Mississippi Valley Conservation

RIDEAU VALLEY CONSERVATION AUTHORITY

AGENDA

Mississippi-Rideau Source Protection Committee (MRSPC)

December 2, 2010
1 pm
Rideau Valley Conservation Authority
3889 Rideau Valley Drive, Manotick

		Pg.	
1.0	**Welcome and Introductions** a. Agenda Review b. Notice of Proxies c. Adoption of the Agenda (D) d. Declarations of Interest e. Approval of Minutes – November 15, 2010 (D) ► draft minutes attached as a separate document f. Status of Action Items – Staff Report Attached (D) …..…… g. Correspondence (I): ……..…… • Raisin-South Nation Source Protection Region re: *Proposed* AR	 1 3	*Chair Stavinga*
2.0	**Source Protection Plan Development** – Staff Report Attached (D) …...……. a. Objectives and Requirements – overview of legislative provincial Plan objectives and requirements b. Policy Development Process and Schedule – consider endorsing a process to develop source protection policies and receiving a schedule c. Guiding Principles – develop guiding principles to act as an evaluation framework for draft policies	6	*Allison Gibbons*
3.0	**Assessment Report Accompanying Document** – Staff Report Attached (D) . Consider approving a document for submission to the MOE that captures drinking water concerns outside the scope of the Assessment Report	26	*Sommer Casgrain-Robertson*
4.0	**Community Outreach** – Staff Report Attached (D) …...…….. a. Members & staff report on activities since the last meeting b. Discuss upcoming events & opportunities	43	*Chair Stavinga*
5.0	**Other Business**		*Chair Stavinga*
6.0	**Member Inquiries**		*Chair Stavinga*
7.0	**Next Meeting** – January 6, 2011, 1pm Rideau Valley Conservation Authority (Monterey Boardroom) 3889 Rideau Valley Drive, Manotick		*Chair Stavinga*
8.0	**Adjournment**		*Chair Stavinga*

(I) = Information (D) = Decision

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

1.0 f) STATUS OF ACTION ITEMS

Date: November 22, 2010
To: Mississippi-Rideau Source Protection Committee
From: Sommer Casgrain-Robertson, Co-Project Manager
Mississippi – Rideau Source Protection Region

Recommendation:

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

Staff & Chair Action Items:

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

Issue		Action	Lead	Status
5	Uranium	MVC and local Health 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 their "Uranium and Drinking Water" fact sheet they developed.
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 public open houses and groups who should be involved in the process are not	Members were asked to provide Sommer with contact information for groups they feel should be involved in the process – they will be added to our mailing list.	All Members	**Ongoing**
3	OFEC Conference Calls & Training Sessions	Richard Fraser will provide the MRSPC with updates on OFEC conference calls & training sessions	Richard Fraser	**Ongoing**
4	Community Outreach opportunities	Members to notify Sommer of potential events and opportunities to engage the public about source protection	All members	**Ongoing**

1.0 g) CORRESPONDENCE

Date: November 22, 2010
To: Mississippi-Rideau Source Protection Committee
From: Sommer Casgrain-Robertson, Co-Project Manager
Mississippi – Rideau Source Protection Region

Attached Correspondence:

	Correspondence From:	Regarding:	Response:
1	Raisin-South Nation Source Protection Committee November 4, 2010	*Proposed* Assessment Report posted for public comment	No response required

November 4, 2010

R.V.C.A.
RECEIVED
REFER TO:
NOV 12 2010
INITIALS:

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

SUBJECT: **Proposed Assessment Report available for Public Comment**

Dear Ms. Stavinga,

The **Raisin-South Nation Source Protection Committee (SPC)** thanks you for your ongoing and enthusiastic participation as an Eastern Ontario neighbour in the municipal Drinking Water Source Protection process. We have enjoyed active participation at recent public meetings. We also appreciate the input of those who provided comments towards the two draft Proposed Assessment Reports over the first public consultation period (September 10 - October 15, 2010).

Based upon comments received during the first posting of the documents, the SPC is now posting Proposed Assessment Reports for both the Raisin and South Nation Source Protection Areas for a second public consultation period. We are also respectfully requesting that this notice be circulated amongst members of your Source Protection Committee and staff, as you deem appropriate. The Proposed Assessment Reports are available online at www.yourdrinkingwater.ca.

Please refer to the applicable Assessment Report as well as to the chapters and maps that relate to your specific municipal drinking water system(s). Written comments are being accepted until December 2, 2010. These comments will then be forwarded to the Ontario Ministry of the Environment along with the Proposed Assessment Reports.

For more information on the Proposed Assessment Reports or the Drinking Water Source Water Protection Program, please contact our Communications Specialist, Karen Cooper at 1-866-938-3611 (ext. 247) or via e-mail at kcooper@rrca.on.ca.

Working with you to protect municipal drinking water supplies,

Claude Cousineau,
Chair, Source Protection Committee

Richard E. Pilon, P.Eng.
Project Manager

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

Conservation Ontario

South Nation Conservation
38 Victoria Street – P. O. Box 29
Finch, ON – KOC 1K0
(Tel) 613-984-2948 (Fax) 613-984-2872
www.nation.on.ca

Media Release / Communiqué
November 3, 2010

Notice

as per Ontario Regulation 287/07, Section 16 – Clean Water Act, 2006

Raisin-South Nation Source Protection Committee approves Proposed Assessment Reports - Now posted for public review

The Raisin-South Nation Drinking Water Source Protection Committee (SPC) approved the *Proposed Assessment Report* for the Raisin Region Source Protection Area and the *Proposed Assessment Report* for the South Nation Source Protection Area on **Thursday, October 28, 2010**.

The Raisin Region Source Protection Authority and the South Nation Source Protection Authority, respectively, will submit these Proposed Assessment Reports to the Ontario Minister of the Environment for consideration in December 2010.

Public Comments Invited

The Raisin-South Nation Source Protection Committee and both Source Protection Authorities welcome the public to inspect these reports and provide input on them. Written comments must be received by **Thursday, December 2, 2010**. These comments will then be forwarded to the Ontario Minister of the Environment.

Written Comments on the ***Proposed Assessment Reports*** may be submitted to:

Richard E. Pilon, P.Eng.
Project Manager
Raisin-South Nation Drinking Water Source Protection
18045 County Rd. 2,
P.O. Box 429 Cornwall, ON K6H 5T2
e-mail: rpilon@nation.on.ca, fax: 613-938-3221

Copies of *Proposed Assessment Reports* are available for public inspection, during regular business hours, at offices of the Raisin Region Conservation Authority in Cornwall and South Nation Conservation in Finch. Copies of the Proposed Assessment Reports are also available online for review and inspection by visiting: **www.yourdrinkingwater.ca.**

For more information on the Proposed Assessment Reports or the Drinking Water Source Water Protection Program, please contact our Communications Specialist, Karen Cooper at 1-866-938-3611 (ext. 247) or via e-mail at kcooper@rrca.on.ca.

Assessment Reports are required under the Ontario Clean Water Act, 2006 for each source protection area in the region. The reports describe the local watershed areas and available water supply, identify vulnerable areas where drinking water sources might face a risk of contamination or depletion, assess threats to drinking water within those vulnerable areas, and provide information necessary for the development of source protection plans by the source protection committee.

2.0 Source Protection Plan Development

Date: November 22, 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 endorse the Source Protection Plan Policy Development Process.

Recommendation 2:

That the Mississippi-Rideau Source Protection Committee receive the Source Protection Plan Policy Development Schedule.

Background

Once Assessment Reports identify land use activities that pose a threat to source water, Source Protection Committees must write policies to address these threats. Policies can manage or prohibit a threat and there are a variety of policy tools available including: education and incentive programs, land use planning, provincial instruments, Risk Management Plans and prohibition. All policies will be contained in Source Protection Plans which will lay out implementation and monitoring requirements. Plans must be submitted to the MOE by August, 2012.

Objectives and Requirements

The *Clean Water Act* and its regulations lay out clear objectives and requirements for Source Protection Plans. These are outlined in the attached Source Protection Planning Bulletin issued by the MOE titled: *Overview of Source Protection Plan Requirements*.

Policy Development Process

On May 31, 2010 the Mississippi-Rideau region hosted a meeting for all municipal staff. We had 22 municipal staff attend from 14 different municipalities. Attendees discussed how local Source Protection Plan policies should be developed. The attached draft policy development process reflects their guidance.

Staff

- Allison Gibbons, Senior Environmental Planner, was hired in October, 2010 to lead the development of Source Protection Plans for the Mississippi-Rideau region.
- Allison will work closely with municipal staff, Committee members, neighbouring regions, technical experts and Conservation Ontario to develop draft policies for stakeholder and public consultation.
- Conservation Ontario's *Source Protection Planning Advisory Committee* is compiling background research on the different threats / threat categories. It will provide:
    - A description of each threat;
    - Why it is a drinking water threat; and
    - Existing legislation that governs it.
- These research "backgrounders" will be used by staff, our municipal working group and the SPC to develop source protection policies.

Municipal Working Group

- The working group will review the background research on each threat and develop preliminary policy recommendations for SPC consideration
- All municipal staff are welcome to participate on the working group at any point in the process
    - Attendance may vary each meeting depending on the agenda / focus
    - Members may break into smaller sub-groups to work more closely with staff on a specific set of policies.
- A planner from MVC and RVCA, two SPC members and relevant district Ministry staff will also participate on the Working Group
- Each meeting will focus on policies for a particular sector (the 21 threat categories have been broken into the following groups for the purposes of policy development:

Agricultural	- agricultural source material (ASM) - non-agricultural source material (NASM) - commercial fertilizer - pesticide - grazing / outdoor confinement area
Residential	- Dense non-aqueous phase liquids (DNAPLs) - pesticide - fuel - sewage (septic systems and holding tanks)
Commercial / Small Business	- pesticide / fertilizer retail - septage spreading - fuel - DNAPLs - organic solvents
Industrial	- waste (mine tailings, petroleum refining waste, waste injection, PCBs, hazardous waste) - sewage (industrial effluent) - DNAPLs - solvents - fuel - non-agricultural source material (NASM)
Municipal	- landfills - snow - road salt - municipal sewage - stormwater
Other	- water quality - transportation corridors - moderate / low threats

- The working group may review public consultation comments and make recommendations to the Committee about how to address them
- The group will also help keep municipal councils informed about progress and draft policies

Source Protection Committee

- The Committee will review the background research compiled on each threat.
- They will review policy recommendation provided by the municipal working group and any other advice provided by staff, technical experts, MOE or CO's Advisory Committee.
- They will receive presentations from academic, sector or government experts as required to provide an overview of existing practices and regulatory requirements.
- They will approve preliminary policies for each threat and will direct staff to consult with targeted stakeholder groups where possible.
- They will review public comments and revise preliminary policies where appropriate.
- They will develop and approve draft and proposed Source Protection Plans for formal public consultation.

Source Protection Authorities

- Staff will keep the Mississippi Valley and Rideau Valley Source Protection Authorities updated on policy development progress, including an overview of preliminary policies approved for targeted consultation as they are developed.

Targeted Consultation

- Targeted consultation will be undertaken with stakeholders who could be impacted by preliminary source protection policies (e.g. meet with farm groups to get feedback on preliminary policies affecting agricultural activities).
- Feedback will be sought on how effective, economical and reasonable the preliminary policies are, the Committee will use this early feedback to shape policies for inclusion in the draft Source Protection Plan.

Policy Development Subgroup

- This subgroup will change for each threat and could consist of one expert or a small group of people.
- Participants could be pulled from municipalities, the Committee, government, academia or the private sector.
- This group may provide advice on policy options (effectiveness of stewardship, public education, provincial instruments) or advice on specific policy wording to ensure the proper legal effect.

Guiding Principles

The Committee will develop guiding principles to create an Evaluation Framework. This framework will:

- Take the form of a list of questions which can be used to "test" a preliminary policy against the original objectives and principles;
- Provide an opportunity for "sober second thought" prior to finalizing a draft policy; and
- Act as a tool for consensus building where there are differing points of view.

Plan Development Process

All preliminary policies approved by the Committee will be compiled into Source Protection Plans – one for the Mississippi watershed and one for the Rideau watershed. The first versions (Draft Source Protection Plans) will be posted for a 35 day public consultation period and public open houses will be held to solicit public input. The Committee will review all comments received and they have the opportunity to revise the Plans to address comments. The second versions (Proposed Source Protection Plans) will be posted for a 30 day public consultation period. The Source Protection Authorities will forward all comments received, along with the Proposed Source Protection Plans, to the MOE for their consideration when reviewing the Plans for possible approval.

Source Protection Plans will be prepared in accordance with:

- *Clean Water Act, 2006*
- Ontario Regulation 287/07 “General” (amended by O.Reg. 386/08)
- Other guidance issued by the MOE

Attachments:

- *Overview of Source Protection Plan Requirements* - MOE Source Protection Planning Bulletin (dated September 15, 2010)
- Draft Source Protection Plan Policy Development Process
- Source Protection Plan Schedule

Source Protection Planning Bulletin - Overview of Source Protection Plan Requirements

September 15, 2010

Introduction

The purpose of the *Clean Water Act, 2006* ("the Act" or "CWA") is to protect Ontario's existing and future drinking water sources, as part of an overall commitment to safeguard human health and the environment. A key focus of the legislation is the preparation of locally developed terms of reference, science-based assessment reports and source protection plans. For additional information on the CWA and how the terms of reference and assessment reports were developed, readers may refer to the Ministry of the Environment's website www.Ontario.ca/cleanwater.

The source protection plans will consist of a range of policies that together, will reduce the risks posed by threats to water quality and quantity. This document is one in a series of planning bulletins intended to assist local source protection committees in preparing source protection plans and policies.

Purpose

This document provides source protection committee (SPC) members with a summary of the key legislative requirements, in plain language, for the preparation of source protection plans. Together the Act and its regulations, in particular the General Regulation - Ontario Regulation 287/07 ("the Regulation"), establish a legal framework for drinking water source protection in Ontario. Amendments to the Regulation setting out some of these requirements took effect on July 1, 2010. All section references relate to the Regulation unless otherwise stated. This document is divided into sections by key topic.

While every effort has been made to ensure the accuracy of the information in this document, it should not be construed as legal advice or relied on as a substitute for the legislation.

The Act and the regulation ("the legislation") divide the drinking water source protection process into four steps:

1. Plan the work: prepare terms of reference for the work to be done;
2. Assess the risks: prepare an assessment report puling together the results of the technical and scientific studies for each source protection area, identifying *vulnerable areas*[1] and assessing the threats to drinking water sources;
3. Plan for source protection: prepare a source protection plan that addresses identified drinking water threats, particularly *significant* threats.
4. Take Action: implement the source protection plan, report on progress, and revise over time.

Preparing Source Protection Plans

The recent amendments to the Regulation primarily affect the preparation and submission of source protection plans; these amendments build on the existing requirements set out by the CWA.

Source Protection Plan Content Requirements

Together the Act and Regulation establish the requirements governing the contents of a source protection plan. Some content is mandatory, while other content is optional. These are summarized in the Table 1.

Objectives of a Source Protection Plan

The Regulation requires the source protection plan to contain the following objectives *(section 22)*:

- Protect existing and future drinking water sources.
- Ensure that activities identified as *significant drinking water threats* either never become a threat or, if the activity is already taking place, the activity ceases to be a *significant* threat[2].
- If the SPC chooses to include a risk reduction policy to deal with a condition (contamination from past activities) that is a *significant drinking water threat*, then the plan must include an objective to ensure that the identified condition ceases to be a *significant* threat.
- If the source protection area contains water flowing into a Great Lake or the St. Lawrence River, and the Minister has requested a report with recommendations for achieving a Great Lakes target established by the Minister, the plan must include an objective to achieve the target in question.

The Regulation says that no other objectives can be contained in the source protection plan. This focuses the scope of the plan on the stated objectives.

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[1] Words in italics are defined in the legislation or represent the legal title of a provincial act.
[2] Note: this objective may be met by policies that manage the activity so that the risk is reduced, not necessarily eliminated.

Table 1: Source Protection Plan Content

Mandatory Content	Optional Content

• Approved Assessment Report
• Objectives
• Significant threat policies – activities: For areas where an activity is or would be a significant drinking water threat, policies intended to ensure the activity ceases to be or never becomes significant
• Monitoring policies:
  • monitoring activities/conditions in areas where they are / would be significant
  • monitoring of moderate / low drinking water threats where advisable to prevent the threat (activity or condition) from becoming significant
  • monitoring of a drinking water issue where advisable
• Summary of consultation activities
• Applicable legal provisions[3], person/body responsible and applicable area for each policy must be clearly identified
• Dates by which official plans, zoning by-laws and prescribed instruments[4] must conform with significant threat policies
	• Significant threat policies – conditions (contamination from previous activities): For areas where condition resulting from a past activity is a significant threat, policies intended to ensure condition ceases to be significant
	• Moderate and low threats policies – Policies to address activities and conditions identified as moderate and low threats
	• Policies governing:
	  • Incentive programs and education & outreach programs, including for drinking water systems not in the terms of reference[5]
	  • Spills prevention, contingency or response plans along highways, railways or shipping lanes in intake protection zones or wellhead protection areas
	  • Climate change data collection
	  • Transport pathways[6]
	• Anything that will assist in understanding the source protection plan
	• Dates for policies to take effect[7]

Note: Requirements related to Great Lake targets are not listed, as no Great Lakes targets have been established for the first round of source protection planning.

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[3] For any drinking water threat policy or monitoring policy to take effect (i.e. to obligate a party or body to implement the policy as per the legislation) the Regulation (section 34) requires each plan identify the legal provision(s) in the legislation that applies to the policy in question, see description of this under the "Legal Effect" section below.

[4] Prescribed instruments are generally specific types of Government of Ontario approvals, permits and other authorizing documents identified by the Regulation – see description of this under the "Tools" section below.

[5] These other drinking water systems may include privately owned systems and non-residential municipal drinking water systems (e.g. a well supplying a municipally owned/operated hockey arena).

[6] While a transport pathway, in and of itself, is not considered to be a drinking water threat, the presence of a transport pathway can increase the vulnerability of a designated area which could potentially increase the risk associated with existing or future drinking water threats.

[7] A plan takes effect once the Minister has approved the plan and published a notice of approval on the Environmental Bill of Rights Registry. Policies may specify a later date to take effect.

Policy Tools

General

A source protection committee's desired outcome for every drinking water threat policy is anticipated to fall within one of two categories, manage or prohibit the drinking water threat. The legislation provides SPCs with a wide range of approaches or "tools" to rely upon as a means of achieving their desired outcome. More than one tool may be associated with a particular policy outcome.

The CWA states that policies in a source protection plan may be either general or particular in application. This allows a policy to apply generally across the source protection area or to be site specific. It also allows a policy to apply generally to several drinking water threats, or to a particular class of threat. The ministry suggests SPCs consider policy development from the general, source protection *area* basis as a starting point, since the CWA requires policies to address all areas identified in the assessment report where an activity is a *significant* threat, or would be a *significant* threat if the activity were established in the future.

- **Part IV Tools of the CWA:**
    - **Prohibition** of the activity using section 57 of the CWA ("Section 57 Prohibition")
    - **Regulation** of the activity using a *risk management plan* (i.e. the activity can only occur if an approved plan is in place to manage the risk to the raw water supply from that activity) ("*Risk Management Plans*")
    - **Restricted Land Uses** under section 59 of the CWA (some development applications under the *Planning Act* or the *Building Code Act, 1992* related to activities that would be a *significant drinking water threat* would be subject to certain conditions)
- ***Prescribed Instruments*** – policies that affect decisions to issue or otherwise create, amend or revoke a *prescribed instrument*. For example, a policy stating that specified provincial permits or approval documents issued for an activity in a *vulnerable area* should contain requirements to help manage associated risks to the raw water supply, or a policy that prohibits the issuance of, or revokes such instruments (and thus prohibits the activity)
- **Land Use Planning Approaches** - policies that affect land use planning decisions under the *Planning Act* and *Condominium Act, 1998*. In some instances it may be appropriate to manage or eliminate (through prohibiting it from being established) a threat activity through a land use policy that is implemented through land use planning decisions (such as Official Plans, Zoning By-laws and Site Plan Controls).
- **Education and Outreach Programs**
- **Incentive Programs**
- **"Other"** approaches including policies that:
    - Specify certain actions be taken by a particular person or body to implement the source protection plan or to achieve the plan's objectives

- Establish stewardship programs
- Specify and promote best management practices
- Establish pilot programs
- Govern research

The SPC may develop policies and choose the most appropriate tool(s), based on local committee knowledge and expertise, current municipal approaches, and provincial guidance. In some cases, the SPC may rely on “hard tools” that use a legal mechanism to regulate an activity (for example, *prescribed instruments*), while in other cases the SPC may rely on “soft tools” - approaches that rely on non-legal mechanisms (for example, education and outreach programs).

The Ministry is currently developing guidance for each policy tool. An overview of the tools is described below. A summary of the tools available for each required and optional plan policy is presented in Table 2.

The Regulation requires SPCs to provide an explanation for all of their policy decisions, regardless of the tools used to address any particular drinking water threat (see Explanatory Document section below).

Tools - Limitations – CWA Part IV:

Part IV of the CWA gives municipalities the authority to regulate *significant drinking water threat* activities in their *Wellhead protection areas* and *intake protection zones*. The purpose of Part IV was to give municipalities additional tools to deal with *significant drinking water threats* where existing local regulatory tools were inadequate to deal with such threats.

There are generally two tools available under Part IV to deal with activities that pose a *significant* threat to source water supplies, prohibiting the activity under section 57 or requiring a *Risk Management Plan* for the activity under section 58. Where a source protection plan uses a Section 57 Prohibition for an activity or requires a Risk Management Plan under section 58 for an activity, Part IV provides an additional tool, Section 59 Restricted Land Uses.

There are certain limitations on the use of these powers:

- The Section 57 Prohibition and *Risk Management Plan* policy tools can only be used in areas where the assessment report indicates that the activity is, or would be, a *significant drinking water threat* and the area is located within a surface water *intake protection zone* or *wellhead protection area*;
- The Section 57 Prohibition and *Risk Management Plan* policy tools cannot both be used to deal with the same activity on a single parcel of land;
- The Section 57 Prohibition and *Risk Management Plan* policy tools can only be used to address an activity that is one of the 21 prescribed drinking water threat activities (or a specific “local” drinking water threat that has been approved by the Director for a particular source protection area), subject to the following:
    - The activity does not require a waste disposal site certificate of approval under the *Environmental Protection Act;*

- The activity does not require a sewage system certificate of approval under the *Ontario Water Resources Act* or the *Building Code Act* applies to the system.[8]

While Part IV CWA tools cannot be used to deal with waste or sewage activities identified as *significant drinking water threats*, the plan must still contain policies intended to manage/reduce the threat from these activities. Other approaches[9] are available for addressing these threats, including *prescribed instrument* policies for an existing or future activity, or a land use planning policy to deal with future activities.

- Section 57 Prohibition can only be used when the SPC is of the opinion that this is the only approach that will ensure that the activity ceases to be, or never becomes a *significant drinking water threat.* The SPC must believe that there is no other policy tool, or combination of tools, available that would effectively manage the risk from the activity.
- The Restricted Land Uses tool can only be used for an area when the following conditions are met:
  i. The land use in question is "prescribed" by regulation. SPCs may designate restrictions for land uses identified in a local zoning by-law or official plan within the source protection area for this purpose[10].
  ii. The land use relates to an activity that has been designated in the source protection plan for the purpose of the Section 57 Prohibition or the *Risk Management Plan* tools.
- During implementation, Restricted Land Uses policies make certain development applications under the *Planning Act* or the *Building Code Act, 1992* related to activities that would be a *significant drinking water threat* subject to conditions. This provides municipalities with a tool to prevent applications or building permits from proceeding if they would create a significant threat.

Tools - Limitations – *Prescribed Instruments*

An instrument is a permit or other legal document that is usually issued by the government, which typically authorizes specific activities to take place at a particular location. For example, a legal document authorizing a municipality to operate a sewage treatment plant at a specific location, commonly known as a Certificate of Approval, issued under section 53 of the *Ontario Water Resources Act*. These types of documents may contain terms or conditions that require the party who is undertaking the activity to have specified pollution control equipment in place and/or to operate in specific ways.

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[8]Larger sewage systems (e.g. municipal sewage treatment plants) are typically regulated by the *Ontario Water Resources Act* while small sewage systems (e.g. a septic system serving a single household) are regulated by the *Building Code Act*.

[9] The SPC can elect to use any policy tool other than the Part IV CWA tools to deal with these drinking water threats.

[10] Naming of land uses in planning documents varies widely across the province. SPCs may find different names for the same land use associated with activities that constitute a threat in the planning documents for municipalities in their source protection area.

These terms and conditions are often included to help protect human health and/or the environment.

After a source protection plan is approved, the CWA requires that decisions about *prescribed instruments* conform with *significant* threat policies and have regard to *moderate* and *low* threat policies (*CWA: subsection 39(7)*). These conformity standards enable SPCs to write policies in their plan that directly affect the content of approvals, permits or other authorizing documents. The policy may outline specific measures or requirements to be included in the content of these documents to help manage and reduce the risk associated with an activity. These types of policies can only be written for instruments that are specifically "prescribed" (i.e. legally identified) by the Regulation.

There are 16 *prescribed instruments* identified by the Regulation (*section 1.0.1*):

- *Aggregate Resources Act*
    - Section 8 site plans included in applications for licences
    - Section 11 and 13 licences to remove aggregate from pit or quarries
    - Section 25 site plans accompanying applications for wayside permits
    - Section 30 wayside permits to operate pits or quarries
    - Section 36 site plans included in applications for aggregate permits
    - Section 37 aggregate permits to excavate aggregate or topsoil
- *Environmental Protection Act*
    - Section 39 certificates of approval or provisional certificates of approval for the use, operation, establishment, alteration, enlargement or extension of waste disposal sites or waste management systems
    - Section 47.5 renewable energy approvals
- *Ontario Regulation 276/03 (General)* made under the *Nutrient Management Act, 2002*
    - Section 10 nutrient management strategies
    - Section 14 nutrient management plans
    - Section 28 with respect to approvals of nutrient management strategies or nutrient management plans
- *Ontario Water Resources Act*
    - Section 34 permits to take water
    - Section 53 certificates of approval to establish, alter, extend or replace new or existing sewage works
- *Pesticides Act*
    - Section 7 and 11 permits for land extermination, structural extermination and water extermination
- Safe *Drinking Water Act, 2002*
    - Section 40 drinking water works permits
    - Section 44 municipal drinking water licences

A policy that relies on the *prescribed instrument* conformity standards in the CWA can only control actions that that the *prescribed instrument* can legally control. The Ministry

will assist SPCs in understanding the scope of legal authority for each type of *prescribed instrument*, as well as provide appropriate contacts for more information about *prescribed instruments*. Direct communication with the person or business that is subject to an instrument will promote an open dialogue, help SPCs understand existing risk mitigation practices and determine whether any additional measures are needed to ensure the risk is no longer a *significant drinking water threat*.

The conformity standards for *prescribed instruments* under the CWA provide a reliable means for committees using this tool to achieve their desired outcome (that is, "manage" or "prohibit") for addressing an existing threat that is subject to an instrument. However, prohibition through this tool should only be used as a last resort. If the current risk mitigation practices are not effective enough to manage *significant* threats, plan policies should focus on strengthening the conditions within existing *prescribed instruments*. The Regulation (*section 32*) restricts the use of this tool for policies that address *moderate* and *low drinking water threats*: these policies shall not prohibit or have the effect of preventing a person from engaging in the activity. Instead, *moderate* and *low threat* policies must focus on risk management.

If a source protection plan identifies a condition (i.e. contamination from previous activities) that is a *significant drinking water threat*, the Act gives the Minister the authority to request a person or body to issue, or otherwise create an instrument under any Act to ensure that the condition ceases to be a *significant drinking water threat*. In other words, when dealing with *significant drinking water threat* conditions, there are no restrictions on the instrument the Minister can use.

Tools - Limitations – Land Use Planning Approaches

The CWA requires that decisions under the *Planning Act* and *Condominium Act, 1998* conform with *significant* threat policies and have regard to *moderate* and *low threat* policies (*CWA: subsection 39(1)*). A policy using this tool may outline specific measures or requirements to be included in the land use planning decision to help manage and reduce the risk associated with an activity. These types of policies can only control actions that fall within the legal authority of *Planning Act* and *Condominium Act, 1998* decisions. For example, decisions under the *Planning Act* generally apply to new and future uses and do not apply to existing, established activities. This is why this tool may not be appropriate for addressing existing drinking water threats.

The Regulation (*section 32*) includes a restriction on *moderate* and *low drinking water threat* policies that applies to the land use planning approaches tool: these policies shall not prohibit or have the effect of preventing a person from engaging in the activity.

The Ministry will provide detailed guidance to SPCs on the use and application of the various source protection plan policy tools.

Tools - Limitations – Education and Outreach Programs, Incentives, Other

The legislation allows all the remaining tools to be used to achieve the SPC's desired outcome for addressing drinking water threats. Several of these may also be used together with the other permissible policies in a source protection plan (for example,

transport pathway policies). When any of these tools are relied upon as the sole means of addressing *significant drinking water threats*, the Regulation requires SPCs to include justification for their decision within the explanatory document that accompanies the source protection plan (see Explanatory Document section below).

The Regulation (*section 32*) includes a restriction on *moderate* and *low drinking water threat* policies that applies to the education, outreach, incentives, and other policy tools: these policies shall not prohibit or have the effect of preventing a person from engaging in the activity.

Additional Policy Details:

The level of detail of any given policy may vary. For certain tools, committees have the option of simply stating the policy as their desired outcome (that is, “manage” or “prohibit”). This applies to any tool that is being relied upon when a SPC’s desired outcome for addressing a *significant* threat is to prohibit the activity from occurring, either now or in the future.

When a SPC decides to use the *Risk Management Plan* tool or *prescribed instrument* tool as the means to achieving the desired outcome of managing a particular threat, they have the option of including some policy details about how the activity should be managed, or outcomes that should be achieved, or may leave those details to the public body responsible for implementing the policy. For example, for existing fuel storage sites that are *significant drinking water threats*, the policy could require a specific standard to be applied, or simply state that measures must be taken to ensure that the activity ceases to be a *significant drinking water threat*. This leaves the decision about what fuel storage standard must be applied in each case to the implementing body.

For all remaining tools, more detail should be included in the policy to help the party responsible for implementing the policy to clearly understand the SPC’s expectations. For example, if a policy establishes an education and outreach program for a *significant drinking water threat* activity, it would be appropriate for the policy, at a minimum, identify the person or body responsible for the policy, the date when the program must be in place, and a description of the program including its objectives. The SPC may also consider including details about how the person or body will report on progress in implementing the program, which may be linked to a monitoring policy (see below).

Monitoring Policies

The monitoring policies included in a source protection plan are summarized in Table 1. The CWA requires that any public body identified in monitoring policies in an approved source protection plan must satisfy their obligations under these policies. Monitoring policies will provide valuable information about the implementation of a source protection plan and the effectiveness of its policies. However, monitoring the implementation progress of a plan will not always provide a measurable outcome. For example, a spill-avoidance protocol would reduce the risk of contamination to a drinking water source, but would not result in a measurable environmental change. Monitoring policies should focus on the designated activity and its risk management measures.

This information will assist source protection authorities with required progress reporting (*CWA: section 46; O. Reg. 287/07: section 52*).

The legislation gives SPCs the flexibility to include whatever policy details they determine are appropriate for the party responsible for implementing the monitoring policy to understand what is expected from the monitoring policy.

Legal Effect of Plan Policies

Part III of the CWA sets out the legal effect (i.e. the obligations imposed on a party or body to implement the policy) of source protection plans. This part of the CWA requires all decisions under the *Planning Act* or *Condominium Act 1998*, or decisions related to *prescribed instruments*, "conform with" meaning comply with, *significant* threat policies and "have regard to", meaning to seriously consider, the policies in the plan that relate to *moderate* and *low drinking water threats*. In addition, Part III requires municipalities, local boards or source protection authorities to satisfy any obligations imposed on it by *significant* threat policies in the plan, regardless of the particular tool or approach used in the policy.

However, Part III of the CWA will only apply if the plan expressly states that they apply.

This means that the applicable legal provisions for each policy must be clearly identified in the plan in order for the legal effect provisions in Part III of the Act to apply *(O. Reg. 287/07: section 34)*. For example, a plan that includes a *significant* threat policy to address a threat using a *prescribed instrument* would have to also identify that sections 39(7)(a), 43 and 44(1) of the CWA[11] apply to the policy. In addition, the Regulation requires the plan to specify the types of *prescribed instruments* the policy applies to, or the policy will not have the intended legal effect. The ministry intends to provide SPCs with directions and an associated template to assist them with complying with section 34 of the Regulation.

The Regulation requires that any policy that does not fall under one of the categories listed below must be identified in the plan as a "strategic action policy" *(section 33)*:

- a *significant threat policy*
- a Great Lakes policy
- any type of monitoring policy that is to be carried out by a specified public body
- a *low* or *moderate threat policy* that affects decisions made under the *Planning Act* or *Condominium Act, 1998*
- a *low or moderate threat policy* that affects *prescribed instruments* (see description of this tool below)

[11] S. 39(7)(a) of the CWA requires the body issuing a prescribed instrument to conform to an applicable significant threat policy; S. 43 of the CWA requires the body issuing a prescribed instrument to amend an existing instrument to conform to an applicable significant threat policy; S. 44 of the CWA provides the Minister with the authority to request the appropriate issuing body to take steps to amend a prescribed instrument if the Minister is of the opinion that the instrument does not conform to an applicable significant threat policy.

Strategic action policies do not have legal implementation requirements; therefore can not legally be enforced. However, strategic action policies are still an important part of a source protection plan, and their implementation can be monitored publicly through required progress reports.

The Explanatory Document

The Regulation requires that the SPC prepare a second type of document, called an "explanatory document", to accompany the source protection plan (*section 40*). The purpose of the explanatory document is to provide the source protection authority, stakeholders, the Minister and general public with background information that the SPC used to prepare the plan and support a transparent decision making process. The explanatory document must include:

- an explanation of the SPC's policy decisions (i.e. the reasons for each policy or a group of policies set out in the plan);
- the reasons why the SPC was of the opinion that an activity that exists today had to be prohibited in the plan using the Section 57 Prohibition tool;
- a summary of how comments received from various parties during the plan pre-consultation process affected the development of various policies (note, the pre-consultation requirements are described later in this compendium);
- a summary of how climate change considerations noted in the assessment report affected the development of policies. (Note: if there was insufficient climate information in the assessment report to have any effect on policy decisions or if climate information had no affect on policy decisions that should be stated in the explanatory document);
- a summary of how financial implications on both implementing bodies and other persons potentially affected by policies influenced the development of policies. (Note: if financial implications were not considered, or financial implications had no effect on policy decisions, this should also be stated in the explanatory document.)
- where a plan includes policies that address *significant drinking water threats* exclusively by non-regulatory means[12]
    - an explanation of why the *significant* threat was dealt with this way, and,
    - statements explaining why the SPC is of the opinion that the policy(s) will achieve the objective of ensuring the activity either never becomes a *significant* threat or, if the activity is already taking place, the activity ceases to be a *significant* threat, and that a policy to regulate or prohibit the activity is not necessary.

[12] These are described in subsection 22(7) of the Act and section 26 paragraph 1 of the Regulation: education and outreach programs; incentive programs; stewardship programs, best management practices programs; pilot programs; research programs; or a policy that specifies actions to be taken to implement the plan or achieve the plan's objectives.

Table 2: Summary of Approaches / Tools Available for Source Protection Plan Policies

Approach / Tool		*Policies Addressing:*									
		Significant Drinking Water Threat - activities	*Significant Drinking Water Threat - conditions*	*Moderate or Low Threats*	*Monitoring Significant Threats*	*Monitoring Moderate and Low Threats*	*Monitoring Drinking Water Issues*	*Transport Pathways*	*Spill Prevention/ Contingency Plans/ Emergency Response Plans*	*Climate Change Condition Data*	*Non-Terms of Reference Drinking Water Systems*
Part IV Tools	S. 57 Prohibition	√*									
	Risk Management Plans	√*									
	Restricted Land Uses	√*									
Prescribed Instruments		√	√	√							
Land Use Planning Approaches		√	√	√							
Incentives		√	√	√				√			
Education / Outreach		√	√	√				√			√
Other	Stewardship Programs	√	√	√				√			
	Best Management Practices	√	√	√				√			
	Pilot Programs	√	√	√				√			
	Research	√	√	√				√			
	Specify Actions	√	√	√				√	√	√	
Specify Monitoring Details					√	√	√				

** Except for waste and sewage threats that require a prescribed instrument under the Environmental Protection Act / Ontario Water Resources Act, or fall under the Building Code.*

	Optional Plan Policies
	Mandatory Plan Policies

Notification/Consultation Requirements During Plan Preparation

The legislation requires SPCs and source protection authorities to carry out consultations at several points during the preparation of a source protection plan.

Notice When Plan Preparation Begins (section 19):

The legislation does not strictly define when the preparation of a source protection plan begins; this provides SPCs with some flexibility in determining when the preparation of the planning document formally begins. Once the SPC has determined they are ready to begin preparing the plan, the Regulation requires that a number of parties be notified, including:

- The clerk of each municipality and band chief of any First Nation reserve that is located all or partly within the source protection area.
- Any person who the SPC believes could be engaging in one or more prescribed activities that are or would be a *significant drinking water threat*. The notice must say why the SPC is notifying this person[13]. The notice must either specify the activity(s) in question or provide a complete or partial list of activities that were identified to be *significant* threats in the local assessment report in the area where the person is carrying out the activity(ies).

The Ministry is currently developing more detailed guidance to assist SPCs with the requirement. Please see the Ministry's source protection planning bulletin "Notice When Plan Preparation Begins".

Pre-consultation with Affected Parties (sections 35 to 39):

The Regulation requires SPCs to consult with affected parties during the policy development process, before the draft plan is published for initial public comment.

If the SPC intends to include any incentive, education and outreach, or "other" policies (*section 26, paragraphs 1, 4, 5 and 6, and section 27*), the SPC is required to notify the person or body who will be responsible for implementing the policy. The notification must tell the party in question that they will be required to implement a policy in the plan. The notice must include draft wording of the policy along with a summary of the reasons for the policy and an invitation to provide input on the draft policy. A committee is required to consider all comments received when finalizing the draft policy.

The same basic consultation and notification process described above is required for other types of policies that would impose implementation responsibilities on a person, body or organization. Pre-consultation notices can be combined if the SPC is required to notify the same person, body or organization several different times:

- for policies affecting *prescribed instruments*, the SPC is required to consult with the body or person responsible for issuing or amending the instrument;

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[13] The notice must say that the person has been given a notice because the committee believes the person could be engaging in one or more activities that are, or would be, significant threats according to the information in the assessment report.

- for policies affecting decisions under the *Planning Act* or *Condominium Act,1998,* the SPC is required to consult with municipalities, planning boards, municipal panning authorities or other local boards whose decisions will be affected and the appropriate regional director of the Ministry of Municipal Affairs and Housing;
- for *significant*, *moderate*, and *low threat policies* that impose an obligation on a municipality or other body or person, the SPC is required to consult with the appropriate affected body;
- for the policies that rely on the Part IV tools (Section 57 Prohibition, *Risk Management Plan*, Restricted Land Uses), which impose enforcement of a policy on the council of a municipality, the SPC must consult with the affected municipality; and
- for monitoring policies, the SPC is required to consult with the person or body who will be responsible for conducting the monitoring program.

A summary of how the comments received from the affected parties as a result of pre-consultation notices, and an explanation of how the comments affected the development of the plan policies, must be included in the explanatory document that accompanies the source protection plan.

In addition to these consultation requirements, the legislation sets out specific requirements for both the submission of the draft and proposed plan. Guidance will be provided in the future to assist committees with these requirements.

Miscellaneous Requirements (sections 20, 21, and 40)

SPCs should be aware of the following additional requirements related to the preparation of source protection plans:

- Every record that is created or acquired for the purpose of preparing or amending a source protection plan must be kept by the SPC for a period of 15 years.
- The Director has the authority to require SPCs to use a specific form or computer software when preparing source protection plans.
- The Director has the authority to require SPCs to use a specific form or computer software when preparing the explanatory document.

Summary

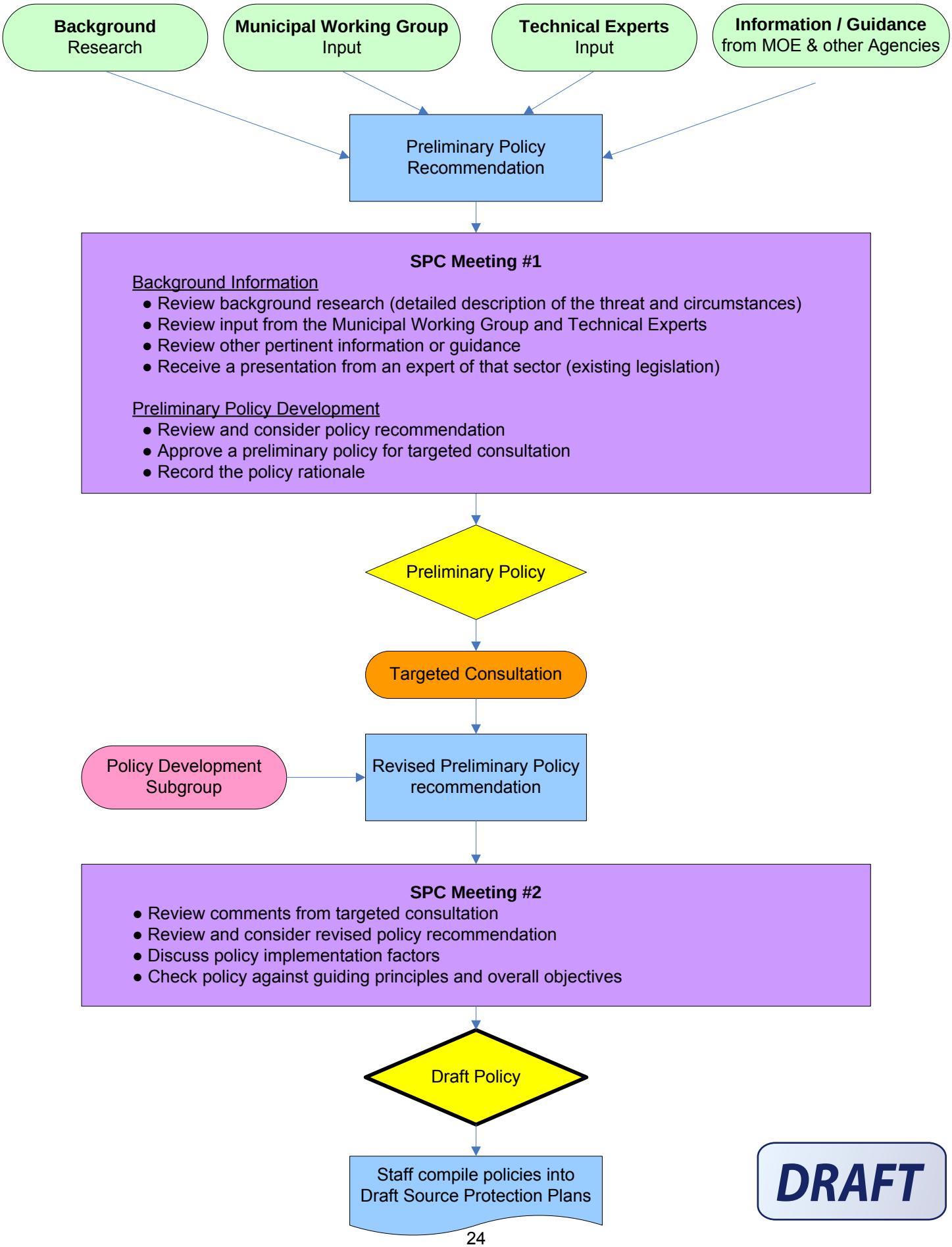
This Bulletin has provided an overview of the requirements for the preparation of source protection plans. For information on other aspects of source protection plan preparation, please refer to the corresponding bulletins in this series, presently under development.

Additional Sources of Information

Ministry of the Environment's Clean Water Act Website – www.Ontario.ca/cleanwater

Clean Water Act, 2006 and **O. Reg. 287/07 "General"** on the **e-Laws Website** (www.e-laws.gov.on.ca)

Source Protection Plan
Policy Development Process



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Source Protection Plan
Policy Development Schedule

2010 to 2011

	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
Municipal Working Group	Ag.	Res.	Com.	Ind.	Mun.	Other							
SPC Meeting #1		Ag.	Ag.	Res.	Com.	Com.	Ind.	Mun.	Mun.	Other			
Targeted Consultation				Ag.	Res.		Com.	Ind.		Mun.	Other		
Policy Development Subgroup					Ag.	Res.		Com.	Ind.		Mun.	Other	
SPC Meeting #2											Ag./Res.	Ind./Com.	Mun/Other
SPP Preparation											Source Protection Plan writing		

Ag. **Agricultural** - agricultural source material (ASM), non-agricultural source material (NASM), commercial fertilizer, pesticide, grazing/outdoor confinement area
Res. **Residential** - dense non-aqueous phase liquids (DNAPLs), pesticide, fuel, sewage (septic systems and holding tanks)
Com. **Commercial / Small Business** - pesticide/fertilizer retail, septage, fuel, DNAPLs, organic solvents
Ind. **Industrial** - waste (mine tailings, petroleum refining waste, waste injection, PCBs, hazardous waste)
sewage (industrial effluent) DNAPLs, solvents, fuel, NASM
Mun. **Municipal** - landfills, snow, road salt, municipal sewage, stormwater
Other **Other -** water quantity, transportation corridors, moderate / low threats

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3.0 Assessment Report Accompanying Document

Date: November 22, 2010
To: Mississippi-Rideau Source Protection Committee
From: Sommer Casgrain-Robertson, Co-Project Manager
Mississippi – Rideau Source Protection Region

Recommendation:

That the Mississippi-Rideau Source Protection Committee approve the attached *A Summary of Concerns Outside the Scope of the Assessment Reports* and direct staff to submit it to the Ontario Ministry of the Environment when the Proposed Assessment Reports are submitted in December, 2010.

Background
Since their formation in 2007, the Mississippi-Rideau Source Protection Committee has been made aware of:

- A number of drinking water related concerns which fall outside the current mandate of the *Clean Water Act*; and
- A few concerns with certain aspects of the source protection planning process.

Accompanying Document
Under the *Clean Water Act* these types of concerns cannot be documented in an Assessment Report, therefore the attached document was created to ensure these broader concerns got consolidated and highlighted for further consideration by an appropriate group, agency or government ministry.

The attached report is intended as a companion document to the MRSPC's Assessment Reports. Some of the concerns were identified by Committee members while others were raised by local municipalities and members of the public. The document is simply a compilation of key concerns brought to the Committee's attention since 2007 that fall outside the scope of the Assessment Reports.

This document will be submitted to the MOE with the MRSPC's Proposed Assessment Reports in December, 2010.

List of Concerns:

- Protecting Private Well Water
  - HVAs & SGRAs
  - Proper Well Construction, Maintenance and Abandoning
  - Minimum Lot Size
- Spill Response
- Spreading of Septage (sewage biosolids)
- Ottawa River Watershed
  - Quebec
  - Chalk River & Tritium Levels
  - Water Budget
- Transportation Corridors

- Provincial Rules for IPZ Vulnerability Scoring
- Protecting Future Municipal Wellhead Sites
- Implementation Costs
- Floodplains and Contamination
- Mining
- Geothermal Systems

DRINKING WATER SOURCE PROTECTION
ACT FOR CLEAN WATER

Mississippi Valley Conservation

RIDEAU VALLEY CONSERVATION AUTHORITY

Mississippi-Rideau Source Protection Region

A Summary of Concerns

Outside the Scope of the Assessment Reports

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Prepared by the

Mississippi-Rideau Source Protection Committee

December 2, 2010

Introduction

The Mississippi-Rideau Source Protection Committee (MRSPC) was appointed in 2007 under Ontario's *Clean Water Act*. Since their formation they have been made aware of:

- A number of drinking water related concerns which fall outside the current mandate of the *Clean Water Act*; and
- A few concerns with certain aspects of the source protection planning process.

This Document

Under the *Clean Water Act* these types of concerns cannot be documented in an Assessment Report, therefore the following document was created to ensure these broader concerns were consolidated and highlighted for further consideration by an appropriate group, agency or government ministry.

This report is intended as a companion document to the MRSPC's Assessment Reports. It briefly describes the concerns that have come to the Committee's attention since 2007. Some concerns were identified by Committee members while others were raised by local municipalities and members of the public.

This companion document will be submitted to the MOE with the MRSPC's Assessment Reports on December 21, 2010. The following concerns are captured in the document:

Concerns

1. **Protecting Private Wells and Intakes**
    a. Protecting Regional Groundwater - HVAs and SGRAs
    b. Designating "Other" Systems
2. **Uranium**
3. **Proper Well Construction, Maintenance and Abandoning**
4. **Minimum Lot Size**
5. **Spill Response**
    a. Spill Response Awareness
    b. New Transportation Infrastructure
    c. Travel Time of IPZ-2
6. **Untreated Septage Spreading**
7. **Ottawa River**
    a. Ottawa River Watershed
    b. City of Ottawa's Intakes
    c. Chalk River Laboratories and Tritium
    d. Water Budget
8. **Surface Water Technical Rules**
    a. Local Vulnerability Scoring Methodology
    b. Precautionary Approach
    c. Aging Infrastructure
    d. Historical Drinking Water Quality
    e. Source Vulnerability Factor
9. **Geothermal Systems**
10. **Implementation Costs**

Glossary

MRSPR– Mississippi-Rideau Source Protection Region
MRSPC– Mississippi-Rideau Source Protection Committee
MOE - Ontario Ministry of the Environment

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1. Protecting Private Wells and Intakes

Concern:

Most properties in urban areas are hooked up to municipal water. Under the *Safe Drinking Water Act*, full time staff ensures that municipal drinking water is properly tested, treated and safely distributed to homes and businesses. The *Clean Water Act* will add an additional layer of protection for municipal drinking water by putting policies in place to protect the source of water (e.g. lake, river or underground aquifer) from contamination or overuse.

In most rural areas, and a few urban areas, people are not supplied with municipal drinking water. In the MRSPR approximately 135,000 people rely on non-municipal drinking water systems, primarily private wells. These people are responsible for testing their own water for possible contaminants and ensuring proper treatment and safe distribution to their tap.

Groundwater aquifers are normally shared by a number of users. Contamination or unsustainable practices like drawing too much water from an aquifer can affect a large number of surrounding wells.

Concerns have been heard that regional aquifers must be protected through legislation because not all individuals use this shared resource in a responsible and sustainable manner. The Committee has heard many property owners on private wells and intakes lobby for the *Clean Water Act* to do more to protect regional groundwater and surface water which are their sources of drinking water. Some feel the *Clean Water Act* is unjustly providing two tiers of source water protection, a lower discretionary tier for water sources supplying private wells and intakes and a higher tier requiring protection of water sources supplying municipal systems.

On the other hand, the Committee has heard from just as many property owners on private wells and intakes who want the *Clean Water Act* to remain focused on protecting municipal source water. They do not want land use requirements and restrictions implemented in rural areas to protect regional groundwater and surface water. They support property owners on private wells and intakes being responsible for testing and protecting their own drinking water and they do not want additional government regulations to be applied to provide a higher level of protection.

Opportunities:

The *Clean Water Act* provides two provisions for protecting sources of water supplying non-municipal drinking water systems, neither is mandatory:

a) Protecting Regional Groundwater – HVAs and SGRAs

Under the *Clean Water Act*, Assessment Reports must identify:

- Highly Vulnerable Aquifers (HVAs) – areas where groundwater is vulnerable to contamination; and
- Significant Groundwater Recharge Areas (SGRAs) – areas where a significant amount of precipitation is infiltrating and replenishing groundwater aquifers.

Approximately 89% of the MRSPR is designated HVA while approximately 13% is considered SGRA. Source Protection Committees can write policies for these two areas to protect regional groundwater from becoming contaminated or overused. This would mean protecting groundwater supplying most private wells.

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b) Designating "Other Systems"

Under the *Clean Water Act*, municipal councils and the Minister of the Environment can require "other" types of drinking water systems to be included in the source protection planning process. These other systems are: clusters of six or more private wells and intakes; and those systems that supply public and private facilities such as schools, community centres and trailer parks. In the MRSPR there are many clusters of private wells and intakes as well as approximately 600 public and private facilities that could potentially be included. If included, a vulnerable area would be delineated around the cluster or system and source protection policies put in place within that area. This would mean protecting groundwater or surface water supplying the cluster or communal system from potential contamination or overuse.

Challenges:

a) Protecting Regional Groundwater – HVAs and SGRAs

In HVAs and SGRAs, the Committee can only use existing tools like land use planning and provincial instruments, along with softer tools like incentives and public education. Stronger tools under the *Clean Water Act*, like prohibition or requiring a Risk Management Plan, cannot be used in these areas.

An additional limitation is Committees only have until August, 2012 to submit their Source Protection Plans. While Plans must contain policies to protect sources of municipal drinking water, other policies are voluntary. Many Committees may not have time to develop discretionary HVA and SGRA policies. Instead they may have to wait to include these policies in an updated Source Protection Plan.

b) Designating "Other Systems"

The MOE is developing an assessment tool to help municipal councils identify other systems they may wish to bring into the source protection planning process. Municipal councils will be reluctant to bring in other systems until they understand the potential implications such as financial costs and legal liability. The MOE has strongly advised municipalities to wait to designate any such systems until they have received additional guidance from the Province. It is anticipated that including "other" systems will be deferred to future updated Assessment Reports and Source Protection Plans.

2. Uranium

Concern

Uranium is naturally occurring in the upper portions of the Mississippi Valley and Rideau Valley watersheds. The area of concern in recent years has been east of Crotch Lake. The bedrock in this area is part of the Precambrian Shield. It is highly fractured and generally exposed at surface or below less than 2 m of overburden. As a result, surface water and groundwater in the area are connected and the groundwater is considered highly vulnerable.

Uranium prospecting has occurred in the area since the late 1950's. Exploration work conducted in the past included airborne and ground radiometric surveys, excavation of trenches and bedrock diamond coring. Based on the Ontario Drill Hole Database, previous exploration activities involved drilling 189 diamond core holes in the area:

- 29 core holes were drilled from 1956 to 1959 with depths ranging from 10 to 70 metres;
- 77 additional core holes were drilled from 1968 to 1969 with depths ranging from 12 to 132 metres;

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- 80 additional core holes were drilled from 1976 to 1980 with depths ranging from 10 to 154 metres; and
- Three core holes were drilled in 2003 with depths ranging from 15 to 16 metres.

Mississippi Valley Conservation in cooperation with several residents in the area conducted a groundwater sampling event in October and November, 2007. The sampling program was undertaken to characterize the background groundwater quality in the area. Samples were obtained from 15 groundwater wells. The results showed 12 samples had detectable levels of uranium and two groundwater samples exceeded the Provincial Water Quality Objective for uranium. Participating landowners and the local Health Units were notified of the sampling results.

The Ontario Drinking Water Standard for uranium is 0.02 mg/L. Due to the insoluble nature of uranium there is very limited information with regards to the actual solubility of uranium in water. The water wells database from the Ontario Ministry of the Environment indicates that there are 2,187 wells in the Crotch Lake area. Groundwater well depths range from 1.7 to 69.2 metres.

Local citizens are concerned that prospecting activities undertaken since 1950 have contributed to uranium in local groundwater and surface water. They are especially concerned that continued or increased prospecting activities, and/or a uranium mine, could lead to higher levels of uranium in the groundwater and surface water which is their source of drinking water. If uranium mining will not be approved in these areas then citizens do not want prospecting activities to be permitted by the Ministry of Northern Development and Mines. It is noted that Ontario Regulation 903 requires that abandoned wells be properly sealed, even wells drilled as part of prospecting or mining activities.

In 2008, there were 103 active mining claims on approximately 7900 ha of land within the upper portions of the Mississippi Valley and Rideau Valley watersheds. The Ministry of Northern Development and Mines listed these claims as being held by eight separate exploration companies.

Opportunities

In recent years, Tay Valley Township has taken a significant role in bringing concerns associated with the *Mining Act* to the attention of the provincial government.

- Mississippi Valley Conservation worked with Tay Valley Township to bring these concerns to the attention of Conservation Ontario resulting in proposed amendments to the *Clean Water Act* being introduced to the legislature. These proposed amendments however were not incorporated into the legislation.
- In 2007, Tay Valley Township, Mississippi Valley Conservation and Conservation Ontario submitted comments to the Ministry of Northern Development and Mines regarding the provincial review of the Mining Act.
- In 2007, the County of Lanark and several municipalities passed motions of support for a moratorium on uranium exploration, mining and processing in eastern Ontario.

In 2008, the MRSPC requested that local agencies work together to educate local residents in the upper part of the watershed about uranium and drinking water.

- Currently the Ontario Ministry of Health and Long-Term Care is working with local health units to develop a guidance document on elevated uranium levels in drinking water
- Health Canada is also in the final stages of approving a new fact sheet about uranium and private wells.

Other Opportunities and Challenges

See Concern #1 – Protecting Private Wells and Intakes

- Protecting regional groundwater - HVAs and SGRAs; and
- Designating "other" systems

3. Well Construction, Maintenance, and Abandonment

Concern

Improperly constructed or maintained wells can act as a shortcut for contaminants to move more quickly and easily down into groundwater aquifers. This can contaminate the groundwater supplying that well, but also neighbouring wells. Therefore, it is important that wells be properly constructed and maintained to ensure proper grouting and seals prevent contaminants from traveling down the well or beside the well into the aquifer. It is also essential that wells that are no longer in use be properly plugged and abandoned to ensure they are not left as a potential pathway to the aquifer. A key concern is that there is an unknown number of unused wells in the region that have not been properly abandoned.

Opportunities

There is broad public support for stable province funding to provide incentives to property owners to properly abandon unused wells. Province wide grant programs like Clean Up Rural Beaches (CURB) and the Ontario Federation of Agriculture's well decommissioning grant program were very successful in the past. Unfortunately current programs are offered by individual municipalities or conservation authorities meaning grants are offered in some parts of the province and not in others. Since groundwater aquifers are a shared resource that flow across political and watershed boundaries, people have called for a province wide incentive program.

Challenges

New well construction is governed by Ontario Regulation 905 and strict requirements are in place to construct wells in a manner that minimizes the potential for the well to allow any contaminants to enter the aquifer. However, unlike new septic systems, this is a self regulating industry. In Ontario a licensed well driller is permitted to construct a new well and they register it with the MOE. There is no required inspection by a regulator.

4. Minimum Lot Size on Private Servicing

Concern

Concerns have been raised that developments on private servicing (private wells and septic systems) should have a larger minimum lot size requirement. The concern is that the move towards development intensification may not take into account the associated increased risk of groundwater contamination from:

- Septic systems on smaller lots resulting in insufficient treatment and filtering of effluent leading to contaminants migrating to adjacent properties or into groundwater; and
- Increased density of septic systems which may contaminate an aquifer because of the concentrated volume of effluent.

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5. Spill Response

Concerns

a) Spill Response Awareness

In Ontario people must report any spill to the provincial Spills Action Centre when an adverse effect may occur or when the spill may reach water (this includes sewers). There are some reporting exemptions. Concerns have been raised about the effectiveness of having a centralized call centre which is not familiar with local areas. It was felt this could delay response time during a critical spill. There is also concern that the public does not know about the Spills Action Centre, does not know when to contact them, or does not know how to contact them. An additional concern is that local emergency responders need to know when they are responding to a spill in a vulnerable drinking water area as opposed to a spill in a regular area.

b) New Transportation Infrastructure

There are concerns that the movement of chemicals and pathogens along transportation corridors running through vulnerable drinking water areas pose a drinking water threat that Source Protection Committees cannot address. Transportation corridors, like bridges, railways and shipping lanes, are not identified as drinking water threats in the provincial Tables.

There are also concerns that new infrastructure, like bridges or highways, should not be constructed through vulnerable areas.

c) Travel Time of IPZ-2

The provincial Technical Rules under the *Clean Water Act* dictate that IPZ-2 must delineate the 2 hour time-of-travel upstream of a municipal intake 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.

Concerns have been raised that IPZ-2 should protect a larger area than two hours upstream of the intake because a spill could go unnoticed or unreported for a length of time rendering 2 hours an insufficient amount of time for municipal drinking water system operators to react to a spill. The two hour delineation assumes all spills will be noticed and reported immediately and it is realistic that this will not happen each time there is a spill.

Opportunities

a) Spill Response Awareness

It was suggested that the phone number for the Spills Action Centre be posted on major highways and roadways that run through Intake Protection Zones and Wellhead Protection Areas to ensure spills are properly reported in these vulnerable drinking water areas. Source Protection Committee Chairs across the province are working on a joint request to the Ministry of Transportation to be able to erect road signs along key highways and roadways in Wellhead Protection Areas and Intake Protection Zones. The sign could contain the Spills Action Centre phone number so people know to report the spill because it is in a vulnerable drinking water area.

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Committees will also ensure the MOE provides the Spills Action Centre with a digital layer of vulnerable area maps so responders know if a spill is in a vulnerable drinking water area. This will ensure appropriate municipal drinking water system operators are notified and appropriate actions taken at municipal water treatment plants or facilities to protect drinking water. Locally we will ensure that all of our emergency response staff and drinking water operators are in possession of our vulnerable area mapping.

b) New Transportation Infrastructure

Locally we will ensure all of our municipalities are in possession of our vulnerable area mapping so they can make informed decisions when planning new transportation infrastructure. The province will ensure all ministries have access to this mapping.

c) Travel Time of IPZ-2

This document is being submitted to the MOE so they can take this concern into consideration and decide whether to revise the Provincial Technical Rules.

6. Untreated Septage Spreading

Concern

Hauled sewage, known informally as septage, consists of the raw, untreated liquids and solids that are pumped out of septic tanks and holding tanks. These tanks can be found on residential, commercial and industrial properties. Untreated septage has not been treated to reduce pathogens, and is considered a waste. Since hauled sewage is considered to be a waste, its application to land is regulated under the *Environmental Protection Act*. Septage does not include untreated portable toilet waste which cannot be applied to land.

Concerns have been raised that septage should not be spread on land where private well water could become contaminated or in floodplain areas where septage could be washed into waterways within an Intake Protection Zone.

Opportunities

Under the *Clean Water Act* the application of untreated septage to land is designated a significant drinking water threat in vulnerable areas scored 8, 9 or 10. This means the Committee will be developing a policy to either manage or prohibit the application of septage in these areas to ensure the activity ceases to be a significant drinking water threat. This policy will only apply to areas close to municipal wellheads and water treatment plant intakes because vulnerability scores of 8, 9 and 10 can only be assigned within Wellhead Protection Areas and Intake Protection Zones.

The MOE discourages the application of untreated septage to land and intends to ban the application of hauled sewage to land in the future. However, the government believes that the capacity to treat septage must be created in order to successfully implement such a ban. This activity is currently banned in British Columba, Quebec, Newfoundland and Labrador, and New Brunswick.

Other Opportunities and Challenges

Most private wells are outside of Wellhead Protection Areas and Intake Protection Zones where the Committee's source protection policy will not apply. The Committee can develop policies in these larger areas to protect regional groundwater however, they are limited in what policy tools they can use and developing these policies is discretionary. See Concern #1 – Protecting Private Wells and Intakes

- Protecting regional groundwater - HVAs and SGRAs; and
- Designating "other" systems

7. Ottawa River

Concerns

a) Ottawa River Watershed

The largest municipal drinking water systems in the Mississippi-Rideau Source Protection Region are the City of Ottawa's intakes on the Ottawa River. The Britannia Water Purification Plant and the Lemieux Island Water Purification Plant are located along the Ottawa River in the urban area of Ottawa and together they provide drinking water for approximately 814,000 people.

Understandably, the overall health of the Ottawa River has been an issue of concern to the Mississippi-Rideau Source Protection Committee since they convened in 2008. The Ottawa River basin encompasses an area of approximately 146,300 square kilometres with countless rivers, lakes, streams and drainage areas. The MRSPR makes up a mere 6% of this total area. Although the Mississippi-Rideau Region works closely with their neighbouring source protection regions and City of Ottawa staff, the larger issue at play is the overall water quality, water quantity, and ecological integrity of the interprovincial Ottawa River.

Protecting the Ottawa River watershed is beyond the capacity and scope of the Mississippi-Rideau Source Protection Region or its Source Protection Authorities. To address this, an inter-jurisdictional committee needs to be formed that is empowered to protect the water quality, quantity, and the ecological integrity of the Ottawa River through a watershed approach.

b) City of Ottawa Intakes

A more localized concern is the inability to protect the City of Ottawa's intakes from potential threats within the full 2 hour time-of-travel area upstream of the City of Ottawa's intakes because that area extends into Quebec. The *Clean Water Act* is provincial legislation that does not apply in Quebec so the Mississippi-Rideau Source Protection Committee can only write policies to address threats in Ontario.

c) Chalk River Laboratories and Tritium

Atomic Energy of Canada Limited operates a nuclear research facility called the Chalk River Laboratories, approximately 180 km upstream of the City of Ottawa's water treatment plants on the Ottawa River. In 1988, the Chalk River Laboratories spilled Tritium into the Ottawa River and the substance was detected in the Ottawa River at the City of Ottawa 16 days later, with peak concentrations reaching approximately 420 Bq/L 23 days after the spill. The peak level was well below the current Ontario Drinking Water Standard maximum acceptable concentration level of 7000 Bq/L. Provincial standards are currently being reviewed by the Ontario Drinking Water Advisory Council.

There is a concern that if provincial standards for allowable levels for tritium are lowered significantly in the future, a similar spill could result in levels exceeding provincial limits at Ottawa's municipal intakes. There is no treatment technology to remove tritium at drinking water treatment plants, so the only way to ensure low tritium levels in drinking water is to avoid contamination. Since the Chalk River Laboratories are outside of the jurisdiction of the MRSPR which ends just upstream of the mouth of the Mississippi River, the concern is that there is no opportunity to recognize or address its potential impact on source water supplying the MRSPR's largest municipal drinking water systems.

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d) Water Budget

MOE Technical Rules specify that a water budget for the Ottawa River is not to be included in the Assessment Report. As noted above the MRSPR's largest municipal drinking water systems draw water from the Ottawa River and it is part of the mandate of the *Clean Water Act* to protect the quality and quantity of municipal source water. Concerns have been raised that not having a water budget for the Ottawa River fails to protect the source of drinking water for 814,000 people.

Opportunities

a) Ottawa River Watershed

In 2008 the Mississippi-Rideau Source Protection Committee passed a motion calling on the MOE to take the lead on establishing an inter-jurisdictional committee empowered to protect the water quality, quantity, and the ecological integrity of the Ottawa River through a watershed approach. In April, 2010 the MOE held a meeting of Ministry, municipal and watershed agency staff from Ontario and Quebec to discuss Ottawa River issues, concerns and existing collaboration. In August, 2010 the National Capital Commission and the Ottawa Riverkeeper held a meeting of First Nations, municipal, and watershed agency representatives from Ontario and Quebec to discuss Ottawa River information, concerns and possible collaboration models. The next step will be for all groups involved in trying to protect the Ottawa River watershed to come together to determine the best way to establish collaborative decision making within the watershed. Discussions are currently underway amongst a number of key ministries and organizations.

b) City of Ottawa Intakes

To best protect source water in the immediate vicinity of the City of Ottawa's intakes, the MRSPR and City of Ottawa staff engaged the Ville de Gatineau in the summer of 2010, to determine if information could be shared among the two municipalities that would help:

- Delineate a complete IPZ-2 for Ottawa and Gatineau intakes (not ending the delineation at the provincial boundary because information is not available for the other side); and
- Determine what potential threats may exist on both sides of the river that could impact intakes on one or both sides of the river.

In the Proposed Assessment Reports there is a preliminary IPZ-2 delineated into Quebec for the City of Ottawa's intakes. This, and other information pertaining to the Ottawa intakes, will be updated in future Assessment Reports as data and modeling is refined.

c) Chalk River Laboratories and Tritium

In May 2010, the Mississippi-Rideau Source Protection Committee passed a motion supporting the recommendation in the *Report and Advice on the Ontario Drinking Water Quality Standard for Tritium* produced for the Minister of Environment. The report recommended the Ontario Drinking Water Quality Standard for tritium be lowered to 20 Bq/L.

In May 2010, the Committee also called on the respective regulatory/governing agencies of the Chalk River Laboratories to work with the MRSPR to develop policies, protocols and best management practices to protect the municipal source water quality of the Ottawa River. The Committee also requested that the Chalk River Laboratory inform the Committee about their current regulatory/governing framework with regards to minimizing tritium releases, their emergency spill protocols for the site and monitoring and reporting protocols.

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The Committee was invited to meet with senior staff at the Chalk River Laboratories on October 13, 2010. The Committee received a thorough briefing about operations at the site, their environmental monitoring and spill reporting, and information about the relative risk of tritium. Additional scientific reports were also provided to the Committee as a follow up to the meeting suggesting that a 20 Bq/L Ontario Drinking Water Quality Standard for tritium would be unnecessarily low.

d) Water Budget

This document is being submitted to the MOE so they can take this concern into consideration and decide whether to revise the Provincial Technical Rules.

Challenges

The ability for Ottawa Watershed groups and agencies to work together on collaborative decision making could be constrained by funding. Available funding will also dictate how much work can be achieved in delineating "true" Intake Protection Zones for the City of Ottawa and Ville de Gatineau intakes and enumerating potential significant threats. All levels of government are encouraged to support these important initiatives in any way they can, be it in-kind support such as staff time or financial support.

8. Surface Water Vulnerability Scores

Concern

Professionals have been carrying out groundwater Wellhead Protection Area studies since the late 1990s. This gave the MOE a wealth of experience and established best practices to draw from when developing provincial Technical Rules governing groundwater studies. The result is a fully prescribed approach for how to derive Vulnerability Scores for Wellhead Protection Areas, an approach that has been applied consistently across the province.

In contrast, surface water Intake Protection Zone studies are being undertaken for the first time in Ontario. With little experience and few "lessons learned" to draw from, provincial Technical Rules for surface water studies are not as prescriptive regarding vulnerability scoring for Intake Protection Zones. Rather, the Technical Rules require locally developed methodologies to be used.

The Technical Rules prescribe that surface water Vulnerability Scores (V) be equal to the product of an Area Vulnerability Factor (B) and a Source Vulnerability Factor (C), where V = B x C. However, the Technical Rules do not provide explicit details on how to calculate B and C. Instead, they identify various matters to be considered.

Per the Technical Rules, the Area Vulnerability Factor (B) is to be based upon the following variables:

- the percentage of area of IPZ-2 or IPZ-3 that is land;
- the land cover, soil type, permeability of the land and the slope of the land;
- the hydrological and hydrogeological conditions where transport pathways are located; and
- the proximity of the area of the IPZ-3 to the intake.

And, the Source Vulnerability Factor (C) must be based upon the following variables:

- the depth of the intake below the water surface;
- the distance of the intake from land; and
- the history of water quality concerns at the intake.

In addition to the above, the Technical Rules specify the following:

- the Area Vulnerability Factor for IPZ-1 must be 10;
- the Area Vulnerability Factor for IPZ-2 is not less than 7 and not more than 9;
- the Area Vulnerability Factors for IPZ-3 are not less than 1 and not more than 9;
- the Area Vulnerability Factor for IPZ-3 shall not be greater than the Area Vulnerability Factor assigned to IPZ-2; and
- the Source Vulnerability Factor shall be 0.9 or 1 for the municipal surface water intakes located in the Mississippi-Rideau Source Protection Region.

The above Technical Rules set boundaries within which to derive Vulnerability Scores, but allow for considerable variation in implementation approaches, and consequently considerable variation in the resultant scores. Based upon discussion with other source protection regions, it is evident that the Rules are being applied differently across the province.

a) Local Vulnerability Scoring Methodology

Many individuals and groups raised concerns that it should not be left up to individual consultants, staff and Committees to develop a local methodology. There were concerns that local methodologies could introduce bias, inconsistent levels of source water protection across the province, and that regions developing unique approaches was a waste of public money.

b) Precautionary Approach

Another concern was some Mississippi-Rideau Source Protection Committee members and members of the public argued that the Technical Rules should be applied in the most precautionary manner possible to produce the highest possible Vulnerability Score. They reason that the Technical Rules rely on the consideration of simple indicators only, rather than a science-based assessment of how a contaminant spill would behave. Furthermore, it has proven to be very difficult for technical advisors to scientifically justify any particular method over another without some aspect of the approach being viewed as “arbitrary”.

However, simply opting to produce the highest scores possible is equally arbitrary. Additionally, it carries with it the weight of regulating the greatest number of land use activities under the Source Protection Plan over the largest possible area, without the science-based rationale to justify such.

c) Aging Infrastructure

Concerns were raised that consideration was not given to aging sewer infrastructure when determining Vulnerability Scores and therefore the scores do not adequately reflect the risk to our drinking water sources in the future.

d) Historical Drinking Water Quality

Concern has been raised about the use of historical drinking water quality records to determine the Source Vulnerability Factor. While historical records cannot predict if a future spill will occur, some support the rationale that they do provide information on whether an intake would be affected by a spill or not. The frequency of historical drinking water incidences can be an indicator of how vulnerable a drinking water intake is to contaminant releases.

e) Source Vulnerability Factor

Concerns were also expressed about the Source Vulnerability Factor criteria in the provincial Technical Rules. There are only two choices for the source vulnerability factor - 0.9 or 1.0. it was felt that there should be a range of options like there is for the Area Vulnerability Factor.

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Opportunities

After much discussion, and many refinements, the Committee did approve a vulnerability scoring approach in September, 2010 that they felt provided a reasonable first time assessment, with the understanding that vulnerability scores can be updated as better methods become available. As the following table shows, using the chosen methodology, the Vulnerability Scores for the Intake Protection Zones are in most instances at or close to the highest possible values permissible in the Technical Rules. Vulnerability Scores that are not the highest possible reflect the specific characteristics of that particular river and/or intake.

	Zone	IPZ-1	IPZ-2	IPZ-3
	Possible Vulnerability Scores	9 or 10	6.3 to 9	0.9 to 9
	Vulnerability Score Results			
Intake Protection Zones	Carleton Place	10	9	4-8
	Perth	10	9	4-8
	Smiths Falls	10	8	4-8
	Britannia	9	8.1	3.6-7.2
	Lemieux Island	9	8.1	3.6-7.2

Many Committee members, municipal and MRSPR staff, consultants and the public feel strongly that MOE guidance on a semi-quantitative approach of determining vulnerability scores for Intake Protection Zones is needed. It is suggested that the province assemble a panel of experts to determine a clear:

- statement of outcomes of interest, measurement endpoints and thresholds for distinguishing “success”;
- 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; and
- understanding of the mapping between IPZ scores and the set of risk management options

The panel could then:

- assess methodologies that were used by source protection areas and regions for the first round of Assessment Reports;
- identify a preferred scoring methodology; and
- prepare a voluntary Technical Guidance document that source protection areas and regions could follow who do not want to develop a local methodology.

9. Geothermal Systems

Concern

Geothermal heating systems are becoming more popular, and concerns have been raised as to the potential impact they may have on groundwater quality, primarily through contamination if there was a leak in the system.

Opportunities

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.

Challenges

The locations of existing geothermal systems are generally unknown at this time.

10. Source Protection Plan Implementation Costs

Concern

The Provincial Government is currently funding 100% of the source protection planning process until Source Protection Plans are complete in late 2012. This includes the cost of technical studies, consultants, peer review, source protection staff and the Source Protection Committee. It should be noted that many municipalities have generously contributed staff time in support of local source protection planning work and these costs have not been covered.

Currently the Province has not committed funding to cover the cost of implementing Source Protection Plan policies. There is wide spread concern among municipalities about the costs they may incur having to implement and enforce Source Protection Plan policies. There is also wide spread concern among property owners in vulnerable areas about what costs they may have to incur to adhere to new requirements or restrictions under Source Protection Plans.

a) Costs for Municipalities

Implementation costs will depend on the number of significant drinking water threats and the types of policies chosen to address them. Under the *Clean Water Act* a substantial portion of implementation falls to the municipalities through the Risk Management Official role.

The Committee, Source Protection Authorities, municipalities and the public applaud the province for generously funding the source protection planning process through its first three phases (Terms of Reference, Assessment Report, and Source Protection Plan), however they all recognize the essentialness of 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). The final three stages will determine the success of source protection in Ontario.

b) Costs for Property Owners

The cost for a property owner to implement a Source Protection Plan requirement will depend on the type of policy tool used to manage the drinking water threat. The MRSPR has advised MOE on multiple occasions that property owners are very concerned about potential costs they may incur and they feel it is unjust for a small group of property owners to bear the cost of protecting a shared resource like drinking water.

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Opportunities

a) Costs for Municipalities

The MRSPR has repeatedly told MOE, on our municipal partners' behalf, that municipalities cannot absorb additional source water costs into their current budgets. The MRSPR will continue to lobby for provincial funding to help municipalities implement source protection policies.

b) Costs for Property Owners

The *Clean Water Act* does not allow compensation to be paid to affected property owners, but it has entrenched in law a financial assistance program called the *Ontario Drinking Water Stewardship Program*. Currently this program has funding until 2011 to provide grants to undertake actions within vulnerable drinking water areas in advance of approved Source Protection Plans. The Act however, states that the intention of this program is also to provide financial assistance to persons whose activities or properties are affected by the Act. The MRSPR has been pressuring the province for generous ODWSP program funding to continue beyond 2012 so that property owners impacted by Source Protection Plan policies can access funding to help them implement the policies.

The Committee has also committed, through their mission statement: *"we will strive to propose policies in an open and consultative manner that are effective, economical and appropriate for local communities".*

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4.0 Community Outreach

Date: November 22, 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 to raise awareness and understanding of the source protection planning process. These activities include information booths at events, presentations at meetings and articles in newsletters and local papers. It is important that staff and members keep each other informed about the activities they are involved in so that we can coordinate our participation and prepare appropriate materials in advance. This includes coordinating with our neighbouring regions for outreach covering Eastern Ontario.

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

1. *Chair / PM Teleconference with MOE*
    - November 15 (Chair Stavinga and Sommer regrets)
2. *Eastern Ontario Source Protection Areas/Regions Meeting*
    - November 22, Brockville (Brian, Sommer and Allison attended)
3. *Rideau Valley Source Protection Authority Meeting*
    - November 25, Manotick (Sommer attending)
4. *Mississippi Valley Source Protection Authority*
    - December 1, Almonte (Sommer attending)

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. *Mississippi-Rideau Source Protection Plan Working Group*
    - December 9, Perth (Allison, Sommer, two SPC members attending)
2. *Project Managers Meeting*
    - January 11, Toronto (Sommer attending)
3. *Provincial Chairs Meeting*
    - January 17-18, Toronto (Chair Stavinga and Sommer attending)