



#### **AGENDA**

#### Mississippi-Rideau Source Protection Committee (MRSPC)

#### November 15, 2010 1 pm Rideau Valley Conservation Authority 3889 Rideau Valley Drive, Manotick

		Т
Welcome and Introductions	Pg.	Chair Stavinga
a. Agenda Review		
b. Notice of Proxies		
c. Adoption of the Agenda (D)		
e. Approval of Minutes – September 2, 2010 (D)		
draft minutes attached as a separate document		
f. Status of Action Items – Staff Report Attached (D)	1	
g. Correspondence (I):	3	
<ul> <li>Raisin-South Nation Source Protection Region re: Draft AR</li> </ul>		
Assessment Report Development – Staff Report Attached (D)	6	
		Sommer
		Casgrain-
<ul> <li>b. <u>Proposed Assessment Report</u> – consider approving Proposed</li> </ul>		Robertson
Assessment Report for public consultation and submission to the MOE		&
		Brian Stratton
Assessment Report Accompanying Document – Staff Report Attached (D)	73	Sommer
	. 0	Casgrain-
consider approving a accument for each modern to allo mode		Robertson
		71000710077
2011 Meeting Schedule – Staff Report Attached (D)	74	Sommer
		Casgrain-
Consider proposed meeting dates for 2011		Robertson
		71000110011
Community Outreach – Staff Report Attached (D)	75	Chair Stavinga
		Gridin Glaviniga
Other Business		Chair Stavinga
Member Inquiries		Chair Stavinga
Next Meeting - December 2, 2010, 1pm		Chair Stavinga
		Grian Glavinga
5000 Mideau Valley Drive, Mariotick		
Adjournment		Chair Stavinga
	a. Agenda Review b. Notice of Proxies c. Adoption of the Agenda (D) d. Declarations of Interest e. Approval of Minutes – September 2, 2010 (D)	a. Agenda Review b. Notice of Proxies c. Adoption of the Agenda (D) d. Declarations of Interest e. Approval of Minutes – September 2, 2010 (D)

#### (I) = Information (D) = Decision

**Delegations** wishing to speak to an item on the Agenda are asked to contact Sommer Casgrain-Robertson at 613-692-3571 ext 1147 or sommer.robertson@mrsourcewater.ca before the meeting.

#### 1.0 f) STATUS OF ACTION ITEMS

Date: November 5, 2010

To: Mississippi-Rideau Source Protection Committee From: Sommer Casgrain-Robertson, Co-Project Manager

Mississippi – Rideau Source Protection Region

#### **Recommendation:**

1. That the Mississippi-Rideau Source Protection Committee receive the Status of Action Items staff report for information.

#### **Staff & Chair Action Items:**

	Issue	Action	Lead	Status
1	Vacant "Other Interest" seat on the MRSPC	Fill the vacancy on the MRSPC	Sommer Casgrain- Robertson	In Progress Applications are currently being reviewed
2	Vacant "City of Ottawa" seat on the MRSPC	Fill the vacancy on the MRSPC	Sommer Casgrain- Robertson	In Progress City of Ottawa staff will begin a process to fill the seat
3	Ottawa River Watershed Inter- Jurisdictional Committee	Encourage MOE to take the lead role in establishing an Ottawa River watershed interjurisdictional committee	Mary Wooding	Ongoing Chair Stavinga and staff met with Ville de Gatineau on September 16, 2010 to discuss possible IPZ work in Quebec.
4	Tritium	Encourage province to lower Ontario Drinking Water Standard for tritium	Chair Stavinga	Ongoing MRSPC passed a motion May 6, 2010 calling on MOE to adopt the Ontario Drinking Water Advisory Council's six recommendations in their Report and Advice on the Ontario Drinking Water Quality Standard for Tritium.  MRSPC and staff visited the Atomic Energy of Canada Limited Chalk River Laboratory on October 19, 2010 and received a briefing about their operations and environmental monitoring.

	Issue	Action	Lead	Status
5	Uranium	MVC and local Health	Sommer	In Progress
		Units work together to	Casgrain-	Jean-Guy Albert will
		raise public awareness	Robertson	encourage Health Canada to
		about naturally occurring		release the "Uranium and
		uranium in drinking		Drinking Water" fact sheet
		water		they developed.
6	Compensation	Staff to collect other	Sommer	In Progress
	Models	compensation models	Casgrain-	Staff will build this in to the
		(e.g. Ottawa wetland	Robertson	Source Protection Plan work
		policy, Alternate Land		plan (begin late 2010).
		Use Services).		

### **MRSPC Member Action Items:**

	Issue	Action	Lead	Status
1	Drainage Act is under review	Follow the process to see if it will impact source protection work	Peter McLaren & Richard Fraser	In Progress Peter and Richard are following the review and will inform the Committee of any concerns they have.
2	Members were concerned that attendance might be low at public open houses and groups who should be involved in the process are not	Members were asked to provide Sommer with contact information for groups they feel should be involved in the process – they will be added to our mailing list.	All Members	Ongoing
3	OFEC Conference Calls & Training Sessions	Richard Fraser will provide the MRSPC with updates on OFEC conference calls & training sessions	Richard Fraser	Ongoing
4	Community Outreach opportunities	Members to notify Sommer of potential events and opportunities to engage the public about source protection	All members	Ongoing

### 1.0 g) CORRESPONDENCE

Date: November 5, 2010

To: Mississippi-Rideau Source Protection Committee From: Sommer Casgrain-Robertson, Co-Project Manager

Mississippi - Rideau Source Protection Region

#### **Attached Correspondence:**

	Correspondence From:	Regarding:	Response:
1	Raisin-South Nation Source Protection Committee September 16, 2010	Draft Proposed Assessment Report posted for public comment	No response required

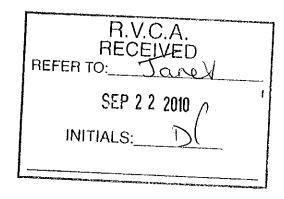






September 16, 2010

Ms. Janet Stavinga
Chair
Mississippi-Rideau
Source Protection Committee
c/o Rideau Valley Conservation Authority
3889 Rideau Valley Dr.
P.O. Box 599
Manotick, Ontario
K4M 1A5



SUBJECT: Draft Proposed Assessment Report available for Public Comment

Dear Ms. Stavinga,

The Raisin-South Nation Source Protection Committee wishes to thank you for your Source Protection Committee's ongoing participation with us in the municipal drinking water source protection process. We appreciate the keen interest and participation demonstrated by both Committee members and Source Protection staff. Your assistance in sharing data with us has played a key role in helping us to prepare this region's two Draft Proposed Drinking Water Assessment reports.

We are now seeking public input into these draft documents.

From now until October 15, 2010, copies of the draft report are available for viewing and commentary on our website at <a href="https://www.yourdrinkingwater.ca">www.yourdrinkingwater.ca</a> and at our region's two Conservation Authority offices: South Nation Conservation and Raisin Region Conservation Authority.

Six public meetings will be held throughout September and in October to discuss Source Water Protection and the Assessment Report. Technical experts, committee members and municipal representatives will be available to answer questions or concerns and receive input. (Please see attached Ad for public meeting schedule and Draft Proposed Assessment Report release).

For more information on the *Draft* Proposed Assessment Report or the Drinking Water Source Water Protection Program, please contact our Communications Specialist, Karen Cooper at 1-866-938-3611 (ext. 247) or via e-mail at <a href="mailto:kcooper@rca.on.ca">kcooper@rca.on.ca</a>.

It is always a pleasure to work together with you to protect Eastern Ontario municipal drinking water supplies.

Claude Cousineau,

Chair, Source Protection Committee

Raisin Region Conservation Authority 18045 County Road # 2 ~ P. O. Box 429 Cornwall, ON ~ K6H 5T2 (Tel) 613-938-3611 (Fax) 613-938-3221 www.rrca.on.ca



Richard E. Pilon, P.Eng. Project Manager

South Nation Conservation 38 Victoria Street – P. O. Box 29 Finch, ON – KOC 1KO (Tel) 613-984-2948 (Fax) 613-984-2872 www.nation.on.ca

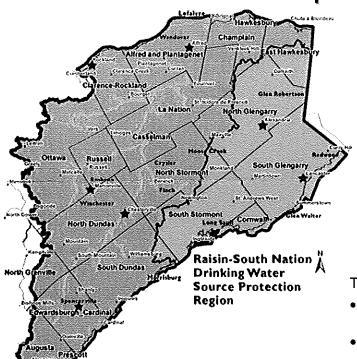




Conservation Authority Office de protection de la



### A Series of Public Meetings We Want Your Input on Local Drinking Water



**Draft Proposed Assessment Reports** for the Raisin-South Nation Region

You are invited to read and comment on the Draft Proposed Assessment Reports for the Raisin-South Nation Source Protection Region.

This proposed draft report was prepared under the Ontario Clean Water Act by the Raisin-South Nation Source Protection Committee.

Publication of these two Reports is an important step in developing a Drinking Water Source Protection Plan for both the Raisin Region and South Nation Source Protection Areas. We are seeking your input on protecting this most valuable natural resource.

#### The Draft Proposed Assessment Report

- Identifies vulnerable areas where drinking water sources might face risk of contamination
- Assesses possible threats to drinking water in vulnerable areas

Groundwater Study Communities: Glen Robertson, Redwood Estates, Crysler, Moose Creek. Finch, Newington, Vars, Limoges, Greely (Shadow Ridge), Embrun / Marionville, Winchester, Chesterville, and Spencerville (Bennett St.)

Surface Water Study Communities: Casselman, Alexandria, Lancaster, Glen Walter, Cornwall, Long Sault, Morrisburg, Cardinal, Prescott, Hawkesbury, Lefebyre, Wendover, and Rockland

#### **Public Meetings**

Sept. 22<sup>nd</sup> (1 - 4 pm; 6 - 9 pm) Lancaster

at Cooper Marsh

**Sept. 23<sup>rd</sup>** (1 - 4 pm; 6 - 9 pm) Alexandria

at Alexandria Curling Club

138 Main St. North

Sept. 28<sup>th</sup> (1 - 4 pm; 6 - 9 pm) Embrun

at Arena d'Embrun Arena

**Sept. 30<sup>th</sup>** (1 - 4 pm; 6 - 9 pm) Alfred

Campus d'Alfred Guelph University

Chesterville Oct. 5<sup>th</sup> (1 - 4 pm; 6 - 9 pm)

Royal Canadian Legion

Spencerville Oct. 7th (1 - 4 pm; 6 - 9 pm)

Spencerville Mill

Deadline for Comments: October 15, 2010

#### See the Report:

**Draft Proposed Assessment Report copies** are available through:

- The internet at <u>www.yourdrinkingwater.ca</u>
- Raisin Region Conservation Authority
- South Nation Conservation
- Municipal Offices

#### Submit all Comments in Writing:

Website: www@yourdrinkingwater.ca

Fax: 613-938-3221 Mail: Richard Pilon.

Proiect Manager

c/o Raisin Region Conservation Authority 18045 Cty Rd. 2, Cornwall, ON K6H 5T2

for information call Karen 1-866-938-3611 (ext 247)

#### 2.0 Assessment Report Development

Date: November 9, 2010

To: Mississippi-Rideau Source Protection Committee From: Sommer Casgrain-Robertson, Co-Project Manager Mississippi – Rideau Source Protection Region

#### **Recommendation 1:**

Whereas the Mississippi-Rideau Source Protection Committee strongly believes a consolidated Assessment Report should be produced for the Mississippi-Rideau Source Protection Region for the following reasons:

- Both the Rideau Valley Source Protection Area and the Mississippi Valley Source Protection Area drain into the Ottawa River and each Area contains a number of small subwatersheds that drain directly into the Ottawa River.
- Much of our existing groundwater information is regional in nature as a result of the Renfrew-Mississippi-Rideau Groundwater Study completed in 2003. It would be a tremendous amount of effort and expense to separate this information into two Source Protection Areas.
- We anticipate the Assessment Report will be most used by municipal staff, especially planners. There are seven municipalities in both Source Protection Areas and a single document free of repetition would be easiest for them to use and reference as it would give them a complete picture of their municipality. Municipalities requested a single Assessment Report following the development of two Terms of Reference for our region.
- Two Terms of Reference proved to be cumbersome and wasteful.
   Municipalities and the public complained that it was onnerous to review two distinct documents when the content was nearly identical. Many members of the public complained at our open houses that the exercise of producing two distinct reports with so much common material was wasteful in terms of paper and printing costs.
- The vulnerable area for our largest municipal drinking water system, Ottawa River intakes, falls in both Source Protection Areas. The IPZ-1 and IPZ-2 is in the Rideau watershed while the IPZ-3 is in the Mississippi watershed.

Be it resolved that the Mississippi-Rideau Source Protection Committee direct staff to create two *Proposed* Assessment Reports in accordance with comment 2 received from MOE to be in compliance with the *Clean Water Act* and its Regulations.

#### **Recommendation 2:**

Whereas the Mississippi-Rideau Source Protection Committee has strongly advocated for long-term provincial funding to fund the implementation of Source Protection Plans:

- Provincial funding for municipalities to implement Source Protection Plans; and
- Provincial funding through the Ontario Drinking Water Stewardship Program for property owners impacted by Source Protection Plan policies.

Be it resolved that the Mississippi-Rideau Source Protection Committee direct staff to revise the "Provincial Funding" section on page 1-9 of the Assessment Report in accordance with comment 12 received from MOE to be in regulatory compliance.

#### **Recommendation 3:**

Whereas the Mississippi-Rideau Source Protection Committee feels strongly that Assessment Report readers should be aware of how difficult it was to develop a local methodology to assign vulnerability scores in Intake Protection Zones because the Provincial Technical Rules do not prescribe a methodology;

Whereas the Mississippi-Rideau Source Protection Committee feels strongly that the Ontario Ministry of the Environment should develop Technical Guidance on how to assign vulnerability scores in Intake Protection Zones;

Be it resolved that the Mississippi-Rideau Source Protection Committee direct staff to revise Section 6.2 of the Assessment Report in accordance with comment 15 received from MOE to be in regulatory compliance.

#### Recommendation 4:

That the Mississippi-Rideau Source Protection Committee approve the *Summary of Comments Received on the Draft Assessment Report and How They Were Addressed* (dated November 8, 2010) and direct staff to prepare *Proposed* Assessment Reports that reflect the approved changes.

#### **Recommendation 5:**

That the Mississippi-Rideau Source Protection Committee direct staff to post the *Proposed* Assessment Reports for public consultation and submit them to the Mississippi Valley Source Protection Authority and Rideau Valley Source Protection Authority for submission to the Ontario Ministry of the Environment.

#### November 15, 2010 - MRSPC Meeting

On September 29, 2010 a *Draft* Assessment Report was posted for public review and comment. Four public open houses were held (in Carp on Oct 26; Perth on Oct 28, Kemptville on Nov 1; and Carleton Place on Nov 2) to present key findings to the public and solicit public input and feedback. The deadline to submit comments was November 5, 2010.

- Attached is a chart summarizing all the comments that were received and how staff feels each comment should be addressed (Draft version of Summary of Comments Received on the Draft Assessment Report and How They Were Addressed, dated November 8, 2010).
- Also attached are the written comment submissions that were received
- The Committee will review the comments and decide what revisions to make in the *Proposed* Assessment Reports.
- The Committee will consider approving Proposed Assessment Reports to be posted for public consultation and submitted to the Source Protection Authorities for submission to the MOE.

#### **Past Meetings**

#### September 2, 2010 – MRSPC Meeting

At their June 3, 2010 meeting the MRSPC approved a *Draft* Assessment Report without IPZ-3 vulnerability scores. It was felt the current IPZ-3 vulnerability scoring was not defensible. Following the meeting MOE confirmed that the Committee could not post a *Draft* Assessment Report without vulnerability scores. As a result staff worked with MOE technical staff, the consultants, and surface water municipalities to develop a revised approach to determine IPZ-3 vulnerability scores. During this process some IPZ delineations were also revised.

At their September 2, 2010 meeting, the Committee approved the following revisions to the *Draft* Assessment Report and directed staff to post it for public consultation:

- Revised IPZ delineations for Smiths Falls, Britannia and Lemieux Island;
- Revised IPZ-3 vulnerability scores for all five surface water systems;
- Updated Managed Lands, Livestock Density and Significant Threat Inventories;
- Inclusion of Knowledge Gaps in Chapter 8

#### June 3, 2010 - MRSPC Meeting

- The MRSPC reviewed the entire *preliminary draft* Assessment Report, comments from MOE on the *preliminary draft* Assessment Report and public comments on the *preliminary draft* surface water and groundwater studies (Wellhead Protection Area and Intake Protection Zone findings).
- The Committee approved a number of MOE's recommended changes and removed IPZ-3 vulnerability scores before approving a *Draft* Assessment Report to be posted for public consultation
- Following the meeting MOE confirmed that a *Draft* Assessment Report cannot be posted without IPZ-3 vulnerability scores.
- Staff informed Committee members and began working as quickly as possible with MOE technical staff, the consultants and surface water municipalities to develop a revised approach to assign IPZ-3 vulnerability scores.

#### May 6, 2010 - MRSPC Meeting

- The MRSPC reviewed *preliminary* Surface Water Threats and Issues information. They then reviewed a *preliminary draft* Assessment Report chapter: Chapter 6 (Surface Water Sources). The Committee also reviewed a *preliminary draft* summary of public comments on the municipal surface water studies.
- The Committee provided feedback and received the chapter as amended for inclusion in the *preliminary draft* Assessment Report that will be reviewed and considered by the Committee at their June 3 meeting.

#### April 1, 2010 – MRSPC Meeting

- The MRSPC received the revised IPZ-3 vulnerability scoring for Carleton Place, Perth and Smiths Falls.
- These summaries were provided to all relevant municipalities and presented to the Mississippi Valley and Rideau Valley Source Protection Authorities on April 21 and 22 respectively.
- Study findings were then presented to the public at open houses in Carleton Place (April 29), Perth (April 26) and Smiths Falls (April 27). The summaries were also posted on the web site for public review

- The MRSPC also reviewed a *preliminary draft* Assessment Report chapter: Chapter 7 (Climate Change).
- The Committee provided feedback and approved it as amended for inclusion in the *preliminary draft* Assessment Report that will be reviewed and considered by the Committee at their June 3 meeting.

#### March 4, 2010 - MRSPC Meeting

- The MRSPC reviewed three preliminary draft Assessment Report chapters: Chapter 1 (Introduction), Chapter 4 (Drinking Water Quality Threats and Issues Approach) and 5 (Groundwater Sources). The Committee also reviewed a preliminary draft summary of public comments on the municipal groundwater studies.
- The Committee provided feedback and approved them as amended for inclusion in the *preliminary draft* Assessment Report that will be reviewed and considered by the Committee at their June 3 meeting.
- The MRSPC also reviewed preliminary draft municipal surface water studies and summaries for Carleton Place, Perth and Smiths Falls and received them as draft for public consultation subject to staff discussing with the consultants why wetlands and woodlots were given a vulnerability score of 1 in IPZ-3 regardless of distance from the intake.
- Staff had a discussion with the consultants who decided to revise the IPZ-3 scoring and present revised *preliminary draft* studies and summaries to the Committee at their April 1 meeting.

#### February 4, 2010 - MRSPC Meeting

- The MRSPC reviewed a *preliminary draft* Assessment Report chapter: Chapter 2 (Watershed Characterization).
- The Committee provided feedback and approved it as amended for inclusion in the *preliminary draft* Assessment Report that will be reviewed and considered by the Committee at their June 3 meeting.
- The MRSPC also reviewed and provided feedback on a preliminary list of topics for inclusion in Chapter 8 (Data Gaps and Topics for Additional Research). MOE then held a conference call with Committee Chairs on March 9 and clarified that content outside of what is required to be included in an Assessment Report cannot be included in the Report because the Director would not be able to approve it.
- Staff has concluded that Chapter 8 will have to be limited to Assessment Report
  Data Gaps and an accompanying document will need to be developed to capture
  outstanding issues, concerns and topics for additional research. This additional
  document will not form part of the Assessment Report.

#### January 7, 2010 – MRSPC Meeting

- The MRSPC reviewed *preliminary draft* surface water studies and summaries for Britannia and Lemieux Island (the City of Ottawa's intakes on the Ottawa River) and received them as *draft* for public consultation.
- These summaries were provided to all relevant municipalities and presented to the Rideau Valley and Mississippi Valley Source Protection Authorities on January 28 and March 24 respectively.
- Study findings were then presented at public open houses near Lemieux Island (March 22 - Tom Brown Arena) and Britannia (March 31 - Ron Kolbus Lakeside Centre). The summaries are also posted on the web site for public review.

#### December 3, 2009 - MRSPC Meeting

- The MRSPC reviewed a *preliminary draft* Assessment Report chapter: Chapter 3 (Water Budget).
- The Committee provided feedback and approved it as amended for inclusion in the preliminary draft Assessment Report that will be reviewed and considered by the Committee at their June 3 meeting.

#### November 5, 2009 - MRSPC Meeting

- The MRSPC reviewed a *preliminary draft* Groundwater Threats and Issues study and summary and approved it as *draft* for public consultation.
- This summary was presented to the Rideau Valley and Mississippi Valley Source Protection Authorities on November 26 and December 2 respectively. The summary was also posted on the web site for municipal and public review.
- Once public consultation details for the draft Assessment Report are finalized, a notice will be sent to each property owner where a land use activity has been identified as a potential significant threat inviting them to review the report and talk to staff about their land use activities if they wish (completely voluntary).

#### September 3, 2009 – MRSPC Meeting

- The MRSPC reviewed *preliminary draft* studies and summaries that provided a Conceptual Water Budget (regional scale), Tier 1 Water Budget (subwatershed scale) and review of Climate Change knowledge. The Committee approved them as *draft* for public consultation.
- These summaries were presented to the Mississippi Valley and Rideau Valley Source Protection Authorities on September 16 and 24 respectively. The summaries were also posted on the web site for municipal and public review.

#### July 9, 2009 - MRSPC Meeting

- The MRSPC reviewed *preliminary draft* studies and summaries identifying Highly Vulnerable Aquifers and Significant Groundwater Recharge Areas at the regional scale and approved them as *draft* for public consultation.
- These summaries were provided to all municipalities and presented to the Mississippi Valley and Rideau Valley Source Protection Authorities on September 16 and August 27 respectively
- Study summaries are posted on the web site for public review.

#### June 4, 2009 – MRSPC Meeting

- The MRSPC reviewed *preliminary draft* municipal groundwater studies and summaries for Almonte, Munster, Richmond (King's Park) and Westport and approved them as *draft* for public consultation.
- These summaries were provided to all relevant municipalities and presented to the Rideau Valley and Mississippi Valley Source Protection Authorities on June 25 and July 15 respectively.
- Study results were then presented at public open houses in Richmond/Munster (July 20), Westport (July 21) and Almonte (July 22). The summaries are also posted on the web site for public review.

#### May 7, 2009 – MRSPC Meeting

- The MRSPC reviewed *preliminary draft* municipal surface water studies and summaries for Carleton Place, Perth and Smiths Falls.
- They chose to continue their deliberations at a later meeting following a technical briefing in late August with MOE staff and the study consultants (see March 4, 2010 meeting).

#### April 2, 2009 – MRSPC Meeting

- The MRSPC reviewed *preliminary draft* municipal groundwater studies and summaries for Carp, Kemptville and Merrickville and approved them as *draft* for public consultation.
- These summaries were provided to all relevant municipalities and presented to the Mississippi Valley and Rideau Valley Source Protection Authorities on April 15 and 23 respectively.
- Study results were then presented at public open houses in Carp (June 8), Merrickville (June 10) and Kemptville (June 11). The summaries are also posted on the web site for public review.

#### Background

Source Protection Committees are required to produce Assessment Reports. These reports will map local sources of drinking water, determine how vulnerable they are to contamination and overuse, and identify what land uses and activities pose a risk. Committees will then use this science to develop Source Protection Plans because they will know where source protection policies are needed and what risks those policies need to address.

Assessment Reports must contain the following components:

- Watershed Characterization
- Water Budget
- Vulnerable Areas:
  - Significant Groundwater Recharge Areas
  - o Highly Vulnerable Aquifers
  - o Wellhead Protection Areas for:
    - Almonte, Carp, Kemptville, Lanark (future planned system),
       Merrickville, Munster, Richmond (King's Park subdivision) and
       Westport
  - Intake Protection Zones for:
    - Carleton Place, Ottawa (Britannia & Lemieux Island), Perth and Smiths Falls
- Prescribed Threats summary
- Inventory of existing Issues and Significant Threats for groundwater
- Inventory of existing Issues and Significant Threats for surface water
- Climate Change Review

#### **Due Date**

Source Protection Committees must submit *proposed* Assessment Reports to their Source Protection Authorities, who in turn submit them to MOE for approval. *Proposed* Assessment Reports must be submitted to the MOE one year after Terms of Reference are approved.

Terms of Reference were approved for the Mississippi Valley Source Protection Area on February 5, 2009, therefore, a *proposed* Assessment Report for the Mississippi watershed must be submitted to MOE by February 5, 2010. Terms of Reference were approved for the Rideau Valley Source Protection Area on March 16, 2009, therefore, a *proposed* Assessment Report for the Rideau watershed must be submitted to MOE by March 16, 2010.

In March 2009, the MRSPC notified MOE that they would need a due date extension. In January, 2010 the MRSPC submited a formal request and received an extension to **September 21, 2010**. The extension was required to enable staff to address:

- revised Technical Rules issued by the MOE; and
- Committee concerns with the surface water studies.

Unfortunately, ongoing concerns with the approach used to determine vulnerability scores for the Intake Protection Zones delayed the completion of a *Draft* Assessment Report. This resulted in the MRSPC not being able to submit a *proposed* Assessment Report to the MOE by September 21, 2010, putting the Committee out of compliance. A *draft* Assessment Report was posted on September 29, 2010 and it is anticipated that a *proposed* Assessment Report should be submitted to the MOE by the end of December, 2010.

#### Two Versions – One Report

The MRSPC is required to develop two Assessment Reports: one for the Mississippi watershed, and one for the Rideau watershed. Learning from the challenges of creating two separate Terms of Reference, staff prepared *Draft* Assessment Reports that are amalgamated within one document because:

- Much of the information is regional and would be repeated in both versions;
- Many municipalities are shared between the Mississippi and Rideau watersheds and it would be onerous for them to review, comment on, and use two stand alone documents;
- It is much more convenient for the public to consult on one report; and
- Creating two separate reports is an unnecessary waste of public money.

#### **Future Update Required**

The *proposed* Assessment Report that will be submitted to the MOE will not contain information about the future municipal drinking water system planned for Lanark Village. This information will be identified as a data gap and included in a revised Assessment Report to be submitted by June, 2011.

#### **Work Plan and Timeline**

Developing an Assessment Report was broken into three phases:

#### Phase 1:

- Completion of background technical studies
- SPC, SPA, municipal and public review of preliminary draft findings
- Development of *preliminary draft* Assessment Report chapters
- SPC review of *preliminary draft* chapters

#### Phase 2:

- Consolidation of chapters into a *preliminary draft* Assessment Report
- SPC review, amendment and approval of *draft* Assessment Report
- SPA, municipal and public consultation on the *draft* Assessment Report

#### Phase 3:

- SPC review of public comments received on draft Assessment Report
- Development of *proposed* Assessment Report
- Public consultation on the *proposed* Assessment Report
- Submission of the *proposed* Assessment Report to MOE for approval

#### Phase 1 Technical Studies

Staff and consultants started working on background technical studies in 2006. Many studies began under draft technical guidance from MOE and were later finalized to meet the approved Technical Rules issued in November, 2009. These studies compiled the scientific information needed to complete Assessment Reports.

Once technical studies are completed, and in many cases peer reviewed:

- Staff developed a summary outlining the study's purpose, methodology and findings (some studies were grouped into one summary).
- The summary was presented to the MRSPC for review and possible amendment (the technical study was provided on CD).
- The summary was presented to the Source Protection Authorities, then circulated to municipalities, and then the public for review.
  - Summaries were posted on the web site for review and comment
  - 11 public open houses were held to solicit public input
  - Each open house focussed on the local municipal drinking water system(s): Wellhead Protection Area or Intake Protection Zone.
  - Full technical studies were available to everyone on CD
- People were encouraged to provide feedback and traditional and local knowledge at this early stage so it could be considered when the preliminary draft Assessment Report was being developed.

Staff developed a *preliminary draft* Assessment Report in collaboration with our neighbouring source protection regions to be consistent where possible. Individual *preliminary draft* chapters were brought to the MRSPC for review and comment as they are developed. Chapters were amended to reflect MRSPC feedback and compiled into a *preliminary draft* Assessment Report.

Carp, Kemptville and Merrickville
Municipal Drinking Water Systems (groundwater)

Month	Task	Timeline
March	Golder complete Wellhead Protection Area Studies	Completed
2009		Early March
	Staff complete Threats Summary	Completed
		Early March
	Staff develop study summaries (reviewed by municipal	Completed
	technical staff)	March 16

Month	Task	Timeline
April 2009	MRSPC review <i>preliminary draft</i> study summaries &	Completed
	technical studies (CD). Provide to municipalities before the	April 2
	meeting.	
May 2009	Send <i>draft</i> study summaries & technical studies (CD) to	Completed
	municipalities with invitation to attend open house	May 21
	Advertise three open houses (Carp, Kemptville and	Completed
	Merrickville) and comment period	May 21
	Send an open house invitation to every property in an area	Completed
	that could score significant threat	May 22 - 25
	SPAs review study summaries	Completed
		April 15 & 23
	Make study summaries available at MVC & RVCA offices	Completed
	for public review	May 22
<b>June 2009</b>	Hold Open houses for municipal staff & council (afternoon	Completed
	session) and public (evening session)	June 8, 10 &
		11
February	Post study summaries on web site	Completed
2010		mid February
	Collect comments on study summaries	Completed
		mid February
	Staff compile comments received on technical study findings	Completed
		March 3
	Staff prepare preliminary draft AR chapter	Completed
		February 24
March	MRSPC review summary of public comments and	Completed
2010	preliminary draft AR Chapter	March 4

Almonte, Munster, Richmond (King's Park), and Westport Municipal Drinking Water Systems (groundwater)

Month	Task	Timeline
May 2009	Malroz complete Wellhead Protection Area Study for	Completed
	Westport; Intera / Golder complete other three studies	Early May
	Staff complete Threats Summary	Completed
		Early March
	Staff develop study summaries (reviewed by municipal	Completed
	technical staff)	May 19
June 2009	MRSPC review <i>preliminary draft</i> study summaries &	Completed
	technical studies (CD). Provide to municipalities before the	June 4
	meeting	
<b>July 2009</b>	Send <i>draft</i> study summaries & technical studies (CD) to	Completed
	municipalities with invitation to attend open house	July 7
	Advertise three open houses (Almonte, Richmond and	Completed
	Westport) and comment period	July 10
	Send an open house invitation to every property in an area	Completed
	that could score a significant threat	July 7
	SPAs review study summaries	Completed
		June 25 &
		July 15

Month	Task	Timeline
	Make study summaries available at MVC & RVCA offices	Completed
	for public review	July 16
	Hold public Open Houses	Completed
		July 20, 21 & 22
February	Post study summaries on web site	Completed
2010		mid February
	Collect comments on study summaries	Completed mid February
	Staff compile comments received on technical study findings	Completed March 3
	Staff prepare preliminary draft AR chapter	Completed February 24
March	MRSPC review summary of public comments and	Completed
2010	preliminary draft AR Chapter	March 4

**Significant Groundwater Recharge Areas & Highly Vulnerable Aquifers** 

Month	Task	Timeline
June 2009	Intera / Golder complete studies	<b>Completed</b> Early June
	Staff complete Threats Summary	<b>Completed</b> Early June
	Staff develop study summaries (reviewed by municipal technical staff)	Completed Mid June
July 2009	MRSPC review <i>preliminary draft</i> study summaries & technical studies (CD).	Completed July 9
	Send <i>draft</i> study summaries & technical studies (CD) to municipalities for review	Completed July 29
August 2009	SPAs review study summaries	Completed August 27 & Sept 16
February 2010	Post study summaries on web site	Completed mid February
	Staff prepare preliminary draft AR chapter	Completed February 24
March 2010	MRSPC review preliminary draft AR Chapter	Completed March 4

Conceptual and Tier 1 Water Budget & Climate Change Review

Month	Task	Timeline
April 2008	MRSPC review preliminary Conceptual Water Budget	Completed
	completed by staff	April 3
August	Staff, Intera & Delcan complete Tier 1 Water Budget and	Completed
2009	staff revise Conceptual Water Budget. Jacqueline Oblak	August 14
	complete Climate Change Review	
	Staff develop summaries	Completed

Month	Task	Timeline
		August 18
September	MRSPC review technical studies (CD) and summaries	Completed
2009		September 3
	SPAs review summaries	Completed
		September 24
November	Staff prepare <i>preliminary draft</i> Water Budget AR chapter	Completed
2009		November 16,
		2009
December	MRSPC review <i>preliminary draft</i> Water Budget AR Chapter	Completed
2009		December 3
February	Post study summaries on web site	Completed
2010		February
March	Send summaries to municipalities for review and comment	Completed
2010		March
	Staff prepare <i>preliminary draft</i> Climate Change AR chapter	Completed
		March 23
April 2010	MRSPC review <i>preliminary draft</i> Climate Change AR	Completed
	Chapter	April 1

**Groundwater Issues and Significant Threats Inventory** 

Month	Task	Timeline
October 2009	Dillon complete Threats & Issues Inventory for groundwater	Completed Early October
	Staff develop study summary (reviewed by municipal technical staff)	Completed October 20
November 2009	MRSPC review study summaries & technical studies (CD). Provide to municipalities before the meeting.	Completed November 5
	SPAs review study summaries	November 26 & December 2
February 2010	Post study summary on web site	<b>Completed</b> February
	Staff prepare <i>preliminary draft</i> AR chapter	Completed February 23
March 2010	MRSPC review preliminary draft AR chapter	Completed March 4
	Send study summaries to municipalities for review	Completed March

**Watershed Characterization Report** 

Month	Task	Timeline
March	MRSPC review preliminary Watershed Characterization	Completed
2008	report	March 6, May
		1 & June 5
January	Staff complete Watershed Characterization report revisions	Completed
2010	and preliminary draft AR chapter	January 23

Month	Task	Timeline
February	MRSPC review technical study revisions and <i>preliminary</i>	Completed
2010	draft AR chapter.	February 4

Britannia & Lemieux Island (Urban Ottawa)
Municipal Drinking Water Systems (surface water)

Month	Task	Timeline
Winter	Baird complete Intake Protection Zone Study	Completed
2009		December 21
	Staff complete Threats Summary	Completed
		April 2009
	Staff develop study summary (reviewed by municipal	Completed
	technical staff)	December 22
January	MRSPC review study summay & technical study (CD).	Completed
2010	Provide to relevant municipalities before the meeting.	January 7
February	Work with City of Ottawa staff to organize open houses	Completed
2010		February
	Advertise open houses (urban Ottawa) & comment period	Completed
		March
	SPAs review study summary	Completed
		January 28 &
	D 1	March 24
	Post study summary on web site and make available at MVC	Completed
N/L 1	& RVCA offices for public review	February
March	Hold public open houses	Completed
2010		March 22 & 31
April 2010	Collect comments on study summaries	Completed
April 2010	Conect comments on study summaries	April 16
	Staff compile comments received on technical study findings	Completed
	and prepare <i>preliminary draft</i> AR chapter	April 28
May 2010	MRSPC review summary of public comments and	Completed
111ay 2010	preliminary draft AR Chapter	May 6
June 2010	MRSPC remove IPZ-3 vulnerability scores from <i>draft</i>	Completed
	Assessment Report	June 3
August	Staff, consultants and municipal staff develop new approach	Completed
2010	to assign IPZ-3 vulnerability scores and revise IPZ	August 26
	delineations	
September	MRSPC review IPZ revisions for inclusion in revised <i>draft</i>	Completed
2010	AR	September 2

### **Carleton Place, Perth and Smiths Falls**

**Municipal Drinking Water Systems (surface water)** 

Month	Task	Timeline
April 2009	J.F. Sabourin complete Intake Protection Zone Studies	Completed
		April 2009
	Staff complete Threats Summary	Completed
		April 2009

Month	Task	Timeline
March	J.F. Sabourin revise Intake Protection Zone Studies	Completed
2010		March 22
	Staff <u>revised</u> study summaries (reviewed by municipal	Completed
	technical staff)	March 23
April 2010	MRSPC review <u>revised</u> preliminary draft study summaries	Completed
	& technical studies (CD). Provide to municipalities before	April 1
	the meeting.	
	Send link to <i>draft</i> study summaries to municipalities with	Completed
	invitation to attend open house	April 14
	Advertise three open houses (Carleton Place, Perth and	Completed
	Smiths Falls) and comment period	April 14
	Send an open house invitation to every property in an area	Completed
	that could score significant threat	April 16
	SPAs review study summaries	Completed
		April 21 & 22
	Post study summaries on web site and make available at	Completed
	MVC & RVCA offices for public review	April 13
	Hold public open houses	Completed
		April 26, 27
		& 29
May 2010	Collect comments on study summaries	Completed
		May 5
	Staff compile comments received on technical study findings	Completed
	and prepare preliminary draft AR chapters	May 5
	MRSPC review summary of public comments and	Completed
7 2010	preliminary draft AR Chapter	May 6
<b>June 2010</b>	MRSPC remove IPZ-3 vulnerability scores from <i>draft</i>	Completed
	Assessment Report	June 3
August	Staff, consultants and municipal staff develop new approach	Completed
2010	to assign IPZ-3 vulnerability scores and revise IPZ	August 26
	delineations	G 1.1
September	MRSPC review IPZ revisions for inclusion in revised <i>draft</i>	Completed
2010	AR	September 2

**Surface Water Issues and Significant Threats Inventory** 

Month	Task	Timeline
May 2010	MRSPC review preliminary findings and preliminary draft	Completed
	AR chapter.	May 6
May 2010	Dillon complete Threats & Issues Inventory for surface	Completed
_	water	May 18
September	Dillon revise Signficant Threats Inventory to reflect changes	Completed
2010	in IPZ-3 vulnerability scoring and delineation	September 22

#### 

Staff compiled all the *draft* Assessment Report chapters into a *preliminary draft* Assessment Report. The MRSPC reviewed all the public comments received on individual technical studies and considered them when finalizing the *draft* Assessment Report for public consultation.

Month	Task	Timeline	
June 2010	MRSPC review preliminary draft AR	Completed	
		June 3	
MRSPC rem	oved IPZ-3 vulnerability scores from Draft AR (identified	them as a data gap to	
be filled	in amended AR). Unfortunately the Draft AR could not be	posted for public	
consu	consultation because IPZ-3 vulnerability scores are not an allowable data gap.		
September	nber MRSPC review amendments to draft AR, including Completed		
2010	revised IPZ-3 vulnerability scores	September 2	
	SPC publish <i>draft</i> AR and notice* on web site	Completed	
		September 29	
	SPC publish notice* in newspapers	Completed	
		September 30 –	
		October 2	
	SPC give copy of notice* to SPAs	Completed	
		September 30	
	SPC give copy of notice* to all municipal Clerks,	Completed	
	CAOs and other involved staff	September 30	
	SPC make notice* publically available at MVC, RVCA	Completed	
	and many municipal offices	September 30	
	SPC make <i>draft</i> AR publically available at MVC,	Completed	
	RVCA and most municipal offices	September 30	
October	SPC provide printed copy of <i>draft</i> AR to remainder of	Completed	
2010	municipalities	October 5	
	SPC give copy of notice* to neighbouring SPCs	Completed	
	CDC 11 1 CW1 11 1 1	October 12	
	SPC provide generic copy of "threat letter", and	Completed	
	property addresses receiving it, to relevant municipal Clerks and CAOs	October 8	
	SPC provide generic copy of threat letter to SPAs	Completed	
		October 8	
	SPC provide generic copy of threat letter to local MPPs	Completed	
		October 12	
	SPC give copy of notice* to each person known to be	Completed	
	potentially engaging in a significant drinking water	October 12	
	threat and identify the potential threat – "threat letter"		
	SPC issue press release	Completed	
<b>N</b> T -	GDG1 - 4 - 111	October 13	
November	SPC host 4 public meetings (two in each watershed)	Completed	
2010		October 26, 28,	
	GDG ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	November 1 & 2	
	SPC receive written comments on <i>draft</i> AR (38 day	Completed	
	comment period)	November 5	

Month	Task	Timeline
	Staff prepare chart summarizing comments received on	Completed
	draft AR and how MRSPC could address them	November 9

<sup>\*</sup> Notice will:

- Inform people they can view the *draft* AR on the Internet
- Inform people of locations and times where they can view the *draft* AR
- Identify dates, times and locations of public meetings
- List due date to submit comments on *draft* AR

#### Phase 3 Proposed Assessment Reports

Staff summarized all comments received on the *draft* Assessment Report during public consultation and recommended how these comments could be addressed. The MRSPC will consider these comments when making final revisions to the Assessment Report. The MRSPC will forward their *proposed* Assessment Reports to the SPAs and post it for a final public consultation period. SPAs will submit the *proposed* Assessment Report to MOE for review and approval along with any public comments received or comments they wish to make.

Month	Task	Timeline
November	SPC review comments received on draft AR and	November 15
2010	consider revising the document to address them	
	Consider posting <i>proposed</i> AR for public consultation	
	and submitting it to the SPAs	
	SPC publish <i>proposed</i> AR, comment summary and	Mid November
	notice* on website and make available at MVC and	
	RVCA offices	
	SPC submit <i>proposed</i> AR, notice* and summary of	Mid November
	comments to SPAs	
	SPC submit <i>proposed</i> AR, notice* and summary of	Mid November
	comments to each municipal clerk	
	SPC send notice* to neighbouring SPCs	Mid November
	SPC issue press release	Mid November
	SPC make notice* available at MVC, RVCA and	Mid November
	municipal offices	
	SPC invite the Algonquins of Ontario, Parks Canada –	Mid November
	Rideau Canal Office and local Provincial Ministry	
	offices to review the Assessment Report and suggest	
	revisions or additions by March 31, 2011	
December	SPAs receive written comments on <i>proposed</i> AR	Mid December
2010		
	SPAs submit to the Director (MOE):	Late December
	- proposed AR	
	- summary of comments received on <i>draft</i> AR	
	and how they were addressed; and	
	- new comments received on <i>proposed</i> AR	T
January	Provide SPC with copy of comments received on	January 6
2011	proposed AR	
	MOE technical staff review proposed AR	winter / spring

Month	Task	Timeline
<b>June 2011</b>	SPC can submit final updates	Early June
summer	Director will consider approving the <i>proposed</i> ARs or	summer
2011	requiring the SPAs to amend them and resubmit	
	When approved the Minister will publish a notice on	Soon after approval
	the Environmental Bill of Rights Registry	
	SPAs will publish <i>approved</i> AR on web site and make	Soon after approval
	available at other locations	

#### \* **Notice** will:

- Inform people they can view the *draft* AR on the Internet
- Inform people of locations and times where they can view the *draft* AR
- Identify dates, times and locations of public meetings
- List due date to submit comments on *draft* AR

#### Assessment Reports will be prepared in accordance with:

- Clean Water Act, 2006
- Ontario Regulation 287/07 "General" (amended by O.Reg. 386/08)
- Technical Rules: Assessment Report (dated November 16, 2009)

#### Attachments:

- Summary of Comments Received on the Draft Assessment Report and How They Were Addressed (dated November 8, 2010)
- Comment submission from Tay Valley Township (dated November 2, 2010)
- Comment submission from the City of Ottawa (dated November 5, 2010)
- Comment submission from the Friends of the Tay Watershed Association (dated November 5, 2010)
- Comment submission from Tom Graham (dated November 5, 2010)
- Comment submission from the Ministry of the Environment (dated November 5, 2010)

# Summary of: Comments Received on the *Draft* Assessment Report & How They Were Addressed

#### **Developing the Assessment Report (AR)**

**Municipal Participation:** 

Municipal representatives sat on working groups that oversaw the technical studies. They selected consultants, reviewed preliminary results and oversaw peer review. Municipal staff also helped develop study summaries which were used during preliminary public consultation and evolved into Assessment Report chapters.

**Public Participation:** 

Preliminary Consultation	<ul> <li>6 public open houses were held in June and July, 2009 to present preliminary Wellhead Protection Areas to local residents and solicit their input</li> <li>5 public open houses were held in March and April, 2010 to present preliminary Intake Protection Zones to local residents and solicit their input</li> </ul>	
Draft AR Consultation	<ul> <li>SPC considered all the comments they received at their preliminary open houses</li> <li>They posted a <i>Draft</i> AR on September 29, 2010 for public review and comment</li> <li>4 public open houses were held on October 26, 28, November 1 and 2, 2010 to solicit public input.</li> <li>Comment deadline was November 5, 2010</li> </ul>	
Proposed AR Consultation	<ul> <li>SPC will consider all the comments they received on the <i>Draft</i> AR (summarized below)</li> <li>Proposed ARs will be posted in mid November for a 30 day public comment period</li> </ul>	
Approved AR	<ul> <li>Source Protection Authorities will submit <i>Proposed</i> ARs, and any comments received, to the Ministry of the Environment by the end of December, 2010</li> <li>MOE will consider the comments when reviewing and approving the AR</li> </ul>	

**Acronyms:** AR – Assessment Report

DNAPL – dense non-aqueous phase liquid

MOE – Ministry of the Environment WHPA – Wellhead Protection Area

SPC – Source Protection Committee IPZ – Intake Protection Zone

Ger	General				
	Comments Received on <i>Draft</i> Assessment Report			How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
0.1	Excellent Scope, content and presentation of the AR is great. Information is well presented and the format of the report is impeccable.	Friends of the Tay Watershed	Yes	N/A	
0.2	Two Reports Required MOE requires that two Assessment Reports be prepared – one for the Mississippi watershed and one for the Rideau watershed.	MOE (comment 2)	Yes	Two <i>Proposed</i> ARs will be created to meet MOE's legislative requirement.	
	Combination of the two ARs in one document is an improvement over the two Terms of Reference.	Friends of the Tay Watershed			
0.3	Executive Summary The executive summary should appear first, ahead of the Table of Contents	CA staff	Yes	This change will be made in the <i>Proposed</i> ARs	
0.4	Glossary Revision In the definition of Transportation Pathways, "transportation crossings" should be replaced with "transportation corridors"	Carleton Place OH	Yes	This revision will be made in the <i>Proposed</i> ARs	

# General

(	Comments Received on <i>Draft</i> Assess	ment Report		How Comments Were Addressed by SPC
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR
0.5	Glossary Addition Add a definition for lithology as it is used on page 5-9.	City of Ottawa	Yes	This definition will be added to the <i>Proposed</i> ARs
0.6	MOE Rules versus Guidance Correctly reference when something is a requirement under MOE's Technical Rules and when something is suggested in MOE guidance.	MOE (comment 1)	Yes	Any incorrect references will be fixed in the <i>Proposed</i> ARs
0.7	Timeframe for Updating AR It is the SPC that determines when an AR needs to be updated, not the MOE	MOE (comment 3)	Yes	This change will be made in the <i>Proposed</i> ARs
0.8	Name of Systems The name of municipal drinking water systems should be consistent with the Terms of Reference	MOE (comment 5)	Yes	The legal name of each municipal drinking water system will be referenced at the beginning of the <i>Proposed</i> ARs to match the Terms of Reference. The common name will then be used in the rest of the <i>Proposed</i> ARs.
0.9	Number of Systems Be consistent throughout the AR about how many municipal systems there are	MOE (comment 7)	Yes	This change will be made in the <i>Proposed</i> ARs
0.10	Great Lakes Agreement AR must include statement about how the Great Lakes agreements were considered	MOE (comment 4)	Yes	A statement will be included in the <i>Proposed</i> AR stating that the Great Lakes Water Quality Agreements were considered in our work but did did not warrant any actions because there is not a direct connection between the MRSPR and the Great Lakes or the St. Lawrence River.

Ger	General				
	Comments Received on <i>Draft</i> Assess	ment Report		How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
0.11	GIS Layers  Municipalities would like to receive the GIS layers from the Assessment Report	City of Ottawa Tay Valley	Yes	All municipalities will receive the GIS layers in the coming months	

Ch	Chapter 1 – Introduction				
	Comments Received on <i>Draft</i> Assess	ment Report		How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
1.1	Provincial Funding The section called Provincial Funding on page 1-9 should be removed	MOE (comment 12)	Yes	This section will be removed in the <i>Proposed</i> ARs and captured in an Accompanying Document	
1.2	Municipal Focus Page 1-10 indicates that municipalities are the focus of the Clean Water Act. This should be corrected to indicate that protecting municipal sources of drinking water is the focus of the Act.	MOE (comment 13)	Yes	The first bullet on page 1-10 will be revised in the <i>Proposed</i> ARs to say: "they [municipalities] own and/or operate the municipal residential drinking water systems; the focus of this Act is to protect source water supplying these systems".	

Cha	Chapter 1 – Introduction				
	Comments Received on <i>Draft</i> Assess	ment Report		How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
1.3	Ottawa River Watershed Section 1.4.7 should be reworded to remove reference to the need for a broader interjurisdictional committee. This section should be limited to discussing work with Gatineau on identifying potential threats to the City of Ottawa intakes	MOE (comment 14)	Yes	The following paragraph will be revised in the <i>Proposed</i> ARs: "Protecting the Ottawa River watershed is beyond the capacity and scope of the Mississippi-Rideau Source Protection Region or its Source Protection Authorities. <u>Initiatives are underway within the Ottawa River watershed to establish</u> an inter-jurisdictional committee to protect the water quality, quantity, and the ecological integrity of the Ottawa River through a watershed approach. The MOE has taken the lead and is working on establishing such a committee."	
1.4	MNR Water Budget Role MNR's water budget role is not project management, they lead the water budget portion of the AR and assist and guide regions to complete this technical component	MOE (comment 37)	Yes	Section 1.3 will be corrected in the <i>Proposed</i> ARs to accurately reflect MNR's role in source protection planning.	
1.5	Threats and Issues Do not refer to significant threats as being prioritized in source protection planning. Issues are not subject to policies.	MOE (comment 46)	Yes	Section 1.5.2 will be corrected in the <i>Proposed</i> ARs	
1.6	Clusters of Private Wells The "Future: Protecting Other Systems" must be modified to remove reference to MOE advising municipalities to wait to designated clusters of private wells	MOE (comment 11)	Yes	This reference will be deleted in the <i>Proposed</i> ARs	

Cha	Chapter 2 – Mississippi-Rideau Source Protection Region (watershed characterization)					
Comments Received on <i>Draft</i> Assessment Report		How Comments Were Addressed by SPC				
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR		
2.1	Physiography Section 2.2.2 contains a typo – MVSPA is noted twice, the second reference should be RVSPA	MOE (comment 26)	Yes	This correction will be made in the <i>Proposed</i> ARs		

Ch	Chapter 3 – Water Budget					
	Comments Received on <i>Draft</i> Assessment Report			How Comments Were Addressed by SPC		
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR		
3.1	Water Stresses Rename Section 3.4.1 "Sub-watershed Surface Water Stresses"	Tay Valley	Yes	This change will be made in the <i>Proposed</i> ARs. Section 3.4.2 will also be renamed "Sub-watershed Groundwater Stresses" to be consistent.		
3.2	Quarry Dewatering Is quarry dewatering included in the groundwater takings described in the water budget?	City of Ottawa	Yes	The Tier 1 water budget incorporated all Permits to Take Water issued for quarry dewatering.		
3.3	Size of Areas and Region On page 3-5 indicate the size of the two Source Protection Areas and the Region	MOE (comment 38)	Yes	The sizes will be included in the <i>Proposed</i> ARs		

# Chapter 3 – Water Budget

	Comments Received on <i>Draft</i> Assessment Report			How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
3.4	Table of Water Takings A table should be included that identifies all the types of water takings in the region	MOE (comment 39)	Yes	A new table will be included in the <i>Proposed</i> ARs	
3.5	Population Increase Include the percentage in population increased used in the drought scenarios and the source of the information	MOE (comment 40)	Yes	This percentage and the source of the information will be included in the <i>Proposed</i> ARs	
3.6	PTTW Were actual takings or permitted takings used in the Permit to Take Water calculations	MOE (comment 41)	Yes	This will be clarified in the <i>Proposed</i> ARs	
3.7	Consumptive Factors  Put the consumptive factors in Appendix 3-3  and 3-4 into a new table in the AR	MOE (comment 42)	Yes	A table will be added to the <i>Proposed</i> ARs	
3.8	Future Scenario Provide a sentence describing the results of the future scenario under the surface water stress section	MOE (comment 43)	Yes	A statement will be added to the <i>Proposed</i> ARs	
3.9	Size of Areas Add a column to Table 3-3 indicating the size of each area being assessed	MOE (comment 44)	Yes	A column will be added in the <i>Proposed</i> ARs	

Cha	Chapter 3 – Water Budget				
Comments Received on <i>Draft</i> Assessment Report		How Comments Were Addressed by SPC			
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
3.10	Additional Maps Maps are required to show the groundwater stress assessment and surface water stress assessment for each subwatershed.	MOE (comment 45)	Yes	Two additional maps will be added to the <i>Proposed</i> ARs, one showing groundwater stress assessment results and one showing surface water stress assessment results. The current map will be revised to show only the moderately stressed areas (groundwater or surface water)	

Cha	Chapter 4 – Drinking Water Quality Threats and Issues Approach				
	Comments Received on <i>Draft</i> Assessi	ment Report		How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
4.1	Salvage Yards Why are waste disposal sites, but not salvage yards, identified as a threat category	Tay Valley	Yes	The Provincial Threats Tables identify land use <u>activities</u> involving chemicals or pathogens as drinking water threats (e.g. handling and storage of fuel, DNAPLs or solvents). The tables do not list broad land uses categories, such as a salvage yard, as drinking water threats because the land use itself does not pose a contamination threat. It is specific activities associated with that land use that may pose a threat.	
4.2	Threat #20 What does threat # 20 ("activity that reduces the recharge of an aquifer") entail	Tay Valley	Yes	A Tier 2 or 3 water budget can identify significant drinking water threats pertaining to water quantity, these threats would fall under threat categories 19 and 20 in the Provincial Threats Tables. A Tier 2 or 3 water budget was not done for the Mississippi-Rideau region because the Tier 1 results did not identify any water quantity stresses that warranted further study.	

### **Chapter 4 – Drinking Water Quality Threats and Issues Approach**

	Comments Received on <i>Draft</i> Assessment Report  Comment Source			How Comments Were Addressed by SPC
			Addressed	Response or Integration into <i>Proposed</i> AR
4.3	Cumulative Impacts of Development Is the impact of cumulative development considered a threat (e.g. subdivisions on private septic systems in an IPZ)	Tay Valley Carleton Place OH Friends of the Tay Watershed	No	MOE did a hazard rating for all land use activities that involve a chemical or pathogen and that determined which are considered a significant drinking water threat in certain sections of a Wellhead Protection Area or Intake Protection Zone (depends on the vulnerability score). The threats that pertain to residential land uses are septic systems and home heating oil (furnace oil). These are only considered threats close to municipal wells, not intakes.
4.4	Wildlife Is wildlife (e.g. geese) being assessed as a potential drinking water threat	Kemptville OH Carleton Place OH	No	Currently, if a SPC can define a human land use activity that is resulting in a threat (e.g. waterfowl are congregating near a municipal intake because adjacent shorelines are void of vegetation) the SPC can apply to MOE to include the activity on the list of prescribed drinking water threats. The SPC will continue to follow up with MOE on this concern.
4.5	Heating Oil Tanks Provide a greater explanation of how home heating oil tanks in basements were enumerated in the Mississippi-Rideau region	City of Ottawa	Yes	Additional wording will be added to the <i>Proposed</i> ARs to explain that since no information was available regarding how people heated homes and business (e.g. oil or other methods) the significant threats enumeration had to assume all buildings had a tank of furnace oil in the basement. A property questionnaire was mailed to property owners with their significant threats notice to collect information to help refine this inflated enumeration.
4.6	Tay River Spills  Encourage industries to provide a follow up report to the local community after a spill to alleviate concerns about the safety of a water source	Friends of the Tay Watershed	Yes	The SPC will consider this comment when developing their Source Protection Plans.

Cha	Chapter 4 – Drinking Water Quality Threats and Issues Approach				
	Comments Received on <i>Draft</i> Assessi	ment Report		How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
4.7	Quarries Quarries should be identified as a drinking water threat since they fit the description.	Tom Graham	No	The Province did not designated quarries as a threat, they designated them a transport pathway because quarries increase the vulnerability of groundwater to contamination by reducing the protection above it (soil thickness above the aquifer). Resource extraction requires permits to restrict such operations from exposing the water table. If an operation is going to do that they have to put safeguards in place (different permit). Other activities related to quarries (on site fuel storage) may be considered a threat if they match the list of prescribed threats.	
4.8	SGRA Definition Section 4.1 provides an incorrect description of Significant Groundwater Recharge Areas – they are not areas of high groundwater vulnerability.	MOE (comment 27)	Yes	This section of the description will be deleted from the <i>Proposed</i> ARs	
4.9	Significant Threats Summary Table A summary table for significant threats should be provided for each kind of threat as opposed to each drinking water system	SPC member	Yes	A new table will be added to the <i>Proposed</i> ARs that tabulates the number of significant threats by Prescribed Drinking Water Category for both groundwater and surface water systems.	

### Chapter 5 – Groundwater Sources

	Comments Received on <i>Draft</i> Assessment Report			How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
5.1	Ottawa Municipal Wells City staff endorse the delineation and vulnerability scoring of the three City of Ottawa Wellhead Protection Areas	City of Ottawa	Yes	N/A	
5.2	Lanark Contamination The word "approximate" should be removed in describing the Issue Contributing Area on page 5-17 so it is consistent with figure 5-2b.	MOE (comment 8)	Yes	In the <i>Proposed</i> ARs, the word "approximate" will be added to figures 5-2a and 5-2b which shows the Issue Contributing Area for Lanark Village's groundwater contamination.	
5.3	Map Labels Figures 5-8a, 5-8b and 5-11b are inconsistent. Individual wells names should be labeled.	MOE (comment 9 and 10)	Yes	<ul> <li>In the <i>Proposed</i> ARs:</li> <li>figure 5-8b will be relabeled "Kemptville Municipal Wells, Kernahan St, Alfred St and Van Buren St"</li> <li>figure 5-11b will be relabeled "Munster Municipal Wells 1 and 2" and "Richmond Municipal Wells 1 and 2"</li> </ul>	
5.4	Modified ISI Method  Methodology, rationale and limitations for modified approach must be documented	MOE (comments 21 and 28)	Yes	Pages 5-6 to 5-10 explain the modified ISI methodology and why it was used in the Mississippi-Rideau region.	
5.5	Consistent Stratigraphy There are inconsistencies about which WHPAs have the Ottawa and Oxford/March formation above the Nepean formation.	MOE (comment 22)	Yes	Inconsistencies will be corrected in the <i>Proposed</i> ARs	
5.6	Model Type What numerical model was used to delineate the WHPAs	MOE (comment 23)	Yes	MODFLOW was used to delineate all WHPAs, this will be stated in the Proposed ARs.	

## **Chapter 5 – Groundwater Sources**

	Comments Received on <i>Draft</i> Assessment Report			How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
5.7	Ratio of WHPA-C to WHPA-D In some cases WHPA-C (5 year) is 50% of the area of WHPA-D (25 year). This should be clearly explained in the report	MOE (comment 24)	Yes	This situation only applies to 2 of the 7 WHPAs in the Mississippi-Rideau region: Munster and Richmond. The furthest extent of these WHPA-Ds is a wetland, where significant groundwater recharge is occurring. Shortly after in WHPA-C, groundwater flow slows considerable and remains steady towards the well. This explanation will be added to the <i>Proposed</i> ARs.	
5.8	Transport Pathways It must be clearly explained what considerations resulted in transport pathways increasing the intrinsic vulnerability in a WHPA and maps must show these areas.	MOE (comments 25 and 31)	Yes	Although this information is already provided in the report and shown on figures (e.g. Section 5.5.2), the text will be reviewed to ensure consistency and clarity.	
5.9	What is a WHPA Section 5.3.1 needs to reword the definition of a WHPA and remove the word "zone" when talking about WHPA areas (including Table 5-viii	MOE (comment 29)	Yes	This section will be corrected in the <i>Proposed</i> ARs	
5.10	Vulnerability Scoring Incorrect vulnerability scores shown for WHPA-C in Table 5-x	MOE (comment 30)	Yes	This will be corrected in the <i>Proposed</i> ARs	
5.11	Vulnerability – Munster Provide justification for increasing intrinsic vulnerability because of high density wells and sewer services and for considering ponds a transport pathway.	MOE (comment 32)	Yes	A justification for increasing intrinsic vulnerability because of high density wells and sewer services and for considering ponds a transport pathway will be included in the <i>Proposed</i> ARs	

# Chapter 5 – Groundwater Sources

	Comments Received on <i>Draft</i> Assessment Report			How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
5.12	Vulnerability – Richmond Clarify that clay deposits increase vulnerability in this WHPA	MOE (comment 33)	Yes	This statement will be corrected in the <i>Proposed</i> ARs	
5.13	Westport Not GUDI A WHPA-E is not required for Westport	MOE (comment 34)	Yes	N/A	
5.14	Westport Cross-Section This cross section is limited in the horizon axis	MOE (comment 35)	No	This WHPA study was completed by a different consultant and a cross-section was requested to match those provided by the other WHPA consultants. Figure 5-12b is what was provided. These cross-sections are not required in the Technical Rules and were included to provide the reader with a better understanding of what the aquifer looks like underneath the ground.	
5.15	Uncertainty Analysis Local knowledge was not considered in the uncertainty analysis, only the uncertainty of the data was considered.	MOE (comment 36)	No	We based our uncertainty analysis solely on the data used in the study, there was not sufficient time, nor a scientific method, to cross reference local knowledge against the study findings and consider this when determining the uncertainty analysis.	
5.16	Transportation Corridors Greater clarity is required to explain why transportation corridors are not threats in this region. A discussion about spill response would be appropriate	MOE (comment 47)	Yes	This section will be revised to be more accurate in the <i>Proposed</i> ARs	
5.17	Sewage Lagoon Sewage lagoons are not conditions because the activity still exists, they are captured as an activity threat.	MOE (comment 48)	Yes	This correction will be made in the <i>Proposed</i> ARs	

#### **Chapter 5 – Groundwater Sources How Comments Were Addressed by SPC** Comments Received on *Draft* Assessment Report Addressed Response or Integration into *Proposed* AR Comment Source 5.18 **Issue Contributing Areas** MOE (comment 50 Additional information will be provided in the *Proposed* ARs identifying Identify whether the activities contributing to and 51) which circumstances contributing to the drinking water issues are the issues are moderate or low drinking moderate and low drinking water threats as well as how the Issue water threats. Provide better documentation Contributing Areas were delineated. Yes about how the Issue Contributing Areas were delineated. 5.19 Quarries and Intrinsic Vulnerability Tom Graham The following wording will be added to Chapter 5: bedrock quarries are Chapter 5 should integrate the following transport pathways because they reduce the amount of overlying wording from the Niagara Peninsula region: material to filter and/or attenuate contaminants. "Aggregate operations, i.e. pits and guarries, are transport pathways because they reduce the amount of overlying material to filter and/or attenuate contaminants. In the NPSP Area there are 31 authorized aggregate Yes sites, and 103 historic pit and quarry locations. The vulnerability category for historic and licensed pits and quarries were raised to high as there is no protection to the aguifer. These locations are already generally classed as highly vulnerable (Table 4.2) because they are often sited where the resource is close to surface and correspond with overburden or bedrock aquifers."

Cha	Chapter 6 – Surface Water Sources				
	Comments Received on <i>Draft</i> Assessment Report			How Comments Were Addressed by SPC	
	Comment Source		Addressed	Response or Integration into <i>Proposed</i> AR	
6.1	IPZ-1 and 2 for Ottawa Intakes City staff endorse the delineation and vulnerability scoring of IPZ-1 and IPZ-2 for the two City of Ottawa Intakes.	City of Ottawa	Yes	N/A	
6.2	Revise IPZ-3 for Ottawa Intakes City of Ottawa staff would like the area vulnerability factors in IPZ-3 for the Ottawa intakes to be changed to 8 within the 24 hour time-of-travel and 4 beyond the 24 hour time- of-travel zone.	City of Ottawa	Yes	The City of Ottawa will work with source water staff and MOE technical experts to explore an alternative approach to scoring the Ottawa River IPZ-3s. City staff will report back to the SPC in sufficient time to allow the SPC to consider requesting an Assessment Report update.	
6.3	Golf Course in Perth IPZ-1 The Town of Perth's water treatment plant should test their raw water after heavy precipitation for chemicals applied to the golf course, not just after each application as is done now. Shoreline planting should also be encouraged to prevent runoff.	Friends of the Tay Watershed	Yes	This comment will be forwarded to the Town of Perth's water treatment plant staff.	
6.4	Storm Sewers Concerned that untreated stormwater from Perth enters the Tay River so pleased that Perth's entire storm sewershed was included in IPZ-2 and that Smiths Falls' sewers were included in IPZ-3.	Friends of the Tay Watershed	Yes	N/A	

	Comments Received on <i>Draft</i> Assessr	ment Report	How Comments Were Addressed by SPC	
	Comment Source		Addressed	Response or Integration into <i>Proposed</i> AR
6.5	Tay River Control Structures The effect of Parks Canada's water management regime involving the control structure at Bolingbroke should be considered in relation to water flow and possible contamination opportunities	Friends of the Tay Watershed	Yes	Staff will explore this concern and any new information will be integrated into a future updated Assessment Report.
6.6	Smiths Falls WTP Additional wording is required to explain that the old back-up intake is not being studied and that all regulatory requirements to exempt it were met	MOE (comment 6)	Yes	This additional wording will be added to the <i>Proposed</i> ARs
6.7	Section 6.2  The first paragraph in this section along with the subsections called "The Debate" and "Provincial Technical Guidance Requested" should be removed.	MOE (comment 15)	Yes	<ul> <li>Section 6.2 will be revised in the <i>Proposed</i> ARs as follows:</li> <li>Section 6.2 will be renamed "<u>Developing a Local Methodology that Meets the Provincial Technical Rules</u>"</li> <li>First paragraph will be removed</li> <li>Subsections called "First Time for Surface Water Studies" and "Current Technical Rules for Surface Water Vulnerability Scores" will be kept</li> <li>Subsection called "The Debate" will be renamed "Developing a Local Methodology" and it will be reworded to focus on how the SPC met the technical rules. It will not raise concerns about the current Provincial Technical Rules.</li> <li>Subsection called "Provincial Technical Guidance Requested" will be deleted and captured in an Accompanying Document</li> </ul>

Cha	Chapter 6 – Surface Water Sources				
	Comments Received on <i>Draft</i> Assessment Report			How Comments Were Addressed by SPC	
	Comment Source		Addressed	Response or Integration into <i>Proposed</i> AR	
6.8	Wind Conditions AR must include basic information about what wind conditions were applied to extend IPZ-2	MOE (comment 18)	Yes	An appendix about the wind conditions that were applied will be included in the <i>Proposed</i> ARs.	
6.9	Smiths Falls Is emergency intake 0m from shore?  How can the emergency intake and the main intake have the same source vulnerability factor of 1.0 when one is so much further from shore and deeper in the river than the other?	MOE (comment 19)	Yes	The Smiths Falls emergency intake is right on the shore so it is 0 metres from shore.  There are two source vulnerability factors that can be assigned to an intake, 0.9 or 1.0. The two Smiths Falls intakes are both less than 2 metres deep and both less than 30 metres from shore. The Ottawa River intakes were assigned 0.9 because they are hundreds of meters from shore and very deep in the river, all other intakes were assigned 1.0 because there are much closer to shore and shallower in comparison to the Ottawa River.	
6.10	Ottawa River IPZ-1 Are there hydrodynamic conditions that would allow the IPZ-1 200 meter semi-circle to be extended to a full circle	MOE (comment 20a)	Yes	The study consultant is currently providing a response to this commer and the responses will be included in the <i>Proposed</i> ARs.	
6.11	Ottawa Sewer Systems What sewer discharge or storm event was used to delineate IPZ-2	MOE (comment 20b)	Yes	Half full sewer conditions were used to delineate IPZ-2. This clarification will be added to the <i>Proposed</i> ARs.	

#### **Chapter 6 – Surface Water Sources** Comments Received on *Draft* Assessment Report **How Comments Were Addressed by SPC** Addressed Response or Integration into *Proposed* AR Comment Source 6.12 **Assigning Area Vulnerability** MOE (comment No, Quebec was not factored in when assigning the area vulnerability Was the preliminary IPZ-2 delineated into factor. Only the IPZ-2 delineated according to the Technical Rules 20c) Quebec used in assigning an area was used to determine the area vulnerability factor. Yes vulnerability factor for iPZ-2 MOE (comment 49) In the Proposed ARs, the map showing the AECL Chalk River 6.13 Chalk River IPZ-3 cannot be extended up to Chalk River Laboratory will be modified to simply show the laboratory location in Yes relation to the Ottawa River intakes, no reference to an IPZ will be made. The discussion will be modified to be consistent. 6.14 | Wetland Mapping **Smiths Falls** Unfortunately, the MNR data sets used by the study consultants did A small wetland shown near the Smiths Falls show the wetland to be present. It is acknowledged that the most NO current MNR wetlands data set does not show the wetland. The new intake is not longer present. data will be incorporated at the first available update opportunity.

Chapter 8 – Data Gaps and Future Work							
	Comments Received on Draft Assess	ment Report	How Comments Were Addressed by SPC				
Comment Source		Source	Addressed	Response or Integration into <i>Proposed</i> AR			
8.1	Data Gaps Data gaps must meet the intent of the Director's Memo dated October 2009.	MOE (comment 16)	Yes	All data gaps listed in section 8.1 meet the intent of the Director's Memo, all other knowledge gaps are listed as knowledge limitations in section 8.2			

Cha	Chapter 8 – Data Gaps and Future Work					
	Comments Received on <i>Draft</i> Assessment Report How Comments Were Addressed by SPC					
	Comment Source		Addressed	Response or Integration into <i>Proposed</i> AR		
8.2	Refining Significant Threats Count Section 8.1.2 should be removed, refining the significant threats count is not in scope for the updated AR.	MOE (comment 17)	Yes	MOE indicates refining the significant threats count is not an efficient use of time or financial resources. Our threats count will be updated by June, 2011 because property owners are returning completed property questionnaires that were mailed out with the Significant Threat notices on October 12, 2010. Also our numbers could drop if municipal well casings are deepened in Kemptville and Merrickville (vulnerability scores will decrease in large areas). Since no staff time or financial resources are involved in refining the count, any revised counts will be provided to the MOE by June, 2011 as AR updates.		

Oth	Other						
Comments Received on <i>Draft</i> Assessment Report				How Comments Were Addressed by SPC			
Comment Source		Addressed	Response or Integration into <i>Proposed</i> AR				
10.1	Extending Municipal Well Casing: Municipal well casings should be extended down into the Nepean aquifer in Kemptville and Merrickville to reduce the intrinsic vulnerability of their source water	Kemptville OH Carleton Place OH	Yes	The SPC has pushed for this project to be funded through the ODWSP and both the Municipality of North Grenville and the Village of Merrickville-Wolford applied again for ODWSP funding during the latest round of applications. A response is expected in the new year. This project would substantially reduce the number of potential significant drinking water threats in the Kemptville and Merrickville Wellhead Protection Areas.			

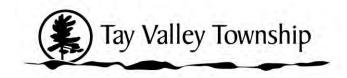
Oth	Other				
	Comments Received on <i>Draft</i> Assess	ment Report		How Comments Were Addressed by SPC	
	Comment	Source	Addressed	Response or Integration into <i>Proposed</i> AR	
10.2	Municipal Implementation Costs  Municipalities are concerned they may have to bear costs to implement the Source Protection Plan (e.g. cost of hiring a Risk Management Official)	Tay Valley Carleton Place OH Perth OH Carp OH Kemptville OH	Yes	The SPC has lobbied for stable long-term provincial funding through the final three phases of the source protection program (implementation of the Plan, monitoring of Plan policies and review and updating of the Plan). The SPC will continue to raise this concern on behalf of our member municipalities.	
10.3	Compensation Compensation should be given to property owners financially impacted by Source Protection Plan policies (e.g. cost of implementing a policy or costs associated with increased taxes because property now taxed as residential rather than agriculture)	Carleton Place OH Perth OH Carp OH Kemptville OH	Yes	Since their formation the SPC has been pushing for a generous ODWSP program to continue beyond 2012 so that property owners can access funding to help them implement Source Protection Plan policies.  The SPC will consider including the following statement in their Source Protection Plan objectives: "the Mississippi-Rideau Source Protection Committee expects a level of financial commitment from the province of Ontario to ensure the successful implementation of Source Protection Plan policies. The SPC also expects that landowners will not be unduly affected by the implementation of these policies" (Better Farming, November 2010).	
10.4	Private Wells Source Protection policies must protect all wells, not just municipal wells.	Kempvtille OH Tom Graham	Yes	A municipal council or the Minister of the Environment can designate a cluster of private wells or intakes to be included in the source protection planning process. MOE is developing guidance to help municipalities identify which clusters, if any, a municipality may want to designate. The question of who pays to study such clusters has not been answered yet so municipalities have been advised by the MOE to wait to make this decision.	

#### Other **How Comments Were Addressed by SPC** Comments Received on *Draft* Assessment Report Addressed Response or Integration into *Proposed* AR Comment Source Harmful Activities in Rural Areas Tom Graham The SPC will consider this comment when developing their Source Protection Plans and this concern will be captured in an Delineating a Wellhead Protection Area or Intake Protection Zone is having the effect of Accompanying Document pushing harmful activities such as bedrock Yes extraction quarries into vulnerable rural areas serviced by private wells. 10.6 HVAs and SGRAs Tom Graham Highly Vulnerable Aquifers (HVA) and Significant Groundwater These vulnerable areas must be protected Recharge Areas (SGRA) are mapped in the AR. The SPC cannot from all potential risks, especially intrusive impose mandatory policies in these areas through the Source and potentially harmful activities such as Protection Plan but the Committee can develop voluntary policies bedrock extraction. Municipalities must Yes and/or recommend municipalities protect these areas through their planning process (Official Plan and zoning policies). The SPC will integrate all vulnerable areas into their planning policies in order to best protect all consider this comment when developing their Source Protection Plans and this concern will be captured in an Accompanying Document. local residents Carp OH 10.7 | Carp Wastewater Collection The collection and transmission and municipal wastewater is included Carp's wastewater is connected to the City in the provincial Threats Tables. When developing the Source of Ottawa's main trunk. The concern is that Protection Plan the SPC will look into the facility in Carp and work with City staff to determine what safeguards or risk management measures there is a large wastewater storage tank in Yes Carp very close to the municipal well and are in place to prevent a leak and what spill response measures are in that this could pose a threat if the tank ever place if there was a leak. cracked or leaked (e.g. earthquake).

Zone.

#### Other Comments Received on *Draft* Assessment Report **How Comments Were Addressed by SPC** Source Addressed Response or Integration into Proposed AR Comment 10.8 **Tay River Vulnerable** Friends of the Tay The SPC will consider this comment when developing their Source The Tay River IPZ has a substantial number Protection Plans. Watershed of potential significant threats identified. As a small, shallow river an especially Yes precautionary approach should be used when developing source protection policies to provide adequate protection. 10.9 Policies by Municipality Tay Valley The SPC will consider this comment when developing their Source In the Source Protection Plan, present Protection Plans. policies by municipality as well as by Yes

Wellhead Protection Area / Intake Protection



# REPORT

To: Council

From: Noelle Reeve, Planner

Date: November 2, 2010

Re: Mississippi-Rideau Source Water Protection Region Draft Proposed Assessment Report

#### **ISSUE**

A draft Assessment Report for the Mississippi Rideau Source Water Region has been prepared and comments have been solicited in five areas.

#### **COMMENTS**

#### 1. Was the information presented clear and easy to understand?

Overall, the report is easy to read and contains a lot of valuable information. Section 3.4.1 might better be labeled "Sub-watersheds with Surface Water Stresses" so the public knows there are specific sub-watersheds identified as being stressed.

### 2. Do you have suggestions for improvement?

With respect to chapter 4, clarification is sought as to why waste disposal sites but not salvage yards are identified as a threat category. Clarification is also sought for threat # 20 – "an activity that reduces the recharge of an aquifer".

A general comment that pertains to the production of the final plan more than this draft assessment is that it would be helpful for planners if the recommendations could be presented by township, as well as by wellhead or surface water intake site.

#### 3. Indicate issues that may have been overlooked?

It is not clear how well risks based on future cumulative impacts were assessed. For example, one single family development or subdivision in an Intake Protection Zone 1 or 2 did not rise to the level of a significant threat. Planners would like to know if there are thresholds where cumulative development impacts will rise to a significant threat so that decisions to avoid precipitation of a threat can be made prior to reaching a tipping point.

#### 4. Do you have any corrections or additions?

None.

# 5. Other Comments

The Council had concerns about who would pay to implement the Plan when it is drafted and a Risk Management Officer is required.

The township would appreciate receiving the GIS layers from the Source Water report, as a lot of new mapped data will be available at no cost that can be used for a variety of planning purposes for example, to meet the proposed indicators of achievement of the Provincial Policy Statement (e.g., percentage change in woodlands cover, % change in population density, etc.).



November 05, 2010

File Number: W0002

Mississippi-Rideau Source Protection Committee c/o Sommer Casgrain-Robertson, Co-Project Manager P.O. Box 599, 3889 Rideau Valley Drive Manotick, ON, K4M 1A5

Email: <a href="mailto:sommer.robertson@mrsourcewater.ca">sommer.robertson@mrsourcewater.ca</a>

Dear Ms. Casgrain-Robertson

Re: Mississippi-Rideau Source Protection Region *Draft* Proposed Assessment Report – September 29, 2010

This letter provides comments in response to the Mississippi-Rideau Source Protection Region "Draft" Proposed Assessment Report which is posted for public consultation.

The City was involved with the groundwater well and the intake protection zone studies that were used to prepare specific sections within the Draft Assessment Report pertaining to Ottawa's municipal drinking water sources. As a result, our list of comments are relatively brief as follows:

- 1. The City agrees with and endorses the *Draft Assessment Report* as it pertains to the three City municipal wells (Kings Park, Munster and Carp) and the delineation and scoring of Intake Protection Zones 1 and 2 of the City's surface water intakes.
- 2. The City requests revision of the delineation and scoring of the Intake Protection Zone 3 for both the surface water intakes, as set out in Motion 5-08/10 of the Source Protection Committee Meeting, approved on September 2, 2010, which commits to further explore an alternative approach to the one applied in the *Draft Assessment Report*.

The *Draft Assessment Report* subdivides both City IPZ-3 areas into 4-hour time of travel zones, with decreasing area vulnerability factors applied in each subzone as the distance from the intakes increases. As you are aware, the City agreed to this methodology on an interim basis in order to allow the Committee to meet its September 30, 2010 posting deadline. In recognition of such, on September 2, 2010 the Source Protection Committee endorsed Motion 5-08/10 as follows:

City of Ottawa 951 Clyde Avenue Ottawa, ON K1Z 5A6 Tel: (613) 580-2400 Fax: (613) 728-4183 ottawa.ca Ville d'Ottawa 951, avenue Clyde Ottawa (Ontario) K1Z 5A6 Tél.: (613) 580-2400 Téléc: (613) 728-4183 ottawa.ca Therefore, be it resolved that the Mississippi-Rideau Source Protection Committee direct staff to work with the City of Ottawa, our consultants (Baird) and the Ontario Ministry of the Environment to further explore an alternative approach to the delineation of sub-zones and vulnerability scores for the two IPZ-3's for the City of Ottawa intakes that is in keeping with the Technical Rules.

And that staff report back to the Committee in sufficient time to allow consideration of this new information as part of an amendment/update to the Assessment Report.

In order to start moving forward, the City has prepared the attached Technical Memorandum that outlines the City's proposed IPZ-3 approach. The City's methodology is based on time of travel, which is the same parameter employed by the current methodology. The key difference is that the City proposes two IPZ-3 subzones rather than five: one subzone where the travel time for a contaminant to reach an intake is less than or equal to 24 hours, and a second subzone extending from the 24 time of travel boundary to the limits of IPZ-3. We further propose that these two IPZ-3 subzones have area vulnerability factors of 8 and 4, respectively. Please refer to the attached Technical Memorandum for additional details.

We request a meeting with Source Protection staff and the MOE Liaison as soon as possible to discuss the City's proposed IPZ-3 methodology and to determine the necessary steps and timelines required to amend the Assessment Report.

We appreciate the support of the Source Protection Chair and Source Protection staff to further explore an alternative methodology and we look forward to working together with all parties on this initiative.

- 3. The following are general comments:
- a) Chapter 5, page 5-9: Definition recommended for the term "lithology".
- b) Chapter 4, page 4-9: Given the high number of potentially significant drinking water threats associated with heating oil tanks, perhaps a greater explanation of the rational used to identify them should be provided.
- c) Chapter 3: The groundwater takings described do not mention pumping of groundwater required for quarry dewatering. Are aggregate takings significant?

Yours truly,

Ryan Polkinghorne, P.Eng. Project Manager, Environmental Programs City of Ottawa

Attached: City of Ottawa Technical Memo dated November 05, 2010.

cc: Tammy Rose – Manager, Drinking Water Services

# **TECHNICAL MEMO**



To / Destinataire	Sommer Casgrain-Robertson	File/N° de fichier: W-0002
From / Expéditeur	Ryan Polkinghorne	
Subject / Objet	Proposed IPZ-3 Methodology	Date: November 05, 2010

Based upon further review, we propose the following methodology to subdivide the City's IPZ-3 areas and assign area vulnerability factors to these subzones, which we believe is consistent with the MOE Technical Rules.

The MOE Technical Rules (Nov. 16, 2009) state:

Rule 90: One or more area vulnerability factors that is not less than 1 and not greater than 9 shall be assigned to each area within an IPZ-3 associated with a type C or type D intake based on the vulnerability of the area within the IPZ-3 where a higher factor corresponds to a higher vulnerability.

Rule 92: The following shall be considered and documented in determining the area vulnerability factor of an area within an IPZ-3. An explanation shall be provided on how each affected the determination of the area vulnerability factor of that area:

- 1. The percentage of the area of the IPZ-3 that is composed of land.
- 2. The land cover, soil type, permeability of the land and slope of any setbacks.
- 3. The hydrological and hydrogeological conditions of the area where the transport pathway is located.
- 4. The proximity of the area of the IPZ-3 to the intake.

#### City of Ottawa Proposed IPZ-3 Methodology:

In accordance with the above Technical Rules, the City of Ottawa proposes subdividing IPZ-3 into 2 zones.

<u>Zone IPZ-3.1</u> is an area where contaminants, if released, could be transported to one of the City's surface water intakes within 24-hours.

Zone IPZ-3.2 is an area where contaminants, if released, could be transported to one of the City's surface water intakes from the outermost drainage boundary within the Source Protection Region to the 24-hour time of travel delineation.

We propose that IPZ-3.1 receive an *area vulnerability* factor of "8", which results in an overall vulnerability score of 7.2 (area vulnerability of 8 multiplied by the source vulnerability factor of 0.9). We provide the following justification for proposing this area vulnerability factor:

1. Most of the area within IPZ-3.1 is within the City's urban boundary limits (the red line on the attached figure shows the limits of the City's official urban boundary). This area is primarily served by sewer infrastructure with a high percentage of urban impervious areas. As a result, the percentage of area throughout IPZ-3.1 is high. A small percentage of IPZ-3.1 north of the urban boundary, immediately abutting and draining to the Ottawa River, is not serviced by sewer infrastructure.

- 2. The land cover, permeability and slope of the land within the urban area are deemed to be relatively consistent.
- 3. The proximity of the area within IPZ-3.1 to the intake was taken into account using a travel time limit of 24-hours. The City of Ottawa firmly believes that all transport pathways within a 24-hour time of travel limit to the intakes present an equivalent degree of vulnerability.

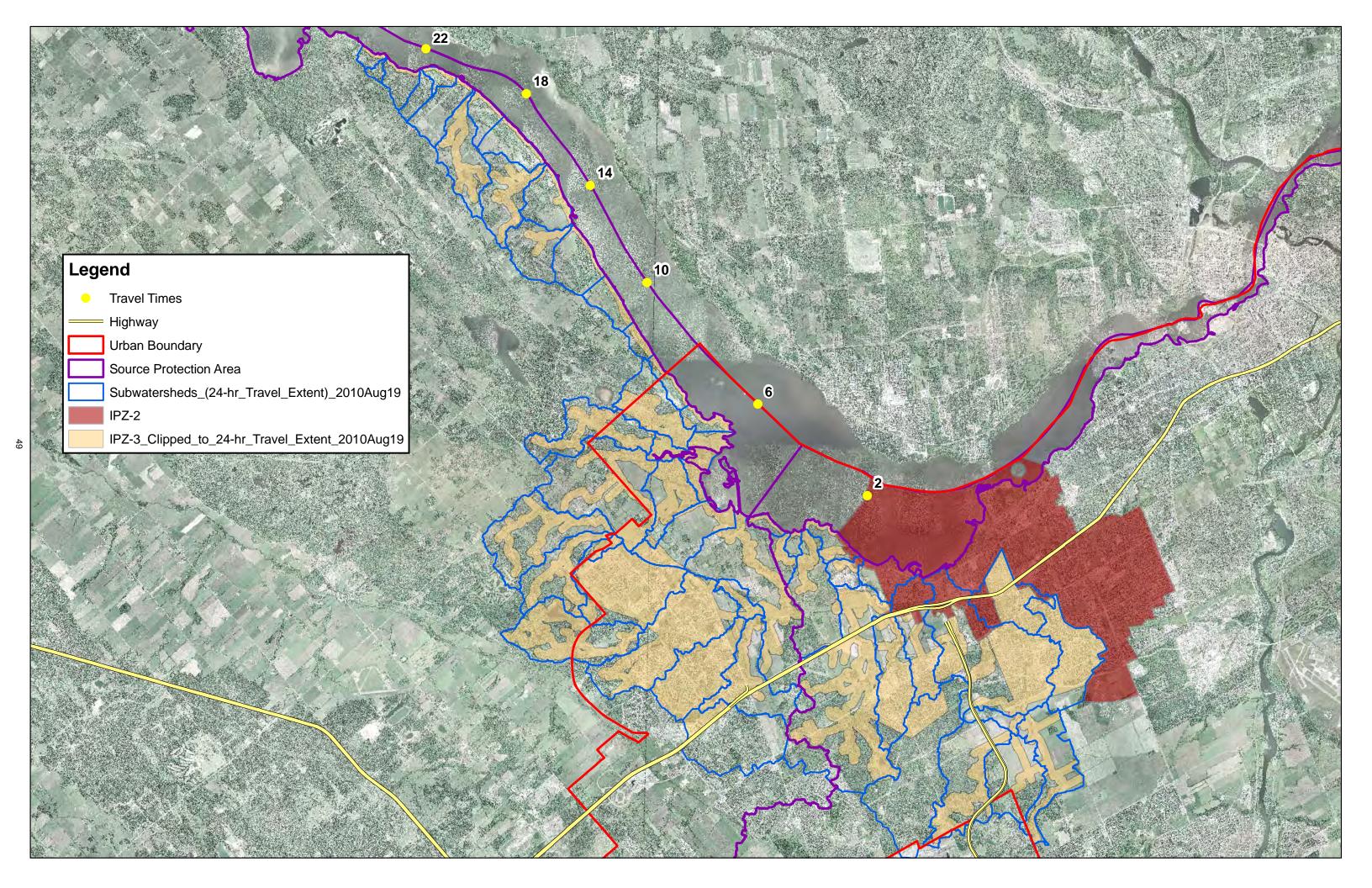
We propose that IPZ-3.2 receive an *area vulnerability* factor of "4", which results in an overall vulnerability score of 3.6 (area vulnerability of 4 multiplied by the source vulnerability factor of 0.9). IPZ-3.2 is largely rural in nature, and we believe the hydrological conditions and distance from the intakes warrant the assigned score.

In addition to the justification provided above, we believe that the vulnerability of the intakes to the an upstream area and response time are linked. Major spills affecting Ottawa's intakes have the potential to affect over 800,000 people. The level of effort and cooperation required to notify that population of a problem, and to put in place alternative water supplies are orders of magnitude greater than what would be required by a smaller municipality in the Region. Therefore, it is critical to ensure that IPZ-3.1 subzone receive an area vulnerability score to reflect what is adequately required to protect the municipal water supply.

In summary, we do not believe that the other inland river intake protection zone studies (Perth, Carleton Place, Smith Falls) and the City of Ottawa studies must all have a consistent IPZ-3 subzone methodology. The City of Ottawa is a large urban centre that has transport and surface water pathways that are unique to a large urban centre. For this reason, we believe the City of Ottawa's IPZ-3 subzones and area vulnerability factors should be dissimilar to the inland river studies.

#### Attached:

Figure illustrating the first IPZ-3 zone (IPZ3.1) based on 24-hour travel time. Note that the red line is the City's urban boundary delineation.





# FRIENDS of the TAY WATERSHED Association

P.O. Box 2065 57 Foster Street Perth, ON K7H 3M9

E-mail: <a href="mailto:info@tayriver.org">info@tayriver.org</a>
Website: <a href="mailto:www.tayriver.org">www.tayriver.org</a>

November 5, 2010

Mississippi-Rideau Source Protection Committee c/o Sommer Casgrain-Robertson, Co-project Manager Box 599, 3889 Rideau Valley Drive, Manotick ON, K4M 1A5

Sent by email to: sommer.robertson@mrsourcewater.ca

Subject: Comments Regarding the Mississippi-Rideau Source

**Protection Region Assessment Report** 

The Friends of the Tay Watershed welcome the opportunity to comment on, and to contribute local knowledge and perspectives to the Mississippi-Rideau Assessment Report.

The Friends of the Tay Watershed Association (FoTW) is an incorporated, community-based organization located in eastern Ontario near the Town of Perth. The Tay watershed is a sub-watershed of the Rideau watershed and falls within the Mississippi-Rideau Source Protection Region. With its member partners, the FoTW represents over 1,000 watershed residents.

The FoTW's mandate is to provide stewardship for the Tay River watershed which it has done for the past 10 years. Thus, the FoTW have both an interest and a responsibility to monitor, reflect and comment on activities that influence the Tay watershed such as the current M-R Assessment Report.

The FoTW Association recognizes that its interests are both narrower and broader than the M-R Assessment Report. While the Assessment Report addresses two large watersheds—the Mississippi and Rideau – the FoTW is mostly concerned with a small portion of that large region – the Tay sub-watershed. Furthermore, the Assessment Report focuses on the mandate of the Clean Water Act (CWA) – municipal drinking water, whereas the FoTW's broader concerns include an interest in source water for private wells as well as the broader ecological health of the watershed. Nevertheless, the Assessment Report provides much needed information for wise water management on a smaller scale and on a voluntary basis.

#### **General Comments**

# **The Assessment Report**

Most importantly, the FoTW are delighted with the scope, content and presentation of the Mississippi-Rideau Assessment Report. Its comprehensive presentation of data pertaining to human and physical geography, regional geology, water budgets, groundwater, surface water, water threats and issues, climate change and data gaps is a most valuable community tool that is pertinent and useful beyond the purposes of the CWA. It provides a firm basis for science-based, community action in protecting water resources that will be useful for years to come.

The format of the Assessment Report is impeccable. It guides the reader with ease and understanding from topic to topic. Everything is explained in clear language. Sections such as the Glossary and How to Use this Report provide lay readers with needed assistance. Despite its size and complexity, the Assessment Report is surprisingly easy to navigate with useful cross references that aid understanding even for the non-sequential, casual reader. Such clear communication makes the community reader feel welcome in the process.

The combination of the two conservation areas into one document is an improvement over the two volumes of the Terms of Reference. There is less repetition, and where separation of the two areas is required, it is provided. While two watersheds may make sense to the water, in fact human activities do not make such distinctions. Municipal boundaries, roads and human activities are not arranged or separated by watershed in our area, and it makes more intuitive sense to have a single report that presents information about the Rideau and Mississippi regions in a unified way that reflects real life situations.

Twelve thousand people live within the Tay watershed: 6,000 in the Town of Perth drink municipal water; 6,000 in the rural areas drink water from private wells. Interestingly, much protection for Perth's municipal drinking water must be done in the rural areas where the drinking water comes from private wells. We were pleased to see that the M-R Assessment Report also contains information that can be useful in managing water resources in rural areas with no municipal water system.

# **Comments Specific to the Perth Municipal Intake**

# **Potentially Significant Surface Water Drinking Water Threats**

The FoTW were concerned to read in the Assessment Report the high number of potentially significant surface water drinking water threats for the Town of Perth intake (p.6-2). The Perth municipal system serves less than 1% of the Region's population that uses surface water as a drinking water source; however it has over 50% of the Region's potentially significant surface water drinking water threats. This would seem to indicate that the Tay, as a small, shallow river, requires an especially precautionary approach in planning in order to provide adequate protection for the drinking water source.

#### **Golf Course in IPZ1**

The Assessment Report reports on "the golf course located just upstream of the Perth municipal surface water intake" (Sec.6.5.6) and that the golf course "provides the Town of Perth with a list of chemicals that are applied on the golf course in the spring and fall of each year. The Town tests raw water samples for these potential contaminations immediately after each application. To date, none of the chemicals have been detected in the raw water samples." To this section, we would comment that perhaps the testing should also be done after heavy precipitation to check for possible runoff effects and strongly suggest shoreline planting to further shield the source water from golf course runoff.

#### **Storm Water Sewers**

We were pleased to read in Section 6.3.1, that "[t]he entire upsteam Perth storm sewershed was included in the IPZ-2 due to its location and extent." and that the storm sewer systems in Perth's IPZ3 for Smiths Falls have also been included. The FoTW have been concerned for some time that stormwater from Perth enters the Tay River in over 40 locations without any treatment.

#### The Tay River Is a Controlled River

Section 6.5.1 describes the downstream control structures that were deemed not to have an influence on the flows on the Tay River at the Perth water intake. Only briefly mentioned, however, was the control structure upstream at Bolingbroke that is operated by Parks Canada (PC). Those who live in the area know that the greatest influence on Tay River flows is the operation of the PC dam. When water is moved from the upstream reservoir of Bobs Lake to its destination in the Rideau Canal, water levels can fluctuate significantly and quickly. One outcome of this is that adjacent lands are often flooded. Some of these lands contain residential septic systems; others are pasture lands. At such times, it's not so much that cows are in the river, but that the river is in the cows. The effects of Parks Canada's water management regime should be considered in relation to water flow and possible contamination opportunities.

# Spills into the Tay River

Section 6.5.6 reports "two spills noted in the Drinking Water Threats and Issues Technical Report." These would be from an industrial complex upstream from the Perth intake. The most recent spill occurred in June 2010, and local history would recount more than the two spills reported. Nevertheless, efforts at the complex to avoid spills, better communication and efficiencies at the water treatment plant appear to have spills under control. Our comment is to agree with and reinforce the Assessments Report's comments in Section 4.6.2:

The reporting requirements for spills and other contamination is well legislated and regulated, with some exceptions, and as a result there are many sources for identifying even minor spills and leaks. However, the ensuing clean-up activities are not required to be as equally well documented.

A follow up report to the community would go far in alleviating any concerns about the restoration and safety of the water source.

# **Future Development**

Not mentioned in the Assessment Report, but of importance to the Perth water intake is the recent purchase of two large parcels of rural land upstream from the intake (IPZs 2 and 3) for planned development. Both parcels are riverfront properties and both will require private septic systems for residential use. While septic systems are not routinely counted as a potential threat for surface intakes, given the high number of potentially surface water drinking water threats for the Perth intake, they may be in this case.

In summary, the Friends of the Tay Watershed recognize that many of the comments made here have more relevance for the next phase--policy and planning. However, the Assessment Report has provided an opportunity to share these comments in preparation for the next phase.

Opportunities for community involvement throughout this process have been exemplary. Thank you for the opportunity to comment.

Yours sincerely,

Colin Stephenson Interim President, Friends of the Tay Watershed

Tom Graham 351 Cty Rd 18, Bishop's Mills RR 2 Oxford Station, ON K0G 1T0 613-258-3885 (days) 613-258-3978 (evgs) tdgraham@tdgraham.com

November 5, 2010

Sommer Casgrain-Robertson Co-Project Manager Mississippi-Rideau Source Protection Region

Dear Sommer:

# Re: Comments on Draft Assessment Report

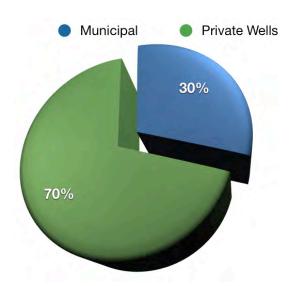
Thanks for coming to Kemptville the other evening. Your presentation was good. The maps were good. The availability of yourself and Brian Stratton was good. Unfortunately, the public does not yet understand the impact of Source Water Protection (SWP), and so there were very few people in attendance.

Protecting our drinking water is extremely important. Your work is not over yet!

Please consider these my comments on your Assessment Report.

1. Rural Wells Are Unprotected: The 'focus' of SWP on Municipal well systems is a good start – but it ignores the safety and protection of the majority of people in our municipality of North Grenville.

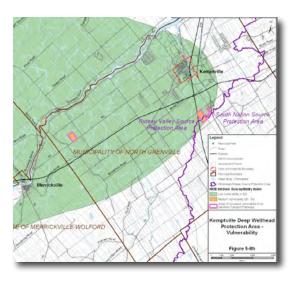
As of today, only 4,450 of North Grenville's 15,000 residents drink from the municipal wells. This means that 70% of our residents are relying on their own private wells to supply them with safe water. Your promotional displays state that 87% of residents in the Mississippi-Rideau Watershed are on municipal wells – but this includes the people in urban Ottawa.



The Source Water Protection report must include a strong acknowledgement that it does **not currently include the protection** of rural private wells. Plans and policies at the local level must include water quality protection for all wells – municipal <u>and</u> private.

2. Wellhead Protection Areas (WHPAs) force potentially harmful activities into vulnerable rural areas. Defining a WHPA around Kemptville's municipal wells is a fine idea. We need to know where the water for these wells is coming from, and what might threaten the water supply now and in the future.

However, the very definition of a WHPA around Kemptville automatically dictates that land use activities such as bedrock extraction quarries must happen outside the WHPA. This forces these ultimately intrusive and destructive activities out into the rural area – an area that is 100% serviced by private wells.



Municipalities must not be given the impression that it's only what's inside the WHPA that's important.

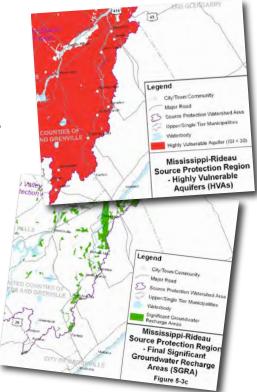
While the SWP Act may state its focus is primarily on municipal wells, it must acknowledge that by choosing this focus, it has an **immediate**, **direct and potentially negative** affect on the vulnerable areas **outside** the WHPA.

3. Highly Vulnerable Aquifers and Significant Groundwater Recharge Areas must be respected and protected: The Assessment Report indicates that almost all of North Grenville is situated on an area identified as having Highly Vulnerable Aquifers (HVAs).

Also, scattered throughout our municipality are numerous Significant Groundwater Recharge Areas (SGRAs). These sensitive areas must be protected from all potential risks – especially from intrusive and potentially harmful activities such as bedrock extraction.

Roughly 30% of North Grenville falls within the South Nation watershed. Their Source Water Assessment indicates similar identification of HVAs and SGRAs.

Municipalities like North Grenville need to view these characteristics in a holistic manner, and should be advised to integrate these considerations into their planning policies in order to best protect local residents from potentially harmful land use activities.



# 4. Quarries must be acknowledged as the 'threat' they realistically are:

The Ministry of the Environment used to list 'quarries' among "activities that threaten drinking water sources". Why do they no longer refer to quarries as threats?

In 2004 MOE released a study called *Watershed-based Source Protection*Planning – Science-based Decision-making for Protecting Ontario's Drinking

Water Resources: A Threats Assessment Framework Report to the Minister of
the Environment by the Technical Experts Committee.

The authors repeatedly refer to <u>quarries as threats</u> (page xiii, 15, 25, 43, etc.). For example, the following text is found on page 25:

"List of land use activities that threaten drinking water sources and are sufficiently serious to be of provincial concern:

Human-made Pathways to the aquifer Activities/structures that penetrate the water table and/or aquifer. These include:

- Existing wells (water, gas, oil)
- Abandoned Wells
- Pits, quarries, mines"

In 2010, however, it appears that Source Water terminology avoids the direct reference to a quarry as a threat to drinking water. Instead, the euphemistic phrase 'transport pathways' is used to indicate a number of instances where 'pathogens may enter an aquifer'. If your goal is to educate and inform people about drinking water threats, it is best to use language that is clear.

For example, a Google search for the term 'transport pathway' bombards the viewer with almost 12 million references – most of them having to do with chemical and biological functions of the human body.

In addition, to avoid calling quarries 'threats' may be seen by some to be due to pressure from the aggregate industry in order to allay public fears – or lull public concern. Quarries should be listed as a threat or as an example of a threat.

In Chapter 4, drinking water 'threats' are defined as: "land use activities which may adversely affect the quality or quantity of a source of drinking water and

Cytoplasm

Transport pathway?

relate to the past, present and future." Quarries certainly fall within this definition, and yet the words 'quarry' or quarries' are not found in this chapter.

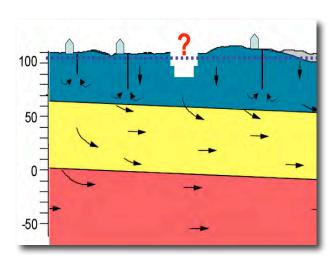
In Chapter 5, the report states that quarries are directly linked to increased vulnerability of the aquifer:

"Three areas [in the Kemptville WHPA] were identified where transport pathways pose a risk to the deep aquifer in Figure 5-8h. The vulnerability of all three areas was increased from medium to high vulnerability because of the presence of bedrock quarries."

Mississippi-Rideau Source Protection Region Assessment Report Chapter 5 Groundwater Sources, Page 5-40

In some cases, where a quarry commences operations and tonnes of bedrock are actually removed from an area that has a water table close to the surface, or flowing springs, or a cluster of wells in the vicinity – the <u>quarry should be considered a threat</u>, because it may affect water **quantity** due to negative impacts on the hydrostatic pressure of the surrounding wells.

To increase clarity – and provide a more easily understood picture of drinking water threats – may I suggest that the report follow the example of the Niagara region's Source Protection Report:



# 4.1.3.4 Aggregate Operations

Aggregate operations, i.e. pits and quarries, are transport pathways because they reduce the amount of overlying material to filter and/or attenuate contaminants. In the NPSP Area there are 31 authorized aggregate sites, and 103 historic pit and quarry locations. The vulnerability category for historic and licensed pits and quarries were raised to high as there is no protection to the aquifer. These locations are already generally classed as highly vulnerable (Table 4.2) because they are often sited where the resource is close to surface and correspond with overburden or bedrock aquifers.

Niagara Peninsula Source Protection Area Assessment Report Chapter 4: Vulnerable Groundwater Areas, page 88

This definition identifies <u>aggregate operations</u> as one of the activities that increases the vulnerability of the groundwater source – and provides examples and uses terms that the average person will understand. <u>The MRSPR</u> Assessment Report should do the same.

Please consider making this important change.

Thank you for considering these suggestions. I trust you will find these comments useful.

If you have any questions, please contact me at any time.

Sincerely,

Tom Graham

613-258-3885 (days)

# MOE Source Protection Planning Branch General Comments and Observations Mississippi Valley and Rideau Valley SPAs Draft AR

Comment Number	Comme	Legislative Requirement/ Recommendation/ Suggestion <sup>1</sup>	
Draft AR C	omments		
1	There are inconsistent references to requirements. (e.g. page 1-15). It was something is linked to guidance and the rules.	yould be helpful to clarify when	Suggestion
2	The legislation requires that an Assected for each source protection at Clean Water Act (CWA). The Missis Protection Region consists of two SI required in order to meet s. 15 of the of sections of the report that can ren (e.g., components of the watershed sections, and systems within the Ott The report itself is separated by drin main body of the report, and these could pulled into separate reports based of In looking at the report, minor change to introduce section, but nothing in rechange. For example:	Legislated Requirement	
Mississipp	i report	Rideau Report	
Chapter 1 (	minor changes in section 1.5.3)	Chapter 1 (minor changes in section 1.5.3)	
Chapter 2 (with minor changes to explain that this section talks about the two SPAs jointly as they all drain to the Ottawa River)		Chapter 2 (with minor changes to explain that this section talks about the two SPAs jointly as they all drain to the Ottawa River)	
• ,	again with minor additions to explain are included in this chapter)	Chapter 3 (again with minor ac both SPAs are included in this	•
Chapter 4 (	no changes)	Chapter 4 (no changes)	
Chapter 5 (	sections 5.1 (split 5.1.5 into the	Chapter 5 (sections 5.1 (split 5.1.5 into the SPA),	

<sup>&</sup>lt;sup>1</sup> Definitions:

<sup>•</sup> Legislative requirement means it is a requirement through the Act, Regulations and Technical Rules

Recommendation means it is a proposed approach or method as part of guidance or technical bulletins provided

<sup>•</sup> Suggestion means a change might help in the understanding and clarity of a specific item

054) = 0				
SPA), 5.2, s numbers fo	5.3, 5.4, 5.5, 5.6, 5.7, split 5-13 into r the SPA)	5.2, 5.3, 5.4, 5.8, 5.9, 5.10, 5.10 into numbers for the SPA)	11, 5.12, split 5-13	
SPA), 6.3 (	sections 6.1 (split 6.1.2 into the split tables in 6.3.1, split in river in 6.3.2) 6.4, 6.7, 6.8, .9, 6.10)	Chapter 6 (sections 6.1 (split 6.1.2 into the SPA), 6.3 (split tables in 6.3.1, split in river discussion in 6.3.2) 6.5, 6.6, 6.7, 6.8, .9, 6.10)		
Chapter 7		Chapter 7		
Chapter 8 in this mem	n consideration of other comments	Chapter 8 in consideration of this memo	other comments in	
Chapter 9 ( with tables		Chapter 9 (split into SPA in ce tables or maps)	ertain sections with	
3	Page 1-15 (s.1.7 below) and 8-1 state the timeframe when they approve the the updates will be. This is incorrect that will need to determine when the become aware that the AR is no lon per s. 19 of the CWA.	te report and determine when tas it is the SPC/Authority will update their AR as they	Legislative Requirement	
	1.7 Continuous Improvement			
	This report has been prepared using the best data and knowledge available at the time the technical studies were completed, and where possible, at the time of publication. Data gaps are identified and described in Chapter 8. The Assessment Reports will be reviewed and updated on a regular basis. The MOE will determine the review timeframe when they approve the report.			
4	Legislative Requirement			
5	Terms of Reference / Drinking Water Systems (DWS):  a) The Executive Summary identifies Almonte as a groundwater system in the Mississippi Valley (MV) SPA, while the MV SPA ToR identifies the DWS as Mississippi Mills which serves Almonte.  b) The Executive Summary identifies Richmond as a groundwater system in the Rideau Valley (RV) SPA, while the RV SPA ToR identifies the DWS as King's Park well supply which serves King's Park subdivision in the village of Richmond.  c) The planned Lanark system is not mentioned in the Executive Summary of the AR, but is in the ToR.  It would be helpful for readers to be clear on the drinking water systems, therefore is recommended that the DWS names should be consistent between the ToR and the AR.			

6	The Smith Falls Water Treatment Plant (WTP) is partially exempt from source protection planning as per the approved Rideau ToR. Originally there were 2 intakes, one of which will be discontinued within five years of the December 7, 2007 council resolution and replaced with a new intake and WTP. This is not clear in the AR. Additional text should be added to explain this (perhaps in section 6.6 of the AR) as well to indicate how all the conditions in ss. 14 (2) of O.Reg 287/07 were met.	Legislated Requirement
7	The Executive Summary of the AR mentions 12 DWS while page 1-13 indicates there are 13 DWS. The number of DWS should remain consistent throughout the AR. If the 13 <sup>th</sup> system is the planned Lanark system, then this needs to be described on page 1-13.	Recommendation
8	The text on page 5-17 should have the word "approximate" removed to be consistent with Figure 5-2b.	Suggestion
9	There does not appear to be a proper correlation between the municipal wells shown on Figure 5-8a and 5-8b. This should be corrected.	Recommendation
10	Figure 5-11b has two wells on the cross section labelled as "Wells 1 and 2". It would be clearer if the wellfield names were shown beside the wells.	Recommendation
11	The sentence beginning with "MOE" below from page 1-3 under the heading "Future: Protecting Other Systems" is not consistent with the regulations and rules on the assessment report contents. It should be removed.  There are many potential clusters in the Mississippi-Rideau region and over 600 public and private facilities. Currently, neither the Minister nor local municipalities have chosen to include any other systems in this current round of planning for the Mississippi-Rideau region. MOE has strongly advised municipalities to wait until they receive guidance from the MOE before deciding to include additional systems. This guidance will help municipalities prioritize which other systems they may want to include in the process and it will speak to potential funding to cover the cost of including additional systems.	Legislative Requirement
12	This section (excerpt from the AR copied below) should be removed from the AR on page 1-9 as it is not within the scope nor is it relevant to the development of the AR. The role of the SPC and the Minister appointed Chair of the SPC is to carry out source protection planning in accordance with the Act, Regulation and Director's Technical Rules in the local setting for each source protection area. The AR is not the appropriate document for the Chair SPC to express how they would like to see future public policy and funding	Regulatory Requirement

	Provincial Funding	
	The Provincial Government is funding 100% of the source protection planning process into 2012 when Source Protection Plans will be completed. This includes the cost of technical studies, consultants, peer review, source protection staff and the Source Protection Committee. It should be noted that many municipalities have generously contributed staff time in support of local source protection planning work and these costs have not been covered.	
	Currently the Province has not committed to pay for:     The inclusion of "other" drinking water systems in the source protection planning process; or     The implementation of source protection plans.	
	Implementation costs will depend on the types of policies that will be used to address drinking water threats. The Mississippi-Rideau Source Protection Region has advised MOE on multiple occasions that municipalities and property owners are very concerned about potential implementation costs they may incur. Our Source Protection Committee will continue to raise this issue at the provincial level on behalf of our local municipalities and residents.	
13	Page 1-10 identifies Municipalities as the focus of the Act; this is incorrect and should be revised to accurately reflect that the focus is to protect municipal sources of drinking water.	Legislative Requirement
14	Pages 1-12 to 1-13 discusses (see excerpt from the AR below) the concerns of the Ottawa River Watershed and an interjurisdictional committee. This discussion is outside of the current scope of the assessment report itself. We recognise the interjurisdictional project is an important step in understanding how to move forward on the Ottawa River, but given the regulations and rules around the content of the assessment report this should remain outside of the report. The work with Gatineau on threats to the two Ottawa River intakes, which was the focus of the meeting in April 2009, and progress since this discussion can be included in the assessment report.  Protecting the Ottawa River watershed is beyond the capacity and scope of the Mississippi-Rideau Source Protection Region or its Source Protection Authorities. To address this, an inter-jurisdictional committee needs to be formed that is empowered to protect the water quality, quantity, and the ecological integrity of the Ottawa River through a watershed approach. The MOE has taken the lead and is working on establishing such a committee.	Legislative Requirement

	Sections that are out of soons for the AD	
15	a) Sections that are out of scope for the AR a) Section 6.2 titled "Outstanding Concerns with Vulnerability Scoring Methodology" indicates that "there has been considerable debate in the MRSPR about how vulnerability scores should be determined for IPZs. While specific concerns have been documented in the record of public comments (to be included in the AR submission package)", The inclusion of this information is not appropriate and is not required in the AR. The Director's Technical Rules are legislative requirements to be followed and adhered to in the development of the technical work and AR. The rules are not subject to debate. Concerns with the rules can be addressed directly with the ministry. The only deviations from the rules allowed are set out in specific sections of the rules such as an application to the Director for an alternate method and the Director approves an alternate method the SPC is required to detail. b) Additionally, the next section titled "Debate" (page 6-10) should also be removed from the AR, as well as the following section titled "Provincial Technical Guidance Requested" which is suggesting that the province would assemble a panel of experts to develop appropriate Technical Guidelines for the derivation of surface water intake vulnerability scores" (see Page 6-11). It is not the role of the SPC to advise the MOE on the steps to reassess the requirements or contents of the Director's Technical Rules in future rounds of planning within the AR. Rather the SPC should be documenting in the AR how they met the technical rules as legislative requirements, and their results of analysis including any uncertainties and limitations they have encountered. Any concerns with the Director's Technical rules can be discussed directly with the ministry.	Legislative Requirement
16	Data Gaps: Ensure that the chapter on data gaps meet the intent of the Director's Memo (Oct 2009). For instance, lack of monitoring for ground water and surface water should not be identified as a data gap. Only where the Technical Rules set out that a workplan is allowed in the AR should a data gap be identified. All other areas where there is a perceived lack of information is either a limitation of the information available or improvements for future rounds of planning.	Legislative Requirement
17	Chapter 8 on data gaps indicates that significant threat counts will be updated for the updated AR. This is not in scope for the updated AR. Any conformation or more detailed information that	

	can inform the threat counts can be included in the process to develop source protection plan policies. Re-counting the threats for an updated AR is not considered to be an efficient use of time and financial resources as it does not directly impact the amount of work or number of policies that an SPC is required to include in their source protection plan. Any activity that is not undertaking an activity that is a significant drinking water threat is not subject to SPP policies even if they are counted in the assessment report.	
Surface	Water Comments	
18	Mississippi Valley and Rideau Valley: In-River portions of IPZ-2s, Page 6-13&14: The AR says "IPZ-2s were extended to take into account wind effects on the ToT in the river". The AR does not provide information on what type of wind condition was applied, i.e. wind direction, wind speed, wind event, etc. References are made to other documents, but the AR and appendices must include the basic information.	Recommendation
19	Smiths Falls Surface Water Intake:  a) Page 6-45: The AR reads that the distance of emergency intake from the shoreline is "0m". Is that distance correct? Please clarify.	a) Suggestion
	b) Page 6-45: The source vulnerability score (Vfs) for the main and emergency intake of Smiths Falls SW system is assigned to 1.0. The intake depth and intake distance of the main intake is much greater than the intake depth and distance of the emergency intake. So how was the same Vfs assigned for both intakes? Please clarify and provide more information on method applied for determining this score.	b)Recommendation
20	Britannia and Lemieux Surface Water Intakes:  a) Page 6-49, IPZ-1: The 200m semi-circle for IPZ-1 has been modified to 200m full circle to account for potential influence of winds on the surface currents. Such modification is allowed by Rule 64 if there are hydrodynamic conditions that would support this. Rule64 requires providing sufficient details on the hydrodynamic rationale for this modification. The rationale provided in the AR is insufficient; in addition wind conditions are not considered a local hydrodynamic condition. Wind conditions can be considered for IPZ-2 delineation, but not for the IPZ-1 delineation. If additional information on hydrodynamic conditions that would support this change, please provide that information.	a) Legislative Requirement
	b) Page 6-50, Sewer Systems: The AR does not provide information on what sewer discharge, or storm event was	b)Recommendation

	used for including sewer systems in IPZ-2. Please clarify. c) Page 6-53, Area Vulnerability Scoring (Vfa): Please include within the documentation on the Vfa whether or not the value assigned was based on the entire area of IPZ-2, i.e. including the portion on the Quebec side of the river.	c)Recommendation
Groundwa	ater Comments	
21	The ISI is applied in a modified format for the regional groundwater vulnerability determination. The methodology must be documented in the report as per rule 15.1, including the rationale for the use of this alternative method and limitations.	Legislative Requirement
22	The hydrogeologic conditions relevant to each WHPA or wellfield have been well documented in most cases throughout the AR with part 2 of each section setting out the stratigraphy of the sedimentary rocks includes Nepean Formation (sandstone) sequentially overlain by the March Formation (sandstone/dolostone) and Oxford Formation (limestone/dolosone). However, Part 3 of many sections states that "the Nepean aquifer is well protected from the overlying Ottawa and Oxford/March Formation aquifers. "This is inconsistent with the combined information in part 2 of each section as the Ottawa and Oxford/March formation is not always mentioned, and therefore, there would be no protective strata between the Nepean and upper aquifers. These sections should be reviewed for consistency and the presence of the protective layer throughout the wellfields should be clearly documented if it is relied on in setting the groundwater vulnerability.	Recommendation
23	Wellhead Protection Areas (WHPAs) are delineated using numerical models, an acceptable method, in all cases. It would be beneficial to indicate which type of model was used (e.g. MODFLOW, FeFLOW).	Suggestion
24	In several cases, the WHPA-C (5-year TOT) is nearly equal to or greater than 50% of the area of WHPA-D (25-year TOT). While it is recognized that the size of the WHPAs are not typically a linear relationship, the justification for why WHPA-C is so large relative to WHPA-D should be clearly explained in the report.	Suggestion
25	Transport pathways are considered in the analysis of groundwater vulnerability within the WHPAs. In many cases, it is unclear from the report what considerations for the pathways have resulted in the increasing of the groundwater vulnerability. Where these areas are and why groundwater vulnerability ranking has been changed. This must be clearly described and shown on maps to comply with Technical Rules 5(2), 9(1)(i) and 41.	Legislative Requirement

26	Section 2.2.2, Physiography: Paragraph 2 states: "The western half covers about 70% of the MVSPA and the upper 30% of the MVSPA." This seems inconsistent with the information in the report and should be reviewed and corrected, as necessary.	Recommendation
27	Section 4.1, Bullet 2: "A SGRA is an area identified as an area of high groundwater vulnerability which" This is incorrect since SGRAs also have areas of medium groundwater vulnerability, as indicated in the report, and this portion of the sentence should be deleted.	Recommendation
28	Section 5.1.2, subsection HVA Delineation in Eastern Ontario: This section describes a rationale proposed for the delineation of HVAs in Eastern Ontario. While this has been accepted by the SPPB, documentation of the following points should be included in the assessment report:  I. The assumption that all bedrock aquifers with less than one and one half or two (depending on what is represented in the actual AR mapping or other evidence) metres of overburden or with overburden that is relatively highly permeable are unconfined aquifers.  II. The designation of all areas with less than two metres of overburden or with overburden that is relatively highly permeable are being delineated as having high	Recommendation
	groundwater vulnerability (therefore are highly vulnerable aquifers).  III. That the application of the Amended 2002 GwISI methodology was used in all other areas.  IV. The rationale for the assumptions should include evidence from wells across the source protection area, including water quality problems, connections with surface water or water level response measurements, that supports the assertion that the bedrock aquifers in the source protection areas are primarily highly vulnerable to surface sources of contamination.	
	V. The methodology should clearly state any limitations for the methodology and must include, as a minimum, the fact that hydraulic data from the WWIS was not considered with respect to confined or semi-confined aquifers as part of the GwISI methodology applied in these SPAs and that some wells which would be determined to have low or moderate aquifer vulnerability under the original GwISI methodology would be designated as highly vulnerable aquifers under this method.	

29	Section 5.3.1 What is a Wellhead Protection Area? Paragraph 3 should read: "Time of travel (ToT) is the distance groundwater travels within the aquifer to the wellhead for a 2, 5 or 25-year time period." The table following this paragraph should remove the word "Zone" in column 1, rows 2 through 5 to be consistent with the Technical Rules.	Legislative Requirement
30	Section 5.5.3 Vulnerability Scoring: The table in this section does not correctly indicate the vulnerability scoring for WHPA-C, which must be consistent with Technical Rule 38(1).	Legislative Requirement
31	Section 5.8.2 Aquifer Vulnerability (Kemptville): The final paragraph states that "Three areas were identified where transport pathways pose a risk to the deep aquifer in Figure 5-8h."  These areas must be described in the text and accurately presented on the map (only two were observed on the map) in order to comply with Technical Rule 41.	Legislative Requirement
32	Section 5.10.2 Aquifer Vulnerability (Munster): The justification for increasing the vulnerability for the presence of high groundwater well density and sewer services is not provided and should be included to comply with Technical Rule 41.  The presence of surface water ponds is not considered a transport pathway for groundwater unless it is shown that it provides a short circuiting of the groundwater flow path between the ground surface and the aquifer.	Legislative Requirement
33	Section 5.11.2 Aquifer Vulnerability (Richmond – King's Park): Paragraph 2 states that: "For the shallow aquifer, the aquifer vulnerability is mostly medium, with some high vulnerability because of clay deposits which are present above the bedrock." Typically, the presence of clay deposits decreases the vulnerability of underlying aquifers and, as such, this statement should be reviewed and corrected, as necessary.	Recommendation
34	Section 5.12 Westport Water Supply: It was understood that the Westport well 1 was classified as GUDI under the Safe Drinking Water Act. However, according to a query from the MOE WiRE system, this well is no longer on line and Wells 2 and 3 are classified as groundwater sources. Under these conditions, Technical Rule 47 does not apply and a WHPA-E is not required for the Westport system wells.	Legislative Requirement
35	Figure 5-12b Westport Conceptual Hydrogeological Cross-Section: It is unclear why this cross-section is so limited in the horizontal axis compared to all others, particularly truncated to the east of the	Recommendation

	wells with the proximity of the lakes and pond to the immediate east o. All relevant information should be portrayed on the accompanying figures to the AR text.	
36	The rules require the uncertainty be characterised as high or low with respect to the factors listed in Rule 13. For groundwater, the AR only provided an analysis of the uncertainty with respect to the delineation of the WHPAs and not on the groundwater vulnerability component. The rationale for the uncertainty level is clearly justified in the report. Uncertainty with some of the data used does not necessarily mean uncertainty is high. If local knowledge of an area would support the vulnerability assessment, then this would indicate a higher certainty in the information. None of the local information seems to have been considered in the uncertainty analysis.	Recommendation
Water Bu	dget Comments	
37	As per page 1-4, the necessary revisions should be made to the effect that MNR does not assist with project management for SPP. In fact, MNR's role is to lead the Water Budget (water quantity) portion of the AR and to assist and guide the SPA/SPR with completion of this component of the AR.	Suggestion
38	Pg 3.5: For each of the three scales being evaluated in the conceptual understanding (MRSPR, MVSPA and RVSPA), indicate the size of each of the area (km²) to demonstrate the scale of the assessment.	Recommendation
39	Pg 3-12: Section 3.2.4 should include a summary table that clearly identifies each of the different types of water takings for the entire region (i.e. Municipal, agricultural, private, PTTW). For the PTTW category, break out the total PTTW category into each of the various sectors it includes.	Legislative Requirement
40	Pg 3-17: Please include the percentage in population increase used to evaluate the drought scenarios. Also, include the source of the information i.e. Official Plan etc.	Legislative Requirement
41	Pg 3-17: Under the permits to take water category it should be indicated whether the total permitted rates are used in the evaluation or actual takings are used (may be a combination of the two).	Legislative Requirement
42	Pg 3-18: Please include a summary table that identifies what consumptive factor has been applied to each of the water taking sectors to arrive at the values presented in 3.5, 3.6 and 3.7. These factors are shown in Appendix 3-3 and 3-4 but would be of value to be brought forward into the text of the AR.	Recommendation

43	Page 3-19: Under the surface water stress section, please add a sentence describing the results of the future scenario.	Legislative Requirement
44	Table 3-3: Please add a column that shows the size of each of the areas (km²) being assessed.	Recommendation
45	Map 3-15: One or more maps showing the results of the Tier 1 stress assessment for surface water and groundwater are required. This map does not clearly demonstrate what the stress level is for groundwater under the low or moderate surface water components and visa versa.	Legislative Requirement
Threats and Issues		

46	Page 1-13 Section 1.5.2 indicates that threats and issues prioritised in the report will be the focus of the source protection plan. The use or the term prioritise is inconsistent with the regulations and rules. threats are classified as significant, moderate or low. Therefore, prioritise should be put in the context of this.	Recommendation
	Issues are not the subject of policies. Significant drinking water threats identified through the issues approach must be addressed through the source protection plan policies.	Legislative Requirement
47	On page 5-46 the report says "A number of transportation corridors, including roads and a CPR rail line exist within the Merrickville WHPA where there may be the transportation of dangerous and/or hazardous goods and the potential for a spill exists. Spills within the WHPA have the potential to impair the groundwater quality however they are not included as threats as per the prescribed drinking water threats categories (see Section 4-3)". The regulations and rules allow the SPC to identify local threats to drinking water. Guidance has been provided to the SPC about adding activities on transportation corridors as a local drinking water threat. Since the SPC has not added this as a local threat, a discussion about activities on a corridor having the potential to contaminate drinking water is not consistent with the rules. Clarity on the process of identifying threats is recommended. A discussion on how the SPC and municipalities should connect on emergency response could be included in the source protection plan.	Recommendation
48	Page 5-32 identifies a sewage lagoon as a condition. Sewage lagoons are not a condition as the activity is still present. This should not be referred to as a condition. In addition, a sewage lagoon is already captured as an activity threat.	Legislative Requirement
49	Page 6-52 presents a discussion around tritium and the Chalk River facility outside of the SPA. As stated in the AR, the rules, which are based on a requirement set out in the Act itself, does not allow the delineation of vulnerable areas outside of the SPA. The report includes a discussion of a secondary IPZ-3. To be consistent with the Act, a reference to a secondary IPZ-3 should be removed. The technical rules do allow the assessment report to include a discussion about activities that may contribute to the issues that are outside of a source protection area. Therefore, if the report is to include a discussion about activities outside of the SPA, the wording should be consistent with the Act and rules. This does not mean this section must be removed, but the approach to identifying concerns with respect to this activity should not	Legislative Requirement

	reference an IPZ.	
50	Page 5-15 includes the following text. "As required by the Technical Rules, where drinking water issues were identified and could be attributed in whole or in part to anthropogenic activities, an Issue Contributing Area was identified, along with the activities and circumstances considered likely to have caused or contributed to the issue. The activities and circumstances are taken from the Threats Tables discussed in Section 4.4.3". As per rule 115, documentation of issues must include a list of drinking water threats that contribute or may contribute to the parameter or pathogen of concern. The rules are suggesting a list of activities likely to cause the issue be included. It is mandatory that any prescribed threat, locally added activity, and any condition related to the parameter or pathogen of concern, located within the ICA, be listed as threats that contribute or may contribute to the issue. Rule 115 (4) says any threat listed in accordance with rule 118, 119 or 126. Table 5.5 lists specific activities and circumstances the SPC believes are contributing to the issues. This table, or some other form of documentation, must provide the full list of threats that may contribute to the issue, indicate if they are significant or moderate drinking water threats, and identify the circumstances that make the activities significant or moderate drinking water threats. This is outlined in the provincial guidance on issues. Given the only issues identified were for drinking water systems not in the terms of reference, the threats can only be identified as moderate drinking water threats. Therefore, no enumeration of threats is required using the issues approach for this report.	Legislative Requirement
51	The documentation requirements for issues that meet the tests in rule 114 are mainly set out in rule 115. In addition, Rule 9(2) sets out additional requirements around documenting methodologies and approaches. The assessment report meets the requirements in rule 115, but does not have sufficient documentation on how the issue contributing areas were delineated.	Legislative Requirement
Livestoc	k Density	
52	In both the WHPA and IPZ sections mention is made of calculating two different types of livestock density in these vulnerable areas. Under the technical rules, there is only one livestock density definition, and it is calculated on a vulnerable area (or sub area) scale. This is the livestock density used in the circumstances for the application of nutrients. When considering the circumstances for livestock pasturing, grazing, outdoor confinement areas, and farm yards. There is no livestock density terminology and there is no vulnerable area based calculation.  The detailed steps for determining the "livestock density" do appear to comply with the technical rules and circumstances except in the use of the term livestock density for livestock operations (pasturing,	Legislative Requirement

grazing, outdoor confinement areas, and farm yards). For consistency with the technical rules, the discussion around livestock density should be limited to the required livestock density calculation required to develop the livestock density map under rule 16. Discussions around how the NU/acre are generated for livestock operations (pasturing, grazing, outdoor confinement areas, and farm yards) should not use the term livestock density given the rules define livestock density. Also, the discussion of calculating a "livestock density" for livestock operations in an IPZ or WHPA – for example on page 6-22 "The second value reported is for livestock density associated with grazing or pasturing, and was computed for IPZ-1 and IPZ-2" should be removed. This type of analysis is not at that scale or based on the type of vulnerable area or sub-area.

# **Managed Lands**

density.

Managed Lands and Livestock Density maps. The report combines managed land % and livestock density onto one map. It is unclear if these maps meet the requirements of the technical rules as there is little explanation behind how the maps were combined. The report should make it clear if the maps provide the percent managed land and livestock density for all areas where the application of nutrients could be a threat (significant, moderate or

low). There are areas with some WHPAs that have no percent or

Recommendation

Typographical errors that are not part of the official Ministry comments

- Page 5.29 references uncertainty for the Almonte WHPA and references section 5.39. There is no section 5.39
- Pg 3-13: At the bottom of the page there is a typo Table 3.2-1 does not exist should likely refer to Table 3.2.
- Under section 5.11.7, at the end of the first paragraph on issues, it is stated that "No
  conditions were identified...". Should this say no issues were identified given the next
  paragraph on conditions also says no conditions were identified.
- In the water quality threats results sections of each drinking water system there is reference to section 4.3.3 of the assessment report. There is no section 4.3.3.
- Table 4-2. The reference to the provincial table for pathogens that are a low threat in an IPZ or WHPA E with a vulnerability score of 8.1 is 60 (PIPZWE8.1<u>L</u>), not 60 (PIPZWE8.1<u>ML</u>).

3.0 Assessment Report Accompanying Document

**Date:** November 10, 2010

To: Mississippi-Rideau Source Protection Committee From: Sommer Casgrain-Robertson, Co-Project Manager

Mississippi - Rideau Source Protection Region

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# Background

Since their formation, the Mississippi-Rideau Source Protection Committee has become aware of a number of drinking water related concerns which, while potentially important, fall outside the current mandate of the *Clean Water Act*. Since these concerns fall outside the scope of the Act the Committee was not allowed to document them in their Assessment Report. The Committee also identified concerns with certain aspects of the source protection planning process while developing their Assessment Report. Under the Provincial Technical Rules these concerns cannot be documented in the Assessment Report.

# **Accompanying Document**

Staff is drafting a report that will be a companion document to the Assessment Report. It will document and briefly describe the "out of scope" drinking water concerns and concerns with aspects of the source protection planning process that have come to the Committee's attention since 2008. Some concerns were identified by Committee members while others were raised by our municipalities and members of the public.

This companion document will be provided to the MOE when the Assessment Report is submitted in late December, 2010. It is hoped that this document will lead to these concerns being given further consideration by an appropriate Ministry or agency.

#### **List of Concerns:**

- Protecting Private Well Water
  - HVAs & SGRAs
  - o Proper Well Construction, Maintenance and Abandoning
  - o Minimum Lot Size
- Spill Response
- Spreading of Septage (sewage biosolids)
- Ottawa River Watershed
  - o Quebec
  - Chalk River & Tritium Levels
  - Water Budget
- Transportation Corridors
- Provincial Rules for IPZ Vulnerability Scoring
- Protecting Future Municipal Wellhead Sites
- Implementation Costs
- Floodplains and Contamination
- Mining
- Geothermal Systems

# 4.0 2011 MRSPC Meeting Schedule

Date: November 5, 2010

To: Mississippi-Rideau Source Protection Committee From: Sommer Casgrain-Robertson, Co-Project Manager

Mississippi - Rideau Source Protection Region

#### **Recommendation:**

1. That the Mississippi-Rideau Source Protection Committee approve the following meeting schedule for 2011:

- Thursday, January 6
  - o 1pm, RVCA
- Thursday, February 3
  - o 1pm, RVCA
- Thursday, March 3
  - o 1pm, RVCA
- Thursday, April 7
  - o 1pm, RVCA
- Thursday, May 5
  - o 6pm, location TBD
- Thursday, June 2
  - o 6pm, location TBD
- Thursday, July 7
  - o 6pm, location TBD
- Thursday, September 1
  - o 6pm, location TBD
- Thursday, October 6
  - o 1pm, RVCA
- Thursday, November 3
  - o 1pm, RVCA
- Thursday, December 1
  - o 1pm, RVCA

#### **Background**

It is proposed that the MRSPC meet every month in 2011, except for August. When the meeting schedule is posted a footnote will be included informing the public that "under rare circumstances meetings may be relocated or cancelled so people are encouraged to visit the website or contact staff to confirm meeting details".

If approved, locations for the May, June, July and September meetings will be confirmed. A finalized 2011 MRSPC Meeting Schedule will be:

- Circulated to all MRSPC and Source Protection Authority members;
- Posted on our website; and
- Included in various communications outreaches.

5.0 Community Outreach

Date: November 5, 2010

To: Mississippi-Rideau Source Protection Committee From: Sommer Casgrain-Robertson, Co-Project Manager

Mississippi - Rideau Source Protection Region

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#### Recommendation:

1. That the Mississippi-Rideau Source Protection Committee receive the Community Outreach staff report for information.

# **Background**

Staff and MRSPC members participate in many different community outreach activities to raise awareness and understanding of the source protection planning process. These activities include information booths at events, presentations at meetings and articles in newsletters and local papers. It is important that staff and members keep each other informed about the activities they are involved in so that we can coordinate our participation and prepare appropriate materials in advance. This includes coordinating with our neighbouring regions for outreach covering Eastern Ontario.

#### **Past Activities**

Members & staff are asked to give a verbal update on any other activities that took place in the past month related to source protection.

- 1. Provincial Site Visit (MNR/MOE)
  - September 8, Manotick (SPC and SPA Chairs, Project Managers and General Managers participated)
- 2. Cities Plus Network conference
  - September 13, Ottawa (Chair Stavinga presented)
- 3. Ontario East Municipal Conference
  - September 15, Kingston (Sommer presented)
- 4. Mississippi Valley Source Protection Authority
  - September 15, Almonte (Chair Stavinga attended)
- 5. Chairs Quarterly meeting
  - September 20-21, Toronto (Chair Stavinga attended)
- 6. Rideau Valley Source Protection Authority
  - September 23, Manotick (Sommer, Brian and Chair Stavinga attended)
- 7. Eastern Ontario Muncipal Water Association Conference
  - September 28, Smiths Falls (Sommer presented)
- 8. MOE Training Session Source Protection Plan regulation
  - October 13, Brockville (staff, SPC members and municipal staff attended)
- 9. Chalk River Laboratories Briefing and Tour
  - October 19, Chalk River (staff and SPC members attended)
- 10. Draft Assessment Report Public Meetings
  - o October 26, Carp
  - o October 28, Perth
  - o November 1, Kemptville
  - o November 2, Carleton Place

# **Upcoming Activities**

Members & staff are asked to give a verbal update about any other activities they know about in the coming months related to source protection.

- 1. Chair / PM Teleconference with MOE
  - November 15 (Chair Stavinga and Sommer regrets)
- 2. Eastern Ontario Source Protection Regions Meeting
  - o November 22, Brockville (Brian, Sommer and Allison attending)
- 3. Rideau Valley Source Protection Authority Meeting
  - o November 25, Manotick (Sommer, Brian and Chair Stavinga attending)
- 4. Mississippi Valley Source Protection Authority
  - December 1, Almonte (Sommer, Chair Stavinga attending)
- 5. Project Managers Meeting
  - January 11, Toronto (Sommer attending)
- 6. Provincial Chairs Meeting
  - January 17-18, Toronto (Chair Stavinga and Sommer attending)