

MISSISSIPPI-RIDEAU SOURCE PROTECTION REGION
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MINUTES

Mississippi-Rideau
Source Protection Committee **December 3, 2009** **#10/09**

Present: George Braithwaite Scott Bryce
Carol Dillon Paul Knowles
Patricia Larkin Christine Leadman
Randy Malcolm Peter McLaren
Beverly Millar Eleanor Renaud
Mary Trudeau

Alan Arbuckle (Source Protection Authority Liaison)
Mary Wooding (Ministry of the Environment Liaison)

Regrets: Alex Cullen Richard Fraser
Drew Lampman Janet Stavinga (Chair)

Jean-Guy Albert (Medical Officer of Health Liaison)

Staff: Sommer Casgrain-Robertson Karyn Cornfield
Brian Stratton

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

Guests: Clare Mitchell (Conservation Ontario)
Scott Lister (Conservation Ontario)

1.0 Welcome

Acting Chair Bryce welcomed everyone to the meeting. Committee members introduced themselves and indicated what sector or interest they represented. Chair Bryce welcomed representatives of Conservation Ontario to the meeting.

a) Agenda Review

Acting Chair Bryce went over the purpose of the meeting and the agenda.

b) Notice of Proxies

None.

c) **Adoption of the Agenda**

Motion 1-10/09

That the Agenda be adopted.

Carried

d) **Declarations of Interest**

None.

e) **Approval of Minutes**

Motion 2-10/09

That the minutes of the Mississippi-Rideau Source Protection Committee meeting of November 5, 2009 be approved.

Carried

f) **Status of Action Items**

Sommer Casgrain-Robertson provided Committee with an update on geothermal systems (Item 1). Based on questions raised by this Committee as well as other Committees across the province, the Ontario Ministry of the Environment (MOE) has prepared a Technical Bulletin speaking to geothermal energy systems as they relate to the source protection planning process. Copies of the bulletin were included in the December agenda package. Ms. Casgrain-Robertson noted that staff are continuing to collect additional information and will continue to work with MOE. Ms. Casgrain-Robertson encouraged the Committee to review the bulletin and to direct questions to her for follow up with MOE.

Ms. Casgrain-Robertson provided an update on the efforts to fill the outstanding vacancy on the Committee for another industry/commercial representative. Ms. Casgrain-Robertson noted that information has been posted on the website and the newspaper advertisements are anticipated this coming weekend. Applications are due by February 1, 2010. A Committee Member asked if a particular industrial/commercial segment was being requested. Ms. Casgrain-Robertson noted that the position is for a representative from any industrial or commercial interest in the watershed region other than agriculture. The Committee composition provides for five economic sector seats, with two specified for agriculture, and the other three for any other industrial and commercial interest. The applications will be reviewed by the two SPAs and they will make the decision as to who would best represent economic interests on the Committee. In response to another question from a Committee Member, Ms. Casgrain-Robertson noted that this is the second public call to fill this vacancy. A Member suggested that staff consider targeted outreaches to such organizations as the National Capital Business Alliance and the Ottawa Chamber of Commerce to advise them of this vacancy. Ms. Casgrain-Robertson highlighted a number of activities that are being undertaken in conjunction to the traditional means of advertising, but also encouraged Committee Members to provide her with any other suggestions that could be pursued.

Motion 3-10/09

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

Carried

g) Correspondence

Acting Chair Bryce drew Committee's attention to the correspondence from Minister Gerretsen to Chair Stavinga on the Ottawa River Watershed inter-jurisdictional Committee. Although the exchange was discussed at our last meeting, Acting Chair Bryce asked Committee if there were any further questions. A Committee Member sought clarification on the understanding of bi-annual meeting as it is a term that is misused and could be interpreted to mean every two years. Ms. Wooding indicated that it was her understanding that it was to mean two meetings per year, but she will confirm this understanding with the Ministry and report back at the next SPC meeting.

Ms. Wooding advised that there continues to be further discussions between MOE and their counterparts in Quebec to drum up interest and contacts for this initiative. A Committee Member inquired as to whether other municipalities, north of the Mississippi Watershed, and on the Ontario side of the river are being brought into the process.

Ms. Casgrain-Robertson stated that as a first step, the names of all the municipalities within the Ottawa River Watershed, both within Ontario and Quebec have been compiled. About one-third of the municipalities are in Ontario and two-thirds are in Quebec. The list of municipalities has been provided to the Province with the intent that they take the lead to establish contact with the municipalities in Ontario and their counterparts in Quebec. It was noted that in the absence of Conservation Authorities, municipalities will play a key role in this process.

Motion 4-10/09

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

Carried

2. Assessment Report Development

Acting Chair Bryce highlighted to the Committee that they are beginning a new phase of work, specifically the review of the draft chapters of the Assessment Report, starting with the *Preliminary Draft Water Budget Chapter*. Acting Chair Bryce noted that this will be the second opportunity for the Committee to provide comments on this document with a third opportunity during the review of the *draft Assessment Report*.

Ms. Casgrain-Robertson noted that this is the first time that the Committee will be reviewing a Draft Chapter. Ms. Casgrain-Robertson provided an overview as to how the various draft Chapters to be reviewed by the Committee will lead into the completion of the *Preliminary Draft* Assessment Report. She noted that the Committee has been receiving various studies and providing feedback to staff. Staff have then taken these comments and incorporated them into the preparation of draft Chapters. Staff are now seeking feedback from Committee on each draft Chapter. Ms. Casgrain-Robertson noted that for each of these draft chapters the technical information should not be new, as it has been seen before by the Committee. However, she stated that staff are seeking the comfort level of the Committee as to how the Chapter has been laid out. Ms. Casgrain-Robertson noted that if members have any concerns, staff would like to hear them at this stage. If members have minor editorial comments that they would prefer not to raise in the meeting forum, members were encouraged to contact Ms. Casgrain-Robertson afterwards.

Ms. Casgrain-Robertson stated that the next time the Committee see this Chapter, it will be contained within the *preliminary draft* Assessment Report with all of the technical findings. She anticipate that *preliminary draft* Assessment Report would be considered by Committee in the spring of 2010, and staff would like to be in the position at that time to be polishing the document versus making any major changes. With the presentation of the *preliminary draft* Assessment Report as a whole, Committee will then be given another opportunity to comment on the document. This will be the document that goes out for public consultation. Public comments will be summarized, as with the Terms of Reference, and the Committee will be given an opportunity to revise the *preliminary draft* Assessment Report to address concerns or issues raised by the public. This revised version will form the *proposed* Assessment Report and will be the document that will go to the Province for approval. At that time there will also be a second opportunity for public review, but the Committee will not be able to revise the document. Rather these comments will be submitted directly to the Province and it will be up to the Province to make recommendations for any changes to the Assessment Report.

Ms. Karyn Cornfield provided a brief overview of *Preliminary Draft Water Budget* Chapter. Chapter 3 Water Budgets includes three sections:

- 3.1 What is a Water Budget?
- 3.2 Conceptual Water Budget
- 3.3 Tier 1 Water Budget

Climate change is also required under the Technical Rules, and it will be included under a separate chapter, that is Chapter 8. In Chapter 3 there is a minimal amount of information relating to climate change, with most of it to be presented within Chapter 8.

Chapter 3 is more detailed than the staff report presented in September 2009, particularly with regards to the conceptual water budget, tables and maps. This

chapter follows the Ministry of Environment's content checklist in the writing of the Assessment Report.

A Member noted that the Appendices were excluded from the printed agenda, but could be found on the electronic version of the report. The Member stated that if the printed materials are to be deemed complete, particularly as we move into the public stage, the Appendices need to be included in their entirety.

In speaking to the format of the Assessment Report Ms. Casgrain-Robertson noted that length of the document will be an issue. She noted that when we go into public consultation hard copies of the Appendices will be provided, at a minimum, at the respective Conservation Authorities. There will be a certain reliance on electronic version for public consultation. On our website we will need to post in downloadable pieces on our website, and we will respond to requests for CDs or flash drives. Ms. Casgrain-Robertson also clarified that the Minister will receive a copy of all the Appendices.

A Member asked whether the web version of the documents could be designed to allow hyperlinks to the specific Tables and Appendices. This would be particularly helpful during the public consultation sessions as it would allow staff to go directly to a specific Table or Appendix, rather than dealing with hard copy versions. Web access of course would be required for these sessions, or the website would need to be placed on staff's computer in its entirety. This would also assist people in their review of the documents on the website.

Ms. Cornfield noted that several minor changes are being proposed within the current Chapter to ensure that it is more reader friendly as well as consistency between the other chapters. She noted that these changes do not impact the results. The proposed changes are as follows:

1. Background information on land cover - If time permits, the land cover percentages in Sections 3.2.2 and 3.2.3 may be updated to reflect a more current dataset. This change will not affect the water budget results. The percentages were presented for background information purposes only.
2. Tier 1 Subwatersheds (Section 3.3.2) - Tier 1 Subwatersheds that were used for Tier 1 water budgets and stress assessments were different than the natural subwatersheds introduced in the Watershed Characterization. The Tier 1 subwatersheds are defined based on flow gauges, whereas the natural subwatersheds are defined based on natural flow outlets. An additional description will be added to this effect in Section 3.3.2.
3. Hydrological Data Sources - Information on evapotranspiration and groundwater recharge calculations will be included in Table 3.2-1.

Ms. Casgrain-Robertson noted that all of the changes made to this document, either by Committee today or later flagged by staff, we be clearly identified within the *preliminary draft* Assessment Report to be considered by Committee in spring 2010.

The following section summarizes the key areas of discussion by the Committee.

Non-Permitted Water Takings

A Member raised a concern about a particular sentence on page 28 which states, “Therefore, the takings listed in the PTTW overestimate the amount of water consumed for anthropogenic uses”. The Member noted that what isn’t mentioned, and often misunderstood by the public is the fact that you don’t need a PTTW for water taking of less than 50,000 L/day. The Member stressed that the cumulative effects of all of these water takings should be mentioned in this sentence. It is understood that PTTW may be larger than what is actually used however there is no estimate for all of the unpermitted water takings and the cumulative effects of these withdrawals. The Member suggested a sentence be added that accounts for the cumulative effects of water that does not require a PTTW to balance out the text.

A Member noted that these concerns could be balanced off with an additional statement that provides perspective on this issue. This statement may note that the cumulative effects of unpermitted takings may be negligible compared to the amount of water available in the watershed, except perhaps in a stressed watershed. That is, a stressed watershed will see more impact from unpermitted takings compared to a watershed that has no problems with water quantity. The Member also noted that it is important that we let the public know about these non-permitted water takings, but in the big picture these takings are deemed to be negligible (with the exception of for example subwatersheds X and Y which are stressed to a considerable degree).

Assumption on the Negligible Effect of Water Diversions

A Member noted concerns about the one of the assumptions of the water budget equation cited in Section 3.2.5 at the bottom of page 28 beginning “Diversions of water between watersheds are negligible therefore this term is assumed to be zero.” The Member expressed concerns that water diversions were deemed to be negligible. The Member stated that a water diversion is occurring in our Region now through the water bottling in Smiths Falls. It was noted that the diversion is currently low, but it could grow. As a precautionary measure, the Member suggested some accounting is required. The Member stated that diversions in the long term are unsustainable, yet with this formula we have assumed they are negligible. The Member noted that diversions will likely increase in the future rather than decrease.

Following up on earlier comments made on the water takings, another Member noted that the following conditions may warrant review of the above-noted assumption, including:

- Diversion of water
- Increased bottled water takings
- Effects of climate change
- Increased irrigation (lawns, crops) with increase ET
- Deteriorating sewer conditions such as sewers leaks and the taking of groundwater and draining it to surface water with no return in terms of infiltration. The Member noted that background documents show sewer

discharges are higher than water withdrawals from wells indicating that there is a net drain so this assumption is already subject to review.

- “Virtual Water” where water is taken up by crops (e.g. apples) traded for goods and shipped out of the watershed will result in a net water loss. This is largely theoretical but with time this may become more of an issue particularly in water scarce areas.

The Member emphasized that the above-noted assumption of negligibility needs to be reviewed regularly based on a review of diversions and activities that may be removing more water from the watershed than would be indicated from withdrawal. We assume that what is withdrawn is equal to what is being put back, however we know of several conditions where this is not the case (as noted above).

Tiled Agricultural Fields

A Member raised concerns with regards to the following sentence on p. 25, “Tiled agricultural fields also inhibit groundwater recharge”. The Member stated that he hopes that this is just a statement that is being noted and is not prefacing limitations to tiling in the future. The Member suggested that changing the wording to “may inhibit” is preferable as he does not want limitations imposed on field tiling as it may result in major drainage issues.

Ms. Casgrain-Robertson noted that this particular concern moves into the policy stage, whereas the technical studies are about what is being observed, calculated and/or derived for the water budget. Any limitations imposed on field tiling in the future would be a question for the Ministry. What different Ministries chose to do with the new information that they are learning through this process will be up to each of these Ministries. However, with regards to the work of the Committee, if tile drainage is deemed to be a threat to municipal drinking water, then the SPC can develop a source protection policy to limit field tiling.

A Member noted that the concerns with regards to future policy implications could be balanced off with an additional statement that provides perspective on this issue, and that in fact the policy component would be looked after by the *Drainage Act*.

A Member stated that in South Nation there was a municipal drain with a plugged culvert. Since it was a municipal drain under the *Drainage Act*, it was deemed appropriate that the culvert be removed and a new one installed. The Township completed this activity and subsequently South Nation Conservation Authority took the Township to court. The Township backed down. *Drainage Act* is already superseded by the *Conservation Act*. The Township was asked to replace the new culvert and to put the drainage back to what it was before and not create a dam.

Ms. Casgrain-Robertson suggested that these comments about policy implications be noted as changes requested and then staff will follow up with the Ministry as to proposed wording to respond to these comments. These requested changes and the follow up will be noted clearly in the upcoming *preliminary draft* Assessment Report for review by the Committee. Acting Chair

Bryce Scott Bryce reminded Members that this is a technical report and not a policy document.

A Member noted that if we are going to include the statement “Tiled fields inhibit groundwater recharge” we need to include an estimate of how much land is actually tile drained. The Member noted we need to be able to quantify it even if it’s just a very small percentage.

Mr. Mark Burnham, Chair of the Mississippi SPA suggested that OMAFRA may have information on tiled fields as they are often the funding agency to support the installation of tile drains. Mr. Stratton stated that this database was examined, but regrettably it is incomplete as not all farmers access the funding.

A Member noted that farmers are required to pay for an upgrade on a municipal drain to pay for their water leaving their property if they put in a tile drain that discharges into a municipal drain, and therefore records are likely available for review.

MVC and RVCA Jurisdictional Boundaries

A Member noted that the sentence on page 27 about the MVC and RVCA jurisdictional boundaries (Section 3.2.4, Paragraph 3, Sentences 3 and 4) should be repeated once again in Section 3.1.1 on page 20 to provide greater clarity to readers as to what watersheds and subwatersheds are included in the determination of the water budget.

Regional Statistics

The Member also noted the value in breaking out separate statistics for MVC and RVCA as the Committee is required technically to complete two assessment reports. For example, “50% of the Region is forest and plantations” can be broken out as X% for MVC and Y% for RVCA.

Statement on Precipitation Input

The Member noted that it is mentioned several times throughout the report that “Precipitation is the only source of water to a watershed”. This statement is technically not correct (e.g. groundwater flux). For credibility, it is important that we need to “tee-up” what we mean by this general statement.

Climate Change Review

The Member also stated that we need to provide more information with regards to the context of the climate change review. The Member noted that the requirement for the climate change review came in after the water budget work was undertaken (as part of the amendments to the Technical Rules). Consequently, we need to make this sequence of events clearer on page 21 (section 3.1.2) and explain why it is not part of the two water budget studies.

A Member noted that the section on the Climate Change Review on page 21 includes the statement, “The Province requires the use of historical data to estimate water supply for Tier 1.” The Member suggested that this sentence be moved up to the preamble to this chapter as it is related to the water budget work herein and not the climate change review (in Chapter 8). The Member

emphasized that it needs to be made abundantly clear that this study is based on historical data.

Data Limitations and Uncertainty

The Member also noted that on page 29 a sentence should be added reiterating that "A discussion of potential impacts of climate change is in Chapter 8."

Minor Comments

Page 34 - "Tier 2 is not recommended..." should be changed to "Tier 2 is not required".

Page 35 - "River River" should read "Rideau River".

Page 35 - The capitalization of "A" in the word "At" in "Rideau River At Ottawa" subwatershed was noted however it is used here as a proper name of the subwatershed. The format was used in the Tier 1 background documents.

Question on Water Budgets

A Member asked why upstream surface water flows are not an input in the water budgets. Ms. Cornfield noted that the water budgets are completed on a subwatershed basis represented by the entire upstream (cumulative) drainage area to the surface water flow gauge where available (otherwise the natural flow outlet). The subwatersheds are treated as headwater subwatersheds (e.g. extends to the upstream headwaters) and therefore result in no surface water flow coming in to the subwatershed (e.g. SW_{IN} equals zero). Surface water flows coming out of the subwatershed (SW_{OUT}) therefore would include flows from any upstream gauge. A statement to this effect can be included in Chapter 3.

Question on Private Well Water Use – 200 L/c/d (Litres per capita per day)

A Member noted other sources cite that the average water use in Canada is 340 L/c/d. Ms. Cornfield noted that the following sources of information were used to select a private well consumption rate of 200 L/c/d:

- 1) City of Ottawa (Michel Kearney) suggested 180-220 L/c/d for rural water use.
- 2) Evaluated metered water use in Montague Township (rural system) is 160 L/c/d (175 L/c/d was mentioned incorrectly during the meeting).
- 3) The Regional Groundwater Study used 175 L/c/d (this was not noted during the meeting but found in the report afterwards)

Question on Climate Data (1971-2000)

The Member observed that the climate data we are citing seems to be outdated and asked whether this is the best we can do? Ms. Cornfield noted that Mr. Bill Hogg, our climate expert from our peer review team, recommended that we use this data for water budgeting work as there is nothing else comparable.

Question on Aquaculture Permit

A Member requested clarification as to the term "aquaculture". Ms. Cornfield noted that aquaculture is another term for fish farming. There is an MNR operated fish hatchery in the Fall River subwatershed (near Sharbot Lake).

Motion 4-10/09

That the Mississippi-Rideau Source Protection Committee approve the following *preliminary draft* Assessment Report chapter for inclusion in the *preliminary draft* Assessment Report, as amended:

- Chapter 3 – Water Budget

Carried

3.0 Community Outreach

Carol Dillon provided an update on the recent annual meeting of the Water Guardians Network (WGN) in Toronto. The MRSPC was well represented with attendance by herself, Patricia Larkin and Chair Stavinga. The WGN is a group made up of environmental groups and members of SPCs across the province. At the Annual General Meeting (AGM) there were approximately seven members from SPCs across the province, with two from the MRSPC. The WGN is run by the CELA, OEN and Environment Defense and Eco-Justice to provide opportunities for people involved in environmental work. The annual meeting also provided opportunities to highlight source protection efforts. There were presentations on the process for the development of Assessment Reports. It was interesting to see the issues other Committees are dealing with. We also had a presentation on the next steps for source protection planning. Although many of the people in attendance were from the Greater Toronto Area there is still an enduring interest in water from private wells. This was one of the issues raised and discussed at the WGN AGM.

Patricia Larkin provided a brief overview of her presentation to the WGN as to the special circumstances of the City of Ottawa. Ms. Larkin expressed thanks to Sommer Casgrain-Robertson, Mary Trudeau and Chair Stavinga for the provision of information for her presentation. The presentation touched about the geography of the Ottawa River watershed and spoke to the Committee's concerns as to the limitations of the delineation of the IPZ2 and IPZ3. In addition, the absence of any data into the water budget for the Ottawa River watershed, including any stressors, was noted. Lastly the presentation spoke to the timelines and the recommendations for the Inter-jurisdictional Committee, finishing up with the recent response from the Minister, in our agenda package today.

Ms. Larkin noted that three issues, in particular, stood out for her from the WGN session including impact of quarry operations on source water protection, the absence of the water bottling industry on the list of threats and the exclusion of private wells under the SPP process.

Ms. Casgrain-Robertson provided an update on the activities of the Planning Working Group. She noted that a draft document has been developed. This interim planning guidance is intended to serve as a tool to assist municipalities as we circulate the various technical maps to them. This guidance document will assist municipalities in better understanding how to use the various maps and how to integrate this information into their decision-making processes. The draft version is now under review with the goal to complete a final draft by February.

Ms. Casgrain-Robertson stated that on November 18th Cataraqui, Raison-South Nation and Mississippi-Rideau provided a joint presentation to the Leeds and Grenville Joint Services Board. The presentation was well received. We are also

intending to ramp up in the New Year another tour of municipal Councils to provide various updates.

Ms. Casgrain-Robertson noted that our Groundwater Threats and Issues Inventory study was presented and received by both of our SPAs.

Ms. Casgrain-Robertson stated that during the Chairs Conference Call an update on the SPP draft regulation was provided. The Province is anticipating that a draft regulation will be posted for comment in the New Year, and perhaps as late as the spring.

Mr. Stratton referred members to the draft Meeting Notes from the November 9th Technical Session on the IPZ studies contained within the Blue folder.

Mr. Stratton encouraged members to contact him if they have any comments or questions about this internal document. Mr. Stratton stated that the Ottawa IPZ will be coming to the Committee in January 2010 and the Inland Rivers IPZ studies in either February or March 2010. Mr. Stratton expressed his appreciation to the participation and insights from Dr. Scott Findlay of the University of Ottawa.

A Member requested that the draft Meeting Notes be circulated to the attendees for review and comments.

A Member reminded Committee that Richard Fraser has extended an open invitation to the Committee to attend the grand opening of their new Broiler Chicken Barn.

Ms. Casgrain-Robertson advised Committee that tomorrow the five source protection areas and regions in Eastern Ontario will be convening a one-day Ministry session with staff from the regional, district, and area offices of interested Ontario Ministries.

The session will provide information on the scope, process, and timing of the source protection initiative; ongoing technical research for assessment reports; implications of the forthcoming source protection plans for provincial ministries; and how their offices can be a part of the effort.

Motion 5-10/09

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

Carried

4.0 Other Business

Ms. Casgrain-Robertson provided clarity to the Committee that the letters to be posted to the affected property owners following up from the Groundwater Threats and Issues Inventory are still in development and will not be going out until the New Year. There is considerable work that staff needs to undertake on their end in preparation to the posting of these letters. An update will be provided at our January meeting and a draft will be circulated for your information.

Ms. Casgrain-Robertson noted that the Assessment Report extension request made back in the spring is no longer valid given certain technical studies have taken much longer than anticipated. A letter will be posted to the Ministry with our revised timeline, work plan and schedule by Chair Stavinga as our deadline is approaching soon. It will be made clear to the Ministry that this letter is a draft and subject to the approval of the Committee in January, as it is the Committee's work plan.

Ms. Larkin noted that the Well Aware Program has not secure provincial funding past March 31, 2010. She noted that there is a link on the website for individuals to show support for the program. She stated that another option would be for the Committee to show their support for the Well Aware Program through a letter. Ms. Larkin agreed to prepare a draft letter for further review by the Committee.

Ms. Renaud requested Ms. Mary Wooding to provide an update on the status of Site 41 at a future meeting of the Committee. Mr. Braithwaite spoke about concerns that were raised for a landfill in Midland that was eventually shut down. Mr. Braithwaite encouraged Ms. Renaud to contact the Mayor of Midland for additional information.

5.0 Member Inquiries

None.

6.0 Next Meeting

Date: January 7, 2010

Time: 1:00 pm

Location: RVCA, Monterey Boardroom

7.0 Adjournment

The meeting was adjourned at 3 pm.

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Janet Stavinga
Chair

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Sommer Casgrain-Robertson
Recording Secretary