

AGENDA

Mississippi-Rideau Source Protection Committee (MRSPC)

June 3, 2010

6 pm

443 Rideau Wing (RCAF)

44 Abbott Street North, Smiths Falls

	Pg.	
1.0 Welcome and Introductions		<i>Chair Stavinga</i>
a. Agenda Review		
b. Notice of Proxies		
c. Adoption of the Agenda (D)		
d. Declarations of Interest		
e. Approval of Minutes – May 6, 2010 (D)		
▶ draft minutes attached as a separate document		
f. Status of Action Items – Staff Report Attached (D)	1	
g. Correspondence (I):	3	
1. MPP Yasir Naqvi re: Congratulations on ODWSP funding		
2.0 Assessment Report Development – Staff Report Attached	5	<i>Staff</i>
a. Staff will explain why IPZ-3 vulnerability scores are a data gap		
b. Committee will review and consider approving:		
• Summary of Public Comments on draft Groundwater Studies (D) ...	18	
• Summary of Public Comments on draft Surface Water Studies (D) ..	24	
c. Committee will review and consider approving:		
• Preliminary Draft Assessment Report (D)	Attached	
3.0 Community Outreach – Staff Report Attached (D)	44	<i>Chair Stavinga</i>
a. Members & staff report on activities since the last meeting		
b. Discuss upcoming events & opportunities		
4.0 Other Business		<i>Chair Stavinga</i>
5.0 Member Inquiries		<i>Chair Stavinga</i>
6.0 Next Meeting – August 12, 2010, 6pm		<i>Chair Stavinga</i>
North Grenville Municipal Centre (Hall A)		
285 County Road 44, Kemptville		
5 pm – public “meet and greet”		
7.0 Adjournment		<i>Chair Stavinga</i>

(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: May 18, 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 “City of Ottawa” seat on the MRSPC	Fill the vacancy on the MRSPC	Sommer Casgrain-Robertson	In Progress City staff is working to fill the seat.
2	Vacant “Other Interest” seat on the MRSPC	Fill the vacancy on the MRSPC	Sommer Casgrain-Robertson	In Progress Sommer Casgrain-Robertson will advertise the vacancy
3	Uranium	MVC and local Health Units work together to raise public awareness about naturally occurring uranium in drinking water	Sommer Casgrain-Robertson	In Progress Jean-Guy Albert will encourage Health Canada to release the “Uranium and Drinking Water” fact sheet they developed.
4	Ottawa River Watershed Inter-Jurisdictional Committee	Encourage MOE to take the lead role in establishing an Ottawa River watershed inter-jurisdictional committee	Mary Wooding	Ongoing MOE held a meeting on April 20 for municipal, Ministry and Conservation Authority representatives from Ontario and Quebec along the Ottawa River.
5	Geothermal Systems	Determine if geothermal systems should be considered a threat to drinking water sources	MOE	Ongoing A lot of information has been collected on this topic, including a technical bulletin from MOE.
6	Compensation Models	Staff to collect other compensation models (e.g. Ottawa wetland policy, Alternate Land Use Services).	Sommer Casgrain-Robertson	In Progress Staff will build this in to the Source Protection Plan work plan (begin late 2010).

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 Assessment Report 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

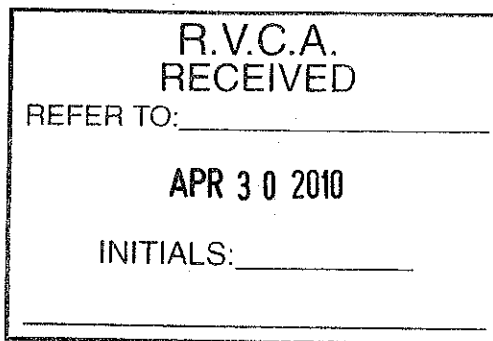
Date: May 18, 2010
To: Mississippi-Rideau Source Protection Committee
From: Sommer Casgrain-Robertson, Co-Project Manager
Mississippi – Rideau Source Protection Region

Attached Correspondence:

Correspondence From:		Regarding:	Response:
1	Yasir Naqvi, MPP, Ottawa Centre April 23, 2010	Congratulations on receiving ODWSP Early Actions funding	No response required



Yasir Naqvi, MPP
Ottawa Centre



April 23, 2010

Ms. Janet Stavinga, Chair
Mississippi-Rideau Source Protection Region
3889 Rideau Valley Drive
PO Box 599
Manotick, ON K4M 1A5

Dear Ms. *Janet* Stavinga,

I am writing to extend my sincere congratulations to you and the Mississippi-Rideau Source Protection Region on being allocated \$418,500 through the Ontario Drinking Water Stewardship Program (ODWSP).

Throughout 2009/2010 our government is investing \$7 million to help conservation authorities, municipalities and individuals protect local drinking water sources through the ODWSP, a program created under the *Clean Water Act*. The fund provides financial assistance to initiatives that best protect our province's water, helping farmers, rural property owners and small businesses put measures in place now to protect drinking water sources. Measures include the decommissioning and upgrading of wells and septic systems, pollution prevention reviews and controlling for run-off. In the past three years more than 800 projects have received funding through the program, and another 400 are currently underway.

I am confident that this funding will be of great use to the Region, providing local landowners support and offering information as to how they can play a larger role in the protection of the Mississippi-Rideau watershed. I also applaud your efforts to engage the greater community in a thoughtful discussion regarding the source and treatment of their local water supply. We all hold responsibility for the protection of our province's water supply.

Once again, congratulations! I want to thank you and the Mississippi-Rideau Source Protection Region for your continued efforts to protect our province's water supply. I assure you that our government shares your passion, and has made the protection of our water sources a priority.

Please do not hesitate to contact me if I can ever be of any assistance to you.

Warm regards,

Yasir Naqvi

Yasir Naqvi, MPP
Ottawa Centre

2.0 Assessment Report Development

Date: May 18, 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 Summary of Comments Received on the *Draft* Groundwater Studies.

Recommendation 2:

That the Mississippi-Rideau Source Protection Committee approve the Summary of Comments Received on the *Draft* Surface Water Studies.

Recommendation 3:

That the Mississippi-Rideau Source Protection Committee approve the *preliminary draft* Assessment Report as the *Draft* Assessment Report to be posted for public consultation.

June 3, 2010 – MRSPC Meeting

- The MRSPC will review the entire *preliminary draft* Assessment Report. They will consider approving it as the Draft Assessment Report to be posted for a 35 day public consultation period starting mid June.

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.

The Assessment Reports will contain the following components (underlining means the study has been approved as *draft* for public consultation by the MRSPC):

- Watershed Characterization
- Water Budget
- Vulnerable area delineation
 - Significant Groundwater Recharge Areas
 - Highly Vulnerable Aquifers
 - Wellhead Protection Areas for:
 - Almonte, Carp, Kemptville, Lanark (future planned system), Merrickville, Munster Hamlet, 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

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

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.

The Mississippi-Rideau Source Protection Committee (MRSPC) are supposed to develop two Assessment Reports: one for the Mississippi watershed, and one for the Rideau watershed. Staff hope to combine the two Assessment Reports into one document for the purposes of public consultation 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 and comment on two stand alone documents;
- It is more convenient for the public and cost effective if both Assessment Reports undergo public consultation at the same time.

This means both Assessment Reports would have to have been completed by February 5, 2010.

The MRSPC requested a due date extension for a number of reasons (finalized Technical Rules were delayed by the Province, technical studies were delayed by concerns raised by the Committee, more time was needed for effective public consultation). The MOE granted the extension meaning a *proposed* Assessment Report must now be submitted to MOE by **September 21, 2010**.

Future Amendment Required

The *proposed* Assessment Report that will be submitted by September 21, 2010, will not contain information about the future municipal drinking water system planned for Lanark Village nor will it contain IPZ-3 Vulnerability Scores. This information will be identified as a data gap and included in a revised Assessment Report submitted in 2011.

Detailed Work Plan and Timeline

The following work plan and timeline breaks the process of developing Assessment Reports into three phases.

Phase 1:

- Completion of background technical studies
- SPC, SPA, municipal and public review of 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 as “draft for public consultation”
- 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 have been developing background technical studies since 2006. These studies began based on draft technical guidance from MOE and were then finalized to meet the approved Technical Rules. These studies contain the scientific information the MRSPC needs to complete Assessment Reports.

In spring 2008, a *preliminary draft* Watershed Characterization Report and *preliminary draft* Conceptual Water Budget (based on MOE’s draft guidance) were presented to the MRSPC. These studies are currently being updated to meet the final approved Technical Rules and will be brought back to the MRSPC as outlined below.

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

- Staff will develop a summary outlining the study’s purpose, methodology and findings (some studies will be grouped into one summary).
- The summary will be presented to the MRSPC for review and possible amendment (the technical study will be provided on CD).
- The summary will be presented to the Source Protection Authorities, then circulated to municipalities, and then the public for review.
 - Summaries will be posted on the web site for comment
 - 11 public open houses will be held.
 - Each open house will focus on the local municipal drinking water system (wellhead protection area or intake protection zone) and provide an overview of regional information as available.
 - Full technical studies will be available to anyone on CD
- Everyone will be encouraged to provide feedback and traditional and local knowledge at this early stage so it can be considered when the *preliminary draft* Assessment Reports are being developed.

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

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

Month	Task	Timeline
March 2009	Golder complete Wellhead Protection Area Studies	Completed Early March
	Staff complete Threats Summary	Completed Early March
	Staff develop study summaries (reviewed by municipal technical staff)	Completed March 16
April 2009	MRSPC review <i>preliminary draft</i> study summaries & technical studies (CD). Provide to municipalities before the meeting.	Completed April 2
May 2009	Send <i>draft</i> study summaries & technical studies (CD) to municipalities with invitation to attend open house	Completed May 21
	Advertise three open houses (Carp, Kemptville and Merrickville) and comment period	Completed May 21
	Send an open house invitation to every property in an area that could score significant threat	Completed May 22 - 25
	SPAs review study summaries	Completed April 15 & 23
	Make study summaries available at MVC & RVCA offices for public review	Completed May 22
June 2009	Hold Open houses for municipal staff & council (afternoon session) and public (evening session)	Completed June 8, 10 & 11
February 2010	Post study summaries on web site	Completed mid February
	Collect comments on study summaries	Completed mid February
	Staff compile comments received on technical study findings	Completed March 3
	Staff prepare <i>preliminary draft</i> AR chapter	Completed February 24
March 2010	MRSPC review summary of public comments and <i>preliminary draft</i> AR Chapter	Completed 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 Westport; Intera / Golder complete other three studies	Completed Early May
	Staff complete Threats Summary	Completed Early March
	Staff develop study summaries (reviewed by municipal technical staff)	Completed May 19
June 2009	MRSPC review <i>preliminary draft</i> study summaries & technical studies (CD). Provide to municipalities before the meeting	Completed June 4

Month	Task	Timeline
July 2009	Send <i>draft</i> study summaries & technical studies (CD) to municipalities with invitation to attend open house	Completed July 7
	Advertise three open houses (Almonte, Richmond and Westport) and comment period	Completed July 10
	Send an open house invitation to every property in an area that could score a significant threat	Completed July 7
	SPAs review study summaries	Completed June 25 & July 15
	Make study summaries available at MVC & RVCA offices for public review	Completed July 16
	Hold public Open Houses	Completed July 20, 21 & 22
February 2010	Post study summaries on web site	Completed mid February
	Collect comments on study summaries	Completed mid February
	Staff compile comments received on technical study findings	Completed March 3
	Staff prepare <i>preliminary draft</i> AR chapter	Completed February 24
March 2010	MRSPC review summary of public comments and <i>preliminary draft</i> AR Chapter	Completed March 4

Significant Groundwater Recharge Areas & Highly Vulnerable Aquifers

Month	Task	Timeline
June 2009	Intera / Golder complete studies	Completed Early June
	Staff complete Threats Summary	Completed 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 <i>preliminary draft</i> AR chapter	Completed February 24
March 2010	MRSPC review <i>preliminary draft</i> AR Chapter	Completed March 4

Conceptual and Tier 1 Water Budget & Climate Change Review

Month	Task	Timeline
August 2009	Staff, Intera & Delcan complete Tier 1 Water Budget and staff revise Conceptual Water Budget. Jacqueline Oblak complete Climate Change Review	Completed August 14
	Staff develop summaries	Completed August 18
September 2009	MRSPC review technical studies (CD) and summaries	Completed September 3
	SPAs review summaries	Completed September 24
November 2009	Staff prepare <i>preliminary draft</i> Water Budget AR chapter	Completed November 16, 2009
December 2009	MRSPC review <i>preliminary draft</i> Water Budget AR Chapter	Completed December 3
February 2010	Post study summaries on web site	Completed February
March 2010	Send summaries to municipalities for review and comment	Completed 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 Chapter	Completed 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	Completed November 26 & December 2
February 2010	Post study summary on web site	Completed February
	Staff prepare <i>preliminary draft</i> AR chapter	Completed February 23
March 2010	MRSPC review <i>preliminary draft</i> AR chapter	Completed March 4
	Send study summaries to municipalities for review	Completed March

Watershed Characterization Report

Month	Task	Timeline
Spring 2008	Staff complete Watershed Characterization report	Completed March 2008
	MRSPC review <i>preliminary draft</i> technical study	Complete March, May and June 2008
January 2010	Staff complete Watershed Characterization report revisions and <i>preliminary draft</i> AR chapter	Completed January 23
February 2010	MRSPC review technical study revisions and <i>preliminary draft</i> AR chapter.	Completed February 4

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

Month	Task	Timeline
Winter 2009	Baird complete Intake Protection Zone Study	Completed December 21
	Staff complete Threats Summary	Completed April 2009
	Staff develop study summary (reviewed by municipal technical staff)	Completed December 22
January 2010	MRSPC review study summary & technical study (CD). Provide to relevant municipalities before the meeting.	Completed January 7
February 2010	Work with City of Ottawa staff to organize open houses	Completed February
	Advertise open houses (urban Ottawa) & comment period	Completed March
	SPAs review study summary	Completed January 28 & March 24
	Post study summary on web site and make available at MVC & RVCA offices for public review	Completed February
March 2010	Hold public open houses	Completed March 22 & 31
April 2010	Collect comments on study summaries	Completed April 16
	Staff compile comments received on technical study findings and prepare <i>preliminary draft</i> AR chapter	Completed April 28
	MRSPC review summary of public comments and <i>preliminary draft</i> AR Chapter	Completed May 6

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

Month	Task	Timeline
	Staff complete Threats Summary	Completed April 2009
March 2010	J.F. Sabourin revise Intake Protection Zone Studies	Completed March 22
	Staff <u>revised</u> study summaries (reviewed by municipal technical staff)	Completed March 23
April 2010	MRSPC review <u>revised preliminary draft</u> study summaries & technical studies (CD). Provide to municipalities before the meeting.	Completed April 1
	Send link to <i>draft</i> study summaries to municipalities with invitation to attend open house	Completed April 14
	Advertise three open houses (Carleton Place, Perth and Smiths Falls) and comment period	Completed April 14
	Send an open house invitation to every property in an area that could score significant threat	Completed April 16
	SPAs review study summaries	Completed April 21 & 22
	Post study summaries on web site and make available at MVC & RVCA offices for public review	Completed 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 and prepare <i>preliminary draft</i> AR chapters	Completed May 5
	MRSPC review summary of public comments and <i>preliminary draft</i> AR Chapter	Completed May 6

Surface Water Issues and Significant Threats Inventory

Month	Task	Timeline
May 2010	MRSPC review <i>preliminary</i> findings and <i>preliminary draft</i> AR chapter.	Completed May 6
	Dillon complete Threats & Issues Inventory for surface water	Completed May 18
	Provide notice of draft AR to SPAs and municipalities	June 17
	Post draft AR on web site	June 18

Phase 2 *Draft Assessment Reports*

Staff will compile all *draft* Assessment Report chapters into a *preliminary draft* Assessment Report. The MRSPC will review all public comments received on individual technical studies and will consider them when developing a *draft* Assessment Report for public consultation.

Month	Task	Timeline
June 2010	SPC review <i>preliminary draft</i> AR.	June 3
	Consider publishing <i>preliminary draft</i> AR, possibly as amended, for public consultation (now <i>draft</i> AR)	
	Staff prepare <i>draft</i> AR	June 16
	SPC courier copy of <i>draft</i> AR and notice* to each municipal clerk	June 17
	SPC give copy of notice to SPAs	June 17
	SPC publish <i>draft</i> AR and notice on website	June 18
	SPC make notice and <i>draft</i> AR publically available at MVC, RVCA and municipal offices	June 18
	SPC publish notice in newspapers	June 18
	SPC give copy of notice to Algonquins of Ontario	June 18
	SPC give copy of notice to neighbouring SPCs	June 18
	SPC give copy of notice to each person known to be potentially engaging in a significant drinking water threat (identify potential threat)	June 18
July 2010	SPC host 2 public meetings (one meeting in each Source Protection Area)	July 19 & 20
	SPC receive written comments on <i>draft</i> AR	Until July 26
	Staff prepare a summary of comments received on <i>draft</i> AR and prepare recommendations about how to address them	August 3

* **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 will summarize all comments received on the *draft* Assessment Report during public consultation and make recommendations about how these comments could be addressed. The MRSPC will consider all comments when making final revisions to the *draft* Assessment Report.

The MRSPC will forward their *proposed* Assessment Report 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 they receive or comments they wish to make.

Month	Task	Timeline
August 2010	SPC review comments received on <i>draft</i> AR and consider revising the document to address them	August 12
	Consider submitting <i>draft</i> AR, possibly as amended, to SPAs for public consultation (now <i>proposed</i> AR)	
	Staff prepare summary of public comments received on <i>draft</i> AR and how they were addressed	August 19

Month	Task	Timeline
	SPC publish <i>proposed</i> AR, comment summary and notice* on website and make available at MVC and RVCA offices	August 20
	SPC submit <i>proposed</i> AR, notice and summary of comments to SPAs	August 20
	SPC submit <i>proposed</i> AR, notice and summary of comments to each municipal clerk	August 20
	SPC send notice to the Algonquins of Ontario	August 20
	SPC send notice to neighbouring SPCs	August 20
	SPC issue notice in newspapers and at MVC, RVCA and municipal offices	August 20
September 2010	SPAs receive written comments on <i>proposed</i> AR	September 20
	SPAs submit to the Director (MOE): <ul style="list-style-type: none"> - <i>proposed</i> AR - summary of comments received on <i>draft</i> AR and how they were addressed; and - new comments received on <i>proposed</i> AR 	September 21
October 2010	Provide SPC with copy of comments received on <i>proposed</i> AR	October 7
	Minister will review the package and approve <i>proposed</i> AR <u>or</u> require SPAs to amend them and resubmit	Fall/Winter 2010
	Once approved the Minister will publish a notice on the Environmental Bill of Rights Registry	Soon after approval
	SPAs publish <i>approved</i> AR on web site and make available at other locations	Soon after approval

* **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 *draft* Groundwater Studies
- Summary of comments received on *draft* Surface Water Studies
- *Preliminary draft* Assessment Report (dated May 18, 2010)
 - Text
 - Tables
 - Figures (maps)
 - Appendices

Summary of: Comments Received on *Draft* Groundwater Studies & How They Could be Addressed

Municipal Review and Comment:	Municipal representatives sat on a working group that oversaw all the groundwater studies. This working group selected the consultants, reviewed preliminary results and oversaw peer review. Municipal staff also helped develop the study summaries that the SPC reviewed and approved as <i>draft for public consultation</i> .
Public Review and Comment:	Six open houses were held and <i>draft</i> groundwater study findings were shared with local residents. The following document is a summary of comments we heard at the open houses and comments we received in writing.
Identification of Potential Threats:	At the open houses and in writing local residents identified a number of land use activities in their communities that they are concerned could contaminate drinking water. They are past and present land uses that include planned developments (airports, intensive residential), transportation of contaminants via rail and road, landfills, businesses (dry-cleaner, junk yard, vehicle service yards, fertilizer storage, fuel retail, car wash), manure spreading, and contaminated sites. Details of these activities have not been included in this summary because it would identify specific properties and businesses which could contravene the Municipal Freedom of Information and Protection of Privacy Act. This information has been reviewed by staff and will be used when developing Source Protection Plan policies and implementing policies (information will be given to the Risk Management Official).

Developing an Assessment Report (AR):

Draft Studies	<ul style="list-style-type: none"> - Mississippi-Rideau Source Protection Committee (SPC) approved preliminary groundwater study findings as <i>draft for public consultation</i> (April and June 2009) - Held 6 open houses and published newspaper ads and press releases to solicit public input (June and July 2009)
Draft AR	<ul style="list-style-type: none"> - SPC will review and consider comments received on draft findings (March 4, 2010) - Draft AR will be posted for a 35 day public comment period (<i>mid June 2010</i>) - Will hold two open houses, send letters to potentially affected property owners, and publish newspaper ads and press releases to solicit public input (<i>June & July 2010</i>)
Proposed AR	<ul style="list-style-type: none"> - SPC will review and consider comments received on draft AR (<i>August 12, 2010</i>) - Proposed AR will be posted for 30 day public comment period (<i>mid August 2010</i>) - Will send letter to potentially affected property owners and publish newspaper ads and press releases to solicit input (<i>August 2010</i>)
Approved AR	<ul style="list-style-type: none"> - Source Protection Authorities will submit proposed AR and comments received on proposed AR to the Ministry of the Environment (MOE) (<i>September 21, 2010</i>) - MOE will consider comments when reviewing and approving AR

Overall Public Response to Open Houses:

In general, the open houses were well received and appreciated by local residents. Many of the comments we received said:

- The information that was provided (handout and presentation) was well presented and answered a lot of questions
- People appreciated the opportunity to learn about *draft* results and provide comments early in the process

Acronyms:

MOE – Ministry of the Environment

SPC – Source Protection Committee

DNAPL – dense non-aqueous phase liquid

Summary of Comments on <i>Draft Study Findings</i>			How Comments Could be Addressed by SPC	
Comments		Open House	Addressed	Response or Suggested Integration into Draft AR
1	Municipal Activities (especially sewage & landfill): are municipal sewage lagoons, underground sewers and sewage treatment plant releases being assessed as potential drinking water threats. Doesn't seem like many municipal land uses are on the threats list	Almonte Kemptville Merrickville Carp	Yes	Municipal sewage and landfill activities are captured in the provincial Threats Tables. Staff explained that if a land use activity is taking place that matches one of the circumstances listed as a prescribed drinking water threat (e.g. storage of fuel) it would be considered a drinking water threat, regardless of who owns or operates the property (municipalities are not exempt). Only Federal lands do not fall under the <i>Clean Water Act</i> .
2	DNAPLs will DNAPLs be looked for in landfill sites (people sometimes dispose of them inappropriately)	Merrickville	Yes	Landfill sites are considered to be a source of DNAPLS. The Threats Tables indicate that landfill sites located in an area with a vulnerability score of 8 to 10 are significant threats.
3	Private Well "Clusters": Private wells should not be included in source protection	Almonte	Yes	Staff explained that only a municipal council or the Minister can designate a cluster of private wells or intakes to be included in the source protection planning process. Staff noted that the MOE is developing guidance to help municipalities identify which clusters, if any, they 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.
	The Province should be fully funding the inclusion of clusters in source protection	Almonte		

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC		
Comments		Open House	Addressed	Response or Suggested Integration into Draft AR
4	Regional Water Resources: What is being done to protect lakes, rivers and groundwater, especially where it supplies private wells and intakes? What is done about cottagers and farmers who impact groundwater and surface water?	Almonte Merrickville	Yes	Staff explained the focus of the <i>Clean Water Act</i> is to protect water supplying municipal drinking water systems. There is other legislation that protects general water resources (lakes and rivers). Water supplying private wells and intakes can be protected if clusters are designated (see comment #3)
5	Wildlife: is wildlife (e.g. geese) being assessed as a potential drinking water threat	Almonte	No	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 can continue to follow up with MOE on this concern.
6	Agriculture: Agriculture and rural areas are being targeted	Almonte	Yes	Staff explained that municipal wells are typically located in the centre of town. This means urban areas will be the most impacted by source protection plan policies since policies will be most restrictive closest to the wells. Staff reminded people that mandatory Source Protection Plan policies can only apply to <u>significant</u> drinking water threats and no agricultural practice can be considered a significant threat outside the 5 year time of travel zone (in almost all cases the area is much smaller, sometimes it is only within 100 metres of the municipal well). This means rural areas will contain fewer threats and be subject to few policies than urban areas. A variety of land use activities associated with agriculture are included in the list of prescribed drinking water threats (specific activities pertaining to grazing; storage, handling and application of manure, fertilizer and pesticides). These activities have to involve a minimum number of animals, minimum volume of a chemical or a particular storage or handling method.
	Threats work must look at farming practices (feedlots, piggeries)	Richmond		
7	Groundwater Quality: technical studies should test the existing purity of aquifers	Almonte	Yes	Groundwater quality testing was carried out in a few locations to help identify wellhead protection areas. The Provincial Groundwater Monitoring Network carried out across Ontario tests overall groundwater quality. A list of monitoring sites in the Mississippi-Rideau will be identified in Chapter 2 of the Assessment Report

Summary of Comments on <i>Draft Study Findings</i>			How Comments Could be Addressed by SPC	
Comments		Open House	Addressed	Response or Suggested Integration into Draft AR
8	Private Well Tests: currently provincial health units provide free analysis of well water samples for bacteria, they should also test for chemicals	Almonte	No	There are currently no free private well water tests that will test for chemicals. There are some grant programs that provide subsidies.
9	Compensation: compensation should be given to property owners impacted by new land use restrictions	Almonte	Yes	This is an ongoing concern that has been raised with MOE. The SPC has pushed for a generous ODWSP program to continue beyond 2012 so that property owners impacted by source protection plan policies can access funding to help them implement the policies.
	ODWSP: grant rates must be high if agriculture is impacted	Kemptville		
10	New Municipal Well location: great care and study should be taken when choosing locations for new municipal wells. SPCs should identify future well locations so they can be protected now	Almonte Carp	Yes	All municipalities will be encouraged to contact source water staff prior to drilling a new well to collect technical findings that would be useful in selecting an appropriate location for a new municipal well. SPCs are not permitted in the draft Source Protection Plan regulation to include policies about recommend sites for future municipal wells. They could encourage municipalities to work with source protection staff to identify such sites and perhaps take precautionary measures through their planning process to protect the adjacent area from threats.
11	Atomic Bomb 1942: earlier tests indicated that Almonte's groundwater infiltrated prior to the first Atomic Bomb being tested in 1942 because no radiation was found in the groundwater – the groundwater should be retested for radiation.	Almonte	No	The SPC could recommend that the municipality repeat the test they undertook in 1995.
12	Extending Municipal Well Casing: municipal well casings should be extended down to the Nepean aquifer	Munster Merrickville	Yes	The SPC has pushed for this project to be funded through the ODWSP and will continue to push for provincial funding. This project would reduce the vulnerability of municipal source water by deepening the casing to reduce water entering from a shallower aquifer.

Summary of Comments on <i>Draft Study Findings</i>			How Comments Could be Addressed by SPC	
Comments		Open House	Addressed	Response or Suggested Integration into Draft AR
13	Road Salt: this is not a pollutant	Kemptville	No	<get rationale from MOE as to why road salt was included in the threats list>
14	Quarries: resource extraction (sand, gravel) should be considered a threat to groundwater quality and quantity	Kemptville Carp	Yes	Quarries are not considered a threat. They can increase the vulnerability of groundwater to contamination by reducing the protection above it (soil thickness above the aquifer). Resource extraction requires permits which 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.
15	Transportation Corridors: how do you deal with transportation corridors moving chemicals	Merrickville	Yes	Staff explained that transportation corridors cannot be considered a threat but SPCs have raised this concern with MOE. SPCs can work with municipalities to make sure they have updated emergency response plans in case a spill occurs and that emergency services staff are aware of vulnerable source water areas and where a spill could contaminate drinking water. SPCs will ensure all relevant source water technical findings are given to the appropriate municipal staff and there is good communication between emergency response staff and drinking water treatment plant operators.

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comments	Open House	Addressed	Response or Suggested Integration into Draft AR
16 Geothermal Systems: (ground source heat pumps): they are a potential groundwater threat	Merrickville Carp	Yes	Many SPCs raised this concern with MOE. The MOE recently released a technical bulletin about geothermal systems and source water protection. The technical bulletin indicates that the use of a geothermal system is not a prescribed threat under the current regulations. However, the bulletin also states that preliminary analysis suggests that a geothermal system would only be a significant threat for ethanol and propylene glycol heat transfer fluids in a relatively large volume commercial/industrial system in a vulnerable area with a score of 10. Within a vulnerable area of any lesser score with such a system or any residential system, this activity would not be a significant threat under the current assessment. Furthermore, the bulletin indicates that a geothermal system could be considered a transport pathway. It is noted that the locations of existing geothermal systems are generally unknown at this time.
17 Floodplain: concerned that contaminated river water spills onto the floodplain and infiltrates down into the aquifer	Carp	Under review	This question is still under review. It will be discussed with the relevant consultants undertaking technical work and the City of Ottawa
18 Recharge Areas: how will important recharge areas be protected	Kemptville Carp	Yes	Significant groundwater recharge areas are being mapped as part of the Assessment Report. Mandatory policies cannot apply through the Source Protection Plan but the Committee can develop voluntary policies and/or encourage municipalities to protect these areas through their planning process (Official Plan and zoning policies).

Summary of: Comments Received on *Draft* Surface Water Studies & How They Could be Addressed

Municipal Review:

Municipal representatives sat on a working group that oversaw the surface water studies. This working group selected the consultants and reviewed preliminary results. Municipal staff also helped develop the study summaries that the SPC reviewed and approved as *draft for public consultation*.

Public Review:

Five open houses were held and *draft* surface water study findings were shared with local residents. The following document is a summary of comments we heard at the open houses and comments we received in writing.

Identification of Potential Threats:

At the open houses and in writing local residents identified some land use activities in their communities that they were concerned could contaminate drinking water. They include past and present land uses such as planned developments (e.g. intensive residential), existing commercial properties and transportation of contaminants via rail or road. Details of these activities **have not been included in this summary** because it would identify specific properties and businesses which could contravene the Municipal Freedom of Information and Protection of Privacy Act. This information has been shared with our Consultants and will be used when implementing Source Protection Plan policies (information will be given to the Risk Management Official).

Developing an Assessment Report (AR):

Draft Studies	<ul style="list-style-type: none"> - Mississippi-Rideau Source Protection Committee (SPC) approved preliminary surface water study findings as <i>draft for public consultation</i> (January and April 2010) - Held 5 open houses and published newspaper ads and press releases to solicit public input (March and April 2010)
Draft AR	<ul style="list-style-type: none"> - SPC will review and consider comments received on draft findings (May 6, 2010) - Draft AR will be posted for a 35 day public comment period (<i>mid June 2010</i>) - Will hold two open houses, send letters to potentially affected property owners, and publish newspaper ads and press releases to solicit public input (<i>June & July 2010</i>)
Proposed AR	<ul style="list-style-type: none"> - SPC will review and consider comments received on draft AR (<i>August 12, 2010</i>) - Proposed AR will be posted for 30 day public comment period (<i>mid August 2010</i>) - Will send letter to potentially affected property owners and publish newspaper ads and press releases to solicit input (<i>August 2010</i>)
Approved AR	<ul style="list-style-type: none"> - Source Protection Authorities will submit proposed AR and comments received on proposed AR to the Ministry of the Environment (MOE) (<i>September 21, 2010</i>) - MOE will consider comments when reviewing and approving AR

Open House Attendance:

Lemieux Island – Ottawa	March 22, 2010	4 people
Britannia – Ottawa	March 31, 2010	12 people
Perth	April 26, 2010	20 people
Smiths Falls	April 27, 2010	20 people
Carleton Place	April 29, 2010	22 people

Overall Response at Open Houses:

- At the Ottawa Open Houses Scott Findlay and Ottawa Riverkeeper raised concerns about the vulnerability scoring methodology. These concerns were shared by most participants at Lemieux’s open house and many at the Britannia Open House. We then received 5 written submissions supporting the Ottawa Riverkeeper’s web posting on this subject.
- At the Perth, Smiths Falls and Carleton Place Open Houses people were generally supportive of the study results. A couple of people questioned the delineations based on their local knowledge of the area. A few people raised concerns about potential implications (e.g. impacts on property owners).

Summary of Comments:

General Comments	pages 3 to 7
Surface Water Study Comments	pages 8 to 18

- **Commenter:** The “commenter” column shows who made the comment (names of groups are shown, names of individuals are not unless requested).
“OH” indicates which “Open House(s)” the comment was made at (either verbally or on a comment form).
“WS” indicates how many “written submissions” made the comment.
- **Response:**

General Concerns – An Accompanying Document to our Assessment Report will be developed to identify concerns not permitted in the body of the Assessment Report. This includes items of concern raised by Committee members and local residents that fall outside the current scope of the *Clean Water Act*. This document will be submitted to the MOE along with the proposed Assessment Report in mid September, 2010.

Surface Water Study Concerns – Section 6.2 of our Assessment Report directs MOE to have technical experts develop Guidance on how surface water studies should be done. The current Technical Rules are flexible and Committee members, Staff and residents have indicated they want greater Provincial direction. A list of specific concerns we received on our methodology and the Technical Rules are included in this summary and will be provided to the MOE in our Assessment Report’s Accompanying Document Surface Water (SW) Section.
- **Acronyms:**

MOE – Ontario Ministry of the Environment	CBLCA – Crystal Beach/Lakeview Community Association
SPC – Mississippi-Rideau Source Protection Committee	OCAPS – Ottawa Citizens Against Pollution by Sewage
IPZ – Intake Protection Zone	JFSA – J.F. Sabourin and Associates Consulting
SPAs – Source Protection Authorities (Conservation Authority Boards of Directors)	

General Comments (do not pertain directly to the Surface Water Studies)

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
1 Private Wells Private wells should be protected under the <i>Clean Water Act</i>	Lemieux OH	Yes	Local municipal councils or the Minister can designate a cluster of private wells or intakes to be included in the source protection planning process. The MOE is developing guidance to help municipalities identify which clusters, if any, they 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. This concern will be included in our Accompanying Document
2 Sewage Biosolids Sewage biosolids should not be spread on floodplains or in areas where it could contaminate private wells	OCAPS	Yes	The Provincial Threats Tables designate the application of biosolids in a vulnerable area scored 8, 9 or 10 to be a significant drinking water threat. This means the SPC will have to develop a policy to address it. The SPC cannot develop a mandatory policy regarding the application of biosolids outside of these areas. This concern will be included in our Accompanying Document
3 Spill Response Key drinking water people must be notified if a spill occurs in an IPZ. Important telephone numbers should be posted on transportation routes that cross IPZs so proper agencies are notified of spills in vulnerable areas.	Britannia OH Smiths Falls OH SPAs	Yes	Currently people must notify the provincial Spills Action Centre of a spill whenever an adverse effect may occur or when the spill may reach water (this includes sewers). There are some reporting exemptions. The SPC will ensure that the MOE provides Spills Action Centre staff with a digital layer of our maps so responders know if a spill is in a vulnerable drinking water area. This will trigger the appropriate drinking water operators being notified and appropriate actions to be taken. Locally we will ensure that all of our emergency response staff and drinking water operators are in possession of our vulnerable areas mapping. This concern will be included in our Accompanying Document

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
4 Mining Activities Uranium mining should not be permitted in Sharbot Lake. Also concerned that new legislation allows lakes to be used as tailings ponds.	Britannia OH	Yes	<p>The SPC has heard concerns about uranium mining since their formation in 2008 and will continue to inform the MOE that this is a local concern. The MOE is unaware of new provincial legislation in Ontario that would allow lakes to be used as tailings ponds. Reclassifying lakes as tailings ponds would be subject to the Federal Fisheries Act.</p> <p>These concerns will be included in our Accompanying Document</p>
5 Consistent Plan Policies Source Protection Plan policies should be consistent across the province otherwise people will be protected to varying degrees across the province. We should all be protected equally.	Lemieux OH	No	<p>The <i>Clean Water Act</i> requires that all significant drinking water threats cease to pose a significant threat. It is left up to individual Source Protection Committees to develop policies to address each significant drinking water threat. Policies will vary across the province but all will accomplish the same task of mitigating significant threats.</p> <p>MOE's decision to delegate policy development to the local level was to allow local stakeholders to create policies that made sense for their area. This was a message the MOE heard repeatedly during consultation when they were drafting the <i>Clean Water Act</i>.</p>
Committees should work together across the province to minimize repetition in developing policies and to strive for policy consistency across shared municipalities	SPAs	Yes	<p>Many neighbouring Committees will work together on policy development to strive for policy consistency across shared municipalities. There will also be provincial coordination to reduce repetition in developing policies. The MOE has to review all Plans and approve them so there will also be consistent provincial oversight.</p>
6 Agriculture Agricultural practices pose a contamination threat (e.g. pesticides and fertilizers running off into lakes and rivers).	Britannia OH	Yes	<p>Agricultural practices associated with chemicals (fertilizer, pesticides) or pathogens (application of manure) are captured in the Provincial Threats Tables so the SPC will have to develop policies for these activities where they would pose a significant threat to municipal drinking water.</p> <p>Many agricultural practices are already regulated (Nutrient Management Act) and many farmers are good stewards (plant buffers) who do not use more inputs (fertilizer, pesticide) than needed because of cost and new precision equipment.</p> <p>This concern will be considered when developing source protection policies</p>

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
7 Ottawa River is Inter-Provincial Concerned that drinking water threats in Quebec will not be addressed because the <i>Clean Water Act</i> is provincial legislation. Federal government needs to play a role.	Britannia OH SPAs	Yes	<p>When the SPC formed in 2008 they recognized the need to protect the water quality, water quantity and ecological integrity of the Ottawa River through a watershed approach. They passed a motion calling on the MOE to establish an Inter-Provincial Working Group to undertake this role. Initial meetings between Ministry and municipal representatives from both provinces have begun and the next step will be to gather all key stakeholders together to determine how best to achieve this goal.</p> <p>This concern will be included in our Accompanying Document</p>
8 Impact on Property Owners There should be funding to offset costs to property owners and businesses if they are financially affected by source protection policies. Also concerned about devaluation of land as a result of new land use restrictions.	Smiths Falls OH Carleton Place OH SPAs	Yes	<p>The <i>Clean Water Act</i> does not allow compensation to be paid to affected property owners, but it has entrenched in law a financial assistance program called the <i>Ontario Drinking Water Stewardship Program</i>. This program currently has funding until 2011 to provide grants to undertake early actions close to municipal drinking water systems in advance of approved source protection plans. The Act however, states that the intention of this program is also to <i>provide</i> financial assistance to persons whose activities or properties are affected by the Act. The SPC has been and will continue to pressure the province to fund this program beyond 2011 in order to provide necessary financial assistance to property owners affected by new policies and risk reduction strategies that may result from approved source protection plans.</p> <p>This concern will be included in our Accompanying Document</p>
9 Impact on Municipalities If municipalities are responsible for implementation, provincial funding will be required to pay for this service.	Carleton Place OH SPAs	Yes	<p>This is an ongoing concern the SPC and many other stakeholders have raised with the MOE since the <i>Clean Water Act</i> was first drafted. The SPC has repeatedly stated to the MOE that while the province has generously funded source protection planning through its first three phases (terms of reference, assessment reports and source protection plans) it is essential that there be stable long-term provincial funding through the final three phases (implementation of the Plan, monitoring of Plan policies and review and updating of the Plan).</p> <p>This concern will be included in our Accompanying Document</p>

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC		
Comment		Commenter	Addressed	Response or Suggested Integration into Draft AR
10	Back up Intake for Ottawa on Rideau The City of Ottawa should have a back up intake on the Rideau River because of the contamination risk from the Chalk River Laboratories.	Britannia OH	No	The City of Ottawa has a contingency plan in the event of a spill at Chalk River.
11	Water Bottling in Smiths Falls The proposed water bottling facility will cause the Rideau River to drop by 1 to 2 feet.	Britannia OH	Yes	The facility will require a Permit to Take Water from the MOE if they are drawing water directly from the Rideau River otherwise the Permit to Take Water for the municipal water treatment plant will need to account for the amount being used by the water bottling facility. Either way, it must be demonstrated that the amount of water being taken from the Rideau River will not have a negative impact.
12	Ottawa Transitway Expansion Concerned the transitway expansion will pose a threat	CBLCA	No	The SPC is limited to developing policies for land use activities that pose a drinking water threat (activities associated with a chemical or pathogen). Municipalities can consider the location of IPZs when approving new infrastructure projects.
13	Road Salt Road salt spread on bridges that cross watercourses in IPZs should be more carefully managed than salt applied to a roadway.	CBLCA	Yes	Road salt is applied as a public safety measure so any policy to protect source water will have to balance that need. It is unlikely road salt will be prohibited in a particular area. It is more likely that strategies will be put in place to manage the application of road salt and potential runoff. Also effective alternatives to road salt could be explored if available. Currently most municipalities are required to have a road salt management plan.
	Concerned how road salt will be mitigated	Carleton Place OH		This concern will be considered when developing source protection policies
14	Mixing of Water from Two Plants Treated water from the Britannia and Lemieux Island water treatment plants should not be mixed. They should serve separate parts of the City.	CBLCA	No	Current infrastructure does not allow for water from the two plants to be kept separate once it enters the distribution system (network of pipes that delivers water to homes and businesses). This concern will be relayed to City of Ottawa drinking water staff. Water systems are usually interconnected to provide redundancy in case of emergency with one system.

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
15 Bridges New bridges should not be permitted in IPZ-1 or IPZ-2.	Britannia OH CBLCA	Yes	<p>Transportation corridors, like bridges, are not a drinking water threat. Instead they transport potential threats (e.g. tanker truck of chemicals). The SPC cannot write policies governing transportation corridors. This concern has been raised by a number of SPCs and stakeholder groups across the Province of Ontario.</p> <p>The SPC can work with municipalities to ensure that they have updated emergency response plans in case a spill occurs and that emergency services staff are aware of vulnerable source water areas and where a spill could contaminate drinking water. Municipalities can consider the location of IPZs when planning new transportation corridors like bridges.</p> <p>This concern will be included in our Accompanying Document</p>
16 Golf Course Concerned that golf courses in IPZs are not required to report to water treatment plant operators when and what chemicals they are applying	Perth OH	Yes	<p>It is known that a local golf course practices due diligence and reports to water treatment plant operators when and what pesticides they are applying as the water treatment plant is then obligated to test for those chemicals. Staff will look into what requirements water treatment plants and golf courses are obligated to do.</p> <p>This concern will be considered when developing source protection policies</p>

Surface Water Study Comments

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
<p>17 Spill Response Time IPZ-2 should be greater than 2 hours to account for the time it could take for a spill to be reported and the proper authorities to be notified.</p> <p>The average time taken to report a spill should be a criterion that is considered when establishing vulnerability scores.</p>	<p>Lemieux OH Britannia OH</p> <p>Ottawa Riverkeeper</p> <p>WS- 1</p>	No	<p>Spill reporting time has been raised as a concern by many SPCs. The provincial Technical Rules dictate that IPZ-2 must delineate the 2 hour time-of-travel unless a municipal drinking water system takes longer than that to shut down (in which case IPZ-2 can be extended). All the surface water municipal drinking water systems in the Mississippi-Rideau have confirmed that they can shut down in 30 minutes or less upon notification of a spill. IPZ-2 is considered the area where a municipal water treatment plant may not have time to react to a spill so the Technical Rules are designed to protect the area from spills based on how vulnerable the intakes are (depth, distance from shore) and how vulnerable the surrounding area is (runoff potential, ratio of pathways).</p> <p>Factoring spill reporting time into vulnerability scores would require a change to the Technical Rules as it is not listed as one of the criterion.</p> <p>These concerns will be included in our Accompanying Document's "SW" Section</p>
<p>18 Ottawa IPZ-2 Delineation Don't agree that the uncertainty associated with the delineation model and analysis is low because of concerns about:</p> <ul style="list-style-type: none"> • Was reverse particle tracking done for surface currents or depth-averaged currents • Was model run with maximum intake pumping rate • A short model run was used (24 hours) 	WS – 1	Yes	<ul style="list-style-type: none"> • Reverse particle tracking was carried out for the full 3D currents with the particles released at the intake location. • The model was run using the maximum intake pumping rate of current plant capacity. • The length of the model simulations was simply the time needed to achieve a steady-state flow condition in the model; it has no impact on the reverse particle tracking or IPZ-2 delineation. The reverse particle tracking model was run using the steady-state current fields computed in the last step of the hydrodynamic simulation. • Baird characterized the uncertainty associated with the model and analysis as low because a very sophisticated 3D model was used that was calibrated against field data (water levels, 3D currents) specifically collected for this study. As with any numerical model, additional data could be collected and improvements made; however, it is Baird's opinion that this additional work would not result in any significant differences in the delineation of IPZ-2 for the conditions assumed. The largest uncertainty was associated with the bathymetry within the rapids areas; however, the flow distribution was inferred based on direct measurements of currents immediately downriver of each set of rapids.

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC		
Comment		Commenter	Addressed	Response or Suggested Integration into Draft AR
19	Inland IPZ-2 Delineation Time of concentration formulae is somewhat a back-of-the-envelope calculation. JFSA noted uncertainty in data gaps and model as high which I agree with	WS – 1	Yes	The appropriateness of the time of concentration formula was tested, and given the data used, the calculations were considerably more than back-of-the envelope calculations.
20	Ottawa IPZ-3 Delineation Why was an analytical solution (which has so much uncertainty) used to compute IPZ-3 when they the Consultant already had a 3D model. Couldn't that model have been used for simulating spill conditions? One of the aspects of spill modeling in delineating IPZ-3 is to look at the historical spills data and their effects at intakes. My impression is that there were some tritium spills in the River which should have been simulated.	WS – 1	Yes	Analytical equations were used to delineate IPZ-3 as the 3D model domain did not cover the potential extent of IPZ-3. The 3D model encompasses a region of the river within a few hours of time of travel from the intake. IPZ-3 encompasses an area that extends several days of time of travel. It would not have been practical to extend the 3D model to include all of IPZ-3. The Technical Guidance regarding the Event Based Approach for IPZ-3 delineation allows for the use of analytical equations. The Chalk River Tritium spill of 1988 occurred well upriver of the Source Protection Region, and outside of the various datasets assembled for this study. It was however flagged by the consultants and included in additional mapping developed for the study that extends all the way up to Chalk River.
21	Water Quality Issues Were pathogens and viruses looked at as possible water quality issues as they are difficult to treat at water purification plants.	WS – 1	Yes	Pathogens and virus data are measured at the intakes.

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
<p>22 Provincial Rules for Vulnerability Scores The MOE needs to fully prescribe how surface water studies should be done, including a methodology for determining vulnerability scores. It should not be left up to individual consultants to develop a local methodology (some felt it could lead to bias and many felt it was a waste of money).</p> <p>For the purpose of risk assessment, MOE guidance on a semi-quantitative approach of providing vulnerability scores is appropriate</p> <p>The following is needed to design a vulnerability scoring system:</p> <ul style="list-style-type: none"> - clear statement of outcomes of interest, measurement endpoints and thresholds for distinguishing “success” - clear statement of what decision principles will be employed in scoring design and their operationalization with respect to the ‘acceptable’ risk outlined in the outcomes of interest - clear understanding of the mapping between IPZ scores and the set of risk management options 	<p>Staff SPC SPAs</p> <p>Lemieux OH Britannia OH</p> <p>Scott Findlay* Ottawa Riverkeeper</p> <p>WS – 5</p>	<p>Yes</p>	<p>The SPC, consultants and staff strongly agree with the need to establish a provincial methodology. Section 6.2 of our Assessment Report recommends that the MOE assemble a team of technical experts to develop specific guidance on how surface water studies should be done, specifically vulnerability scoring. Once a provincial methodology has been established local IPZs will be rescored if necessary.</p> <p>This concern will be clearly stated in Section 6.2 of our Assessment Report and expanded upon in our Accompanying Document’s “SW” Section</p>

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
<p>23a Consideration of Factor Criteria to Determine Vulnerability Scores</p> <p><u>May 2009 preliminary draft version</u> How criteria are considered to determine Source and Area vulnerability factors is arbitrary and based on assumptions:</p> <ul style="list-style-type: none"> • Minimum and maximum criteria values are arbitrary (e.g. transport pathway discharge length was set to be 1/3 and 3 times the observed minimum and maximum lengths in local IPZs) • There is no justification for assessing criteria relative to other areas of the province • There is no justification for equally distributing Area vulnerability factors between 7, 8 and 9. • Need to look at individual intakes and assess what threats may be present • Need to take a precautionary approach - should start with the highest factor values and put the onus on individual site conditions to warrant a reduction • Need to determine how to properly assess transport pathways and land-water ratios before creating methodology • Calculation for transport pathways and land/water ratio unnecessarily introduces a constraint on smaller systems that will tend to make IPZ-2 scores lower than a precautionary approach would dictate. 	<p>SPC deliberations</p> <p>Scott Findlay*</p>	<p>Yes</p>	<p>The Rules simply list criteria that must be considered when determining Area and Source vulnerability factors (which are then multiplied together to determine vulnerability scores). Individual consultants must decide how they will “consider” the criteria and use it to determine area and source vulnerability factors. <u>See attached <i>Explanation of Vulnerability Scores</i> for a list of the criteria.</u></p> <p>May 2009 preliminary draft version was revised:</p> <ul style="list-style-type: none"> • Less arbitrary minimum and maximum values were set (no more 1/3 and 3 times) • Provincial maximums and minimums were removed, local characteristics are no longer compared to other parts of the province • The methodology never assumed an equal distribution of Area vulnerability factors between 7, 8 and 9. For example, if 99% of the systems were in urban areas (high imperviousness) and had many transport pathways, the result would be 99% of the Area factors being 9. • Under the Technical Rules threats are not considered when establishing the vulnerability of an area. The vulnerability reflects the physical characteristics of the intakes, water body and surrounding area with respect to how these characteristics could decrease or increase the susceptibility of the water body or intake becoming contaminated. Policies are then developed to manage all land use activities that could pose a significant drinking water threat. • JFSA proposed an alternative approach which looked at individual site conditions (e.g. presence/absence of sewers) but this approach was not supported by most SPC members. Aspects of the methodology are precautionary as they take a conservative approach (e.g. where data is limited like the assessment of the impact of wind) • Methodology was revised to use local context only or absolute vulnerability as much as the Technical Rules and data allowed. Section 6.2 of our Assessment Report will call on the MOE to convene experts to determine how each criterion should be evaluated. • Revised approach is based on local conditions rather than provincial comparisons or comparisons between larger and smaller systems. <p>• Agreed that the relative rather than the absolute risk is assessed in some parts of the</p>

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
<p>23a <u>May 2009 preliminary draft version – cont.</u></p> <ul style="list-style-type: none"> • Approaches are explicitly concerned with estimating relative risk as opposed to absolute risk • Approaches fail to explicitly distinguish between value-based versus fact-based methodological elements • Approaches rely on mathematical formulae that are unjustifiable, not required by the Technical Rules and do not take a precautionary approach • Approaches fail to capture the true scientific uncertainty about the determinants of vulnerability and the nature of the hazards of concern. • No means to judge whether scoring method is successful or not • Does not like the use of a linear relationship • There is not a clear distinction in the methodology between what is based in science and what is not 			<p>methodology. Revised methodology eliminated the relative comparisons where the Technical Rules and data allowed. However, the methodology does include the use of empirically based formulae and real data.</p> <ul style="list-style-type: none"> • The mathematical formulae are only used to assess the relative qualities of a given parameter and/or condition (e.g. how deep is a given intake relative to a “good” intake or a “poor” intake). These formulae and weightings are not the sole basis for selection of the area and source factors; professional judgment is also applied. • We agree that determining the “success” of a scoring methodology needs to be built in to provincial guidance about vulnerability scoring • The assumption of a linear scale was purely mathematical convenience and was not intended to convey any type of mathematical relationship between the parameters and the ability of a contaminant to reach the intake. Such mathematical relationships would clearly be complex, non-linear and highly variable. The use of a linear scale was a transparent means to convey the “merits” of a given parameter and/or condition. For example, how deep is an intake relative to what would be judged a “poor” intake versus an “excellent” intake. The revised methodology uses a categorization approach for parameters instead of a mathematical relationship. However, ultimately the selection of appropriate vulnerability factors is based on professional judgment. • The distinction between what is science and what is not in the methodology must be better communicated <p>MOE confirmed the method aligned with the intent of the Technical Rules and satisfied the scientific requirements. The MOE stated they were developing a similar method for assigning vulnerability scores for IPZ-2 and IPZ-3.</p> <p>The SPC directed the Consultants to revise their methodology and present new findings to the Committee at a future meeting (March and April 2010)</p>

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC	
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR
<p>23b Consideration of Factor Criteria to Determine Vulnerability Scores</p> <p><u>Revised April 2010 preliminary draft version</u></p> <ul style="list-style-type: none"> How criteria are weighted should be prescribed by the province and used consistently across Ontario How the criteria were weighted to determine Source and Area vulnerability factors is arbitrary and has no mathematical or scientific basis. Ottawa IPZ-2s should be scored 9 rather than 8 as this area is only 2 hours away from the intake. There would be many more land use activities that could be considered threats if the score was 9. <hr/> <ul style="list-style-type: none"> My general impression is that the vulnerability estimates may be conservative, however it is difficult to judge because supporting evidence was not detailed in the study summary JFSA used weighting, but not equally. They provided extensive justifications and talked about sensitivity analysis with different combinations. Overall, I didn't see major problems in their assessments but I would caution I'm not familiar with the problems in this area or some of the methodologies used. 	<p>SPC deliberations</p> <p>Lemieux OH Britannia OH</p> <p>Scott Findlay* Ottawa Riverkeeper</p> <p>WS – 6</p> <hr/> <p>WS – 1</p>	<p>Yes</p>	<p><u>See attached <i>Explanation of Vulnerability Scores</i> for a list of the scores that were determined and how local criteria were considered.</u></p> <p>The SPC, consultants and staff strongly agree that a provincial vulnerability scoring methodology must be established rather than individual consultants developing methodologies for individual regions.</p> <p>Revised April 2010 preliminary draft version</p> <ul style="list-style-type: none"> Baird assumed an equal weighting for all parameters based on an assumption that this is what is intended by MOE in the Technical Rules in the absence of any other guidance. For example, it is difficult to judge the relative importance of the “number of recorded drinking water issues” to the “depth” or “distance” of the intake when determining a Source factor. JFSA assumed more weight for the transport pathway criterion in determining Area factors. The transport pathway criterion was assigned a higher weighting (40%) than the runoff potential and percentage land area criteria since the pathways are considered to be the primary vectors for transport to the source water supply. Surface permeability and slope are considered to be important factors (30% weighting) facilitating pathway and overland flow. Land threat potential in the zone is also considered to be an important factor (30% weighting) reflecting the predominance of land (threat source potential) in the zone.” These weightings were based on professional judgment. These weightings were based on professional judgment and a sensitivity analysis was performed to justify the selected weighting. Further, the use of weightings and formulae was only part of the consideration, professional judgment was also used. The objective of assigning a vulnerability score is to reflect how susceptible a given area around an intake is to contamination, not to allow for the greatest list of drinking water threats which would then be subject to source protection policies. IPZ-3 vulnerability scores are not being included in the draft Assessment Report because a defensible methodology could not be developed to determine area vulnerability factors for IPZ-3. This will be noted as a data gap and filled as soon as adequate Provincial Guidance is available. <p>This concern will be clearly stated in Section 6.2 of our Assessment Report and expanded upon in our Accompanying Document’s “SW” Section</p>

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC		
Comment		Commenter	Addressed	Response or Suggested Integration into Draft AR
24	Quebec and Vulnerability Was the area in Quebec also used in deriving vulnerability factors for IPZ-2? Do they have all the information required (e.g. transport pathways). Were sensitivity studies conducted with and without including the information from Quebec.	WS – 1	Yes	Quebec is outside the Mississippi-Rideau Source Protection Region and was not included in the vulnerability scoring. However, a preliminary estimate of IPZ-2 delineation was developed for the Quebec side of the Ottawa River based on information obtained. Neither vulnerability scoring nor IPZ-3 delineations were carried out for the area in Quebec.
25	IPZ-3 Vulnerability Scores Vulnerability scores in IPZ-3 should start with the IPZ-2 score and decline as distance from the intake increases	SPC deliberations	Yes	IPZ-3 vulnerability scores are not being included in the draft Assessment Report because a defensible methodology could not be developed to determine area vulnerability factors for IPZ-3. This will be noted as a data gap and filled as soon as adequate Provincial Guidance is available. These concerns will be included in our Accompanying Document: “SW” Section
	The first part of IPZ-3 where you can still regulate land uses (areas scored 8) seems big. It extends so far upstream of the intake.	Carleton Place OH		

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC		
Comment	Commenter	Addressed	Response or Suggested Integration into Draft AR	
26	<p>Precautionary Approach Since the current weighting of factor criteria has no sound scientific or mathematical basis a more precautionary approach should be taken to determine vulnerability scores.</p>	<p>SPC deliberations</p> <p>Britannia OH Lemieux OH</p> <p>Scott Findlay* Ottawa Riverkeeper</p> <p>WS – 5</p>	No	<p>Consultants developed a methodology using professional judgment and integrated a number of recommendations from the SPC and local technical experts. MOE technical experts have reviewed the methodology and support it and the methodology is also similar to approaches being used in other regions.</p> <p>The April 2010 methodology results in most vulnerability factors being the highest allowed under the Technical Rules (3 out of 5 for IPZ-1 and 7 out of 10 for IPZ-2). The factors not scored the highest are the Source vulnerability factor for the Ottawa intakes and the IPZ-2 Area vulnerability factor for Smiths Falls - <u>see attached explanation of vulnerability scores</u>.</p>
	<p>The current vulnerability scoring methodology and outcomes are reasonable</p>	<p>Britannia OH Carleton Place OH Perth OH Smiths Falls OH</p> <p>WS – 1</p>		<p>Rather than simply bumping scores up to err on the side of caution Staff, our consultants and the SPC feel it is essential for the credibility of the technical work that the MOE have technical experts develop a prescriptive surface water vulnerability scoring methodology that is then simply applied in each region.</p> <p>This concern will be highlighted in Section 6.2 of our Assessment Report and expanded on in our Accompanying Document: “SW” Section</p>
27	<p>New Criteria At the Ottawa Open Houses Baird Consulting introduced a new criterion (river flow) that was considered when establishing Source vulnerability factors. This criterion was not listed in the Rules nor is it discussed in the draft study summaries.</p>	<p>Ottawa Riverkeeper</p>	Yes	<p>River flow was not a criterion that was considered in the methodology (e.g. given a weighting). It was a factor that was considered when professional judgment was used to assess if the results produced by the methodology were reasonable.</p>

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC		
Comment		Commenter	Addressed	Response or Suggested Integration into Draft AR
28	Sensitivity Analysis Why wasn't a sensitivity analysis done for the vulnerability score equation to determine which criteria would have the largest impact on the final outcome.	SPC deliberations Ottawa Riverkeeper WS – 1	Yes	Sensitivity analysis was carried out for some parameters, otherwise criteria in the Technical Rules was applied using professional judgment.
29	Peer Review It looks odd to have one consultant report reviewed by the other consultant, particularly when both of them are engaged in the study for different intakes	WS – 1	Yes	Two separate studies were done. One for the Ottawa River intakes and another for the three inland intakes. Baird Consulting was hired to do the Ottawa study and JFSA was hired to do the Inland study. Their work was carried out completely separately and Baird and JFSA have never worked together.
30	Historical Drinking Water Issues The probability of a spill in the watershed is independent of the number of recorded drinking water incidents. This criterion should not be given equal weighting or considered at all when determining Source vulnerability factors.	Lemieux OH SPC deliberations Ottawa Riverkeeper	No	This criterion is listed in the Technical Rules so it must be considered when determining a Source vulnerability factor. Recorded drinking water incidents at an intake are not considered because they give any indication of the likelihood of future spills, they are considered because they can give an indication of whether contaminants in a particular river are likely to enter the intake (some river flows are such that contaminants are more or less likely to enter the intake). This would require a change to the Technical Rules The concern will be included in our Accompanying Document: “SW” Section
31	Technical Rules There are concerns with the provincial Technical Rules: <ul style="list-style-type: none"> • Source vulnerability factor can only be 0.9 or 1.0, no range like area factor • Hazard ratings and risk equation used to determine Threats Tables are arbitrary and uncertain • Concerned with the logic and empirical justification for some of the more prescriptive elements in the Rules 	Scott Findlay* WS – 1	No	These concerns will be included in our Accompanying Document: “SW” Section

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC		
Comment		Commenter	Addressed	Response or Suggested Integration into Draft AR
32	Area Outside IPZ The area outside of the IPZ that is still within the watershed should be shown in a colour rather than left white	Carleton Place OH	No	Common mapping symbology (including how IPZs are displayed) was developed provincially so maps from different regions can be compared and look similar.
33	Climate Change Future weather patterns (climate change) were not taken into account when river flows and water levels were analyzed. Therefore vulnerability scores do not adequately reflect the risk to our drinking water sources in the future.	Ottawa Riverkeeper	Yes	The Technical Rules require regions to review existing local climate change information and determine if climate change will impact or alter any technical findings. Currently not enough is known about local climate change to make a determination about how it may impact our technical findings. The MOE is developing guidance on how to better integrate climate change into the Assessment Reports so consideration for how future weather patterns could alter the delineation of IPZs will play an increasing role in future Assessment Reports.
34	Aging Sewer Infrastructure Consideration was not given to aging sewer infrastructure when determining vulnerability scores. Therefore vulnerability scores do not adequately reflect the risk to our drinking water sources in the future.	Ottawa Riverkeeper	No	This concern will be included in our Accompanying Document: “SW” Section
35	SPC Credentials SPC members lack the technical background to analytically review vulnerability scoring methodologies	Scott Findlay Ottawa Riverkeeper WS – 2	Yes	The role of the SPC is to represent a wide variety of local stakeholders (municipal, economic and public interests). The MOE did not intend SPC members to be technical experts acting as a peer review for consultant studies nor do they intend for them to be risk management or planning experts when developing Source Protection Plan policies. Rather the composition of the SPC enables municipalities, farmers, businesses, industry, First Nations, environmental interests and the public to play a formal role in the decision making process. Technical, risk management and planning expertise is brought into the process through the legislative framework, provincial guidance, working groups, consultants and staff.

Summary of Comments on <i>Draft Study Findings</i>		How Comments Could be Addressed by SPC		
Comment		Commenter	Addressed	Response or Suggested Integration into Draft AR
36	Public Consultation Object to public consultation being undertaken with documents that are not clear to the general public. Open houses did not outline issues of concern from individual SPC members.	Ottawa Riverkeeper WS – 2	Yes	A “reader friendly” version of the consultants’ reports was prepared for each surface water system. Key findings were also presented at the Open Houses giving people an opportunity to ask questions. This summary of comments will be posted on our web site and will be used during two rounds of public consultation on the Assessment Report. In addition, Section 6.2 of the Assessment Report will make it very clear to the reader that there is debate regarding the surface water studies and that the development of a provincial vulnerability scoring methodology is essential. The surface water section of our “Accompanying Document”, which will also be heavily used during our rounds of public consultation, will document all concerns raised to date about the surface water studies (including SPC concerns). These steps ensure a transparent process.

* Dr. Scott Findlay, Institute of the Environment, University of Ottawa

Attached: Explanation of IPZ Vulnerability Scores

Sources: - *Technical Rules for the Preparation of Assessment Reports*
 - *Tables of Drinking Water Threats*
 Both sources can be viewed on MOE’s web site at www.ene.gov.on.ca/en/water/cleanwater/cwa-technical-rules.php

Explanation of IPZ Vulnerability Scores

IPZ-1 Vulnerability Scoring

Vulnerability Score = Source Vulnerability Factor X Area Vulnerability Factor

Intake	Source Vulnerability Factor (0.9 or 1.0)	Area Vulnerability Factor (10)	IPZ-1 Vulnerability Scores (9 or 10)
Carleton Place	1	10	10
Perth	1		10
Smiths Falls	1		10
Ottawa (Lemieux Island and Britannia)	0.9		9

Source Vulnerability Factor: Rules say it can be 0.9 or 1.0

Rules say to consider:

- depth of intake
- distance from shore of intake
- historical water quality incidences

Also considered:

- upstream hydraulic structures

Intake	Depth of Intake (m)	Distance from Shore (m)	Water Quality Incidences (reported for raw water)	Upstream Hydraulic Structure	Source Vulnerability Factor
Carleton Place	2.2	48	none	no	1
Perth	1.98	4	none	no	1
Smiths Falls	1.82	30	none	yes	1
Britannia	7	300	none	no	0.9
Lemieux Island	6	450	none	no	0.9

0.9 Ottawa Intakes were assigned the lower source vulnerability factor because the intakes are deep and far from shore making them less vulnerable to contamination.

1.0 Carleton Place, Perth and Smiths Falls intakes were assigned the higher source vulnerability factor because they are in rivers that are much shallower and narrower making them more vulnerable to contamination.

Area Vulnerability Factor: Rules say it's automatically 10

IPZ-2 Vulnerability Scoring

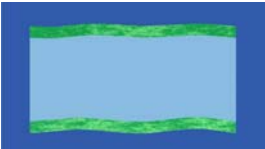
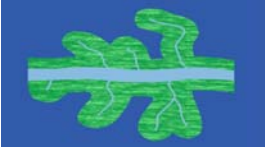


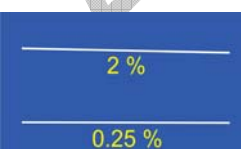


Vulnerability Score = Source Vulnerability Factor X Area Vulnerability Factor

Intake	Source Vulnerability Factor (0.9 or 1.0)	Area Vulnerability Factor (7, 8 or 9)	IPZ-2 Vulnerability Scores (6.3 to 9)
Carleton Place	1	9	9
Perth	1	9	9
Smiths Falls	1	8	8
Ottawa (Lemieux Island and Britannia)	0.9	9	8

Source Vulnerability Factor: Explained on previous page under IPZ-1

Area Vulnerability Factor: Rules say it can be 7, 8 or 9

Rules say to consider: (the three characteristics below)

% of IPZ-2 that is Land	Runoff Potential	Pathways to River
 	  	 

Intake	% of IPZ-2 that is Land	Runoff Potential	Ratio of Pathways	Area Vulnerability Factor
Carleton Place	8.55	8.88	8.56	9
Perth	8.92	8.88	8.04	9
Smiths Falls	7.93	8.80	7.42	8
Britannia	8.6	9.0 & 7.9	9.0	9
Lemieux Island	8.1	9.0 & 8.1	9.0	9
weighting: Inland Ottawa	30% 1/3	30% 1/3	40% 1/3	

7 No IPZ-2s received the lowest area vulnerability factor.

8 Smiths Falls' IPZ-2 received an area vulnerability factor of 8 because only half of it is land and it contains few pathways (tributaries, storm sewers) to the river.

9 The other IPZ-2s received the highest area vulnerability factor because: Carleton Place (many pathways & high runoff due to thin soils over bedrock); Ottawa (many storm sewer outfalls & high runoff due to hard surfaces); Perth (most of IPZ-2 is land and high runoff due to thin soils over bedrock)

3.0 Community Outreach

Date: May 18, 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 Community Outreach staff report for information.

Background

Staff and MRSPC members participate in many different community outreach activities that raise awareness and promote 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 meetings and events that cover 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. *Eastern Ontario Conference Call*
 - May 19, (Sommer and Brian participated)

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. *Choosing our Future - Sustainability Summit*
 - June 11, Ottawa (Sommer presenting)
2. *MOE-CO Communications Meeting*
 - June 14-15, Toronto
3. *Chairs Conference Call*
 - June 16 (Chair Stavinga, Sommer and Brian participating)
4. *City of Ottawa – Conservation Partners Meeting*
 - June 24, Finch (Sommer attending)