



## CATARAQUI SOURCE PROTECTION COMMITTEE

### AGENDA FOR MEETING

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Date: Thursday April 8, 2010  
Time: 7:00 PM\*\*  
Location: St. John's Memorial Hall  
216 Church Street, Bath

\*\* Please note: This meeting will be preceded at 5:00 PM with a tour of the Lafarge North America Inc. facility at 6501 Bath Road (Highway 33) for members and staff. Dinner will be served at the meeting location (~ 6:15 PM) for members and staff.

1. Roll Call
2. Adoption of the Agenda
3. Declarations of Conflict of Interest
4. Approval of Previous Meeting Minutes from March 11, 2010 (attached)
5. Business Arising
6. Delegations
7. Correspondence
  - a. Letter from Robert Morrison, Chair, Cataraqui Source Protection Authority, to Debbie Scanlon, Ontario Ministry of the Environment, regarding EBR Environmental Registry posting 010-8766 (proposed amendments to Ontario Regulation 287/07), dated March 25, 2010.
8. Business/Reports
  - a. Draft Assessment Report
    - i. Overview of Key Improvements Since December 2009 – Lauren Forrester, Water Quality Specialist and Rob McRae, Project Manager (report attached, presentation)
    - ii. Assessment Report Subcommittee Comments and Recommendation – Nona Marriotti, Lake Association Representative (update)
    - iii. Posting and Public Consultation Update – Lauren Forrester, Water Quality Specialist (presentation)
  - b. Introductory Discussion: Source Protection Plan Policy Evaluation Criteria – Christine Woods, Source Protection Planner (report attached; presentation)

9. Sector Updates from the Committee
10. Announcements or Inquiries
11. Motions or Notices of Motion
12. Opportunity for Questions from the Media
13. IN CAMERA Session (if required)
14. Adjournment

*Please inform Donna Cellini at (613) 546-4228 ext. 248 or via e-mail at [dcellini@cataraquiregion.on.ca](mailto:dcellini@cataraquiregion.on.ca) if you will not be able to attend the meeting.*

**THE CATARAQUI SOURCE PROTECTION COMMITTEE**  
**MINUTES OF MEETING # 28**

Thursday March 11, 6:00 PM

Outdoor Centre, Little Cataraqui Creek Conservation Area,  
1641 Perth Road Glenburnie, Ontario

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**Present:** John C. Williamson, Chair      John Conley      Scott Ewart  
Joan Green      Jacques Labelle      Kathleen Laird  
Wendy Lavender      Richard Lindgren      Chris Mangan-Greene  
Nona Mariotti      Allan McPhail      Jeff Peters  
Peter Raabe      Kevin Riley      Kim Sytsma

**Regrets:** Richard Bresee      Rob Cumming      Gary Davison  
Alex Palilionis (proxy to Kate Laird)

**Staff Present:** Donna Cellini, Project Secretary  
Holly Evans, Water Quality Specialist  
Lauren Forrester, Water Quality Specialist  
Nicole Irvine, SWP Technician  
Karla Maki-Esdon, Communications Coordinator  
Rob McRae, Project Manager, Source Water Protection  
Erin Oogarah, GIS Technician  
Titia Praamsma, Hydrogeologist  
Sean Watt, Water Resources Engineer  
Christine Woods, Source Protection Planner

**Guests:** Katie Fairman, Ontario Ministry of the Environment (MOE)

At 6:11 P.M. Chair John C. Williamson, called the meeting to order.

1) **Roll Call and Mileage**

There were 15 members present and 1 member had declared his proxy to another.

2) **Chair's recognition of Kim and Charlie Sytsma**

Chair John Williamson congratulated Kim Sytsma and her husband Charlie for winning the 2010 Environmental Stewardship Award. Kim and Charlie have done some great work on their farm near Athens, to ensure the water does not become contaminated by their cattle herd.

Kim Sytsma provided a short presentation outlining the many changes they made on the farm to help protect the water.

3) **Adoption of Agenda**

Moved by: Kim Sytsma

Seconded by: Kevin Riley

**THAT** the Cataraqui Source Protection Committee members adopt the meeting agenda as amended.

**Carried**

4) **Declarations of Conflict of Interest**

There were none.

5) **Approval of Cataraqui Source Protection Committee Minutes**

- a) Approval of February 11, 2010 Cataraqui Region Source Protection Committee Minutes

Moved by: Nona Mariotti

Seconded by: Kathleen Laird

**THAT** the minutes of the February 11, 2010 meeting of the Cataraqui Source Protection Committee be approved as amended.

**Carried**

6) **Business Arising**

- a) Requirements for the Removal of Fuel Storage Tanks – Wendy Lavender, MOE Liaison

Wendy Lavender briefly discussed the process that is followed in Ontario to ensure that all fuel storage tanks are removed properly and safely.

- b) Update from Mayor John Conley regarding Elgin

Mayor Conley advised the SP Committee that the United Counties of Leeds and Grenville are continuing to work with MOE regarding the property in Elgin that is now undergoing Phase 2 testing. Together they will ensure that the study is complete and that good clean water is supplied. They are also investigating the possibility of a new well to ensure there will be no water quantity issues in the future.

7) **Delegations**

There were none.

8) **Correspondence**

The following items of correspondence were acknowledged by the SP Committee:

- a) Jacques Labelle mentioned a recent newspaper article he had read indicating that 399 municipalities across Canada are without sewage treatment and that 550 have sewage treatment that is not adequate. This was taken from a federal government report. Of these 949 municipalities, 106 are in the Province of Ontario.
- b) Letter from Heather Kirby, Green Communities Canada to John C. Williamson, Chair, Cataraqui Source Protection Committee, regarding community based private well stewardship programs, dated February 9, 2010.

- c) Letter from Ian R. Smith, Director, Source Protection Programs Branch, Ontario Ministry of the Environment to Project Managers, Source Protection Authorities, regarding drinking water threats under federal jurisdiction, dated February 23, 2010.

9) **Business/Reports**

- a) Status of the Assessment Report – Assessment Report Subcommittee and Rob McRae, Project Manager, Comments by Rick Lindgren

Rick Lindgren updated the SP Committee on the status of the draft assessment report by indicating that the CRCA staff team is working toward the April 2010 timeline of releasing the draft assessment report publicly. Among other items they are working specifically on the ten components that were considered incomplete as of December 2009. Mr. McRae advised the SP Committee that staff from the CRCA met with the MOE in January 2010 and some additional gaps were identified at that time and the CRCA staff will strive to close these gaps. The Assessment Report Subcommittee will be meeting with the staff on March 22, 2010 to provide further input. The target is to circulate an improved draft of the assessment report to the SP Committee with the agenda package on April 1<sup>st</sup>.

- b) Updated Communications Strategy for the Assessment Report – Karla Maki-Esdon, Communications Coordinator

Karla Maki-Esdon updated the SP Committee on the 12 municipal council presentations. She suggested that since these presentations will be a couple months removed from the draft assessment report publication, the SP Committee should hold three public open houses following the publication of the draft assessment report. The suggestion is to hold these public open houses in the east (Brockville), central (Kingston) and west (Napanee, jointly with the Quinte Source Protection Region), through late April and May.

**Resolution CSPC 06-10**

Moved by: Kim Sytsma  
Seconded by: Kevin Riley

**BE IT RESOLVED THAT** the Cataraqui Source Protection Committee approves the revised Communications Strategy for the forthcoming Assessment Report: Cataraqui Source Protection Area in accordance with the report of the Communications Coordinator dated March 3, 2010.

**Carried**

- c) Draft Findings for the Assessment Report: Eastern Lake Ontario and Upper St. Lawrence River Intake Protection Zone 3 – Sean Watt, Water Quality Resources Engineer

Sean Watt provided the SP Committee with a progress update on the Intake Protection Zone 3 modeling for eight intakes in Lake Ontario and St. Lawrence River. He clarified that this could be updated in the revised assessment report due approximately in the summer of 2011. He proposed modifications to the IPZ 3 map for these intakes based on the findings from research at Queen's University that used 2006 field data.

### Resolution CSPC 07-10

Moved by: Kim Sytsma  
Seconded by: Nona Mariotti

**BE IT RESOLVED THAT** the Cataraqui Source Protection Committee approve the approach for considering delineation of the Intake Protection Zone 3 as presented by Sean Watt, Water Quality Resources Engineer, on March 11, 2010 for use in developing the Cataraqui Assessment Report and the Cataraqui Source Protection Plan.

**Carried**

- d) Draft Findings for the Assessment Report: Lansdowne Wellhead Protection Area Study Phase '3' and Tier 2 Water Budget – Sean Watt, Water Quality Resources Engineer

Sean Watt informed the SP Committee that there were no major concerns identified during the peer review of these findings.

### Resolution CSPC 08-10

Moved by: Kevin Riley  
Seconded by: Chris Mangan-Greene

**BE IT RESOLVED THAT** the Cataraqui Source Protection Committee receives the findings of the Lansdowne Wellhead Protection Area Phase '3' Study and the Lansdowne Tier 2 Water Budget Study (as presented by Intera Engineering Inc. at the February 11th, 2010 meeting and described by the Water Resources Engineer at the March 11th meeting), for consideration in preparing the Cataraqui Assessment Report and the Cataraqui Source Protection Plan.

**Carried**

- e) Draft Findings for the Assessment Report: Drinking Water Issue Evaluation for Highly Vulnerable Aquifers and Significant Groundwater Recharge Areas – Lauren Forrester, Water Quality Specialist

Lauren Forrester indicated that the Technical Rules: Assessment Report (MOE, 2009) under the Ontario *Clean Water Act, 2006* allow for the identification of ambient groundwater issues in the broader vulnerable areas (Rule 115.1). For those issues it is helpful and appropriate to explain the issues and their possible causes in the report but it is not necessary to identify the associated issue contributing areas.

### Resolution CSPC 09-10

Moved by: Jacques Labelle  
Seconded by: Kim Sytsma

**BE IT RESOLVED THAT** the Cataraqui Source Protection Committee receives the findings of the issue evaluation in highly vulnerable aquifers and significant groundwater recharge areas (completed according to Assessment Report Technical Rule 115.1), as outlined in the report of Lauren Forrester, Water Quality Specialist (dated March 4, 2010) for use in the Cataraqui Assessment Report and the Cataraqui Source Protection Plan.

**Carried**

f) Draft Findings for the Assessment Report: Drinking Water Threat Inventory (report attached; presentation) (commencing ~ 7:30 PM)

i. Conditioning salt as a non-prescribed drinking water threat – Sean Watt, Water Resources Engineer

Sean Watt indicated that as per the request by the SP Committee that the staff have proceeded to request that conditioning salt be added as an additional (non-prescribed) type of threat and expect to receive a positive response from the MOE.

ii. Activities along corridors as a non-prescribed drinking water threat – Lauren Forrester, Water Quality Specialist

Lauren Forrester indicated that as per the SP Committee request, the CRCA staff have requested that certain substances transported along transportation corridors be added by the MOE as non-prescribed threat circumstances.

iii. Livestock density and managed lands – Erin Oogarah, GIS Technician

Erin Oogarah advised the SP Committee on the alternative method used to enumerate the managed lands and live stock density for the Cataraqui Source Protection area using the best available data and assumptions.

Ms. Oogarah stated that pending the concurrence of the SP Committee, a request to use the method in Highly Vulnerable Areas and Significant Groundwater Recharge Areas would be submitted to the MOE per Technical Rule 15.1.

Wendy Lavender was asked if she could please contact OMAFRA to obtain actual livestock numbers.

iv. Landowner contact, Conditions – Nicole Irvine, SWP Technician

Nicole Irvine updated the SP Committee on the enumeration of significant drinking water threats in accordance with the protocol approved by the SP Committee in May 2009. The CRCA staff are about to mail out Letter #2 so that the landowners would be able to assist in these calculations. The SP Committee requested that a generic copy of this letter be circulated to them.

Ms. Irvine went on to discuss conditions; she noted that none had been identified to-date based on the lack of data. There were a number of related studies mentioned by the SP Committee members. These studies and other evidence could be very helpful to identify potential conditions in preparing the Assessment Report; concerns can be investigated further in the revised versions. The SP Committee should please provide any of these reports, studies or concerns to the CRCA staff so they can be brought forth earlier rather than later.

### Resolution CSPC 10-10

Moved by: Nona Mariotti  
Seconded by: Kim Sytsma

**BE IT RESOLVED THAT** the Cataraqui Source Protection Committee receives the updated drinking water threat inventory findings that are outlined by the Cataraqui Region Conservation Authority staff in their report dated March 4, 2010 for consideration in preparing the Cataraqui Assessment Report and the Cataraqui Source Protection Plan.

**Carried**

- v. Motions by Jacques Labelle, Public Representative: Aquifer-Based Home Heating and Cooling Installations (updated document attached)

Jacques Labelle reiterated his concern regarding aquifer-based heating systems on well water and proposed a resolution that was not carried. There was debate as to whether or not matters such as these are within the mandate of the SP Committee. It was discussed further and the SP Committee agreed to send the MOE a letter voicing their concern for the negative impacts that aquifer-based heating systems could have on the quality and quantity of water in the Cataraqui Source Protection Area. Mayor John Conley asked that it be noted that he was opposed to sending a letter.

- g) Source Protection Plan Regulation (Proposed Amendments to O. Reg. 287/07)

- i. Overview – Wendy Lavender, MOE Liaison

Wendy Lavender gave a presentation to the SP Committee regarding the proposed regulation changes and explained the need for such changes. The MOE will use the regulation to set parameters for the source protection planning process. Ms. Lavender highlighted that the requirements are intend to allow for local flexibility. She indicated that existing Prescribed Provincial Instruments should be used to avoid regulatory duplication.

- ii. SP Committee Comment Letter – Christine Woods, Source Protection Planner

Christine Woods worked with the SP Committee to finalize the letter being sent to the MOE regarding the proposed amendments to Ontario Regulation 287/07.

### Resolution CSPC 11-10

Moved by: Nona Mariotti  
Seconded by: Chris Mangan-Greene

**BE IT RESOLVED THAT** the Cataraqui Source Protection Committee approves of the letter to the Ontario Ministry of the Environment in reference to the proposed amendments to Ontario Regulation 287/07 (General) (EBR Posting 010-8766) as discussed at the meeting of March 11, 2010;

**AND THAT the CRCA** staff be requested to submit the letter to the Ministry by March 26th.

**Carried**

h) Proposed Meeting Schedule to December 2010

Rob McRae presented a proposed meeting schedule for the balance of 2010 for approval by SP Committee. He noted that the Thursday April 8th meeting will be preceded by a tour of the Lafarge North America Inc. facility at Bath for members and staff. Dinner will be served at the meeting location (St. John's Memorial Hall in Bath) for members and staff. The November meeting date was proposed to move to Thursday November 18th due to the 11th (Remembrance Day) being a statutory holiday for the CRCA.

**Resolution CSPC 12-10**

Moved by: Kim Sytsma  
Seconded by: Kathleen Laird

**BE IT RESOLVED THAT** the Cataraqui Source Protection Committee approves the dates for its regular meetings to December 2010 that were outlined by Project Manager at the meeting of March 11, 2010.

**Carried**

**10) Sector Updates from the Committee**

There were none

**11) Announcements or Inquiries**

- a) Bay of Quinte Remedial Action Plan – Back to the Bay Event (Belleville, March 25<sup>th</sup>)

Chair John Williamson advised the SP Committee of the above event.

- b) Save the Prison Farms Benefit Concert (Kingston, March 20<sup>th</sup>)

Jeff Peters advised the SP Committee and CRCA staff of an upcoming awareness concert and advised everyone that they could be purchase tickets from him.

**12) Motions/Notice of Motion**

There were none.

**13) Opportunity for Questions from the Media**

There were no questions.

**14) IN CAMERA Session**

There were no questions.

**15) Next Meeting**

Next meeting of the SP Committee: Thursday April 8, 2010

5:00 PM Tour of the Lafarge North America Inc. facility  
6501 Bath Road (Highway 33)  
(for members and staff)

~6:15 PM Dinner  
St. John's Memorial Hall  
216 Church Street, Bath

7:00 PM Regular Meeting  
St. John's Memorial Hall  
216 Church Street, Bath

**16) Adjournment**

The meeting adjourned at 9:49 P.M. on a motion by Kim Sytsma.

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John C. Williamson, Chair

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Rob McRae, Project Manager



March 25, 2010

Files: SPP 1-1, 3-0

VIA E-MAIL & MAIL

Ms. Debbie Scanlon  
Senior Drinking Water Program Advisor  
Ontario Ministry of the Environment  
Drinking Water Management Division  
Source Protection Programs Branch  
2 St. Clair Avenue West, 8<sup>th</sup> Floor  
Toronto, ON M4V 1L5

Dear Ms. Scanlon,

**Re: Proposed Amendments to O. Reg. 287/07 – General Regulation  
Regulatory Components to Support the Development and Implementation of  
Source Protection Plans under the Clean Water Act 2006  
(EBR Posting 010-8766)**

I am writing on behalf of the Cataraqui Source Protection Authority (SP Authority) to provide you with comments about the above-noted EBR Environmental Registry posting of proposed amendments to Ontario Regulation 287/07 - General. These comments were endorsed by the SP Authority at our meeting on March 24, 2010.

Our comments below focus on the need for clarity about the roles and responsibilities of SP authorities, sustained provincial funding, and the timing of the groundwork for the planning phase.

The posting of the proposed regulatory amendments marks the beginning of the 'planning phase' of the drinking water source protection initiative. Decisions made during this phase will influence how the implementation of source protection plans will unfold. They will also shape our collective thinking about the future of the initiative over the long-term, including future planning cycles.

#### *Roles and Responsibilities*

The *Clean Water Act, 2006* and the proposed regulatory amendments outline several responsibilities for the SP authorities following approval of the source protection plan. These

include: commenting on proposed transport pathways (section 19.8 of the regulation, as proposed), initiating amendments to the plan (section 19.29), and preparing annual progress reports (section 19.32). In addition, monitoring tasks (related to drinking water issues and threats, and climate) are expected to be assigned to many SP authorities across Ontario.

Source protection authorities will continue to build capacity and expertise over the planning phase that will be important assets for the implementation of the source protection plan.

### *Sustained Funding*

We understand that the Ministry of the Environment is considering the longer-term funding needs of this initiative. A sustained provincial investment will be needed for the SP authority responsibilities discussed above. It will be of particular importance to maintain and utilize our capacity (e.g. staff expertise and local knowledge).

To ensure the overall success of the initiative, there should also be continued investment in source water assessment, in the Ontario Drinking Water Stewardship Program, and to assist municipalities to integrate source protection into their business. The extent to which the Ministry intends for funds raised by municipal utilities under the *Sustainable Water and Sewage Systems Act* to be used for source protection needs to be communicated early in the planning phase.

### *Preparing for Planning*

The groundwork for the planning phase needs to be put into place soon. We encourage the Ontario government to approve the amended regulation by the summer of 2010, and we encourage the Ministry to finalize the risk management measures catalogues at the same time. In the interim, additional information about the catalogues should be provided to the SP committees and conservation authority staff. These actions by the Ministry will ensure that the SP committees can proceed into the planning phase with confidence and in a timely manner. Work on the source protection plan for the Cataraqui must begin by fall 2010 in order for us to meet the August 2012 due date.

The policy tools, guidance materials, and implementation funding that will be made available to the SP committees and SP authorities will influence the resulting source protection plans. Thank you for the opportunity to provide comments; we trust that the above will be of assistance. If you have any questions, or require additional information, please contact our Source Protection Planner Christine Woods at (613) 546-4228 ext. 235, or via e-mail at [woods@cataraquiregion.on.ca](mailto:woods@cataraquiregion.on.ca).

Yours truly,

(original signed by)

Robert Morrison  
Chair, Cataraqui Source Protection Authority

c.c. John C. Williamson, Chair, Cataraqui Source Protection Committee  
Clare Mitchell, Conservation Ontario

Ministry of  
the Environment

Source Protection Programs  
Branch

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Direction des programmes de protection  
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Log: ENV1174IT-2010-88

March 29, 2010

Mr. John C. Williamson  
Chair, Cataraqui Source Protection Committee  
4145 Holmes Road  
R.R. #1  
Inverary ON K0H 1X0

Dear Mr. Williamson:

I am responding to your March 12, 2010 letter regarding your request to use an alternate method under Rule 15.1 of the Director's Technical Rules (Rules) for the completion of the assessment report under the Clean Water Act (CWA) for the Cataraqui source protection area.

Variation from Rule 16(10) - Livestock Density

Your proposal is to use an alternate methodology to determine livestock density, per Rule 15.1. In the absence of actual animal numbers, you propose to use Census of Canada livestock data within the Cataraqui area. The Census data of actual animal numbers would then be converted to nutrient units for use in the calculations.

We concur with your opinion that the alternate method is effective, as it uses available Census data to produce the required maps, and appropriate, as it uses data at a regional scale and results in maps that reflect the actual pattern of farming in the area. Therefore, this approach is equivalent to the method currently required by Rule 16(10).

In accordance with my authority under Rule 15.1, I hereby provide Director's approval for the use of these alternate methods for the Cataraqui source protection area.

Mr. John C. Williamson  
Page 2

Your rationale for the use of this alternative method and how it was applied must be included in your assessment report.

We thank you for your efforts in completing the technical studies in support of the assessment report under the CWA. If you have any questions or require additional information, please contact our office.

Sincerely,



Ian Smith, Director  
Source Protection Programs Branch  
Ministry of the Environment

cc: Kim Sytsma, Agricultural Representative, Cataraqui Source Protection  
Committee, via e-mail  
Jeff Peters, Agricultural Representative, Cataraqui Source Protection  
Committee, via e-mail  
Wendy Lavender, Liaison Officer, Source Protection Implementation  
Heather Malcolmson, Manager, Source Protection Planning  
Keith Willson, Manager, Source Protection Approvals

**Ministry of  
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ENV1283MC-2010-95

March 30, 2010

**To: Conservation Authority Project Managers  
Source Protection Committee Chairs**

**Re: Preparing for source protection plan policies development – Provincial versus local  
roles and responsibilities**

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At the January Chair's meeting we discussed a number of items related to the type of support Source Protection Committees (SPC), Source Protection Authorities (SPA), and/or municipalities would need for the source protection planning stage of the process – policy development.

As Chairs and Project Managers you may recall we asked for your feedback regarding three key items:

- Prioritization of products/tools from the Ministry of the Environment that are needed to help SPCs prepare for policy development;
- Identification of what SPAs/SPC chairs can be doing locally to prepare committees/municipalities for policy development; and
- Brainstorming of products/tools that would be required to support SPCs/municipalities during policy development.

Based on our review of the feedback provided on January 26<sup>th</sup>, 2010 at the Chair's meeting, the following priority tools and products were identified as being critical to help SPAs, SPCs, and municipalities prepare for policy development. As such my staff will endeavour to release the following after the final regulation is posted:

- Release of a draft Risk Management Measures catalogue
- Plain language materials for municipal authorities (ex Planning Act 101)
- Support materials for SPCs once regulation is final – guidance materials, training on final regulation, support materials/guidance on aboriginal and treaty rights as they relate to policy development

The second item that we requested feedback on was what SPC Chairs and SPAs could be doing locally to help their committees develop the necessary capacity to prepare for source protection plan development. While support from the Ministry will be important there are a number of actions identified that SPCs should be engaging in locally that will also be critical in preparing for the policy development process. Based on your feedback these include:

- Establish "planning" working groups to support SPCs during policy development – models will vary but these may include representation from SPCs, municipalities (a major role for municipal planning department staff was articulated), and CAs

- SPCs should review and learn about their local Official Plans (OPs) in order to better understand the current protection afforded by OPs, and the planning approaches available to them for inclusion in SPPs, so as to identify where gaps in OPs may require filling to protect drinking water supplies
- SPCs/Chairs/SPAs should establish stronger communication and collaboration between key stakeholders to promote learning and further local input to the source protection plan. These include building stronger linkages to promote dialogue and learning between:
  - *SPC members*- SPC members can learn a great deal from each to help inform the policy development process.
  - *SPCs and local municipalities*- it is important to have municipal support and engagement throughout the planning process (council and staff level).
  - *SPCs and members from the local community/external stakeholders* - experts in areas that may be affected by policy development could be invited to the SPC meetings as this would help with addressing the knowledge gaps that exist at the SPC table. SPCs may want to consider developing and sharing contact lists for sector experts that can be drawn upon during policy development.
  - *Neighbouring Source Protection Areas/Source Protection Regions* – building linkages will help facilitate dialogue and, where appropriate, consistency during the development of source protection plans policy.

The third item for discussion was brainstorming on products and tools that would help support SPCs and municipalities during policy development. Due to time constraints we did not get much feedback from this discussion so we will continue to develop proposed strategies and processes to help SPCs while they are drafting source protection plans and will engage with Chairs/PMs again on this topic at the next Chair's meeting in May.

We will continue to do our best to provide support and guidance to you our program partners as you move into the source protection planning phase of the process and will continue to strategize on how best to provide this support. Based upon our discussions it is apparent to me that "one size does not fit all". As you are aware, SPCs need to start thinking locally about getting ready to write policies. Currently the Ministry is the one that is largely providing support to policy development but as indicated at the Chairs Meeting in January there will be a shift to more local responsibilities/independence. Therefore, I strongly encourage you to undertake a discussion with your SPC and your neighbouring SPCs with regards to your situation and the possible approaches. At this time it is important that you take a proactive role and approach in helping your committees get ready for policy development at the local level. It is clear that a foundation for our collective success in policy development will be through combined and collaborative efforts.

Sincerely,



Ian Smith, Director  
Source Protection Programs Branch  
Ministry of the Environment

c: Don Pearson/Charley Worte, Conservation Ontario  
Dan Marinigh, Director, Integration Branch, Ministry of Natural Resources  
Ken Petersen, Director (A), Provincial Policy and Planning Branch, Municipal Affairs and Housing

# THE CATARAQUI SOURCE PROTECTION COMMITTEE

## REPORT

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To: Cataraqui Source Protection Committee

File: SPP 4-0, 6

From: Lauren Forrester, Water Quality Specialist  
Rob McRae, Project Manager, Source Water Protection

Date: March 31, 2010

### **RE: DRAFT ASSESSMENT REPORT**

This report seeks direction from the Cataraqui Source Protection Committee (“SP Committee”) to publish a Draft Assessment Report: Cataraqui Source Protection Area for public review and comment. Internal Draft 6 has now been circulated for review by the SP Committee in advance of the April meeting.

### **Background**

The revised date for submitting a proposed assessment report for the Cataraqui Source Protection Area to the Ontario Ministry of the Environment (MOE) is October 12, 2010. Resolution CSPC 02-10 directs CRCA staff to work with the Assessment Report Subcommittee toward the publication of a draft report in April 2010.

### **Discussion**

#### *Improvement Process*

- Staff began improving the Draft Assessment Report in January 2010. A meeting with the MOE added to our list of ‘gaps’ in the document relative to minimum content requirements of the Province. All of those gaps have been addressed in Internal Draft 6.
- The Cataraqui Source Protection Committee received updated technical findings in January, February, and March that were subsequently reflected in the document.
- The Assessment Report Subcommittee met with CRCA staff on March 22<sup>nd</sup>. Wendy Lavender (MOE) participated in the meeting to provide the perspective of the Ministry. All of the items discussed at that meeting have been addressed in Internal Draft 6, with the exception of the delineation of highly vulnerable aquifers (see below).
- A working draft (Internal Draft 5) was circulated to the Subcommittee on March 25<sup>th</sup>; Volume I of that draft was posted on the Internet for review by all members. Positive feedback was received from Subcommittee members on or before March 30<sup>th</sup>; a number of helpful suggestions were provided. Almost all of those comments have been reflected in Internal Draft 6.
- Staff met with Wendy Lavender (MOE) on March 29<sup>th</sup> to review aspects of the document against the minimum content requirements of the Province. This meeting identified the need to add several maps to Chapter 2 of the report and to clarify some of the text. Those changes are included in Internal Draft 6.

– Next steps:

- Draft content has been circulated to the consultants who prepared technical studies to ensure that their work has been properly represented in the report. Draft content has also been shared with the adjacent source protection regions for review. Comments have been requested by April 7<sup>th</sup>. Any resulting changes will be communicated to the SP Committee on April 8<sup>th</sup>, for potential inclusion in the report.
- The MOE has indicated that part of the method that was used to delineate and score highly vulnerable aquifers (Dillon Consulting Ltd., 2008) may fall outside of the Technical Rules: Assessment Report (MOE, 2009). Staff are working to resolve this question.
- Responses to Letter # 2 are now being received from landowners. All responses have been requested by April 7<sup>th</sup>. Any resulting changes to the threat inventory (enumeration) will be communicated to the SP Committee on April 8<sup>th</sup>, for potential inclusion in the report.
- Staff will continue to review all three volumes of the report for minor items such as typographical errors, proper formatting and referencing, and flow.

### *Key Improvements*

A summary of the key improvements to the Draft Assessment Report is provided in Attachment # 1.

Staff will seek the endorsement of the SP Committee on the following *new or updated* items at the April meeting as part of a decision on the Draft Assessment Report:

- 1) The updated evaluation of the ambient surface water and groundwater quality (see Maps 2-7 and 2-8);
- 2) The method used to delineate highly vulnerable aquifers (see Map 5-3);
- 3) The use of Technical Rule 44(1) method to delineate significant groundwater recharge areas (see Maps 5-8 and 5-11);
- 4) Revisions to Map 6-58 (Great Lakes Intake Protection Zone 3) reflecting the addition of inland areas to the combined IPZ 3;
- 5) Updates to the threat inventory (enumeration) which result from landowner contact; and
- 6) Research by the CRCA on sites and areas where conditions may be present.

### *Posting and Consultation*

Pending the decision of the SP Committee, the document will be posted on Thursday April 15<sup>th</sup> for 35 days of public review. As prescribed in detail by O. Reg. 287/07, this task involves posting material on the Internet, placing newspaper advertisements, distributing copies, and notifying municipalities, landowners with significant drinking water threats, and others.

The proposed comment period will close on Thursday May 20<sup>th</sup>. As discussed at the March meeting, three public open houses will be held during the period. The proposed dates, times, and locations are follows:

<b>Date</b>	<b>Time</b>	<b>Location</b>	<b>Comments</b>
Thursday May 6 <sup>th</sup>	5:00 – 8:00 PM	Brockville	
Thursday May 13 <sup>th</sup>	5:00 – 8:00 PM	Kingston (Little Cataraqui Creek Conservation Area Outdoor Centre)	Prior to the SP Committee meeting, in the West Hall
Monday May 17 <sup>th</sup>	5:00 – 8:00 PM	Greater Napanee	To be co-hosted with the Quinte Source Protection Committee

The timing of the Napanee event is intended to follow the posting of the draft assessment report for the Quinte Source Protection Region, which is currently scheduled for Thursday May 13<sup>th</sup>.

### **Conclusions**

The delay in publishing the Draft Assessment Report has allowed the SP Committee and CRCA staff team to make substantial improvements to the document. While some areas of research are ongoing, Internal Draft 6 is a ‘complete’ document when considered against the minimum content requirements of the MOE. Posting the document in April will ensure that the overall (October) due date is achieved, and it will create a forum for dialogue with local communities. Hosting three public open houses exceeds the regulatory requirements but will ensure that people in different parts of the Cataraqui area are able to participate.

### **Recommendation**

WHEREAS the Ontario *Clean Water Act, 2006* and its regulations and rules prescribe requirements for the development and approval of assessment reports;

AND WHEREAS a draft report for the Cataraqui Source Protection Area has been developed in accordance with those requirements;

THEREFORE BE IT RESOLVED THAT the Cataraqui Source Protection Committee approves the publication of a Draft Assessment Report: Cataraqui Source Protection Area for public review and comment, as outlined in the presentation by CRCA staff on April 8, 2010.

We look forward to discussing the Draft Assessment Report with the SP Committee at the April meeting.

Respectfully submitted,

(original signed by)

Lauren Forrester M.Sc.  
Water Quality Specialist

(original signed by)

Rob McRae MCIP, RPP  
Project Manager, Source Water Protection

Attachment # 1: Summary of Key Improvements to the Draft Assessment Report – Winter 2010

## Summary of Key Improvements to the Draft Assessment Report – Winter 2010

### *Status of Improvements Discussed in December 2009*

The table below describes the status of each of the ‘gaps’ that were identified in December relative to the Internal Draft 6. Only those items that are marked with an asterisk (\*) are required by the Ontario Ministry of the Environment (MOE) to be addressed in the initial assessment report.

<b>Topic</b>	<b>Component</b>	<b>Status in Internal Draft 6</b>
Updated findings for Lansdowne	Wellhead Protection Area Study (Phase ‘3’)*	Completed.
	Tier 2 Water Budget*	
Issue evaluation	More detailed plans for delineating issue contributing areas*	Completed.
Threat inventory	Conditioning salt (proposed local drinking water threat type)	Deferred. The ongoing work is acknowledged in the Draft.
	Conditions	Initial research has been completed. The ongoing work is acknowledged in the Draft.
	Great Lakes Intake Protection Zone 3 (threats)	Deferred. The ongoing work is acknowledged in the Draft.
Additional maps	Corridors	Deferred. Supporting information is included and the ongoing work is acknowledged in the Draft.
	Livestock density*	Completed. Permission from the MOE for the alternate method used is anticipated shortly.
	Managed lands*	Completed.
Tier 3 Water Budget findings	Lansdowne	Will not proceed.
	Sydenham	Deferred. The ongoing work is acknowledged in the Draft.

### *Status of Other Key Improvements*

- A “how to read this report” page has been added to help the reader understand the intentions and function of the report.
- A table guiding the reader to specific sections relevant to each system, has been added to enhance the use of the document.
- In all chapters, explanatory text was added to provide the reader with a better understanding of the assessment process and its implications.
- In all chapters, the role that peer review has played in shaping the findings was acknowledged.

- In Chapter 2, several new maps have been added to show the bedrock geology, topography, physiography, surficial geology, and water control structures of the Cataraqui area.
- In Chapter 2, an updated evaluation of the ambient surface water and groundwater quality was completed. Grades were assigned based on subwatersheds (surface water) and bedrock units (groundwater) and shown on two new maps (see Maps 2-7 and 2-8). Also, a new component of Appendix 'C' was added to outline the methods used.
- In Chapter 5, the Technical Rule 44(1) method was selected to delineate significant groundwater recharge areas (see Maps 5-8 and 5-11). This will be discussed at the April meeting. The Ontario Ministry of Natural Resources indicated that one of the two prescribed methods (Technical Rule 44(1) or Technical Rule 44(2)) must be used. In addition, a new Map 5-10 was prepared. It is an overlay of the significant groundwater recharge findings for both Technical Rules 44(1) and 44(2), which staff propose to include for information purposes.
- In Chapters 5 and 6, the implication of vulnerable areas extending from Picton and Westport into the Cataraqui area has been clarified, and the related content has been scoped.
- In Chapters 5 and 6, the most recent issue evaluation and threat inventory findings have been included.
- In Chapter 6, the inland extent of the combined Intake Protection Zone 3 (IPZ 3) around the eight intakes on Lake Ontario and the St. Lawrence River has been added in draft. The Technical Rules call for IPZ 3 to extend inland along river systems; due to an oversight this component of the intake protection zone had not yet been shown (see Map 5-68).
- The issues evaluation and threats inventory findings have been summarized in Chapter 9.

# THE CATARAQUI SOURCE PROTECTION COMMITTEE

## REPORT

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To: Cataraqui Source Protection Committee

Date: March 31, 2010

From: Christine Woods, Source Protection Planner

File: SPP8

### **RE: OVERVIEW OF POLICY EVALUATION CRITERIA**

Staff have prepared an overview of research on policy evaluation criteria for the information of the Cataraqui Source Protection Committee (SP Committee) to aid its discussion and selection of criteria.

#### 1. Background

In the *Terms of Reference for the Preparation of an Assessment Report and a Source Protection Plan: Cataraqui Source Protection Area* (June 30, 2008) indicates that the SP Committee will strive to include policies in the Cataraqui Source Protection Plan that are appropriate, effective, and economical for local communities. Further, each draft policy will be carefully evaluated using a set of criteria that will be developed by the SP Committee in accordance with provincial guidelines.

Since provincial guidelines on evaluation criteria have not been prepared to date, staff have performed a detailed search of journal articles, books, and case studies on decision-making methods and evaluation criteria to prepare this report.

#### 2. Decision-Making Process

The generic decision-making process for any problem involves numerous steps, as illustrated in the following chart (adapted from Baker et al., 2001).



A description of how each of these steps is or will be fulfilled in the source protection planning process is included in Attachment # 1. The main focus of this report and of our discussions at the April SP Committee meeting is Step 4: develop evaluation criteria.

### 3. General Information on Criteria

Evaluation criteria are required in order to compare, measure and select among policy alternatives. The criteria are not to be used in lieu of critical thinking and thorough discussion, but rather as a guide to ensure that each draft policy is considered in a similar objective manner. According to Baker et al. (2002), criteria should be:

- able to compare the alternatives and their anticipated performances,
- complete to include all goals or targets,
- meaningful to the decision-makers' understanding of the implications of the alternatives,
- non-redundant, and
- few in number to keep the process manageable (no more than 12).

Criteria are either quantitative or qualitative. Quantitative criteria can be measured (e.g. to what extent does this action maintain this specific concentration of a contaminant in the source water?). Qualitative criteria are subjective and may be interpreted differently based on the perspective of each person (e.g. to what extent does this action increase public awareness of the need for groundwater protection?). When defining criteria, the SP Committee should consider groups that may become involved in the future and opposing interests.

Staff recommend that the SP Committee develop qualitative criteria to evaluate draft policy options since a variety of stakeholders will be using the criteria at the roundtable. Quantitative criteria can be used to evaluate the effectiveness of the policies following their implementation.

### 4. Examples of Criteria

As mentioned previously, the SP Committee indicated that source protection policies should be appropriate, effective, and economical for local communities. The following examples of criteria under each of these categories are provided to initiate discussion.

#### *Appropriateness criteria*

<b>Criterion</b>	<b>Consideration</b>	<b>Measure</b>
Ease of implementation	The designated implementing body will have the financial and administrative capacity to implement the policy	Good – easily implemented, few problems Fair – somewhat easily to implement, few problems Poor – not easily implemented, many problems
Reliability	The policy will manage ongoing threat-related activities or address potential future threats to sources of drinking water	Good – very reliable, few problems Fair – somewhat reliable, some problems Poor – not reliable, many problems
Community acceptance	The potential for the policy to be accepted by the community	High – potential for high acceptance, minimal complaints in community Moderate – potential for acceptance, some complaints in community Low – potential for minimal or no acceptance, many complaints in community

*Effectiveness criteria*

The forthcoming risk management measures catalogues that are forthcoming from the Ontario Ministry of the Environment may link to the effectiveness criteria. We understand that the catalogues will suggest which policy approaches may be most effective in addressing types of drinking water issues and threats. The catalogues will be available as a resource for SP committees but will not bind their decisions.

<b>Criterion</b>	<b>Consideration</b>	<b>Measure</b>
Adequacy	The policy will adequately manage site specific activities or land uses that are or could be threats	Good – very adequate, few problems Fair – somewhat adequate, some problems Poor – not adequate, many problems
Duration of process	The policy will address the threat in a reasonable amount of time	Long – relatively long period of time required to address threat (> 5 years) Intermediate – moderate period of time required to address threat (2-5 years) Short – relatively short period of time required to address threat (< 1 year)
Social awareness	The policy will raise social awareness and participation	High – potential for significant social awareness and participation Moderate – potential for some social awareness and participation Low – minimal or no potential for social awareness and participation
Improvement in water quality	The policy will maintain or improve a specified level of water quality	High – potential to substantially improve source water quality Moderate – potential to improve source water quality Low – potential to maintain source water quality
Monitoring requirements	The level of monitoring required to demonstrate the effectiveness of the policy	High – the objectives need to be supported by extensive monitoring Moderate – the objectives need to be supported by moderate monitoring Low – the objectives need to be supported by limited monitoring

*Economic criteria*

<b>Criterion</b>	<b>Consideration</b>	<b>Measure</b>
Net costs	Direct and indirect monetary costs for landowner(s), municipality, other agencies involved	High – relatively high costs (> \$100,000) Moderate – relatively moderate costs (\$10,000 - \$99,999) Low – relatively low costs (\$0- \$10,000)
Net benefits	Direct and indirect financial benefits for landowner(s), municipality, other agencies involved (e.g. reductions in the use of materials such as road salt)	High – relatively high benefits Moderate – relatively moderate benefits Low – relatively low benefits

5. Criteria Weights

Criteria can be assigned weights to reflect their relative importance. The weightings may range from equal importance of all criteria, to a ranking of most to least important, to a relative weighting of all criteria. They can be expressed qualitatively, quantitatively or a mixture of both.

The following table provides an example of criteria for a riparian revegetation program and the relative weight assigned to each criterion.

<b>Criteria</b>	<b>Relative Weight</b>
Erosion control	150%
Preserving biodiversity	50%
Maintain water quality	100%
Education	50%
Maintenance of cultural values	50%

We note that criteria weightings are not appropriate for all situations, as may be the case for source protection policies.

## Conclusion

CRCA staff recommend that the SP Committee develop draft policy evaluation criteria at its May 13<sup>th</sup> meeting that can be used evaluate the draft policies developed for two ‘test’ roundtables this coming June. It is proposed that one test roundtable would be held for groundwater, and another would be held for surface water. This experience will provide the SP Committee and other stakeholders an opportunity to consider which aspects of the drinking water source protection initiative are important to them, and to determine if the criteria need to be revised.

The evaluation criteria, as well as draft policy, may also need to be revised following our review of the water quality risk management measures catalogue, which the Province anticipates will be released in draft this May.

Respectfully submitted,

Christine Woods MCIP, RPP  
Source Protection Planner

(w/attach)

## Attachment 1: Decision-making Process



Step 1 - The problem statement, or purpose, is taken from the Clean Water Act: “to protect existing and future drinking water sources in the Cataraqui Source Protection Area”.

Step 2 - The SP Committee has indicated that source protection policies should be appropriate, effective and economical for local communities. The forthcoming amendments to O. Reg. 287/07 will set parameters for the content of the source protection plans. A proposed source protection plan must be submitted to the Ontario Minister of the Environment by August 2012.

Step 3 - The “goals” of the Cataraqui source protection plan are established in the proposed amendment to O. Reg. 287/07:

1. To protect existing and future drinking water sources in the source protection area.
2. To ensure that for every area ... where an activity is a significant drinking water threat ... the activity ceases to be a significant drinking water threat.
3. To ensure that for every area ... where an activity would be a significant drinking water threat, the activity never becomes a significant drinking water threat.
4. To ensure that for every area ... where a condition that results from a past activity is a significant drinking water threat, the condition ceases to be a significant drinking water threat (if applicable).
5. To achieve the Great Lakes target for the source protection area (if applicable).

In its letter to the Ontario Ministry of the Environment (March 12, 2010), the SP Committee commented that the objectives stated in the draft regulation, particularly “to protect existing and future drinking water sources in the source protection area”, are in fact high level goals that should be achieved through specific and measurable objectives set by each SP Committee as part of a locally-led process.

The SP Committee may wish to establish measurable objectives (perhaps called ‘targets’ to eliminate confusion with the regulatory objectives) for the source protection plan before it defines criteria to evaluate policy. Alternatively, the working groups could establish targets for each vulnerable area as they work through the planning process. These targets should be specific, measurable, achievable, realistic and timely (SMART).

Step 4 - The SP Committee will develop criteria to evaluate draft policy alternatives.

Step 5 - The working groups will identify draft policy alternatives, or options, for each vulnerable area as they work through the planning process. These options will be evaluated using the criteria developed by the SP Committee.

Step 6 - There are numerous available decision-making tools and methods that can be used to compare options and to rank preferences. The method(s) to be used will be chosen at a later date. Examples include pros and cons analysis, and scoring.

Step 7 - The working groups and the participants at the policy roundtables will evaluate the policy options against the criteria.

Step 8 - Finally, the working groups and SP Committee will verify that the preferred policy options are appropriate, effective and economical, and that they will help to protect existing and future drinking water sources.

## **Reference**

Baker, D., D. Bridges, R. Hunter, G. Johnson, J. Krupa, J. Murphy and K. Sorenson. 2002. *Guidebook to Decision-Making Methods*, WSRC-IM-2002-00002, Department of Energy, USA. Accessed March 9, 2010 from:  
[http://emi-web.inel.gov/Nissmg/Guidebook\\_2002.pdf](http://emi-web.inel.gov/Nissmg/Guidebook_2002.pdf) .