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SOURCE PROTECTION COMMITTEE MEETING #1/10  
Monday, January 18, 2010**

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# DRINKING WATER SOURCE PROTECTION

ACT FOR CLEAN WATER



## MEETING OF THE SOURCE PROTECTION COMMITTEE #1/10

January 18, 2010

The Source Protection Committee Meeting #1/10, was held at Black Creek Pioneer Village, North Theatre, on Monday, January 18, 2010. The Chair Susan Self, called the meeting to order at 10:03 a.m..

### PRESENT

Andrea Bourrie	Member
Doug Brown	Member
Wendy Burgess	Member
Michael D'Andrea	Member
Brian Denney	Liaison, Source Protection Authority
Louise Foster	Member
Michael Garrett	Member
Jessica Ginsburg	Member
Bob Goodings	Member
Irv Harrell	Member
David Kentner	Member
Laura McDowell	Member
Lynne Moore	Member
Peter Orphanos	Member
John Presta	Member
Fred Ruf	Member
Mark Schiller	Member
Norine Schofield	Liaison, Medical Officer of Health
Susan Self	Chair
Howard Shapiro	Member
John Westlake	Liaison, Ministry of the Environment

### STAFF

Rodney Bouchard	Water Studies, Peel Region
David Burnett	Planning & Development, TRCA
Don Ford	Technical Lead, TRSPA
Valérie Dubail	Admin. Asst., CTC Source Water Protection
Adele Freeman	Director, Watershed Management, TRCA
John Kinhead	Project Lead, Manager, CVSPA
Kerry Mulchansingh	Technical Lead, CVSPA
Nicholas Schulz	Communications & Consultations, CTC SWP
Gayle Soo Chan	Technical Lead, CLOSPA
Beverley Thorpe	Project Manager, CTC Source Water Protection

**GUEST**

Sudhakar Kurli	Source Water Protection Coordinator, Region of Halton
Scott Lister	Conservation Ontario
Don McIver	Director Environment Canada, Adaptation & Impact Research
Kevin McMahon	Director of WATERLIFE
Dagna Pielaszkiwicz	UNAC

**PROXY**

Bob Burnside	Member
Juli Abouchar	Member

**ABSENT**

Heather Laidlaw	Member
Peter Miasek	Member

**RES.#A144/10 - MINUTES**

Moved by:	David Kentner
Seconded by:	Peter Orphanos

**THAT the Minutes of Meeting #8/09, held on Tuesday, November 24,2009, be approved. CARRIED**

**CORRESPONDENCE**

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- (a) Letter dated December 8, 2009 to SPC Chairs and Program Managers from Keith Wilson, Manager, Source Protection, MOE, regarding Updated Assessment Report Checklist
- (b) Email dated December 14, 2009 to Beverley Thorpe, Project Manager, CTC Source Protection Region, from Beth Williston, Manager, Environmental Assessment Planning, Planning and Development, regarding Response to the Proposed Terms of Reference
- (c) Letter dated January 6, 2010 to Susan Self, Chair, CTC Source Protection Region, from Ian Smith, Director, Source Protection Programs Branch, MOE, regarding Lake Ontario Collaborative (LOC) Technical Studies - Pathogen Monitoring Work

**RES.#A145/10 - CORRESPONDENCE**

Moved by:	Irv Harrell
Seconded by:	Doug Brown

**THAT the above-noted correspondence (a) - (c) be received. CARRIED**

## CORRESPONDENCE A

14-075

<b>Ministry of the Environment</b> Source Protection Programs Branch 8 <sup>th</sup> Floor 2 St. Clair Ave. West Toronto ON M4V 1L5	<b>Ministère de l'Environnement</b> Direction des programmes de protection des sources 8 <sup>e</sup> étage 2, avenue St. Clair Ouest Toronto (Ontario) M4V 1L5	
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December 8, 2009

To: Source Protection Committee Chairs  
Source Protection Project Managers

From: Keith Willson, Manager  
Source Protection Programs Branch  
Drinking Water Management Division

Re: Updated Assessment Report Checklist

I am happy to provide you with the attached updated Assessment Report Checklist. The checklist was updated to incorporate the amendments to the Director's Technical Rules (November 16, 2009).

The province has created both a track changes version of the checklist that shows the changes from the July 6, 2009 version to this updated version as well as a clean version for ease of use.

The purpose of the checklist is to provide Source Protection Authorities (SPAs) and Source Protection Committees (SPCs) with a consolidated list of the legislative requirements for the contents of and consultation on assessment reports. The legislative requirements are detailed in the Clean Water Act, 2006 (CWA), Ontario Regulation 287/07 (General Regulation) and the *Technical Rules: Assessment Report* (November 16, 2009).

While the checklist provides clarification on the requirements for the assessment report it does not replace the CWA, regulation or technical rules. I strongly encourage you to use this checklist in conjunction with these aforementioned documents.

### Submission of Assessment Reports

I would like to take this opportunity to remind you of the submission details for the assessment report. The proposed assessment report is due to the Director not later than the first anniversary of the date that the notice of approval of the terms of reference is published to the Environmental Registry (section 17(2)(a), CWA) or by the Director approved due date in response to a request for an extension.

The following are details on the submission of proposed assessment reports:

Submit at least two (2) hard copies of the proposed assessment report;

Submit an electronic copy of the proposed assessment report and any supporting documentation on DVD or memory stick;

Submit the assessment report checklist or a reformatted version of the assessment report checklist with the last column of checklist titled "PAGE/MAP NO. IN ASSESSMENT REPORT" populated in full;

Submit documentation to provide proof of the consultation undertaken on the assessment report, as per the guidance in the checklist; and

Any data requirements as requested by the Director.

Submission of the proposed assessment report and above supporting documentation should be sent to the Director at the following address:

Ian Smith  
Director, Source Protection Programs Branch  
Drinking Water Management Division  
Ministry of the Environment  
2 St. Clair Ave West, 8<sup>th</sup> floor  
Toronto, Ontario  
M4V 1L5

Please note that it is essential that the floor number (i.e., 8<sup>th</sup> floor) be included in any mail or document shipping addresses or the package may not be delivered appropriately.

If you have questions or comments on the checklist or about the development or submission of the assessment report, please contact your Liaison Officer.

In the very near future we will be communicating the three part data collection strategy for assessment reports.

Part 1: Population of Executive Statistical Summary of Core Statistics

Part 2: Detailed Geospatial information to be submitted as part of the Assessment Report Geodatabase at CAMaps

Part 3: Addition of other data as needed to support the source protection program.

To support the development of the source protection program data will need to be collected as assessment reports are being developed and once assessment reports are approved by the Director. More details will follow.

Sincerely,

*Original signed by*

Keith Willson  
Manager, Source Protection Approvals Section  
Source Protection Programs Branch

cc: Don Pearson, Conservation Ontario  
Dan Marinigh, Ministry of Natural Resources  
Mike Garraway, Ministry of Natural Resources  
Ian Smith, Ministry of the Environment  
Andy Gemza, Ministry of the Environment  
Melanie Ward, Ministry of the Environment  
Heather Malcolmson, Ministry of the Environment  
Katie Fairman, Ministry of the Environment  
Liaison Officers, Ministry of the Environment

CORRESPONDENCE B



December 14, 2009

CFN 42093

**BY MAIL AND EMAIL ([Jeffrey.dea@ontario.ca](mailto:Jeffrey.dea@ontario.ca))**

D. Jeffrey Dea, Project Officer  
Ministry of the Environment  
Environmental Assessment and Approvals Branch  
2 St. Clair Avenue West, Floor 12A  
Toronto, ON M4V 1L5

Dear Mr. Dea:

**Re: Response to the Proposed Terms of Reference  
Upper York Sanitary Solutions; Individual Environmental Assessment  
Humber and Rouge Watersheds; Towns and Communities of Aurora, Newmarket,  
Holland Landing, Queensville, and Sharon; Regional Municipality of York**

Toronto and Region Conservation Authority (TRCA) staff received the Proposed Terms of Reference (TOR), dated November, 2009 for the above-noted Individual Environmental Assessment (IEA) application. TRCA staff has completed their review of the TOR and offer the following comment.

In previous correspondence with the Regional Municipality of York (York) on the Draft TOR, the TRCA requested that Figure 7.2 and references made to the thermal classifications of Rouge River Tributaries within the accompanying text on page 32 be corrected to classify all tributaries as coldwater. This classification is important for evaluating the risk associated with the alternatives and for determining appropriate construction timing. In an October 30, 2009 response from York, it was explained that the proponent had relied upon 2009 Ontario Ministry of Natural Resources (MNR) 'NRVIS' data and that alternate classifications would only be considered if TRCA could provide data and/or references. Since then, the TRCA has consulted with John Pisapio, Area Biologist, of MNR who confirmed that the MNR Timing Windows Mapping, supplied to TRCA, takes precedence over MNR 'NRVIS' data as the former incorporates more comprehensive considerations such as downstream habitat and fish communities. The TRCA requests the Proposed TOR be amended to classify all tributaries of the Rouge River watershed as coldwater.

Should you have any questions, please contact me at 416-661-6600 extension 5217 or by email at [bwilliston@trca.on.ca](mailto:bwilliston@trca.on.ca).

Yours truly,

A handwritten signature in cursive script, appearing to read 'Beth Williston'.

Beth Williston, H. BA, MCIP, RPP  
Manager, Environmental Assessment Planning  
Planning and Development

JD/bw

Member of Conservation Ontario

5 Shoreham Drive, Downsview, Ontario M3N 1S4 (416) 661-6600 FAX 661-6898 [www.trca.on.ca](http://www.trca.on.ca)



**BY EMAIL**

cc: Adrian Coombs, York Region ([Adrian.coombs@york.ca](mailto:Adrian.coombs@york.ca))  
George Godin, Conestoga-Rovers and Associates ([ggodin@croworld.com](mailto:ggodin@croworld.com))  
Bev Thorpe, CTC Source Protection Manager ([bevthorpe@sympatico.ca](mailto:bevthorpe@sympatico.ca))  
Jackie Burkart, Lake Simcoe Region C.A. ([j.burkart@lsrca.on.ca](mailto:j.burkart@lsrca.on.ca))  
John Pisapio, Ministry of Natural Resources ([john.pisapio@ontario.ca](mailto:john.pisapio@ontario.ca))  
Adele Freeman, Director, Watershed Management  
Gary Bowen, Watershed Specialist  
Nancy Gaffney, Lake Ontario Shoreline Specialist  
Maria Papoulias, Natural Heritage Specialist ([m\\_papoulias@rougepark.com](mailto:m_papoulias@rougepark.com))  
Beth Williston, Manager, EA Planning  
Carolyn Woodland, Director, Planning and Development  
Dave Burnett, Oak Ridges Moraine Specialist

F:\Home\Public\Development Services\EA\Letters for Mailing\42093 Proposed TOR Response to MOE Dec 14 09.doc



## CORRESPONDENCE C

Ministry of  
the Environment

Source Protection Programs  
Branch

8<sup>th</sup> Floor  
2 St. Clair Ave. West  
Toronto ON M4V 1L5

Ministère de  
l'Environnement

Direction des programmes de protection  
des sources

8<sup>e</sup> étage  
2, avenue St. Clair Ouest  
Toronto (Ontario) M4V 1L5



Log: ENV1174IT-2009-144

January 6, 2010

Ms. Susan Self  
Chair, CTC Source Protection Committee  
C/O The Toronto and Region Conservation Authority  
5 Shoreham Drive,  
Toronto, Ontario  
M3N 1S4

Dear Ms. Self:

Thank you for your letter dated October 8, 2009 titled "Lake Ontario Collaborative (LOC) Technical Studies – Pathogen Monitoring Work", a letter that you wrote as a response to my letter dated July 17, 2009, which is a response to your letter received by me on June 16, 2009.

In your October 8, 2009 letter on behalf of the Collaborative you indicate that a number of reports would be made available for review as a basis for the Ministry making an informed decision on the request to support an advanced pathogen monitoring study. These reports were to include an analysis of the pathogen data collected up to June 2009 and a comprehensive work plan and breakdown of costs for undertaking the Lake Ontario wide pathogen sampling program. An initial work plan for the Quantitative Microbial Risk Assessment (QMRA) project that the Region of Peel is initiating and funding a through the Canadian Water Network (CWN) was also to accompany these reports.

According to our records the Ministry is not in receipt of either the reports or workplan. I understand that updates on some of this work will be provided at the planned meeting early in the New Year. As such I look forward to this meeting as an opportunity to discuss these matters, get an update from the Region of Peel and discuss the next steps for the Collaborative as it supports the work of the various SPCs around Lake Ontario.

...2

Ms. Susan Self  
Page 2

Please do not hesitate to contact Martin Keller at 416-314-0909 or martin.keller@ontario.ca, or Heather Malcolmson at 416-314-0597 or heather.malcolmson@ontario.ca if you have further questions.

Sincerely,

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

c: Heather Malcolmson, Manager, Source Protection Planning  
Martin Keller, Great Lakes Project & Planning Advisor, Source Protection Planning  
John Westlake, Liaison Officer, Source Protection Implementation  
Wendy Lavender, Liaison Officer, Source Protection Implementation  
Maevie McHugh, Liaison Officer, Source Protection Implementation  
Mark Schiller, Chair, Lake Ontario Collaborative Study, Region of Peel  
✓Lake Ontario Collaborative SPC Chairs and project managers

## SECTION I - ITEMS FOR COMMITTEE ACTION

### RES.#A146/10 -

#### **Public Consultation on the CTC Assessment Reports**

Recommendations for Stage 2 Public Consultation from the CTC SPC Communications and Outreach Working Group (COWG) and update on Stage 1 consultation.

Moved by: Andrea Bourrie  
Seconded by: Louise Foster

**THAT the SPC endorses the recommendations of the CTC SPC COWG as set out below;**

**THAT source water protection staff be directed, working with municipal and stewardship staff, to proceed with planning 9 public meetings in the last week of April and first week of May as outlined in this report;**

**THAT staff be directed to work with municipalities and adjacent Source Protection Areas to ensure that the proposed Stage 2 consultation coordinated with other activities;**

**AND FURTHER THAT the COWG reports back at SPC meeting #2/10 to be held Monday, February 22, 2010 with proposed Stage 2 details of the public consultation agenda.**

### **BACKGROUND**

At SPC Meeting #8/09 held on Tuesday, November 24, 2009 the SPC directed the COWG to report back with a proposed Stage 2 consultation plan to meet and exceed the regulatory requirements of the *Clean Water Act, 2006*. The SPC also directed staff to proceed with Stage 1 consultation to individuals in identified wellhead protection areas.

The COWG met via teleconference on December 8, 2009 to review the proposed Stage 2 consultation plan and final Stage 1 outreach materials.

### **Stage 1 Consultation**

At SPC Meeting #8/09 the committee approved the Stage 1 Consultation outreach plan and directed staff by Res.#A134/09 to draft outreach materials with minor amendments. Staff are working to move Stage 1 consultation forward with municipal contacts in the Regions of Peel, York, Halton and Durham as the vulnerability assessments for those wells are currently under peer review and will be the first brought to the Ad Hoc WG for review. Upon SPC acceptance of the vulnerability mapping, Stage 1 consultation will commence for that area.

As directed at SPC Meeting #8/09 Attachment 1 of this report is the amended letter to landowners. Staff have also added a paragraph on ODWSP funding to the letter based on verbal advise from MOE staff that additional Early Actions funding will be provided to the CTC shortly. The outreach materials package will include the following items as approved at SPC Meeting 8/09.

- The outreach materials consist of:
- the letter sent to the mailing address of the property with the name of the owner/tenant/lessee, if known;
- a map showing the specific vulnerable area and corresponding vulnerability score relevant to this property and surrounding area;

- the pamphlet which provides an overview description of vulnerable areas and scoring; and
- (optional) enclosure letter from the municipality responsible for drinking water if they choose.

### **Stage 2 Consultation**

As directed at SPC Meeting #8/09 by Res.#A134/09, staff and the COWG have developed a plan for Stage 2 consultation which exceeds the minimum public meeting requirements (one public meeting in each Source Protection Area) of the *Clean Water Act, 2006*. The following communications plan is based on the acceptance of the CTC Assessment Reports for public consultation at SPC Meeting #3/10 on March 30, 2010. Attachment 2 of this report is an anticipated schedule of key delivery dates for the development, approval and consultation of the CTC Assessment Reports.

Wherever possible Assessment Report consultation will be combined with other related local activities to encourage attendance and provide more information to the public. Consultation plans will be shared with adjacent source protection regions to determine if there are opportunities to share events, particularly where WHPAs and other vulnerable areas extend into adjacent areas.

Attachment 3 of this report is the COWG's proposed dates and locations for nine (9) Stage 2 consultation meetings in the CTC SPR. The dates are subject to venue availability, and budget considerations and site visit to confirm suitability. The COWG recommends that CTC staff be given direction to proceed with site visits to these venues and that SPC members suggest any additional potential venues by January 31, 2010. The proposed timing in Attachment 3 is based on the Assessment Reports/consultation notices being released no later than April 5, 2010. Given the number of meetings and the short time period available it likely that any delay in the release of the Assessment Reports will result in more than one meeting being held on a given evening. SPC members are asked to note the period of April 26 – May 6 (Monday through Thursday evenings) as the Stage 2 consultation period in their calendars.

### **Meeting Format**

The COWG reviewed and discussed a number of possible formats for Stage 2 consultation of the Assessment Reports. It was agreed that the format should have some universal themes in each of the public meetings but that staff should also tailor each meeting to suit the anticipated audience. Specific formats were identified for public meetings focused on groundwater and Lake Ontario systems.

### **Meetings Adjacent to Groundwater Systems**

Public meetings for groundwater systems will target persons and businesses within vulnerable areas for each of the CTC drinking water supplies. The proposed meetings are distributed across the Source Protection Region with the intention of making it easiest for landowners within each of the Wellhead Protection Areas to attend.

The COWG recommends that the public meetings for groundwater systems be a modified version of the format used during the Draft Proposed Terms of Reference consultation period. This format will include a shorter and more focused formal presentation followed by a Question and Answer period. Staff will arrange for a number of poster presentations highlighting the Assessment Report findings, the Stewardship Program, municipal water programs and any

other stakeholder or related materials that are approved by the COWG. A draft outline for a public meeting of a groundwater system is:

- 6:00: - 6:45 PM Meet and Greet with SPC members and technical staff
- 6:45 – 7:15 PM: Formal Presentation
  - Brief overview presentation on the Assessment Report and Source Protection Plans from CTC SPC Chair or representative
  - Brief presentation from the municipal staff responsible for the water system identifying local vulnerable areas
- 7:15 – 7:30 PM: Question and Answer period
- 7:30 – 8:30 PM: Open period with one-to-one discussion with SPC members and technical staff

### **Meetings Adjacent to Lake Ontario Systems**

The full assessment of Lake Ontario drinking water threats will not be completed in time for inclusion in the initial Assessment Reports. There are no significant drinking water threats identified for Lake Ontario systems within the Intake Protection Zones 1 and 2. The COWG recommends that public meetings for Lake Ontario systems have a different target audience and format than public meetings for groundwater systems. The COWG recommends that two meetings be held with respect to Lake Ontario systems, one in Toronto and one in Durham, to allow the SPC an opportunity to discuss ongoing work of the Lake Ontario Collaborative on Intake Protection Zones 3 . A Lake Ontario system meeting is not proposed for the CVSPA as four public meetings are currently proposed for that Source Protection Area where a greater focus on the groundwater systems is considered a greater priority. Staff will make appropriate efforts to promote public meeting for Lake Ontario systems to individuals in the CVSPA.

The COWG recommends that staff be directed to develop public meetings for Lake Ontario systems similar to the successful event hosted by the TRCA on December 3, 2009 at the Gladstone Hotel in Toronto. The proposed format for these evenings is:

- Keynote speaker on related water issues (i.e. nearshore vulnerability)
- Brief update presentation from Lake Ontario related projects with supporting presentations from researchers undertaking studies in Lake Ontario
- Presentation of completed Intake Protection Zone 1 & 2 work as well as an update on Intake Protection Zone 3 work underway
- Question and Answer period
- Open house style one-on-one discussions

It is the intention that this format will give stakeholder groups from across the CTC an opportunity to become familiar with the work of the Lake Ontario Collaborative and in turn share this work with their members and partners.

### **Member Participation**

The COWG recommends that at each public consultation meeting the SPC municipal representative for the drinking water systems of focus be in attendance to provide a bridge between the work of the municipalities and the Source Protection Committee. Non-municipal SPC representatives are encouraged to attend public meetings which are of particular importance to the stakeholders they represent. It is recommended that SPC members identify the meetings of interest for them and advise the Chair and Project Manager of their preference so we can try to provide consistent SPC representation at each public meeting.

### **NEXT STEPS**

Staff will proceed with site inspection of meeting venues and secure tentative availability during the proposed dates identified in Attachment 3.

The deadline for public comment is anticipated to be set as **May 14, 2010**. This date will provide more than the minimum 35 day notice period set out in the regulation. Staff will review and consolidate comments and prepare revised AR for the SPC to review and approve at SPC Meeting #5/10 to be held on June 1, 2010.

The COWG will report back at at SPC Meeting #2/10 on February 22, 2010 with a proposed agenda and specific dates and locations for the Assessment Report consultations.

**Report prepared by: Nicholas Schulz, extension 5392**

**Emails: nschulz@trca.on.ca**

**For Information contact: Beverley Thorpe, extension 5577**

**Emails: bthorpe@trca.on.ca**

**Date: December 14, 2009**

#### **Attachments:**

1. Letter to Property Owner/Tenant/Lessee in WHPA
2. Schedule of Assessment Report development, approval, consultation and submission
3. Proposed Stage 2 consultation venues and details to be provided separately

**Note:** The proposed timing in Attachment 3 is based on the Assessment Reports/consultation notices being released no later than April 5, 2010. Given the number of meetings and the short time period it is possible that two meetings will need to run on the same evening. SPC members are asked to note the period of April 26 – May 6 (Monday through Thursday) as the Stage 2 consultation period in their calendars.

**Attachment 1: Letter to Property Owner/Tenant/Lessee in WHPA**

PRIVATE AND CONFIDENTIAL

PRIVATE AND CONFIDENTIAL

Date

«Name»

«Street»

«CityTown», «Prov»

«Postal»

Dear «Name»,

You are receiving this letter because your property, located at **XXXXX XXXX**, is within the “Wellhead Protection Area” of *Name of well* located at *insert well location*. *Name of well* is managed by the *name of municipality* and supplies drinking water to residents in your community.

The enclosed map and pamphlet identifies the location of your property within the Wellhead Protection Area, explains what a Wellhead Protection Area is, how it is mapped, and what activities are defined as drinking water threats. Because threat activities that occur within a Wellhead Protection Area have a greater potential to impact the drinking water supply, it is important that residents and municipalities work together to identify and remove potential threats and contamination from these sources. Oil/gas tank storage, septic systems, manure or chemical storage are just a few of those activities that have the potential to pollute drinking water supplies. Work is currently underway to identify where threat activities occur within Wellhead Protection Areas using a number of different methods. Local knowledge is the best tool available to validate these methods and we would appreciate your co-operation in helping us to validate information relating to past, present or planned land use activities on your property or in the vicinity of *Name of Well*. We invite you to share any personal knowledge of threat activities in your area with us through either the *Name of Municipality* or conservation authority staff person below.

***In keeping with provincial privacy legislation, information about your property will not be communicated to the public in a manner that will identify any personal information.***

The CTC Source Protection Committee is responsible for working with Conservation Authorities and *name of municipality* to ensure completion of the Assessment Reports and develop policies that are intended to help protect the sources of municipal drinking water. The CTC Source Protection Committee includes members acting as representatives from municipalities, industry, farming, health and the environment sectors.

At this time the CTC Source Protection Committee is reaching out directly to you and other residents, businesses and landowners within mapped vulnerable areas to explain:

- what the risk and threat assessment process means to you
- how you can comment on and provide information for the technical studies being completed
- how you can get involved in protecting drinking water supplies for *Name of Well*
- what activities may threaten drinking water in *name of municipality*

### **What is Source Water Protection and what does it mean to you?**

Source Water Protection starts by conducting scientific studies which provides the CTC Source Protection Committee with an understanding of how water moves within the watershed. This technical work is currently being compiled into *Draft Proposed Assessment Reports* which will be made available in spring 2010. At that time you will have the opportunity to provide formal comments which will be considered by the CTC Source Protection Committee in finalizing this work. Following its completion, the *Proposed Assessment Report* must be submitted for approval to the Ministry of the Environment by August 17, 2010.

Using the information from the Assessment Reports, the CTC Source Protection Committee will develop *Proposed Source Protection Plans* containing policies to, at a minimum, reduce or prevent all significant drinking water threats. These *Proposed Source Protection Plans* must be submitted to the Ministry of the Environment by August 20, 2012 for approval. When implemented, source protection plans could have implications for persons or businesses whose properties involve an activity or condition that has been identified as a risk to drinking water now or in the future. More information regarding drinking water threats can be found in the documents provided with this letter.

### **Get Involved**

To receive information about municipal drinking water systems in *Name of Municipality* or to provide knowledge about threats near *Name of Well* please contact municipal or source water protection staff below.

In the spring of 2010 the CTC Source Protection Committee will host public meetings to discuss the Assessment Report studies in *Name of municipality* and the surrounding area. A notice of meeting dates and locations will be sent to you, published in local newspapers and posted online at [www.ctcswp.ca](http://www.ctcswp.ca) as details are confirmed. We encourage you to join us at the meeting nearest to you.

### **Funding available**

Your proximity to a municipal water source may make you eligible for funding to reduce risks that could be present on your property. Projects such as well decommissioning, septic upgrades and pumpouts are eligible. Business owners may receive funding to undertake a confidential pollution prevention review. If you are interested in learning more about the funding available please contact Mathew Maclean at 416-661-6600 X5349 or [mmaclean@trca.on.ca](mailto:mmaclean@trca.on.ca).

Susan Self  
Chair CTC Source Protection Committee

***Insert name and title of municipal contact*** For more information on the Source Water Protection program and the CTC Source Protection Committee you can visit the website [www.ctcswp.ca](http://www.ctcswp.ca) or contact Nicholas Schulz, Supervisor Communications, Toronto and Region Conservation Authority, at 416-661-6600 X5752 or by email at [sourcewater@trca.on.ca](mailto:sourcewater@trca.on.ca)



**Attachment 2; Schedule of Assessment Report development, approval, consultation and submission**

<b>Activity</b>	<b>Scheduled Date</b>
SPC acceptance of individual technical studies	Ongoing through to Feb '10
Stage 1 consultation period	Jan'10 to Feb'10
Draft ARs distributed to SPC for review	March 10, 2010
<i>March Break</i>	<i>March 15 – March 18, 2010</i>
<b>Draft AR approved by SPC for public consultation</b>	<b>March 30, 2010</b>
Draft AR released: circulated to clerks and posted for public comments	April 1, 2010
Notice of public meetings released	April 1, 2010
<i>Good Friday, Easter Monday</i>	<i>April 2 &amp; 5, 2010</i>
Public meeting period (not to begin sooner than 21 days after the release of meeting notices and posting of draft AR)	April 26, 2010 – May 14, 2010
Public comment deadline for Draft AR: <i>40 day public consultation period proposed to allow for public meetings in wellhead areas</i>	May 14, 2010
<b><i>Ad Hoc WG review of public comments</i></b>	<b><i>May 18, 2010</i></b>
Public comments and proposed actions sent to SPC for review	May 21, 2010
<i>Victoria Day</i>	<i>May 24, 2010</i>
<b>SPC approval of Proposed AR</b>	<b>June 1, 2010</b>
Submit Proposed AR to SPA	June 2, 2010
30 day comment period begins: Proposed AR circulated to clerks and posted for public comments	June 2, 2010
SPA public comment deadline	July 2, 1010
Comments received on Proposed AR sent to SPC and SPAs	July 5, 2010
SPA authorize staff to submit Proposed AR & comments to MOE	July 2010
Assessment Report submitted to MOE	<b>August 17, 2010</b>

**dates shown in bold are currently scheduled and/or fixed**

**RES.#A147/10 -**

**SPC Acceptance of Wellhead Protection Area Delineation and Vulnerability Assessment**

Acceptance in principle of WHPA delineation and vulnerability scoring within the CTC in the Regions of Halton/York/Durham

Moved by: Michael Garrett  
Seconded by: Mark Schiller

**THAT the CTC SPC accepts, the recommendations of the Ad Hoc Working Group as follows:**

**THAT SPC accepts the proposed WHPA delineation and vulnerability scoring for the Regions of Halton/York/Durham subject to additional refinement as outlined in this status table for each of the wellhead protection areas as outlined in this report;**

**THAT the CTC SPC authorize the Ad Hoc Working Group to review and accept these refined WHPA delineation and vulnerability scoring on behalf of the CTC SPC;**

**THAT the CTC SPC authorize the Ad Hoc Working Group to review and accept WHPA delineation and vulnerability scoring on behalf of the CTC SPC for the remaining CTC wells;**

**THAT staff be directed to take the necessary steps to finalize the maps and begin Stage 1 consultation in partnership with the appropriate municipalities;**

**AND FURTHER THAT staff be directed to distribute finalized maps identifying WHPA delineation and vulnerability scoring to all CTC SPC members as soon as possible.**

**BACKGROUND**

This staff report replaces the report included with the agenda for SPC Meeting#1/10 distributed on December 21, 2009.

The Ad Hoc Working Group is meeting to review the well head protection area mapping and vulnerability assessments for municipal wells within the CTC. On December 15, 2009 the Ad Hoc Working Group met to consider the well head protection areas in the Region of Peel's portion of the Toronto and Region Source Protection Area (TRSPA). On January 13, 2010 they considered the well head protection areas in the Regions of Halton, York and Durham and reviewed again the Region of Peel area within the TRSPA.

Copies of all the reports that had been received as of December 17, 2009 have been provided to committee members separately on CD and on the CTC web portal. These reports are not for public release at this time. These reports have been provided to SPC members so that those who wish can review the technical reports prepared by consultants for the municipalities. Please note that the mapping contained in these reports will be updated and final consolidated maps will be provided to the SPC members in a form that conforms to the current Technical Rules, reflects the changes through the peer review process and incorporates all of the relevant vulnerability assessment information within one map.

## Peer Review Process

Third party expert peer review consultants were retained by the CTC to assess the methodology and assumptions used to generate the well head protection areas and the vulnerability scoring and to confirm that the work meets the requirements of the current Technical Rules under the *Clean Water Act, 2006*. The objective of this process is to assure the CTC Source Protection Committee (SPC) of the validity of the technical approach and decisions taken.

The peer review consultants prepared a written evaluation of the work as described in Attachment 2. In addition, peer reviewers have been asked to provide their summary recommendations on whether the SPC should:

- a) accept the delineation and vulnerability assessments;
- b) accept the delineation/assessment but identify additional studies to refine the delineation/assessment that should be considered in future amendments to the Assessment Report; or
- c) to not accept them due to significant technical shortcomings that must be addressed first (including the rationale and specific work to be done).

The final peer reviewer's comments, responses and recommendations will be provided separately to members as they are completed.

## What do the Technical Rules Require?

The Technical Rules require the delineation of vulnerable areas for each municipal well or well field (several wells in close proximity to one another) and an assessment of the vulnerability within these areas. The requirements are set out in Attachment 1 and are also shown graphically in the July 2009 Technical Bulletin on Groundwater Quality Analysis found on the Ministry of the Environment website <http://www.ontario.ca/drinkingwater/275906.pdf>. A copy of this graphic has been provided separately from this report. Also required (but not shown in the graphic) is consideration of increasing the vulnerability score where there is a transport pathway (Technical Rules 39 to 40 inclusive). The Assessment Reports will contain maps that show the summary results of these WHPA delineations and vulnerability assessments for each well or well field.

### Considerations in Delineating WHPAs

The *Technical Rules* issued by Ontario Ministry of the Environment (MOE) in November, 2009 include several directives for determining WHPAs (Rules 42 and 47). For clarity, these rules are excerpted in Attachment 1.

- Technical Rule 42 outlines the potential methodologies to be used for both WHPA delineation and vulnerability scoring. The use of a numerical three dimensional groundwater flow model is the most comprehensive and scientifically defensible method of the four options.
- Technical Rule 47 defines the wellhead protection areas to be delineated for municipal residential (Type 1) systems.
  - a) The WHPA-A zone is fixed as 100 metre radius around the well, and therefore are not subject to interpretation
  - b) The WHPA-B, -C and -D zones for are determined based on the use of groundwater flow models and WHPA-E (GUDI wells only) and -F (GUDI wells only with an issue identified) requires interpretation of the interaction between surface and groundwater. Therefore WHPA zones B through F are subject to interpretation

and will be or have been peer reviewed.

### Considerations in Vulnerability Scoring

The *Technical Rules* issued by Ontario Ministry of the Environment (MOE) in November, 2009 include several directives for scoring the vulnerability within each of the WHPA zones (Rules 37, 38, 38.1, 38.2, 39, 40, 41, 42, 82, 83, and 84). The excerpt of these rules is provided in Attachment 1.

Four approaches to characterizing vulnerability are proposed in Rule 37:

- (1) Intrinsic Susceptibility Index (ISI) The index considers the overburden soil type and thickness above the aquifer and the static water level in the well. This index value is then interpolated between the well locations to produce a map of vulnerability of the aquifer(s);
- (2) Aquifer Vulnerability Index (AVI) – score or index value based on mapping various geological features (e.g. depth to aquifer, soil type and thickness, etc) and estimating the relative amount of protection provided by physical features that overlie the aquifer to determine the vulnerability score;
- (3) Surface to Aquifer Advection Time (SAAT) – the time for a contaminant to travel from the ground surface to the top of aquifer where the well is located is estimated using a three-dimensional numerical groundwater flow model. The rules set the vulnerability scores based on specific travel times; and
- (4) Surface to Well Advection Time (SWAT) – the time for a contaminant to travel from the ground surface directly to the well is estimated using a three-dimensional numerical groundwater flow model. The rules set the vulnerability scores based on specific travel times.

### **Additional Work to be Done**

After characterizing the vulnerability in each area, Rules 39 -40 require consideration of whether the vulnerability should be increased due to the presence of transport pathways. An example of a transport pathway is a utility trench that is backfilled with gravel, thereby allowing faster water movement than the original subsurface material. Under the Rules the vulnerability score could be increased from low to moderate or high and in an area of moderate vulnerability to high. Vulnerability scores can not be reduced through this analysis.

In most cases, the municipalities have not included this work as part of the initial WHPA delineation and vulnerability assessment consulting contracts. Generally they have hired separate contractors to do this as part of the Threats Assessment and Issues Identification work which is prescribed under Part IX of the Technical Rules. CTC staff is still awaiting these studies and are not proposing having them peer reviewed due to both time constraints and the fact that the decisions to be made are more policy decisions than complex technical ones that require expert peer review. Once the latter reports are received, staff will review them and make recommendations through the Ad Hoc Working Group on the modifications to the vulnerability scoring for each municipal well or well field.

After acceptance by the Ad Hoc Working Group, staff will increase the vulnerability scores shown on the maps in areas where transport pathways have been identified that can increase the susceptibility of an area to contamination. SPC members will receive a copy of the revised vulnerability mapping prior to staff contacting property owners for Stage 1 consultations. Only when this final mapping is completed will Stage 1 public consultation commence.

## **CURRENT STATUS WHPA DELINEATION and VULNERABILITY SCORING**

### **Region of Peel - TRSPA**

On December 15, 2009 the Ad Hoc Working Group met to review WHPA delineation and vulnerability scoring for the Peel wells located within the Toronto & Region Source Protection Area. The following reports were prepared by consultants for Peel Region wells within the TRSPA that were subjected to peer review by the consulting firm AMEC Earth and Environmental:

1. Wellhead Protection Area Study for Municipal Residential Groundwater Systems Located within the Toronto and Region Conservation Authority Watersheds, Caledon East Wells 2, 3, and 4 and Palgrave Wells 2 and 3, prepared by EarthFx Incorporated (May 2007)
2. Surface to Well Advection Time Analysis Wellhead Protection Areas for Municipal Residential Groundwater Systems Located within the Toronto and Region Conservation Authority Watersheds, Caledon East Wells 2, 3, and 4 and Palgrave Wells 2 and 3, prepared by EarthFx Inc February 2008
3. Wellhead Protection Area Study and Surface to Well Advection Time Analysis for Palgrave Well 4 Located within the Toronto and Region Conservation Authority Watersheds, prepared by EarthFx Inc. September 2008

WHPAs were delineated using a three-dimensional groundwater flow model (per Technical Rule 42.1). The model used was the same as that used in preparing the Tier 1 water budget for the TRSPA and has previously been reviewed as part of the water budget process.

In report #1 above, the consultants carried out a vulnerability assessment using the *Intrinsic Susceptibility Index* (ISI) approach per Technical Rule 37.1. Staff of the Region of Peel commissioned a second study (report #2), using *Surface to Aquifer Advection time* (SAAT) per Technical Rule 37.3 and *Surface to Well Advection Time* (SWAT) per Technical Rule 37.4 to determine the vulnerability scores.

Following discussion of the methods used, the Ad Hoc Working Group recommended that the modified SWAT methodology be used to assess the significance of drinking water threats within the area. This decision was made based upon the greater level of technical sophistication with the groundwater flow model used in this work and the recommendation of the technical staff and peer reviewers.

Final peer review is in the process and will be brought forward at a later date.

<b>Status of Region of Peel TRSPA wells</b>	
WHPA Delineation A through D	Additional refinement has been requested by the peer reviewer
WHPA Delineation E and F *	Not yet received- part of Threats Assessment work underway, only applies to Caledon East Well 2
Vulnerability Assessment	Modified SWAT approach accepted by Ad Hoc WG CTC staff preparing integrated mapping of WHPA delineation and vulnerability assessment
Adjustment for transport pathways*	Not yet received- part of Threats Assessment work underway
Adjustment for Highly Vulnerable Aquifers	Not yet received. Part of a CTC wide study to identify Highly Vulnerable Aquifers and apply vulnerability scores

\*Additional refinement will required to mapping before final Ad Hoc WG acceptance and Stage 1 consultation

### **Region of Halton**

On January 13, 2010 the Ad Hoc Working Group met to review WHPA delineation and vulnerability scoring for the Halton wells located within the Credit Valley Source Protection Area. The following reports were prepared by consultants for Halton Region wells that were subjected to peer review by the consulting firm:

1. Vulnerability Analysis for the Georgetown and Acton Wellfields, Regional Municipality of Halton, Ontario, prepared by Earthfx incorporated (September 2009) - *includes Cedarvale wells 1a, 3, 3a, 4 & 4a, Princess Anne wells 5 & 6, Lindsay Court well 9, 4th Line well, Davidson wells 1 & 2 and Prospect Park wells 1 & 2.*
2. Delineation and Vulnerability Analysis of WHPA-Es and WHPA-Fs for the Georgetown and Acton Wellfields, Regional Municipality of Halton, Ontario, prepared by Earthfx incorporated (November 2009) - *includes Cedarvale wells 1a, 3, 3a, 4 & 4a, 4th Line well, Davidson wells 1 & 2 and Prospect Park wells 1 & 2.*

WHPAs were delineated using a three dimensional groundwater flow model (per Technical Rule 42.1) developed for the Region of Halton as part of studies to identify additional well supplies. The model used was not the same as that used in preparing the Tier 2 water budget for the CVSPA however it was peer reviewed for Halton by the same peer reviewer who is doing the CTC water budget peer reviews.

**These wells are currently part of the Tier 3 water budget assessment process. As such the WHPA delineation and vulnerability assessment for the Acton and Georgetown wells should be reviewed and updated as required as part of the amended Assessment Report to be prepared when the Tier 3 water budget work is completed. Additional public consultation will be required at that time.**

The summary recommendation from the peer reviewers regarding acceptance of the WHPA delineations was:

*The work performed by Earthfx has been completed to a high technical standard and generally conforms with the requirements of the Technical Rules. The biggest challenge with the vulnerability analysis work for the communities of Georgetown and Acton is that an updated groundwater flow model is being constructed in support of the Tier 3 water budget analysis and will be available in the near future. The concern with respect to fully accepting the vulnerability analysis work outlined in the Draft reports and as updated to address comments from Technical Reviewers is that two different models would have been used to determine the Tier 3 water budget outputs and the WHPA/Groundwater Vulnerability. At this time it is not possible to confirm what the results from the second model would be or whether the existing model is conservative relative to the Tier 3 model.*

*No, the WHPAs as delineated should not be accepted. Additional work is required so that the WHPA can be used in the first version of the Assessment Report. In the absence of the pending Tier 3 model, the WHPA delineations and vulnerability assessment based on the model used for the draft report would be acceptable for use in the Assessment Report provided that the additional work was performed (based on previous comments from Jagger Hims, Halton Region, and the meeting to discuss comments).*

*In view of the timing issues involved, GENIVAR recommends that the work to update the vulnerability analysis be completed and incorporated into the Assessment Report as Interim Findings. On completion of the model for the Tier 3 water budget, a preliminary WHPA delineation should be performed so that the effects of the new model can be observed and compared. The most significant difference between the models will likely be the consideration of other permitted water takings and, in particular, quarry dewatering in the Tier 3 model. If the WHPA based on the Tier 3 model are found to be substantially different in a way that the areas of higher vulnerability (primarily WHPA-B) are larger, then the source protection committee can decide whether to accept the Interim Findings or to repeat the vulnerability and threats analysis using the newer models. The newer models could be used to update the groundwater vulnerability analysis for the next source protection planning cycle*

*The additional work for the first Assessment Report should include:*

- 1) The Acton WHPA are to be updated to consider the maximum permitted rates as per the Permits to Take Water.*
- 2) Comments are to be added to the text to reflect the effects of geological layers in the bedrock and the general model used for calibration.*
- 3) Forward Tracking Analysis is to be completed separately for the Acton and Georgetown systems and any cells in the Acton Area where the released particles travel to the Georgetown wells will not be shown on the Acton system. (For both the delineation of WHPA and the vulnerability analysis).*
- 4) The WHPA are to be adjusted to reflect the larger area between the forward and backward tracking particles. (This may not be necessary if the differences*

were caused by the methods to be corrected by point 3, above.

5) A text section is to be added to describe the differences between the delineated WHPA and the previous versions (1997). This will include discussions of additional data, improved models, improved conceptual understanding, and in particular differences in assumed pumping rates and other model parameters.

6) Transport pathways are to be considered as directed by the technical subcommittee.

7) The sections describing the UZAT analysis are to be moved to an Appendix. The assumption that the travel time through the unsaturated zone is 0 is a reasonable conservative assumption.

8) The uncertainty sections are to be revised to reflect the requirements of the Technical Rules and to clearly identify an uncertainty rating of high or low to be associated with the vulnerable areas.

9) The WHPA-E/F analysis are to be incorporated into a single vulnerability analysis report. WHPA-F is to be delineated for the Cedarvale wells such that this information can be included in the Assessment Report at the discretion of the Source Protection Committee based on the findings of the Issues and Threats Assessment.

Vulnerability Assessment was done using *Surface to Well Advection Time* (SWAT) per Technical Rule 37.4 methodologies to determine the vulnerability scores.

The summary recommendation from the peer reviewers regarding acceptance of the vulnerability assessments was:

*The Vulnerability Ratings and Vulnerability Scores need to be updated in accordance with the work to update the WHPA. The specific additional tasks with respect to the vulnerability rating and vulnerability scores are:*

1) Areas within the WHPA where the released particles do not reach the municipal wells are to be assigned low vulnerability and the corresponding vulnerability score based on the Technical Rules (relative to Time of Travel zone). The vulnerability scores will be displayed for the entire WHPA.

2) Vulnerability Scores for the WHPA-E and WHPA-F should be displayed to one decimal place. The vulnerability scores for WHPA-E should be reviewed to confirm that the Vulnerability Score in the WHPA at the point of interaction with the stream is greater than the score of the WHPA-E. If not, the WHPA-E should be adjusted accordingly. (Technical Rules provide direction that  $IPZ2 < IPZ1$ ,  $IPZ3 < IPZ2$ ).



A completed peer review table is being provided separately.

<b>Status of Region of Halton wells</b>	
WHPA Delineation*	Additional refinement underway as requested by peer review
Vulnerability Assessment*	Additional refinement underway as requested by peer review
Adjustment for transport pathways*	Refinement to be completed. Anticipated delivery with Threats Assessment in February 2010
Adjustment for Highly Vulnerable Aquifers	Not yet received. Part of a CTC wide study to identify Highly Vulnerable Aquifers and apply vulnerability scores

\*Additional refinement will required to mapping before final Ad Hoc WG acceptance and Stage 1 consultation

### **Region of York**

On January 13, 2010 the Ad Hoc Working Group met to review WHPA delineation and vulnerability scoring for the York wells located within the Toronto & Region Source Protection Area. The following reports were prepared by consultants for York Region wells that were subjected to peer review:

1. Vulnerability Assessment and Scoring of Wellhead Protection Areas Regional Municipality of York, prepared by Earthfx, November 2007 - *CTC wells included are King City wells 3 & 4, Kleinburg wells 2 & 3, Nobleton wells 2 & 3, Stouffville wells 1, 2, 3, 5 & 6.*
2. Vulnerability Assessment and Scoring of Wellhead Protection Areas Regional Municipality of York, prepared by Earthfx, November 2007 (Revised October 2009) - *CTC wells included are King City wells 3 & 4, Kleinburg wells 2, 3 & 4, Nobleton wells 2 & 3, Stouffville wells 1, 2, 3, 5 & 6.*
3. *Addendum Report Updated Vulnerability Assessment and Scoring of Wellhead Protection Areas Regional Municipality of York, prepared by Earthfx, November 2009 - CTC wells included are Nobleton wells 2, 3 & 4.*

WHPAs were delineated using a three-dimensional groundwater flow model (per Technical Rule 42.1). The model used was the same as that used in preparing the Tier 1 water budget for the TRSPA and has previously been reviewed as part of the water budget process.

The summary recommendation from the peer reviewers regarding acceptance of the WHPA delineations was:

*Yes, provided the additional information listed below is provided and does not result in any additional concerns. The additional work requested is:*

- *additional simulations of the Klienberg and Stouffville well fields to assure that shutting off particular wells would not shift any of the WHPAs significantly*
- *additional local-scale calibration and verification information*
- *additional information about how porosity was sourced and used in the model*
- *additional information on how the model was modified from the 2006 core model*

**The Stouffville wells are within the boundary of the York Region Tier 3 water budget**

**assessment study. As such, the WHPA delineations and vulnerability assessment for these wells will be reviewed and updated as required. The updated information will be included in TRSPA’s amended Assessment Report to be prepared when the Tier 3 water budget work is completed. Additional public consultation will be required at that time.**

Vulnerability Assessment was done using *Surface to Aquifer Advection time (SAAT)* per Technical Rule 37.3 and *Surface to Well Advection Time (SWAT)* per Technical Rule 37.4 methodologies to determine the vulnerability scores. The summary recommendation from the peer reviewers regarding acceptance of the vulnerability assessments was:

*Yes, with some minor reservations about transport pathways subject to further discussion.*

*The final peer review table is under preparation. Draft comments have been provided separately.*

<b>Status of Region of York wells</b>	
WHPA Delineation*	Additional refinement underway for Kleinburg and Stouffville systems as requested by peer review
Vulnerability Assessment*	Additional refinement underway for Kleinburg and Stouffville systems as requested by peer review
Adjustment for transport pathways*	Not yet received- part of Threats Assessment work underway
Adjustment for Highly Vulnerable Aquifers	Not yet received. Part of a CTC wide study to identify Highly Vulnerable Aquifers and apply vulnerability scores

\*Additional refinement will required to mapping before final Ad Hoc WG acceptance and Stage 1 consultation

### **Region of Durham**

On January 13, 2010 the Ad Hoc Working Group met to review WHPA delineation and vulnerability scoring for the Durham Uxville well located within the Toronto & Region Source Protection Area. The following reports were prepared by consultants for Durham Region that were subjected to peer review:

1. Groundwater Modeling and WHPA delineation - Uxville Water Supply System, prepared by AECOM, September 2009 - *CTC wells included are Uxville wells MW1 and MW2.*
2. Groundwater Vulnerability Assessment - Township of Uxbridge - Uxbridge Industrial Park in Uxville (Uxville Water Supply), prepared by AECOM, September 2009 - *CTC wells included are Uxville wells MW1 and MW2.*

WHPAs for Uxville Wells No. 1 and No. 2 were delineated using a three-dimensional groundwater flow model (per Technical Rule 42.1). The model used was not the same as that used in preparing the Tier 1 water budget for the TRSPA and has not been peer reviewed as part of the water budget process.

**The Uxville wells are within the boundary of the York Region Tier 3 water budget assessment study. As such, the WHPA delineations and vulnerability assessment for**

**these wells will be reviewed and updated as required. The updated information will be included in TRSPA's amended Assessment Report to be prepared when the Tier 3 water budget work is completed. Additional public consultation will be required at that time.**

Vulnerability Assessment was done using *Aquifer Vulnerability Index (AVI)* per Technical Rule 37.2 methodology to determine the vulnerability scores. As mentioned above, this score or index value is calculated based on a variety of hydrogeologic considerations such as the thickness and estimated permeability of the various geologic layers. Peer review on this work is under way and final summary recommendation will be brought to the SPC when available.

*The draft peer review table is under preparation. Initial peer reviewer questions are provided separately.*

<b>Status of Region of Durham wells</b>	
WHPA Delineation*	Peer review still in progress - Additional information has been requested
Vulnerability Assessment*	Peer review still in progress - Comments and request for information has been provided to municipality
Adjustment for transport pathways*	Included in WHPA delineation peer review - Additional refinement required
Adjustment for Highly Vulnerable Aquifers	Not yet received. Part of a CTC wide study to identify Highly Vulnerable Aquifers and apply vulnerability scores

\*Additional refinement will required to mapping before final Ad Hoc WG acceptance and Stage 1 consultation

## **RATIONALE**

CTC technical staff, working with municipal leads and their consultants, are undertaking third party peer review of the WHPA delienation and vulnerability assessment for all municipal wells in the CTC to ensure that work has been completed in accordance with the Technical Rules. The Ad Hoc Working Group, established at SPC Meeting #7/09 by Res #A138/09, is reviewing the outcomes of this work to determine whether or not it is acceptable for the preparation of the Assessment Reports required for each Source Protection Area. The timetable for completion of the draft Assessment Reports is early March 2010 to bring forward to the SPC for their review prior to commencement of regulated consultation of the *Draft* Assessment Reports at the end of April 2010. CTC staff are still recieving consulting reports from the municipalities and a number of the peer reviews are underway. Where the peer reviews have been completed additional refinements have been identified which require consideration prior to finalizing WHPA delineation and vulnerability assessment. In order to manage the timetable and workload the Ad Hoc Working Group recommends that they be given authority to finalize WHPA delineation and vulnerability assessment for the commencement of public consultation.

SPC members have been provided with copies of all WHPA delineation and vulnerability studies received and will be provided with the final mapping as soon as it is available, prior to letters being sent to the public. Should any SPC member wish to attend an Ad Hoc Working Group meeting to observe discussion for any specific wellfield they are encouraged to do so. The final WHPA delienation and vulnerablity assessment will be brought to the SPC for review and approval at the March 30, 2010 SPC meeting as part of the Assessment Reports. Staff will

provide regular updates on the progress of this work.

**IN PROGRESS STUDIES**  
**Peel Region - Credit Valley Source Protection Area**

<b>Status of Region of Peel CVSPA wells</b>	
WHPA Delineation A through D	Additional work underway to address the peer reviewer's draft comments
WHPA Delineation E and F *	Not yet received- part of Threats Assessment work underway
Vulnerability Assessment	Peer review of the Vulnerability Assessment complete
Adjustment for transport pathways*	Not yet received- part of Threats Assessment work underway
Adjustment for Highly Vulnerable Aquifers	Not yet received. Part of a CTC wide study to identify Highly Vulnerable Aquifers and apply vulnerability scores

**Orangeville/Mono/Amaranth - Credit Valley Source Protection Area**

<b>Status of Orangeville/Mono/Amaranth wells</b>	
WHPA Delineation	Work currently with peer review. Anticipated to be brought to the SPC in February 2010
Vulnerability Assessment	Work currently with peer review. Anticipated to be brought to the SPC in February 2010
Adjustment for transport pathways	Work currently with peer review. Anticipated to be brought to the SPC in February 2010
Adjustment for Highly Vulnerable Aquifers	Not yet received. Part of a CTC wide study to identify Highly Vulnerable Aquifers and apply vulnerability scores

**Erin/Hillsburgh - Credit Valley Source Protection Area**

<b>Status of Erin/Hillsburgh wells</b>	
WHPA Delineation	Work still currently in development by municipality's consultant
Vulnerability Assessment	Work still currently in development by municipality's consultant
Adjustment for transport pathways	Work still currently in development by municipality's consultant
Adjustment for Highly Vulnerable Aquifers	Not yet received. Part of a CTC wide study to identify Highly Vulnerable Aquifers and apply vulnerability scores

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**Date: January 11, 2010**

**Attachments:**

1. Director's Rules for WHPAs and Vulnerability Scoring
2. Peer Review Questions

## Attachment 1: Director's Rules for WHPAs and Vulnerability Scoring

### Part IV.1 - Vulnerability Assessment and Delineation, Groundwater

37. The vulnerability of groundwater within a source protection area shall be assessed using one or more of the following groundwater vulnerability assessment methods:

- Intrinsic susceptibility index (ISI).
- Aquifer vulnerability index (AVI).
- Surface to aquifer advection time (SAAT).
- Surface to well advection time (SWAT).

38. A source protection area shall be divided into areas of high, medium or low groundwater vulnerability, high corresponding to greater vulnerability, as follows:

Where a method described in subrule 37(1) or (2) was used to assess vulnerability,

- areas of high vulnerability are those areas with scores that are less than 30,
- areas of medium vulnerability are those areas with scores that are greater than or equal to 30 but less than or equal to 80, and
- areas of low vulnerability are those areas with scores that are greater than 80.

Where a method described in subrule 37(3) or (4) was used to assess vulnerability,

- areas of high vulnerability are those areas with results that are less than 5 years,
- areas of medium vulnerability are those areas with results that are greater than or equal to 5 years but less than or equal to 25 years, and
- areas of low vulnerability are those areas with results that are greater than 25 years.

Where, in accordance with rule 15.1, a method that departs from the methods specified in rule 37 has been used to assess vulnerability, an approach shall be used that, in the Director's opinion, is comparable to the approach specified in subrules (1) and (2).

38.1 When using a groundwater vulnerability assessment method referred to in subrules 37(3) or (4) to assess the vulnerability of groundwater in a wellhead protection area in respect of a drinking water system mentioned in clause 15(2)(e) of the Act, the shallow and deep aquifer shall be independently assessed and delineated into areas of high, medium or low groundwater vulnerability in accordance with subrule 38(2).15

38.2 If more than one method is used to assess groundwater vulnerability, the results of both methods must be mapped.

#### Vulnerability increase, transport pathways

39. Where the vulnerability of an area identified as low in accordance with rule 38 is increased because of the presence of a transport pathway that is anthropogenic in origin, the area shall be identified as an area of medium or high vulnerability, high corresponding to greater vulnerability.

40. Where the vulnerability of an area identified as medium in accordance with rule 38 is increased because of the presence of a transport pathway that is anthropogenic in origin, the area shall be identified as an area of high vulnerability.
41. When determining whether the vulnerability of an area is increased for the purpose of rules 39 and 40 and the degree of the increase, the following factors shall be considered:
- Hydrogeological conditions.
  - The type and design of any transport pathways.
  - The cumulative impact of any transport pathways.
  - The extent of any assumptions used in the assessment of the vulnerability of the groundwater.
42. Where the rules in this Part require that the extent of an area be determined by time of travel to a wellhead, one or more of the following models and methods shall be used:
- A computer based three-dimensional groundwater flow model.
  - Two-dimensional analytical model.
  - Uniform flow method.
  - Calculated fixed radius method.
  - Removed

### **Part V.3 - Delineation of wellhead protection areas, type I systems**

47. A wellhead protection area for a well associated with a type I system is the area created by combining all of the following areas:
- Area WHPA-A, being the surface and subsurface area centred on the well with an outer boundary identified by a radius of 100 metres.
  - Area WHPA-B, being the surface and subsurface areas within which the time of travel to the well is less than or equal to two years but excluding WHPA-A.
  - Area WHPA-C, being the surface and subsurface areas within which the time of travel to the well is less than or equal to five years but greater than two years.
  - Area WHPA-D, being the surface and subsurface areas within which the time of travel to the well is less than or equal to twenty-five years but greater than five years.
  - Area WHPA-E, being the area delineated in accordance with the rules in Part VI that apply to the delineation of an IPZ-2, as if an intake for the system were located,
    - a) at the point of interaction between groundwater that is the source of raw water supply for the well and the surface water that is directly influencing that groundwater, or
    - b) at the point in the surface water body influencing the raw water supply for the well that is closest in proximity to the well, if the point of interaction described in (a) is not known.
  - Area WHPA-F, being the area delineated in accordance with the rules in Part VI that apply to the delineation of an IPZ-3, as if an intake for the system were located in the surface water body influencing the well at the point closest in proximity to the well.
82. A wellhead protection area shall be subdivided by the boundaries of the areas of groundwater vulnerability identified in accordance with Part IV rule 38.
83. The areas identified in accordance with rule 82 shall be assigned a vulnerability based upon their location within the areas identified in Part V rules 47 or 48 in accordance with,
- Table 2(a) and rule 84 where the groundwater vulnerability was determined by the use

- of a method listed in Part IV subrules 37(1) or 37(2);
- Table 2(b) and rule 84 where the groundwater vulnerability was determined by the use of a method listed in Part IV subrules 37(3) or 37(4); or
- an approach that is, in the opinion of the Director, comparable to those specified in subrules (1) and (2), if, in accordance with rule 15.1, a method that departs from the methods specified in rule 42 has been used, to determine time of travel to a wellhead.

84. The areas identified in accordance with rule 82 that are located in WHPA-E shall be assigned a vulnerability score in accordance with the rules in Part VIII that apply to an IPZ-2.

Table 2(a): Wellhead Protection Area Vulnerability Scores – ISI or AVI

	<b>Location Within a Well Head Protection Area</b>				
<b>Groundwater Vulnerability Category for the Area</b>	<b>WHPA-A</b>	<b>WHPA-B</b>	<b>WHPA-C</b>	<b>WHPA-C1</b>	<b>WHPA-D</b>
<b>High</b>	10	10	8	8	6
<b>Medium</b>	10	8	6	6	4
<b>Low</b>	10	6	4	4	2

Table 2(b): Wellhead Protection Vulnerability Scores - SAAT or SWAT

	<b>Location Within a Well Head Protection Area</b>				
<b>Groundwater Vulnerability Category for the Area</b>	<b>WHPA-A</b>	<b>WHPA-B</b>	<b>WHPA-C</b>	<b>WHPA-C1</b>	<b>WHPA-D</b>
<b>High</b>	10	10	8	8	6
<b>Medium</b>	10	8	6	6	4
<b>Low</b>	10	6	2	2	2



## Attachment 2: Peer Review Questions

The technical questions to be answered through peer review of the WHPA delineation:

1. Appropriateness of model and rationale for model selection
2. Scale and WHPA discretization
3. Are the geological model interpretation and boundary conditions reasonable?
4. Do the flowpaths 'line up' with delineated SGRAs for the area?
5. Are the model parameters used in the delineation fully explained and is the conceptualization of the study area sufficiently developed and understood?
6. Are the underlying assumptions fully explained?
7. Have the appropriate data been used for calibration and validation?
8. Can the model be easily changed/updated to account for new information?
9. Have changes in the delineation from earlier versions been adequately explained?
10. Does the model produce WHPA maps and vulnerability scores that are directly useful to decision makers or must the results be interpreted by experts before use in decision-making?
11. Do the WHPA model outputs/tools provide information required to:
12. perform the water quality risk analysis required as another component of the Assessment Report,
13. overlay with other products such as the threats inventory, and
14. compare against the broader landscape findings?
15. Does the WHPA model track flow paths from potential contamination sources to current or potential water intake/extraction points or hydrologically sensitive areas?
16. Does the model have the ability to assess potential impacts within the WHPA?
17. Can the WHPA map be used as a scientifically defensible tool to support water management decisions (examples, policy development, conservation plans, PTTW applications, current and future water supply/use)?
18. Do the WHPA model and map outputs integrate with geological model outputs for the broader landscape to facilitate consistent policy development?

The **Summary** question to be answered is whether the peer reviewer recommends to the CTC SPC to accept the delineation, accept the delineation but identify additional studies to refine the delineation that should be considered in future amendments to the Assessment Report or to not accept them due to significant technical shortcomings that must be addressed first (including the rationale and specific work to be done).

The key components and questions to be answered through the peer review of the vulnerability scoring include:

1. Are the geological data and model upon which the vulnerability is based reasonable?
2. Are there adequate data for a reasonable assessment?
3. Are the quality of the data adequate and has any been any work on data refinement?
4. Was the vulnerability assessment done according to the direction outlined in the Director's Rules?
5. Are the delineated highly vulnerable areas reasonable, given surficial geology and physiographic setting?
6. Are the scoring tables accurate?
7. Has the approach been adequately documented?

The **Summary** question to be answered is whether the peer reviewer recommends to the CTC

SPC to accept the vulnerability scoring and if more than one method was used, which of them is the most technically defensible, accept the scoring but identify additional studies to refine the scoring that should be considered in future amendments to the Assessment Report or to not accept it due to significant technical shortcomings that must be addressed first (including the rationale and specific work to be done).

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## **SECTION II - ITEMS FOR COMMITTEE INFORMATION**

### **RES.#A148/10 -**

### **Completed Water Budget Reports Release to the Public**

Distribution of Final Tier 1 and Tier 2 Water Budget Reports for the CTC Source Protection Areas.

Moved by: Jessica Ginsburg  
Seconded by: Lynne Moore

**THAT the CTC SPC receive this report for information.**

### **BACKGROUND**

At SPC Meeting #8/09 held on November 24, 2009 the CTC Source Protection Committee approved explanatory wording to be included on maps delineating Significant Groundwater Recharge Areas (SGRA) and in the body and executive summary of water budget reports. CTC technical staff have revised the water budget reports and posted them on the CTC Source Protection Committee website ([www.ctcswp.ca](http://www.ctcswp.ca)) as directed by Res.#A139/09.

Distributed at SPC Meeting #1/10 the CTC Source Protection Committee will receive a disc with the three water budget reports of the CTC Source Protection Region. These three reports are:

1. SPC Accepted Integrated Water Budget Report - Tier 2 Credit Valley Source Protection Area
2. SPC Accepted Tier 1 enhanced Water Budget Report Toronto and Region Source Protection Area
3. SPC Accepted Tier 1 Water Budget Central Lake Ontario Source Protection Area

Also included on this disc, for the reference of SPC members, will be the final Significant Groundwater Recharge Area maps for each of the Source Protection Areas.

### **WATER BUDGET APPROVAL**

Water Budgets for each of the three CTC Source Protection Areas have been independently peer reviewed and approved by the CTC Source Protection Committee. The table below illustrates the stages of approval for the CTC water budget reports.

<b>SPC Meeting #1/09</b> <b>Res.#A89/09</b> February 17, 2009	<ul style="list-style-type: none"> <li>● SPC accepts the CLOSPA Tier 1 Water Budget</li> </ul>
<b>SPC Meeting #2/09</b> <b>Res.#A97/09</b> April 7, 2009	<ul style="list-style-type: none"> <li>● SPC accepts the CVSPA Tier 2 Water Budget</li> <li>● SPC accepts SGRA mapping for the CVSPA with direction to hold until SGRA mapping for TRSPA and CLOSPA are completed</li> </ul>
<b>SPC Meeting #7/09</b> <b>Res.#A135/09</b> October 20, 2009	<ul style="list-style-type: none"> <li>● SPC accepts the TRSPA Enhanced Tier 1 Water Budget</li> <li>● SPC accepts SGRA mapping for each of the 3 CTC Source Protection Areas</li> </ul>
<b>SPC Meeting #8/09</b> <b>Res.#A139/09</b> November 24, 2009	<ul style="list-style-type: none"> <li>● SPC approves explanatory text for inclusion with SGRA maps and water budget reports</li> </ul>

### **NEXT STEPS**

The three water budget reports listed are accepted for use as foundation documents for the three Assessment Reports of the CTC Source Protection Region.

As foundation documents these reports will:

- provide water quantity data to inform the CTC Assessment Reports
- be posted publicly on the CTC SPC website ([www.ctcswp.ca](http://www.ctcswp.ca))
- be identified as background information during public consultation of the CTC Draft Assessment Reports

At this time Stage 1 consultation letters to landowners (see Agenda Item 6.2), will **NOT** be distributed to landowners within Significant Groundwater Recharge Areas (SGRAs). This outreach will not begin prior to CTC SPC approval of vulnerability scoring (Highly Vulnerable Areas assessment) within these areas. At that time staff and the SPC will know what areas within the SGRAs have vulnerability scores of 4 or 6 (maximum possible). Stage 1 consultation to landowners living within SGRAs with vulnerability scores of 4 or 6 only, will commence only with acceptance of the CTC SPC of the vulnerability scoring for the SGRAs.

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**Date: December 14, 2009**

**RES.#A149/10 -**

**Communications Update including Water Budget e-learning Module**

Update on the development of the e-learning module communications tool and ongoing communications activities within the CTC SPR

Moved by: Jessica Ginsburg  
Seconded by: Lynne Moore

**THAT the CTC SPC receive this report for information.**

**BACKGROUND**

CTC communications staff continue to conduct general outreach to educate residents of the CTC Source Protection Region on the importance of the *Clean Water Act, 2006* and the work of the CTC Source Protection Committee.

**E-Learning Water Budget Module**

Staff has developed with the Haight consulting firm, a tool to provide the interested public with an on-line self-directed learning opportunity to understand more about water budgets. Currently this module is at the 'beta' stage, i.e. undergoing testing and review to ensure the information is correct and that the program functions properly.

This learning module provides interested individuals with an interactive opportunity to gain a better understanding of the Water Budget work including how water quantity threats are identified, the tiered process and how the source protection committee will use this work to inform the *Source Protection Plans*. This module will be made available on the CTC Source Protection Committee's website ([www.ctcswp.ca](http://www.ctcswp.ca)) and will be part of the interactive displays planned for Stage 2 public consultations and at other public events. Upon request, copies will be made available to individuals who do not have high speed internet access. The work will be also be shared with other source protection regions through Conservation Ontario.

The 'beta' version of the Water Budget e-learning module will be made available to SPC members for demonstration at SPC Meeting #1/10 held on Monday, January 18, 2010.

**Next Steps**

CTC staff will incorporate feedback from the source protection committee and work to finalize the Water Budget e-learning module for release to the public along with the final Tier 1 & 2 Water Budgets for the CTC Source Protection Region (see agenda item 6.1).

CTC staff will work to develop a similar e-learning module to educate public stakeholders on the Wellhead Protection Area delineation, Vulnerability Assessments and Threats and Issues Assessment work.

**Outreach Meetings and Events**

Through the months of November and December staff were involved in a number of general source water protection communications events in the CTC and surrounding area (see list below). Of particular note was the Lake Ontario Evenings event hosted by TRCA on December 3, 2009. This event was a tremendous success with over 70 audience members learning about Source Water Protection and other issues related to Lake Ontario. The recommended format

for Stage 2 Public consultations planned for areas served by Lake Ontario water systems is based on this event (see Communications Outreach Working Group report agenda item 6.1).

Starting in January through the submission of the Assessment Reports in August 2010, CTC Communications staff will focus their efforts on the Stage 1 and Stage 2 public consultations, including developing display materials and other communications support. General outreach efforts will need to be limited during this high activity period.

#### Recent Events

November 18, 19 & 20 - A.D. Latornell Conservation Symposium

- CTC Communications staff set up the "It Starts With A Drop" mural at the 16th annual A.D. Latornell Conservation Symposium being held November 18, 19 and 20 in Alliston. The symposium brings together practitioners, students, academics, politicians and nongovernmental organizations to discuss a broad range of conservation issues. The symposium is Ontario's most prestigious and well-attended annual conservation conference and with the mural set up for the duration of the symposium many stakeholders and colleagues were made aware of the CTC SPC's ongoing outreach efforts.

November 21 - "Toilet to Tap" - Bus Tour and Workshop to celebrate World Toilet Day

- CTC Communications staff joined a Riversides bus tour and workshop which provided information about the history of Ashbridge's Bay, the building of the city's modern wastewater and drinking water treatment infrastructure and some older treatment systems from the past. At this bus tour CTC staff presented general update on SWP in the CTC region including anticipated timelines for bringing forward the TRSPA Assessment Report for public consultation. Engagement of local grassroots NGOs now is anticipated to create greater engagement of the public during the Stage 2 consultation as proposed in Item#6.1.

December 3 - Inaugural Lake Ontario Evenings

- Rodney Bouchard, Project Manager of the Lake Ontario Collaborative (LOC), spoke at this inaugural evening exploring local projects focused on Lake Ontario. Michael D'Andrea, Director, Infrastructure Asset Management with the City of Toronto, spoke about Toronto Waterworks projects addressing quantity and quality issues. The evening featured a talk from Peter Annin, author of *The Great Lakes Water Wars* as well as an opportunity to provide input on recommendations coming forward in the updated Don River Fisheries Management Plan. This meeting was hosted by TRCA and was very successful in:
  - increasing public engagement by providing information in a way that decreased the demand on the public's time
  - established a forum where public stakeholders received credible information and were able provide input to the TRCA
  - presented initiatives to the public as pieces of the larger Lake Ontario picture (reflecting the watershed approach)

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**Date: December 15, 2009**

**RES.#A150/10 -**

**WATERLIFE - Film about Protecting the Great Lakes**

Director of the documentary speaks to the committee about his experience creating the film

Moved by: Jessica Ginsburg  
Seconded by: Lynne Moore

**THAT the CTC SPC receive this report for information.**

**BACKGROUND**

Kevin McMahon's journalistic engagement with the Great Lakes began at his university newspaper (in St. Catharines, ON) where he covered the then-emerging disaster of the Love Canal in Niagara Falls, N.Y. A dozen years later, the abandoned neighbourhood provided one of the most poignant scenes in *The Falls* (1990), the first documentary feature Mr. McMahon directed. In 2007, he returned to the area for *WATERLIFE* a documentary which tells the epic story of the Great Lakes by following the cascade of its water from northern Lake Superior to the Atlantic Ocean, through the lives of some of the 35 million people who rely on the lakes for their survival. His hope with the film *WATERLIFE* is that it will "alert Americans and Canadians to the extreme threats facing the great body of water they share; which, indeed, some would say they hold "in trust", since it comprises 20 per cent of all the surface fresh water on Earth." The film engages young audiences with beautiful imagery and a soundtrack featuring Sam Roberts, The Allman Brothers, Dropkick Murphys, Sufjan Stevens, Sigur Ros, Robbie Robertson, Daniel Lanois, Phillip Glass, Brian Eno and a new song from the Tragically Hip.

In addition to the film an interactive website has been created at [www.waterlife.nfb.ca](http://www.waterlife.nfb.ca) which allows users to browse through segments of the documentary and learn engage with issues that affect the great lakes.

**PRESENTATION**

Kevin McMahon, Director of the film *WATERLIFE* will make a presentation to the committee about how and why this film was created as well as highlighting some of the reactions it has inspired.

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**Date: December 02, 2009**

**RES.#A151/10 -**

**Source Water Protection and Climate Change**

Presentation from Fred Ruf, SPC representative and Don MacIver, Director, Adaptation and Impacts Research, Environment Canada

Moved by: Jessica Ginsburg  
Seconded by: Lynne Moore

**THAT the CTC SPC receive this report for information.**

**BACKGROUND**

Under the *Clean Water Act, 2006* the Technical Rules 9.2(e) require that an Assessment Report include a written description of the work undertaken in accordance with these rules including the assessment of the climate of the source protection area undertaken in accordance with part III.1. The analysis is to estimate the effects that projected changes in the climate over the following 25 years will have on the conclusions reached in the assessment report and a list of the information sources underlying those projected changes. Climate change impacts on drinking water supplies can affect both the quantity of groundwater and surface water available and also the quality of the water, particularly in lakes and rivers where more high intensity storms can transport large volumes of contaminants from land in a short time period.

The province is conducting a source water protection pilot project on how to assess these climate change impacts. They will be providing guidance on how to carry out the analysis and staff will prepare the material to be included in the *Draft Assessment Reports* based on this guidance. The Minister of the Environment has recently released the report and accepted the 56 recommendations of Ontario's Expert Panel on Climate Change Adaptation (report can be found at <http://www.ene.gov.on.ca/publications/7300e.pdf> and a link to this site is found at our website [www.ctcswp.ca](http://www.ctcswp.ca)). Hard copies of this report are also available to SPC members upon request.

This two part presentation will provide the SPC with information on the work being done under Canada's Climate Change Adaptation Project to raise general awareness of the climate change issue and what is being done presently in federal programs.

#### **Presentation**

##### **a) Fred Ruf, CTC SPC Member Public Sector Representative**

Fred Ruf is a member of two Source Protection Committees (CTC SPR and Southern Georgian Bay Lake Simcoe SPR). Outside of his source protection work, Fred is working on a climate change adaptation project for Health Canada titled "Heat Alert and Response Systems in Canada: Developing Heat Resilient Communities and Individuals". This project is one of four components of a larger project initiated and funded by the Climate Change and Health Office (CCHO) of Health Canada. Fred will speak directly to the impacts of climate change on human health.

##### **b) Don MacIver, Director of Adaptation and Impacts Research with Environment Canada, Mayor of the Township of Amaranth and County Councillor with Dufferin County**

Don MacIver leads Environment Canada's Climate Change Adaptation Project and he is also the mayor of the Township of Amaranth, in Dufferin County. Amaranth is a rural municipality west of Orangeville which is partially within the CTC Source Protection Region in the Credit Valley Source Protection Area. Amaranth is also partially within the South Georgian Bay Lake Simcoe and Lake Erie Source Protection Regions. Within the CVSPA, Amaranth has one planned groundwater drinking water system which is being assessed under source water protection. Don's presentation "Whose Water Is It Anyway?" will highlight the connections between source water protection and climate change illustrating both the economic and political implications of not responding to climate change.

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**RES.#A152/10 -**

**Update on Municipal Planners Meeting**

Meeting Scheduled to re-engage municipal planning staff in source water protection to coincide with the expected release of the draft source protection planning regulation and to start discussions to prepare amended Terms of Reference to include source protection planning tasks by municipalities.

Moved by: Jessica Ginsburg  
Seconded by: Lynne Moore

**THAT the CTC SPC receive this report for information;**

**AND FURTHER THAT staff be directed to report back at SPC Meeting#2/10 to be held on February 20, 2010 on the outcome of the Municipal Planners meeting and recommended next steps.**

**BACKGROUND**

At SPC meeting #8/09 held on November 24, 2009 staff were directed by RES.#A140/09 to report back at Meeting #1/10 on the responses received to Chair Self's invitation and proposed meeting details for information.

Responses have been received from most municipalities and based on the majority of persons who could attend (23 out of 27 respondents), February 8, 2010 from 9:00 AM to 2:30 PM has been selected for the meeting. On this date, planning representatives from all the municipalities who are responsible for municipal groundwater drinking systems can attend, along with representation from a variety of upper and lower tier municipalities. In addition to planning staff, the municipal technical leads will also be invited to attend to provide continuity of information flow within the municipalities.

The purpose of the meeting is to brief municipal planning staff on the current status of the work on the assessment reports and plans for public consultation; what is required in source protection plans and tools available to SPC; and to begin to develop work plan details including roles and responsibilities for source protection planning tasks for inclusion in amended Terms of Reference for each source protection area.

**MEETING DETAILS**

The meeting will start with brief overview presentations on the assessment report work status and plans for Stage 2 public consultation. Depending upon the release by the province of the draft source protection planning regulation, an overview of this will be included, preferably by provincial staff (an invitation request has been made to speak). If the draft regulation has not been released then there will be a presentation on source protection planning based on the discussion document released in June 2009. The next part of the meeting will be break out sessions into 2 to 3 groups to discuss the proposed work plan to undertake source protection planning tasks (draft for discussion will be provided in advance as part of the agenda package).



Attendees will be surveyed to identify how they wish to be kept informed/involved in the source protection planning and assessment report progress, asked their opinion on the usefulness of the meeting and format, and to provide advice on future meeting topics and frequency and/or other methods of communication.

#### **NEXT STEPS**

Agenda packages and supporting materials will be sent to meeting attendees in mid January 2010.

Staff will review the initials responses from the February 8, 2010 meeting discussions and prepare draft TOR tasks for review by the CTC SPC Municipal Liaison Terms of Reference Working Group at a meeting to be scheduled in late February - early March 2010. Amended draft Terms of Reference (TOR) will be prepared for SPC approval and public consultation to be conducted coincident with assessment report consultations if possible.

On-going communications with municipal planning staff will be planned taking into account their preference for best form of communication, e.g. newsletters, meetings or other methods based on their survey responses,

Upon Minister's approval of the amended TOR, source protection planning tasks will commence.

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#### **11. NEW BUSINESS**

##### **TERMINATION**

ON MOTION, the meeting terminated at 2:38 pm., on Monday, January 18, 2010.

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Susan Self  
Chair