opportunity to support your recommendation. Please do not hesitate to contact me should you have any questions about this correspondence.

Sincerely,

Gavle Soo Chan

G. Soo Chan.

Director - Watershed Knowledge and Acting contact, CTC Source Protection Committee

Attachment 1: CTC SPC Report #9.2 – Meeting #2/20, May 13, 2020

Attachment 2: Excerpt CTC SPC Meeting Minutes - Resolution #13/20 - Meeting #2/20

Copy to:

Laurie Nelson, Director - Policy Planning, Toronto and Region Conservation Authority Doug Wright, Chair – CTC Source Protection Committee



5 Shoreham Drive, Downsview, ON M3N 1S4 T. 416-661-6600 ext. 5633 | sourcewater@trca.on.ca

CTC Source Protection Region

Source Protection Committee

June 29, 2020

Keley Katona, Director, Source Protection Programs Branch Ministry of Environment, Conservation and Parks 40 St. Clair Ave W, 14th Floor Toronto, ON M4V 1M2

Dear Keley:

As you are aware, on May 31st, 2020, the Credit Valley -Toronto and Region- Central Lake Ontario (CTC) Source Protection Region submitted its fourth annual report regarding the implementation of the CTC Source Protection Plan (SPP) as required under the *Clean Water Act, 2006* and Ontario Regulation 287/07. This submission reported that of the 10,583 significant drinking water threats (SDWTs) that were enumerated in December 2015 when the CTC SPP came into effect, 424 of these threats remain to be addressed by policies in the CTC SPP. With in-depth, thorough reports presented to the Committee by municipal and source protection authority (SPA) staff, the committee concluded that substantial, tangible progress has been made over the last four years and recognized that work is actively on-going.

As you are also aware, there is one legislated deadline stipulated in the CTC Source Protection Plan, that staff concluded will not be met; that being the completion of all Risk Management Plans to address SDWTs by December 31st, 2020. As a result, the committee chose to report the status of SPP implementation as "Progressing well, but short of target" in its submission to the Province for 2019.

Risk Management Plan Progress

In 2019, 41 risk management plans were established in the CTC Source Protection Region. This number reflects the most risk management plans generated in any one calendar year. At the end of 2019, 72 risk management plans are in place across the CTC Source Protection Region. Municipalities have reported that 27 risk management plans are in the process of being completed. There were 45 inspections carried out by a risk management inspector for prohibited or regulated activities. In 2019, there was a 100% compliance rate with risk management plans and prohibited activities that were inspected.

Although municipalities across the CTC Source Protection Region have made significant progress in establishing risk management plans, it will not be possible to complete the remaining 236 plans by the December 2020 deadline. On an annual basis, there is great variation across municipalities, in the number of risk management plans that can be developed based on the complexity of these documents, the number of threats being addressed through the Plan, and the willingness of the parties carrying out the activity(ies) to negotiate the parameters of the Plan. Therefore, in May 2020, the CTC Source Protection Committee agreed to allow a three-year extension for the remainder of Risk Management Plans to be complete, pending approval from the Province of Ontario.

CTC SPC Recommendations

At Meeting #2/20, the CTC Source Protection Committee endorsed the following recommendations:

THAT the CTC Source Protection Committee authorizes a 3-year extension to the December 31, 2020 deadline for municipalities to complete risk management plans (RMPs) that address existing significant drinking water threats contingent on their submission of a workplan outlining activities between January 1, 2021 and December 31, 2023;

THAT a letter be sent from the Source Protection Committee to each of the municipal Councils advising them of the extension that is being granted, asking for their support in obtaining the resources necessary to meet the requirements of the workplan and to remind their Risk Management Officers when necessary, to make use of their powers under the Clean Water Act;

THAT all municipalities submit their workplan to the CTC Source Protection Committee for their information, and if necessary, discussion, at Meeting #1/21 anticipated in January 2021);

THAT all municipalities respond on the status of workplan progression by February 1st of each calendar year through 2024;

AND FURTHER THAT staff be directed to take the necessary action to request a formal 3-year extension to December 31, 2023 for the completion of RMPs to address the remaining existing significant drinking water threats.

As the Chair of the CTC SPC, this letter is to formally request an extension of the deadline to complete RMPs in the CTC SPR by three years, from December 31st, 2020 to December 31st, 2023.

Please find attached Report 9.1 to the CTC SPC from Meeting #2/20, held on May 13th, 2020, along with Resolution #12/20, for your information. We look forward to your approval of our request.

Please contact Gayle Soo Chan, Director, Watershed Knowledge, Credit Valley Conservation should you have any questions.

Sincerely.

Douglas Wright

Chair, CTC Source Protection Committee

Doug Wought

Copy to:

Debbie Scanlon, Manager - Source Protection Approvals Unit, Ministry of the Environment, Conservation and Parks (MECP)

Tea Pesheva, Liaison Officer - Strategic Planning Operations and Implementation Unit, MECP Laurie Nelson, Director - Policy Planning, Toronto and Region Conservation Authority Gayle SooChan, Director - Watershed Knowledge, Credit Valley Conservation



VIA EMAIL

July 23, 2020

Legislative & Planning Services Department Office of the Regional Clerk 1151 Bronte Road Oakville ON L6M 3L1

Ministry of Municipal Affairs and Housing, Heather Watt Lake Erie Region Source Protection Committee, Martin Keller Halton-Hamilton Source Protection Committee, Chitra Gowdra Credit Valley-Toronto Region-Central Lake Ontario (CTC) Source Protection Committee, Gayle Soo Chan Conservation Halton, Barb Veale Credit Valley Conservation Authority, Joshua Campbell Grand River Conservation Authority, Nancy Davy City of Burlington, Kevin Arjoon Town of Halton Hills, Suzanne Jones Town of Milton, Meghan Reid Town of Oakville, Vicki Tytaneck

Please be advised that at its meeting held Wednesday, July 15, 2020, the Council of the Regional Municipality of Halton adopted the following resolution:

LPS52-20 re: Regional Official Plan Review – Natural Heritage RESOLUTION: **Discussion Paper**

- 1. THAT Report No. LPS52-20 re: "Regional Official Plan Review – Natural Heritage Discussion Paper" be received.
- 2. THAT Regional Council direct staff to release the "Natural Heritage Discussion Paper" (document under separate cover) and "Natural Heritage Landing Page" attached to Report No. LPS52-20 as a basis for public consultation on the Regional Official Plan Review to commence in July 2020.
- 3. THAT the Regional Clerk forward a copy of Report No. LPS52-20 to the Ministry of Municipal Affairs and Housing, the City of Burlington, the Town of Halton Hills, the Town of Milton, the Town of Oakville, Conservation Halton, Credit Valley Conservation, Grand River Conservation Authority, Lake Erie Region Source Protection Committee, Halton-Hamilton Source Protection Committee, and Credit Valley - Toronto and Region - Central Lake Ontario (CTC) Source Protection Committee.

Enclosed please find a copy of Report No. LPS52-20 for your information.

Regional Municipality of Halton

HEAD OFFICE: 1151 Bronte Rd, Oakville, ON L6M 3L1 905-825-6000 | Toll free: 1-866-442-5866





If you have any questions please contact me at extension 7110 or the e-mail address below.

Sincerely,

Graham Milne Regional Clerk graham.milne@halton.ca



The Regional Municipality of Halton

Report To: Regional Chair and Members of Regional Council

From: Bob Gray, Commissioner, Legislative and Planning Services and

Corporate Counsel

Date: July 15, 2020

Report No. - Re: LPS52-20 - Regional Official Plan Review - Natural Heritage

Discussion Paper

RECOMMENDATION

1. THAT Report No. LPS52-20 re: "Regional Official Plan Review – Natural Heritage Discussion Paper" be received.

- THAT Regional Council direct staff to release the "Natural Heritage Discussion Paper" (document under separate cover) and "Natural Heritage Landing Page" attached to Report No. LPS52-20 as a basis for public consultation on the Regional Official Plan Review to commence in July 2020.
- 3. THAT the Regional Clerk forward a copy of Report No. LPS52-20 to the Ministry of Municipal Affairs and Housing, the City of Burlington, the Town of Halton Hills, the Town of Milton, the Town of Oakville, Conservation Halton, Credit Valley Conservation, Grand River Conservation Authority, Lake Erie Region Source Protection Committee, Halton-Hamilton Source Protection Committee, and Credit Valley Toronto and Region Central Lake Ontario (CTC) Source Protection Committee.

REPORT

Executive Summary

- The Regional Official Plan Review is underway and currently in Phase 2. Phase 2 focusses on research, technical analysis and development of Discussion Papers related to key themes of the Regional Official Plan Review.
- There are 5 Discussion Papers in total that have been prepared: Rural and Agricultural System, Natural Heritage, Regional Urban Structure, Climate Change and North Aldershot Planning Area.
- The Discussion Papers explore issues and options on each topic that represent the range of choice in contemplating how the Official Plan could achieve conformity with the Provincial Plans and Provincial Policy Statement.

- For each of the topics, the Discussion Papers are also accompanied by 'Landing Pages'. The Landing Pages have been developed to provide a simplified, plain language summary of the Discussion Papers that can be accessible to the general public.
- This Report profiles the Natural Heritage Discussion Paper, included as Attachment #1 (document under separate cover), that explores proposed refinements to Natural Heritage System policy and mapping, water resource system policies and mapping, drinking water source protection policies, and updates to natural hazards policies in response to changes to the Provincial Policy Statement (2020) and Provincial Plans.
- All of the Discussion Papers will be presented as part of a workshop of Regional Council on July 8, 2020.
- It is recommended that this report and the accompanying Discussion Paper and Landing Page be released for public consultation as described in this Report.

Background

As part of the Regional Official Plan Review, staff are examining Natural Heritage policies and mapping to strengthen the Region's existing Natural Heritage System framework while conforming to new provincial policy directions such as the Growth Plan Natural Heritage System mapping, water resource systems planning and source water protection implementation. Background technical memos have been prepared to audit natural heritage mapping and policies, review best practices and examine options for implementing source water protection plans in Halton. This background work has identified key Natural Heritage System policy issues and options to explore, which is summarized in the Natural Heritage Discussion Paper appended to Report No. LPS52-20 as Attachment #1 (document under separate cover).

To complement the Natural Heritage Discussion Paper in Attachment #1, a Natural Heritage Landing Page was also developed and is provided as Attachment #2. Landing Pages were developed for all the Discussion Papers to provide a simplified, plain language summary of the Discussion Papers intended to provide an enhanced opportunity for consultation with the general public. These Landing Pages will be posted on halton.ca/ropr and will include links to access the Discussion Papers.

Discussion

Halton Region has been at the forefront of natural area planning since the 1980s, well before the Province made it mandatory for municipalities to do so. Natural heritage has a central place within the planning vision for Halton as described in the Regional Official Plan. Within this vision, two concepts feature prominently. The first is "sustainable development", in which protecting the natural environment is a vital factor. The second is "landscape permanence", which recognizes that although the Region will urbanize and

change, certain landscapes must be preserved permanently. Consistent with the Region's strong commitment to the environment, natural heritage preservation has been strengthened in each successive Regional Official Plan.

Extensive background technical work was undertaken to inform the development of the Natural Heritage Discussion Paper. The technical work included a review of applicable Regional and Provincial Plans and guidelines, best practices, policy and mapping analysis, and a review of drinking water source protection plans affecting Halton. These technical memos will be made available on Halton's Regional Official Plan Review webpage (halton.ca/ropr).

The Natural Heritage Discussion Paper has identified key themes that should be further investigated through the Regional Official Plan Review. For each theme, the Discussion Paper contains a brief overview of the policy area and provides policy and mapping options for discussion. A summary of the important information and discussions contained in the Discussion Paper can be found in the Natural Heritage Landing Page (Attachment #2)

Natural Heritage Discussion Paper

The Natural Heritage component of the Regional Official Plan Review is intended to build upon and strengthen the Natural Heritage System policies and mapping in the existing Regional Official Plan and ensure consistency/conformity with recent updates to the Provincial plans. The key policy and mapping options explored in the Natural Heritage Discussion Paper are listed below.

1- What is the best approach for incorporating the Natural Heritage System for the Growth Plan into the Regional Official Plan?

The Growth Plan (2019) has introduced a new Natural Heritage System for the Growth Plan, which includes policies and mapping. In order to conform to the Growth Plan (2019), the Region must now include the provincial Natural Heritage System mapping and policies in the Regional Official Plan. The Natural Heritage Discussion Paper outlines options for incorporating the Natural Heritage System for the Growth Plan.

In addition to incorporating the Growth Plan Natural Heritage System within the Regional Official Plan, staff are refining the "Natural Heritage System" maps (Maps 1 and 1G) to reflect planning decisions that have been made since ROPA 38, Ontario Municipal Board decisions, and updates to data source layers (i.e. provincially significant wetlands) provided by the Province and/or conservation authority. Undertaking these refinements is essential to provide transparent mapping that accurately reflects current policy approaches and to incorporate the most current data sources available. The Natural Heritage Discussion Paper presents these mapping refinements for consultation within a draft "2019 Regional Natural Heritage System" map.

Through Phase 2 of the Regional Official Plan Review, Regional staff have and will continue to work closely with our local municipal and conservation authority partners on

the update to the Regional Natural Heritage System mapping. The proposed draft 2019 Regional Natural Heritage System mapping will continue to evolve during the Regional Official Plan Review process based on availability of new source data and additional consultation with municipalities, agencies and the public. The final mapping refinements will be included in the Regional Official Plan Amendment that will be presented as part of Phase 3.

2- Regional Natural Heritage System policies were last updated through ROPA 38. Are the current goals for the Regional Natural Heritage System policies still relevant/appropriate?

Beyond conformity with the updated Provincial plans, the Natural Heritage Discussion Paper identifies a number of additional policy options for improvement and clarification including: strengthening the precautionary principle identified in the Regional Official Plan; how to address buffers/vegetation protection zones; and how to address centres for biodiversity within the Natural Heritage System. The Natural Heritage Discussion Paper outlines options for strengthening existing policies to improve the implementation of Regional Official Plan.

3- How should policy and mapping address the relationship between natural heritage protection and agriculture outside of the urban area?

Natural heritage and agriculture require a balance in priorities to guarantee and strengthen their coexistence. Policy and mapping for natural heritage and agriculture require coordination to ensure effective implementation. The Natural Heritage Discussion Paper discusses options to determine the best approach in clearly representing the relationship between agriculture and natural heritage in the Regional Official Plan given the requirements set out by the Provincial Plans for lands outside of the settlement areas. Staff received feedback and input to the Discussion Paper from Halton's Natural Heritage Advisory Committee and Halton's Agricultural Advisory Committee. The Natural Heritage Discussion Paper outlines options for implementing the refined Natural Heritage System and Agricultural System mapping in the Regional Official Plan.

4- How should the Water Resource System be incorporated into the Regional Official Plan?

The updated Greenbelt Plan (2017) and Growth Plan (2019) now require municipalities to identify a Water Resource System in Official Plans. There are a number of similarities between the components of the Water Resource System and Natural Heritage System. As such, policy and mapping options around how to best incorporate the Water Resource System are presented in the Natural Heritage Discussion Paper.

5- What is the best approach to address Drinking Water Source Protection policies and mapping?

As required under the *Clean Water Act*, 2006, a number of Source Protection Plan policies related to land use must be implemented into the Regional Official Plan. While many of the policies in the three Source Protection Plans that impact Halton Region are similar to

each other, there are differences in policy approaches. The Natural Heritage Discussion Paper provides several options related to policy frameworks and mapping approaches to address provincial conformity with respect to implementing land use policies in the Source Protection Plans.

6- The Regional Official Plan is required to conform to the updated Natural Hazards policies in the Provincial Policy Statement (2020). What is the best approach to incorporate Natural Hazard policies and mapping?

The Provincial Policy Statement (2020) places greater emphasis on the avoidance of Natural Hazards, which include hazardous lands, flooding hazards, erosion hazards, dynamic beach hazards and hazardous sites as defined in the Provincial Policy Statement. The Natural Heritage Discussion Paper presents options to include the Provincial policy direction on Natural Hazards and the findings of Ontario's Special Advisor on Flooding report (2019) within the Regional Official Plan.

Relationship with Other Components of the Regional Official Plan Review

The Natural Heritage component of the Regional Official Plan Review is related to each of the other components as follows:

- Integrated Growth Management Strategy: Any expansion of Settlement Area boundaries through the Integrated Growth Management Strategy must ensure the protection of the Natural Heritage System.
- Rural and Agriculture: Designating and mapping prime agricultural areas will need to be coordinated with the Natural Heritage System policy and mapping updates to ensure effective implementation.
- *Climate Change*: Natural Heritage protection and enhancement is an important part of responding to climate change in terms of both adaptation and mitigation.
- North Aldershot Special Policy Area: Updates to the North Aldershot Special Policy Area policies will need to be coordinated with the Natural Heritage System policy and mapping updates to integrate the Regional Natural Heritage System on Map 1G in the Regional Official Plan and the Natural Heritage System for the Provincial Growth Plan.

Engagement Approach for the Regional Official Plan Review Discussion Papers

While engagement for the Regional Official Plan Review will be undertaken consistent with the Council endorsed Public Communication and Engagement Strategy (Report No. LPS44-17), adjustments need to be made to the proposed schedule and engagement format as a result of COVID-19. Accordingly, Phase 2 Discussion Paper public consultation will be conducted primarily through online engagement. An expanded 75-day consultation period will take place from July 15 – September 28, 2020 and will include:

 Discussion Papers and Landing Pages, which summarize the Discussion Papers, being posted on halton.ca/ropr

- People will be able to provide their responses to questions posed and/or general comments using an online survey tool;
- Presentations to local municipal Councils on the Discussion Papers, as requested.
- Meetings with Advisory Committees;
- Public Information Centres, which will be held virtually, but following the same outline as a traditional Public Information Centre with an introduction, staff presentation and question/answer session. A technical moderator and a process facilitator will be utilized. People who do not have access to the virtual meeting because they do not have the technology, are not comfortable with the technology, or have accessibility issues will be accommodated;
- Public Information Centre meeting materials and questions, which will be posted on halton.ca/ropr to allow people to provide input and comments after the sessions;
- Stakeholder meetings, which will be held using a virtual meeting format;
- Indigenous people's engagement undertaken on a case-by-case basis depending on the preferences of those communities; and
- Receipt of comments to the Regional Official Plan email account at ropr@halton.ca.

Public notification of these engagement opportunities will be promoted through the Region's website, newspaper advertisements, signboards, mailing lists, social media, stakeholder groups, and other means.

Given that part of the engagement period is during the summer, most engagement activities will be focused in the month of September.

It is recognized that the engagement plan may have to be adjusted in light of changes to COVID-19 restrictions. Staff will monitor restrictions and make adjustments as needed. However, the groups/individuals and the content of the engagement will not change.

The Discussion Paper engagement within the context of the broader Regional Official Plan Review engagement process is shown graphically in Attachment #3.

Next Steps

Upon release of the Discussion Paper and Landing Page, all input received through public engagement will be recorded, responded to, as necessary, and presented to Regional Council in a Consultation Summary Report.

The comments received on the Discussion Papers and Landing Pages will also be used in determining 'policy directions' that will be presented to Council in advance of preparing amendments to the Regional Official Plan. There will be additional opportunities for public engagement throughout the Regional Official Plan Amendment process in Phase 3 of the Regional Official Plan Review in 2021. Phase 3 will involve preparing and finalizing any necessary Regional Official Plan Amendment(s).

FINANCIAL/PROGRAM IMPLICATIONS

The current approved budget for T8021 (Regional Official Plan Update) includes sufficient funding to facilitate the Regional Official Plan Review.

Respectfully submitted,

Curt Benson

Director, Planning Services and Chief

Planning Official

Bob Gray

Commissioner, Legislative and Planning

Services and Corporate Counsel

Approved by

Jane MacCaskill

Chief Administrative Officer

Jane Malashell

If you have any questions on the content of this report, please contact:

Curt Benson

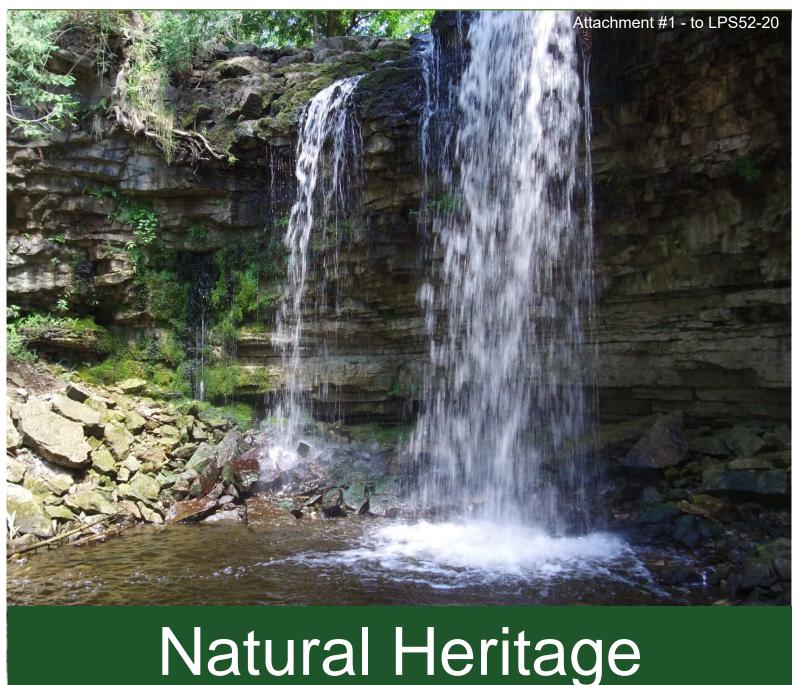
Tel. # 7181

Attachments:

Attachment #1 – Natural Heritage Discussion Paper (Under Separate Cover)

Attachment #2 - Natural Heritage Landing Page

Attachment #3 – Regional Official Plan Review Public Engagement Process



Natural Heritage Discussion Paper

Regional Official Plan Review

June 2020

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Executive Summary

Introduction

The Regional Municipality of Halton is undertaking a Regional Official Plan Review (ROPR) in accordance with Provincial requirements established in Section 26 of the Planning Act. The last comprehensive review of the Regional Official Plan (ROP) was the Sustainable Halton process completed in 2009 that resulted in Regional Official Plan Amendments (ROPA) 37, 38, and 39, which implemented the policies of the Growth Plan for the Greater Golden Horseshoe 2006 and the Greenbelt Plan 2005, amongst other key policy initiatives. The ROPR is being undertaken in three phases and the Natural Heritage Discussion Paper is part of Phase 2. Phase 2 will inform the development of ROP policies during the upcoming policy drafting phase of the ROPR (Phase 3).

Through this ROPR, specific theme areas and policies will be updated, enhanced and refined based on changing demographics, evolving land use trends and changes to the Provincial Policy Statement (PPS) 2020, Greenbelt Plan 2017, A Place to Grow: Growth Plan for the Greater Golden Horseshoe 2019 (Growth Plan) and the Niagara Escarpment Plan (NEP) 2017. The ROPR also provides an opportunity for a comprehensive review of the effectiveness of existing policies and implementation through a Municipal Comprehensive Review (MCR) process.

Halton Region and the Natural Heritage System

Natural heritage has a central place within the planning vision for Halton as described in the ROP. Within this vision, two concepts feature prominently. The first is "sustainable development", in which protecting the natural environment is a vital factor. The second is "landscape permanence", which recognizes that although the Region will urbanize and change, certain landscapes must be preserved permanently.

To strengthen the long-term viability of Halton's natural heritage and water resources, the ROPR process includes:

- a review of current ROP policies and mapping relating to Halton's Natural Heritage System (NHS);
- a review of the Region's Natural Heritage policies to be consistent with updated Provincial Plans;
- incorporating the Natural Heritage System for the Growth Plan and updating the Regional Natural Heritage System mapping;

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- identifying actions that are needed to achieve the Region's natural heritage objectives; and
- exploring new opportunities to meet the objectives of the <u>Halton Region</u> Strategic Business Plan 2019-2022.

Relationship with other ROPR Components

Updates to the ROP need to reflect the many changes in the PPS and Provincial Plans since the last ROP review. The planning horizon to accommodate additional residential and employment growth in Halton Region is being extended to 2041, which has implications on decisions on where and how we grow in the Region. In turn, the Regional Municipal Comprehensive review will examine the interrelationship of growth, natural heritage systems, agricultural heritage systems and climate change, which are all key theme components of the review. The Natural Heritage System component of the ROPR will have implications for each theme of the ROPR.

Integrated Growth Management Strategy (IGMS) – where the NHS is identified will help to determine the best location for future growth areas including the amount of developable land and consideration of urban boundary expansions if required.

Rural and Agriculture – natural heritage and agriculture are often located in the same areas and require a balance in priorities to guarantee and strengthen their coexistence. New direction from the Province related to designating prime agricultural areas will have an impact on the approach taken for NHS identification. The outcomes from the two topic areas require close alignment to ensure effective implementation.

Climate Change - NHS protection and enhancement is an important part of responding to climate change in terms of both adaptation and mitigation. The NHS provides for more resilient environments and can allow opportunities to reduce impacts of flooding and other risks associated with extreme weather events. NHS protection and enhancement can also play an important role in acting as a carbon sink to reduce green house gas emissions.

North Aldershot Special Policy Area - The ROP essentially treats the North Aldershot as a distinct policy area based on the North Aldershot Inter-Agency Review Final Report (May 1994) (the "North Aldershot Plan"). The North Aldershot Plan predates the last two reviews of the Official Plan and all current Provincial plans and does not reflect current policies and mapping regarding natural heritage. A relatively large proportion of the area is mapped within the RNHS on Map 1G in the ROP. The recent NHSGP includes several large areas of North Aldershot that are not currently included in the RNHS. Additional information pertaining to the North Aldershot area can be found in the North Aldershot Planning Area Discussion Paper for the ROPR.

Technical Background Work

The Natural Heritage Discussion Paper provides an overview on the analysis completed on the technical background work as part of Phase 2 of the ROPR. Technical analysis was completed on relevant background information, best practices for NHS and Water Resource System (WRS) policy and planning, drinking water source protection, and a review of existing and new policies and mapping. Each section of the Discussion Paper contains a brief overview of the policy area, along with relevant considerations and provides options for discussion and consideration. The Natural Heritage Discussion Paper does not outline all conformity considerations, nor does it detail all housekeeping items identified through the policy audit review. This information can be found in the technical work completed by the Region in support of this Natural Heritage Discussion paper and will be made available on Halton Region's Regional Official Plan Review webpage.

Discussion Paper Questions

Throughout the Natural Heritage Discussion papers, there are discussion questions being presented for each theme and a summary of these questions can be found in Appendix 1. The Region is requesting that the reader respond to these questions in their comments on the Discussion Paper. Additional information and detailed analysis for each topic can be found in the Appendix and Technical Background Memos.

The Natural Heritage Discussion Paper is one of five discussion papers being made available to support public input for the Regional Official Plan Review.

How to get Involved:

Please visit halton.ca/ropr to learn more and provide feedback.

The Regional Official Plan Review page contains more information to support participation as well as a questionnaire on the policy themes being considered by Regional Council.

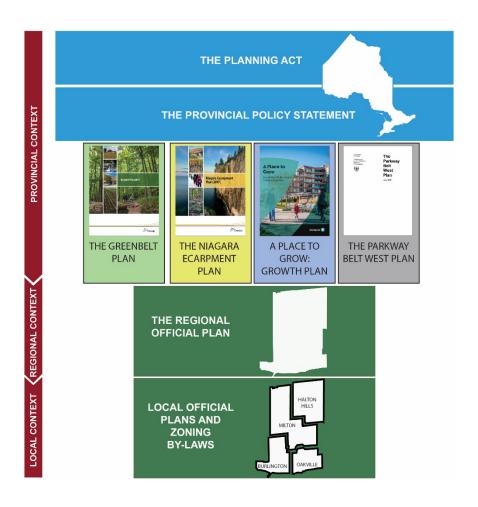
Comments can also be submitted to ropr@halton.ca.

1.0 Background

1.1 Regional Official Plan Review (ROPR)

The Regional Municipality of Halton is undertaking a Regional Official Plan Review (ROPR) in accordance with Provincial requirements established in Section 26 of the <u>Planning Act</u>. The last comprehensive review of the Regional Official Plan (ROP) resulted in Regional Official Plan Amendments (ROPA) 37, 38, and 39, which implemented the policies of the Growth Plan for the Greater Golden Horseshoe 2006 and the Greenbelt Plan 2005, amongst other key policy initiatives. The general framework for land use planning in Halton is set out in below.

Figure 1: Ontario's Land Use Planning Framework as Applicable to Halton Region



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The current ROPR will ensure consistency with the <u>Provincial Policy Statement</u> (PPS), 2020, as well as conformity to <u>A Place to Grow: Growth Plan for the Greater Golden Horseshoe</u> (2019), the <u>Greenbelt Plan</u> (2017) and the <u>Niagara Escarpment Plan</u> (NEP) (2017).

The ROPR is a three-phased process: Phase 1 was completed on October 2016 through the endorsement of Phase 1 "Directions Report" which outlined the tasks and deliverables to be undertaken during the two phases of the ROPR. Phase 2, currently underway, is centered on the production of five discussion papers researching and analyzing potential options to address the ROPR key theme areas shown in Figure 2. The work in Phase 2 will inform the development of ROP policies during the upcoming policy drafting phase of the ROPR (Phase 3).

Figure 2: ROPR Phase 2 key theme areas addressed through research, analysis and discussion papers.



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2.0 Evolution of Natural Heritage at Halton Region

Halton Region is well known for its rich natural areas (e.g. forests, wetlands) and physical formations (e.g. Niagara Escarpment, glacial features, valleylands) that provide habitat for a diversity of plants and wildlife. Human settlement has significantly reduced the amount of natural habitat in Halton making it critically important to protect the remaining natural areas, our natural heritage, for current and future generations.

Halton Region has been at the forefront of natural area planning since the 1980s, well before the Province made it mandatory for municipalities to do so. Preserving natural heritage remains a key component of Halton's Planning Vision, which stems from the Region's fundamental value in land use planning: landscape permanence. Consistent with the Region's strong commitment to the environment, natural heritage preservation has been strengthened in each successive Halton ROP.

The 1980 ROP introduced Environmentally Significant Areas, which protected about 13.4% of Halton. As the protection policies targeted sensitive features and areas, they were considered feature-based. The 2006 ROP built on this strong foundation by introducing comprehensive protection of the natural heritage features and areas that as required by the 1997 Provincial Policy Statement. These protected areas, called the Greenlands System, covered about 21.9% of the Region. However, despite its name, the Greenlands System was essentially still a feature-based approach to natural heritage protection. The evolution of natural heritage protection continued through the Sustainable Halton exercise in 2009 as the 2006 Provincial Policy Statement required municipalities to identify and protect an NHS. Halton's NHS mapping from Sustainable Halton is the current NHS that is in force through the ROP. Figure 3 highlights the evolution of the Natural Heritage System mapping.

ESAs - 1980 Greenlands System - 2006 Halton's NHS - 2009

Figure 3: The Evolution of Natural Heritage Protection in Halton Region

Halton's current Natural Heritage System

Halton's current NHS, built on the Greenlands System, was introduced through the 2009 ROP (formerly known as Regional Official Plan Amendment 38). The key refinement was the adoption of a true "systems approach" and included the protection of 'non-features' such as linkages and enhancement areas. This systems approach in the 2009 ROP now protects about 50.6% of Halton Region. Below is a brief summary of Halton's current approach to the Natural Heritage System. Additional history and information can be found in the Mapping Technical Audit memo made available on Halton Region's Regional Official Plan Review webpage

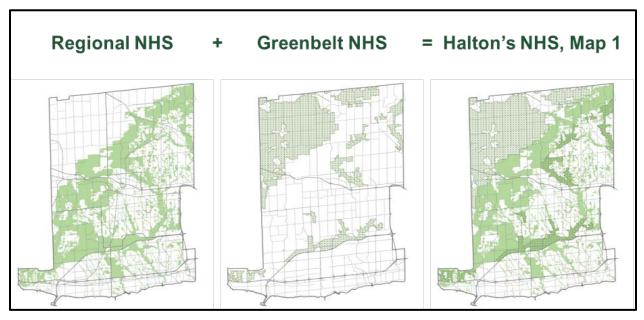
Within this vision, two concepts feature prominently. The first is "sustainable development", in which protecting the natural environment is a vital factor. The second is "landscape permanence", which recognizes that although the Region will urbanize and change, certain landscapes must be preserved permanently. The current ROP identifies three principal categories of land uses that will comprise Halton's future landscapes, one of which is the NHS that is to be integrated within the other land uses such as Settlement Areas and the Rural Countryside. Within rural areas of Halton Region, agricultural land uses and the NHS are generally intended to co-exist as compatible uses, outside of key features.

Policies pertaining to Halton's NHS are included within the ROP and are consistent with the Natural Heritage policies of the Provincial Policy Statement 2005. The current conception of the Halton NHS in the ROP consists of two "sub-systems" each with their own policies: The Greenbelt NHS (GBNHS) and Regional NHS (RNHS). The GBNHS must be identified in the ROP as required by the Greenbelt Plan (2017). Together, these Systems create Halton's NHS as identified on Map 1 of the ROP, referenced in Figure 4

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below. The components of the Regional Natural Heritage System are detailed in Appendix 2 and illustrated in Figure 14 – Map 1G in Section 5 of this report.

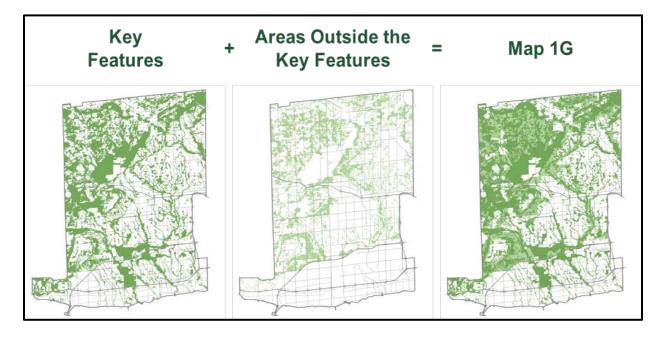
Figure 4: Halton's Natural Heritage System



The ROP recognizes that the two systems have different sets of planning policies, but that they complement each other and, "... together implement Halton's vision of a sustainable natural heritage system ..." (Halton Region 2018, s.139.3.4). The GBNHS is an overlay within the ROP and is identified as a "constraint to development" that applies in addition to any other constraints associated with the underlying land use designation(s). Both the GBNHS and RNHS are comprised of Key Features and additional components (e.g. Linkages, Buffers, and Enhancement Areas) in the system, which are defined slightly different in the two Systems. For example, Buffers in the RNHS are defined differently than Vegetation Protection Zone in the GBNHS. Section 4.2 Policy Considerations provides additional discussion around the two defined terms. Figure 5 shows the Key Features and components that create Halton's NHS.

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Figure 5: Key Features and Components



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3.0 Natural Heritage System for the Growth Plan

3.1 Introduction

The most significant changes to the Provincial policy framework since the last ROPR are related to the Growth Plan 2017 and subsequent Growth Plan update in 2019. Whereas the other policy documents have undergone minor refinements, the NHS policies in the Growth Plan, 2019 were greatly expanded since 2005. The Growth Plan, 2019 now identifies a Regional Natural Heritage System for the Growth Plan for the Greater Golden Horseshoe (NHSGP). It only applies outside of settlement areas, at the scale of the Greater Golden Horseshoe and is supported by mapping, and provides a full suite of policies to protect it (Growth Plan policies 4.2.2, 4.2.3, and 4.2.4).

The NHSGP is a comprehensive, integrated, and long-term approach to planning for the protection of the region's natural heritage and biodiversity. The NHSGP builds upon the GPNHS, the Niagara Escarpment Plan's two designations (Natural and Protection Areas) as well as natural areas within the landscape that are located outside of the Greenbelt Plan 2017 and the NEP 2017. For lands within the NHSGP, the ROP must incorporate the NHSGP mapping as an overlay and apply appropriate policies. For lands outside of the NHSGP, existing advances in NHS protection in Halton Region, as discussed in Section 2.0 of this report, should not be lost by incorporating the NHSGP.

3.2 Policy and Mapping Considerations

Policy Considerations

Across the Provincial plans, there has been a general harmonization of policies and definitions through recent updates. The Growth Plan 2019 and Greenbelt Plan 2017 policies and definitions related to natural heritage (and water resources, as discussed below) are almost the same. Many of the ROP NHS were drawn from policies and definitions from previous versions of these Provincial plans but will require revisions to align ROP policies and definitions with the latest versions. The NHSGP does not have an impact on the GBNHS overlay in the ROP as the natural heritage systems in both Provincial Plans are mutually exclusive.

Consideration is required around how to incorporate the new NHSGP into policy, specifically as it relates to the existing RNHS outside of settlement areas. In order to incorporate the NHSGP, the ROP will have to include:

- definitions that describe what comprises the NHSGP;
- policies to prohibit development and site alteration under certain circumstances;
- permitted uses;
- environmental evaluations; and
- vegetation protection zones including the addition of a mandatory 30m buffer on some Key Features and areas.

Mapping Considerations

The Province mapped and issued the NHSGP in 2018 and documented the process followed to create it in a "The Regional Natural Heritage System for the Growth Plan for the Greater Golden Horseshoe, Technical Report on Criteria, Rationale and Methods" (OMNRF 2018) (the "Technical Report"). The NHSGP mapping was completed by the Province for the entire Growth Plan 2019 area, excluding those areas that are subject to the Greenbelt Plan 2017 and NEP 2017. The NHSGP mapping must be incorporated into the ROP as required in Growth Plan policy 4.2.2.2.

Refinements to the Natural Heritage System for the Growth Plan

The Growth Plan 2019 policy 4.2.2.5 provides an opportunity to refine the NHSGP, for areas not included in the Greenbelt Plan 2017 or NEP 2017, with greater precision through a Municipal Comprehensive Review and general guidance for refinement are outlined in the Technical Report. Additionally, the Province may review and update mapping for the NHSGP in response to a municipal request.

As part of the background technical work for this ROPR, the NHSGP was reviewed and recommendations for mapping refinements were identified in accordance with the Technical Report. Owing to the scale and use of more recent data, there are some inaccuracies and differences between the Province's and Halton's NHS mapping. Furthermore, the NHSGP has been mapped within settlement boundaries in Halton Region, which is contrary to the Growth Plan 2019 policy 4.2.2.1, where the NHSGP "...excludes lands within settlement area boundaries that were approved and in effect as of July 1, 2017".

In November 2017, Regional Council endorsed the submission from the Halton Area Planning Partnership (HAPP) to the Province that highlighted the requests for the refinement of certain areas of the NHSGP as part of the review of the draft Provincial

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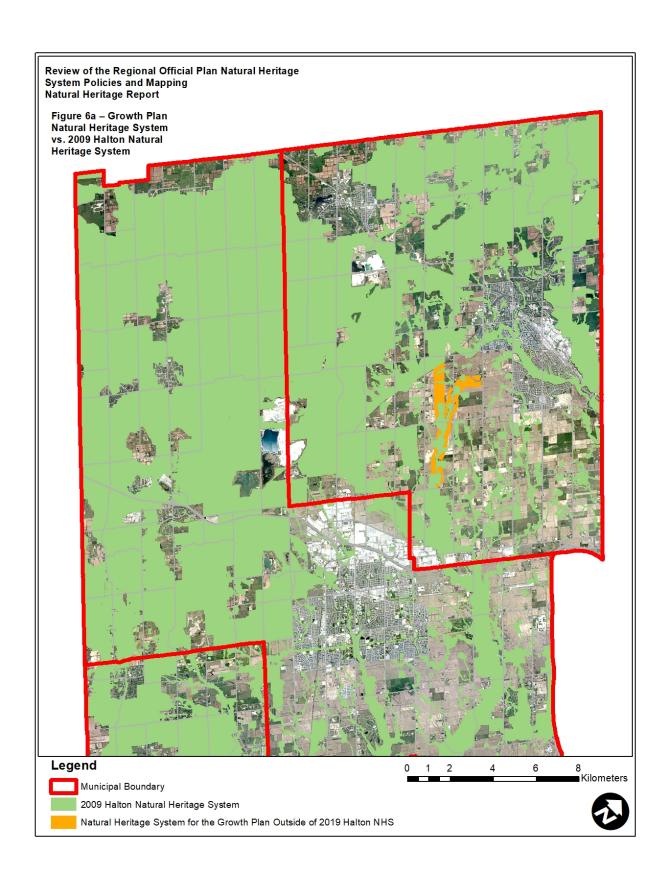
NHS and Agricultural System mapping, and technical criteria for each, through Report No. LPS90-17.

Through the Region's ROPR process and keeping with 2017 HAPP submission to the Province, the Region will seek to make refinements to the NHSGP to better align it with the Regional NHS mapping, and exclude NHSGP from lands within settlement area boundaries in Halton. Until such time that the Province has approved these refinements, the Halton's NHS mapping will continue to show the NHSGP as mapped by the Province.

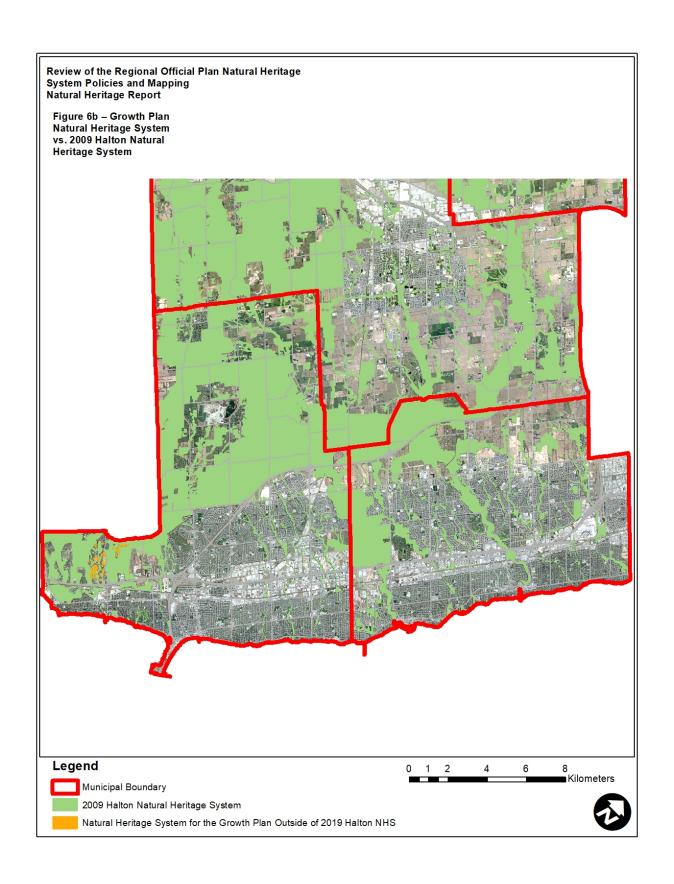
2009 Halton's Natural Heritage System compared to Natural Heritage system for the Growth Plan 2019

The NHSGP is a broad-scale NHS for the entire Growth Plan area and should not be considered to replace the Halton's NHS, which responds to a finer, Halton-based scale. Thus they could be considered to work together such that the NHSGP serves to connect the RNHS with the broader Provincial system. Technical background work found the following comparisons between the NHSGP and the 2009 NHS mapping as shown in **Figure 6a** and **6b**:

- Only 434.11 ha (25%) of the NHSGP in Halton occurs outside Halton's NHS, thus 75% of the NHSGP in Halton already occurs within the 2009 Halton NHS.
- The 434.11 ha that occurs outside of the Halton NHS include many very small (less than 1ha) patches that are possibly a result of mapping discrepancies between the different data sources used by the Province and the Region in mapping the NHS.
- Only 24 areas (mapping polygons) in the NHSGP which occur outside of the 2009 RNHS, were bigger than 1 ha in size, totalling 425.89 ha.
- Each of the 24 areas (mapping polygons) were assessed against the four guidelines for removing areas from the NHSGP provided in the "Technical Report". Of these 24 areas, 18 were considered to have ecological merit for retention, 1 could be considered for removal and 5 warranted further discussion and consideration through the ROPR process.



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3.3 Discussion

In light of the policy and mapping considerations outlined in Section 3.2 of this report, Halton Region will need to determine how to incorporate the NHSGP into the ROP recognizing that the ROP contains existing policies and mapping for the RNHS and the GPNHS. As part of this discussion, options to incorporate the NHSGP are outlined below.

When the best approach to incorporating the NHSGP into the ROP has been determined, options on how to clearly represent Halton's Natural Heritage System (NHSGP, RNHS and GPNHS) in ROP policies and mapping need to be discussed. Section 5.0 Overlay and Designation Options outlines policy and mapping options to address the relationship between agriculture and natural heritage in the ROP given the requirements set out by the Provincial plans and to continue to protect and enhance natural heritage, which is strongly enshrined in Halton's planning vision.

The three options are presented as being mutually exclusive. However, there may be opportunities to combine elements of the different options.

Option 1 – Provide Separate Frameworks for Each Natural Heritage System

The RNHS would continue in its current form with policies refined where appropriate/required. The NHSGP would be incorporated into the ROP as an overlay/constraint layer and would include policies from the Growth Plan 2019 (similar to how the GBNHS is currently treated in the ROP). Essentially, the Region would be covered by three separate NHS policy frameworks:

- the Regional Natural Heritage System (RNHS) (which would also extend into the NEP area as it does currently),
- the Natural Heritage System for the Growth Plan (NHSGP);
- the Greenbelt Natural Heritage System (GBNHS)

Outside of the NEP areas and settlement areas, the RNHS and the NHSGP may overlap and where it does, the more restrictive policies would apply. The existing overlay between the RNHS and GBNHS would remain unchanged.

This approach would ensure that the policies relating to Provincial Plan Systems in the ROP are only being applied where they have been identified by each respective Provincial Plan. This would allow for some flexibility in terms of restrictions between each System and not necessarily apply more restrictive policies broadly across the

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Region. A challenge with this approach is that it would add complexity to mapping and policies in the ROP and could make it less user-friendly. There would also be a number of policies that would be duplicated or appear similar, given that the policy direction between the Greenbelt Plan 2017, Growth Plan 2019 and ROP policies related to the RNHS are already very similar. Finally, clarity would be required to identify what policies apply in instances where there is overlap between multiple systems.

Option 2 – Harmonize the Provincial Natural Heritage Systems

The RNHS would continue independently with policies refined where appropriate/required. The NHSGP would be incorporated into the ROP and combined with the GBNHS as an overlay/constraint layer. Essentially, the Region would be covered by two layers of NHS policy:

- the Regional Natural Heritage System (RNHS); and
- a combined/harmonized Natural Heritage System for the Growth Plan (NHSGP) and the Greenbelt (GBNHS) (i.e. the Provincial Plan Systems).

While the policies that apply in the NHSGP and the GBNHS would be similar, there would be mutually exclusive elements.

This approach would help to provide some clarity in terms of applying various policy sets while still allowing flexibility to include policies that reflect local considerations for the RNHS. There are some differences between the Greenbelt Plan 2017 and the Growth Plan 2019, however any differences could be reconciled through policy. This option could still be complex; however, it would be slightly less complicated than Option 1. Similar to Option 1, there would likely be similar policies within the sections addressing Provincial policies and the RNHS policies.

Option 3 – Create an updated Regional Natural Heritage System that incorporates the Provincial Natural Heritage Systems

This would be a different approach that involves the establishment of a RNHS that incorporates the NHSGP and the GPNHS plus other NHS lands outside of settlement areas and applying the most restrictive policy framework respecting development and site alteration to the entire NHS. PPS policies on development and site alteration respecting features would apply in settlement areas.

This approach would provide the most clarity to the end user and allow for the use of the current ROP framework for the RNHS; however, achieving a single policy set for all

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three natural heritage systems could present some challenges in terms of policy restrictions. If one policy set is presented, the most restrictive policy would apply everywhere. For example, the GPNHS prohibits development in significant woodlands and with one policy set that must meet the minimum standards of the provincial plans, the prohibition of development in significant woodlands will apply to all woodlands in Halton Region. This does not allow for opportunities to provide a unique framework for the RNHS, it would limit flexibility in how it is treated and could result in additional frameworks to address RNHS in the urban context. Finding the appropriate balance in approach in the single consolidated framework would be essential. Careful consideration would be necessary to ensure no existing protections or permissions are removed through such any balancing exercise.

Discussion Question 1:

As required by the Growth Plan, 2019, the new Natural Heritage System for the Growth Plan mapping and policies must be incorporated into the Regional Official Plan. Based on the three (3) options discussed above, what is the best approach to incorporate the NHSGP into the ROP?

4.0 Regional Natural Heritage System

4.1 Introduction

The Natural Heritage policies and mapping will require a number of updates for the following reasons:

- consistency with the PPS and conformity to Provincial plans;
- through the implementation of the current ROP, a number of natural heritage policies and discrepancies in the natural heritage mapping that have been identified for improvement or clarification;
- identifies actions that are needed to achieve the Region's natural heritage objectives; and
- to update the NHS mapping with the best available data sources to improve accuracy of the mapping.

Detailed analysis of these policies and mapping is found in the supporting technical work; however, some of the key considerations for updates to Natural Heritage policies and refinements to the mapping are discussed below.

Why does the ROP require the identification of a Natural Heritage System?

Section 2.1 of the PPS (2020) requires municipalities to identify a NHS based on a list of natural heritage features and areas and contains a suite of policies to protect the ecological function and biodiversity of the natural heritage and water resources in the long-term. The requirement to incorporate natural heritage systems in Official Plans is set out in Section 2.1.3 of the 2020 PPS:

Natural heritage systems shall be identified in Ecoregions 6E & 7E1, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.

A Natural Heritage System (NHS) is defined in the PPS 2020 as:

...a system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. These systems can include natural heritage features and areas, federal and provincial parks and conservation reserves, other natural heritage features, lands that have been restored or have the

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potential to be restored to a natural state, areas that support hydrologic functions, and working landscapes that enable ecological functions to continue...

This is also a requirement in Section 5.3 of the Greenbelt Plan 2017 to identify the GBNHS:

Official plans shall contain policies that reflect the requirements of this Plan together with a map(s) showing the boundaries of the Greenbelt Area, the Protected Countryside, the Natural Heritage System and the agricultural land base. Municipalities shall provide a map showing known key natural heritage features and key hydrologic features and any associated minimum vegetation protection zones identified in this Plan. The identification of the Natural Heritage System boundary will form the basis for applying the policies of section 3.2.

The Growth Plan 2019 suggests a similar approach to that of the Greenbelt Plan 2017. In this regard, Section 4.1 of the Growth Plan 2019 states in part the following:

This Plan also provides for the identification and protection of a Natural Heritage System for the GGH outside of the Greenbelt Area and settlement areas, and applies protections similar to those in the Greenbelt Plan to provide consistent and long-term protection throughout the GGH.

The NEP 2017 is also applicable to lands identified as part of this plan within Halton Region and is discussed in Section 7.3 Niagara Escarpment Plan (NEP) 2017.

Throughout the discussion paper, the requirements from these Provincial plans with respect to NHS are highlighted and options to incorporate or update the policies and mapping for the NHS are provided.

As discussed in Section 2.0 Evolution of Natural Heritage at Halton Region, the current ROP identifies NHS policies and mapping. The goal of the NHS in Halton's ROP is "... to increase the certainty that the biological diversity and ecological functions within Halton will be preserved and enhanced for future generations" (Halton Region 2018, s.114). This goal has supported the application of the precautionary principle in relation to analysis of proposed NHS impact avoidance and mitigation measures (i.e., faced with uncertainty, err on the side of being conservative in the protection of natural heritage components).

4.2 Policy Considerations

Natural Heritage Policy Review

Many ROP policies and definitions will require a detailed review in light of changes to the Provincial plans. In the case of natural heritage, this will largely mean refining existing definitions and considering best practices based on technical documents, frameworks and guidelines. A Water Resource System will need to be identified in the ROP and is discussed in more detail in Section 6.0 Water Resource System. The relationship between the GBNHS and the RNHS could be further clarified in the ROP. More importantly, the approach taken to incorporate the NHSGP will determine the significance of the changes to the policies for the RNHS, which is discussed in Section 3 Natural Heritage System for the Growth Plan.

The current ROP includes policies that support an approach to the protection of natural heritage grounded in the precautionary principle (i.e., faced with uncertainty, err on the side of being conservative to ensure the protection of natural heritage components). Options to more explicitly entrench this principle should be considered through this review, however, this must be balanced with other Regional objectives where necessary. The options are provided in Section 4.3 Policy Discussion.

Discussion Question 2:

RNHS policies were last updated through ROPA 38. Are the current goals and objectives for the RNHS policies still relevant/appropriate? How the can ROP be revised further to address these goals and objectives?

Buffers and Vegetation Protection Zones

The ROP assumes that one of the principal mitigation measures for achieving no negative impact is the provision of a Buffer around components of the key features within the RNHS. This is not clearly stated within the ROP policies themselves, although the definition of buffer in the ROP (reproduced below) does support this interpretation. This discussion around Buffers within the RNHS does not preclude any requirements relating to buffers as prescribed in conservation authority policies and regulations.

Buffer is defined in Section 220.1.1 of the ROP as

...an area of land located adjacent to Key Features or watercourses and usually bordering lands that are subject to development or site alteration. The purpose of the buffer is to protect the features and ecological functions of the Regional Natural Heritage System by mitigating impacts of the proposed development or site alteration. The extent of the buffer and activities that may be permitted within it shall be based on the sensitivity and significance of the Key Features and watercourses and their contribution to the long term ecological functions of the Regional Natural Heritage System as determined through a Subwatershed Study, an Environmental Impact Assessment or similar studies that examine a sufficiently large area.

Similar to buffers, vegetation protection zones are addressed for lands outside of settlement areas in the Greenbelt Plan 2017, the Growth Plan 2019 and the NEP 2017. Certain features in the Greenbelt Plan (2017) and Growth Plan (2019) require a mandatory minimum vegetation protection zones under specified circumstances and the minimum width of the vegetation protection zone in some instances cannot be reduced. These updated policies will need to be incorporated into the ROP.

Vegetation Protection Zone (VPZ) is defined in Section 288.1 of the ROP as:

...it applies within the Greenbelt Plan Area, a vegetated buffer area surrounding a Key Feature within which only those land uses permitted within the feature itself are permitted. The width of the vegetation protection zone is to be determined when new development or site alteration occurs within 120 metres of a Key Feature, and is to be of sufficient size to protect the feature and its functions from the impacts of the proposed change and associated activities that will occur before, during, and after construction, and where possible, restore or enhance the feature and/or its function.

The ROP could consider outlining a similar approach to buffers to that included in Provincial Plans. However, other Regional objectives would need to be considered to minimize impacts for example on existing development. Consideration should be given on how to incorporate Buffers or Vegetation Protection Zones into the ROP.

Discussion Question 3:

Based on the discussion provided above, to ease the implementation of buffers and vegetation protection zones, should the Region include more detailed policies describing minimum standards?

The Region has developed a working document called the "Framework for Regional Natural Heritage System Buffer Width Refinements for Area-Specific Planning" that outlines process requirements and resources for determining Buffers in designated Greenfield areas. Consideration should be given to formalize the Buffer framework for use in area-specific planning. This would require consultation with the local municipalities, conservation authorities and the public prior to formalizing the Buffer framework. Following formal consultation, there are three options to incorporate this Buffer framework in Halton's planning framework: (1) through Council approved ROP Guidelines (most probably the EIA Guidelines or through the development of Subwatershed Guidelines); (2) recognizing the Buffer framework status in policy in the ROP; (3) seek Council direction to use it as a stand-alone guidance document.

4.3 Policy Discussion

Precautionary Principle

As it relates to Natural Heritage, the precautionary principle can be explained by when faced with uncertainty, err on the side of being conservative to ensure the protection of natural heritage components. The current ROP includes policy approaches to the protection of natural heritage that are grounded in the precautionary principle. Through the ROPR, consideration is warranted on how to continue to incorporate this principle into the ROP.

Option 1: Include Policy Direction

The ROP Review will consider if the precautionary principle should be more explicitly referenced in natural heritage ROP. The notion of having a high degree of confidence in considering the impacts on the NHS could be more explicitly articulated in the policies. The term "precautionary principle" could be added into the ROP, perhaps in the Vision.

This option would strengthen existing policies and assist in providing clarity about the approach that should be taken when there is a discrepancy or conflict in policy interpretation (since some reliance is placed on the vision when interpreting policies). A challenge with this is that the language could still be subjective and open to interpretation. There may also be uncertainty about a universally accepted definition of the precautionary principle.

Option 2: Maintain Current Approach

This option would not make any changes to the ROP as it relates to the precautionary principle.

As noted above, a precautionary approach is already implicitly included in the ROP. Not including any additional language related to the precautionary principle would likely not have any negative implications.

Buffers and Vegetation Protection Zones

The current ROP assumes that one of the principal mitigation approaches for achieving no negative impact is the provision of Buffers or Vegetation Protection Zones around components of the key features within the RNHS and GBNHS. Consideration should be given on how to incorporate Buffers or Vegetation Protection Zones into the ROP. It should be noted that these terms are being used interchangeably to reflect the terminology used in the GBNHS and GPNHS.

Option 1: Include Policies in the ROP

This option would consider if implementing policies for vegetation protection zones should be added to the ROP, possibly incorporating minimum vegetation protection zones related to different types of natural heritage features, as is done in the Provincial plans. The role and use of the Region's Buffer Framework could also be clarified through policy or Council endorsed guideline.

This option would help to provide clarification about what buffers or vegetation protection zones apply and where, as well as providing a distinction between buffers or vegetation protection zones that can be modified and those that cannot. Direction on where buffers or vegetation protection zone can be modified could still be provided through a framework or guideline.

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Option 2: Do Nothing

This option would continue the current approach taken regarding vegetation protection zone and not include any additional policies, other than those required by Provincial Plans.

This means that additional clarity about how vegetation protection zones apply and how they can or cannot be modified outside of the lands subject to Provincial Plans would not be provided.

4.4 Mapping Considerations

Natural Heritage Mapping

The current mapping (2009) in the ROP is based on the NHS mapping undertaken as part of the Sustainable Halton exercise in preparation for ROPA 38. At that time, three natural heritage system options were developed that approximately reflected "minimum standards", "systems based" and "enhanced ecological integrity" approaches. Council at the time directed staff to develop the "enhanced ecological integrity" concept as a basis for protecting natural heritage in the ROP in order to provide a high probability that biodiversity and ecological function of natural heritage in the Region was protected in the long term. The concept map for that option was refined concurrently with the development of the policy framework for natural heritage policies. Comments provided by the local municipalities, modifications made by the Province, and settling of Ontario Municipal Board (OMB) appeals (including the Region's) resulted in multiple changes to the policy structure. However, the NHS mapping had not been completely updated to reflect all these changes at the time that ROPA 38 was approved with modifications by the Province (Nov 24th, 2011).

To address the discrepancies because of ROPA 38, the 2009 NHS maps (Maps 1 and 1G) must be refined to better reflect the policies that define Halton's NHS and/or the policies that define the Halton NHS themselves should be refined to better reflect how it was mapped. There are also some minor inconsistencies in the extent of the Region's NHS between Maps 1 and 1G that need to be resolved. Appendix 2 contains a component list of key features and areas that create the NHS.

It should be noted that Section 5.4.2 of the Greenbelt Plan (2017) does not permit refinements to the GBNHS mapping except as a result of amendments to the plan. However, refinements to the boundaries of Key Features within the GBNHS may be considered through site level boundary interpretation by qualified individuals using the guidance in the Province's Technical Paper 1 (OMNR 2012).

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Undertaking these mapping refinements is essential to provide transparent mapping that accurately reflects the policy structure and which incorporates the most current data available. These updates have resulted in a proposed Draft 2019 Region's Natural Heritage System map, which is discussed in Section 4.5 below. Appendix 3 contains a flow chart that describes the technical process to draft the 2019 Natural Heritage System Mapping, which was informed by the Mapping Audit Technical Paper dated May 2020.

4.5 Proposed Refined 2019 Regional Natural Heritage System (RNHS)

Technical Process for Refinement of the RNHS

Maps 1 and 1G of the ROP have been refined as part of this ROPR to better reflect the policies that define the NHS and to recognize some minor inconsistencies in the extent of the RNHS between Maps 1 and 1G. The draft 2019 RNHS also utilized updated base data information available from the Province and conservation authorities to assemble the RNHS. Using updated base layers ensures that NHS mapping in the ROP reflects the most current data available and thus the maps are as accurate as possible. In addition to the base layers updates, a review of the NHS mapping was undertaken to recognize planning decisions and updated information since ROPA 38 and this includes OMB decisions, approved planning applications, special Council Permits and staff refinements based on in-field observations.

Refinements of Buffers, Enhancements Areas and Linkages

An analysis was completed to refine the components of the NHS including Buffers, Enhancement Areas and Linkages. This was necessary to reflect the updated boundaries of Key Features and other feature components of the NHS (watercourses, wetlands, Escarpment Protection Areas and Escarpment Natural Areas). Enhancements and linkages were evaluated to ensure they were still valid after the updates, identify new enhancement and linkages opportunity and that those identified were consistent with the approach taken for the existing, in-force, RNHS.

Quality Assurance/Quality Control (QA/QC) evaluation

The final step in the RNHS mapping update process was a Quality Assurance/Quality Control (QA/QC) evaluation of the draft 2019 RNHS. The purpose of this exercise was to complete a visual inspection of the draft 2019 RNHS to confirm that a consistent approach to the mapping in accordance with the Regional Official Plan, identify mapping errors and apply specific mapping rules (i.e. exclusion of individual storm water management ponds). More importantly, for an open and transparent method for the

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refinements of the RNHS with the local municipalities, conservation authorities and the public.

Additional Mapping Considerations

Proxy Data

One challenge that was resolved as part of the overall refinement of NHS mapping is the degree to which it is appropriate to use proxy data to map key features and areas for which no data are available. This process entailed a review of the entire suite of potential data sources that could be incorporated within a refined NHS to determine those that will best fulfil the Region's NHS goal and satisfy policy and mapping requirements in current Provincial Plans. This involved consultation with the conservation authorities and the Region's ecological consultant to determine whether it is valid to us a proxy data source to identify a key feature in the NHS, for example permanent watercourse data to represent fish habitat. Appendix 2 contains a component list of key features and areas that create the NHS.

If it was determined that the proxy data were not sufficient for some features (e.g. limits of Significant Valleylands, Significant Wildlife Habitat), it would remain as unmapped key features. The unmapped key features would be identified through fieldwork completed during an Environmental Impact Assessment, Subwatershed Study or subsequent environmental reports.

Centres for Biodiversity

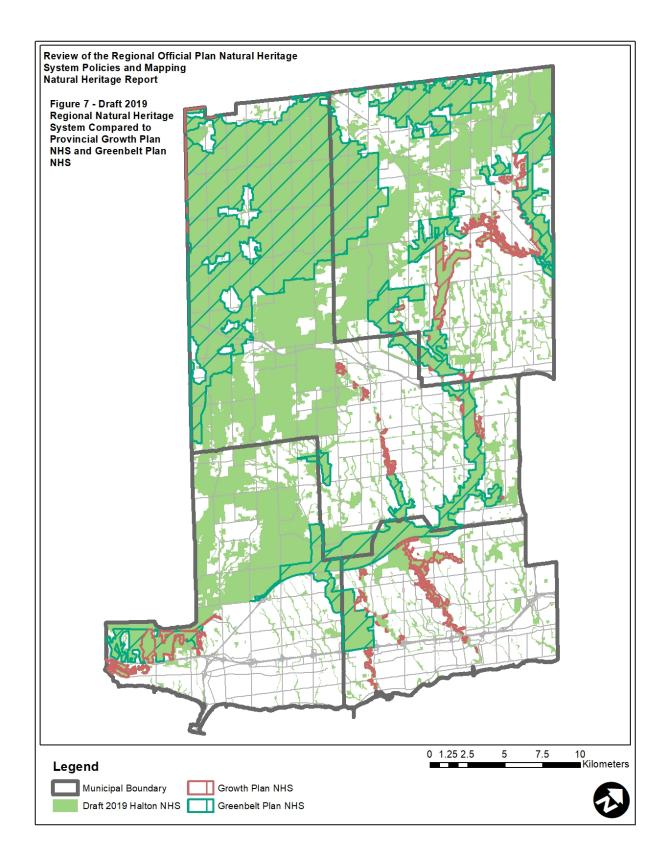
The concept of Centres for Biodiversity arose from a recognition of the impact of fragmentation of natural communities. The identification and protection of very large (>200 ha) contiguous areas of wildlife habitat was viewed as a means to help represent the main natural heritage landscapes in Halton Region within the RNHS. In the current ROP, Centres for Biodiversity are included in the RNHS as Enhancement Areas, which are a component of the RNHS. Although defined in the ROP, there are no policies that pertain specifically to the identification/refinement and protection of Centres for Biodiversity and therefore, Centres for Biodiversity are subject to the same policies as the rest of the RNHS. Through the ROPR it will be determined how the Centres for Biodiversity will be identified as part of the RNHS mapping and policies.

Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESA) have a regional significance and support a system-based approach to the NHS which is instilled in Halton's Planning Vision "To maintain Halton as a desirable and identifiable place for this and future generations, certain landforms within Halton must be preserved permanently. This concept of landform permanence represents Halton's fundamental value in land use planning and will guide its decisions and actions on proposed land use changes accordingly." (ROP 2006, Part II, s. 26). The original criteria and objectives of the ESA program were not explicitly carried through into the current ROP, nor were ESAs listed as components of the RNHS (s. 115.3). However, ESAs were used as a data source layer in the mapping of the RNHS. Most of the ESAs include other key features and areas of the Region's NHS but there are some ESAs that are located outside of these key features and components, in particular some Earth Science ESAs. With the absence of policies in the current ROP that specifically identify the ESAs and provide guidance on their protection, it has created a void that has resulted in some confusion about their role in the RNHS. As part of the ROPR, the Region will clarify the role of the ESAs in the RNHS.

Proposed Refined Draft 2019 Regional Natural Heritage System Mapping

The proposed draft 2019 RNHS map was created using the parameters outlined above that were established through the technical background review and are shown in Figure 7. Figure 7 illustrates the RNHS and identifies where the NHSGP and GBNHS overlap. The draft 2019 NHS mapping will continue to evolve through this process based on availability of new data, policy changes and consultation with local municipalities, Halton's Advisory Committees, agencies and the public.



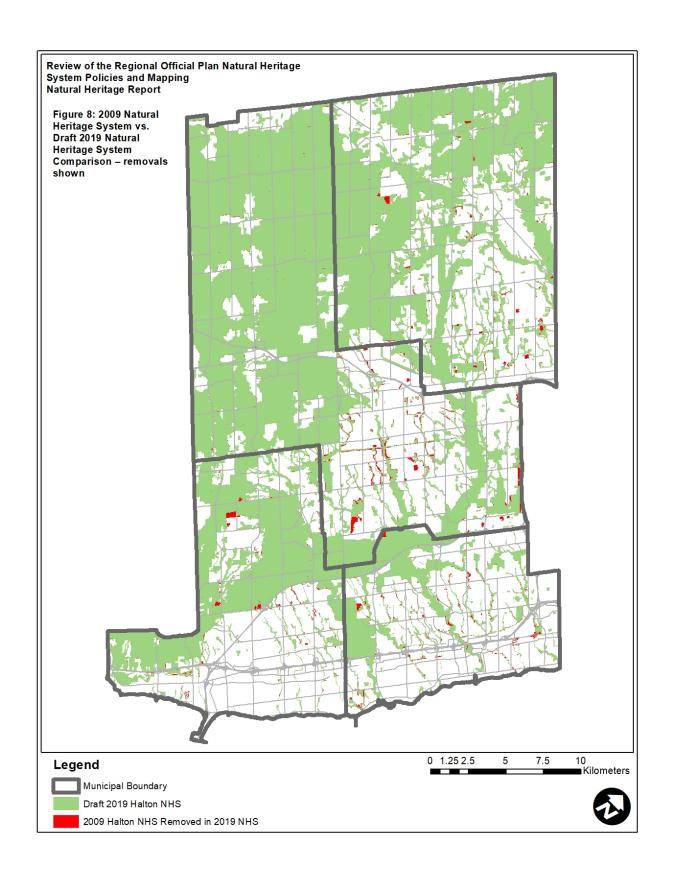
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4.6 Comparison Mapping

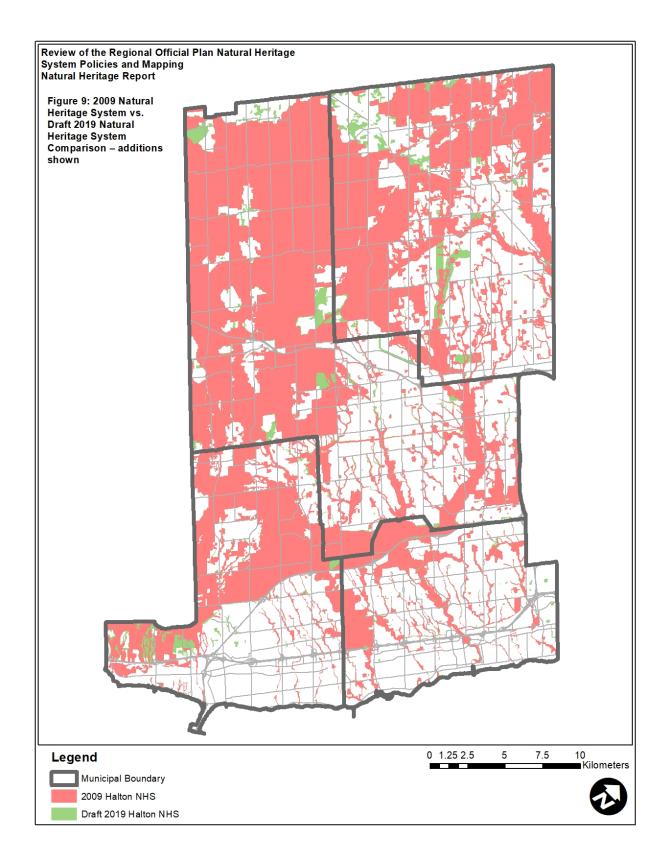
Draft 2019 Halton NHS compared to 2009 Halton NHS

The current conception of the Halton NHS (2009) in the ROP consists of two "subsystems" each with their own policies: The GBNHS and RNHS. Together, these Systems create Halton's NHS as identified on Map 1 of the ROP. The Draft 2019 Halton NHS continues to be comprised of the GBNHS and the RNHS as well as the NHSGP that has now been introduced in the Halton's NHS based on provincial policy requirements (as outlined in Section 3: Natural Heritage System for the Growth Plan). Note that the draft Halton NHS does include the NHSGP mapping without any refinements as outlined in Section 3.2 Policy and Mapping Consideration for the NHSGP.

Figures 8 and 9 below highlight the removals and additions to Halton's NHS. The Provincial Systems are not shown separately in the 2009 and 2019 mapping to simplify the visual comparison of the systems. The 2019 draft NHS mapping (including the provincial system) accounts for approximately 52.8% of Halton Region, which is a slight increase from the 2009 NHS mapping, which was 50.6%. The increase can be attributed to updated data sources and updated provincial plans including the addition of the NHSGP mapping. Further refinement will occur before the finalization of Halton's NHS based availability of new data, policy changes and consultation with municipalities, agencies and the public.



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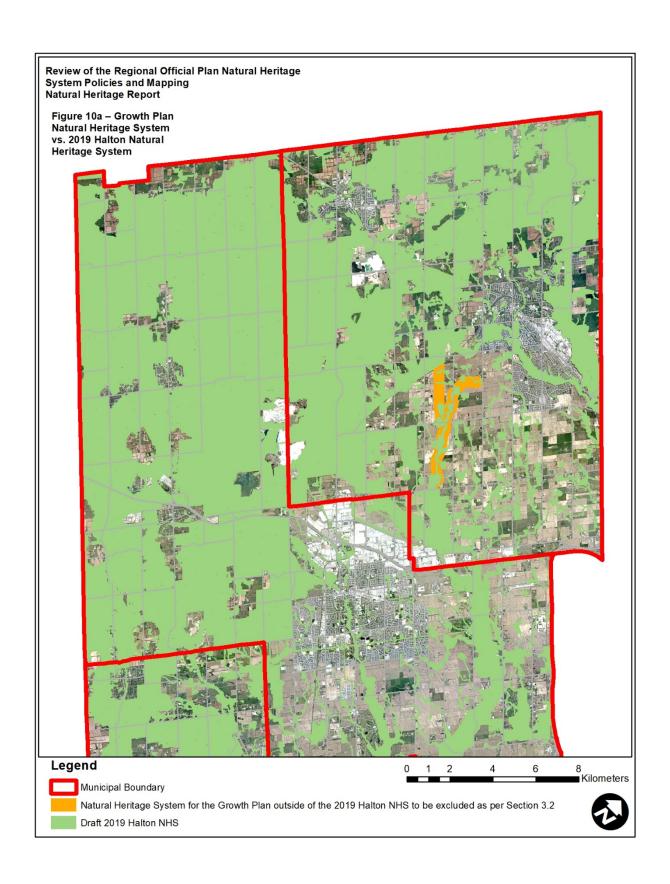


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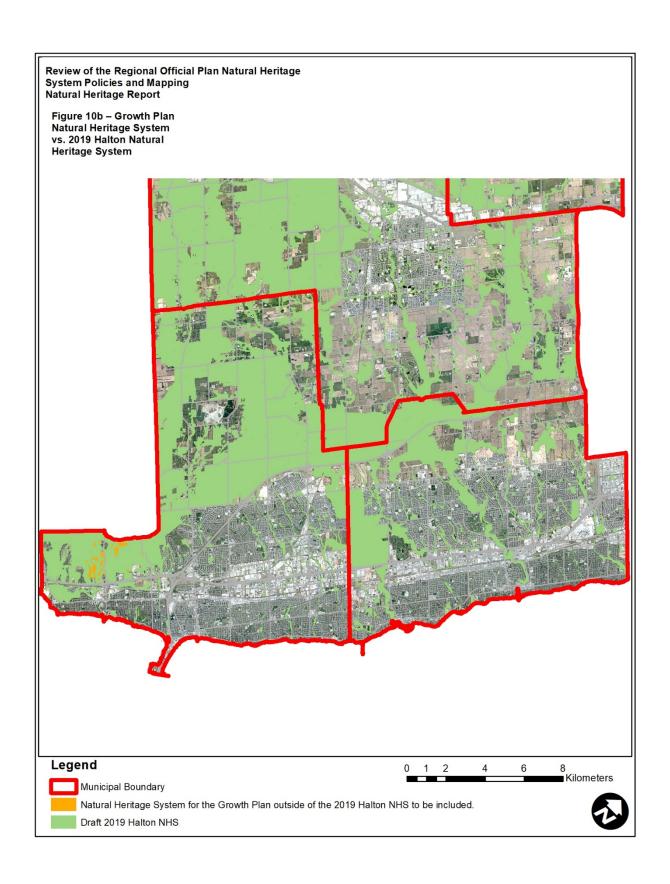
Draft 2019 Natural Heritage System compared to Natural Heritage System for the Growth Plan

Figure 10a and 10b compare the NHSGP to Halton's draft 2019 NHS mapping. Many of the areas in the NHSGP that are outside the draft 2019 NHS are extremely small patches that could be a result of mapping discrepancies from the two systems using different base layers. The draft 2019 NHS uses up-to-date base mapping which has resolved some mapping discrepancies with the NHSGP. The mapping technical work resulted in the following information based on the comparison of the two systems for the rural area. This data will be used to further discussions on incorporating the NHSGP into the ROP and establishing potential refinements to the NHSGP.

- Only 349.54 ha (20.5%) of the NHSGP in Halton occurs outside the 2019 RNHS, thus 79.5% of the NHSGP in Halton already occurs within the 2019 Halton NHS.
- The 349.54 ha that occurs outside of the RNHS include many very small (less than 1ha) patches that are possibly a result of mapping discrepancies between the different data sources used by the Province and the Region in mapping the NHS.
- Only 23 areas (mapping polygons) in the NHSGP, which occur outside of the 2019 RNHS, were bigger than 1 ha in size, totalling 340.15 ha.



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5.0 Overlay and Designation Mapping Options

5.1 Introduction

The overall planning vision of the ROP as amended by ROPA 38 was to deliver:

- Strong, vibrant, healthy and complete communities;
- An enhanced Natural Heritage System;
- A strong and sustainable agriculture industry; and
- A sustainable land use decision-making process.

Natural heritage and agriculture are often located in the same areas and require a balance in priorities to guarantee and strengthen their coexistence. The outcomes from the two topic areas require close alignment to ensure effective implementation.

This section provides options on the best approach in clearly representing the relationship between agriculture and natural heritage in the ROP given the requirements set out by the Provincial plans for lands outside of the settlement areas.

5.2 Policy and Mapping Background

In the current ROP, the RNHS is shown as a designation, and the GBNHS as a constraint overlay for lands outside settlement areas. Within the settlement area, the RNHS is shown as a designation. Prime Agricultural Area in the RNHS shown on Map 1G is shown as an overlay with policies for agricultural uses permitted in parts of the RNHS but outside of Key Features. Recent changes to the Growth Plan 2019 require that Prime Agricultural Areas including specialty crop areas be designated. The Growth Plan 2019 provides more direct policy guidance with respect to the designation of agricultural lands.

Section 4.2.2.2 of the Growth Plan 2019 indicates:

Municipalities will incorporate the Natural Heritage System for the Growth Plan as an overlay in official plans, and will apply appropriate policies to maintain, restore, or enhance the diversity and connectivity of the system and the long-term ecological or hydrologic functions of the features and areas as set out in the policies in this subsection and the policies in subsections 4.2.3 and 4.2.4.

Section 4.2.6.2 of the Growth Plan 2019 indicates:

Prime agricultural areas, including specialty crop areas, will be designated in accordance with mapping identified by the Province and these areas will be protected for long-term use for agriculture.

These sections require all municipalities to designate prime agricultural areas in accordance with Provincial mapping and to protect these lands for long-term use for agriculture. Provincial policies also require that Key Natural Heritage and Key Hydrologic Features must be protected from new uses, development, and site alteration.

As discussed in Section 3.0. Natural Heritage System for the Growth Plan, the Province released the mapping for the NHSGP in February 2018. The policies of the Growth Plan 2019 pertain only to the NHS identified within the Growth Plan area (i.e., only the Greenbelt Plan 2017 policies apply to the Greenbelt NHS, the Oak Ridges Moraine Conservation Plan policies apply to the Oak Ridges Moraine NHS, etc.). However, the recent iteration of the Growth Plan 2019 also includes policies that require municipalities to identify in their Official Plans. Section 6.0 Water Resource System provides additional context and discussion around the incorporation of the WRS into the ROP.

And then Section 4.2.2.2 states:

Municipalities will incorporate the Natural Heritage System as an overlay in official plans, and will apply appropriate policies to maintain, restore, or enhance the diversity and connectivity of the system and the long-term ecological or hydrologic functions of the features and areas as set out in the policies in this subsection and the policies in subsections 4.2.3 and 4.2.4.

The designation in the NHS in the ROP going forward is relevant to the question of how agricultural lands are to be designated because of the current approach that has certain lands designated NHS with agriculture as part of a constraint overlay. Additionally, not all of the rural area in the Region is considered to be prime agricultural land. As a consequence, a new 'Rural' designation will also be required for these areas should a Prime Agricultural designation be introduced, since there would be a need to apply a land use designation to those lands that are not considered to be within the prime Page 39 | Natural Heritage Discussion Paper

agricultural area. Additional information with regard to this discussion can be found in the Rural and Agriculture System Discussion Paper.

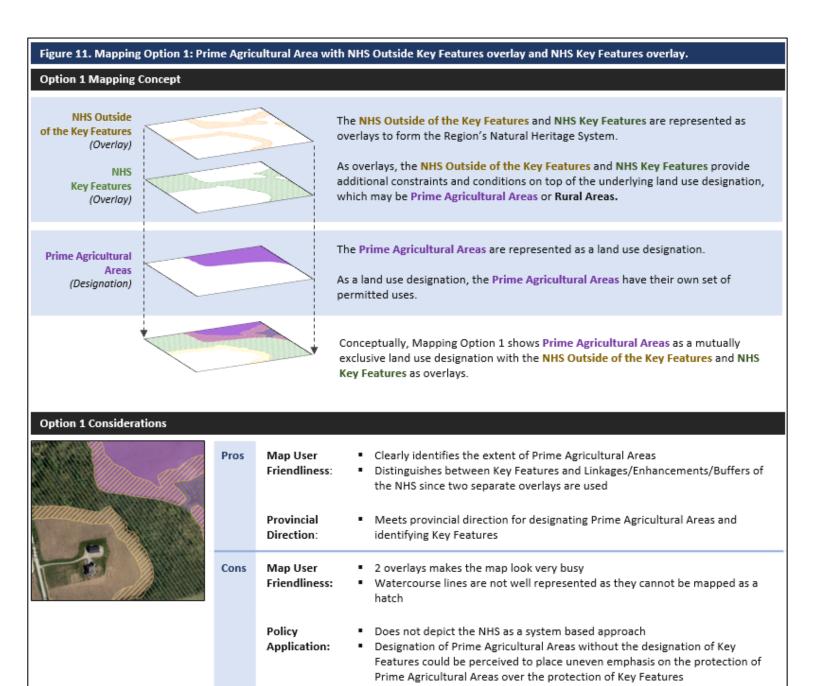
5.3 Discussion

As described above in Section 5.2 Policy and Mapping Considerations, the Province is now requiring planning authorities to designate Prime Agricultural Areas in accordance with guidelines developed by the Province. Provincial policies also require that Key Natural Heritage and Key Hydrologic Features must be protected from new uses, development, and site alteration and that a Water Resource System (WRS) be identified in Official Plans.

To address these requirements, four (4) options are being considered to determine the best approach in clearly representing the relationship between agriculture and natural heritage in the ROP given the requirements set out by the PPS and Provincial plans. **Figures 11 to 14** below provides an illustration of the mapping options that are described in this section.

Discussion Question 4:

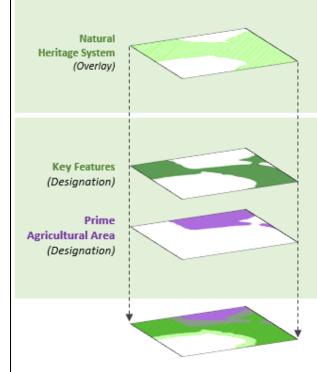
Given the policy direction provided by the PPS and Provincial plans, how should policy and mapping address the relationship between natural heritage protection and agriculture outside of the Urban Area or the Natural Heritage System?



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Figure 12. Mapping Option 2: Prime Agricultural Area and Key Features are designated with a Natural Heritage System overlay. Key features that overlap with the Prime Agricultural Area are cut out of the Prime Agricultural Area and incorporated into the Key Features designation.

Option 2 Mapping Concept



The Natural Heritage System as a whole is represented as an overlay that includes all the components of the Region's Natural Heritage System such as the Key Features, Linkages, Enhancement Areas, and Buffers.

As an overlay, the Natural Heritage System provides additional constraints and conditions on top of the underlying land use designation, which may be NHS Key Feature, Prime Agricultural Areas, or Rural Areas.

The NHS Key Features and Prime Agricultural Areas are represented as land use designations.

The Provincial mapping for Prime Agricultural Areas includes Key Features. Through the refinement process Provincial Staff have previously confirmed that the Region can remove the Key Features. In this option the Key Features that were included in the Provincial Prime Agricultural Area are consolidated with the rest of the Key Features of the Natural Heritage System under one designation.

As land use designations, the NHS Key Features and Prime Agricultural Areas will have their own set of permitted uses.

Conceptually, Mapping Option 2 shows Prime Agricultural Areas and Key Features as mutually exclusive land use designations with the Natural Heritage System as an overlay.

Option 2 Considerations



Pros	Map User
	Friendliness

 Clear visualization of how the Prime Agricultural Areas, NHS, and Key Features interconnect

Policy Application:

- Balanced approach and clear representation of the NHS as a system with emphasis on the protection of Key Features and Prime Agricultural Areas
- Policies for Key Features are applied consistently through one designation (instead of 2 designations in Option 3)

Provincial Direction:

- Meets Provincial direction for designating Prime Agricultural Areas and identifying Key Features
- Easiest method to identify Key Features in the RNHS, GBNHS, and NHSGP

Cons Map

Map User Friendliness:

 Does not identify Linkages, Enhancements, and Buffers as a separate layer (they are included in the Natural Heritage System Overlay which includes the entire system)

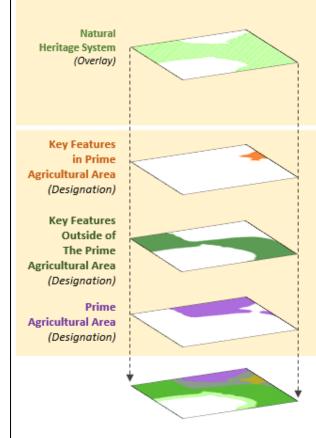
Policy Application:

 Detracts from the systems approach on which the RNHS is based on by creating two tiers; Key Features being treated differently from other components in the RNHS

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Figure 13. Mapping Option 3: Prime Agricultural Area and Key Features are designated with a Natural Heritage System overlay. Key Features that overlap with the Prime Agricultural Area are designated separately as 'Key Features in Prime Agricultural Area.'

Option 3 Mapping Concept



The Natural Heritage System is represented as an overlay that includes all the components of the Region's Natural Heritage System such as the Key Features, Linkages, Enhancement Areas, and Buffers.

As an overlay, the Natural Heritage System provides additional constraints and conditions on top of the underlying land use designation, which may be Key Features in Prime Agricultural Area, Key Features Outside of the Prime Agricultural Area, Prime Agricultural Areas, or Rural Area.

The Key Features in Prime Agricultural Area, the Key Features Outside of the Prime Agricultural Area, and the Prime Agricultural Areas are represented as land use designations.

The Provincial mapping for Prime Agricultural Areas includes Key Features. Through the refinement process Provincial Staff have previously confirmed that the Region can remove the Key Features however, in this option the Key Features are not removed from the Prime Agricultural Area and are split between two designations.

As land use designations, the **Key Features in Prime Agricultural Area**, the **Key Features Outside of the Prime Agricultural Area**, and the **Prime Agricultural Areas**will have their own set of permitted uses.

Conceptually, the Mapping Option 3 shows Prime Agricultural Areas and Key Features as mutually exclusive land use designations with the Natural Heritage System as an overlay.

Option 3 Considerations



Pros	Map User
	Friendliness:

 Clear visualization of how the Prime Agricultural Areas, NHS, and Key Features interconnect

Policy Application:

 Balanced approach and clear representation of the NHS as a system with emphasis on the protection of Key Features and Prime Agricultural Areas

Provincial Direction:

 Meets provincial direction for designating Prime Agricultural Areas and identifying Key Features

Cons

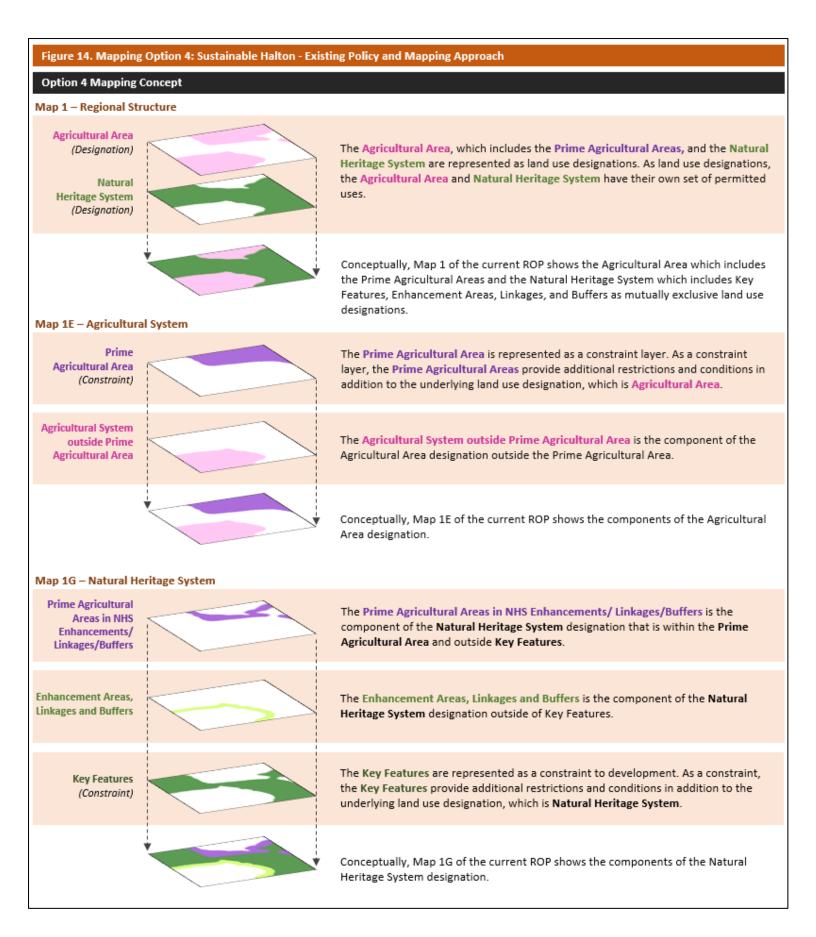
Map User Friendliness:

 Does not identify Linkages, Enhancements, and Buffers as a separate layer (they are included in the Natural Heritage System Overlay which includes the entire system)

Policy Application:

- Detracts from the systems approach on which the RNHS is based on by creating two tiers; Key Features being treated differently from other components in the RNHS
- Policies for Key Features are applied through two designations. This will
 create duplications of policies given that the level of protection and permitted
 uses for Key Features within and outside of Prime Agricultural Areas is
 identical

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Option 4 Considerations			
	Pros	Policy Application: User Friendliness:	 Continues Halton's long-standing history of the protection of agriculture and natural heritage that is strongly enshrined in Halton's planning vision Familiarity with Halton's approach as there has been extensive training done within and throughout the Region.
	Cons	User Friendliness: Policy Application: Provincial Direction:	 Mapping is complex and requires reference to three separate ROP Schedules Designation of NHS without the designation of Prime Ag could be perceived to place uneven emphasis on the protection of the NHS over protection of Prime Ag While accepted and approved as an approach to ROPA 38, Provincial direction has indicated that Prime Agricultural Areas must be designated Provincial direction has indicated that the Agricultural System is made up of Prime Agricultural Areas and Rural Areas. The Agricultural Area designation does not fully conform with this structure

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6.0 Water Resource System

6.1 Introduction

The current ROP policies on water are included in the Environmental Quality section of Part IV Healthy Communities Policies. They include the overall objective of maintaining, protecting and enhancing the quality and quantity of groundwater and surface water. The current OP establishes requirements for hydrogeological studies, hydrological studies and Environmental Impact Assessments in the context of development and site alteration in or near sensitive surface or groundwater features, or in cases where development has potential to release or discharge contaminants that affect the quality of groundwater. The ROP directs the Region to prepare watershed plans in partnership with Conservation Authorities and in consultation with Local Municipalities. It requires Local Municipalities to carry out sub-watershed studies prior to or as part of an area-specific plan process.

6.2 Policy and Mapping Considerations

Water Resource System Policy Review

Changes to the PPS 2020, Growth Plan 2019 and Greenbelt Plan 2017 have created a consistent approach across these plans and policies concerning water resources, with prominence given to watershed planning and identifying and protecting a Water Resource System (WRS). Supported by the PPS 2020, policies in the Growth Plan 2019 and Greenbelt Plan 2017 require that a WRS be identified to provide for the long-term protection of key hydrologic features, key hydrologic areas, and their functions.

The Growth Plan 2019 Policy 4.2.1.2 states:

Water resource systems will be identified to provide for the long-term protection of key hydrologic feature, key hydrologic areas, and their function.

The Greenbelt Plan 2017 Policy 3.2.3.3 states:

Water Resource Systems shall be identified, informed by watershed planning and other available information, and the appropriate designations and policies

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shall be applied in official plans to provide for the long-term protection of key hydrologic features, key hydrologic areas and their functions.

In the Growth Plan 2019, the WRS is defined as:

A system consisting of ground water features and areas and surface water features (including shoreline areas), and hydrologic functions, which provide the water resources necessary to sustain healthy aquatic and terrestrial ecosystems and human water consumption. The water resource system will comprise key hydrologic features and key hydrologic areas.

In the Growth Plan 2019 and Greenbelt Plan 2017, policies on the NHS and WRS are very much connected, as Key Hydrologic Features are considered components of both Systems and protection approaches for these features are similar. Policy direction often applies to Key Natural Heritage Features and Key Hydrologic Features together where they coincide. While the two systems share many of the same elements, there are also components that are unique to each system. For example, wetlands are shared between the two Systems, while highly vulnerable aquifers are unique to the WRS. In addition to the shared elements, there are functional relationships between the two systems; for example some Key Features in the NHS may partially depend on groundwater, which is encompassed within the WRS.

Due to the overlap between the two systems, it is important to identify the relationship between the NHS and WRS in order to determine how the interdependency of the two systems should best be addressed in the ROP policy and mapping. Although key features in both systems are treated similarly in policy, the policies (and therefore protections) pertaining to each system as a whole are different. When developing or refining policies, the commonalities and functional relationships should be recognized, either through text or by cross referencing.

Although the ROP has a section on water, it does not identify a WRS, map it, or apply policies that pertain to it. To satisfy this expanded area of Provincial plans, the ROP will be required to incorporate new terms, definitions, mapping and policies that address and protect a new Halton WRS. Also related to water, policies in the Growth Plan 2019 and Greenbelt Plan 2017 establish that decisions on allocation of growth and planning for water, wastewater, and storm water infrastructure shall be informed by applicable watershed planning or equivalent (Growth Plan 2019 policy 4.2.1.3 & Greenbelt policy 3.2.3.4).

6.3 Discussion

In considering how the ROP can be brought into conformity and made consistent with the Provincial plans and policies, a key issue to be addressed is whether the NHS and WRS should be addressed in an integrated fashion or separately.

Option 1 – Combine the NHS and WRS

The NHS and WRS policies would be integrated in a unified policy section which highlights the relationship of the two systems in a narrative sense. The ROP would still include separate policies pertaining to the two systems, but could also present a common set of policies for Key Natural Heritage Features and Key Hydrologic Features. A separate set of policies would apply to Key Hydrologic Areas.

This approach would provide recognition of the integration and overlap between the two systems and would be similar to the approach taken in the Greenbelt and Growth Plan 2019. Another benefit would be to reduce duplication in the policies pertaining to Key Natural Heritage Features and Key Hydrologic Features, by outlining them once together, rather than separately in two different sections.

Option 2 – Separate the NHS and WRS

The water sub-section could be expanded to meet the requirements of the Provincial plans and policies concerning WRS, separate from, but with reference to the NHS section. Key Hydrologic Features and Key Hydrologic Areas would be mapped separately from Key Natural Heritage Features, potentially on a specific map dedicated to the WRS.

While this option would not highlight the integration of the two systems to the same extent as Option 1, it would provide clarity in terms of mapping and policy application. Some challenges with this option would be that there could be some instances where there is policy duplication or two sets of policies may apply to the same area or feature.

Discussion Question 5:

The Greenbelt Plan 2017 and Growth Plan 2019 require municipalities to identify a Water Resource System (WRS) in Official Plans. Based on the two (2) options presented, how should the WRS be incorporated into the ROP?

7.0 Other Considerations

There are additional considerations and key themes that have been reviewed through the background technical work. Section 7.0 highlights some additional themes that could be further investigated through the ROPR.

7.1 Halton Region's Natural Heritage Strategy

Halton Region has placed significant emphasis on the protection and enhancement of Halton's NHS through each successive Halton ROP. A healthy and connected system of features and linkages is essential to preserve the Region's natural heritage and biodiversity. The Halton Region Strategic Business Plan 2019-2022 has continue to builds on this fundamental value through the objectives set out in this plan including the commitment to prioritizing the protection of the natural environment and agricultural areas, responding to climate change and reducing Halton's carbon footprint. The Regional efforts, through a system-based approach, has resulted in 50.6% of Halton Region located in the NHS. Section 114 of the ROP states:

The goal of the Natural Heritage System is to increase the certainty that the biological diversity and ecological functions within Halton will be preserved and enhanced for the future.

In order to meet the goal outlined above, Halton Region should develop a Natural Heritage Strategy, similar to Halton's Rural Agricultural Strategy. The Natural Heritage Strategy would align with the action items identified in the Halton Region Strategic Business Plan 2019-2022 and provide a context for Regional decision-making that supports a sustainable, natural environment. The goal of a Natural Heritage Strategy would be to provide a framework for initiatives to:

- restore habitat and increase forest cover through restoration and stewardship;
- promote natural heritage education and community awareness;

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Figure 15: Halton Region Natural Heritage Strategy



- secure greenlands and their linkages;
- explore opportunities to mitigate climate change; and
- promote and protect the natural environment.

Halton Region has existing programs that would fall under this strategy and help achieve, maintain, protect and enhance Halton's NHS. These existing programs include

Discussion Question 6:

Preserving natural heritage remains a key component of Halton's planning vision. Should Halton Region develop a Natural Heritage Strategy and what should be included in such a strategy?

Greenland Securement, State of NHS Reporting, Halton Region's Tree By-law, Forest Management Plans, and strategies for natural heritage preservation and restoration for the Waterfront Parks Masterplans. Consideration should be given on how to incorporate policies in the ROP that would support the development of a Natural Heritage Strategy.

7.2 Climate Change

Halton's NHS protection and enhancement is an important part of responding to climate change in terms of both adaptation and mitigation. The NHS provides for more resilient environments and can allow for opportunities to reduce impacts of flooding and other risks associated with the more frequent and severe weather events. NHS protection and enhancement can also play an important role in acting as a carbon sink to reduce green house gas emissions.

Through the ROPR, there are opportunities to strengthen a number of natural heritage, hazard lands and water resource goals, objectives and policies to better respond to climate change and address provincial conformity requirements. ROP policies should be enhanced to address climate change mitigation and adaptation measures, including the following:

- Building on the existing research and literature to require studies such as Subwatershed studies to mitigate climate change and extreme weather impacts on NHS features;
- Development of a Natural Heritage Strategy for Halton Region;
- Preserve and restore biological diversity, water resources and natural features;
- Explore ways to mitigate against climate change events and protect water resources using low impact development and green infrastructure approaches to stormwater management; and
- Encouraging joint partnerships with local municipalities and conservation authorities to find opportunities to enhance and restore Halton's NHS to help

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mitigate against climate change as part of Halton Region's Natural Heritage Strategy.

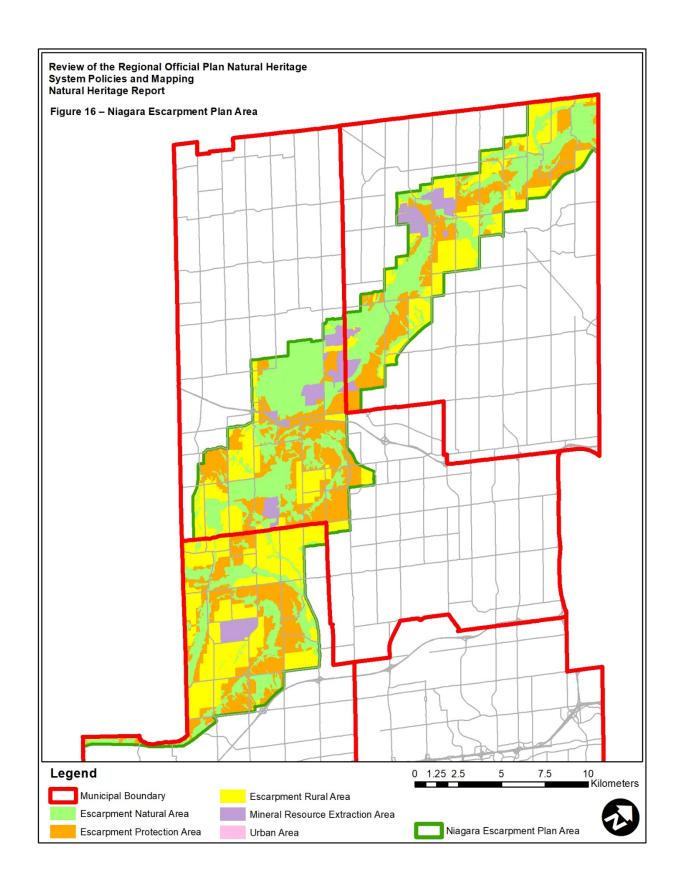
7.3 Niagara Escarpment Plan (NEP) 2017

Although many of the policies of the NEP 2017 have undergone significant change, the overall structure of the plan, which establishes land use designations and details development criteria, has remained the same. The purpose and objectives relative to natural heritage are unchanged. New text in the introduction explains the landscape approach taken by the NEP 2017 and the relevance of natural heritage:

The land use designations of this Plan focus on the continuous landform of the Escarpment and provide a series of connected and protected areas. These land use designations ensure a broader landscape approach to protecting the natural environment and should be implemented in a way that recognizes the natural heritage system of the Niagara Escarpment and associated natural heritage features.

Under this section, similar to the other provincial plans, the text of the NEP 2017 conceptualizes natural systems as made up of natural heritage features and hydrologic features that often coincide.

Natural heritage continues to be among the criteria for identifying certain land use designations, particularly Escarpment Natural Area and Escarpment Protection Area. The objectives, criteria for designation and permitted uses for these land use designations have been refined. Although the NEP 2017 does not define a natural heritage system per se, the combination of Escarpment Protection and Escarpment Natural Area designations are a de facto NHS. The NEP 2017 includes updated provincial mapping to reflect changes to the lands within the Niagara Escarpment designations. These designations are shown in Figure 16 Niagara Escarpment Plan Area. Specifically, the Escarpment Natural Area has increased in size, whereas the Escarpment Rural Area has decreased. Consideration should be given to determine how the NEP 2017 Escarpment Natural and Protection areas mapping should be reflected in the ROP.



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The greatest area of substantive change regarding natural heritage is within the development criteria in Section 2.7 of the NEP. This is a new section which establishes an expanded set of policies regarding development affecting natural heritage. The objective listed for the designation criteria is "to protect and where possible enhance natural heritage features and functions, in order to maintain the diversity and connectivity of the continuous natural environment."

Consideration should be given to the broader approach to conformity with the NEP 2017. While generally aligned with the Growth Plan 2019, there are differences in policy. These policy differences could be reflected in the ROP, or the ROP might simply indicate that its own policies are subject to the NEP 2017.

7.4 Cootes to Escarpment EcoPark System

The Cootes to Escarpment EcoPark System is an innovative partnership to protect, connect and restore natural lands and open space between the Niagara Escarpment and Cootes Paradise in Hamilton Harbour. The EcoPark System consists of six core natural areas referred to as "Heritage Lands", named to reflect the natural and cultural components of each area. The Heritage Lands include both publicly- and privately-owned lands and Management Plans have been undertaken for each of the Heritage Areas on partner-owned lands.

There are no policies currently in the ROP that recognize the Cootes to Escarpment EcoPark System partnership, support its vision, or implement the Management Plans. The Cootes to Escarpment EcoPark System is located within the Greenbelt Plan 2017. There are no protective policies that apply to the Cootes to Escarpment EcoPark System per se, although there are numerous areas within the EcoPark System that are subject to the policies of the RNHS, the GBNHS, and/or the NHSGP. The Greenbelt Plan 2017 does contain policies that require municipalities, agencies, and other levels of government to consider "geographic-specific park or public land management plans" when making decisions on land use or infrastructure proposals.

As there are Management Plans for the Cootes to Escarpment EcoPark System that address public lands, the Region should consider them when making decisions on land use or infrastructure proposals as required by the Greenbelt Plan 2017. This may be

Discussion Question 7:

Should the ROP incorporate objectives and policies to support/recognize the Cootes to Escarpment EcoPark System?

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most applicable where there are development proposals within/adjacent to NHS. In such cases impact analyses and mitigation recommendations (for example as part of Environmental Impact Assessments) should account for the role the Heritage Areas play in the overall Cootes to Escarpment EcoPark System. It could also involve working with the responsible public agency to undertake or support management within the Natural Heritage Lands themselves to mitigate the inevitable increased use associated with development. Based on this discussion, the Region must determine if the ROP should include policies to encourage recognition and support continued collaboration with partners and landowners and consider including requirements for environmental impact assessment for Cootes to Escarpment Eco Park System Heritage Areas.

7.5 Drinking Water Source Protection

The Clean Water Act, 2006 (CWA) was created to help protect drinking water sources from contamination and overuse as the first step in a multi-barrier staged approach. The Region introduced policies related to drinking water source protection during the Sustainable Halton process through policies and directions contained in the Aquifer Management Plan (refer to council report number PW-05-17/LPS07-17 – "Aquifer Management Plan Update"). The current ROP contains policies and mapping to protect and enhance the quality and quantity of Halton Region's ground and surface water resources as directed through the Aquifer Management Plan. These policies were included in the ROP prior to the Provincial approval of Source Protection Plans (SPP) applicable to Halton Region.

SPPs have now been developed in Halton Region in keeping with the CWA science-based process for the local development and continuous refinement of SPP policies which are intended to protect drinking water. SPPs are applicable law in the Planning Act, Condominium Act, 1998 and the Building Code Act, 1992, meaning that planning and building officials within municipalities play a role in implementation.

Each SPP applies to a discrete area based on watersheds and Conservation Authority jurisdiction so the boundaries do not correspond with municipal boundaries. Halton Region is located in three different watersheds and as such is subject to the policies of three SPPs:

- Halton-Hamilton Source Protection Plan
- CTC Source Protection Plan
- Grand River Source Protection Plan

These SPPs include policies and mapping that must be implemented through land-use planning and require that official plans be updated to conform to the SPPs as part of a ROPR. The land use policies contained in the applicable SPPs will replace the need for some of the existing ROP policies.

Consideration is needed to determine the best approach in implementing the SPPs into the ROP in a clear and concise way. The three SPPs that affect Halton apply to different geographic areas which complicates policy implementation. The applicable SPPs used modelling to determine drinking water source vulnerability and the significance of existing and future threats. Because this approach is outlined in the CWA, many policies among the SPPs affecting Halton Region are similar. Despite these similarities, there are unique policies and subtle differences among related policies according to the context and conditions of the associated watersheds. Mapping of vulnerable areas will be complicated given that SPP policies cross municipal boundaries and there are multiple SPPs to take into consideration. There is also a concern with changes to the SPP mapping occurring during the life of the ROP.

Discussion Question 8:

The ROP is required to conform to applicable Source Protection Plans and must be updated through this ROPR process. What is the best approach to address Drinking Water Source Protection policies and mapping?

7.6 Natural Hazards

PPS 2020, Section 3.0 Protecting Public Health and Safety, has revised policies to indicate greater emphasis on avoidance as compared to mitigation of natural and human-made hazards. The PPS indicates that development should be directed away from areas where there is an unacceptable risk to public health or safety or of property damage, and not create new or aggravate existing hazards. The PPS also emphasizes reducing the potential for public cost or risk to Ontario's residents from natural or human-made hazards. Natural Hazards in the PPS include hazardous lands, flooding hazards, erosion hazards, dynamic beach hazards and wildland fire.

The current ROP policies relating to Natural Hazards need to be strengthened and do not provide clear direction on Natural Hazard policy and mapping requirements for Local Municipalities. Consideration also needs to be given on how to include the revised PPS

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policies into the ROP. The recommendations in the recent report from Ontario's Special Advisor on flooding <u>Protecting people and property: Ontario's flooding strategy</u> should also be considered through the development of ROP policies and creation of guidelines.

Conservation Authorities have been delegated responsibilities from the Minister of Natural Resources and Forestry to represent the provincial interests regarding natural hazards encompassed by Section 3.1.1-3.1.7 of the PPS. These delegated responsibilities require Conservation Authorities to review and provide comments on municipal policy documents (Official Plans and comprehensive zoning by-laws) and applications submitted pursuant to the Planning Act, as part of the Provincial One Window Plan Review Service. Halton Region is located within the jurisdiction of three Conservation Authorities: Conservation Halton, Credit Valley Conservation and the Grand River Conservation Authority.

Although the ROP must be consistent with the natural hazards policies of the PPS, the ROP should also align with the policies and regulations of Conservation Authorities where possible, as per the Memorandum of Understanding (July 16, 2018) between Halton Region, local municipalities and the Conservation Authorities. Through the ROPR, Halton Region has and will continue to work closely with our conservation authority partners on the review of natural hazard policies and mapping.

In the 2009 RNHS mapping, erosion hazards, dynamic beach hazards and wildland fire are not shown on Map 1G but regulated flood plains, as mapped by the Conservation Authority, have been included in Map 1G as a component within the System. Even though flood plains are identified as a natural hazard, some flood plain areas do offer an ecological benefit to the RNHS and can be a source to help map possible enhancement areas or linkages. Criteria to identify flood plain areas that do offer ecological benefit to the RNHS will need to be developed as part of the ROPR. In order for Regional and Local Official Plans to conform to the PPS, the approach to mapping Hazard Lands needs to be clarified in the ROP, specifically within settlement areas. There are three options to identify Natural Hazards in mapping:

- 1. create a separate Schedule in the ROP that maps the Natural Hazards;
- 2. on the RNHS schedule (Map 1G), show the Natural Hazards as an overlay; and

Discussion Question 9:

The ROP is required to conform to the updated Natural Hazards policies in the PPS. What is the best approach to incorporate Natural Hazards policies and mapping?

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3. do not map Natural Hazard in the ROP but rather include additional policies to direct the Local Municipalities to map Natural Hazards in their Official Plans.

7.7 Significant Woodlands

Brow.

Significant Woodland is a key feature in the RNHS as required by Provincial policies and is a key component in the protection of Halton Region's Natural Heritage. The definition of significant woodlands was approved through a ROPA 38 OMB decision and is defined in Section 277 of the ROP as follows:

SIGNIFICANT WOODLAND means a Woodland 0.5ha or larger determined through a Watershed Plan, a Sub-watershed Study or a site-specific Environmental Impact Assessment to meet one or more of the four following criteria:

277(1) the Woodland contains forest patches over 99 years old, 277(2) the patch size of the Woodland is 2 ha or larger if it is located in the Urban Area, or 4 ha or larger if it is located outside the Urban Area but below the Escarpment Brow, or 10 ha or larger if it is located outside the Urban Area but above the Escarpment Brow, 277(3) the Woodland has an interior core area of 4 ha or larger measured 100m from the edge, or 277(4) the Woodland is wholly or partially within 50 m of a major creek or certain headwater creek or within 150m of the Escarpment

Through consultation, it was identified that there should be consideration for the quality of the woodland in the definition of significant woodlands. In the 'Technical Definitions and Criteria for Key Natural Heritage Features in the Natural Heritage System of the Protected Countryside Area Paper' (2005) prepared by the Province, woodland quality is addressed by taking into consideration the extent of non-native tree species present within the woodland. However, only two tree species are included in this criterion from the Province. A decision is required on whether this approach should be considered in the ROP and if this approach should be applied Region-wide or not.

Invasive tree species are impacting the character and integrity of woodlands in Halton Region to varying degrees, and some are experiencing severe disturbance as a result of this stressor, particularly in areas anthropogenic influence. Through the implementation phase of the ROPR, consideration should be given to reviewing the definition of woodlands and significant woodlands to include criteria to address the quality of the woodland in addition to the existing four criteria. Regardless of tree Page 57 | Natural Heritage Discussion Paper

species, woodlands help mitigate climate change through removing carbon from the atmosphere and storing it, contribute to mitigating urban heat impacts, assist in maintaining a healthy hydrological cycle, and even areas with a relatively high proportion of non-native trees can provide wildlife habitat. These and other ecological functions should also be considered and any change in the definition of significant woodland must consider how these functions can be maintained and enhanced as part of the NHS, where appropriate. Consideration should also be given to the development of policies that provide a greater protection to these woodlands.

Another stressor influencing the character of woodlands in Halton Region is extreme weather events and the impact of forest pathogens. Dead trees have often been precluded from tree density counts involved in identifying "woodlands", based on an interpretation that the current definition only requires consideration of live trees. Therefore it is possible that an area that would have qualified as a woodland no longer qualifies due to the amount of dead/removed trees (and therefore it is possible that a former significant woodland is no longer significant). Consideration should be given to refining the existing definition of "woodland" (ROP 295) similar to the Greenbelt Plan technical paper that addresses this issue: "Woodlands experiencing changes such as harvesting, blowdown or other tree mortality are still considered woodlands. Such changes are considered temporary whereby the forest still retains its long-term ecological value". Dead trees also provide habitat for wildlife and their value to Significant Wildlife Habitat as well as potential areas for enhancement to the NHS should continued to be assessed.

Discussion Question 10:

How can Halton Region best support the protection and enhancement of significant woodlands, through land use policy?

8.0 Next Steps

The overall goal of the NHS Policies and Mapping portion of the ROP Review is to identify opportunities to strengthen the long-term viability of Halton's natural heritage and water resources. It addresses where ROP policies and mapping could be updated, enhanced, and refined based on experience with the implementation of the current ROP, best practices and changes to the Provincial policy framework since the last ROP Review, including the Provincial Policy Statement, A Place to Grow, the Greenbelt Plan and the NEP) and the recently released Provincial NHSGP mapping.

This report summarizes the key findings from the background technical work, identifies the principal issues the ROP Review will address and outlines potential options and considerations for addressing these issues through revised policies and mapping in the ROP.

This report will form the basis for consultation with municipalities, conservation authorities and the public. Following the consultation component, a policy directions report will be brought forward to Council to guide Phase 3.

Discussion Question 11:

Are there any additional considerations or trends that Halton Region should review in terms of the Natural Heritage component of the ROP?

Acronym Glossary

CWA Clean Water Act

ESA Environmentally Sensitive Areas
GBNHS Greenbelt Natural Heritage System

GP Growth Plan

IGMS Integrated Growth Management Strategy

MCR Municipal Comprehensive Review

MNRF Ministry of Natural Resources and Forestry

NEP Niagara Escarpment Plan NHS Natural Heritage System

NHSGP Natural Heritage System for the Growth Plan

NHSPC Provincial Greenbelt Plan Natural Heritage System for the Protected

Countryside

PPS Provincial Policy Statement

RNHS Regional Natural Heritage System

ROP Regional Official Plan

ROPA Regional Official Plan Amendment

ROPR Regional Official Plan Review

SPP Source Protection Plan

VPZ Vegetation Protection Zone

WRS Water Resource System

Glossary of Terms

Agricultural system: The system mapped and issued by the Province in accordance with this Plan, comprised of a group of inter-connected elements that collectively create a viable, thriving agricultural sector. It has two components: 1. an agricultural land base comprised of prime agricultural areas, including specialty crop areas, and rural lands that together create a continuous productive land base for agriculture; 2.) An agri-food network which includes infrastructure, services, and assets important to the viability of the agri-food sector. (Greenbelt Plan 2017)

A system comprised of a group of inter-connected elements that collectively create a viable, thriving agricultural sector. It has two components:

- a. An agricultural land base comprised of prime agricultural areas, including specialty crop areas, and rural lands that together create a continuous productive land base for agriculture; and
- b. An agri-food network which includes infrastructures, services, and assets important to the viability of the agri-food sector. (PPS 2020)

Area Specific Plan: means a Local Official Plan Amendment applying to a specific geographic area such as a secondary plan or a Regional Official Plan Amendment applying to a specific geographic area.

Key hydrologic areas: Significant groundwater recharge areas, highly vulnerable aquifers, and significant surface water contribution areas that are necessary for the ecological and hydrologic integrity of a watershed. (Growth Plan 2019)

Key hydrologic features: Permanent streams, intermittent streams, inland lakes and their littoral zones, seepage areas and springs, and wetlands. (Growth Plan 2019)

Key natural heritage features: Habitat of endangered species and threatened species; fish habitat; wetlands; life science areas of natural and scientific interest (ANSIs), significant valleylands, significant woodlands; significant wildlife habitat(including habitat of special concern species); sand barrens, savannahs, and tallgrass prairies; and alvars.

Municipal comprehensive review: A new official plan, or an official plan amendment, initiated by and upper- or single-tier municipality under section 26 of the Planning Act that comprehensively applies the policies and schedules of A Place to Grow: Growth Plan for the Greater Golden Horseshoe. (Growth Plan, 2019)

Natural heritage system: A system made of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity,

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natural functions, viable populations of indigenous species and ecosystems. The system can include key natural heritage features, key hydrologic features, federal and provincial parks and conservation reserves, other natural heritage features and areas, lands that have been restored or have the potential to be restored to a natural state, associated areas that support hydrologic functions, and working landscapes that enable ecological functions to continue (Based on PPS, 2020 and modified for the Growth Plan, 2019)

Natural heritage system for the growth plan: The natural heritage system mapped and issued by the Province in accordance with this Plan (Growth Plan, 2019)

Prime agricultural area: An area where prime agricultural lands predominate. This includes areas of prime agricultural lands and associated Canada Land Inventory Class 4 through 7 lands and additional areas where there is a local concentration of farms which exhibit characteristics of ongoing agriculture. Prime agricultural areas are to be identified by the Ontario Ministry of Agriculture, Food and Rural Affairs using guidelines developed by the Province as amended from time to time (Based on PPS, 2020 and modified for the Growth Plan, 2019)

Settlement Areas: Urban areas and rural settlements within municipalities (such as cities, towns, villages and hamlets) that are:

- a) Built-up areas where development is concentrated and which have a mix of land uses; and
- b) Lands which have been designated in an official plan for development in accordance with the policies of the Growth Plan. Where there are no lands that have been designated for development, the settlement area may be no larger than the area where development is concentrated (Growth Plan, 2019).

Subwatershed Plan: A plan that reflects and refines the goals, objectives, targets, and assessments of watershed planning, as available at the time a subwatershed plan is completed, for smaller drainage areas, is tailored to subwatershed needs and addresses local issues.

A subwatershed plan should: consider existing development and evaluate impacts of any potential or proposed land uses and development; identify hydrologic features, areas, linkages, and functions; identify natural features, areas, and related hydrologic functions; and provide for protecting, improving, or restoring the quality and quantity of water within a subwatershed.

A subwatershed plan is based on pre-development monitoring and evaluation; is integrated with natural heritage protection; and identifies specific criteria, objectives, actions, thresholds, targets, and best management practices for development, for water and wastewater servicing, for stormwater management, for managing and minimizing impacts related to severe weather events, and to support ecological needs. (Greenbelt Plan 2017)

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Appendices

Appendix 1: Discussion Section

We would welcome your feedback on options discussed around the Natural Heritage System in Halton. Here is a summary of reflection questions posed throughout the discussion paper. Please take a moment to answer these questions and provide your valuable insight into these issues:

1.	As required by the Growth Plan, the new Natural Heritage System for the Growth Plan mapping and policies must be incorporated into the Regional Official Plan. Based on options outlined in Section 3.3, what is the best approach in incorporating the NHSGP into the ROP?
2.	RNHS policies were last updated through ROPA 38. Are the current goals and objectives for the RNHS policies still relevant/appropriate? How the can ROP be revised further to address these goals and objectives?
3.	Based on the discussion in Section 4.2, to ease the implementation of buffers and vegetation protection zones, should the Region include more detailed policies describing minimum standards?
4.	Given the policy direction provided by the PPS and Provincial plans, how should policy and mapping address the relationship between natural heritage protection and agriculture outside of the Urban Area or the Natural Heritage System? Options are provided in Section 5.3.

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5.	The Greenbelt Plan 2017 and Growth Plan 2019 require municipalities to identify Water Resource Systems (WRS) in Official Plans. Based on the two (2) options provided in Section 6.3, how should the WRS be incorporated into the ROP?
6.	Preserving natural heritage remains a key component of Halton's planning vision. Should Halton Region develop a Natural Heritage Strategy and what should be included in such a strategy?
7.	Should the ROP incorporate objectives and policies to support/recognize the Cootes to Escarpment EcoPark System?
8.	The Regional Official Plan is required to conform to applicable Source Protection Plans and must be updated through this ROPR process. What is the best approach to address Drinking Water Source Protection policies and mapping?
9. —	The ROP is required to conform to the updated Natural Hazard policies in the PPS. What is the best approach to incorporate Natural Hazard policies and mapping?
10	How can Halton Region best support the protection and enhancement of significant woodlands, through land use policy?

11. Are there any additional considerations or trends that Halton Region should review in terms of the Natural Heritage component of the ROP?					

Appendix 2: RNHS Components List 2018

Proposed Refined	Included	Key Feature	System	Remains as an unmapped feature			
Halton NHS			Component	due to limited data source			
Components	(Y/N)	(K)	(S)	(Y)			
Key Features and Area	Key Features and Areas						
Key Natural Heritage Fea	Key Natural Heritage Features						
Provincial Life ANSI	Υ	K					
Regional Life ANSI	Υ	К					
Candidate Life ANSI	Υ		S				
Provincial Earth ANSI	Υ		S				
Regional Earth ANSI	Υ		S				
Candidate Earth ANSI	Υ		S				
Significant Wildlife Habitats (including	Υ	K		Υ			
habitat of special							
concern species)							
Significant Coastal	Υ	К					
Wetlands and							
Significant Wetlands ¹							
MNR Provincial	Υ	К					
Significant Wetlands							
Coastal Wetlands	Υ	K					
Candidate Significant Woodlands	Υ	К					
Significant Valleylands	Υ	K		Υ			
Urban River Valleys							
Habitat of Threatened	Υ	K		Υ			
or Endangered Species							
Fish Habitat	Υ	K					
Sand barrens,	Υ	K					
savannahs, and							
tallgrass prairies,							
Alvars,	N						

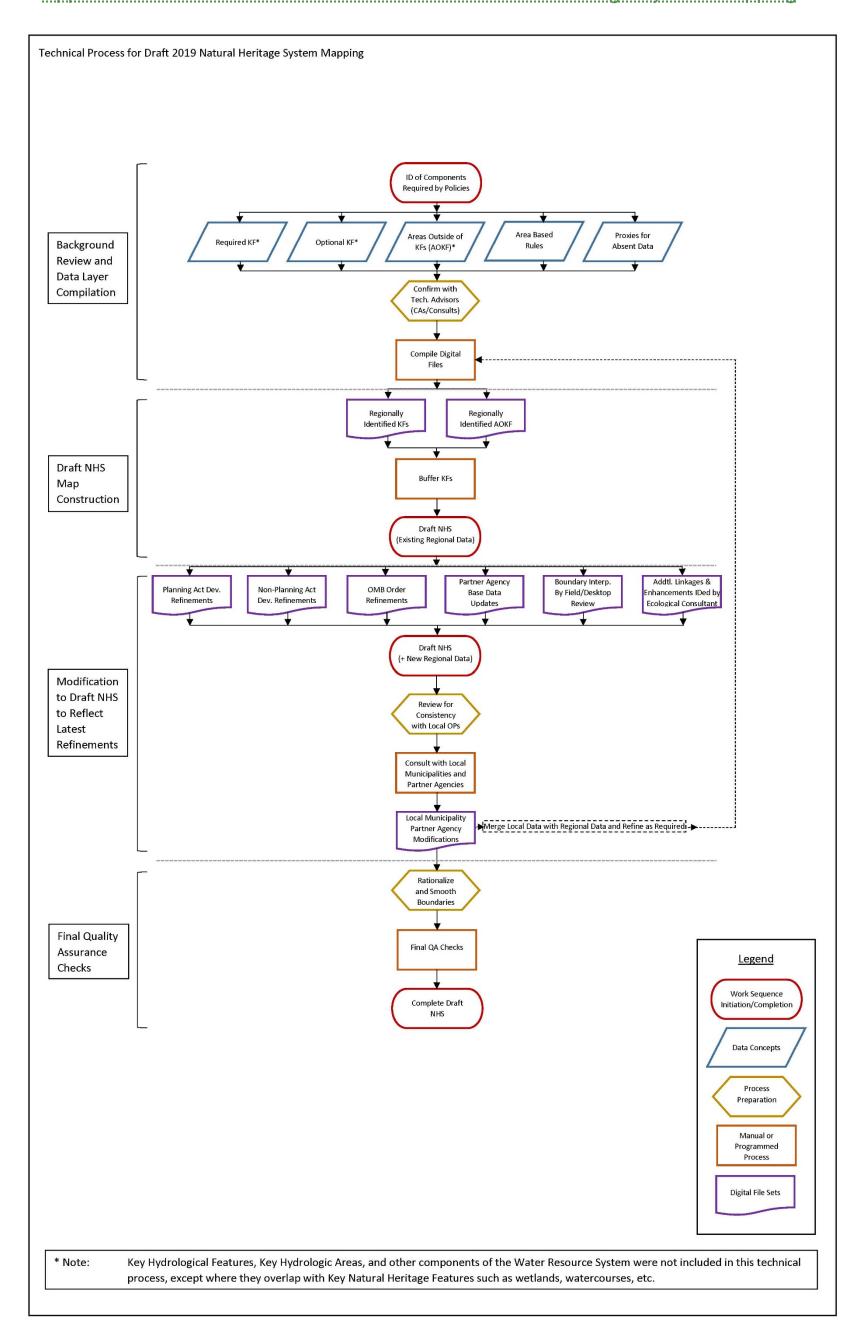
¹ Wetlands significance varies geographically across the Region. Current ROP definitions tie the significance threshold for wetlands to the specific threshold identified in each Provincial Plan area (e.g. Section 276.5 of the 2009 ROP). Where the term significant wetland is used here, it is assumed that this includes (a) for lands within the Niagara Escarpment Plan Area, provincially significant wetlands and wetlands as defined in the Niagara Escarpment Plan; (b) within the Growth Plan Area and Greenbelt Plan Area, but outside the area describe in (a), provincially significant wetlands and wetlands as defined in the Growth Plan, 2017, and Greenbelt Plan, 2017; (c) for lands within the Halton NHS outside the areas describe in (a) and (c), provincially significant wetlands and wetlands that make an important ecological contribution to the Halton Natural Heritage System; and (d), for all lands outside the areas described in (a), (b), and (c), provincially significant wetlands.

- In C						
Proposed Refined	Included	Key Feature	System	Remains as an unmapped feature		
Halton NHS	(57 (81)	(14)	Component	due to limited data source		
Components	(Y/N)	(K)	(S)	(Y)		
W. H. J. J. J. T. F. J						
Key Hydrologic Features		I				
Significant Wetlands ¹	Υ	К				
Seepages and springs	Υ	K		Υ		
Permanent and	Υ	K				
Intermittent Streams						
Lakes (and their littoral	Υ	K				
zones)						
			ant for their e	nvironmental and social values as a		
legacy of the natural lan	dscape of H	alton				
Environmentally	Υ		S			
Significant Areas						
Great Lake Dunes	Υ	K				
Certain headwater	Υ	K		Υ		
drainage features						
Rehabilitated Mineral	Υ		S			
Aggregate Resource						
Extraction Sites						
Areas Outside of Key Fea	atures					
Natural Hazards						
Flooding Hazards	Υ		S			
Buffer and/or Vegetation	n Protection	n Zones				
Buffer (30m)	Υ		S			
Vegetation Protection	Υ		S			
Zone						
Minimum Vegetation	Υ		S			
Protection Zone						
Linkages	Υ		S			
Key Feature	Υ		S			
Enhancement Areas						
Other Suitable NHS Enhancement Areas (reviewed by Ecological Consultants)						
CA Regulated	Υ		S	,		
watercourses that			-			
provide linkage to a						
wetland and/or						
significant woodland						
Lands designated	Υ	К				
and/or zoned for						
and/or zoned for						

Included	Koy Foaturo	Systom	Remains as an unmapped feature
mciuded	Rey reature	*	due to limited data source
/v/NI\	(v)	-	
(Y/N)	(K)	(5)	(Y)
Y		5	
.,			
Υ		S	
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nd similar			
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Appendix 3: Technical Process for Draft 2019 Natural Heritage System Mapping





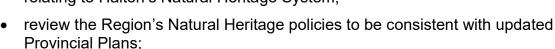
Halton Region Official Plan Review - Natural Heritage

Why is Natural Heritage Being Addressed in the Official Plan Review?

Halton Region, like all municipalities in Ontario, is responsible for protecting the natural environment. Preserving the natural environment has been a key component of Halton's Regional Official Plan (ROP) since the 1980s. The goal of the Natural Heritage System is to increase the certainty that the biological diversity and ecological functions within Halton Region will be preserved and enhanced for future generations. The Natural Heritage System now protects about 50% of Halton Region.

The Region is currently working on an update to the Regional Official Plan (ROP). The Natural Heritage Discussion Paper sets out proposed objectives and actions for the Region to strengthening the long-term viability of Halton Region's natural heritage and water resources through land-use planning. Through this review, the Region will:





- incorporate the Natural Heritage System for the Growth Plan and update the Regional Natural Heritage System mapping; and
- explore new opportunities to meet the objectives of the <u>Halton Region Strategic</u> Business Plan 2019-2022.



The Natural Heritage and Water Resource Systems provide environmental, health, economic, and cultural benefits for us and future generations.

The Natural Heritage System is made of wetlands, woodlands, rivers, lakes, and other natural areas that have ecological significance. These are locations that are home to many plants and wildlife and green spaces we frequent such as regional forests, conservation areas and parks.

The Water Resource System is made of ground and surface water features like seeps, springs, wetlands and rivers that provide water to residents and perform many other vital functions for the environment.



The Regional Natural Heritage System is an approach to protecting and enhancing natural features and functions. It is built on the foundation of key natural heritage features and areas and is consistent with the policies of the Provincial Policy Statement. To learn more about those key features and components visit Regional Official Plan Explained - Natural Heritage System.



Halton Region Official Plan Review - Natural Heritage

Refinements to Halton's Natural Heritage System

Updates to Natural Heritage System policies and mapping will be required to:

- be consistent with the Provincial Policy Statement and conform to Provincial Plans;
- improve and clarify existing natural heritage policies;
- identify planning objectives needed to preserve and enhance the Region's Natural Heritage System; and
- improve the accuracy of the Natural Heritage System mapping. Refinements to the mapping may result in removals or additions to the Natural Heritage System.

The Greenbelt Natural Heritage
System was developed by the
provincial government in 2005 and it
is currently identified through policy
and mapping in the ROP.

The Growth Plan, 2019 now identifies a Natural Heritage System for the Growth Plan for the Greater Golden Horseshoe policies and mapping that must be incorporated into the ROP.

The draft Natural Heritage System

mapping is available on Halton Region's website. Following the public consultation on the Discussion Paper, Regional planning staff will consult with property owners who may be affected by the mapping changes.

Water Resource System

The Region must now identify a water resource system following recent changes to the Provincial Plans. A water resource system is a vast interconnected system of groundwater features, hydrologic features, natural heritage features and areas, and surface water features including shoreline areas. These features and areas are necessary for the ecological and hydrological integrity of a watershed.

Drinking Water Source Protection

Sourcewater Protection Plans help protect drinking water in Halton Region in keeping with the Clean Water Act. These plans have policies and mapping that are implemented through land use planning and require Halton's Official Plan to be updated.

Groundwater provides potable water for one in eight Halton residents.

Each Sourcewater Protection Plan applies to a geographic area based on watersheds and Conservation Authority jurisdiction so the boundaries do not correspond with municipal boundaries. Halton Region is located in three different watersheds and as such is subject to the policies of three Sourcewater Protection Plans: Halton-Hamilton Source



Halton Region Official Plan Review – Natural Heritage

Protection Plan, Credit Valley-Toronto and Region-Central Lake Ontario (CTC) Source Protection Plan and the Grand River Source Protection Plan.

Natural Hazards

Recent changes to the Provincial Policy Statement 2020, place a greater emphasis on avoiding rather than mitigating natural and human-made hazards. Natural Hazards in the Provincial Policy Statement include hazardous lands, flooding hazards, erosion hazards, dynamic beach hazards and wildland fire. The ROP policies and mapping for Natural Hazards should be strengthened and revised to address the new policies in the Provincial Policy Statement.

Conservation Authorities have been delegated responsibilities from the Minister of Natural Resources and Forestry to represent the provincial interests regarding Natural Hazards.

There are three Conservation Authorities that have jurisdiction in Halton Region: Conservation Halton, Credit Valley Conservation and the Grand River Conservation Authority.

Summary Questions

- 1. The current Regional Official Plan aims to protect approximately 50% of the total area of Halton for Natural Heritage. Is this an appropriate goal to maintain? Are there other ways to measure how effective we are at protecting the environment?
- 2. Are there other policies or actions Halton can include in the Regional Official Plan Review to protect and enhance the Natural Heritage System?

Full Discussion Paper Questionnaire

To find out more about natural heritage and land use planning in Halton please review the Region's complete Natural Heritage Discussion Paper.

After reviewing these summaries and/or full Discussion Papers, please participate in our Phase 2 Discussion Paper Questionnaire to provide feedback on all Phase 2 theme areas.

Additional Resources

Link to Discussion Paper

Ontario's Special Advisor on flooding Protecting people and property: Ontario's flooding strategy

Grand River Source Water Protection Plan v1

Grand River Source Water Protection Plan v2

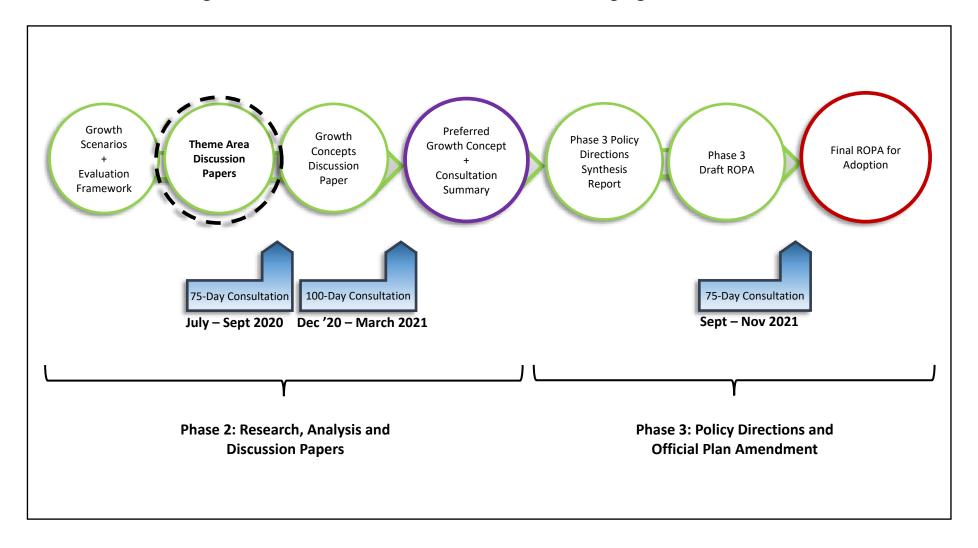
CTC Source Water Protection Plan

Halton-Hamilton Source Protection Plan

Red font in text = future hyperlink



Regional Official Plan Review - Public Engagement Process



Ministry of the Environment, Conservation and Parks

Source Protection Programs Branch

14th Floor 40 St. Clair Ave. West Toronto ON M4V 1M2

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

Direction des programmes de protection des sources

14e étage

40, avenue St. Clair Ouest Toronto (Ontario) M4V 1M2



July 29, 2020

Gayle Soo-Chan, Director, Watershed Knowledge CTC Source Protection Authority

Re: Request for Extension of Policy Implementation Timeline Related to Section 58 Risk Management Plans, CTC Source Protection Plan

Dear Gayle,

I am writing in response to your request for an extension to the policy timeline for implementing source protection plan policies for activities designated under section 58 of the *Clean Water Act, 2006* for the CTC Source Protection Region. We understand that the risk management officials have made progress, but some risk management plan (RMP) negotiations have taken much longer than anticipated. Additionally, uncertainty with dense non-aqueous phase liquids (DNAPL) activities led to a delay with initiating these types of negotiations.

Policy T-6 in the CTC Source Protection Plan sets out a timeline of 5 years (i.e., December 2020) for the establishment of risk management plans for activities that existed *prior* to the source protection plan taking effect in December 2015 (i.e., defined as "existing" activities in the source protection plan). Section 58 and 59 of the *Clean Water Act, 2006* allow for such a grace period to be applied to existing threat activities. It is an offence under the Act for existing activities to be engaged in after the grace period has passed.

The source protection authority and municipalities have proposed a new policy implementation timeline of December 31, 2023. In consideration of the challenges outlined in your letter and supporting documents, I hereby grant your request for an extension to **December 31, 2023** for the implementation deadline for risk management plan policies as they apply to activities in WHPAs and IPZs established prior to the effective date of the source protection plan and applicable plan amendments.

I acknowledge and commend you for working with the affected municipalities to identify the remaining activities that require a risk management plan and to develop strategies to achieve compliance with the source protection plan. To assure the ministry and local communities of the intent and ability to comply with the policy by the new deadline, I request that the source protection authority and affected risk management officials work together to summarize the work necessary to complete the establishment of risk management plans by the new policy timeline. I am requesting this summary by **February 1, 2021**. In advance of this date, I encourage you to continue working with your liaison officer and program analyst to address any questions or issues with this approach, as well as to review and provide feedback in advance of your formal submission. All other requirements of the *Clean Water Act, 2006* and Ontario Regulation 287/07 continue to apply.

When you next move forward with amendments or an update of your source protection plan, it is recommended you include revisions to the text of the policy T-6 to reflect the extended policy timelines. Until that time, you may wish to include a note for readers about the extended policy timeline.

If you have any questions about this letter, please don't hesitate to contact me.

Sincerely,

Debbie Scanlon

Dola Learl

Manager, Source Protection Approvals, Source Protection Programs Branch

c: John MacKenzie, Chief Executive Officer, Toronto and Region Conservation Authority

Douglas Wright, Chair, CTC Source Protection Committee Keley Katona, Director, Source Protection Programs Branch



5 Shoreham Drive Downsview, ON M3N 1S4 T. 416-661-6600 | info@trca.on.ca

CTC Source Protection Region

Toronto and Region Source Protection Authority

Debbie Balika Source Water Protection Lead Conservation Ontario 120 Bayview Parkway Newmarket ON L3Y 3W3

Via email only to dbalika@conservationontario.ca

November 2, 2020

Re: CTC SPR comments on the 2020 Proposed Amendments to the Director's Technical Rules: Assessment Report under the Clean Water Act, 2006

Dear Ms. Balika,

On August 11, 2020, the Ontario Ministry of the Environment, Conservation and Parks released a proposal to update the Director's Technical Rules for assessing drinking water source protection vulnerability and risks under the Clean Water Act, 2006 (Environmental Registry of Ontario (ERO) #019-2219).

CTC Source Protection Region staff have reviewed the proposed amendments and prepared a summary of comments (attached) for consideration by Conservation Ontario.

Respectfully yours,

Janet Ivey

CTC SPR Program Manager

Chief Specialist, Watershed Plans and Source Water Protection Credit Valley Conservation Authority

CC: CTC Source Protection Committee

TO: Chair and Members of the CTC Source Protection

Committee

DATE: October 15, 2020

FROM: Gayle Soo Chan, Director - Watershed Knowledge, Credit Valley Conservation

Janet Ivey, Chief Specialist - Watershed Plans and Source Water Protection,

Credit Valley Conservation

RE: Review of the 2020 Proposed Amendments to the Director's Technical Rules:

Assessment Report under the Clean Water Act, 2006

KEY ISSUE

Report to the CTC Source Protection Committee (SPC) summarizing preliminary comments on the proposed amendments to the Director's Technical Rules, and the resources that would be required to update the Assessment Report for compliance.

BACKGROUND

On August 11, 2020, the Ontario Ministry of the Environment, Conservation and Parks (MECP) released their proposal to update the Director's Technical Rules for assessing source protection vulnerability and risks under the *Clean Water Act, 2006*. The proposed updates are primarily intended to address editorial, technical and implementation gaps that have been articulated by Project Managers and Risk Management officials since the approval of the Source Protection Plans. The MECP indicates that the proposed updates are to help ensure that source protection efforts are supported by current science and that the quality of Ontario's drinking water continues to be protected, as committed to in the draft Made-in-Ontario Environment Plan, 2019.

The proposed updates have been posted to the Environmental Registry of Ontario (English: https://ero.ontario.ca/notice/019-2219; French: https://ero.ontario.ca/fr/notice/019-2219) for a 90-day public consultation period, which will close at 11:59 P.M. on Monday, November 9, 2020.

CTC staff have reviewed the proposed amendments and prepared a list of comments. Table 1 (attached) summarizes the proposed amendments and CTC staff comments. It is anticipated that MECP staff will hold meetings or provide further clarification regarding the proposed amendments prior to the end of the consultation period. CTC comments may be refined following MECP's clarification and will be provided to Conservation Ontario, who is compiling comments on behalf of all Source Protection Authorities (SPAs).

PURPOSE

The stated objectives of the proposed amendments to the Director's Technical Rules are to:

- Address alignment of technical terms and definitions with other provincial legislation under the Environmental Protection Act, Ontario Water Resources Act (OWRA) and Nutrient Management Act (NMA).
- Reduce administrative burden and allow local flexibility to do technical work while maintaining technical rigour.

- Address implementation and technical challenges flagged by municipalities, Source Protection Authorities, and Source Protection Committees.
- Support the draft Made-in-Ontario Environment Plan, 2019 (e.g. climate change vulnerability and threats from road salt activities).
- Support the ongoing Source Protection Plan updates per Minister's Order (Section 36).

ANALYSIS

Definitions, Editorial and Legislative consistency amendments:

The majority of the proposed amendments consist of editorial or consistency clarifications to address ambiguities reported in the existing technical criteria under the Clean Water Act, 2006. Staff have reviewed the wording and content of the amendments and generally concur that they do provide added clarity, direction, and technical guidance for the preparation of future amendments to the Assessment Report.

Staff are currently reviewing the implications of the proposed editorial changes with respect to the resulting changes that would be required to the existing Assessment Reports and scheduled Section 34 amendments.

Technical:

Several minor technical changes have been noted and are outlined in the attached Table 1. Changes in the Technical Rules can directly impact the findings in the Assessment Reports, which identify the type and location of Significant Drinking Water Threats and govern where policies may be applied.

Staff review focused on the Technical Rule amendments that may:

- 1) Better protect drinking water sources per the intent of the Clean Water Act,
- 2) Render past analyses and findings obsolete or invalid, or
- 3) Direct additional workload and associated costs to SPA and or Municipal staff.

It should be noted that in discussion with MECP staff, it was clarified that not all of the proposed amendments are mandatory (i.e., a SPC may determine whether the 'new' rule is relevant or appropriate) and that unlike the first set of Technical Rules, there is no legislated timeframe to complete the updated analyses.

Key technical changes are highlighted as follows:

Intake Protection Zones (IPZs)

This work is not mandatory and left to the discretion of the SPC to determine whether a revised analysis is required. The current vulnerability scoring and mapping of protection zones may not adequately capture local ground conditions (hydrology) and land characteristics (slope, soils).

<u>IPZ-1</u> – The proposed updated Rules allows the Source Protection Regions (SPRs) to
extend a portion of the IPZ-1 on land that may contribute water to the intake beyond the
high-water mark or the Conservation Authority Regulation limit, to the full 1,000 metre
radius around the intake.

Additional analysis is required to calculate the managed lands, livestock density and imperviousness for the newly delineated areas. Currently, the following IPZ-1s have land within the 1,000m radius of the intake: Oshawa West, Oshawa East, R. L. Clark and Toronto Island.

• IPZ-2 - IPZ-2 Vulnerability Scoring — The proposed updated Rules allow for an IPZ-2 to have multiple vulnerability scores in areas where the soils data and infiltration characteristics imply a likelihood for increased runoff, with resulting impact on the water quality near the intake. Currently, the maximum scoring in an IPZ-2 cannot meet the threshold for a significant drinking water threat (SDWT). The CTC SPR used Technical Rules Part V1.5 Rules 68-70 to complete event-based modelling to determine the SDWTs to the Lake Ontario intakes, recognizing that this source provides drinking water to over 90% of the population in this Source Protection Region. This proposed amendment was created in response to Source Protection Regions with areas within their IPZ-2s that were deemed vulnerable to waste run-off. The proposed updated Rules allow for an IPZ-2 to have multiple areas with various assigned vulnerability scores, not less than 7 and not greater than 9.

In the CTC SPR, the source vulnerability factor ranges from 0.5-0.6 due to the distance and depth of the intakes in Lake Ontario. This source vulnerability factor results in IPZ-1s and IPZ-2s in the CTC SPR having a vulnerability score no higher than 6. Increasing the vulnerabilities within the IPZ-2 cannot occur without revisiting the Source Vulnerability Modifying Factor assigned to each intake. As such, this revised rule has no impact on the CTC SPR IPZ-2s.

IPZ-Issue Contributing Area (ICA) - The proposed updated Rules provide for the delineation of a zone much like the WHPA-ICAs, where there is an established trend of contaminant impact identified by a water treatment plant, and where new policies may be developed to mitigate the issue identified. IPZ-ICAs were previously allowed for all intake types, Type A (Lake Ontario), B, C or D Intakes (inland), but there was no guidance regarding the delineation of an IPZ-ICA. The proposed amendments allow an IPZ-ICA to be delineated as its own vulnerable area, where previously an ICA needed to be delineated within an existing vulnerable area. An IPZ-ICA shall only be delineated where a drinking water issue is identified for the intake and there is evidence that activities, conditions that result from past activities, and naturally occurring conditions, within this area, contribute to the drinking water issue. If CTC SPC is aware of a parameter in the water at a surface water intake that is present at a concentration that may result in the deterioration of the quality of the water for use as a source of drinking. or there is a trend of increasing concentrations of the parameter at the surface water intake and a continuation of that trend would result in deterioration of the quality of the water for use as a source of drinking water, the CTC SPC shall describe it as a drinking water issue of an IPZ. If a municipality reports the above-mentioned requirements to the CTC SPC, the CTC SPC shall describe it as a drinking water issue resulting in a need for an IPZ-ICA delineation. These changes are intended to allow municipalities to better define protection zones using their local data, information and professional judgement. Staff agree that this is a reasonable addition and could be instrumental in addressing key ongoing problems identified by water treatment plant operators.

To date, the CTC SPR has not identified issues at their Lake Ontario intake. CTC staff would consult with municipal staff to determine if there are currently any issues that could be better managed through the use of this updated Rule. It should be noted that a technical methodology for IPZ-ICA delineation has not been provided in the proposed updated Rules. Staff have commented that that allowing SPRs to develop individual methodologies raises concerns of consistency across the province, and that it would be prudent to provide minimum requirements regarding a technical methodology.

IPZ-ICA analyses would require that foundational studies be undertaken by third party consultants and/or staff, including data collection, modeling work, analyses, vulnerable area delineation, and development of detailed explanatory text and mapping. Data collection would include a review of Water Treatment Plant historical records, reports, and data, to identify and assess historical issues, and undertake threat assessment and enumeration. Work would also be required to update the Source Protection Plan to address threats to this new vulnerable area.

Changes to the Table of Circumstances (TOC)

Under the Clean Water Act 2006, there are 21 activities that are listed as Threats to Drinking Water. This list has recently been expanded to 22 to include petroleum pipelines. Additionally, the CTC SPR also has a local activity in nuclear facilities. The TOC is a multiple page document that presents all of the circumstances where each of these activities represent a significant threat. The TOC includes the types of chemicals associated with the activity that represent a threat, the volumes that represent a threat, and the way in which the associated chemicals may be stored, transported, handled, etc.

Amendments have been proposed for seventeen drinking water circumstance categories and include new threshold quantity criteria for circumstances related to salt storage, above grade fuel storage, and snow storage, amongst others. These changes have the potential to introduce new significant drinking water threats in vulnerable areas, and would likely have implications for threat counts and Risk Management Plans / planning processes.

Several changes have been made for clarity, but there are a few that merit discussion as they represent a major change in the analyses or additional implementation work, as follows:

Application of Road Salt

The current threshold of paved areas that receive salt is too high to adequately identify road salt application as a significant risk, even when the drinking water system is experiencing increasing trends of salt in the raw water. The proposed Rules provide more stringent thresholds using an improved approach to help identify geographical areas where the application of road salt may impair water quality. This approach would help municipalities to better identify salt contributing areas within vulnerable areas using the scoring approach.

Based on the proposed lower thresholds for impervious surface, the CTC SPR could have increased 'low threat' counts in its Highly Vulnerable Aquifers (HVAs) and IPZs for application of road salt. WHPAs with a Vulnerability Score between 9 and 10 could have an increased count of significant drinking water threats. WHPAs with lower vulnerability scores could result in additional moderate and low drinking water threats. As well, additional analysis is required by staff to incorporate new development and infrastructure activities into the impervious surface dataset.

Handling and Storage of Road Salt

It was determined that the current threshold of storage of road salt is too high to adequately identify storages as significant risk, even when the drinking water system is experiencing increasing trends of salt in the raw water. The proposed changes to the Rules are expected to provide more stringent thresholds for three categories of road salt storage (uncovered, covered and well covered facilities) combined with volumes of road salt stored. The intent of this approach is to assist municipalities in identifying risks of the road salt storages in vulnerable areas using the scoring approach. Staff are in support of these changes given that increasing levels of Sodium and Chloride have been identified as key drinking water concerns within the

CTC SPR.

Based upon the proposed lower thresholds for quantities and exposure of salt storage, the proposed circumstances are low drinking water threats for IPZ-1 and IPZ-2 in the CTC SPR. WHPAs with a Vulnerability Score between 9 and 10 could result in an increased count of significant drinking water threats. Lower vulnerability scores could result in additional moderate and low drinking water threats, depending of the volume and storage classified of road salt. This amendment would require updated Geographic Information System (GIS) analysis by staff.

Storage of Snow

Snow melt from storage of snow contains chemicals such as chloride, sodium and petroleum hydrocarbons which have risks to human health. The current Rules do not acknowledge that snow storage and disposal may be regulated by an Environmental Compliance Approval (ECA) under the Ontario Water Resources Act (OWRA). This has created duplication where snow storage covered by an ECA is also subject to a municipal risk management plan.

Staff support this proposed amendment as it would provide greater clarity by making it explicit that snow storage activities include those regulated under the OWRA. The proposal also includes a new circumstance - reduction in the existing threshold criteria area for snow storage to 200 m2 (WHPA-10). The application of this updated circumstance may result in an increase in the significant drinking water threats related to snow storage, and as such, may have implications to threat counts and Risk Management Plans.

Fuel storage

The threshold volume for Fuel Storage is now 250 L, which in some vulnerable areas, would represent Significant Drinking Water Threats that were not previously enumerated. This could result in revisions to existing Risk Management Plans or preparation of new ones in some areas. Staff will review the fuel storage tank volumes within the WHPAs and IPZs and consult with Municipal staff.

Pesticides

The circumstance tables for pesticide application say that Atrazine, Dicamba, Dichlorophenoxy Acetic Acid (2,4-D), MCPA (2-methyl-4-chlorophenoxyacetic acid), MCPB (4-(4-chloro-2-methylphenoxy) butanoic acid), Mecoprop, Metalaxyl, Metolachlor or s-Metolachlor are significant threats in a WHPA-A when application occurs in an area greater than 10 ha. However, the WHPA-A is only 100 m in radius, which is substantively less than 10 ha. Given this, none of those pesticides are significant threats in a WHPA-A.

It is not fully understood whether the new Rules would apply solely to vulnerable areas associated with new or changed drinking water systems, or if they are also to be applied to existing threats. For example, if the updated circumstances could identify a new significant drinking water threat on a property which already has a Risk Management Plan in place. It is also not clear whether the currently approved threat enumeration would have to be redone, and the associated Risk Management Plans re-negotiated.

The remaining proposed amendments include the following refinements:

Significant Groundwater Recharge Area (SGRA) – The vulnerability scoring requirement
is proposed to be removed. Staff are in general agreement with this amendment as
these areas are primarily relevant to drinking water areas with water quantity risks, and it
is believed that the required Tier-3 modelling and existing Source Proteciton Plan

policies in WHPA-Qs adequately address drinking water quantity concerns. Additionally, Highly Vulnerable Aquifers (HVAs – Water quality) generally overlap with the SGRAs.

- Managed Lands The definition of Managed Lands is proposed to be amended to
 exclude compost material that meets the requirements outlined in Part II of the Compost
 Standards. The idea was to remove duplication where an existing instrument is already
 in place to manage the concern. While staff agree with this change, it is not clear
 whether existing threat enumerations would have to be updated to comply with the new
 definition. This would require a review of the threat enumeration in all CTC Managed
 Land delineations.
- Impervious Surfaces The amended Rules propose a new GIS method for delineation of impervious surfaces with the removal of the "per square kilometer" criterion. A clause has been introduced requiring that where an area within a WHPA has two or more vulnerability scores, the impervious surface analyses must be conducted separately for each sub-area. Under the current Rules, the threshold of paved areas that receive salt is too high to identify road salt application as a significant risk, even when the drinking water system has documented increasing trends of sodium and chloride in the raw water, and there is evidence that the source is related to the application of salt on nearby paved surfaces. The application of this updated methodology is optional, but may result in an increase in the significant drinking water threats related to road salts, and as such, may have implications to threat counts and Risk Management Plans.
- Climate Change considerations The proposed amendements are intended to add
 definition and clarity to climate impact assessment reporting in the Assessment Report.
 There is, however, no guidance pertaining to the technical approach to be applied in the
 evaluation of the impact of climate change on drinking water sources. This could result in
 inconsistent findings and policy application across the different SPRs. This amendment
 is non-mandatory and is at the discretion of the SPC.

Although climate change has always been a provision of the technical Rules, very little work has been completed to date. Given the scope of the updates outlined, it is envisaged that additional effort would be required on the part of staff. Staff could apply Conservation Ontario's proposed climate change methodology, which involves the application of Environment Canada model outputs to assess the vulnerability of municipal supplies in the context of climate change. This would require training, and the current staff capacity would have to be enhanced to meet this demand. This is consistent with the opinion of the former CTC Program Manager, who requested an additional human resources (from the Watershed Management department at CVC) in the 2020/2021 work plan and budget.

ADDITIONAL WORK REQUIREMENT

The scope of additional work required for conformity with the proposed amendments to the Rules remains unclear for several of the proposed changes. As a result, staff comments (Table 1) reflect the need for clarification. Where appropriate, staff comments recommend that MECP provide explanatory documentation as a companion to the proposed amendments (e.g., circumstances categories).

CTC staff will follow up with Provincial staff to more accurately assess required updates, potential costs, and funding sources. CTC staff are consulting with Provincial staff regarding the

anticipated eligibility of activities under the Transfer Payment Agreement for 2021 and beyond.

It should be noted that since the preparation of the Assessment Reports circa 2008, there has been significant turnover in staff. Without legacy knowledge, additional time may be required for staff to revisit these historical analyses and prepare the updates. This factor should be accounted for in future timelines and costs analyses.

The following work is the minimum expected to update the Assessment Reports if the proposed amendments to the Director's Technical Rules are approved. The following lists the items that would be mandatory for the CTC SPR:

- Impervious Surfaces This would entail text edits to the Assessment Report and
 associated appendices, as well as updates to the mapping for all municipal wellhead
 protection areas, IPZs and HVAs. Depending on the outcome of the analyses, the threat
 enumerations for each municipality (and likely, respective Risk Management Plans) may
 also have to be adjusted. This has the potential of being a significant amount of effort
 and work for staff.
- Significant Groundwater Recharge Areas This would entail text edits to the Assessment Report and associated appendices, as well as updates to the maps in the report. These amendments are relatively minor compared to the other updates.
- Threat Enumerations The threat enumerations for each municipality may have to be adjusted based on the proposed changes to the Table of Circumstances, specifically updated thresholds under Road Salt Application, Handling and Storage of Road Salt, Snow Storage, Fuel Storage, Managed Lands, and potentially Pesticides. The outcome of the impervious surfaces and managed land analyses are likely to change. The magnitude of the changes is not clear at this point, but will be better understood with clarification from MECP. This has the potential for being a significant amount of effort and work for staff.

The SPC will be engaged to discuss and approve proposed Assessment Report amendments.

DETAILS OF WORK TO BE DONE

Staff will continue to liaise and work with MECP staff in obtaining clarification on the 2020 Proposed Amendments to the Director's Technical Rules. Staff will continue to assess the resources that would be needed to bring the Assessment Reports into conformity with the Proposed Amendments if approved.

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Table 1: Staff Review comments.

	А	В	С	D
1	TABLE 1	-		-
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2				
3	*Strikeout, means te	xt removed <u>Underlined</u> , means text added as per MECP SW	/P Branch Track changes PDF	
4	Clean Water Act, 2006#	Proposed amendments	Footnote Reference	Comment
	Part I.1 - Definitions		1-Where Ministry of Environment or	
			Ministry of Environment and Climate	
		1. In these rules,	Change is used in the rules, it refers to same	
_			authority as Ministry of Environment,	
5		(1) the following definitions apply:	Conservations and Parks.	Agree. This change helps to clarify the intent of the CWA particularly wrt to pathogens and metals.
		"managed land" means land to which agricultural source material, commercial fertilizer,		Suggest adding a link to the relevant categories of the Compost Standards. Suggest also to indicate
			2-Amended in August 2020	exemption from the CWA in these standards. (https://www.ontario.ca/page/ontario-compost-quality-
		compost that meets the requirements for Categories "AA", "A", and "B" compost in Part		standards#section-2). SPA staff should advise the RMOs to review their site specific enumeration notes
6		II of the Compost Standards;		and indicate to the SPA whether threats should be removed for this revision.
		Significant, moderate or low drinking water threats		
	Contents	8. The identification of the areas within vulnerable areas where an activity is or would		
		be a significant, moderate or low drinking water threat for the purpose of subclause 15(2)(h)(i) of the Act and subparagraphs 2i and 2ii of subsection 13(1) of O. Reg. 287/07		
		(General) and where a condition that results from past activities is a significant,		
		moderate or low drinking water threat for the purpose of subclause 15(2)(h)(ii) and		
		subparagraphs 2iii and 2iv of subsection 13(1) of O. Reg. 287/07 (General) shall be		
7		completed as follows:		
				Agree with removal of scoring for SGRAs, but don't understand why they are still assigned to HVAs, which
				by definition, have a an implicit vs of 6
8				
				This was my question to know why they proposed to remove the vulnerability scoring for SGRAs and
9				Gayle answered it.
		(1) Assign vulnerability scores to highly vulnerable aquifers, significant groundwater- recharge areas and wellhead protection areas in accordance with Part VII.		
		recharge areas and weilifeau protection areas in accordance with rait vii.		Agree with this removal of Vulnerability calculations for SGRAs. The SGRAs are relevant to the quantity aspect of sustainable resources (and still captured under Part V.2) while the vulnerability is focused on the
				quality aspect. Vulnerability scoring is more relevant to Highly vulnerable aquifer assessments. Often
				these areas overlap in any case as the most vulnerable areas tend to be shallow unconfined areas where
				recharge is direct and significant. WHPA-Q's and 'Local Areas' also serve to protect water supply/recharge.
10				SGRAs may also be considered as part of Watershed planning targets.
11		Minimum information		
12		9. An assessment report shall include the following:		
		(2) A written description of the work undertaken in accordance with these rules		
		including, (a)	9-Amended in August 2020	Editorial - no comment
13		information sources for data used in developing the assessment report and the purposes for which information was used	_	
_	Part I.3 - General	Method and models 10. A		
		method or model used in the preparation of the assessment report shall be	10-Amended in August 2020	Editorial - no comment
14		representative of the area or thing under study.		
				This was originally entitled Uncertainty - Water quality to differentiate the uncertainty analyses required
			11-Amended in August 2020	for vulneerability from a water quality aspect. I can understand the broader heading but why not then
	Part I.4 - Uncertainty analysis - Water quality			present all of the uncertainty analyses required here? The work it refers to still remain quality aspect.
15	- vvater quality	13. An analysis of the uncertainty, characterized by "high" or "low" shall be made in		
16		respect of the following:		
		(5) The assessment of the vulnerability of significant groundwater recharge areas, highly vulnerable aquifers and wellhead protection areas undertaken in accordance with Part		Can an HVA have low vulnerability?
17		VII.	12 Amenaeu III August 2020	
18				Agreed.
10		14. The following factors shall be considered in an analysis conducted for the purpose of rule 13:		
19		(1) The distribution, variability, quality and relevance of data used in the preparation of		
20		the assessment report.		Editorial
	Part I.5 – Alternate Methods	·		
21	or Approaches			

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		15.1 Despite any provision of these rules, in preparing an assessment report a source		
		protection committee may use an alternate method or approach in the assessment		
		report for gathering information or for performing a task that departs from the method	13- Amended August 2020	Editorial for the section. Agreed
		or approach prescribed in these rules if the following conditions are metby including the		
22		following information in the assessment report:		
23		(1) the rule that is being departed from;		
		(3) an explanation of how the method or approach used by the source protection		Agreed as this allows for continuous improvement without the adminisitrative burden and time
		committee to gather information or perform the task is equivalent to or better than the		associated with requesting approval (demonstrating all the rquired conditions) for a new approach before
24		approach or method prescribed in these rules; and		implementing.
		(4) the source protection committee provides the Director with a notice of the alternate		A much better approach - currently there is a top-down approach, where the director provides the justific
		method or approach that identifies the rule being departed from and a brief summary		approach approach can only line is a top down approach, where the an estar provides the justific
25		of the rationale and explanation referred to in (2) and (3).		
		<u></u>		I assume the notice can be sent at the same time as the amendment and it is for flagging purposes. It is
26				not clear whether the Director must respond prior to the use of the new method. Please clarify.
	Part I.6 – Climate			
	Consideration Data – Director's			
1	Directions Water quality			
27				
		15.2 For greater certainty, section 15.1 does not relieve the source protection		
		committee from ensuring that an assessment report is prepared made in accordance	14 Amended August 2020	Editorial
20		with an applicable requirement in the Act, the regulations or the terms of reference.		
28				
				Who has the authority to decide on whether a climate impact assessment is required for a particular
				DWS? Where the SPA are asked to perform the analyses, they will require additional resources and
				training in applying CO's methodology and working with Envir Canada's model outputs
29				
	1			
		15.3 If, in preparing an assessment report, the source protection committee is required		Agreed. This reduces the administrative and technical burden on the MECP for providing data/direction
		by these rules to consider climate data in making a determination or performing a task,		forclimate change. It allow th local agencies to use localized and sometimes more appropriate/up-to-date
		the Director may give directions to the committee for the purpose of ensuring that		information for climate change impact assessment. It is suggested that the MECP, however, not stay too
		impacts from climate change are taken into account, including directing the committee		far removed as the authority of approval still remains with the Province. As well, many local agencies will
		to If a source protection committee prepares a climate impact assessment in relation to	15 Amended August 2020	require Provincial assistance as a result of limited resources. The is a role for the Province in leading edge
		a wellhead protection area or intake protection zone delineated in the assessment		climate change analyses.
		report and the source protection committee intends to use the findings of the impact		
30		assessment in the assessment report, the following shall be included in the assessment		
	1	<u>report</u>		
1				
				Miles described and the second benefits assessed to the second and
1				Where does the climate change vulnerability assessment tool (version 2) fit into this?
1				
1				
31				
	1			Agree. Provice should provide climate change projections for each SPR to be consistent with the approach
32				and outcomes
<u> </u>	1		1	

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	,	(1) use a climate data set provided by the Director; or (2)		-
		use any climate data gathered by the committee in the manner specified by the		
		Director. (1)		
		An explanation of why specified climate data sets were used as the basis for the climate		
		impact assessment; (2) A		
		summary of the findings of the climate impact assessment;		All considering and the second considering th
		(3) A description of the approach used by the source protection committee to evaluate		All acceptable conditions/ requirements.
		the vulnerability of a drinking water system to climate impacts identified in the climate		
		impact assessment; and		
		(4) An explanation of the results of the evaluation under subrule (3), including whether		
		the evaluation concluded that the drinking water system is resilient to the climate		
33		impacts identified in the climate impact assessment.		
34				Agree with this approach
	Part II – Watershed			Should add the date to the number of users as a reference point. Clause (c)
35	Characterization			Should add the date to the number of users as a reference point. Clause (c)
		16. The following shall be included in a characterization of a watershed, where the		
		information is available: (3)	16- Amended August 2020	seems redundant - suggested wording "location of monitoring infrastructure related to the system"
		With respect to drinking water systems, (e) the	20ciided / lagast 2020	Supposed Wording Toodson of Monthly Initiative Courted to the system
36		location of monitoring <u>locations</u> wells-related to the system.		
		(9) One or more maps of the percentage of managed lands within, a significant	17-Amended August 2020	Agreed.
37	<u> </u>	groundwater recharge area Removed		- -
38		(b) each of the following areas within a vulnerable area:		
		(x) IPZ-ICA, if any.	18-Amended August 2020 Introduced in	
		(xi) WHPA-ICA, if any.	August 2020. With regard to IPZ-ICA and	
			WHPA-ICA in this subrule, one or more	
			maps of the percentage of managed lands /	
			live stock density or percentages of	
			impervious surface areas is required where	IPZ Impact to SPA workload. Need to look at the Rules for IPZ-ICA delineation
			the drinking water issue identified for IPZ-	
			ICA or WHPA-ICA is a contributing	
			parameter of the drinking water threats	
			activities listed in subrule (9).	
39	-			
40				No technical guidance offered on the methodology (ies) and process to be used to delineate ICAs
				This will require that foundation studies be undertaken either by third party consultants and / or staff,
				and will entail data collection, modelling work, analyses, vulnerable area delineation, and detailed
				explanatory text and mapping. The data collection will include review of Water Treatment Plant historical
				records, reports and data to identify and assess historical issues, and threat assessment/enumeration.
				Also, a new IPZ-ICA technical guide is needed for proposed developments outside existing IPZ but have
				potential of introducing new significant drinking water threats. The technical guide should provide
				investigation procedure to determine if the proposed development site with the associated drinking
				water threat will have to be re-classified as IPZ-ICA. Work will also be required to update the Source
l				Protection Plan to address threats to this new vulnerable area. This will entail a significant amount of
41				work.
		If two or more areas in an area referred to in clause (a) toand (eb) have different		
		vulnerability scores, the percentage of managed land may be determined for each of		
		those areas. Mapping the percentage of managed lands is not required for any area in		
		an area mentioned in clause (a) to and (eb) where the vulnerability scores for that area		
			19- Amended August 2020	Editorial.
		moderate or low drinking water threat in the Table of Drinking Water Threats: the	-	
		application of agricultural source material to land, the application of non-agricultural		
		source material to land and the application of commercial fertilizer to land. Each map		
4-		prepared in accordance with this subrule shall be labelled the "managed land map".19		
42				

	A	B B	C	D
43		(10) One or more maps of livestock density for each area referred to in subrule (9). Livestock density shall be determined by dividing the nutrient units generated in each area by the number of acres of agricultural managed land in that area where agricultural source material is applied. If two or more areas in an area referred to in subrule (9) (a) to and (eb) have different vulnerability scores, the livestock density may be determined for each of those areas. Mapping livestock density is not required for any area in an area mentioned in clause (9) (a) to and (eb) where the vulnerability scores for that area are less than those necessary for the following activities to be considered a significant, moderate or low drinking water threat in the Table of Drinking Water Threats: the application of agricultural source material to land, the application of nonagricultural source material to land and the application of commercial fertilizer to land. Each map prepared in accordance with this subrule shall be labelled the "livestock density map"		Editorial
44		(11) For every highly vulnerable aquifer or each area of a wellhead protection area and intake protection zone identified in clause 9 (b), one or more maps showing the percentage of impervious surface areas where road salt application in those areas is or would be a significant, moderate of low threat as determined in accordance with the Table of Drinking Water Threats. Where an area identified in clause 9 (b) has two or more vulnerability scores, the percentage of impervious surface area may be determined for each sub-area with the same vulnerability score. Each map prepared in accordance with this subrule shall be labelled the "total impervious surface area map". For each vulnerable area, one or more maps of the percentage of the impervious surface area where road salt can be applied per square kilometre in the vulnerable area. Mapping the percentage of impervious surface area is not required for an area in a vulnerable area where the vulnerability scores for that area is less than the vulnerability score necessary for the application of road salt to be considered a significant, moderate or low threat in the Table of Drinking Water Threats. Each map prepared in accordance with this subrule shall be labelled the "total impervious surface area map".	21- Amended August 2020	The current version frequently produces scoring which can fall under the threshold criteria for the identification of a signicant threat - even in areas which have been identified as ICAs for Na and CL. This updated GIS methodology may however result in an increase in the significant threats related to road salt. Agreed. This clause I believe was simply edited for clarity. Focus is on the impervious areas where road
45 46				salt IS applied as versus where it CAN BE applied. Wording of this rule needs improvement
47		17. Removed 22 For the purposes of subrule 16(11), the location of a square kilometre- in a vulnerable area shall be determined by overlaying a 1 kilometre by 1 kilometre grid- over the vulnerable area with a node of the grid centred on the centroid of the source- protection area.		Agreed as unnecessary and overly prescriptive.
48	Part III – Water Budget			
49	Part III.2 – Subwatershed water budgets	30.1 If, the information required to delineate a local area or to complete a Tier Three water budget in accordance with rule 30 canmay not be readily ascertained, the assessment report may instead include a description of the steps that will be taken to ascertain the necessary information and complete the Tier 3 work. 1) a plan that includes a work schedule for ascertaining the information necessary to delineate the local area or complete the Tier Three water budget, including any additional work that must be carried out under these rules as a result of ascertaining this information; and 2) if, after completing the work the source protection committee becomes aware that the assessment report is no longer accurate or complete, an estimate of the date by which the source protection committee expects an updated assessment report would be submitted to the Director under section 19 of the Act.	23- Amended August 2020	Gives flexibility to the municipalities but weakens the legislative power to drive the work to occur. Suggest that 'steps' to be taken should be complemented with a deadline cap to ensure the work does not remain in limbo for extended periods. This should be a reportable item in the annual SPP reporting process where relevant.
50	Part V – Delineation of Vulnerable Areas: Highly Vulnerable Aquifers, Significant Groundwater Recharge Areas and Wellhead Protection Are			
	Part V.3 - Delineation of wellhead protection areas, type I systems			

	А	В	С	D
		47. A wellhead protection area for a well associated with a type I system is the area		
52		created by combining all of the following areas:		
		(6) Area WHPA-F, being the area delineated in accordance with the rules in Part VI that		
		apply to the delineation of an IPZ-3, as if an intake for the system were located in the surface water body influencing the well at the point closest in proximity to the well.	25- Amended August 2020	agree with the removal - was never clear to its intent
53		Removed.		
55		Tellioted.		
				Agree with the inclusion of "naturally occuring conditions" in the definition, so that this condition will no
				be applicable in an argument against the delineation of an ICA. However, no technical guidance has been
				offered on the methodology (ies) and process to be used to delineate ICAs
F.4		/7) Area M/JDA JCA being the insure contribution and involving to Doubly 1.1 shall only		
54		(7) Area WHPA-ICA, being the issue contributing area in relation to Part XI.1, shall only be delineated where,26 (a) a		
		drinking water issue is identified in accordance with rule 114 in relation to the well, and		
		(b) there is evidence that activities, conditions that result from past activities, and	26-Introduced in August 2020	
		naturally occurring conditions, within this area, contribute to the drinking water issue		Agree with the inclusion of "naturally occuring conditions" in the definition. How does this tie in with
		described in subrule (a).		ORMGP's comment wrt WHPA delinations and "long skinny" WHPAs in some of smaller CAs?
55				
				Good addition. To be consistent with ICAs for wells. This allows for historical issues to be identified and a
				plan be put in place to address. This will address the key ongoing problems identified by WTPs on the
56				Great Lakes and direct action in hopefully a consistent manner. This has workload impacts to the SPA.
		40 Parity rule 47 where a reasonable of the character of		
		48. Despite rule 47, where a zone representing a ten year time of travel was delineated for the well in a report prepared prior to April 30, 2005 and a five year time of travel has		
		never been delineated for the well the wellhead protection area for a well associated		
		with a type I system is the area created by combining all of the following areas:		
57				
58		(6) Area WHPA-F, delineated in accordance with the requirements of subrule 47(6). Removed.	27- Amended Augst 2020	OK. Replaced with IPZ-ICA
-		(7) Area WHPA-ICA, being the issue contributing area in relation to Part XI.1, shall only		
		be delineated where,28 (a) a drinking water issue is identified in accordance with rule		
		114 in relation to the well, and (b) there is evidence that activities, conditions that result	28-Introduced in August 2020	Agreed. Good addition
		from past activities, and naturally occurring conditions, within this area, contribute to		
59		the drinking water issue described in subrule (a).		CVSPA already has ICAs delineated for WHPAs using these rulesthis is not newperhaps just a name-
60				change (?)
		CO Demond 20 Demits which 47(C) and 49(C) area MUDA Caball article added to a		
		50. Removed.29 Despite subrules 47(6) and 48(6), area WHPA F shall only be added to a wellhead protection area where, (1)		
		the wellhead protection area contains a WHPA-E; (2) a		
		drinking water issue is identified in accordance with Part XI.1 in relation to the well; and	29- Amended August 2020	
		(3) the source of the drinking water issue described in subrule (2) originates outside of		
		areas WHPA A, WHPA B, WHPA C, WHPA C1 if any, WHPA D and WHPA E.		
61		50.1 If the information required to delineate a WHPA-E or WHPA-F in accordance with		
		subrule 47(5) or 48(5) may not be readily ascertained, the assessment report may		
		instead include, a description of the steps that will be taken to ascertain the necessary		
		information and complete the work. (1)		
		a plan that includes a work schedule for ascertaining the information necessary to		
		delineate the WHPA E and F, including any additional work that must be carried out	30- Amended in August 2020	Again, suggest a timeframe be required of the implementer to ensure timely addressing of this matter.
		under these rules as a result of ascertaining this information; and		
		(2) if, after completing the work the source protection committee becomes aware that the assessment report is no longer accurate or complete, an estimate of the date by		
		which the source protection committee expects an updated assessment report would		
62		be submitted to the Director under section 19 of the Act.		
	t VI – Delineation of			
	Inerable Areas: Surface			
ი⊰ IWat	ter Intake Protection Zone	S		

	A	В	С	D
65		55.1 If the source protection committee is of the opinion that the classification of an intake or planned intake in accordance with rule 55 is not appropriate, the committee may reclassify the intake or planned intake and shall include in the assessment report a rationale and evidence to support the reclassification. The Director may, by written notice, classify an intake or planned intake associated with a type I, II or III system and the classification specified in the notice shall deem to be the classification for the intake or planned intake and any written notice given by the Director under this rule shall be included in the assessment report	31- Amended in August 2020	This should ease administrative burden. The classification should be required to be consistent with classifications under instruments such as the SDWA and regulations
	Part VI.2 - Area of surface			
66	water intake protection zones			
67		58. A surface water intake protection zone for a surface water intake associated with a type I system or a type II or type III system to which O. Reg. 170/03 (Drinking Water Systems) made under the Safe Drinking Water Act, 2002, O. Reg. 318/08 (Transitional – Small Drinking Water Systems) made under the Health Protection and Promotion Act or O. Reg. 319/08 (Small Drinking Water Systems) made under the Health Protection and Promotion Act applies, is the area created by combining all of the following areas:		
68		(5) Area IPZ-ICA, delineated in relation to the rules in Part XI.1, where applicable.	32-Introduced in August 2020	Editorial to add IPZ-ICA
	Part VI.3 - Delineation of IPZ-1		33-Introduced in August 2020	Agreed. Makes sense.
70				May require additional work, maximum setback for IPZ1 incuding portion on land is 1000m. Type A
71	Part VI.8 - Delineation of IPZ- ICA		34-37 -Amended in March 2017	Per challenges previously experienced with delineation of groundwater (WHPA) ICAs, there ought to be defining criteria agreed by provincial and local stakeholders. For exhow far are they permitted to extend from L.Opast the IPZ 2 limits? May also have workload implications for SPAs.
73		78.1 Area IPZ-ICA, being the issue contributing area in relation to Part XI.1, shall only be delineated where, (1) a drinking water issue is identified in accordance with rule 114 in relation to the intake; and (2) there is evidence that activities, conditions that result from past activities, and naturally occurring conditions, within this area, contribute to the drinking water issue described in subrule (1).	38- Introduced August 2020	Instruction on the modelling requirements for mapping the ICA. How does this tie in wrt Gayle's comment RE WTPs on the Great Lakes?
74				IPZ-ICA - only delineated if there's degredation to DWS based on water quality monitoring by the municipality
- 	1			Fineagrees with other amendments. I anticipated some instruction on the limit of the delineated
75				boundary of the ICA and modelling requirements for mapping the ICA?
76			39, 40 - Amended in March 2017	
77	Part VIII – Vulnerability: Surface Water Intake Protection Zones			
78	scores	86. A vulnerability score shall be assigned to each IPZ-1 and to each area of an IPZ-2 associated with a type A, B, C or D intake and to each area of an IPZ-3 associated with a type C or type D intake.	41- Amended August 2020	Editorial
79		87. The vulnerability score assigned to each IPZ-1, <u>each area of an</u> IPZ-2 and each area of an IPZ-3 associated with a type C or type D intake shall be calculated in accordance with the following formula, B x C Where, B = the area vulnerability factor of the area of the surface water intake protection zone determined in accordance with rules 88 to 93; and C = the source vulnerability factor of the surface water intake determined in accordance with rules 94 to 96.		Editorial

	A	В	С	D
80				It will be possible to have multiple vulnerability scoring within the IPZ-2, in areas where the soils data and infiltration characteristics imply increased runoff. Currently an IPZ-2 can not have a vulnerability score high enough to meet the threshold for a significant drinking water threat. Can this change with this update?
81				May require additional work.
	Part VIII.2 - Area vulnerability			
	=	89. One or more area vulnerability factors that are not less than 7 and not greater than 9 shall be assigned to each area within Anan IPZ-2 shall be assigned an area vulnerability factor that is not less than 7 and not more than 9 based on the vulnerability of the area where a higher factor corresponds to a higher vulnerability.	43- Amended August 2020	Language clarification. Fine
83		92. The following shall be considered and documented in determining the area vulnerability factor of an IPZ-2 or of an area within an IPZ-2 or IPZ-3 for the purpose of rule 89 or 90 and an explanation shall be provided on how each affected the determination of the area vulnerability factor of that area	44- Amended August 2020	Editorial
	Part XI – Drinking Water Threats: Water Quality			
04	inicats. water Quality		45- Introduced in March 2017	
85			46-51 Amended March 2017	
	Part XI.1 - Describing drinking water issues	115. Only in respect of a drinking water issue identified in accordance with rule 114, where the drinking water issue is the result of, or partially the result of, anthropogenic causes, the description of the drinking water issue shall include the following information:		
87		(3) The issue contributing area delineated in accordance with subrules 47 (7) or 48 (7) or rule 78.1; area within a vulnerable area where activities, conditions that result frompast activities, and naturally occurring conditions may contribute to the parameter or pathogen and this area shall be identified as the "issue contributing area"; and	52- Amended August 2020	Tying it to Rule 47 and 48, fine.
88				Suggest inclusion of links (electronic doc) to the rules & sub-rules that are being cited /referenced.
89		116. Removed.If the information specified by subrules 115(3) or (4) cannot be readily-ascertained, the assessment report shall include, a plan that includes a work schedule for ascertaining the information specified by those subrules, including any additional work that must be carried out as a result of ascertaining this information; and (2) if, after completing the work the source protection committee becomes aware that the assessment report is no longer accurate or complete, an estimate of the date by which the source protection committee expects an updated assessment report would be submitted to the Director under section 19 of the Act.	53- Amended August 2020	
	Part XI.2 - Listing drinking water threats - Activities	Activities prescribed to be drinking water threats		
91		118. The activities prescribed to be drinking water threats for a vulnerable area in paragraphs 1 through 18 and paragraphs 21 to 22 of subsection 1.1(1) of O. Reg. 287/07 (General) may be collectively listed in the assessment report as "the activities prescribed to be drinking water threats in paragraphs 1 through 18 and paragraphs 21 and 22 of subsection 1.1(1) of O. Reg. 287/07 (General)".	54-Amended August 2020	
92		Other activities		
93		119. In addition to activities prescribed to be drinking water threats in paragraphs 1 through 18 and paragraphs 21 and 22 of subsection 1.1(1) of O.Reg. 287/07 (General), an activity shall be listed as a drinking water threat for a vulnerable area if,	55- Amended August 2020	
94		(2) an approval is not required to engage in the activity pursuant to any Act (Provincial or Federal); (3) the Director has confirmed in writing that the activity is an activity that can be assessed and addressed as a drinking water threat under the Clean Water Act; and		
	Part XI.3 - Listing drinking	The state of the s		
\vdash	water threats - Conditions			
96		Listing Conditions that result from past activities 126. If the source protection committee is aware of one of the following conditions that results from past activities, the committee shall list it as a drinking water threat under clause 15(2)(g)(ii) of the Act:	56- Amended August 2020	

	А	В	С	D
98		(1) The presence of a non-aqueous phase liquid in groundwater in a highly vulnerable aquifer, significant groundwater recharge area or wellhead protection area.		Is it not important to monitor the water threats for SGRAs?
99		(3) The presence of a contaminant in groundwater in a highly vulnerable aquifer, significant groundwater recharge area or a wellhead protection area, if the contaminant is listed in Table 2 of the Soil, Ground Water and Sediment Standards, is present at a concentration that exceeds the potable groundwater standard set out for the contaminant in that Table, and the presence of the contaminant in groundwater could result in the deterioration of the groundwater for use as a source of drinking water.		Is it not important to monitor the water threats for SGRAs?
100			58 Amended in March 2017 59 Introduced in March 2017	
	significant, moderate and low drinking water threats - Conditions	139. For the purpose of rule 138, the hazard rating of a condition that results from a past activity is, (1) if there is evidence that the condition is causing off site contamination the contamination is migrating towards the well or intake and the contamination has the potential to deteriorate the quality of water of the aquifer drinking water source or the surface water drinking water source, the hazard rating is 10	60 Amended in March 2017 61 Amended in August 2020	agree with the clarification. The refininement affords greater protection to drinking water systems
102			62 Amended in March 2017 63 Amended in March 2017	
103 104		141. Despite anything else in these rules, a condition that results from a past activity is a significant drinking water threat if, (4) there is evidence that the condition is causing off site contamination the contamination is migrating towards the well or intake and the contamination has the potential to deteriorate the quality of water of the aquifer drinking water source or the surface water drinking water source or the condition is on the property where the surface water intake, well or monitoring location identified in accordance with subrule 115(2) is located.	64 Amended in March 2017 65 Amended in August 2020	agree with the clarification. The refinement affords greater protection to drinking water systems Agreed.
-	Proposed Amendments to the			Agreeu.
	Tables of Drinking Water Threats			
	Section 1: Amendments to the drinking water threats circumstances subcategories		Please enter comments is corresponding cell below	
107				New circumstance text is confusing wrt an IPZ that is scored 10. It suggests that 10 can never be less than 8% imperviousness but can be greater than 6%. Regardless of if this is an sub area or the full IPZ, the instruction is unclear.
108		1. Application of Road Salt (page 84)		Text is unclear with respect to IPZsneeds ro be clarified. What is the threshold criterion for an IPZ scored 10 - is it 6% or 8%?
109				Can the application of road salt increase the Vfs from 0.5 to 0.7 and who is responsible for this work?
110				Further Clarification and methodology is required in order to determine impacts of the proposed changes? Is the modeling for impervious by entire IPZ, sub areas, or by 1km Grid or a combination of there of. Definition of the sub area would be beneficial.
111				I agree with Kerry M and Gayle SC, the wording of the proposed new circumstance is confusing, particularly in regards to an IPZ.
112		2. Handling and Storage of Road Salt (page 85)		Agree. It is not just the volume stored but how it is stored. This revision makes practical sense.
113 114				All HVA's in CLOCA already have a vulnerability scoring of 6 based on the AVI. Can the storage of road salt increase the Vfs from 0.5 to 0.7 and who is responsible for this work?
115				Will now capture residential storage, since 25L bags have now been included. This will likely result in new significant drinking water threats, with implicatiosn to threat counts and risk management plans.
116		3. Wastewater Collection Facilities and Associated Parts (page 87)		What if the combined or sanitary sewer is not located in the IPZ or WHPA but the discharge could flow into said zone? Would this require modelling to determine if overflows and discharges from combined and sanitary sewer could impact an IPZ or WHPA E/10? Otherwise good to recognize the additional circumstances for risk. Do the SPA need to enumerate additional threats where these new conditions exist?

	A B	С	D
117			Implications for City of Toronto where there is a number of combined sewer systems?
			The scope of the additional work is not clearly understood based on the amendment presented. Suggest
			that explanatory notes be included as a compendium to the Technical Rule updates. Perhaps a "cheat
118			sheet" showing the differences and new requirements vs. current ones .
			Specificity with the areas that could qualify for risk (surface water now only the IPZs and WHPA-Es: 8-10
	4. Storm Water Management Facilities and Drainage Systems (page 93)		and WHPA:10 vs all land or surface water.) If the facility does not discharge or impact these areas, they
			are not enumerated? Focus on municipal systems. Additional work to remove threats and re count.
119			· ·
120			Implications for infiltration facilities?
			The scope of the additional work is not clearly understood based on the amendment presented. Suggest
			that explanatory notes be included as a compendium to the Technical Rule updates. Perhaps a "cheat
121			sheet" showing the differences and new requirements vs. current ones .
122	5. Wastewater Treatment Facilities and Associated Parts (page 99)		Minimizes/tightens the risk circumstances to focus on discharge for the various parts of the facility.
123	6. Industrial Effluent Discharges (page 103)		Good change to accommodate circumstances where industrial effluent is discharged to land.
124	7. Storage of Snow (page 105)		This change focuses the impact zones to IPZ, WHPA-E/WHPA:10. Why not say WHPA:10 (as in all with score 10) for circumstance 1 for SDWT?
			new circumstance of 200m2 may result in new significant drinking water threats, impacting threat counts
125			and risk management plans.
	8. Handling and Storage of DNAPLs (page 107)		Seems to be a good revision as it refines the areas that would see significant impact and brings
126			consistency with Reg 153. May mean enumeration revisions
			The circumstance tables for pesticide application still say that Atrazine, Dicamba, Dichlorophenoxy Acetic
			Acid (2,4-D), MCPA (2-methyl-4-chlorophenoxyacetic acid), MCPB (4-(4-chloro-2-
			methylphenoxy)butanoic acid), Mecoprop, Metalaxyl, Metolachlor or s-Metolachlor are significant
			threats in a WHPA A when application in an area greater than 10 ha. This is a mathematical impossibility.
			No matter how hard you try, you can't fit 10 ha. into a 100 m radius circle. A 100 m radius circle has an
			area of 3.1415926536 ha. Therefore, none of those nasty pesticides are significant threats in a WHPA A.
			This needs to be corrected. They should make all the nasty pesticide chemicals significant threats in a
			WHPA A regardless of the area of application. The result would be that pesticide use in the WHPA A
			would be managed. The way things currently stand they are not significant threats and are therefore not
			managed. Just as an example of why this is important, some Plans may have prohibited or required risk
			management plans for pesticide use in WHPA As. For the chemicals listed above, these policies would not
			apply because they aren't technically significant threats.
127			apply because they aren't technically significant threats.
			New circumstance regarding storage of NASM. Need some clarification/background regarding the need
128	9. Storage and Handling of NASM (page 108)		for addition.
129			Editorial correction required - "Significant risk would be identified in IPZs/WHPA-E scored 8 to 10 and WHP
			New circumstance for NASM application that poses risk to water quality (explicitly) and focused on IPZ
	10. Application of NASM (page 112)		and WHPAs:10. Non-farm herbivorous animals. Seems goodadditional protection but focused on key
130			areas of vunerability.
131	11. Handling and Storage of Fuel (page 116)		Good practical change as indeed storage and handling happens together.
			Threshold volume changed to 250L, which will likley create new significant drinking water threats.
132			Accordingly, there will be implications to threat counts and risk management plans
	12. Handling and Storage of Commercial Fertilizer (page 119)		I take I that this circumstance was previously confusing and not associated with the same
133	12. Hamaning and Storage of Commercial Fertilizer (page 113)		facility/property? If so this editorial change is fine.
134			Do the new circumstances supercede the previous ones, or add to them?
	13. Waste Transfer/Processing Sites (page 121)		Removes sites that are NOT approved to receive subject waste under Reg 347 and focuses on key
135			vulnerable areas. Good clarification.
	14. Waste Generating Facilities (page 123)		Adds non registered sites (waste generating) under the EPA, that generate waste and that could pose a
136	14. waste Generating Facilities (page 123)		risk but focused in key vulnerable areas. This adds protection capturing all facilities that pose a risk.
			Requirement vs option for assessment of this threat. Viewed as waste vs NASM activity. Separation of
	15. Waste: Application and Storage of Processed Organic Waste or Waste biomass (page 15)	ge 125)	tables between application and storage for different levels of risk. Added protection to respond to on the
137			ground assessments. Will require review in the CTC
	16. Waster Application and Storage of Hauled Source (1999 1990)		Editorial to capture this as a waste. Good revision to reflect the disposal aspect of the subject waste.
138	16. Waste: Application and Storage of Hauled Sewage (page 130)		Focused to key vulnerabe areas
139	17. General Editorial Amendments (page 131)		Agreed
140			A second consistent of a consistent of the consistency of the consiste
	Any additional issues, gaps or concerns?		A complementary document outlining the intent of each revision would be extremely helpful in reviewing
141 0	verall General Comments		and commenting. It has been awhile since these discussions. Background info is needed.
140			Where are the new rules on the inclusion of Liquifed Nitrogen pipelines as a new water quality threat to
142			IPZs?



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CTC Source Protection Region

Toronto and Region Source Protection Authority

George Jacoub
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Source Protection Programs Branch
Ministry of the Environment, Conservation and Parks

Submitted online only to Environmental Registry of Ontario (ERO) #019-2219

November 9, 2020

Re: CTC SPR comments on the 2020 Proposed Amendments to the Director's Technical Rules: Assessment Report under the Clean Water Act, 2006

Dear Mr. Jacoub,

Thank you for the opportunity to provide comments on the proposed amendments to the Director's Technical Rules made under section 107 of the Clean Water Act (ERO #019-2219).

CTC Source Protection Region staff have reviewed the proposed amendments and prepared a summary of comments (attached as Table 1) for consideration by the Ministry of the Environment, Conservation and Parks.

Respectfully yours,

Janet Ivey

CTC SPR Program Manager

Chief Specialist, Watershed Plans and Source Water Protection Credit Valley Conservation Authority

CC: CTC Source Protection Committee

	А	В	С	D
1	TABLE 1	-		-
<u> </u>	IADELI			
2				
3	*Strikeout, means te	xt removed <u>Underlined</u> , means text added as per MECP SW	/P Branch Track changes PDF	
4	Clean Water Act, 2006#	Proposed amendments	Footnote Reference	Comment
	Part I.1 - Definitions		1-Where Ministry of Environment or	
			Ministry of Environment and Climate	
		1. In these rules,	Change is used in the rules, it refers to same	
_			authority as Ministry of Environment,	
5		(1) the following definitions apply:	Conservations and Parks.	Agree. This change helps to clarify the intent of the CWA particularly wrt to pathogens and metals.
		"managed land" means land to which agricultural source material, commercial fertilizer,		Suggest adding a link to the relevant categories of the Compost Standards. Suggest also to indicate
			2-Amended in August 2020	exemption from the CWA in these standards. (https://www.ontario.ca/page/ontario-compost-quality-
		compost that meets the requirements for Categories "AA", "A", and "B" compost in Part		standards#section-2). SPA staff should advise the RMOs to review their site specific enumeration notes
6		II of the Compost Standards;		and indicate to the SPA whether threats should be removed for this revision.
		Significant, moderate or low drinking water threats		
	Contents	8. The identification of the areas within vulnerable areas where an activity is or would		
		be a significant, moderate or low drinking water threat for the purpose of subclause 15(2)(h)(i) of the Act and subparagraphs 2i and 2ii of subsection 13(1) of O. Reg. 287/07		
		(General) and where a condition that results from past activities is a significant,		
		moderate or low drinking water threat for the purpose of subclause 15(2)(h)(ii) and		
		subparagraphs 2iii and 2iv of subsection 13(1) of O. Reg. 287/07 (General) shall be		
7		completed as follows:		
				Agree with removal of scoring for SGRAs, but don't understand why they are still assigned to HVAs, which
				by definition, have a an implicit vs of 6
8				
				This was my question to know why they proposed to remove the vulnerability scoring for SGRAs and
9				Gayle answered it.
		(1) Assign vulnerability scores to highly vulnerable aquifers, significant groundwater- recharge areas and wellhead protection areas in accordance with Part VII.		
		recharge areas and weilifeau protection areas in accordance with rait vii.		Agree with this removal of Vulnerability calculations for SGRAs. The SGRAs are relevant to the quantity aspect of sustainable resources (and still captured under Part V.2) while the vulnerability is focused on the
				quality aspect. Vulnerability scoring is more relevant to Highly vulnerable aquifer assessments. Often
				these areas overlap in any case as the most vulnerable areas tend to be shallow unconfined areas where
				recharge is direct and significant. WHPA-Q's and 'Local Areas' also serve to protect water supply/recharge.
10				SGRAs may also be considered as part of Watershed planning targets.
11		Minimum information		
12		9. An assessment report shall include the following:		
		(2) A written description of the work undertaken in accordance with these rules		
		including, (a)	9-Amended in August 2020	Editorial - no comment
13		information sources for data used in developing the assessment report and the purposes for which information was used	_	
_	Part I.3 - General	Method and models 10. A		
		method or model used in the preparation of the assessment report shall be	10-Amended in August 2020	Editorial - no comment
14		representative of the area or thing under study.		
				This was originally entitled Uncertainty - Water quality to differentiate the uncertainty analyses required
			11-Amended in August 2020	for vulneerability from a water quality aspect. I can understand the broader heading but why not then
	Part I.4 - Uncertainty analysis - Water quality			present all of the uncertainty analyses required here? The work it refers to still remain quality aspect.
15	- vvater quality	13. An analysis of the uncertainty, characterized by "high" or "low" shall be made in		
16		respect of the following:		
		(5) The assessment of the vulnerability of significant groundwater recharge areas, highly vulnerable aquifers and wellhead protection areas undertaken in accordance with Part		Can an HVA have low vulnerability?
17		VII.	12 Amenaeu III August 2020	
18				Agreed.
10		14. The following factors shall be considered in an analysis conducted for the purpose of rule 13:		
19		(1) The distribution, variability, quality and relevance of data used in the preparation of		
20		the assessment report.		Editorial
	Part I.5 – Alternate Methods	·		
21	or Approaches			

	A	В	С	D
		15.1 Despite any provision of these rules, in preparing an assessment report a source		
		protection committee may use an alternate method or approach in the assessment		
		report for gathering information or for performing a task that departs from the method	13- Amended August 2020	Editorial for the section. Agreed
		or approach prescribed in these rules if the following conditions are metby including the		
22		following information in the assessment report:		
23		(1) the rule that is being departed from;		
		(3) an explanation of how the method or approach used by the source protection		Agreed as this allows for continuous improvement without the adminisitrative burden and time
		committee to gather information or perform the task is equivalent to or better than the		associated with requesting approval (demonstrating all the rquired conditions) for a new approach before
24		approach or method prescribed in these rules; and		implementing.
		(4) the source protection committee provides the Director with a notice of the alternate		A much better approach - currently there is a top-down approach, where the director provides the justific
		method or approach that identifies the rule being departed from and a brief summary		approach approach can only line is a top down approach, where the an estar provides the justific
25		of the rationale and explanation referred to in (2) and (3).		
		<u></u>		I assume the notice can be sent at the same time as the amendment and it is for flagging purposes. It is
26				not clear whether the Director must respond prior to the use of the new method. Please clarify.
	Part I.6 – Climate			
	Consideration Data – Director's			
1	Directions Water quality			
27				
		15.2 For greater certainty, section 15.1 does not relieve the source protection		
		committee from ensuring that an assessment report is prepared made in accordance	14 Amended August 2020	Editorial
20		with an applicable requirement in the Act, the regulations or the terms of reference.		
28				
				Who has the authority to decide on whether a climate impact assessment is required for a particular
				DWS? Where the SPA are asked to perform the analyses, they will require additional resources and
				training in applying CO's methodology and working with Envir Canada's model outputs
29				
	1			
		15.3 If, in preparing an assessment report, the source protection committee is required		Agreed. This reduces the administrative and technical burden on the MECP for providing data/direction
		by these rules to consider climate data in making a determination or performing a task,		forclimate change. It allow th local agencies to use localized and sometimes more appropriate/up-to-date
		the Director may give directions to the committee for the purpose of ensuring that		information for climate change impact assessment. It is suggested that the MECP, however, not stay too
		impacts from climate change are taken into account, including directing the committee		far removed as the authority of approval still remains with the Province. As well, many local agencies will
		to If a source protection committee prepares a climate impact assessment in relation to	15 Amended August 2020	require Provincial assistance as a result of limited resources. The is a role for the Province in leading edge
		a wellhead protection area or intake protection zone delineated in the assessment		climate change analyses.
		report and the source protection committee intends to use the findings of the impact		
30		assessment in the assessment report, the following shall be included in the assessment		
	1	<u>report</u>		
1				
				Miles described and the second benefits assessed to the second and
1				Where does the climate change vulnerability assessment tool (version 2) fit into this?
1				
1				
31				
	1			Agree. Provice should provide climate change projections for each SPR to be consistent with the approach
32				and outcomes
<u> </u>	1		1	

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	,	(1) use a climate data set provided by the Director; or (2)		-
		use any climate data gathered by the committee in the manner specified by the		
		Director. (1)		
		An explanation of why specified climate data sets were used as the basis for the climate		
		impact assessment; (2) A		
		summary of the findings of the climate impact assessment;		All considering and the second considering th
		(3) A description of the approach used by the source protection committee to evaluate		All acceptable conditions/ requirements.
		the vulnerability of a drinking water system to climate impacts identified in the climate		
		impact assessment; and		
		(4) An explanation of the results of the evaluation under subrule (3), including whether		
		the evaluation concluded that the drinking water system is resilient to the climate		
33		impacts identified in the climate impact assessment.		
34				Agree with this approach
	Part II – Watershed			Should add the date to the number of users as a reference point. Clause (c)
35	Characterization			Should add the date to the number of users as a reference point. Clause (c)
		16. The following shall be included in a characterization of a watershed, where the		
		information is available: (3)	16- Amended August 2020	seems redundant - suggested wording "location of monitoring infrastructure related to the system"
		With respect to drinking water systems, (e) the	20ciided / lagast 2020	Supposed Wording Toodson of Monthly Initiative Courted to the system
36		location of monitoring <u>locations</u> wells-related to the system.		
		(9) One or more maps of the percentage of managed lands within, a significant	17-Amended August 2020	Agreed.
37	<u></u>	groundwater recharge area Removed		- -
38		(b) each of the following areas within a vulnerable area:		
		(x) IPZ-ICA, if any.	18-Amended August 2020 Introduced in	
		(xi) WHPA-ICA, if any.	August 2020. With regard to IPZ-ICA and	
			WHPA-ICA in this subrule, one or more	
			maps of the percentage of managed lands /	
			live stock density or percentages of	
			impervious surface areas is required where	IPZ Impact to SPA workload. Need to look at the Rules for IPZ-ICA delineation
			the drinking water issue identified for IPZ-	
			ICA or WHPA-ICA is a contributing	
			parameter of the drinking water threats	
			activities listed in subrule (9).	
39	-			
40				No technical guidance offered on the methodology (ies) and process to be used to delineate ICAs
				This will require that foundation studies be undertaken either by third party consultants and / or staff,
				and will entail data collection, modelling work, analyses, vulnerable area delineation, and detailed
				explanatory text and mapping. The data collection will include review of Water Treatment Plant historical
				records, reports and data to identify and assess historical issues, and threat assessment/enumeration.
				Also, a new IPZ-ICA technical guide is needed for proposed developments outside existing IPZ but have
				potential of introducing new significant drinking water threats. The technical guide should provide
				investigation procedure to determine if the proposed development site with the associated drinking
				water threat will have to be re-classified as IPZ-ICA. Work will also be required to update the Source
l				Protection Plan to address threats to this new vulnerable area. This will entail a significant amount of
41				work.
		If two or more areas in an area referred to in clause (a) toand (eb) have different		
		vulnerability scores, the percentage of managed land may be determined for each of		
		those areas. Mapping the percentage of managed lands is not required for any area in		
		an area mentioned in clause (a) to and (eb) where the vulnerability scores for that area		
			19- Amended August 2020	Editorial.
		moderate or low drinking water threat in the Table of Drinking Water Threats: the	-	
		application of agricultural source material to land, the application of non-agricultural		
		source material to land and the application of commercial fertilizer to land. Each map		
4-		prepared in accordance with this subrule shall be labelled the "managed land map".19		
42				

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	A	(10) One or more maps of livestock density for each area referred to in subrule (9).	C	U
43		Livestock density shall be determined by dividing the nutrient units generated in each area by the number of acres of agricultural managed land in that area where agricultural source material is applied. If two or more areas in an area referred to in subrule (9) (a) to and (eb) have different vulnerability scores, the livestock density may be determined for each of those areas. Mapping livestock density is not required for any area in an area mentioned in clause (9) (a) to and (eb) where the vulnerability scores for that area are less than those necessary for the following activities to be considered a significant, moderate or low drinking water threat in the Table of Drinking Water Threats: the application of agricultural source material to land, the application of non-agricultural source material to land and the application of commercial fertilizer to land. Each map prepared in accordance with this subrule shall be labelled the "livestock density map"		Editorial
44		(11) For every highly vulnerable aquifer or each area of a wellhead protection area and intake protection zone identified in clause 9 (b), one or more maps showing the percentage of impervious surface areas where road salt application in those areas is or would be a significant, moderate of low threat as determined in accordance with the Table of Drinking Water Threats. Where an area identified in clause 9 (b) has two or more vulnerability scores, the percentage of impervious surface area may be determined for each sub-area with the same vulnerability score. Each map prepared in accordance with this subrule shall be labelled the "total impervious surface area map". For each vulnerable area, one or more maps of the percentage of the impervious surface area where road salt can be applied per square kilometre in the vulnerable area. Mapping the percentage of impervious surface area is not required for an area in a vulnerable area where the vulnerability scores for that area is less than the vulnerability score necessary for the application of road salt to be considered a significant, moderate or low threat in the Table of Drinking Water Threats. Each map prepared in accordance with this subrule shall be labelled the "total impervious surface area map".		The current version frequently produces scoring which can fall under the threshold criteria for the identification of a signicant threat - even in areas which have been identified as ICAs for Na and CL. This updated GIS methodology may however result in an increase in the significant threats related to road salt.
45 46				Agreed. This clause I believe was simply edited for clarity. Focus is on the impervious areas where road salt IS applied as versus where it CAN BE applied. Wording of this rule needs improvement
47		17. Removed.22 For the purposes of subrule 16(11), the location of a square kilometre-in a vulnerable area shall be determined by overlaying a 1 kilometre by 1 kilometre grid-over the vulnerable area with a node of the grid centred on the centroid of the source-protection area.	22- Removed	Agreed as unnecessary and overly prescriptive.
48	Part III – Water Budget			
49	Part III.2 – Subwatershed water budgets	30.1 If, the information required to delineate a local area or to complete a Tier Three water budget in accordance with rule 30 eanmay not be readily ascertained, the assessment report may instead include a description of the steps that will be taken to ascertain the necessary information and complete the Tier 3 work. 1) a plan that includes a work schedule for ascertaining the information necessary to delineate the local area or complete the Tier Three water budget, including any additional work that must be carried out under these rules as a result of ascertaining this information; and 2) if, after completing the work the source protection committee becomes aware that the assessment report is no longer accurate or complete, an estimate of the date by which the source protection committee expects an updated assessment report would be submitted to the Director under section 19 of the Act.	23- Amended August 2020	Gives flexibility to the municipalities but weakens the legislative power to drive the work to occur. Suggest that 'steps' to be taken should be complemented with a deadline cap to ensure the work does not remain in limbo for extended periods. This should be a reportable item in the annual SPP reporting process where relevant.
50	Part V – Delineation of Vulnerable Areas: Highly Vulnerable Aquifers, Significant Groundwater Recharge Areas and Wellhead Protection Are			
51	Part V.3 - Delineation of wellhead protection areas, type I systems			

	A	В	С	D
		47. A wellhead protection area for a well associated with a type I system is the area		
52		created by combining all of the following areas:		
		(6) Area WHPA-F, being the area delineated in accordance with the rules in Part VI that		
		apply to the delineation of an IPZ-3, as if an intake for the system were located in the	25- Amended August 2020	agree with the removal - was never clear to its intent
53		surface water body influencing the well at the point closest in proximity to the well. Removed.		
33		nemoved.		
54		(7) Area WHPA-ICA, being the issue contributing area in relation to Part XI.1, shall only		Agree with the inclusion of "naturally occuring conditions" in the definition, so that this condition will no be applicable in an argument against the delineation of an ICA. However, no technical guidance has been offered on the methodology (ies) and process to be used to delineate ICAs
		be delineated where,26 (a) a drinking water issue is identified in accordance with rule 114 in relation to the well, and (b) there is evidence that activities, conditions that result from past activities, and naturally occurring conditions, within this area, contribute to the drinking water issue described in subrule (a).		Agree with the inclusion of "naturally occuring conditions" in the definition. How does this tie in with ORMGP's comment wrt WHPA delinations and "long skinny" WHPAs in some of smaller CAs?
55				Good addition. To be consistent with ICAs for wells. This allows for historical issues to be identified and a plan be put in place to address. This will address the key ongoing problems identified by WTPs on the Great Lakes and direct action in hopefully a consistent manner. This has workload impacts to the SPA.
57		48. Despite rule 47, where a zone representing a ten year time of travel was delineated for the well in a report prepared prior to April 30, 2005 and a five year time of travel has never been delineated for the well the wellhead protection area for a well associated with a type I system is the area created by combining all of the following areas:		
		(6) Area WHPA-F, delineated in accordance with the requirements of subrule 47(6).	27- Amended Augst 2020	OK. Replaced with IPZ-ICA
58		Removed. (7) Area WHPA-ICA, being the issue contributing area in relation to Part XI.1, shall only be delineated where, 28 (a) a drinking water issue is identified in accordance with rule 114 in relation to the well, and (b) there is evidence that activities, conditions that result from past activities, and naturally occurring conditions, within this area, contribute to the drinking water issue described in subrule (a).	28-Introduced in August 2020	Agreed. Good addition
60				CVSPA already has ICAs delineated for WHPAs using these rules this is not newperhaps just a name-change (?)
61		50. Removed.29 Despite subrules 47(6) and 48(6), area WHPA F shall only be added to a wellhead protection area where, (1) the wellhead protection area contains a WHPA E; (2) a drinking water issue is identified in accordance with Part XI.1 in relation to the well; and (3) the source of the drinking water issue described in subrule (2) originates outside of areas WHPA A, WHPA B, WHPA C, WHPA C1 if any, WHPA D and WHPA E.	29- Amended August 2020	
62		50.1 If the information required to delineate a WHPA-E or WHPA-F in accordance with subrule 47(5) or 48(5) may not be readily ascertained, the assessment report may instead include, a description of the steps that will be taken to ascertain the necessary information and complete the work. 1) a plan that includes a work schedule for ascertaining the information necessary to delineate the WHPA-E and F, including any additional work that must be carried out under these rules as a result of ascertaining this information; and (2) if, after completing the work the source protection committee becomes aware that the assessment report is no longer accurate or complete, an estimate of the date by which the source protection committee expects an updated assessment report would be submitted to the Director under section 19 of the Act.	30- Amended in August 2020	Again, suggest a timeframe be required of the implementer to ensure timely addressing of this matter.
	Part VI – Delineation of Vulnerable Areas: Surface Water Intake Protection Zones			
-	Part VI.1 – General	Classification of intakes		

. The classification should be required to be consistent with as the SDWA and regulations In setback for IPZ1 incuding portion on land is 1000m. Type A
n setback for IPZ1 incuding portion on land is 1000m. Type A
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with delineation of groundwater (WHPA) ICAs, there ought to be
nd local stakeholders. For exhow far are they permitted to extend
so have workload implications for SPAs.
ents for mapping the ICA. How does this tie in wrt Gayle's commen
ents for mapping the ICA. How does this tie in wit dayle's commen
adation to DMC hand as a start of the same that a feet had
edation to DWS based on water quality monitoring by the
anticipated some instruction on the limit of the delineated
uirements for mapping the ICA?
r

	A	В	С	D
80				It will be possible to have multiple vulnerability scoring within the IPZ-2, in areas where the soils data and infiltration characteristics imply increased runoff. Currently an IPZ-2 can not have a vulnerability score high enough to meet the threshold for a significant drinking water threat. Can this change with this update?
81				May require additional work.
	Part VIII.2 - Area vulnerability			
	=	89. One or more area vulnerability factors that are not less than 7 and not greater than 9 shall be assigned to each area within Anan IPZ-2 shall be assigned an area vulnerability factor that is not less than 7 and not more than 9 based on the vulnerability of the area where a higher factor corresponds to a higher vulnerability.	43- Amended August 2020	Language clarification. Fine
83		92. The following shall be considered and documented in determining the area vulnerability factor of an IPZ-2 or of an area within an IPZ-2 or IPZ-3 for the purpose of rule 89 or 90 and an explanation shall be provided on how each affected the determination of the area vulnerability factor of that area	44- Amended August 2020	Editorial
	Part XI – Drinking Water Threats: Water Quality			
04	cats. water quality		45- Introduced in March 2017	
85			46-51 Amended March 2017	
	Part XI.1 - Describing drinking water issues	115. Only in respect of a drinking water issue identified in accordance with rule 114, where the drinking water issue is the result of, or partially the result of, anthropogenic causes, the description of the drinking water issue shall include the following information:		
87		(3) The issue contributing area delineated in accordance with subrules 47 (7) or 48 (7) or rule 78.1; area within a vulnerable area where activities, conditions that result frompast activities, and naturally occurring conditions may contribute to the parameter or pathogen and this area shall be identified as the "issue contributing area"; and	52- Amended August 2020	Tying it to Rule 47 and 48, fine.
88				Suggest inclusion of links (electronic doc) to the rules & sub-rules that are being cited /referenced.
89		116. Removed.If the information specified by subrules 115(3) or (4) cannot be readily-ascertained, the assessment report shall include, a plan that includes a work schedule for ascertaining the information specified by those subrules, including any additional work that must be carried out as a result of ascertaining this information; and (2) if, after completing the work the source protection committee becomes aware that the assessment report is no longer accurate or complete, an estimate of the date by which the source protection committee expects an updated assessment report would be submitted to the Director under section 19 of the Act.	53- Amended August 2020	
	Part XI.2 - Listing drinking water threats - Activities	Activities prescribed to be drinking water threats		
91		118. The activities prescribed to be drinking water threats for a vulnerable area in paragraphs 1 through 18 and paragraphs 21 to 22 of subsection 1.1(1) of O. Reg. 287/07 (General) may be collectively listed in the assessment report as "the activities prescribed to be drinking water threats in paragraphs 1 through 18 and paragraphs 21 and 22 of subsection 1.1(1) of O. Reg. 287/07 (General)".	54-Amended August 2020	
92		Other activities		
93		119. In addition to activities prescribed to be drinking water threats in paragraphs 1 through 18 and paragraphs 21 and 22 of subsection 1.1(1) of O.Reg. 287/07 (General), an activity shall be listed as a drinking water threat for a vulnerable area if,	55- Amended August 2020	
94		(2) an approval is not required to engage in the activity pursuant to any Act (Provincial or Federal); (3) the Director has confirmed in writing that the activity is an activity that can be assessed and addressed as a drinking water threat under the Clean Water Act; and		
	Part XI.3 - Listing drinking	The state of the s		
\vdash	water threats - Conditions			
96		Listing Conditions that result from past activities 126. If the source protection committee is aware of one of the following conditions that results from past activities, the committee shall list it as a drinking water threat under clause 15(2)(g)(ii) of the Act:	56- Amended August 2020	

	А	В	С	D
98		(1) The presence of a non-aqueous phase liquid in groundwater in a highly vulnerable aquifer, significant groundwater recharge area or wellhead protection area.		Is it not important to monitor the water threats for SGRAs?
99		(3) The presence of a contaminant in groundwater in a highly vulnerable aquifer, significant groundwater recharge area or a wellhead protection area, if the contaminant is listed in Table 2 of the Soil, Ground Water and Sediment Standards, is present at a concentration that exceeds the potable groundwater standard set out for the contaminant in that Table, and the presence of the contaminant in groundwater could result in the deterioration of the groundwater for use as a source of drinking water.		Is it not important to monitor the water threats for SGRAs?
100			58 Amended in March 2017 59 Introduced in March 2017	
	significant, moderate and low drinking water threats - Conditions	139. For the purpose of rule 138, the hazard rating of a condition that results from a past activity is, (1) if there is evidence that the condition is causing off site contamination the contamination is migrating towards the well or intake and the contamination has the potential to deteriorate the quality of water of the aquifer drinking water source or the surface water drinking water source, the hazard rating is 10	60 Amended in March 2017 61 Amended in August 2020	agree with the clarification. The refininement affords greater protection to drinking water systems
102			62 Amended in March 2017 63 Amended in March 2017	
103 104		141. Despite anything else in these rules, a condition that results from a past activity is a significant drinking water threat if, (4) there is evidence that the condition is causing off site contamination the contamination is migrating towards the well or intake and the contamination has the potential to deteriorate the quality of water of the aquifer drinking water source or the surface water drinking water source or the condition is on the property where the surface water intake, well or monitoring location identified in accordance with subrule 115(2) is located.	64 Amended in March 2017 65 Amended in August 2020	agree with the clarification. The refinement affords greater protection to drinking water systems Agreed.
-	Proposed Amendments to the			Agreeu.
	Tables of Drinking Water Threats			
	Section 1: Amendments to the drinking water threats circumstances subcategories		Please enter comments is corresponding cell below	
107				New circumstance text is confusing wrt an IPZ that is scored 10. It suggests that 10 can never be less than 8% imperviousness but can be greater than 6%. Regardless of if this is an sub area or the full IPZ, the instruction is unclear.
108		1. Application of Road Salt (page 84)		Text is unclear with respect to IPZsneeds ro be clarified. What is the threshold criterion for an IPZ scored 10 - is it 6% or 8%?
109				Can the application of road salt increase the Vfs from 0.5 to 0.7 and who is responsible for this work?
110				Further Clarification and methodology is required in order to determine impacts of the proposed changes? Is the modeling for impervious by entire IPZ, sub areas, or by 1km Grid or a combination of there of. Definition of the sub area would be beneficial.
111				I agree with Kerry M and Gayle SC, the wording of the proposed new circumstance is confusing, particularly in regards to an IPZ.
112		2. Handling and Storage of Road Salt (page 85)		Agree. It is not just the volume stored but how it is stored. This revision makes practical sense.
113 114				All HVA's in CLOCA already have a vulnerability scoring of 6 based on the AVI. Can the storage of road salt increase the Vfs from 0.5 to 0.7 and who is responsible for this work?
115				Will now capture residential storage, since 25L bags have now been included. This will likely result in new significant drinking water threats, with implicatiosn to threat counts and risk management plans.
116		3. Wastewater Collection Facilities and Associated Parts (page 87)		What if the combined or sanitary sewer is not located in the IPZ or WHPA but the discharge could flow into said zone? Would this require modelling to determine if overflows and discharges from combined and sanitary sewer could impact an IPZ or WHPA E/10? Otherwise good to recognize the additional circumstances for risk. Do the SPA need to enumerate additional threats where these new conditions exist?

A	В	С	D
117			Implications for City of Toronto where there is a number of combined sewer systems?
			The scope of the additional work is not clearly understood based on the amendment presented. Suggest
			that explanatory notes be included as a compendium to the Technical Rule updates. Perhaps a "cheat
118			sheet" showing the differences and new requirements vs. current ones .
			Specificity with the areas that could qualify for risk (surface water now only the IPZs and WHPA-Es: 8-10
	4. Storm Water Management Facilities and Drainage Systems (page 93)		and WHPA:10 vs all land or surface water.) If the facility does not discharge or impact these areas, they
			are not enumerated? Focus on municipal systems. Additional work to remove threats and re count.
119			· · ·
120			Implications for infiltration facilities?
			The scope of the additional work is not clearly understood based on the amendment presented. Suggest
404			that explanatory notes be included as a compendium to the Technical Rule updates. Perhaps a "cheat
121			sheet" showing the differences and new requirements vs. current ones .
122	5. Wastewater Treatment Facilities and Associated Parts (page 99)		Minimizes/tightens the risk circumstances to focus on discharge for the various parts of the facility.
123	6. Industrial Effluent Discharges (page 103)		Good change to accommodate circumstances where industrial effluent is discharged to land.
124	7. Storage of Snow (page 105)		This change focuses the impact zones to IPZ, WHPA-E/WHPA:10. Why not say WHPA:10 (as in all with score 10) for circumstance 1 for SDWT?
			new circumstance of 200m2 may result in new significant drinking water threats, impacting threat counts
125			and risk management plans.
	8. Handling and Storage of DNAPLs (page 107)		Seems to be a good revision as it refines the areas that would see significant impact and brings
126			consistency with Reg 153. May mean enumeration revisions
			The circumstance tables for pesticide application still say that Atrazine, Dicamba, Dichlorophenoxy Acetic
			Acid (2,4-D), MCPA (2-methyl-4-chlorophenoxyacetic acid), MCPB (4-(4-chloro-2-
			methylphenoxy)butanoic acid), Mecoprop, Metalaxyl, Metolachlor or s-Metolachlor are significant
			threats in a WHPA A when application in an area greater than 10 ha. This is a mathematical impossibility.
			No matter how hard you try, you can't fit 10 ha. into a 100 m radius circle. A 100 m radius circle has an
			area of 3.1415926536 ha. Therefore, none of those nasty pesticides are significant threats in a WHPA A.
			This needs to be corrected. They should make all the nasty pesticide chemicals significant threats in a
			WHPA A regardless of the area of application. The result would be that pesticide use in the WHPA A
			would be managed. The way things currently stand they are not significant threats and are therefore not
			managed. Just as an example of why this is important, some Plans may have prohibited or required risk
			management plans for pesticide use in WHPA As. For the chemicals listed above, these policies would not
			apply because they aren't technically significant threats.
127			apply because they aren't technically significant threats.
			New circumstance regarding storage of NASM. Need some clarification/background regarding the need
128	9. Storage and Handling of NASM (page 108)		for addition.
129			Editorial correction required - "Significant risk would be identified in IPZs/WHPA-E scored 8 to 10 and WHP
			New circumstance for NASM application that poses risk to water quality (explicitly) and focused on IPZ
	10. Application of NASM (page 112)		and WHPAs:10. Non-farm herbivorous animals. Seems goodadditional protection but focused on key
130			areas of vunerability.
131	11. Handling and Storage of Fuel (page 116)		Good practical change as indeed storage and handling happens together.
			Threshold volume changed to 250L, which will likley create new significant drinking water threats.
132			Accordingly, there will be implications to threat counts and risk management plans
	12. Handling and Storage of Commercial Fertilizer (page 119)		I take I that this circumstance was previously confusing and not associated with the same
133			facility/property? If so this editorial change is fine.
134			Do the new circumstances supercede the previous ones, or add to them?
135	13. Waste Transfer/Processing Sites (page 121)		Removes sites that are NOT approved to receive subject waste under Reg 347 and focuses on key vulnerable areas. Good clarification.
	14. Waste Generating Facilities (page 123)		Adds non registered sites (waste generating) under the EPA, that generate waste and that could pose a
136			risk but focused in key vulnerable areas. This adds protection capturing all facilities that pose a risk.
	AT Works Assiliant as a side of the side o	425)	Requirement vs option for assessment of this threat. Viewed as waste vs NASM activity. Separation of
	15. Waste: Application and Storage of Processed Organic Waste or Waste biomass (page	125)	tables between application and storage for different levels of risk. Added protection to respond to on the
137			ground assessments. Will require review in the CTC
	16. Waste: Application and Storage of Hauled Sewage (page 130)		Editorial to capture this as a waste. Good revision to reflect the disposal aspect of the subject waste.
138			Focused to key vulnerabe areas
139 140	17. General Editorial Amendments (page 131)		Agreed
170			A complementary document outlining the intent of each revision would be extremely helpful in reviewing
141 Overall General Comment	Any additional issues, gaps or concerns?		and commenting. It has been awhile since these discussions. Background info is needed.
Overall General Comment	•		Where are the new rules on the inclusion of Liquifed Nitrogen pipelines as a new water quality threat to
142			
174	L		IPZs?