

NORTH BAY-MATTAWA SOURCE PROTECTION COMMITTEE

MINUTES OF

A meeting of the North Bay-Mattawa Source Protection Committee held at 9:00 a.m. on March 18, 2008 in the North Bay-Mattawa Conservation Authority Natural Classroom 15 Janey Avenue North Bay, Ontario.

Members Present:

Barbara Groves, Chair	John MacLachlan, Member at Large
Dennis MacDonald, Transportation	Kathy Parker, Municipal
George Onley, Municipal	Maurice Schlosser, Agricultural
George Stivrins, Industrial/Commercial	Lucy Emmott, Member at Large
Ian Kilgour, Municipal (ar. 9:40 a.m.)	Roy Warriner, Member at Large

Regrets:

Peter Jekel, Liaison, North Bay Parry Sound District Health Unit

SWP Staff Present:

Sue Miller, Project Manager	Walter Koch, Technician
Kristen Green, Water Quality Specialist	

Also Present:

Kate Turner, Liaison, Ministry of Environment

1. Administration

Quorum

Nine Members plus Chair were present. Quorum requirement was met.

Declaration of Pecuniary Interest

None declared.

Approval of Agenda

Approved as circulated. (Emmott/MacDonald)

Adoption of the Minutes of January 8, 2008

Approved as circulated. (Emmott/Onley)

SPC Meeting Dates, 2008

The Committee agreed to change the SPC meeting of July 22, 2008 to July 9, 2008 at 7:00 p.m. to accommodate a scheduling conflict. Kathy Parker indicated she will participate via teleconference.

The Committee established the following dates for future SPC meetings in 2008:

SPC Meeting Date	Alternate
August 20th, 2008	August 21 st , 2008
September 17th, 2008	September 18th, 2008
October 15th, 2008	October 16th, 2008
November 19th, 2008	November 20th, 2008
December 10th, 2008	December 11th, 2008

Members are to communicate any attendance conflicts with these dates to the Chair and c.c. the project manager at their earliest opportunity.

2. Updates

SWP Guidance

The Project Manager (PM) gave an update on latest SP technical guidance and the development of Director's Rules. Additional guidance to assist to municipalities in understanding the implications of elevating non-municipal systems for inclusion in source protection planning is not expected before June, 2008. The PM indicated that Powassan's town council will need to pass a new resolution if they still want to elevate the former Village of Trout Creek for inclusion as a cluster of residential wells.

Terms of Reference (TOR)

The Project Manager gave an overview of development aspects of the Terms of Reference (ToR). Ministry of Environment has provided an application (Wizard) for tracking and reporting development of the ToR.

Municipal Engagement

An information workshop for municipal representatives is planned for April 17th, 2008 at 7:00 p.m. at the Legion Hall in Callander. A notice was sent to all 15 municipalities on February 27. This will be followed with details confirming time and location as soon as possible. The Chair requested that all SPC members attend.

The SPC discussed the TOR and municipal engagement process. Discussion included systems that may be elevated for inclusion in to the TOR, funding for same, and the process for amending the ToR. Municipalities may choose through resolution of council to elevate non-municipal systems such as clusters of private residential wells or shoreline intakes. Powassan previously passed a resolution to include the former Village of Trout Creek. The possibility of shoreline residents of Trout Lake approaching City of North Bay requesting inclusion was mentioned.

MTO Roads Workshop

Dennis MacDonald attended the Ministry of Transportation's roads maintenance open house held March 5, 2008 in North Bay. He provided a report as well as information on road salting and WHMIS to the Chair for SPC use.

Callander Bay Sediment Core

On March 17, 2008, SWP obtained a sediment core sample from the centre of Callander Bay. The sample will be sectioned by SWP staff and then sent to Queen's University for paleolimnological analysis. SP staff extend their appreciation to Jean-Marc Filion providing equipment, transportation and assistance to obtain the core sample.

3. Groundwater Principles

Peter Richards, a hydrogeologist and President of Waters Environmental Geosciences Ltd., gave an overview presentation on groundwater principles with specific reference to the SWP legislation and guidance.

The presentation described the importance of the Water Balance and Hydrologic Cycle as the basis for all Source Water Protection planning. The concept of residence time within the hydrologic cycle was discussed, stressing the long residence times typically associated with groundwater flow systems.

A generic Water Balance (inputs = outputs +/- changes in storage) was described for a typical watershed, and the importance of determining recharge was identified (identifying the aquifer as being under stress when withdrawals exceed recharge, etc.). Typical aquifer settings were described, and the response to an aquifer being pumped was discussed. Finally, the area that contributes water to the pumping well was defined as the Well Head Protection Area (WHPA), and is the focus of the current Source Water Protection Studies.

4. Comment Letter from John Fontaine

The Chair read aloud an email letter received from Mr. John Fontaine, dated March 18th, 2008 regarding questionable use on a nearby property. Ian Kilgour commented that the City of North Bay has been monitoring land use on the subject property for some time. The property is outside the North Bay – Mattawa SP Area, and suggested sending the letter to the City for follow up.

Ian further agreed to present this situation as a case item study at the next SPC meeting.

(NOTE SEE ATTACHED RESOLUTION AT END OF MINUTES)

5. Groundwater Municipal Technical Studies

Peter Richards presented the historical background leading into the current detailed technical studies of the Mattawa and Powassan municipal systems. The present studies were identified as building upon previous work on the municipal well systems (beginning in 2000), and follow a set of Draft Guidance Modules (which periodically have been updated as the process continues across the Province). The studies are proceeding, even though some of the final details on the assessment methods for the Risk Assessment Module are still in development. Overall, the goal is to use the best data available in the study process, and the importance of “continuous improvement” was noted.

The Mattawa municipal well system was briefly reviewed, and the development of a unique well head protection area was discussed. The area was defined by computer modelling, and identified zones within the well head protection area that were various distances away from the well head area itself. The distances were defined by their time of travel in the aquifer, with zones furthest away from the well having the longest time of travel (previously described as residence times).

The vulnerability of the aquifer to surficial contamination (i.e. from spills) was identified as being related to the geology of the area, and whether or not the aquifer was confined or unconfined (previously discussed). The importance of identifying land uses within the well head protection area that may place the well intake at risk to contamination was identified, and the work carried out in previous studies and the present study (including work completed in 2007 by the North Bay – Mattawa Conservation Authority) was highlighted.

The completion of the study using a Risk Assessment process was described (currently underway), which combines the aquifer vulnerability with an assessment of the individual threat posed by specific land use activities within the well head protection area. As discussed, the exact methodology to be followed is still under development by the Ministry of the Environment, and will be forthcoming in the spring of 2008.

A similar review was done for the Powassan municipal well system. At the conclusion of the discussion, Peter Richards indicated that additional detailed hydrogeological information had been recently obtained which may change the shape of the well head protection area. Whereas previous interpretations of the aquifer had suggested that the Genessee Creek did not play a role in the municipal well system, there is now reason to believe that the Powassan well field may depend upon both the groundwater aquifer and the surface waters of Genessee Creek. Work is now underway to identify the potential change to the shape of the well head protection area, and to define the role that Genessee Creek plays in the water supply. The consequence of such a change is that the Source Water Protection focus may now have to include a portion of the Genessee Creek that is potentially feeding the groundwater system at the well head area.

The discussion then focused on recent changes to the Source Water Protection program which targets well clusters in a similar well head protection analysis. Peter Richards noted that, in some settings, a cluster of private water wells can have an effect similar to a single municipal well drawing the same total volume of water out of the aquifer. Therefore, the same methodologies could theoretically be applied to well clusters (with some modification, as appropriate). SPC members debated what is/is not a well cluster, then agreed that it is up to municipalities to express concern that they may have a well cluster. The PM noted that Kristen Green, SWP Water Quality Specialist has already completed some preliminary analysis on the Trout Creek Well Cluster.

8. New and Other Business

- a) SPC moved to accept new information from Dennis MacDonald regarding salt use on roadways.
- b) SPC members gave support to Dennis' s intention to participate in a western railway conference
- c) SPC members indicated a desire to field tour the SP Area and on May 20th departing tentatively at 9:30 a.m.
- d) The Chair requested that Members wear their name tags to the Municipal meeting, April 17, 2008.
- e) The Committee directed the PM to obtain generic business cards for member use.
- f) The Committee discussed the merits of erecting signage along transportation corridors through critical IPZs and WHPAs.

10. Next Meeting

The next meeting will be held April 15, 2008 at the offices of the NBMCA.

[Note: change of start time to 9:15 a.m.]

The meeting adjourned at 3:40 pm.

Original signed by:

Original signed by:

Barbara Groves, Chair

Sue Miller, Project Manager

RESOLUTION

North Bay – Mattawa Source Protection Committee

Date: March 18, 2008 Resolution Number: _____

Moved By: John Meckachlan Seconded By: Dennis MacDonald

That the North Bay - Mattawa Source
Protection Committee has received the
email of John Fontaine, dated March 18,
2008 under subject of "Well water protection"
and redireets his email and this resolution
to the City of North Bay for information
and appropriate action.

Endorsement of Chair:

Barbara Groves