

MISSISSIPPI-RIDEAU SOURCE PROTECTION REGION
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MINUTES

**Mississippi-Rideau
Source Protection Committee**

May 7, 2009

#4/09

Present: George Braithwaite Scott Bryce
 Domenic Idone Paul Knowles
 Patricia Larkin Peter McLaren
 Christine Leadman Randy Malcolm
 Beverly Millar Eleanor Renaud
 Janet Stavinga (Chair) Mary Trudeau

Jean Guy Albert (Medical Officer of Health Liaison)
Ken Graham (Source Protection Authority Liaison)
Mary Wooding (Ministry of the Environment Liaison)

Regrets: Alex Cullen Carol Dillon
 Richard Fraser

Staff: Sommer Casgrain-Robertson Roz Kee
 Paul Lehman Emily Saumure
 Brian Stratton

SPA Members: Mark Burnham (Chair, Mississippi Valley Conservation)

Guests: Heather Wilson (J.F. Sabourin)

1.0 Welcome

Chair Stavinga welcomed everyone to the meeting and invited Deputy Reeve Ed Sonnenberg of Carleton Place to say a few words. Deputy Reeve Sonnenberg welcomed everyone to the meeting, acknowledged the good turnout and commended the MRSPC for their hard work and dedication. Deputy Reeve Sonnenberg introduced two other members of Carleton Place Council in attendance, Councillor Louis Antonakos and Councillor Wendy Leblanc.

Chair Stavinga had Committee members introduce themselves and indicate which sector or interest they represent. Chair Stavinga then introduced Mark Burnham, Chair of Mississippi Valley Conservation and Paul Lehman, General Manager of Mississippi Valley Conservation. She then had staff introduce themselves. Chair Stavinga then turned to the audience and asked municipal staff in attendance to introduce themselves: Sarah Cooke and Ted Joynt from Smith Falls, and Greg Marriotti and Grant Machan from the Town of Perth. Remaining members of the public were then asked to introduce themselves: Jim McCready (Chair of the Urban Forest / River Corridor Advisory Committee for Carleton Place), Frank Mills (Mississippi Lakes Association), Alf Lowley (Federation of Agriculture), Elly Adeland (Polaris

Institute), Colin Stephenson (Friends of the Tay), Rick Kwissa (Urban Forest / River Corridor Advisory Committee for Carleton Place and the Riverfront Conservation Association), Bill Slade (Mississippi Valley Field Naturalists), Shirley Duncan, (Canadian Property Rights Coalition), Bill Duncan (President, Canadian Property Rights Coalition), Phil Warland, (Canadian Property Rights Coalition) and Heather Wilson (J.F Sabourin).

a) **Agenda Review**

Chair Stavinga went over the purpose of the meeting and the agenda.

b) **Notice of Proxies**

None

c) **Adoption of the Agenda**

Motion 1-04/09

That the Agenda be adopted.

Carried

d) **Declarations of Interest**

None

e) **Approval of Minutes**

Motion 2-04/09

That the minutes of the Mississippi-Rideau Source Protection Committee meeting of April 2nd, 2009 be approved as amended.

Carried

f) **Status of Action Items**

Chair Stavinga gave an update on Action Item #1. A letter was sent to the Ministry of the Environment on April 9 indicating that both Source Protection Authorities had endorsed the MRSPC's motion calling on the Province to create an Ottawa River Inter-jurisdictional Committee. The Raisin-South Nation Source Protection Committee passed a similar motion on April 23 as did the City of Ottawa's Planning and Environment Committee on April 28. Ottawa City Council is expected to carry the motion on May 13.

Sommer Casgrain-Robertson notified members that a revised Assessment Report reference sheet had been placed in their blue folders. Ms. Casgrain-Robertson explained that this document is intended to provide members with a general overview of the Assessment Report process and it does not reflect intricacies or exceptions in the process.

Mary Wooding, MOE Liaison, informed the MRSPC that the Saugeen, Grey

Sable, Northern Bruce Peninsula Source Protection Committee are removing the issue of compensation from their Terms of Reference and will resubmit it to the Ministry for approval.

Ms. Wooding also provided members with an update on Site 41 in Tiny Township, Simcoe County, where a proposed landfill has been approved. Ms. Wooding explained that the site is not located in a wellhead protection area or intake protection zone and the aquifer in that area is considered low to moderately vulnerable. The MOE has assigned a dedicated inspector to ensure that the construction of the landfill complies with all approved applications and that the operation of the landfill site is closely monitored. The landfill's Certificate of Approval also requires that a community monitoring group be struck with representation from residents of the county, community & local council. Chair Stavinga thanked Mary for the update and recommended that if members had further concerns or questions that she would take them up with the Chair of that region at the Quarterly Chairs Meeting June 1 and 2. Members expressed their concern that MOE had approved a landfill site on top of a pristine aquifer and requested that Chair Stavinga raise this issue with the Chair of that region.

Members had no further questions about the Action Items.

Motion 3-04/09

That the Mississippi-Rideau Source Protection Committee receive the following report for information.

Carried

g) Correspondence

None

2.0 Public Delegation

Howard Robinson from the Mississippi Valley Field Naturalists (MVFN) gave a presentation entitled "Adapting to Climate Change in the Mississippi Watershed". The presentation highlighted a two day climate change workshop held in Almonte by Mississippi Valley Conservation and the MVFN in September 2007. It also focused on a new publication called 'From Impacts Towards Adaptation – Mississippi Watershed In a Changing Climate' that was released in the fall of 2008. The presentation stressed the need to plan for climate change adaptation rather than focus on the quantitative study of climate change. A copy of the presentation is attached.

A member asked what the source of data was for a number of the graphs, maps and statements in the presentation. Mr. Robinson explained that some of the data was from Environment Canada, the National Research Council and the Ottawa Airport. Mr. Robinson encouraged members to read the report 'From Impacts Towards Adaptation' written by Paul Egginton and Beth Lavender which was provided to members at their April meeting. This report contains many references

and links to the data sources used in the presentation. Mr. Robinson will also provide additional information regarding the data used to Ms. Casgrain-Robertson for circulate to members.

A member noted that data from the City of Ottawa climate change report agreed with the conclusion that temperatures will increase, but how do we know that will lead to lower water levels. This presentation is only about the need to plan for adapting to climate change. The publication by Egginton and Lavender explains how it was concluded that water levels would decrease. It is predicted that there will be less water overall in the summer but there will be more severe storms and flash floods. Members stated that if the MRSPC uses this information in their future source protection planning work they will need to ensure strong evidence supports the claim that water levels will decrease as a result of climate change.

Brian Stratton informed members that there are two Assessment Report Technical Rules that pertain to climate change. First, a Tier 2 water budget must consider the climate of the local area, including historical trends and existing projections relating to the climate changes of the area. Second, a summary must be included in the Assessment Report outlining what is known about local climate change trends and what impact climate change may have on the Assessment Report findings.

Bill Duncan of the Canadian Property Rights Coalition stated that we need to hear more balance when it comes to climate change. Everyone talks about increasing temperatures and the negative impacts of climate change. The photo in the presentation showing the spillway around the hydro dam in Almonte is misleading because it indicates low water levels in September 2007 yet there was no drought that year, farmers had good crops. Mr. Robinson responded that the photo was not trying to distort facts, it was simply showing that the water level was low that year at the falls.

Chair Stavinga thanked Mr. Robinson and the MVFN for their presentation. Chair Stavinga recommended two additional resources to the MVFN. The Federation of Canadian Municipalities' program called Partners for Climate Protection, where participating municipalities have a shared objective to reduce green house gas emissions. Their approach is based on a defined action plan for both the inventorying and implementation of various strategies. Also, the Columbia Basin Trust is working in partnership with the Regional Districts of the Kootenays, local municipalities and First Nations to complete inventories of greenhouse gas (GHG) emissions and develop action plans for reduction.

3.0 Community Outreach

Ms. Casgrain-Robertson notified members that the draft Carp groundwater study was presented to the Mississippi Valley Source Protection Authority on April 15, and the draft Kemptville and Merrickville groundwater studies were presented to the Rideau Valley Source Protection Authority on April 23. Both Authorities endorsed the studies and public open houses are currently being planned for the

second week of June. These open houses are being co-hosted by the municipality. As soon as dates and locations are confirmed the open houses will be advertised in newspapers, press releases and on the website.

Ms. Casgrain-Robertson also reported that the Mississippi-Rideau Source Protection Region had a booth at the Ottawa Eco-Stewardship Fair on April 18. This event was well attended and staff received a number of questions about local source protection planning work.

Ms. Casgrain-Robertson reported that at the April 28 Project Managers meeting MOE stated that they received a number of comments on the Ontario Drinking Water Stewardship Program and that they were very consistent: simplify the process, allow more local flexibility, target drinking water threats, and fund small municipal infrastructure. MOE is just sorting out what changes they can implement in the short term for the 2009-2010 program and what changes will be implemented in 2010-2011.

Ms. Casgrain-Robertson added that the next Quarterly Chairs meeting will be June 1 and 2 in Grand Bend and Chair Stavinga and Ms. Casgrain-Robertson will be attending.

Patricia Larkin informed the MRSPC that the Mississippi Valley Field Naturalists received funding through the Ontario Drinking Water Stewardship Program to teach seven grade eight classes about source water protection. Their program is called "Engaging Grade 8s in Source Protection Planning".

Motion 4-04/09

That the Mississippi-Rideau Source Protection Committee receive the following report for information.

Carried

4.0 Assessment Report Development

Sommer Casgrain-Robertson reminded everyone that summaries of the groundwater studies were provided in the agenda and complete consultant reports were provided to members on CD and are available to the public. The study summaries prepared by staff are intended to present study findings in a reader friendly manner and will be an important communications tool during public consultation. Once the MRSPC approves studies and their summaries as *draft for public consultation* they will be presented to the Source Protection Authorities, municipalities and then the public. Public comments received on *draft* studies will be considered by the MRSPC when developing their *draft* Assessment Reports in December.

Brian Stratton presented *preliminary draft* study findings from the Carleton Place, Perth and Smith Falls surface water studies. Mr. Stratton acknowledged the important contributions and excellent working relationship with the following municipal staff: Greg Mariotti (Town of Perth), Sarah Cooke

and Ted Joynt (Town of Smith Falls) and Dave Young (Town of Carleton Place). Mr. Stratton also introduced Heather Wilson from J.F. Sabourin who was the lead consultant, and Mississippi-Rideau staff member Emily Saumure who managed the studies.

Frank Mills, Mississippi Lake Association, asked if the two hour time of travel was calculated using mean flow since seasonal water levels can vary greatly. Heather Wilson from J.F. Sabourin explained that the HEC RAZ model was used which determines average velocity between chosen cross sections of the river. The model used the 1 in 2 year flow rate, also called “bankful flow” by the Department of Fisheries and Oceans. This flow rate is recommended in the technical rules and has been used by most source protection committees.

A member asked what the travel time was at the border between IPZ-1 and IPZ-2. Mr. Stratton explained that off hand the travel time for that exact location is unknown. What the mapping shows is IPZ-1 which is a set distance from the intake and IPZ-2 which is the outer limit of the two hour time of travel upstream of the intake. The travel time of particular locations within IPZ-2 were not calculated. The Technical Rules assume that if a spill occurs in IPZ-1 there will be no time to respond, so this zone automatically receives the highest vulnerability score of 10. In contrast, IPZ-2 is based on the water treatment plant operator shutting down the intake upon notification of a spill. The zone must be a minimum two hour time of travel and can be increased if the municipality requires longer to shut down the intake. The vulnerability score must be between 7 and 9 and is based on local physical features.

A member asked why some areas on shore close to the intake were not included in IPZ-2 while other areas further from the intake were included. Mr. Stratton explained that the areas included in IPZ-2 were connected to the river through some means (e.g. ditch, stream, storm sewer). Members asked how new sewers in an area would be addressed. Mr. Stratton explained that all Assessment Reports will have a review cycle at which time intake protection zones would be reevaluated and would account for new sewer networks or connections to the river.

A member clarified that the shape of IPZ-1 is 200 metres upstream with modifications to take into account the ability of contaminants to enter the river close to the intake. Mr. Stratton confirmed that IPZ-1 does account for factors that would facilitate contaminants getting into the intake such as land slope and soil type.

A member clarified that a plant operator can shut down an intake within five minutes once notified about a spill, but receiving notification could take any length of time.

Mr. Duncan, Canadian Property Rights Coalition, asked how large the Carleton Place intake protection zone was. Mr. Stratton responded that IPZ-1 is approximately 0.1 km², IPZ-2 is approximately 4 km² and IPZ-3 is approximately 1,500 km². The member of the public stated that IPZ-2 encompasses lots of homes and recreational boating and asked what affect this will have on them. Chair Stavinga explained that you need to look at the

Threats Tables in the Technical Rules which lists very specific circumstances under which a land use activity could be considered a threat. If a particular land use activity is considered a significant threat in the tables, it does not mean it must be eliminated, it simply means the threat must be mitigated. For example, if fuel storage is a significant threat then perhaps a better tank with secondary containment will be required to mitigate the threat. Chair Stavinga reminded everyone that a Source Protection Plan Discussion Paper would be released shortly by MOE and it will contain our first look at the types of land use policies that could be developed under the Clean Water Act.

Jim McCready, Carleton Place Urban Forest / River Corridor Advisory Committee, asked if development was considered a threat. Mr. Stratton explained that it is important to look at the vulnerability score of an area and then look at the circumstances listed in the Threats Tables. For the Carleton Place, Perth and Smiths Falls studies IPZ-1 has a score of 10, IPZ-2 a score of 8, and IPZ-3 has scores that can range from 1 to 8.

Some members questioned why there could not be a range of vulnerability scores in IPZ-2 so that scores could gradually drop from 10 to 1 as you move further away from the intake. Members felt it was irrational that the vulnerability scores drop from a 10 to an 8 as soon as you cross from IPZ-1 into IPZ-2. Mr. Stratton explained that earlier iterations of IPZ-2 did have a range of vulnerability scores but the final Technical Rules only allow one vulnerability score for all of IPZ-2.

A member raised concerns about the methodology used to determine the 'area vulnerability factor' for IPZ-2. They felt it should not be determined relative to other parts of Ontario. They stated the factor should be based solely on local conditions, regardless of how those conditions compare to other parts of the Province. Ms. Wilson explained that under the Technical Rules, the area vulnerability factor for IPZ-2 must be 7, 8 or 9, with 7 being the least vulnerable and 9 being the most vulnerable. As per the Technical Rules, four local criteria were evaluated to determine the area vulnerability factor: average precipitation, runoff potential, transport pathways, and the ratio of land to water. These local values were compared to provincial data ranges to determine where Carleton Place, Perth and Smiths Falls should each fall between 7 and 9. Ms. Wilson also explained that there is a local data gap regarding the total length of transport pathways in IPZ-2 for Carleton Place, Perth and Smiths Falls so an estimate was derived. The estimate was calculated by taking the information that was available and multiplying it by three to determine a maximum value and dividing it by three to determine a minimum value.

A member reiterated that the methodology should not compare local conditions to the rest of the province to determine where a local area vulnerability factor should rank between 7 and 9. A member felt that the methodology should allow an area vulnerability factor of 9 in IPZ-2 for Carleton Place, Perth and Smiths Falls despite that in relation to the rest of the province, those three IPZ-2s would not be among the most vulnerable. Ms. Wilson explained that the provincial mean and maximum values simply provide the boundaries between 7 and 9 and that the area vulnerability factor

chosen for an IPZ-2 reflects the four local criteria.

A member asked if climate change was considered when evaluating average precipitation to determine area vulnerability factors. Mr. Stratton explained that as per the Technical Rules, historical climate change data was used. The Rules also ask each source protection region to review what they know about local climate change and comment on whether they think climate change will impact the results of the Assessment Report. This would include IPZ delineation and scoring. Members also indicated that it is not just changes to average precipitation that needs to be considered but a potential increase in extreme storm events.

Mr. Robinson, Mississippi Valley Field Naturalists, asked if the time it takes to report a spill was included in the definition of the two hour time of travel. Ms. Wilson explained that operators were asked how long it would take them to shut down the intake once they were notified of a spill. Operators for Carleton Place, Perth and Smith Falls all responded they could shut down within five minutes. It would be impossible to calculate how long it would take for a spill to be reported, some spills are noticed right away and reported others could go unnoticed. Members asked that staff revise the study summaries to clearly state that reported shut down times are once a spill is reported.

Mr. Duncan, Canadian Property Rights Coalition asked what was being done to other parts of the region like Ashton. There was concern that business in some areas would be captured in Intake Protection Zones and Wellhead Protection Areas while businesses in other areas would not. There was also concern that there would be differences in water quality in different areas. Mr. Stratton indicated that an evaluation of potential threats is currently underway and Chair Stavinga encouraged all interested parties to stay abreast of upcoming findings and open houses.

A member asked how it was determined where a transport pathway should be cut off within the IPZ-2, for example a ditch running along a road. Ms. Wilson explained that calculations were undertaken to determine the length that would equate to a travel time of 2 hours –distance was a factor of time of travel and efficiency of the pathway.

A member asked what the effect would be if a different precipitation value was used such as an extreme storm event. Ms. Wilson responded that an adjustment to the weighting would have to be given to each value used in the calculation.

A member asked when threats would be evaluated. The member was particularly concerned about an abandoned gas station. Mr. Stratton indicated that Dillon Consulting is currently doing an inventory of potential threats and it will be presented to the MRSPC in the coming months. If identified as a significant threat, then policies would be developed by the MRSPC as part of the Source Protection Plan to mitigate that threat. Ms. Casgrain-Robertson reminded members that there are many other pieces of legislation that protect water and drinking water. She directed them to a new provincial brochure included in their blue folders that outlines all existing drinking water legislation and what it protects, it is called “How is Ontario’s Drinking Water Protected?”.

A member sought confirmation that a land use activity listed as a significant threat in the provincial Threats Tables may not necessarily be a significant threat on the ground if the property owner has already put risk management strategies in place. The member noted that requirements under other legislation may have already addressed some threats that will be identified in the source protection planning process. Mr. Stratton confirmed that that was correct.

A member asked if Dillon would be looking at historical data captured by MOE in addition to aerial photos and other resources. Mr. Stratton confirmed that Dillon would review MOE records, which are currently being compiled by MOE staff.

Chair Stavinga summarized the fundamental issues that had been raised by the Committee: the technical rules are very vague, gradation of vulnerability scores should be allowed in IPZ-2, emphasis should be given to local conditions rather than normalizing to provincial ranges for determining area vulnerability factors, consideration should be given to the impact of extreme event, and response times to shut down a plant do not incorporate the time it takes for a plant operator to be notified of a spill.

Ms. Wilson explained that the study results are good news, the vulnerability scores show that local conditions in Carleton Place, Perth and Smiths Falls help protect the intakes from being more vulnerable than they would be if larger areas were hardened with pavement leading to more runoff or if more storm outlets were located upstream of the intakes (Smiths Falls has none).

A member asked that the methodology look at “significant rainfall” values rather than “mean annual precipitation”. That would allow the MRSPC to more easily study climate change effects in the future.

A member suggested that IPZ-2 may need to be increased to provide a more realistic window for a spill to be reported, the plant operator to be notified and the intake to be shutdown.

A member also cautioned that there were a number of data gaps so studies need to be precautionary given the uncertainty. Members understood the Technical Rules to indicate that IPZ vulnerability scores could range from 1 to 9, however scores in IPZ-3 seem to be limited to 1 to 7 which does not seem precautionary. Ms. Wilson clarified the technical rules indicate that the vulnerability score of IPZ-3 cannot be higher than IPZ-2. Ms. Wilson also noted that the methodology used to determine scores in IPZ-3 is different than IPZ-2 since distance has to be taken into account and therefore, a range of scores can be assigned.

A member pointed out that vulnerability scores in Carleton Place seem to drop from an eight immediately to a one which seems odd. Mr. Stratton explained that the area that scored a one is a wetland which would have limited land uses, and IPZ-3 scores take into consideration land type and distance from the intake. Members stated that it made sense to have a range of scores based on land type.

Chair Stavinga suggested a special MRSPC meeting to continue reviewing

these three surface water studies with representation from MOE to provide some clarity regarding the Technical Rules and the issues of concern raised by the Committee. Members agreed that they would defer approval of these studies as draft for public consultation and would continue their deliberations at a future meeting.

A member stated that surface water operators would want the same level of protection afforded to other surface water systems in the province – no more and no less. That is why it makes sense to determine IPZ-2 area vulnerability factors in relation to values in other parts of the province. Everyone should be equally protected which means not every IPZ-2 across the province should be able to score a nine if their local conditions indicate that their intake is not as vulnerable as an intake elsewhere in the province.

Motion 5-04/09

That the Mississippi-Rideau Source Protection Committee defer approval of the following studies and their summaries as *Draft* for public consultation:

- Carleton Place Surface Water Study;
- Perth Surface Water Study;
- Smiths Falls Surface Water Study

And that the Chair be directed to convene a special meeting of the Committee in the future to allow further deliberations with the presence of MOE Technical staff.

Carried

5.0 Other Business

Domenic Idone announced that he accepted a position with the Department of Infrastructure in the Federal Government and will therefore be resigning from the MRSPC effective May 7. Mr. Idone thanked the MRSPC and stated that he has enjoyed working with this committee. He said the Committee has been a good forum to create consensus for such a worthwhile cause as protecting our source water. Chair Stavinga thanked Mr. Idone for his insightfulness during Committee deliberations and stated that his contributions would be missed as local source protection efforts continue.

Ms. Casgrain-Robertson indicated that a recruitment process will begin to fill two vacant industry/commercial seats. Advertisements will run in local newspapers, a press release will be issued and applications for these two positions will be accepted until June 15. Two people will be chosen by the Source Protection Authorities.

A member informed the MRSPC that the MOE tabled a Toxics Reductions Act and the EBR posting ended today. Members recommended that staff follow the progress of this Act as there could be implications for source water protection work.

A member noted that the Mississippi River Heritage Festival is scheduled for

the end of August. This festival celebrates the 125th anniversary of the end of the McLaren-Caldwell feud over the use of a sluice at High Falls. A federal ruling over its use was the forerunner to the federal Navigable Waters Act.

A member indicated that a recent provincial press release stated that there are anticipated changes to the Mining Act to bring it up to today's standards. The changes have gone through first reading. Ms. Casgrain-Robertson will provide members with a link to the press release. Chair Stavinga informed members that in their blue folders was a copy of a new report prepared in collaboration with Mississippi Valley Conservation called "Effects of Uranium in Well Water Supplies".

6.0 Member Inquiries

None

7.0 Next Meeting

Date: Thursday, June 4, 2009

Time: 7:00 pm ("meet and greet" at 6pm)

Location: County of Lanark Council Chambers, Perth

8.0 Adjournment

The meeting was adjourned at 10.30 pm.

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Janet Stavinga
Chair

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Roz Kee
Recording Secretary