

**NORTH BAY-MATTAWA SOURCE PROTECTION AUTHORITY
MINUTES
of the**

SECOND meeting of the year 2016 for the North Bay-Mattawa Source Protection Authority held at 5:30 p.m. on October 26, 2016 in the North Bay-Mattawa Conservation Authority Natural classroom, 15 Janey Avenue North Bay, Ontario.

MEMBERS PRESENT:

Bonfield, Township of	-	Jane Lagassie(5:30 pm – 6:24pm)
Callander, Municipality of	-	Robb Noon (5:30 pm – 6:24pm)
Calvin, Township of	-	Ian Pennell (5:30 pm – 6:24pm)
Chisholm, Township of	-	Nunzio Scarfone (5:30 pm – 6:24pm)
East Ferris, Municipality of	-	Mike Voyer (5:30 pm – 6:24pm)
Mattawa, Town of	-	Lorne Mick (5:30 pm – 6:24pm)
Mattawan, Municipality of	-	Carole Curran (5:30 pm – 6:24pm)
North Bay, City of	-	Dave Mendicino (5:30 pm – 6:24pm)
North Bay, City of	-	Chris Mayne (5:30 pm – 6:24pm)
Papineau –Cameron, Township of	-	Alvina Neault (5:30 pm – 6:24pm)
Powassan, Municipality of	-	Dave Britton (5:30 pm – 6:24pm)
South River, Village of	-	Les Mahon (5:30 pm – 6:24pm)
Strong, Township of	-	Vi Montpetit (5:30 pm – 6:24pm)

MEMBER(S) ABSENT:

Nipissing, Township of	-	Liz Smith
North Bay, City of	-	Jeff Serran

ALSO PRESENT:

Brian Tayler, Chief Administrative Officer, Secretary-Treasurer
Jeff Celentano, Chair, Source Protection Committee
Katelyn Lynch, Water Resources Engineer
Sue Miller, Project Manager, Source Water Protection

1. Adoption of the Agenda

The Chair extended regrets on behalf of Liz Smith and Jeff Serran. After discussion the following resolution was presented:

Resolution No. SPA10-16, Voyer-Pennell

THAT the agenda be approved.

Carried Unanimously

2. Declaration of Pecuniary Interest

None declared.

3. Adoption of Previous Minutes of January 27, 2016

After discussion the following resolution was presented:

Resolution No. SPA11-16, Mayne-Britton

THAT the minutes of the meeting held on January 27, 2016 be adopted as written.

Carried Unanimously

4. Project Managers Report

Sue Miller presented a power point presentation and report outlining the Callander Bay Issue Contributing Area next steps forward, the review of vulnerability scoring for the North Bay intake, assessing the Pipeline threat to North Bay's source water and the progress on implementation of Source Protection Plan and program update. After discussion, questions and answers the members thanked Sue for her presentation and the report. After discussion the following resolutions were presented:

Resolution No. SPA 12-16 Mayne-Mick

THAT the Source Protection Authority endorses the development of a collaborative work plan to meet policy requirements of the Source Protection Plan for the Callander Bay Issue Contributing Area.

Carried Unanimously

5. New Business

Vi Montpetit mentioned the recent passing of Pat Haufe. A condolences card was sent around.

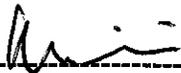
7. Adjournment (6:24p.m.)

As there was no further new business, the following resolution was presented:

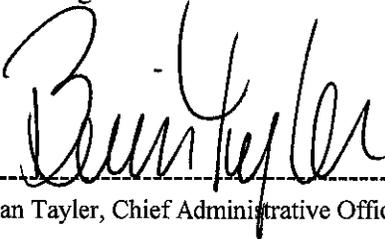
Resolution No. SPA 13-16, Mahon-Voyer

THAT the meeting be adjourned, and the next meeting be held at the call of the Chair.

Carried Unanimously



Dave Mendicino, Chair



Brian Tayler, Chief Administrative Officer, Secretary Treasurer

TO: The Chairman and Members of the
North Bay-Mattawa Source Protection Authority (SPA)

ORIGIN: Sue Miller, Manager Source Water Protection

DATE: October 20, 2016 (for meeting October 26)

SUBJECT: Project Manager's Report

BACKGROUND:

Since 2007, the SPA has been charged with the task of overseeing the development and implementation of a local Source Protection Plan (SP Plan) developed by the Source Protection Committee (SPC). The SPA works to ensure compliance with the Clean Water Act (2006) and its regulations. The North Bay-Mattawa Conservation Authority (NBMCA) administers the program and provides necessary resources according to an agreement with the SPA. The NBMCA also has a role in watershed management mandated by legislation other than the CWA.

Items for consideration at this time include:

	Disposition
1. Next Steps to address water quality issue in Callander ICA	Support of SPA is sought
2. Review of Vulnerability Scoring of the North Bay intake	For Information
3. Assessing the threat posed by the EnergyEast oil pipeline	
4. SP Plan Implementation and Program Update	

ANALYSIS:

1. Next Steps to Address Water Quality Issue in the Callander ICA

A work plan needs to be developed to implement SP Plan policies to address the water quality issue in the Callander ICA related to the incidence of blue green algae. In 2015, NBMCA ran a very successful education and outreach campaign improving shorelines by planting trees, shrubs and perennials. And over the last eight years, we have been fairly successful cobbling together funding from various sources and collaborating with Nipissing University researchers to get a very basic understanding of the problem and how it might be corrected. We are at a point where municipalities need to commit some funding to resolve the issue. A meeting with the five municipalities that share jurisdiction of the ICA is being arranged for late November to get a financial commitment for development and implementation of the work plan to meet municipal obligations under the Source Protection Plan.

The work plan would lay out a strategy for moving forward and include the following components:

- a. A sensitivity analysis of the hydrology of the watershed
- b. Research to assess the ecology and identify ways to make less phosphorus available to algae
- c. Some modest projects to be undertaken in 2017
- d. Identification of current practices that need improvement
- e. Ongoing research to identify most appropriate and affordable strategies to be implemented in the future
- f. An outreach and communications plan for educating stakeholders, providing opportunities to participate, and encouraging positive action

For several years, NBMCA has been undertaking research and monitoring in the Callander ICA in collaboration with Nipissing University. As well NBMCA staff conducted field work and met with property owners throughout the ICA in 2013 to identify any prescribed activities that could be adding phosphorus. Most of the costs to date have been covered by funding from the Province through the Source Protection Program – including grants made to municipalities for SPMIF (Source Protection Municipal Implementation Funding). Our findings indicate that the continued water quality problem has little to do with additional phosphorus being applied to the land. Rather, erosion of stream banks, stormwater runoff and sediment loading from land-based activities including road maintenance and culvert installation result in soil particles carrying phosphorus into the waterways and water bodies. The only point source of phosphorus in the ICA is the discharge from the Callander lagoons.

A review of what is being done internationally to address such water quality problems points to a strategy of restoring the natural hydrologic functions and ecology. To reduce the amount of phosphorus entering rivers, lakes and bays, we need to increase the time it takes for stormwater and snowmelt to reach them (improving hydrologic function). As well, we need to find ways to attenuate (or tie up) the phosphorus that is already in the system and make it unavailable for algae growth. The latter can be achieved by improving the ecology so that algae get consumed by small organisms and insects that are then consumed by fish.

Much of the development work that was done previously in the watershed to drain land for agriculture, straighten streams to reduce exposure of land to seasonal flooding and hasten the movement of snowmelt and stormwater away from roadsides is contributing to the issue today. How can we better meet our needs to manage the location and movement of water? How can we offset the negative effects we are experiencing?

- a) At this point, it is recommended that we conduct a sensitivity analysis of the hydrology of the contributing watershed. That will give us an understanding of how water currently moves through the system, where problems exist, desirable targets for change and, hopefully, some affordable options to achieve those. In most cases such hydrologic improvements would also improve the attenuation of phosphorus and the ecology.

- b) Strategies also need to be found to tie up phosphorus in the food web. Some would apply to land management and others to conditions in lakes and streams. Most of these strategies would also improve fish habitat. Some basic research needs to be undertaken to assess local conditions to determine which strategies would work in our locale.
- c) On a positive note, such environmental projects are widely supported by environmental grants offered by a number of agencies. NBMCA is well positioned to undertake some initial projects that would help move us forward. Being able to cite specific support from municipalities in applications improves our chances of receiving funding. Having a multi-year plan will help us identify appropriate grant opportunities into the future and increase the confidence of agencies in our ability to deliver.
- d) With respect to improvement of current practices, findings of a recent study of Erosion and Runoff undertaken by Water's Edge identify some concerns that should be addressed. Municipal roads staff need to be made aware of ways they can reduce erosion and sediment loading to water courses. Better attention needs to be paid to best practices for culvert installation. Principles of Low Impact Development Strategies (LIDS) should be employed where possible. Other sectors can also adopt better management practices.
- e) Research and monitoring needs to continue with a focus on developing cost effective approaches to improve water quality and assess progress.
- f) Consultation will be required to help identify which strategies should be prioritized. Implementing them will require significant participation of residents and other stakeholders. A program to educate and increase awareness that will lead to actions on the part of individual property owners can take on their own properties will be part of the work plan. Reporting back to the public on progress will also be an important component.

Once the proposed work plan is developed (including a funding model) municipalities will be consulted on how to move forward. The goal is to have those discussions in time for setting 2018 budgets.

2. Review of Vulnerability Scoring of the North Bay Intake

The need to review of the vulnerability scoring of the North Bay intake first became evident when the proposed oil pipeline was approved as a local threat by the Minister of the Environment and Climate Change. The problem was that the original scoring suggested that an oil spill could not contaminate North Bay's source water, but the Site Specific Risk Assessment commissioned by TransCanada Pipeline found that certain spill scenarios could result in oil product reaching the area above the intake. It also became evident in

discussions with SPC Members that it was very surprising that so few of the hazardous substances transported along Trout Lake Road through the Intake Protection Zone 1 (IPZ-1) were identified as posing a significant threat. Similarly, the fact that so few prescribed activities were designated as significant threats was also unexpected. Further, the original work was never peer reviewed. For all these reasons, it was deemed prudent that the appropriateness of the scoring should be verified.

A comparison with other intakes in inland lakes (which are very few) was completed. Based on MOECC's recommendation, we compared the characteristics of North Bay's intake to Sudbury's Lake Ramsey intake. They share many similarities but the Lake Ramsey intake has a vulnerability score of 1.0 compared to North Bay's at 0.8. The report, which included a summary of implications in IPZ-1 if the vulnerability score were higher, was presented to the SPC at its meeting September 12, 2016. It was resolved that a peer review be undertaken to determine whether the vulnerability score is appropriate and that the SPC be provided a summary of what effect a high score would have for threat activities in each of IPZ-1, 2 and 3. The findings are to be presented to the SPC at its next meeting, expected in January 2017.

3. Assessing the Threat Posed by the EnergyEast Pipeline as Proposed

As stated in the previous section, using the procedure outlined in the Technical Rules for intakes in inland lakes, the assigned vulnerability scoring of the intake and the locations where the pipeline crosses streams, the pipeline is not rated as a significant threat to the North Bay intake. This despite the fact that modelling of spills demonstrates that oil product could reach the area above the intake.

In reviewing how other SP Areas evaluated the threat posed by pipelines that were carrying petroleum products, it was found that none of the pipelines were in vulnerable areas of inland lakes; rather all of the intakes were in the Great Lakes. The protocol for assessing the threat of pipeline spills in Great Lakes requires that spills are modelled and if product is demonstrated to result in impaired water quality at the intake, the threat is rated as significant. Using this procedure all of the SP Areas in question concluded that the pipelines posed a significant threat. There is no consideration of the vulnerability scoring of either the intake or the area in which the pipeline is located.

Therefore, program staff will be submitting a request to the Director to invoke section 15.1 of the Technical Rules to approve the use of modelling to evaluate the threat posed to the North Bay intake.

4. SP Plan Implementation and Program Update

SP Plan implementation is well on track. There are few policies that are still to be implemented by municipalities. Provincial ministries and agencies are also mostly ahead of implementation deadlines. The review of the Environmental Compliance Approval for the Callander sewage lagoons by the Ministry of Environment and Climate Change (MOECC) needs to be completed before July 2018 and there are similar requirements for many other

systems in Ontario. Timing of the Callander sewage lagoon review will be dependent upon scheduling by MOECC.

Implementation of policies to address the Callander water quality issue is well underway, but several including research, monitoring and education & outreach will involve the continuing commitment by the municipalities that have territory in the ICA.

Budget for this fiscal period provided by MOECC is \$307,944 and includes staffing of 2.30 fulltime equivalents (FTEs). That is less than our original request but a relatively small drop from the previous fiscal period. We explained in our original request that we were concerned over our ability to retain and/or attract trained and qualified staff if positions would not be fulltime. We are experiencing some challenges in that regard and working to resolve them. The Interim Progress Report to MOECC is due October 27, 2016.

Preparation of the Work Plan and Funding request for next fiscal (2017-18) should commence at the end of October. We expect it will be due in early December.

RECOMMENDED RESOLUTIONS:

1. That this report be received and appended to the minutes of this meeting.
2. That the SPA endorse the development of a work plan to address the issue in the Callander ICA and encourage municipal councils to commit to funding its development and implementation.



Susan Miller
Manager, Source Water Protection



Brian Tayler
CAO, Secretary Treasurer