



**Lake Erie Region Source Protection Committee  
Agenda**

Thursday, October 3, 2019

1:00 pm

Auditorium

Grand River Conservation Authority

400 Clyde Road, Box 729

Cambridge, ON N1R 5W6

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**Pages**

1. **Call to Order**
2. **Roll Call and Certification of Quorum – 17 Members Constitute a Quorum (2/3 of Members plus Chair)**
3. **Chair's Remarks**
4. **Review of Agenda**
5. **Declarations of Pecuniary Interest**
6. **Minutes of the Previous Meeting**
7. **Hearing of Delegations**
8. **Presentations**
9. **Correspondence**
  - a. RE: Approval of the Grand River Assessment Report and Source Protection Plan Update

1

Correspondence from Jeff Yurek, Minister, Ministry of the Environment, Conservation and Parks to Helen Jowett, Chair, Grand River Conservation Authority and Wendy Wright Cascaden, Chair, Lake Erie Region Source Protection Committee.

- b. RE: S.36 Order for the Review and Update of the Catfish Creek Assessment Report and Source Protection Plan 2

Correspondence from Jeff Yurek, Minister, Ministry of the Environment, Conservation and Parks to Helen Jowett, Chair, Grand River Conservation Authority, Rick Cerna, Chair, Catfish Creek Source Protection Authority and Wendy Wright Cascaden, Chair, Lake Erie Region Source Protection Committee.

- c. RE: Order for the Review and Update of the Kettle Creek Assessment Report and Source Protection Plan 6

Correspondence from Jeff Yurek, Minister, Ministry of the Environment, Conservation and Parks to Helen Jowett, Chair, Grand River Conservation Authority, Stephen Harvey, Chair, Kettle Creek Source Protection Authority and Wendy Wright Cascaden, Chair, Lake Erie Region Source Protection Committee.

## 10. Reports

- a. SPC-19-10-01 Source Protection Program Update 11
- b. SPC-19-10-02 Progress Report Grand River 19
- c. SPC-19-10-03 S.34 Draft Updated Grand River Assessment Report and Source Protection Plan for Wellington/Brant: Municipal and Non-municipal Sections 21
- d. SPC-19-10-04 S.34 Revised Updated "Bundled" Grand River Assessment Report and Source Protection Plan 35
- e. SPC-19-10-05 Draft S.36 Long Point Region and Grand River Workplans 75

## 11. Business Arising from Previous Meetings

- a. Lake Erie Region Source Protection Committee request under Technical Rule 119, from February 3, 2011, Re: rehabilitation activities at an aggregate operation within a vulnerable area of a municipal drinking water system that allows ponding of water.

## 12. Other Business

- a. Question and Answer Period

## 13. Closed Meeting

## 14. Next SPC Meeting

December 12, 2019 at 1:00pm, Grand River Conservation Authority, 400 Clyde Road, Cambridge ON

## 15. Adjourn

Ministry of the Environment,  
Conservation and Parks

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



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AUG 16 2019

357-2019-1520  
CR: ENV1283MC-2013-401

Helen Jowett, Chair  
Grand River Conservation Authority  
400 Clyde Road, P.O. Box 729  
Cambridge, ON N1R 5W6

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

Dear Ms. Jowett and Ms. Cascaden,

It is a pleasure to inform you that the Ministry has completed the review of the amended assessment report and source protection plan for the Grand River Source Protection Area, affecting drinking water systems in Grey County, City of Hamilton and County of Brant, developed under the *Clean Water Act, 2006*. Pursuant to section 34 of the *Clean Water Act*, I approve these amendments. These amendments will take effect on the day a notice of this decision is posted on the Environmental Registry.

When the initial plan was approved, an order was given under section 36 of the *Clean Water Act* that governs the future review of the plans. The requirements that govern that review remain unchanged with the approval of these amendments.

The ongoing efforts to protect sources of drinking water by the Lake Erie Source Protection Committee, the Grand River Conservation Authority, and all stakeholders is appreciated. Please accept my thanks for your dedication and hard work to protect Ontario's sources of drinking water.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Yurek".

Jeff Yurek  
Minister

Ministry of the Environment,  
Conservation and Parks

Ministère de l'Environnement,  
de la Protection de la nature et  
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JUL 22 2019

357-2019-984  
CR: ENV1283MC-2013-14

Helen Jowett, Chair  
Grand River Conservation Authority  
400 Clyde Road, P.O. Box 729  
Cambridge, ON N1R 5W6

Rick Cerna, Chair  
Cattfish Creek Source Protection Authority  
8079 Springwater Road, RR5  
Alymer, ON N5H 2R4

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

Dear Ms. Jowett, Mr. Cerna and Ms. Cascaden,

I am following up on your proposed workplan for the review and update of the Cattfish Creek assessment report and source protection plan. The workplan, dated October 4, 2018, was submitted in compliance with the order dated September 19, 2014 issued under section 36 of the *Clean Water Act*.

I am pleased to note that your workplan confirms that implementation of the source protection plan is going well, and I appreciate the level of effort you put into your analysis of your assessment report and plan.

Pursuant to subsection 36 (1) of the *Clean Water Act*, I am amending the order dated September 19, 2014, to establish requirements governing the content and timeframes of the review and the process to be followed for any updates to your assessment report and plan. The source protection committee and the lead source protection authority for the region (Grand River Conservation Authority) shall update the assessment report and source protection plan to address the workplan items identified in the attachment to this order and ensure those changes comply with the recent amendments to the General Regulation and Director's Technical Rules.

I would also like to thank you for your proposed local interest updates which I noticed through my review. While not specifically required, I would encourage you to work with both your community and your municipalities to find cooperative ways to move forward with items that are consistent with the Act, its regulations and Technical Rules that are in effect at the time of the updates. Staff in the Ministry's drinking water source protection program are also available to provide you advice on this. You may contact Debbie Scanlon, Manager Approvals Section (416-212-8839) if you have any questions.

When undertaking any updates, the source protection committee and the lead source protection authority must follow the amendment process and consultation requirements set out in the attachment to this letter. All updates carried out under section 36 of the *Clean Water Act* are to be submitted to the Ministry within six (6) months after the completion of the required updates and consultation.

Thank you for the continued efforts of the source protection authorities, committee and local communities to ensure sources of drinking water are protected. Significant progress has been made in source protection and the province looks forward to continuing to work with you and all stakeholders to protect sources of drinking water.

Sincerely,



Jeff Yurek  
Minister

Enclosure

C: Martin Keller, Project Manager, Lake Erie Region Source Protection  
Chris Wilkinson, General Manager/Secretary Treasurer, Catfish Creek Conservation  
Susan Ecclestone, Director, Source Protection Programs Branch, MECP  
Debbie Scanlon, Manager, Source Protection Programs Branch, MECP  
Stacey Baker, Program Analyst, MECP  
Olga Yudina, Liaison Officer, MECP

## **Attachment: Catfish Creek Updates under Section 36 of the *Clean Water Act***

### *Mandatory Updates to the Assessment Report and Source Protection Plan*

The Lake Erie Region Source Protection Committee and Grand River Conservation Authority, as the lead authority for the region, shall ensure that the review includes updates to the assessment report and source protection plan to:

- Comply with the amendments made to the Director's Technical Rules, published on the Environmental Registry in March 2017 under posting number 012-8507 and the 2018 amendments to the Rules and General Regulation (O. Reg. 287/07). For your source protection area this includes:
  - assessing locations where liquid hydrocarbon pipelines pose a significant, moderate and low risk, and ensuring policies apply to all relevant protection zones; and
  - updating the significant groundwater recharge areas and any associated maps or policies in the plan to align with the amended Technical Rules.

### *Amendment Process for Updates including Consultation:*

The rules that source protection committees and source protection authorities were required to follow under the *Clean Water Act* in preparing, consulting on and submitting assessment reports and source protection plans to the Ministry will generally apply when making updates as part of the review. However, as with locally initiated amendments, any proposed updates to an assessment report and plan are to be consulted on concurrently and submitted together as one package to the Ministry by the source protection authority.

Only those provisions of the *Clean Water Act* and General Regulation referred to below apply to the update of your assessment report and source protection plan. For example, as no terms of reference is being required for the review and update of the assessment report and plan, subsection 36 (3) of the *Clean Water Act* does not apply.

Accordingly, for the updates to the assessment report and source protection plan, the following provisions apply:

- Assessment report content outlined in section 15 of the *Clean Water Act* and sections 11 to 14 of the General Regulation.
- Source protection plan content outlined in subsections 22 (2) to (15) of the *Clean Water Act* and sections 20 to 34 of the General Regulation.

Updates to the assessment report and source protection plan shall be made in consultation with affected municipalities, the Ministry, and any other bodies responsible for implementing a policy that may be revised as part of the updates. Consultation shall include the following minimum requirements:

- Early consultation on any draft updates to the assessment report and plan with the Source Protection Programs Branch prior to carrying out pre-consultation with other bodies.
- Pre-consultation with all implementing bodies as well as persons and businesses engaged in significant drinking water threats in the geographic areas affected by the updates in accordance with sections 35 to 39 of the General Regulation.
- Consultation for a minimum of 35 days, as outlined below.

The Explanatory Document that accompanies the plan (section 40, General Regulation) shall also be updated to reflect the proposed changes to the plan and made available for consultation.

While consulting on the proposed updates to the assessment report and source protection plan in accordance with the requirements set out above, comments received shall be documented, considered and addressed prior to advancing to the next consultation stage or finalizing the proposed updates to the assessment report and plan.

Notification and publication of the proposed updates shall follow the provisions included in the General Regulation for assessment reports and plans as described below. This includes making the proposed updates available on the Internet and in locations that are accessible to give the public and other interested parties an opportunity to inspect and comment on the updates. Specifically, consultation on the proposed updates to the assessment report and plan shall occur concurrently and sections 23 to 25 of the *Clean Water Act* and section 41 of the General Regulation apply with modifications noted below:

- References to a draft or proposed source protection plan shall be read as references to the proposed updates to the assessment report and source protection plan that result from the review carried out under section 36 of the *Clean Water Act*.
- Notices shall be provided to the clerk of each municipality and all other persons and bodies listed in section 41 that are affected by the proposed updates.
- A public meeting referred to in clause (c) of subsection 41 (3) and in subsection 41 (7) is optional as determined by the source protection committee in consideration of the nature and scope of the proposed updates.

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JUL 22 2019

357-2019-985  
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Helen Jowett, Chair  
Grand River Conservation Authority  
400 Clyde Road, P.O. Box 729  
Cambridge, ON N1R 5W6

Stephen Harvey, Chair  
Kettle Creek Source Protection Authority  
44015 Ferguson Line, RR8  
St. Thomas, ON N5P 3T3

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

Dear Ms. Jowett, Mr. Harvey and Ms. Cascaden,

I am following up on your proposed workplan for the review and update of the Kettle Creek assessment report and source protection plan. The workplan, dated October 4, 2018, was submitted in compliance with the order dated September 8, 2014 issued under section 36 of the *Clean Water Act*.

I am pleased to note that your workplan confirms that implementation of the source protection plan is going well, and I appreciate the level of effort you put into your analysis of your assessment report and plan.

Pursuant to subsection 36 (1) of the *Clean Water Act*, I am amending the order dated September 8, 2014, to establish requirements governing the content and timeframes of the review and the process to be followed for any updates to your assessment report and plan. The source protection committee and the lead source protection authority for the region (Grand River Conservation Authority) shall update the assessment report and source protection plan to address the workplan items identified in the attachment to this order and ensure those changes comply with the recent amendments to the General Regulation and Director's Technical Rules.

I would also like to thank you for your proposed local interest updates which I noticed through my review. While not specifically required, I would encourage you to work with both your community and your municipalities to find cooperative ways to move forward with items that are consistent with the Act, its regulations and Technical Rules that are in effect at the time of the updates. Staff in the Ministry's drinking water source protection program are also available to provide you advice on this. You may contact Debbie Scanlon, Manager Approvals Section (416-212-8839) if you have any questions.

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Thank you for the continued efforts of the source protection authorities, committee and local communities to ensure sources of drinking water are protected. Significant progress has been made in source protection and the province looks forward to continuing to work with you and all stakeholders to protect sources of drinking water.

Sincerely,



Jeff Yurek  
Minister

Enclosure

C: Martin Keller, Project Manager, Lake Erie Region Source Protection  
Elizabeth VanHooren, General Manager/Secretary Treasurer, Kettle Creek Conservation  
Susan Ecclestone, Director, Source Protection Programs Branch, MECP  
Debbie Scanlon, Manager, Source Protection Programs Branch, MECP  
Stacey Baker, Program Analyst, MECP  
Olga Yudina, Liaison Officer, MECP

## **Attachment: Kettle Creek Updates under Section 36 of the *Clean Water Act***

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- Comply with the amendments made to the Director's Technical Rules, published on the Environmental Registry in March 2017 under posting number 012-8507 and the 2018 amendments to the Rules and General Regulation (O. Reg. 287/07). For your source protection area this includes:
  - assessing locations where liquid hydrocarbon pipelines pose a significant, moderate and low risk, and ensuring policies apply to all relevant protection zones; and
  - updating the significant groundwater recharge areas and any associated maps or policies in the plan to align with the amended Technical Rules.

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The rules that source protection committees and source protection authorities were required to follow under the *Clean Water Act* in preparing, consulting on and submitting assessment reports and source protection plans to the Ministry will generally apply when making updates as part of the review. However, as with locally initiated amendments, any proposed updates to an assessment report and plan are to be consulted on concurrently and submitted together as one package to the Ministry by the source protection authority.

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- A public meeting referred to in clause (c) of subsection 41 (3) and in subsection 41 (7) is optional as determined by the source protection committee in consideration of the nature and scope of the proposed updates.



## LAKE ERIE REGION SOURCE PROTECTION COMMITTEE

**REPORT NO. SPC-19-10-01**

**DATE:** October 3, 2019

**TO:** Members of the Lake Erie Region Source Protection Committee

**SUBJECT: Source Protection Program Update**

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### **RECOMMENDATION:**

THAT the Lake Erie Region Source Protection Committee receives report SPC-19-10-01 – Source Protection Program Update – for information.

### **REPORT:**

#### **2019/2020 Financial Update**

On July 16, 2019, Lake Erie Region staff received the signed 2019/20 Drinking Water Source Protection Program Transfer Payment Agreement from the province, covering the costs of the program from April 1, 2019 to March 31, 2020.

#### **Model Management Study Update**

GRCA, together with the Region of Waterloo and the City of Guelph, are continuing their discussions and work to develop a model management governance framework. Work at each of the organizations to transfer models and model data from consultants to internal IT frameworks and to make foundational data layers (e.g., geological layers) from the Tier 3 models available to broader audience is ongoing. A meeting is scheduled for October 4 to show progress by the respective parties over the summer. Insights from these technical tasks will help inform options for a model management governance framework.

#### **Lake Erie Region Source Protection Committee Chair Appointment**

Wendy Wright-Cascaden has been re-appointed as the Chair of the Lake Erie Region Source Protection Committee (SPC) for another three years. The effective date of the appointment was September 4, 2019.

#### **SPC Member Appointment Update**

In April 2019, Donald Woolcott, indicated his intent to resign from the SPC, leaving a vacant public interest seat on the committee. An open application process was initiated on May 30, 2019 and closed on June 28, 2019. The Lake Erie Region Management Committee evaluated the applications and by consensus, recommended that the Grand River Source Protection Authority appoint Linda Dickson as the public interest representative for a four-year term of appointment. The Grand River Source Protection Authority appointed Linda Dickson to the committee on August 23, 2019. Linda has lived in Woolwich Township for 20 years and the Region of Waterloo for 30 years. She has worked for the County of Wellington for the past 33

years as a Land Use Planner and as an Emergency Manager, and has served on various Woolwich Township Committees.

Paul General resigned from the SPC in April 2019 leaving a vacant Six Nations seat on the committee. On September 10, 2019, Six Nations of the Grand River nominated Weylin Bomberry - Manager of the Six Nations Wildlife Unit - to the committee. A report will be brought to the Grand River Source Protection Authority recommending that W. Bomberry be appointed to the committee at their October meeting.

## **Phase II Technical Rules Update**

The MECP is preparing to re-engage source protection stakeholders on the proposed Phase II changes to the Director's Technical Rules. The list of proposed changes include amendments to:

- Surface water vulnerability:  
Enable changes to Intake Protection Zone 1 (delineation) and Intake Protection Zone 2 (scoring) to reflect local hydrological conditions.
- Drinking water issues:  
Introduce new IPZs and WHPAs as issue contributing areas (ICA), i.e. IPZs-ICA and WHPA-ICA and requirements behind delineation of issue contributing areas.
- Alternative approach request:  
Reduce the administrative burden of seeking the Director's approval prior to conducting the technical work.
- Local activity / threat request:  
Focus on local activity that may pose a local risk to the municipal drinking water source and where there are provincial or federal efforts in managing risks for activities.
- Climate Change Risk Assessment:  
Amendment will specify what must be included in an assessment report if climate change risk assessment is conducted.
- Threats (e.g. waste, sewage, road salt, storage of snow and salt, DNAPLs, NASM):  
Provide clarification on the definition of threats and circumstances to address implementation challenges and align with other provincial frameworks such as the Ontario Water Resources Act, the Nutrient Management Act, the Environmental Protection Act.

The MECP will be hosting three in-person engagement sessions with technical staff across the province this fall (east, central and southwest) and one webinar for the north and those who cannot attend a session.

Additionally, the MECP is moving forward with proposed changes to the circumstances for the storage and handling of road salt, with the main focus a reduction of the threshold that triggers road salt storage as a significant drinking water threat. M. Keller has been participating in stakeholder working group discussions.

## SPC Meeting Outlook

Work to complete the two S.34 updates of the Grand River Source Protection Plan and one update of the Long Point Region Source Protection Plan are ongoing.

The first update is for the “Bundled” Grand River Assessment Report and Source Protection Plan. The public consultation period ended on July 21, 2019. One public comment on the assessment report was received during this time. Amendments made to the “Bundled” update are detailed in report SPC-19-10-04. The Grand River Source Protection Authority is anticipated to submit the “Bundled” update to the MECP following its meeting on October 25, 2019.

The second update is for Wellington County (Elora, Fergus, Rockwood and Hamilton Drive) and the County of Brant (water quantity policies for the Bethel Municipal Water Supply). Amendments made to assessment report and source protection plan sections are summarized in report SPC-19-10-03. The amended assessment report and source protection plan are scheduled to be released for pre-consultation October 7 to November 12, 2019.

The third update is for amendments to the Long Point Region Assessment Report and Source Protection Plan. The update reflects changes to the Otterville Wellfield (Oxford County) WHPA and ICA. The public consultation period began on September 23 and will end on October 27, 2019. A public open house will be held in Norwich on October 1, 2019.

Work is also ongoing to develop new water quantity policies for the City of Guelph, Halton Region, Region of Waterloo and Wellington County. At this time, draft water quantity policies are anticipated to be presented to the SPC on December 12, 2019, as part of the GGET/Acton Grand River Assessment Report and Source Protection plan update. Pre-consultation is anticipated to begin after the April 2, 2020, SPC meeting.

Lake Erie Region staff plan to initiate work on S.36 assessment report and source protection plan updates for Catfish Creek and Kettle Creek in late fall 2019. The draft updated Catfish Creek and Kettle Creek assessment reports and source protection plans are scheduled to be brought to the committee April 2, 2020 to be released for pre-consultation.

Updates to the Grand River, Long Point region, Catfish Creek and Kettle Creek assessment report and source protection plan sections will continue to be presented to the SPC as work is completed.

**Table 1** provides an overview of the next few SPC meetings and anticipated agenda items related to the S.34 “Bundled” Grand River, S.34 Wellington/Brant Grand River, S. 34 Otterville Long Point Region, S.34 GGET/Acton Grand River and S.36 Catfish Creek and Kettle Creek updates.

Prepared by:



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Ilona Feldmann  
Source Protection Program Assistant

Approved by:



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Martin Keller, M. Sc.  
Source Protection Program Manager

**Table 1: SPC meeting outlook 2019/2020**

SPC Meeting Date	Agenda Items				
	S.34 “bundled” Grand River Update (all other sections)	S.34 Otterville Long Point Region Update	S. 34 Wellington/Brant Grand River Update	S. 34 GGET/Acton Grand River Update	S. 36 Catfish and Kettle Creek Updates
September 23 – October 27, 2019		Public consultation period (5 weeks)			
<b>October 3, 2019</b>	<ul style="list-style-type: none"> <li>Revised draft updated AR and SPP: receive public comments for consideration; release the document to the Grand River Source Protection Authority for submission to the Ministry</li> </ul>		<ul style="list-style-type: none"> <li>Draft updated AR and SPP; release for pre-consultation</li> </ul>		
October - November 2019			Municipal and ministry pre-consultation period		

SPC Meeting Date	Agenda Items				
	S.34 “bundled” Grand River Update (all other sections)	S.34 Otterville Long Point Region Update	S. 34 Wellington/Brant Grand River Update	S. 34 GGET/Acton Grand River Update	S. 36 Catfish and Kettle Creek Updates
December 12, 2019		<ul style="list-style-type: none"> <li>Revised draft updated AR and SPP: receive public comments for consideration; release the document to the Long Point Region Source Protection Authority for submission to the Ministry</li> </ul>	<ul style="list-style-type: none"> <li>Complete draft updated AR/SPP; release for public consultation</li> </ul>	<ul style="list-style-type: none"> <li>Draft water quantity policies</li> </ul>	
January – February 2020			Formal public consultation period		

SPC Meeting Date	Agenda Items				
	S.34 “bundled” Grand River Update (all other sections)	S.34 Otterville Long Point Region Update	S. 34 Wellington/Brant Grand River Update	S. 34 GGET/Acton Grand River Update	S. 36 Catfish and Kettle Creek Updates
April 2, 2020			<ul style="list-style-type: none"> <li>Revised draft updated AR and SPP: receive public comments for consideration; release the document to the Grand River Source Protection Authority for submission to the Ministry</li> </ul>	<ul style="list-style-type: none"> <li>Revised water quantity policies (Guelph-Guelph/Eramosa) and updated municipal SPP sections (Guelph, Halton, Waterloo and Wellington)</li> <li>Updated AR and SPP sections; release for pre-consultation</li> </ul>	<ul style="list-style-type: none"> <li>Draft updated ARs and SPPs; release for pre-consultation</li> </ul>
April - June 2020				Municipal and ministry pre-consultation period	Municipal and ministry pre-consultation period
July 9, 2020				<ul style="list-style-type: none"> <li>Complete draft updated AR/SPP; release for public consultation</li> </ul>	<ul style="list-style-type: none"> <li>Complete draft updated ARs/SPPs; release for public consultation</li> </ul>

SPC Meeting Date	Agenda Items				
	S.34 “bundled” Grand River Update (all other sections)	S.34 Otterville Long Point Region Update	S. 34 Wellington/Brant Grand River Update	S. 34 GGET/Acton Grand River Update	S. 36 Catfish and Kettle Creek Updates
July – September 2020				Formal public consultation period	Formal public consultation period
October 8, 2020				<ul style="list-style-type: none"> <li>Revised draft updated AR and SPP: receive public comments for consideration; release the document to the Grand River Source Protection Authority for submission to the Ministry</li> </ul>	<ul style="list-style-type: none"> <li>Revised draft updated AR and SPP: receive public comments for consideration; release the documents to the Catfish and Kettle Creek Source Protection Authorities for submission to the Ministry</li> </ul>



## LAKE ERIE REGION SOURCE PROTECTION COMMITTEE

**REPORT NO. SPC-19-10-02**

**DATE:** October 3, 2019

**TO:** Members of the Lake Erie Region Source Protection Committee

**SUBJECT: Progress Report Grand River**

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### **RECOMMENDATION:**

THAT the Lake Erie Region Source Protection Committee receives report SPC-19-10-02 – Progress Report Grand River – for information.

### **REPORT:**

This report provides an update on progress of studies in the Grand River watershed. Progress reports and results of technical studies are presented to the Source Protection Committee as they are completed with recommendations to update the Grand River Assessment Report and Source Protection Plan. Once the technical studies are presented, updated municipal sections of the assessment report and plan will be presented to the Source Protection Committee.

### **Technical Studies**

#### Centre Wellington Tier 3 Water Budget study

The Centre Wellington Scoped Tier 3 Water Budget Study began in August 2016 to assess potential water quantity risks to the Centre Wellington municipal drinking water system. The project is managed by the GRCA on behalf of the Township of Centre Wellington. The study is being completed in coordination with the Township's Water Supply Master Plan (WSMP), which began in early 2018.

The final phase of the project, the Risk Assessment, will be completed this fall with the release of the final report. The Risk Assessment scenarios resulted in a significant risk level when assessing future municipal demand. The WSMP identified population growth and water demand to a planning horizon of 2041. Based on this information, the Township will not be able to meet their average daily or maximum day water demand by the year 2041 with the existing municipal wells and infrastructure. New options to meet demand, for example new wells or changes to the existing configuration, such as the deepening of wells, will be required. A significant risk level also requires development of water quantity policies. The Township is currently working with Wellington Source Water Protection to develop draft policies that will be applicable within the WHPA-Q. Policy discussions with GRCA staff will follow.

The next, and final, meeting with the Community Liaison Group is planned to be held in mid-November to present the Risk Assessment results and policy approaches. Draft policies, together with the final report of the Risk Assessment, are expected to be presented to the Source Protection Committee in December.

Information about the Centre Wellington study including reports, CLG presentations, and meeting summaries are available at [www.sourcewater.ca/CW-Scoped-Tier3](http://www.sourcewater.ca/CW-Scoped-Tier3)

Guelph-Guelph/Eramosa Water Quantity Policy Development Study

Policy discussions have been ongoing throughout the summer at the project team level. To further advance policy development, W. Wright-Cascaden, SPC Chair, and M. Keller, Program Manager, have initiated individual discussions with the City of Guelph and Ministry of the Environment, Conservation and Parks, Source Protection Programs Branch (MECP, SPPB) staff to find a balance between the municipal and provincial interests. Both the City and Ministry are supportive of this approach. An initial meeting with the City of Guelph was held on September 10, and with MECP SPPB on September 25. The Chair and Program Manager are prepared to have one on one meetings as long as positive results can be seen. The goal is to present draft water quantity policies to the SPC on December 12. Presentation of the draft policies to the Implementing Municipalities Group (IMG) and Community Liaison Group (CLG) is anticipated following the December SPC meeting.

Prepared by:



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Ilona Feldmann  
Source Protection Program Assistant

Approved by:



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Martin Keller, M. Sc.  
Source Protection Program Manager

Prepared by:



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Sonja Strynatka, P.Geol.  
Senior Hydrogeologist

## LAKE ERIE REGION SOURCE PROTECTION COMMITTEE

**REPORT NO. SPC-19-10-03**

**DATE:** October 3, 2019

**TO:** Members of the Lake Erie Region Source Protection Committee

**SUBJECT: S.34 Draft Updated Grand River Assessment Report and Source Protection Plan: Wellington County, County of Brant**

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### **RECOMMENDATION:**

THAT the Lake Erie Region Source Protection Committee receives report SPC-19-10-03 – S.34 Draft Updated Grand River Assessment Report and Source Protection Plan: Wellington County, County of Brant – for information.

AND THAT the Lake Erie Region Source Protection Committee release the Draft Updated Grand River Assessment Report and Source Protection Plan for pre-consultation and direct staff to commence a 37-day pre-consultation period.

### **REPORT:**

#### **Updates to the Assessment Report**

Two assessment report sections have been revised since an update to the Grand River Assessment Report and Source Protection Plan was approved on August 16, 2019. The revisions include:

##### Section 6 – Wellington County:

- Rockwood and Hamilton Drive (Guelph/Eramosa) WHPAs, vulnerability scoring, threats and issues assessment
- Fergus and Elora (Centre Wellington) WHPAs, vulnerability scoring, threats and issues assessment and subsequent delineation of three new Issue Contributing Areas (ICAs) for Chloride and TCE (Chloride ICA around well E3 in Elora, and Chloride and TCE ICAs around well F1 in Fergus)
- Minor revisions across the section for brevity and added clarity

##### Section 20 – Whitemans Creek Tier 3 Water Budget and Risk Assessment:

- New section that describes the Tier 3 Water Budget and Risk Assessment completed for the municipal drinking water systems of the Whitemans Creek Subwatershed, including the delineation of a significant WHPA-Q for the Bethel wellfield

#### **Updates to the Source Protection Plan**

The Grand River Source Protection Plan was amended as a result of the technical updates in the assessment report. Draft policy approaches for both Wellington County and the County of Brant were presented to the SPC at the June 20, 2019 meeting. The draft policy approaches and subsequent policy text have undergone further revisions since that time.

## Section 7 – Wellington County:

- New Chloride ICAs in Fergus and Elora triggered a municipal review of prescribed drinking water threat policies related to chloride
- Proposed new drinking water quality policies have been developed and amendments made to approved policies, by the County, in consultation with Lake Erie Region staff
- Incentive policies WC-CW-1.6, 1.7, 1.8 and transport pathway policy CW-CW-1.20, have not been amended
- Policy work primarily focussed on proposed new drinking water quality policies and amendments to approved policies, summarized in **Appendix A, Tables 1 – 4**, for the following drinking water threats: the Application of Road Salt, the Handling and Storage of Road Salt, the Storage of Snow and Sewage System or Sewage Works – Discharge from a Stormwater Management Facility.
- Other proposed revisions include:
  - Inclusion of new definitions for stormwater management facility, salt application area, and salt
  - updates to policy text to align with policies from neighbouring Source Protection Regions to ensure consistency in implementation across municipal jurisdiction
  - Update to monitoring policy WC-MC-1.14 to include Well F1 in Fergus and Station Street Wells 1 and 2 in Guelph/Eramosa
  - Update to conditions policy WC-NB-1.18 to reduce the meeting frequency from six months to once every calendar year
  - Removal of Sodium and Chloride ICA from Education and Outreach policy for septic systems and holding tanks
  - Addition of clarification in prohibition policy for new sewage treatment plant (policy WC-MC-3.4) to ensure existing plants are not affected
  - Addition of new policy (WC-MC-3.8) to manage existing and new stormwater management facilities where chloride could leach into groundwater
  - Revisions to policies related to application and storage of Agricultural Source Material (ASM), application and storage of fertilizer, livestock, and septic systems to remove reference to land being phased in under the Nutrient Management Act. This removes a policy gap and implementation challenge.
  - Addition of Nitrate ICA to RMP policies related to application and storage of ASM, application and storage of fertilizer, livestock, and septic systems to ensure consistency with Non-Agricultural Source Material (NASM) policies and policies in neighbouring source protection plans. Previously these activities were addressed through education and outreach policies. This change is anticipated to affect approximately three (3) properties.
  - Inclusion of a minimum 25L policy threshold for applicability of Dense Non-Aqueous Phase Liquid (DNAPL) storage and handling policy (WC-CW-16.1 and 16.3). The current policies apply to any quantity.

Section 14 – County of Brant:

- The WHPA-Q for the Bethel wellfield was assigned a significant risk level and a high level of uncertainty as a result of the Whitemans Creek Tier 3 Water Budget and Risk Assessment
- Proposed new drinking water quantity policies have been developed by the policy development team (staff from the County of Brant, Grand River Conservation Authority and MECP)
- The proposed policies are based on previous water quantity policy development work, reflect the needs of the County and the municipal resources available while achieving the objectives of the source protection plan (**Appendix B, Table 5**)

The S.34 draft updated sections of the Grand River Assessment Report and Source Protection Plan, including the proposed policy text, for Wellington County and the County of Brant are available in their entirety on the October 3, 2019 [eScribe](#) meeting site.

Prepared by:



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Ilona Feldmann  
Source Protection Program Assistant

Approved by:



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Martin Keller, M. Sc.  
Source Protection Program Manager

## Appendix A

**Table 1: Proposed Wellington County water quality policies related to the application of road salt**

Application of Road Salt					
Tool	Proposed Change	Existing and / or Future	Approach	ICA Threshold	Non-ICA Threshold
S.58 Risk Management Plan	New policy WC-CW-12.2	Existing and Future	Manage through a RMP	Chloride ICA where: a) significant; b) salt is or could be applied to the property; c) salt application area is > or = to 200 square metres or 8 parking spots; and d) any land uses except residential < or = to four units OR e) any municipal property where significant	Within WHPA-A-v.10; WHPA-B-v.10; IPZ-1-v.10 where: a) significant; b) salt is or could be applied to the property; c) salt application area is > or = to 200 square metres or 8 parking spots; and d) any land uses except residential < or = to four units OR e) any municipal property where significant
Land Use Planning	New policy WC-MC-12.01	Future	Manage new development through Official Plan policies and application requirements	Chloride ICA where: a) all land uses except residential < or = to four units b) only salt application area is > or = to 200 square metres or 8 parking spaces	Not Applicable

Specify Action	New policy WC-NB-12.4	Existing and Future	Prioritize inspection and abatement activities related to well maintenance and abandonment pursuant to Reg. 903	Chloride ICA	Within WHPA-A-v.10; WHPA-B-v.10
Specify Action	New policy WC-CW-12.02	Existing and Future	Provide training opportunities for municipal staff and private contractors	Chloride ICA	Within WHPA-A-v.10; WHPA-B-v.10
Specify Action	Amended policy WC-CW-12.1	Existing and Future	Manage through Salt Management Plans; must be included in a RMP	Chloride ICA	Not Applicable
Specify Action	New policy WC-CW/NB-12.3	Future	Enhance road design measures	Chloride ICA	Within WHPA-A-v.10; WHPA-B-v.10
Specify Action	New policy WC-CW-12.5	Existing and Future	Review transport pathways and possible actions to be taken	Chloride ICA	Not Applicable
Specify Action	New policy WC-NB-12.6	Existing and Future	Manage through Salt Management Plans	Chloride ICA	Not Applicable
Education and Outreach	New policy WC-CW-12.7	Existing and Future	Implement education initiative related to the application of road salt	Chloride ICA	Not applicable

**Table 2: Proposed Wellington County water quality policies related to the handling and storage of road salt**

Prescribed Drinking Water Threat Activity					
Handling and Storage of Road Salt					
Tool	Proposed Change	Existing and / or Future	Approach	ICA Threshold	Non-ICA Threshold
S.57 Prohibition	Amended policy WC-CW-13.2	Future	Prohibit	Not Applicable	Within WHPA-A-v.10; IPZ-1-v.10
S.57 Prohibition	New policy WC-CW-13.2.1	Existing and Future	Prohibit	WHPA-A-v.10 within Chloride ICA where: a) stored in any amount covered or uncovered; or b) covered storage > than 100 kg	Not Applicable
S. 58 Risk Management Plan	Amended policy WC-CW-13.1	Existing and Future	Manage through a RMP	Not Applicable	Existing within WHPA-A-v.10; WHPA-B-v.10; IPZ-1-v.10 OR New within WHPA-B-v.10

S.58 Risk Management Plan	New policy WC-CW-13.2.2	Existing and Future	Manage through a RMP	Chloride ICA where: a) outside of WHPA-A any amount uncovered; or b) outside of WHPA-A, covered in amounts > 100 Kg; or c) property that requires a salt application RMP, covered or uncovered in any amount; or d) municipal property covered or uncovered in any amount	Not Applicable
Land Use Planning	New policy WC-MC-12.01	Future	Manage new development through Official Plan policies and application requirements	Where: a) all land uses except residential < or = to four units b) only salt application area is > or = to 200 square metres or 8 parking spaces	Not Applicable
Specify Action	New policy WC-CW-12.02	Existing and Future	Provide training opportunities for municipal staff and private contractors	Chloride ICA	Within WHPA-A-v.10; WHPA-B-v.10
Education and Outreach	Amended policy WC-CW-13.3	Existing and Future	Implement education initiative related to the handling and Storage of road salt	Chloride ICA	Not Applicable

**Table 3: Proposed Wellington County water quality policies related to the storage of snow**

Prescribed Drinking Water Threat Activity					
Storage of Snow					
Tool	Proposed Change	Existing and / or Future	Approach	ICA Threshold	Non-ICA Threshold
S.57 Prohibition	Amended policy WC-CW-14.2	Future	Prohibit	Not Applicable	Within WHPA-A-v.10; IPZ-1-v.10
S.57 Prohibition	New policy WC-CW-14.4	Future	Prohibit	WHPA-A-v.10 within Chloride ICA where: a) below-grade storage > than 0.01 ha in area; OR b) above-grade storage > than 1 ha in area	Not Applicable
S. 58 Risk Management Plan	Amended policy WC-CW-14.1	Existing and Future	Manage through a RMP	Not Applicable	Within WHPA-A-v.10; WHPA-B-v.10; IPZ-1-v.10

S. 58 Risk Management Plan	New policy WC-CW-14.5	Existing and Future	Manage through a RMP	Chloride ICA where: a) prohibition does not apply; b) salt is or could be applied to a property; c) application area is = to or > than 200 square metres or eight parking spots; and d) any land use except = or < than four residential units	Not Applicable
Land Use Planning	New policy WC-MC-12.01	Future	Manage new development through Official Plan policies and application requirements	Chloride ICA where: a) all land uses except residential < or = to four units b) only salt application area is > or = to 200 square metres or 8 parking spaces	Not Applicable
Education and Outreach	Amend policy WC-CW-14.3	Existing and Future	Implement education initiative related to the storage of snow	Chloride or Nitrate ICA	Within WHPA-A-v.10; WHPA-B-v.10; IPZ-1-v.10

**Table 4: Proposed Wellington County water quality policies related to sewage system or sewage works - discharge from a stormwater management facility**

<b>Prescribed Drinking Water Threat Activity</b>					
<b>Sewage System or Sewage Works – Discharge from a Stormwater Management Facility</b>					
<b>Tool</b>	<b>Proposed Change</b>	<b>Existing and / or Future</b>	<b>Approach</b>	<b>ICA Threshold</b>	<b>Non-ICA Threshold</b>
S.58 Risk Management Plan	New policy WC-CW-3.8	Existing and Future	Manage through a RMP	Chloride ICA where: a) significant; b) facility does not require an ECA approval	Not Applicable
Prescribed Instrument (PI)	Amend policy WC-MC-3.7	Existing and Future	Manage through Environmental Compliance Approval process	Chloride ICA	Within WHPA-A-v.10; WHPA-B-v.10; IPZ-1-v.10
Land Use Planning	New policy WC-MC-12.01	Future	Manage new development through Official Plan policies and application requirements	Where: a) all land uses except residential < or = to four units b) only salt application area is > or = to 200 square metres or 8 parking spaces	Not Applicable

## Appendix B

Table 1: Proposed water quantity policies for the County of Brant

Prescribed Drinking Water Threat Activity				
Consumptive Water Taking				
Tool	Policy #	Existing / Future	Approach	Implementing body
Prescribed Instrument (PI)	BC-MC-13.1	Existing and Future	<p><b>Manage water takings through Permit to Take Water</b></p> <p>Approvals to include appropriate terms and conditions to demonstrate that the taking will not adversely impact the aquifer's ability to meet municipal and other water supply requirements.</p>	Ministry
Prescribed Instrument (PI)	BC-MC-13.2	Existing and Future	<p><b>Manage water takings through approvals under Aggregate Resources Act</b></p> <p>Review and amendment existing and new approvals for extraction below the water table to include terms and conditions addressing operational controls, consumptive water taking, rehabilitation and to include the results from the Tier 3 study.</p>	Ministry

Land Use Planning	BC-MC-13.3	Future	<p><b>Manage future growth servicing using municipal land use planning</b></p> <p>Decisions made under the Planning Act ensure the development and any required expansion of the municipal drinking water system is consistent with the County's Water Supply Master Plan and Infrastructure Master Plan, and consideration of the results of the Tier 3 study in conditions of approval.</p>	Municipality
Specify Action	BC-CW-13.4	Future	<p><b>Identification of additional water supplies</b></p> <p>Consideration of locating additional water supply outside of the WHPA-Q where practical.</p>	Municipality
Specify Action	BC-CW-13.5	Future	<p><b>Update of the Water Supply Master Plan (WSMP)</b></p> <p>Municipality to update their Water Supply Master Plan using the findings of the Tier 3 study.</p>	Municipality
Specify Action	BC-CW-13.6	Future	<p><b>Update of the Hydrogeologic Model</b></p> <p>Municipality to update the Hydrogeologic Model to include wellfields servicing the Town of Paris to complete a Well Capacity study to support the WSMP.</p>	Municipality
Specify Action	BC-CW-13.7	Future	<p><b>Completion of a Growth Management Strategy</b></p> <p>Municipality to complete a Growth Management Strategy conforming to the Growth plan.</p>	Municipality
Specify Action	BC-CW-13.8	Existing and Future	<p><b>Maintenance of Tier 3 water budget model</b></p> <p>Municipality to request the MECF should support and fund the ongoing support and maintenance of the Tier 3 model.</p>	Municipality
Education and Outreach	BC-CW-13.9	Existing and future	<p><b>Update of water conservation plans</b></p> <p>Municipality to update their water conservation plans using the finding of the Tier 3 study.</p>	Municipality

Recharge Reduction				
Land Use Planning	BC-MC-14.1	Future	<p><b>Manage recharge reduction through applications under the Planning Act</b></p> <p>Applications to include requirements to demonstrate that the development will not adversely impact recharge reduction.</p>	Municipality



## LAKE ERIE REGION SOURCE PROTECTION COMMITTEE

**REPORT NO. SPC-19-10-04**

**DATE:** October 3, 2019

**TO:** Members of the Lake Erie Region Source Protection Committee

**SUBJECT: S.34 Revised Updated “Bundled” Grand River Assessment Report and Source Protection Plan**

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### **RECOMMENDATION:**

THAT the Lake Erie Region Source Protection Committee receives report SPC-19-10-04 – S.34 Revised Updated “Bundled” Grand River Assessment Report and Source Protection Plan – for information.

AND THAT the Lake Erie Region Source Protection Committee releases the revised updated “Bundled” Grand River Assessment Report and Source Protection Plan to the Grand River Source Protection Authority for submission to the Ministry of the Environment, Conservation and Parks along with the municipal council resolutions endorsing the changes, and the comments as presented in this report.

### **REPORT:**

Work under s.34 of the *Clean Water Act, 2006* to update the Grand River Assessment Report and Source Protection Plan has been completed for proposed updates that affect Dufferin County (Township of Melancthon and Township of Amaranth), Oxford County (Community of Bright), the Region of Waterloo, Perth County (Township of Perth East), Wellington County (Township of Puslinch) and the City of Brantford. Minor administrative changes have been made to other sections of the Assessment Report and Source Protection Plan.

Source protection technical work and policy updates, where necessary, have been completed and presented to the Lake Erie Region Source Protection Committee in previous reports. A formal public consultation period was held from April 8 to July 21, 2019. All comments received, along with additional proposed revisions, are presented in the revised updated “Bundled” Grand River Assessment Report and Source Protection Plan for consideration by the committee and release to the Grand River Source Protection Authority for submission to the Ministry of the Environment, Conservation and Parks (MECP).

### **Revised Updated Grand River Assessment Report and Source Protection Plan: Pre-consultation and Public Consultation Process**

As part of the s.34 update process, municipalities and ministries affected by the proposed amendments were notified of the proposed changes and the opportunity for pre-consultation. Affected property owners were notified and made aware of the opportunity for public consultation. Lake Erie Region received assessment report pre-consultation comments for consideration from the MECP and one comment from a member of the public during the public consultation period (see **Appendix A, Table 1**). Source protection plan pre-consultation comments were received from the MECP and Ministry of Agriculture, Food and Rural Affairs (OMAFRA) (see **Appendix A,**

**Table 2).** No public comments on the source protection plan were received during the public consultation period.

As per O. Reg. 287/07 section 50(2), persons with properties affected by the proposed changes in the Region of Waterloo, Township of Puslinch (Wellington County), Community of Bright (Oxford County), Township of Melancthon (Dufferin County), and City of Brantford were sent notification letters highlighting the updates and public consultation process. One public consultation open house was held in Oxford County at the Plattsville Lions Hall on April 15, 2019.

Section 34 of the CWA requires that source protection authorities obtain a municipal council resolution from each municipality affected by the amendments. Municipal Council resolutions in support of the amendments to the revised updated Grand River Assessment Report and Source Protection Plan were received on the following dates:

- Township of Amaranth – March 8, 2019
- Dufferin County – March 19, 2019
- Oxford County – April 5, 2019
- Township of Melancthon – April 5, 2019
- Perth County – April 5, 2019
- City of Brantford – April 5, 2019
- Township of Perth East – April 17, 2019
- Township of Blandford-Blenheim – May 3, 2019
- Township of Puslinch – June 3, 2019
- Wellington County – July 18, 2019
- Region of Waterloo – June 24, 2019

### Revisions to the Grand River Assessment Report

The Revised Updated Grand River Assessment Report primarily includes technical updates to municipal and non-municipal sections. **Table 1** below provides a high-level description of the proposed changes within each section and references the SPC report which contains more detailed information.

**Table 1:** Grand River Assessment Report Amendments for the draft updated “Bundled” Grand River Assessment Report Update

Assessment Report Section	Description of Amendments	SPC Report Reference
<b>Section 1</b> Introduction	Executive Summary: Updated to reflect changes in content referenced in the body of the assessment report	SPC-18-10-09
<b>Section 2</b> Watershed Characterization	Major revisions to most subsections	SPC-18-10-09
<b>Section 5</b> County of Dufferin	<ul style="list-style-type: none"> <li>- Minor editorial revisions to the Waldemar and Marsville Well Supplies</li> <li>- Revisions related to new supply well (PW8) for Shelburne Well Supply</li> <li>- Revision to threat numbers for Orangeville Well Supply</li> </ul>	SPC-18-06-13

<b>Section 7</b> City of Guelph	Guelph Waterworks revisions including the addition of WHPA-A surrounding Glen Collector and an update to Drinking Water Quality Issues Evaluation	SPC-19-02-03
<b>Section 8</b> Region of Waterloo	<ul style="list-style-type: none"> <li>- Numerical Tier 3 groundwater flow models used to update WHPAs, vulnerability scoring, threats and issue assessment for Cambridge, Kitchener, Waterloo and rural Wellfields</li> <li>- Six replacement wells drilled at some supply sites where existing well infrastructure deteriorated enough to warrant replacement</li> <li>- Three wells constructed for operational redundancy at existing water supply systems</li> </ul>	SPC-19-02-03
<b>Section 9</b> Region of Halton	Acton Wellfield updates due to the addition of 4 <sup>th</sup> Line Well B as redundancy and updates to water quality issues evaluation.	SPC-18-12-07
<b>Section 10</b> Perth County	Milverton Water Supply underwent minor editorial updates.	SPC-19-02-03
<b>Section 11</b> County of Oxford	<ul style="list-style-type: none"> <li>- Bright Water System underwent a technical update using the Whiteman's Tier 3 model to update WHPAs, vulnerability scoring, threats and issue assessment</li> <li>- Drumbo-Princeton and Plattsville Water Supply Systems underwent minor editorial changes</li> </ul>	SPC-18-10-08
<b>Section 14</b> City of Brantford	Brantford Water Treatment Plant had changes to reflect the municipal boundary change north of the City and minor editorial changes.	SPC-19-02-03
<b>Section 16</b> Haldimand County	Dunnville Water Treatment Plant underwent minor editorial changes.	SPC-19-02-03
<b>Section 17</b> Water Budget Framework and Methodology	New section detailing: <ul style="list-style-type: none"> <li>- Tier 2 Framework and Tier 3 Framework</li> <li>- Tier 3 Water Budget Methodology</li> </ul>	SPC-18-12-07
<b>Section 18</b> Tier 2 Water Budget Results	Out of date and no longer relevant content was removed pertaining to Tier 2 methodology and results	SPC-18-10-09
<b>Section 19</b> Waterloo Tier 3 Water Budget and Risk Assessment	New section detailing: <ul style="list-style-type: none"> <li>- Tier 3 Water Budget and Risk Assessment completed for the municipal drinking water systems in the Region of Waterloo, including the delineation of WHPA-Qs</li> </ul>	SPC-18-06-11
<b>Section 20</b> Orangeville and Amaranth Tier 3 Water Budget and Risk Assessment	Updates include editorial changes to improve consistency and readability.	SPC-19-02-03
<b>Section 21</b> State or Climate Change Research in Lake Erie Region	Minor update to subsection 24.3 Effect of Projected Climate Changes on Assessment Report Conclusions	SPC-19-02-03

<b>Section 22</b> Conclusions	Updates to reflect changes to municipal systems within the assessment report	SPC-19-02-03
<b>Section 24</b> References	Updated to reflect changes in content referenced in the body of the assessment report	SPC-19-02-03
<b>Section 25</b> Map References	Updated to reflect changes in maps referenced in the body of the assessment report	SPC-19-04-04

Additional revisions were also made throughout the assessment report for brevity and added clarity.

**Revisions to the Grand River Source Protection Plan**

The updated revised “Bundled” Grand River Source Protection Plan policy amendments focus on revising technical names or terms, timing of implementation, changing pipelines from a local threat to a prescribed threat, research opportunities for recharge reduction, and new and revised policies for several activities in the Region of Waterloo. Source Protection Plan municipal sections were brought to the SPC alongside the assessment report sections.

The revised updated “Bundled” Grand River Assessment Report and Source Protection Plan are available in their entirety on the October 3, 2019 [eScribe](#) meeting site.

**Submission Comments**

The Source Protection Program under the *Clean Water Act, 2006* is designed with continuous improvements in mind and will require updates to the Source Protection Plan and Assessment Report when new information, changes to municipal supply infrastructure and advanced technologies become available. The submission of the revised updated “Bundled” Assessment Report and Source Protection Plan for the Grand River Source Protection Area marks the second s.34 update completed in accordance with the updated Ontario Regulation 205/18 which came into force on July 1, 2018 where a new or changed municipal drinking water system within as source protection area requires a Minister approved Assessment Report and Source Protection Plan before drinking water can be distributed to the public.

The following list includes ongoing work and comments staff recommend should be submitted to the MECP together with the revised updated assessment report and plan, pre-consultation comments, municipal resolutions and public consultation comment:

Ongoing Work

- Guelph-Guelph/Eramosa Tier 3 Water Quantity Policy Development Study and Centre Wellington Tier 3 Water Budget and Risk Assessment
- Proposed items identified in the s.36 workplan, including:
  - Addressing Technical Rule changes
  - Assessing environmental monitoring data
  - Updating assessment report as a result of further municipal drinking water system infrastructure changes, e.g., new wells or intakes
  - Policy review and revisions to address gaps and/or implementation challenges

- Update to Tier 3 groundwater models
- Re-modeling of existing vulnerable areas based on new and updated information
- Transport pathway identification and review

Comments

- Need for long-term, multi-year sustainable provincial funding for conservation authorities for continued program oversight and support to ensure successful implementation of the Source Protection Plans and to meet the mandatory legal responsibilities of conservation authorities on an ongoing basis.
- Need for simple and easy to administer future program processes, e.g., annual progress reporting and plan update processes, to not burden conservation authorities with complex and resource intensive processes and reporting requirements.
- Need for provincial funding and support for maintenance of scientific technical tools, e.g., surface water and groundwater models, including Tier 3 models.

**Timeline for “Bundled” Source Protection Plan Update**

**Table 1** presents the key milestones for completing the necessary technical and policy work, undertaking the necessary formal public consultation, and submitting the Revised Updated “Bundled” Grand River Source Protection Plan to the MECP. The next step in the update process is for the committee to consider the revised updated plan, assessment report and consultation comments and release the documents to the Grand River Source Protection Authority for submission to the MECP.

**Table 1: Key Milestones for the Revised Updated “Bundled” Grand River Assessment Report and Source Protection Plan**

Activity	Date	Complete
Municipal and Ministry pre-consultation on draft updates made to the “Bundled” Grand River Source Protection Plan	February 11 – March 25, 2019	✓
SPC receives draft updated “Bundled” Grand River Assessment Report and Source Protection Plan for consideration and release for public consultation	April 4, 2019	✓
Formal public consultation for draft updated “Bundled” Grand River Assessment Report and Source Protection Plan	April 8 – July 21, 2019	✓
Oxford County public open house 6 p.m. – 8 p.m. Plattsville Lions Hall Plattsville ON	April 15, 2019	✓

SPC receives revised updated "Bundled" Grand River Assessment Report and Source Protection Plan and public comment for consideration; SPC releases the document to the Grand River Source Protection Authority	October 3, 2019	✓
Grand River Source Protection Authority receives revised updated "Bundled" Grand River Assessment Report and Source Protection Plan for submission to the MECP.	October 25, 2019	

Prepared by:




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Approved by:




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Martin Keller, M. Sc.  
Source Protection Program Manager

## **Appendix A**

### **Pre-consultation and Public Consultation Comments**

**Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments**

#	Comment Source	Comment Period	AR Section	Comment	How Comment was Addressed
1	MECP	Pre-Consultation	Various	<p>At this time, the province has not completed a thorough review of the proposed technical work and associated amendments given the lack of technical information to support the Ministry’s assessment. This review will be completed when the regional update is submitted for approval with the supporting technical assessments, which may result in a delay of the final approval. Specifically, technical reports are required for the following:</p> <ul style="list-style-type: none"> <li>○ Dufferin County (Section 5): if a WHPA was delineated for the addition of the municipal well (PW8).</li> <li>○ Region of Waterloo (Section 8): <ul style="list-style-type: none"> <li>▪ Cambridge Wellfields: Hespeler, Pinebush, Blair Road, Clemens Mill, Elgin Street, Middleton Street, Shades Mill, Fountain Street, and Willard. Additionally, if WHPAs were delineated for the replacement wells (i.e. P15A and P10B);</li> <li>▪ Kitchener wellfields: Mannheim East, West, ASR and Peaking, Lancaster, Greenbrook, Strange Street, Parkway, Strasburg, Pompeii, Woolner and Wilmot Centre;</li> </ul> </li> </ul>	A copy of the requested technical reports were made available to the MECP on June 3, 2019.

**Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments**

#	Comment Source	Comment Period	AR Section	Comment	How Comment was Addressed
				<ul style="list-style-type: none"> <li>▪ Waterloo Wellfields: Erb Street, William Street, and Waterloo North; and</li> <li>▪ Rural Wellfields: Ayr, Branchton Meadows, Elmira, Foxboro Green, Heidelberg, Linwood, Maryhill, New Dundee, New Hamburg, Roseville, St. Clements, Wellesley.</li> <li>○ Region of Halton (Section 9): If a WHPA was delineated for the addition of 4<sup>th</sup> Line Well B.</li> <li>○ County of Oxford (Section 11): Well 4A and Well 5</li> </ul>	
2	MECP	Pre-Consultation	Section 8 and Section 19	<p>The draft 2019 technical work indicates that “future (2031) Allocated Rates applied in the Tier 3 Assessment and the planned rates (to 2051) in the Water Supply Master Plan” were used to delineate. While using future rates is the most protective approach, please provide additional rationale for using the furthest forecasted future rates for this assessment and context to clarify difference in planned/allocated pumping rates from current pumping rates. Additionally, please consider any implications on where policies apply when using these future projections. For example, to what</p>	<p>The quote provided in MECP’s comments does not contain the entire sentence that was provided in the Assessment Report. The full statement is as follows:            “Modeled pumping rates used to generate the WHPAs were established in consideration of future (2031) Allocated Rates applied in the Tier 3 Assessment and the planned rates (to 2051) in the Water Supply Master Plan.”            The key word that was omitted in MECP’s comments is “considered”. The Region’s approach to determining pumping rates was based on a number of operational considerations and improved knowledge to the Region’s groundwater supplies arising from the Tier 3 Assessment. It was not designed to meet the 2051 demand, although</p>

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				<p>extent did the future rates influence the delineation of the WHPAs? Have more significant threats (counts or activities) been identified?</p>	<p>the total of the pumping rates used for delineation is similar to that needed to meet the 2051 demand. Finally, the Region’s Water Supply Master Plan did not identify well-specific pumping rates but rather used available well capacities to indicate that demand up to 2051 could be met.</p> <p>As noted in MECP’s early comments in this letter, MECP had not received nor reviewed the technical study reports that were generated and provided the technical details needed to assist in interpreting Waterloo Region’s approach to delineation of Well Head Protection Areas (WHPAs). Specifically, Appendix B of the report Region of Waterloo Well Head Protection Delineation Study (Matrix 2017) provides details of the approach taken to establish pumping rates. The approach taken addressed several challenges including:</p> <ul style="list-style-type: none"> <li>• Several of the existing operating wells were not needed to meet the 2031 demand as determined in the Tier 3 Assessment including several Planned systems in the Region’s 2015 Master Water Supply Plan that were not currently operating. Pumping rates for these wells were established so well head protection areas could be delineated.</li> <li>• The results of the Tier 3 Assessment provided new insights into the interaction and competition of water amongst the</li> </ul>

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					<p>wells in the Integrated Urban System (IUS) for Cambridge, Kitchener and Waterloo. Specifically, operation of wells in one area interferes with and changes where water flows to adjacent and/or up gradient wells resulting in well head protection areas that change with changes in pumping.</p> <ul style="list-style-type: none"> <li>• The Region frequently takes well systems off-line for extended periods of time for upgrades. For instance the Strange Street wells were taken off line in August 2019 and will be off line for 2 years while upgrades to the treatment plant are undertaken to address new iron and manganese Ontario Drinking Water Standards. Also Greenbrook was off-line for 2 years for treatment upgrades to address 1,4-dioxane contamination between 2004 and 2006. To address these issues and because changes in well operation affect adjacent wells, the Region undertook an assessment of whether the existing supply well pumping rates could be increased to offset these losses for a two-year period. The two-year shut down rates were run through the Tier 3 models to assess whether the Safe Additional Available Water thresholds established under the Clean Water Act could be met. Through a series of iterative model runs, the rates were</li> </ul>

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					<p>optimized and these were the rates used to delineate well head protection areas. Region staff decided that although the combined rates established in this process were higher than needed to meet the 2031 demand, these rates reflected the way the Region operated the IUS and were appropriate for delineation of well head protection areas.</p> <ul style="list-style-type: none"> <li>The combined rate was approximately 12 percent lower than those used in the original Assessment Report.</li> </ul> <p>Some of the above information was provided in the proposed Assessment Report; however, further clarification is recommended and the draft wording expanded to better explain the approach to determination of pumping rates.</p> <p>Not all pumping rates were increased so the impact of changes to pumping rates varied. More importantly, the conceptual hydrogeology and most of the parameters used to calibrate the numerical models changed due to the comprehensive update to the models. The changes to the models, particularly in Cambridge, resulting in much larger well head protection areas. Obviously, where the protection areas were larger, they are more likely to have more significant threats particularly where Issue Contributing Areas were delineated.</p>

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3	MECP	Pre-Consultation	Section 8	Please explain how the WHPA delineation integrated the results between the base case and the uncertainty cases.	Results of forward and backward particle tracking for each of the base and uncertainty cases were combined and an “envelope” created around all of the particle tracking simulations. This protection area envelope was then carried forward into the vulnerability assessment and scoring process. A sentence describing this process will be added to the assessment report.
4	MECP	Pre-Consultation	All water quality sections	For pathogen threats, please consider removing references to WHPA-C/D. Pathogen threats can not be identified in these areas.	Removed reference to pathogen threats for WHPA-C/D throughout assessment report.
5	MECP	Pre-Consultation	All water quality sections	The delineation of Issue Contributing Areas (ICA) depends on Wellhead Protection Area (WHPA) delineations. Given that there are a number of reports we still need to review, please note that if there are any technical concerns with WHPA delineations, the ICAs will need to be reviewed again.	Requested reports were given to the MECP on June 3, 2019.
6	MECP	Pre-Consultation	Section 5	Please clarify if conditions resulting from past or historical activities were identified within the PW7 and PW8 WHPAs. Currently the text only refers to PW7 and the WHPAs are delineated for both wells (section 5.4.4).	Assessment report updated in include that there are no additional conditions for PW8.
7	MECP	Pre-Consultation	Section 5	The Shelburne water supply issues evaluation (section 5.4.5) only provides information on the main well	Assessment report was updated to include text on issues evaluation for PW8. No new issues identified.

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				PW7. Please update this section with the relevant information for back-up well PW8.	
8	MECP	Pre-Consultation	Section 7	Please confirm that the Intake Protection Zone (IPZ) delineation methodology described in Chapter 3 (Water Quality Threats Assessment Methodology – submitted in a previous s.34 amendment for Grey/Brant/Hamilton) is the same IPZ methodology removed on page 37.	Assessment report updated with text to confirm that the methodology used to delineate the IPZ in the City of Guelph is the same as described as in the Methodology section.
9	MECP	Pre-Consultation	Section 7	Please note that once studies on potential declining concentrations of nitrate (Carter Wells) and TCE (Emma wells) are completed, the Ministry will need to review the water quality issues evaluations.	Noted.
10	MECP	Pre-Consultation	Section 7	For the Membro Well, it is currently unclear why trichloroethylene (TCE) is identified as an Issue under Technical Rule 114. The recent data indicates a declining TCE trend with concentrations less than the Maximum Acceptable Concentration (MAC) and the well is not operating at full capacity. Given that TCE activities are significant threats up to and including the WHPA-C and the TCE issue, likely from past activities, are already significant threats under the scoring approach, please clarify what an ICA would additionally do to help	Concerns regarding the water quality in the Membro well remain as it has been demonstrated on several occasions where concentrations of TCE tend to rise as there is an increase in the pumping rate at the Membro well. The declining trend is due to the lower pumping rates in recent years for the well. The City of Guelph plans to increase the pumping rate at the Membro Well using a new Replacement Well at the same location. Until the water quality trend is confirmed at higher pumping rates, the most conservative approach is to continue TCE as a drinking water Issue in the well. Once the City has more monitoring data at higher

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				improve the water quality in the well.	pumping rates, the TCE Issue can be reconsidered. The ability to identify a municipal drinking water supply as having an issue is prescribed in the Technical Rules. The City has followed the rules and rationale to designate TCE as a drinking water issue in the Membro well and, as such, have defined an ICA for TCE for the well.
11	MECP	Pre-Consultation	Section 8	For the vulnerability assessment conditions section (page 60) please update the text to reflect the March 2017 updates to the Technical Rules.	Completed.
12	MECP	Pre-Consultation	Section 8	Table 8-11 (page 76) for the identification of quality threats for Erb Street, the WHPA qualifiers under the vulnerable area column are missing. Please update with the correct information.	Completed.
13	MECP	Pre-Consultation	Section 8	For the Mannheim West WHPA-E map (Map 8-36, page 118), the WHPA-E appears to have slightly changed from the approved assessment report. Please clarify if this was due to the removal of well K22A or changes in the hydrological data.	Yes, removal of well K22A changed the delineation of WHPA-E for the Mannheim West well field. No additional hydrologic assessment was completed as part of the update.
14	MECP	Pre-Consultation	Section 8	TCE trends are depicted for the Kitchener Parkway Supply Wells and Common Reservoir (Figure 8-11, page 177) and Cambridge well G9 (Figure 8-11, page 317). The TCE	For the Parkway wells, a trend of increasing TCE concentrations has been occurring in K32 since approximately 2013 and there are two instances where isolated samples were above the trend and above half of the Ontario

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				<p>concentrations do not appear to have an increasing trend in either figure and, other than a single occurrence for Kitchener, are consistently below the Ontario Drinking Water Standard (ODWS) for almost 20 years. It is unclear how an ICA for TCE is justified given the current data. Please provide additional information to explain the TCE ICA. Also, please consider how an ICA would further manage TCE concerns given that DNAPL activities are already a significant threat up to WHPA-C (regardless of the scores) and there is no SDWT condition site.</p>	<p>Drinking Water Standard (2.5 ug/L). As MECP staff have directed the Region to operate the wells to try to keep the overall TCE concentration at half the Ontario Drinking Water Standard, a TCE drinking water issue was identified for well K32. For G9, there appears to be a correlation between pumping rates and TCE concentrations in the supply well. For instance, samples from May 2008 and May 2011 show lower levels of TCE and correlate to time periods when the pumping from the production well was reduced. The apparent increasing trend of TCE concentration up to 3 µg/L between May 2008 and December 2009 correlates to a time period of sustained well pumping. If G9 is pumped at higher and more continuous rates in the future, this could result in higher TCE concentrations at this water source. Further, the source(s) of TCE to well G9 are not known and the fractured rock aquifers in the area, like all fractured rock hydrogeologic regimes, are difficult to characterize with respect to groundwater flow and contaminant transport. Based on all of these factors, a TCE issue was identified for this well, consistent with that in the approved Assessment Report.</p>
15	MECP	Pre-Consultation	Section 8	<p>For significant conditions, the assessment report indicates that the sites were identified through different sources of information including the</p>	<p>Region staff met with MECP Guelph District Office staff on May 29, 2019 as part of our bi-monthly conditions meetings. The proposed new condition sites were presented but</p>

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				<p>MECP Guelph District Office. For the Ministry’s information, could you clarify if the following changes to significant conditions have been discussed with the MECP District Office and the outcome of this discussion (if any):</p> <ul style="list-style-type: none"> <li>• Two (2) additional SDWTs conditions added to William Street Wellfield (page 100);</li> <li>• One (1) significant condition was added due to the new vulnerability scores of the Hespeler wellfield (page 252);</li> <li>• One (1) additional significant condition was added due to the new information on the Pinebush site (page 259);</li> <li>• One (1) new significant condition was added due to the new vulnerability scores of the Clemens Mill wellfield (page 262);</li> <li>• One (1) significant condition was added for Shades Mills (page 283); and</li> <li>• One (1) new significant condition was added due to new vulnerability scores of the Blair Road wellfield (page 313).</li> </ul>	<p>District Office staff did not review the underlying circumstances to confirm they support adding these sites. A further meeting will be scheduled in mid-September 2019 to review the details.</p> <p>It is important to note that the above list is incorrect as there is no site identified for Shades Mill and there are two additional sites identified for Middleton making a total of 8 new condition sites.</p>
16	MECP	Pre-Consultation	Section 8	For the Pompeii Well (section 8.3.4) one (1) significant condition has been removed; however, the Regional	The table in the Region’s excel file No. 2977091 refers to the removal of a site from the river wells which should have read

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<b>#</b>	<b>Comment Source</b>	<b>Comment Period</b>	<b>AR Section</b>	<b>Comment</b>	<b>How Comment was Addressed</b>
				Municipality of Waterloo (RMOW) excel file # 2977091 does not include this site. Please provide the necessary information to support the removal.	Pompeii wells. This will be changed in the Region’s document.
17	MECP	Pre-Consultation	Section 8	Although the Blair Road Well WHPA-E section (section 8.6.1, page 291) indicates it was delineated similar to other WHPA-E delineations, it is recommended to provide a brief description of how this zone was delineated and scored for clarity.	Additional wording added in the Assessment Report for clarity.
18	MECP	Pre-Consultation	Section 8	For the Branchton Meadows wells, it is currently unclear from the current description on Issues (page 366) whether sodium has been identified as an issue under Technical Rule 114. If it has, please provide the required data and information to show how Rule 114 has been met.	Sodium has not been identified as an Issue under Technical Rule 114. Thus, no data/discussions were included in the Issues Assessment document. For clarification, a statement indicating sodium concentrations are currently elevated (approximately 90 mg/L) with an increasing trend, but are not predicted to exceed the ODW-AO of 200 mg/L within 10 years and as such are not classified as an Issue will be added to the Region of Waterloo Issue rational document.
19	MECP	Pre-Consultation	Section 8	Please verify and explain why, for the Branchton Meadows well ICA map (Map 8-171, page 380), a portion of the WHPA-A has not been captured within the ICA given that the ICA was delineated for a 25-year Time-of-Travel (TOT). The WHPA-A has the highest vulnerability score, regardless of the TOT.	This was an error. The map has been updated with the ICA including the WHPA A 100 m zone.

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20	MECP	Pre-Consultation	Section 11	For the identification of quality threats in the Bright Supply WHPAs (Table 11-6, page 41), the table indicated that the WHPA-C has score of 8 and 6, while the corresponding map (Map 11-6, page 20) shows WHPA-C scores of 8, 6 and 2. Please verify the data and revise the map and/or table as required.	Data has been verified.
21	MECP	Pre-Consultation	Section 16	For the Dunnville Water Treatment Plant, Maps 16-4 (page 10), 16-5 (page 11) and 16-6 (page 12) show managed lands, livestock density and impervious areas delineated on the water portions of IPZs. For clarity, it is recommended to uncolour these portions of the IPZs on the associated maps as these activities do not occur on water.	Managed lands, livestock density, and impervious surfaces delineated on the water portions of the IPZ for Dunnville Water Treatment Plant have been removed.
22	MECP	Pre-Consultation	Tier 3 Sections	The summaries of the Tier 3 Water Budgets in the assessment report sections for Waterloo (Section 8), Guelph (Section 19), Whiteman’s Creek (Section 21) and Orangeville and Amaranth (Section 22) are currently written for a technical audience. In particular, the Waterloo Tier 3 section discussion of the risk of water quantity stress from the future (2031) is particularly challenging for a generalist to follow. These sections should be revised to better describe	The Tier 3 sections of the Assessment Report were revised to reflect these comments.

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				<p>the results to a layman reader rather than a step-wise summary of the Tier 3 process.</p> <p>While the water budget sections use language that is compliant with the source protection water quantity framework, it could do more to draw linkages to the purpose of the studies for the readers and communicate technical results in an accessible fashion.</p>	
23	MECP	Pre-Consultation	Tier 3 Sections	<p>We encourage a review and revision of these sections to use more plain language (e.g. existing/future) over language specific to the framework (e.g. allocated), a clearer summary of the work completed and its conclusions, as well as a consistency in technical terms used (i.e. Guelph section uses WHPA-Q whereas the other sections use WHPA-Q1/Q2) which will help give the readers some consistency in terms when comparing to the water quantity policies. Tier 3 water quantity wellhead protection areas (WHPA-Qs) be accompanied with the associated water quantity policies in order for the amendments to be aligned and considered complete. We realize this will require making some adjustments</p>	The Tier 3 sections of the Assessment Report were revised to reflect these comments.

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				to your recently updated summary of proposed amendments and associated timelines, however this is necessary to avoid the problems of uncertainty and creating a gap of information among the public and businesses located in a WHPA-Q or which will be affected by the related policies.	
24	MECP	Pre-Consultation	Section 8	The Region of Waterloo approved a resolution to decommission 14 wells by January 2023 and the updated assessment report removed the wellhead protection area (WHPA) delineations for each of these wells. However, for the wells with an active drinking water license (i.e. WM1, WM2, WM3, WM4, C3, C4, C5, C6, and P6) and in use prior to the amendments under section 34 being approved by the Minister, the WHPA delineations must stay in the assessment report with a note indicating the timeframe for decommissioning each well. Although this section indicated that the wells were excluded as source protection plan policies will no longer be applicable in these areas, the assessment report also indicated that the existing drinking water systems will be operated as necessary until the	The most recent May 18, 2018 Drinking Water Works Permit for West Montrose and Conestoga does not include reference to wells WM1, 2, 3 or 4 as these wells have been decommissioned and removed from the system. Further an application for an amendment to the Drinking Water Works Permit to remove P6 from the permit was submitted to MECP on December 14, 2017 as this well has been decommissioned. Therefore, protection areas for these wells will not be included in the Assessment Report. Protection areas for the four Conestogo wells will be added back into the Assessment Report.

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				wells are decommissioned. The plan for decommission can be further explained in the assessment report, in addition to indicating that notification will occur when the delineation and plan policies are no longer in place. An administrative amendment can be applied under section 51 of O.Reg.287/07 to remove the applicable wells and update the assessment report and plan as necessary following decommissioning.	
25	MECP	Pre-Consultation	Section 8	The Issue Contributing Areas within the region were set at the 25-year time of travel using pumping rates consistent with the 2051 average day rate. As an Issue represents existing conditions, it would be more appropriate to use <u>current</u> pumping rates to assess the area that may be contributing to an existing Issue. Please provide additional rationale for the approach using future pumping rates to delineate the ICAs.	<p>A response to the Region’s approach to establishing pumping rates for delineating well head protection areas was included in responses to MECP’s May 2019 comments. In that response, the Region clarified that it did not use 2051 pumping rates to delineate well head protection areas.</p> <p>The use of future pumping rates was used as the basis for delineating Issue Contributing Areas in the approved Assessment Report. The rationale for using this approach in the original and this report is as follows:</p> <ul style="list-style-type: none"> <li>• Sources of non-point contaminants such as nitrate and sodium/chloride are known to extend beyond the 25 year time of travel delineated using existing pumping rates. Increasing the areas where these threats can be identified as significant will improve the likelihood that more of the contaminant sources can be mitigated which supports</li> </ul>

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					<p>the pre-cautionary principle of the Clean Water Act. This is particularly important for sodium and chloride issues as these chemicals are applied to roads and parking lots to ensure public safety but are applied at excessive rates due to liability concerns. Because of these concerns, it is the Region’s implementation experience that only very minor mitigation will be realized from each individual risk management plan so a higher number of properties are needed to reach a critical “mass” of properties to potentially reduce concentrations at the wells.</p> <ul style="list-style-type: none"> <li>• Municipalities are required to update their official plans to be consistent with the approved Source Protection Plan and Assessment Report. These plans direct where and how future development should occur and so will protect municipal water supplies from the impacts of future development. If Issue Contributing Areas were delineated with existing pumping rates, future development outside of these areas would not be required to implement mitigation measures to protect drinking water sources needed to supply this new development thereby defeating the purpose of updating these plans.</li> <li>• As noted in the response to MECP’s May 2019 comments, the Region frequently shuts down water supply wells for</li> </ul>

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					<p data-bbox="1346 347 1925 846">maintenance and upgrades resulting in wells that could be off-line for up to two years. The effect of this operating approach is that areas that contribute water to the supply wells change such that a water well pumping at an existing rate would not be obtaining water from within it’s “narrowly defined” well head protection area depending on whether other nearby wells are operating. Consequently, expanding the areas for which activities can be significant increases the certainty that the well is actually capturing water from within the delineated protection area and Issue Contributing Area.</p> <ul data-bbox="1346 850 1925 1187" style="list-style-type: none"> <li>• It is anticipated that it will take more than ten years and possibly up to 20 years for Region staff to complete negotiations of risk management plans for the total number of sodium and chloride threats identified in the Assessment Report. As this time frame is well beyond the present, it is expected that increased pumping beyond the current rates will be occurring which supports the use of future pumping rates.</li> </ul> <p data-bbox="1346 1211 1925 1406">Using future pumping rates and the Region’s approach to setting pumping rates for delineating well head protection areas and issue contributing areas provides the best likelihood that mitigation measures can be implemented at the right location and right</p>

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					number of properties to potentially mitigate increasing concentrations of chemicals identified for issue contributing areas.
26	MECP		Section 8	Section 8.1.2: The capture zone delineations are generally composite capture zone envelopes that encompass the base case model and three additional calibrated models. Two of the models were calibrated to parameters that were at the upper range of the consultant’s conceptual understanding. This resulted in some areas of the model(s) that were deemed not representative at a larger scale (near Clemens Mill, Hespeler and Pinebush wellfields). This approach is conservative as it captured all particle pathways rather than just the areas where there was overlap between the capture zone delineations (i.e. increased certainty that the area is in fact within the WHPA when there is overlap between multiple models). The consultant attempted to address the uncertainty inherent in modelling by using multiple models that appear, in some cases, to be at the upper range of the conceptual understanding of the groundwater systems. This likely resulted in larger capture zone delineations compared	Additional discussion has been provided in the Assessment Report. The approach was not peer reviewed. To clarify, the modelling approach started the calibration at the upper end of the hydraulic conductivities for the particular layers being modified in the scenario. The calibration was then allowed to proceed and would have likely resulted in final hydraulic conductivities that were less than the upper values used at the outset of the calibration.

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				with the base case only capture zone delineations. Additional explanation for using this conservative approach should be provided within the assessment report. Also, if this approach was peer reviewed, please provide the peer reviewer comments to the Ministry.	
27	MECP	Pre-Consultation	Section 8	Section 8.1.4 (page 31) indicates that no WHPA-E was delineated for the Middleton wellfield, as the municipal wells are believed to be under the influence of shallow groundwater, but not directly from the Grand River. This statement appears to be inconsistent with Section 4.1.3.5 of Region of Waterloo Wellhead Protection Area Delineation Study (Matrix Solutions Inc., February 2017), which indicates the Middleton Street production wells are believed to capture a component of water from the Grand River. Please explain the inconsistency between the 2 documents and confirm if the Middleton wellfield, or part of the wellfield, is designated as under the influence of shallow groundwater and the Grand River.	The Region undertook a detailed hydrogeologic investigation of the Middleton Street Wellfield in 2007 (Stantec, 2007) which included a detailed modelling assessment to evaluate the influence of the Grand River on water quality at the Middleton Well. This analysis concluded that “... recharge provided from the Upper Bedrock Aquifer in the area of the Grand River does not specifically represent water that is obtained from the Grand River, but from model grids that extend beneath a portion of the River and may include land adjacent to the river as well.” The conclusions in this report were used as the basis for not delineating a WHPA-E for the Middleton Wells and this rationale was provided in the Approved Assessment Report. Reference to the GUDI status of the Middleton Wells in the Matrix February 2017 report was an oversimplification of the GUDI status. It is also important to note that the basis for not delineating a WHPA-E or F for the Middleton wells, as directed in Technical Rule No. 49, was that the interaction between

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					surface water and groundwater <u>did not</u> have the effect of decreasing the time of travel of water to the well compared to the time it would take water to travel to the well if the raw water supply to the well was not under the direct influence of surface water. Finally, it is important to note that there is a WHPA-E delineated for the well immediately south of the Middleton wells (G15) that extends well upstream of the wells and overlays a significant portion of the entire Middleton WHPA-D.
28	MECP	Pre-Consultation	Section 8	Section 2.1 of Region of Waterloo Wellhead Protection Area Delineation Study (Matrix Solutions Inc., February 2017) indicated the porosity values and municipal pumping rates were adjusted from those used in the Tier 3 Assessment. However, the porosity values used in this amendment (25% for overburden and 3% for bedrock) are the same as the values used in the approved assessment report. Additional clarification or explanation of the change in effective porosity value is required.	Region staff agree that the porosity values used to delineate the well head protection areas was the same as those used in the Approved Assessment Report as stated in the last sentence of Section 2.1. As the Tier 3 Assessment would not have used porosity as part of its water budget calculations, Region staff agree that better wording for this statement would have reduced the confusion.
29	MECP	Pre-Consultation		There are few remaining references to the Lancaster wellfield in section 8.3 that should be removed, as this wellfield is no longer included in the assessment report.	References to the Lancaster wells has been removed from Section 8.3 of the Assessment Report.
30	MECP	Pre-	Section 8	The Region of Waterloo provided	Figure has been included.

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		Consultation		<p>Appendix B (Derivation of Municipal Capture Zone Delineation Rates) in an email dated May 8, 2019 to address initial questions raised by SPPB about the capture zone rates.</p> <ul style="list-style-type: none"> <li>○ The attachment is currently missing Figure 1, which shows the demand projections to 2051 and illustrates the concept for derivation of municipal capture zone delineation rates. With this attachment missing, the average day demand projection to 2051 is not provided in the appendix.</li> <li>○ Section 1.4 indicates the final selected pumping rates were established at a level approximately <u>24%</u> higher than the Tier 3 Allocated Rates, which were based on the projected average day demands to 2031. However, the tables indicate the final capture zone rates for Kitchener, Waterloo and Cambridge are <u>35%</u> higher than the 2031 allocated rates (1,938 L/s vs 1,440 L/s). This apparent discrepancy should be addressed.</li> </ul>	The discrepancy in the percentage increase in pumping rates over the Tier 3 Allocated Rates was a typographical error in the report as the increase was approximately 34%.
31	MECP	Pre-Consultation	Section 11	The Bright water quality wellhead protection areas (WHPAs) were completely revised using the Whiteman’s Tier 3 water quantity model which was calibrated regionally	Noted.

**Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments**

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				and recalibrated locally for the water quality WHPA delineations. The redelineation completely changed the vulnerable areas for this system; the WHPAs are significantly smaller and now trend to the northeast rather than north/north-northwest. The Ministry has no concerns about the methodology employed by the consultant (EarthFx) or for results of the WHPA delineation or vulnerability scoring.	
32	MECP	Pre-Consultation	Section 17	In the first section (Overview of the Water Budget Framework -17.1) the terms <i>groundwater assessment areas</i> and <i>subwatershed</i> are used. A clearer reference that a groundwater assessment area is the groundwater equivalent of a subwatershed could be made. By doing this, the Tier 2 methodology references to subwatersheds make sense for the Grand River context and is clearer to a reader who is unfamiliar with these concepts.	A clearer definition of groundwater assessment areas was added to Section 17.
33	MECP	Pre-Consultation	Section 17	The third paragraph of section 17.1 states that “those subwatersheds and assessment areas identified within the Tier 2 study as having a moderate to high potential for water use stress moved to the Tier 3 stage”. Only subwatersheds and groundwater	Statement has been revised to make it clear that only subwatersheds or groundwater assessment areas that support municipal drinking water supplies advance to a Tier 3 Assessment.

**Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments**

#	Comment Source	Comment Period	AR Section	Comment	How Comment was Addressed
				assessment areas that supported municipal drinking water supplies were advanced to Tier 3. Please revise the statement for technical accuracy.	
34	MECP	Pre-Consultation	Section 17	Table 17-1 (page 2) could benefit from the addition of the term “intakes” to remind the reader that it refers to surface water municipal supplies.	The word “intakes” was added.
35	MECP	Pre-Consultation	Section 17	A note under Table 17-2 (page 2) indicates that an additional technical report completed for the Big Creek groundwater assessment area determined that a Tier 3 study for the community of Lynden was not required; however, the details of this report do not appear anywhere within the assessment report including Chapters 12 (City of Hamilton – Lynden Communal System), 17 or 18. Given that the Tier 2 (2009) report indicated that the ground water supply for the Village of Lynden met the requirements for a Tier 3 water quantity risk assessment, a summary of the details of this additional assessment would be prudent.	Results of the technical report for the Big Creek groundwater assessment area were summarized in a paragraph in Section 17.
36	MECP	Pre-Consultation	Section 17	Table 17-3 (page 5): please revise the first bullet of the ‘significant risk’ row of the table as it is currently missing a reference to future municipal pumping rates. Additionally, consider using	Table updated. “Allocated pumping rate” language updated to “future pumping rate”

**Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments**

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				more plain language as the use of “allocated pumping rates” could be confusing for someone unfamiliar with the subject matter.	
37	MECP	Pre-Consultation	Section 17	Table 17-4 (pages 6-9) is taken directly from the Director’s Technical Rules and contains complex information (i.e. references to Part IX). Although a summary of the purpose of the table is provided directly above it on page 6, please consider revising the table to be more plain language for ease of understanding.	Table removed from assessment report and reference added to Director’s Technical Rules.
38	MECP	Pre-Consultation	Section 19	This section uses the term <i>allocated rates</i> throughout the report and we suggest using the executive summary developed by the GGET Project Team (linked below). Currently, this section does not make a strong enough connection that allocated rates are being used as the approximation of future municipal demand, and by using more plain language it would make the Tier 3 technical reports easier to understand for the public. <a href="https://www.sourcewater.ca/en/source-protection-areas/resources/Documents/Grand/GGET-Tier-3-WQRA---Executive-Summary-Final-April-3_17.pdf">https://www.sourcewater.ca/en/source-protection-areas/resources/Documents/Grand/GGET-Tier-3-WQRA---Executive-Summary-Final-April-3_17.pdf</a>	The GGET Tier 3 section has been removed from this Section 34 assessment report update as the policies for the WHPA-Q are not complete. This section will be part of a future Section 34 update, once the policies are complete. This comment will be addressed at that time.
39	MECP	Pre-Consultation	Section 19	On page 1, please consider rephrasing ‘the Ontario Ministry of	The GGET Tier 3 section has been removed from this Section 34 assessment report

**Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments**

#	Comment Source	Comment Period	AR Section	Comment	How Comment was Addressed
				Environment and Climate Change (MOECC) released a set of Technical Rules (MOECC, 2016) that require Tier 3 Assessments be completed in subwatersheds that have a Moderate or Significant water quantity stress in areas that supply municipal drinking water’ as it reads like a change was made to the Technical Rules which required the completion of the Tier 3, which is incorrect. The 2016 reference is only the most current version of the Technical Rules.	update as the policies for the WHPA-Q are not complete. This section will be part of a future Section 34 update, once the policies are complete. This comment will be addressed at that time.
40	MECP	Pre-Consultation	Section 19	Table 19-7 (Summary of Permitted Rates and Consumptive Demands by Water Use Sector for Study Area, page 23) please consider adding an additional column to the table with a “date current to” for the PTTWs.	The GGET Tier 3 section has been removed from this Section 34 assessment report update as the policies for the WHPA-Q are not complete. This section will be part of a future Section 34 update, once the policies are complete. This comment will be addressed at that time.
41	MECP	Pre-Consultation	Section 19	Please add a note referencing the year the enumerated threat counts were done as part of the Risk Management Measures Evaluation Process (RMMEP) to Table 19-8 (Summary of Significant Water Quantity Threats, page 28).	The GGET Tier 3 section has been removed from this Section 34 assessment report update as the policies for the WHPA-Q are not complete. This section will be part of a future Section 34 update, once the policies are complete. This comment will be addressed at that time.
42	MECP	Pre-Consultation	Section 19	The section summary (page 33) indicates that the extent of the WHPA-Q-A to the southwest toward the City of Cambridge was delineated based on the results of the GGET Tier 3	The GGET Tier 3 section has been removed from this Section 34 assessment report update as the policies for the WHPA-Q are not complete. This section will be part of a future Section 34 update, once the policies

**Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments**

#	Comment Source	Comment Period	AR Section	Comment	How Comment was Addressed
				<p>Assessment and the Region of Waterloo Tier 3 Assessment completed for the municipal wells in the City of Cambridge. Map 19-10 (page 31) shows the WHPA-Q boundary near Cambridge abruptly cut off and the reasoning for that determination should be made clearer to the reader. For example, it could be mentioned that the boundary was determined with an additional technical assessment and direct the reader to the memo in the Tier 3 appendices or referencing the more fulsome discussion in Section 20.3.2.</p>	<p>are complete. This comment will be addressed at that time.</p> <p>The Region of Waterloo Tier 3 Chapter in the current Section 34 assessment report update has been updated to address this comment.</p>
43	MECP	Pre-Consultation	Section 20	<p>The summary of this study is extremely technical and would be difficult for a member of the public to understand. The Tier 3 summary used for Long Point is good example of Tier 3 results being presented at a more appropriate level and we suggest this is similarly revised for better clarity. There is a focus on the process, and this section could benefit from better linkages between the purpose and the findings of the study. In addition, it would be helpful as well to use plain language descriptions of what is being assessed rather than references to specific risk assessment scenarios in short form (e.g. G2) without a link to</p>	<p>The Region of Waterloo Tier 3 section was updated to focus less on process and more on the linkages between purpose and the findings of the study. Language was adjusted to be less technical (plain).</p>

<b>Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments</b>					
<b>#</b>	<b>Comment Source</b>	<b>Comment Period</b>	<b>AR Section</b>	<b>Comment</b>	<b>How Comment was Addressed</b>
				the table of scenarios elsewhere in the document.	
44	MECP	Pre-Consultation	Section 20	This section of the assessment report would also benefit from the reminder that the low risk level means there are no significant water quantity threats (i.e. risk level circumstances on page 42).	A statement indicating that there are no significant water quantity threats has been added to the Amended Assessment Report.
45	MECP	Pre-Consultation	Section 21	Please refer to the general comment on the use of plain language content.	Whiteman’s Creek Tier 3 summary has been removed from this update and will be part of another Section 34 update. This comment will be addressed as part of a future Section 34 update.
46	MECP	Pre-Consultation	Section 22	Please refer to the general comment on the use of plain language content.	Orangeville and Amaranth Tier 3 section has been updated to use more general and plain language.
47	MECP	Pre-Consultation	Section 23	On page 1 it states that ‘the Tier 3 hydrologic model improves on the Tier 2 Water Budget model for the model simulation and representation of groundwater movement between and across subwatershed boundaries’. Please clarify if this statement should be hydrologic and/or hydrogeologic as is used in the next paragraph. If the comment relates only to the surface water model, further explanation as to why only the surface water model was improved is recommended.	Halton Hills Tier 3 section has been removed from this Section 34 update and will be part of the Wellington Tier 3 Section 34 update as that is when polices will be ready.  This comment will be addressed as part of a future Section 34 update.
48	MECP	Pre-Consultation	Section 26	In Watershed Characterization (page 1), Elmira was removed from the list of communities that are part of the	Elmira receives drinking water from the IUS, but they do not provide water to the IUS. The assessment report has been updated to

**Table 1: Draft Updated “Bundled” Assessment Report – Pre-Consultation and Public Consultation Comments**

#	Comment Source	Comment Period	AR Section	Comment	How Comment was Addressed
				Integrated Urban System (IUS); however, page 12 includes Elmira as one of the communities connected to the IUS. Please verify and address this discrepancy.	clarify this.
49	Public	Public Consultation	Section 6	<p>A few comments specific to the County of Wellington-Rockwood water information:</p> <ul style="list-style-type: none"> <li>- why was OMAFRA's GIS and farms with nutrient management plans not used as a source of information instead of guessing at barn structures and livestock information?</li> <li>- if the flouride and sodium in the Rockwood well is so high, why isn't more frequent testing being done</li> <li>- the map 7-45, I believe is the correct reference, does not include all known quarries, active and inactive, within the Guelph-Eramosa Township area</li> <li>- this assessment contains an incredible amount of speculation. Why was evidence not actually gathered? Most statements have multiple caveats of possible or potential with no actual evidence-based conclusions.</li> <li>- it is difficult for land-owners to discern how this applies to them and what they should do or change</li> </ul>	<p>Questions and comments have been noted and will be addressed through a future update of the Wellington County section of the assessment report planned for 2020.</p> <p>Wellington Source Water Protection encourages land owners or residents that have questions related to source protection to call or visit the County’s website <a href="http://www.wellingtonwater.ca">www.wellingtonwater.ca</a>. Wellington Source Water Protection is a partnership of all the municipalities within the County of Wellington to implement the Clean Water Act.</p>

<b>Table 2: Draft Updated “Bundled” Source Protection Plan – Pre-Consultation Comments</b>				
<b>#</b>	<b>Comment Source</b>	<b>SPP Section</b>	<b>Comment</b>	<b>How Comment was Addressed</b>
1	MECP	General	In the source protection plan, Ministry of Environment (MOE) has been updated to reflect our new name, Ministry of Environment, Conservation and Parks (MECP). Please make a note in your plan that MOE refers to MECP or ensure all of the previous acronyms are corrected as a few instances of the previous Ministry name remain (e.g. RW-MC-11.1).	Acronyms corrected to reflect new name.
2	MECP	General	Please verify all revisions to vulnerability scores with pathogen and chemical threat tables and ensure a statement in the plan (and assessment report) refers to the 2017 version of the Technical Rules being used for these amendments.	Verified that all vulnerability scores with pathogen and chemical threat tables and ensure a statement in the plan refers to the 2017 version of the Technical Rules.
3	MECP	General	As a reminder, an amendment to the source protection plan requires an update the ‘Summary of Consultation’ section to reflect the various stages of consultation carried out for the amendment.	Summary of consultation section updated.
4	MECP	Section 10	Please revise policy RW-MC-2, RW-CW-3, and RW-CW-4 to ensure the correct vulnerability score applies to the applicable waste activity for technical accuracy.	Application of hauled sewage separated from current sub policies in RW-MC-2, RW-CW-3, and RW-CW-4 to reflect correct vulnerability scores at which these activities can be significant.
5	MECP	Section 10	Please revise policy RW-CW-21.1 to remove MECP as an implementing body, as MECP has no role in issuing Nutrient Management Plan and Nutrient Management Strategy documents.	Reference to MECP has been removed from policy RW-CW-21.1.
6	MECP	Section 10	Policy RW-CW-26.1 requires MECP and OMAFRA to prohibit NASM storage and application through NMA instruments (i.e. NASM Plans). MECP is not the correct implementing body for this policy as we have no role in issuing NASM Plans.	Clarification that MECP regulates this activity through ECAs added to RW-CW-26.1.

7	MECP	Section 10	Policy RW-CW-27, a prescribed instrument policy directing MECP to manage NASM through ECAs, has been struck out from the pre-consultation draft. The policy appears to be replaced by RW-CW-26.1 which is a Risk Management Plan (RMP) policy for when NASM Plans do not apply. NASM applied as POW/biosolids require an Environmental Compliance Approval; if the Source Protection Authority is confident that all biosolids are applied on-farm then there are no concerns in removing this policy. A statement indicating why this policy is not required would also need to be included in the Explanatory Document. However, if the SPA is unsure, or there are biosolids being applied off-farm (i.e. requires an ECA) then removing policy RW-CW-27 would leave a policy gap. Please consider if policy RW-CW-27 is still required.	Policy RW-CW-27 has been reinserted back into the Source Protection Plan to address off-farm management of NASM through ECAs.  Policy RW-MC-25 has been revised to include reference to MECP to address off-farm management of NASM through ECAs.
8	MECP	Section 10	Consider if Policy RW-CW-26.1 (RMP for when NASM Plans do not apply) is still required if RW-CW-27 is reinstated as both policies apply where the application of NASM does not require a NASM Plan.	Policy RW-CW-25.1 (Part IV-Prohibit), RW-CW-26.1 (Part IV-RMP), and RW-CW-27.1 (Incentive and Education & Outreach) removed.
9	MECP	Section 10	The authority may also wish to consider including the phrase “off-farm application and/or storage of NASM as processed organic waste (i.e. biosolids)” to add further clarity to the applicable policies.	Policy RW-MC-27 revised to include suggested phrasing.
10	MECP	Section 10	Policy RW-CW-37 is an incentive and education and outreach policy. Part (b) has an incentive program for the storage of salt in wellhead protection area B where the vulnerability score is 10, while part (a) has an education program for the storage of salt in wellhead protection areas A and B. It appears that WHPA A was removed from the storage of salt section. The Ministry is unsure if this was an unintended typo or policy gap and wanted to bring it to the SPA’s attention.	Reinserted WHPA-A into policy RW-CW-37 to match existing RMP policy.
11	OMAFRA	Section 10	Prohibition of creation of future privately-serviced lots; ministry recommends that the proposed amendments be revised to remove the wording dealing with outright the	Policy RW-CW-6 is consistent with policies in chapter 8 of the Region of Waterloo Regional Official Plan along

			prohibition of lot creation in certain areas, and insert wording that would permit these lots to be created only in accordance with the applicable provincial legislation and standards (which would include Safe Drinking Water Act, Planning Act, PPS, etc.)	with Region's overall approach to not establish new threats in highly vulnerable areas
12	OMAFRA	Section 10	Nutrient Management Plans; ministry is unable to review and amend new or existing Nutrient Management Plans because the Director does not have the authority to do so under the Nutrient Management Act. Rather, this action must be undertaken by the certified preparer who creates the Nutrient Management Plan. It is recommended that this policy be revised accordingly.	Policy RW-MC-22 revised to indicate that Nutrient Management Plans and Strategies to be reviewed and amended in accordance with the Nutrient Management Act.
13	OMAFRA	Section 10	Incentive programs; ministry supports the proposed policies concerning the development and implementation of incentive programs... [, and] encourages the alignment of future incentive programs with programs under the Canadian Agricultural Partnership to promote consistency, and avoid confusion, amongst affected farmers.	Comment noted. No policy revisions required
14	OMAFRA	Section 10	Education and outreach policies; ministry supports the proposed policies concerning the development and implementation of education and outreach programs... [, and] encourages the alignment of future incentive programs with existing ministry education and outreach messaging and materials to promote consistent actions, and avoid confusion, amongst affected farmers.	Comment noted. No policy revisions required
15	MECP	Section 9	HR-NB-14.1 has been revised to change pipelines from a local threat to a prescribed drinking water threat. However, the title of the policy still includes the title 'local threat'. Please revise for consistency with the other pipeline policies.	Title of policy revised to prescribed threat.
16	MECP	Section 15	CB-MC-7.1 and CB-MC-7.2 for the application of commercial fertilizer, have been revised to only include handling and storage of commercial fertilizer. The plan previously indicated that the application of fertilizer did not currently apply due to the percentages of managed land	Additional language added to the Explanatory Document to ensure clarity.

			and livestock density. Please ensure this information is reference in the Explanatory Document or elsewhere in the source protection plan to ensure clarity on why an application of commercial fertilizer policy is not currently required for this area.	
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## LAKE ERIE REGION SOURCE PROTECTION COMMITTEE

**REPORT NO.** SPC-19-10-05

**DATE:** October 3, 2019

**TO:** Members of the Lake Erie Region Source Protection Committee

**SUBJECT:** Draft Section 36 Long Point Region and Grand River Workplans

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### **RECOMMENDATION:**

THAT the Lake Erie Region Source Protection Committee receives report SPC-19-10-05 – Section 36 Long Point Region and Grand River Workplans – for information;

THAT the Lake Erie Region Source Protection Committee direct staff to finalize the Workplan for Comprehensive Review and Update of the Long Point Region Source Protection Plan and release to the Long Point Region Source Protection Authority for submission to the Ministry of the Environment, Conservation and Parks;

AND THAT the Lake Erie Region Source Protection Committee direct staff to finalize the Workplan for Comprehensive Review and Update of the Grand River Source Protection Plan and release to the Grand River Source Protection Authority for submission to the Ministry of the Environment, Conservation and Parks.

### **REPORT:**

#### *Background*

At the time of approval for each Lake Erie Region Source Protection Plan, the Minister specified the timeline and process for the comprehensive review and update of the respective Assessment Report and Source Protection Plan under Section 36 of the Act.

Specifically, the approval letters tasked the lead source protection authority (Grand River SPA) to develop a workplan for each assessment report and plan in consultation with the Source Protection Committee, other Source Protection Authorities, municipalities and the Ministry of the Environment, Conservation and Parks (MECP) as part of the review process. The workplan sets out what aspects of the assessment report and plan should be reviewed. Long Point Region and Grand River workplans are due for submission to the MECP by November 30, 2019.

#### *Workplan Development Process*

The Grand River and Long Point Region workplan development process was initiated in November 2018 with the release of municipal worksheets developed by Lake Erie Region staff. The worksheets captured municipal information that was used to help determine the scope of assessment report and source protection plan updates that would be addressed through the Section 36 workplans. One-on-one teleconferences were held with municipalities that identified potential items for inclusion in the workplans following submission of their worksheets.

The following are examples of proposed tasks that have been included in the workplans:

1. Results of environmental monitoring programs  
Example: review of monitoring data to evaluate existing or the potential for Issues identified at municipal drinking water wells
2. Growth and infrastructure changes  
Example: new drinking water supply well(s) to be brought online
3. Policy effectiveness  
Example: revise policies related to the application of salt to improve plowing and salting practices
4. Implementation challenges  
Example: review prescribed instrument policies related to the Nutrient Management Act, to identify policy gaps
5. Technical rule changes  
Example: review and consider Phase II Technical Rule changes for incorporation into the assessment report and source protection plans
6. Other local considerations  
Example: update WHPA delineations, vulnerability scoring, mapping, threats and issues assessment and uncertainty analysis

*Proposed Reviews and Updates in the Long Point Region and Grand River Workplans*

A summary of the proposed reviews and updates, with associated timelines, in the Long Point Region Workplan are summarized in **Table 1 and Table 2**, and **Tables 3a-e** and **Table 4** for the Grand River Workplan.

Tasks included in the workplans may be undertaken as part of a Section 34 update if warranted, i.e., new or expanded drinking water systems that are time sensitive and require more immediate updates to the assessment report and source protection plan.

**Table 1 – Municipal Proposed Review Tasks – Long Point Region**

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion of Task
1	Norfolk County	<p>The addition of a new supply well located in Bloomsburg, between the Simcoe and Waterford Drinking Water Supplies. An Environmental Assessment is currently being conducted for this new well; however, construction of the well is not expected to be complete for another two years.</p> <p>Addition of a new well will require the delineation of a WHPA, vulnerability scoring, mapping, threats and issues assessment (including the number of locations of existing threats), uncertainty analysis and possibly changes to SPP policies.</p>	AR and SPP	<p>Completion of technical work: Norfolk County</p> <p>Update of AR and SPP: Lake Erie Source Protection Region</p>	Technical work: November 2021
2	Norfolk County	<p>The possible construction of a well located in Port Rowan. Phase two of the work is expected to commence within the next three to five years and will include investigation into the intake and the current groundwater study as a potential source. The addition of a new well would require the delineation of a WHPA, vulnerability scoring, mapping, threats and issues assessment (including the number of locations of existing threats), uncertainty analysis and possibly changes to SPP policies.</p>	AR and SPP	<p>Completion of technical work: Norfolk County</p> <p>Update of AR and SPP: Lake Erie Source Protection Region</p>	Technical work: November 2023

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion of Task
3	Norfolk County	The Delhi filtration plant and water intake at Lehman Dam will be decommissioned once a second transmission main from the Delhi well field is brought into town. The intake structure at the dam would remain but the County would isolate and possibly look at grouting the pipe from the dam to the treatment plant. The decommissioning of the intake would require the removal of the IPZ, vulnerability scoring, threats (including the number of locations of existing threats) and mapping.	AR and SPP	Decommissioning: Norfolk County  Update of AR and SPP: Lake Erie Source Protection Region	Decommissioning: November 2021
4	Oxford County	Update WHPA delineations, vulnerability scoring, mapping, threats and issues assessment (including the number of locations of existing threats) and uncertainty analysis for the Tillsonburg south wells (1A, 2, 9, 10, 11, 12), Springford wells 4 and 5, Norwich wells 2, 4 and 5 and Dereham Centre well 2. The current WHPA delineations were all completed using the 2001 groundwater model. Since that time there have been advancements in modeling (e.g. Tier 3 Water Budget studies).	AR and SPP	Completion of technical work: Oxford County  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2022
5	All municipalities	Any identified transport pathways that Lake Erie Region staff become aware of in accordance with section 27 of the General Regulation (287/07) will be considered for inclusion in the AR and SPP. The AR updates may include updated WHPA/IPZ vulnerable area mapping, and the associated vulnerability scores, which will be used to determine and include identification of areas where an activity is or would be a significant drinking water threat. The SPP policy applicability maps would also be updated to reflect changes to the AR.	AR and SPP	Review of identified potential transport pathways and update of AR and SPP: Lake Erie Source Protection Region	Review of transport pathways: November 2023

**Table 2: Proposed Review and Tasks – Technical Rule Changes – Long Point Region**

Rule Change	Considerations	Applicable Municipality	Applicable Document	Task Completed by	Timeline for Completion of Task
Changes to above grade fuel handling and storage in a WHPA-E or IPZ	<p>Haldimand County has confirmed that there was previously fuel storage in the IPZ-2 but that those storage activities no longer exist.</p> <p>Norfolk County will review the rule change as it relates to the Lehman Dam Surface Water Reservoir IPZ-1. The number of locations of existing threats fuel threats will be included in the AR.</p>	Norfolk County	AR	<p>Completion of review: Norfolk County</p> <p>Update of AR: Lake Erie Source Protection Region</p>	Review: November 2021
Great Lakes Intake increased vulnerability scoring through Technical Rule 95.1	Norfolk County and Haldimand County will review technical rule 95.1 to determine if it could apply to the Port Dover and Port Rowan Water Treatment Plant IPZs and the Nanticoke IPZ, respectively.	<p>Norfolk County</p> <p>Haldimand County</p>	AR and SPP	<p>Completion of review: Norfolk County and Haldimand County</p> <p>Update of AR and SPP: Lake Erie Source Protection Region</p>	Review: November 2021
Replacement of the term “monitoring well” with “monitoring location”	Only the Norfolk County section of the AR referenced the term “monitoring well”. This old term will be replaced with the new term “monitoring location”	Norfolk County	AR	Lake Erie Source Protection Region	Term replacement: November 2021

<p>Phase II Rules Project</p>	<p>Through the preliminary analysis, anticipated changes resulting from the MECP's Phase II Rule Project have been identified that will likely need to be reflected in an update to the AR and SPP. The complete list of changes to the rules has not been identified to this point, nor has the timeline for completion of the Project.</p> <p>Lake Erie Region staff will work closely with municipalities and the Source Protection Committee to ensure that the new rules are reviewed and considered for incorporation in the AR and SPP once they are finalized and become available.</p>	<p>All municipalities</p>	<p>AR and SPP</p>	<p>Review of Phase II Rules Project: Lake Erie Source Protection Region</p>	<p>Review: Within two years from the time the Phase II Rules Project becomes available</p>
<p>Climate Change</p>	<p>Conservation Ontario's tool/guidance for incorporating climate change into water quality risk assessments may result in changes to the assessment that could be considered in updates to the AR and SPP.</p> <p>Lake Erie Region staff will work closely with municipalities and the Source Protection Committee to ensure that the tool/guidance is reviewed and considered for incorporation in the AR and SPP if and when it is finalized and become available.</p>	<p>All municipalities</p>	<p>AR and SPP</p>	<p>Review of tool/guidance: Lake Erie Source Protection Region</p>	<p>Review: Within two years from the time the tool/guidance becomes available</p>

**Table 3a – Municipal Proposed Review Tasks – Environmental Monitoring – Grand River**

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
1	Wellington County	<p>Wellington County will review environmental monitoring data to evaluate potential or existing Issues identified at municipal drinking water wells. This review may result in an update to content and mapping in the AR and SPP.</p> <p>The County may consider increased water quality monitoring at municipal wells to aid in the review and evaluation of Issues.</p>	AR and SPP	<p>Completion of technical work: Wellington County</p> <p>Update of AR and SPP: Lake Erie Source Protection Region</p>	Review: November 2024
2	Wellington County	<p>The current intrinsic vulnerability layer used for Wellington County is raster data. GRCA will aid Wellington County in smoothing (vector data) the intrinsic vulnerability GIS layer.</p> <p>Updates to the vulnerability layer for the Township of Centre Wellington and Guelph/Eramosa areas will be completed as part of the current Section 34 update. However, the intrinsic vulnerability for the remaining areas within Wellington County will be updated as part of the Section 36 update.</p>	AR and SPP	<p>Completion of technical work: Lake Erie Source Protection Region and Wellington County</p> <p>Update of AR and SPP: Lake Erie Source Protection Region</p>	Technical work: November 2024
3	The City of Guelph	<p>The City of Guelph is in the process of installing Sentry Wells to obtain a better understanding of contaminant fate and transport for multiple sources of Trichloroethylene (TCE) in the area. Analysis of TCE data as part of this study may be used to redefine the TCE Issue Contributing Area for the City’s municipal supply wells.</p>	AR and SPP	<p>Completion of technical work: City of Guelph</p> <p>Update of AR and SPP: Lake Erie Source Protection Region</p>	Technical work: November 2024

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
4	The City of Guelph	In the City of Guelph, several changes to the landscape have occurred since the delineation of the Nitrate Issue Contributing Area (ICA). The current ICA extends into the County of Wellington. The City will undertake a study to use new information on land use activities (specifically in the Carter Wellfield area) to potentially redefine the Nitrate ICA.	AR and SPP	Completion of technical work: City of Guelph  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024
5	The City of Guelph	The Clair Maltby Secondary Plan may drive changes to the Guelph-Guelph/Eramosa (GGET) Tier 3 water budget model. As part of the Clair Maltby secondary plan a three-year baseline monitoring study has been undertaken, with continued monitoring to occur during development of the area. The focus of the study is on shallow groundwater features, which may provide valuable data that can be used to update data gaps in the GGET Tier 3 model. If the GGET Tier 3 model is updated, mapping and content in the AR and SPP will be revised.	AR and SPP	Completion of technical work: City of Guelph  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024
6	The City of Guelph	The City of Guelph retained a consultant to evaluate the use of the MOECC's "Alternative Approach" method. The primary objective of this study is to undertake an assessment of the risk to municipal drinking water systems from the application of road salt, based on scope of work as outlined in the updated "Alternative Approach" (MOECC, March 2017). The City of Guelph will review the results of the Alternative Approach Study and assess the need to update the sodium and chloride triggers for an "Issue". The City continues to monitor sodium and chloride concentrations and will review data on an ongoing basis. This review may result in an update to content and mapping in the AR and SPP.	AR and SPP	Completion of technical work: City of Guelph  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2022

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
7	The Regional Municipality of Waterloo	The Regional Municipality of Waterloo (RMOW) will review results of environmental monitoring programs and assess water quality parameters of concern for potential new and existing Issues. This review may result in an update to content and mapping in the AR and SPP.	AR and SPP	Completion of technical work: Region of Waterloo  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024

**Table 3b – Municipal Proposed Review Tasks – Growth and Infrastructure – Grand River**

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
8	Dufferin County (The Town of Orangeville)	The Town of Orangeville plans to bring a new water supply well online in the next two years that will be located within Amaranth Township. The new water supply system will require updates to WHPA delineations, vulnerability scoring, and threats within the AR. Mapping in the SPP will be revised accordingly.	AR and SPP	Completion of technical work: Consultant  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2021
9	Wellington County (Township Centre Wellington)	Water Supply Master Plan completed in 2019. Exploratory drilling program started in 2019 and new wells are expected to be tested and, if successful, brought online between 2020 and 2025. The exact number of new wells is unknown at this time. If new wells are brought online updates to WHPA delineations, vulnerability scoring, and threats within the AR will be required along with updates to SPP mapping.	AR and SPP	Completion of technical work: Consultant  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024 or greater

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
10	Wellington County (Erin)	An exploratory drilling program for new supply wells is underway in the Town of Erin. At this time, it is likely that the new wells will be located in the CTC Source Protection Region. However, some locations are close to the Grand River Watershed boundary and it is possible the WHPAs may extend into the Lake Erie Source Protection Region. AR and SPP mapping may need to be updated with data provided by CTC.	AR and SPP	Completion of technical work: Consultant  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024
11	Wellington County	Wellington County is aware of technical work being completed for new quality and quantity WHPAs for Halton (Acton) that may extend into the County and Grand River Watershed. AR and SPP mapping would be updated with data provided by CTC.	AR and SPP	Completion of technical work: Consultant  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024
12	Regional Municipality of Waterloo	The Region of Waterloo will complete technical work to update WHPAs and vulnerability scoring for new wells (Cambridge East, Waterloo and Blair Road). This work may be completed within one to 4 years. Updates may require a Section 34 update if work is complete before Section 36 update.	AR and SPP	Completion of technical work: Region of Waterloo  Update of AR and SPP: Lake Erie Source Protection Region and Region of Waterloo	Technical work: November 2020
13	City of Hamilton	Technical work is being completed for new quality WHPAs for the Freelton supply wells (City of Hamilton) that may extend into Wellington County within the Grand River Watershed. AR and SPP mapping may need to be updated with data provided by Halton Hamilton Source Protection Region.	AR and SPP	Completion of technical work: Consultant  Update of AR and SPP: Lake Erie Source Protection Region	Technical work: November 2020

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
14	City of Brantford	The City of Brantford has recently acquired land from Brant County on the northern and southern borders. The northern side has no municipal servicing, since all properties are on private wells and septic systems and will over time be serviced as needed. However, the southern end is currently serviced by Brant County and the City of Brantford is negotiating an extension of this agreement to 2025. Updates to the serviced areas mapping in the AR will be required.	AR	Update of AR: Lake Erie Source Protection Region	a) agreement extension not approved: November 2020 b) agreement extension approved: November 2024

**Table 3c – Municipal Proposed Review Tasks – Policy Effectiveness – Grand River**

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
15	Wellington County	Wellington County to review all policies included in the five (5) source protection plans covering the County, determine effectiveness and consistency, and propose possible changes (including DNAPL, pipeline threats, NMA PI policies, dual prohibition policies, Nitrate ICA policies, etc.). Updates to policies in SPP may lead to changes in threats numbers in the AR.	AR and SPP	Policy Review: Wellington County  Update of AR and SPP: Lake Erie Source Protection Region	Policy Review: November 2024
16	City of Guelph	Optimization of road salt application– update policies to increase frequency in monitoring of chloride and sodium, policies to improve plowing and salting practices, and education and outreach policies.	SPP	Policy Updates: City of Guelph  Update to SPP: Lake Erie Source Protection Region	Policy Text: November 2022

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
17	City of Guelph	City of Guelph would like to enact a bylaw to request information on all geothermal installations within the WHPAs. Geothermal installations may be considered transport pathways. If geothermal installations are found to be transport pathways then vulnerability scoring will be updated in the AR, which could result in additional threats. Additionally, updates to Source Protection Plan mapping may be required.	AR and SPP	Technical Review and Policy: City of Guelph  Update to AR and SPP: Lake Erie Source Protection Region	Policy Update: November 2021
18	Regional Municipality of Waterloo	The City is considering revisions to policy CG-NB-1.13 as the Grand River SPA no longer receives funding from the province for research and monitoring into sources of contaminants for Issues at municipal supply wells. Consider revising text to be directed at the City only.	SPP	Policy Review: Regional Municipality of Waterloo  Update to SPP: Lake Erie Source Protection Region	Policy Review: November 2024
19	City of Hamilton	The City of Hamilton is planning to review all policies to determine effectiveness over time and propose possible changes. For example, review DNAPL policies keeping in mind the option of instituting a limit, E&O and RMP. Updates to policy content in SPP.	SPP	Policy Review: City of Hamilton  Update to SPP: Lake Erie Source Protection Region	Policy Review: November 2024
20	City of Brantford	The City of Brantford recently proposed a policy to eliminate a gap in managing significant drinking water threats from storm water management facilities (SWMFs) that do not require a MECP Environmental Compliance Approval. The policy will ensure that existing and/or future activities that pose or would pose a significant drinking water threat will be managed through a Risk Management Plan (RMP). Updates to policy content in SPP.	SPP	Policy Update: City of Brantford  Update to SPP: Lake Erie Source Protection Region	Policy Update: November 2020

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
21	City of Brantford	<p>A newly proposed to eliminate a gap in managing significant drinking water threats from storm water management facilities (SWMFs) that do not require a MECP Environmental Compliance Approval. The policy will ensure that existing and future activities that pose or would pose a significant drinking water threat will be managed by way of a Risk Management Plan (RMP).</p> <p>Addition of new Source Protection Policy: Sewage System or Sewage Works - Combined Sewer Discharge from a Stormwater Outlet to Surface Water. Applicable in IPZ-1 to 3. Updates to policy content in SPP.</p>	SPP	<p>Policy Update: City of Brantford</p> <p>Update to SPP: Lake Erie Source Protection Region</p>	Policy Update: November 2020
22	City of Brantford	<p>Existing and future application of road salt hasn't been previously addressed in Brantford's SPP. IPZ-1 is the only area that has an impervious surface area related to road salt between 8 and 80% and which might pose a SDWT as per Reference #92 and 93 of the Tables of Circumstances. A new policy needs to be created.</p> <p>The handling and storage of fuel activity has been amended in the Tables of Circumstances to include circumstances where this activity may pose a SDWT. Amendments needs to be made to existing fuel storage and a new policy must be created.</p>	SPP	<p>Policy Update: City of Brantford</p> <p>Update to SPP: Lake Erie Source Protection Region</p>	Policy Update: November 2020

**Table 3d – Municipal Proposed Review Tasks – Implementation Challenges – Grand River**

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
23	City of Guelph	<p>Concerns regarding EPA vs. CWA limitations for condition sites and regulatory gaps as identified by the Environmental Commissioner of Ontario (ECO). Quote from ECO: "The Clean Water Act gives the perception that the law addresses conditions that are drinking water threats, without actually doing so. Source protection committees have no substantial tools at their disposal to protect drinking water sources from historical contamination. Municipalities, which bear the onus of providing safe drinking water to their residents, similarly have no such powers. Municipalities very rarely have the finances to control or remediate contamination themselves, nor do they have any authority to force property owners to remediate. They can only ask the province to act."</p> <p>The Smallfield Wellfield continues to be adversely impacted by TCE based on recent water quality monitoring in the supply well. Additional investigations of privately-owned contaminated sites in area of Smallfield Well are required. The City of Guelph will update conditions site policies to encourage MECP actions on Conditions sites.</p>	SPP	<p>Policy Updates: City of Guelph</p> <p>Update to SPP: Lake Erie Source Protection Region</p>	Policy Update: November 2024
24	Regional Municipality of Waterloo	<p>Current Section 34 update includes policy revisions to address implementation challenges, including the alignment of storm water management and salt application/storage policies and tools. Policy changes may be considered as part of broader Section 36 work resulting from new WHPA delineations or Tier 3 update.</p>	SPP	<p>Revised Policy: Regional Municipality of Waterloo</p> <p>Update to SPP: Lake Erie Source Protection Region</p>	Revised Policy: November 2024

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
25	City of Hamilton	The City of Hamilton is planning to review all prescribed instrument policy wording to identify gaps (i.e. NMA policies). Updates to policy content in SPP may be required.	SPP	Revised Policy: City of Hamilton  Update to SPP: Lake Erie Source Protection Region	Policy Update: November 2024

**Table 3e – Municipal Proposed Review Tasks – Other – Grand River**

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
26	Wellington County	Updates to Mapleton and Wellington North WHPAs (quality) should be considered once the Tier 3 modeling and Erin WHPA changes are complete. It is proposed that the Township of Centre Wellington Tier 3 model be extended to include both areas, possibly with new data provided through the proposed OGS Mount Forest - Elmira project and the new WHPAs modeled.  Updates to WHPA delineations, vulnerability scoring, and threats within the AR will be required along with updates to SPP mapping.	AR and SPP	Completion of technical work: Consultant  Update to AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024
27	Wellington County	Consider updating Managed Lands, Livestock Density and Impervious Surfaces with most current aerial photography. Currently based on outdated 2010 data. If completing updates the most up to date aerial photography will be used. Mapping and content in the AR would need to be revised.	AR	Completion of technical work: Lake Erie Source Protection Region and Wellington County  Update to AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024

Update	Municipality	Description of Proposed Review and Task	Applicable Document	Task Completed by	Timeline for Completion
28	Regional Municipality of Waterloo	The Region plans to update both the Regional and Cambridge Tier 3 groundwater model. Work would include a stress assessment, climate change assessment (water quantity), and updated mapping (WHPAs and vulnerability). Updates to WHPA delineations, vulnerability scoring, and threats within the AR will be required along with updates to SPP mapping.	AR and SPP	Completion of technical work: Regional Municipality of Waterloo  Update to AR and SPP: Lake Erie Source Protection Region	Technical work: November 2024
2	Oxford County	Oxford County is planning to update WHPA delineations for wells 1, 2A and 3 (Drumbo water system) and wells 1 and 2 (Plattsville water system). The current WHPA delineations were all completed using the 2001 groundwater model. Given the advancements in modeling (e.g. Tier 3 Water Budget studies), Oxford intends to remodel these WHPAs. Updates to WHPA delineations, vulnerability scoring, and threats within the AR will be required along with updates to SPP mapping.	AR and SPP	Completion of technical work: Consultant  Update to AR and SPP: Lake Erie Source Protection Region	Technical work: November 2022
30	All municipalities	Any identified transport pathways that Lake Erie Region staff become aware of in accordance with section 27 of the General Regulation (287/07) will be considered for inclusion in the AR and SPP. The AR updates may include updated WHPA/IPZ vulnerable area mapping and revised vulnerability scores, which will be used to determine and include identification of areas where an activity is or would be a significant drinking water threat. The SPP policy applicability maps would also be updated to reflect changes to the AR.	AR and SPP	Review of identified potential transport pathways and update of AR and SPP: Lake Erie Source Protection Region	Review of transport pathways: November 2023

**Table 4 – Proposed Review Tasks – Technical Rule Changes – Grand River**

Rule Change	Considerations	Applicable Municipality	Applicable Document	Task Completed by	Timeline for Completion of Task
Sewage/septic systems and holding tanks	<p>There are sodium or chloride ICAs in the Region of Waterloo with potential septic systems or holding tanks as a contributing activity.</p> <p>The Region of Waterloo will review the sodium and chloride ICAs for potential septic systems or holding tanks as a contributing activity.</p>	Region of Waterloo	AR	<p>Completion of review: Region of Waterloo</p> <p>Update of AR: Lake Erie Source Protection Region</p>	Review: November 2024
Changes to above grade fuel handling and storage in a WHPA-E or IPZ	<p>Intake Protection Zones (IPZs) in the Region of Waterloo, the County of Wellington (City of Guelph Eramosa River intake) and Haldimand County have vulnerability scores of nine or higher where above-grade fuel storage could be a significant threat.</p> <p>The Region of Waterloo, City of Guelph, Wellington County, and Haldimand County will review fuel storage activities, including on site diesel tanks for standby power at the water treatment plants, gas stations, and heating fuel tanks in consideration of the changes to the provincial threats tables and circumstances.</p>	Region of Waterloo, City of Guelph/Wellington County, Haldimand County	AR	<p>Completion of review: Region of Waterloo, City of Guelph, Wellington County, Haldimand County</p> <p>Update of AR: Lake Erie Source Protection Region</p>	Review: November 2024

Rule Change	Considerations	Applicable Municipality	Applicable Document	Task Completed by	Timeline for Completion of Task
Phase II Rules Project	<p>Through the preliminary analysis, anticipated changes resulting from the MECP's Phase II Rule Project have been identified that will likely need to be reflected on when updating the AR and SPP. The complete list of changes to the rules has not been identified to this point, nor has the timeline for completion of the Project.</p> <p>Lake Erie Region staff will work closely with municipalities and the Source Protection Committee to ensure that the new rules are reviewed and considered for incorporation in the AR and SPP once they are finalized and become available.</p>	All municipalities	AR and SPP	Review of Phase II Rules Project: Lake Erie Source Protection Region	Review: Within two years from the time the Phase II Rules Project becomes available
Climate Change	<p>Conservation Ontario's toll/guidance for incorporating climate change into water quality risk assessments may result in changes to the assessment that could be considered in updates to the AR and SPP.</p> <p>Lake Erie Region staff will work closely with municipalities and the Source Protection Committee to ensure that the tool/guidance is reviewed and considered for incorporation in the AR and SPP if and when it is finalized and become available.</p>	All municipalities	AR and SPP	Review of tool/guidance: Lake Erie Source Protection Region	Review: Within two years from the time the tool/guidance becomes available

The draft Section 36 Long Point Region and Grand River Workplans in their entirety are available on the October 3 SPC meeting site on [eScribe](#).

Early draft copies of the two workplans have been sent to MECP staff for their preliminary review. Comments on the Long Point Region Workplan have been considered and incorporated, where applicable. Comments on the Grand River Workplan have been received and will also be considered for inclusion, where applicable.

#### *Next Steps*

Following release of the Section 36 workplans by the Lake Erie Region Source Protection Committee, the workplans will be considered by their respective Source Protection Authority and subsequently submitted to MECP by November 30, 2019.

The MECP will issue Section 36 orders that will detail the review of the Long Point Region and Grand River Source Protection Plans and that will be informed by the respective Section 36 workplans. Implementation of the Section 36 orders will depend upon available funding.

The overall timeline for completion of all of the proposed updates is by November 2023. The Phase II Technical Rules and climate change guidance will be considered if and when they are released. Provided that provincial funding is available, the Grand River SPA will complete the proposed updated to the source protection plans with support from the Lake Erie Region SPC, and in consultation with the Long Point Region SPA, the MECP, and other applicable implementing bodies. Consultation may also take place with persons engaged in significant drinking water threat activities, if any policy changes affect persons engaged in existing significant threat activities.

Staff recommends that the Lake Erie Region Source Protection Committee releases the Workplan for Comprehensive Review and Update of the Long Point Region Source Protection Plan to the Long Point Region Source Protection Authority for submission to the Ministry of the Environment, Conservation and Parks.

Staff also recommends that the Lake Erie Region Source Protection Committee releases the Workplan for Comprehensive Review and Update of the Grand River Source Protection Plan to the Grand River Source Protection Authority for submission to the Ministry of the Environment, Conservation and Parks.

Prepared by:



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Approved by:



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