Four Agency Report to the St. Marys River BPAC Meeting
March 27 2012
BT 202 – Algoma University, Sault Ste. Marie, ON

U.S. Environmental Protection Agency (U.S. EPA)

- The Eastern Upper Peninsula Regional Planning and Development Commission received a grant from NOAA to conduct the engineering and design phase of the Little Rapids habitat restoration project. This analysis will be completed sometime in 2012.

Michigan Department of Environmental Quality (DEQ)

- The BPAC PAC support grant was reviewed by the DEQ and Great Lakes Commission. There was support to fund the project.
- The statewide assessment report for the bird & animal deformities is expected by the end of the month. Once internally vetted, the report will be made available to the BPAC.
- The first phase of the statewide assessment for beach closings BUI was looking at whether or not an AOC is listed on the MI impaired waterbody list. The SMR is currently listed due to CSO, thus did not pass this first level of assessment. The AOC Program is considering continuing the assessment to look at the other tiers of the criteria (e.g., monitoring efforts needed assess status in individual AOCs).
- Molly Rippke from the DEQ's Water Resource Division held a public meeting in the Soo to discuss how the Total Maximum Daily Load (TMDL) for *E. coli* is going to be addressed for the St. Marys River tributaries.
- John Riley, the AOC coordinator leading the aethetics BUI statewide assessment, will be coordinating with Christine Daley to determined when the best time to conduct a site visit to assess the aethetics BUI at the Sugar Island public beach. The effort will try to target a wet-weather event.
- There is a public meeting schedule March 29th at 6:30 on Sugar Island at the Community Center to discuss the Little Rapids restoration project.
- The next round of EPA's Great Lakes Restoration Initiative Request for Applications (RFA) is expected at the end of March or early April. It is DEQ's understanding that there will not be an AOC-specific funding line-item in the EPA RFA, and that AOC projects will need to be coordinated through the DEQ. We are hopeful that the RFA will explain this approach in more detail. If there is interest in pursing GLRI funding for AOC-specific projects, please contact Michelle.
- The International Upper Great Lakes Study report is being presented to the IJC for consideration. The IJC will be holding a series of public meetings throughout the Great Lakes basin this year to further discuss the report and next steps.

Environment Canada (EC) and Ontario Ministry of Environment (MOE)

- The MOE is currently in the process of drafting a funding agreement to continue support for the local RAP coordinator position in 2012-13. Environment Canada and Algoma U have negotiated a multi-year funding agreement that extends until March 2015. In 2012, work will focus on finalizing the updated BUI delisting criteria and coordinating an updated multi-agency Workplan with remaining actions for this AOC, a draft of which was developed last fall. During the fiscal year 2011-2012 which is now coming to an end, funding provided by EC and the MOE enabled AU and SSMIC to undertake public outreach initiatives through the Home and Outdoor Show, the Green Expo, the LSSU Environmental Summit, and a variety of other events. Research being done on the St. Marys River was additionally presented at national and international forums, including the 47th Annual Symposium of Water Quality Research, the Aquatic Toxicity Workshop, and the International Association of Great Lakes Research Conference. The final initiative being undertaken for this year is a St. Marys River contest for Anna McCrea Public School, for which all children in the school are participating by drawing pictures, writing poems, and also essays.

EC/MOE Sediment Technical Team [includes other stakeholders]

- St. Marys River sediment stability was analyzed by Krishnappan (2011 and 2012), utilizing a two dimensional hydrodynamic flow model (RMA2) and critical shear stress data collected from SMR. The study concluded that layers of fine sediment deposits below the top five cm are stable for all flows

tested. As an addendum to the study, additional modelling was also done to determine what upper limit of flow velocity would be required in order to challenge the conclusion drawn in the study.

- M.R. Wright was contracted to carry out a geotechnical and geochemical assessment of the sediment in the area East of Bellevue Marine Park. Unfortunately, sediment coring attempts were unsuccessful. However, cone penetration testing which was also carried out provided new data that will be important for assessing sediment management and remediation options. As a result of the study, we now know, for example, that the depth of sediment to native till is as much as 7.9 m, and that petroleum hydrocarbons (PHs) are confined within the uppermost 0.9 to 1.7 m of organic silt material.
- An independent consultant was hired to compile and format data previously obtained by Environment Canada for the area East of Topsail Island. These data were then used by CTech Development Corp. to create bathymetric maps that include sediment volume, mass estimates for total PAHs, iron, and chromium, and also to create a 3D visualization of the sediment deposit and associated contaminants.
- Paula Antunes is currently using the data previously obtained from Environment Canada to further investigate whether chemical bioavailability can be used to better explain dose-response relationships observed from the BEAST study.
- Discussions regarding next steps are currently ongoing between EC, the MOE, and SSMIC.

March 1, 2012

Letter to: Residents affected by the proposed Pointes Estates Development

Subject: Your support is being solicited as a result of a new report which suggests that all residents of our community will be potentially negatively impacted by the proposed Pointe Estates development

Fellow Residents,

As a result of a recently released report , contracted to Frank Breen, P.G. (Professional Geologist) and commissioned by the Sault Ste. Marie Region Conservation Authority (SSMRCA) , as part of their evidence to present in the appeal, (by the developer of their June 2010 decision to deny the application by The Pointes Development Group to build a 2.6 kilometre canal and 91 lot subdivision in and around the Pointe Louise wetland complex), we think it time to reengage the neighbourhood in this important issue. Not only has their decision (to deny the application) been verified (by the Breen report), but his report suggests that a range of environmental concerns remain unanswered and states for example **"the proposal to conduct water flushing of the canal could pose a risk to residents along the shoreline as well as the overall water quality of the St. Mary's River."**

Attached to this letter is a summary of **Chapter 8**, entitled "**Conclusions**" contained in the report that was prepared by Mr. Breen for the Sault Ste. Marie Region Conservation Authority (SSMRCA). "*Mr. Breen was asked to evaluate the technical information provided in support of the application submitted by Chant Construction Limited for the proposed Pointe Estates Development from the perspective of hydrology, hydrogeology and geochemistry in relation to the impact or potential impact on water quality and hydrological function of the wetlands, the St. Mary's River and the surrounding environment*". It was to form part of the defence of their (SSMRCA) decision to deny the application of Chant Construction Limited, now known as the Pointes Estates Development Group, which the Group had appealed. The appeal, which was scheduled for November 2011 before the Commissioner of Mining Lands, has since been delayed as the developer is considering whether he will perform the necessary Ministry of the Environment - Guided hydro geological study as directed by the SSMRCA.

The complete summary of Mr. Breen's report can be found on our website. (pointesprotection.org). We also have a copy of the complete 588+ page report. In addition we have included as an attachment, one of the many graphics contained in

the report which shows where the "potentially impacted water" will migrate once leaving the canal.

In addition to keeping both the politicians and related government agencies apprised of our own concerns, we continue to support efforts of the staff at our local Conservation Authority (their initial technical report on the development can also be found on the website). As well, we have undertaken our own studies of the water and wetland evaluation, as we feel the wetland is in fact "Provincially Significant" which if so found, would cease all discussion on the development. We continue to work on this effort.

If you would like to become a member of the associaiont/participate and/or support our efforts, we ask that you contact one of our executive at your earliest convenience. Your membership will be kept in strict confidence if you so wish and you can reach us by telephone or by e-mailing us through the website.

We look forward to hearing from you in the near future.

Peter Gagnon, President 705-779-3796

Rick Gartshore, Past President 705-779-2916

Lou Simonetti, Vice-president

Pat Grattan, Secretary

Gay Gartshore, Treasurer

Technical Opinion

Evaluation of the Proposed Pointe Estates Development

By

Frank Breen P.G.[1] Breen GeoScience Management, Inc.

Section 8 Conclusions – *These conclusions can be found in both the summary report (38 pages) and the complete report (588+ pages including appendices and a PowerPoint presentation), provided to the Conservation Authority on December 26, 2011. The report was subsequently tabled at the January Board meeting and a copy was made available to the developer and at cost to the Pointes Protection Association.*

"Based on a review of the available information and the opinion provided herein, the following conclusions are made.

- *The legal proceedings against the SSMRCA are baseless.*

The appeal made by the Pointe Estates Development Group regarding the Sault Ste. Marie Region Conservation Authority (SSMRCA) decision of June 6, 2010 claiming, in part, that,

> *"SSMRCA made the Decision without proper or any regard to the scientific evidence submitted and filed by the Applicants in support of its Application" and "SSMRCA based the Decision upon facts unsubstantiated in evidence"*

Is baseless and without merit. As presented in this opinion, the technical information provided to SSMRCA by the Pointe Estates Developers is at best preliminary, incomplete, and to some extent misleading and inaccurate. The hydrogeologic assessment conducted and submitted to the SSMRCA is inconsistent with applicable provincial guidance and does not present a complete evaluation of the available MOE well data. Furthermore, this assessment incorrectly applies portions of the MOE guidance, fails to make a clear determination of the risk to residential wells and nearby surface waters, and contains no site-specific data or information with which to accurately quantify the potential risk to human health or the environment. In short, it contains no valid "scientific" evidence as claimed in the appeal.

The hydraulic model evaluating the influence of seiches and ship traffic on water quality in the proposed canal also cannot be considered to be valid scientific evaluation of the potential risk to human health or the environment. The application

of the model was not conducted in a manner consistent with accepted modeling practices, or accepted practices identified by the consultant on previous modeling projects [4], and the physical process of wave action causing dilution in the canal is technically incorrect. Furthermore, the proposal to conduct flushing of the canal could pose a risk to residents along the shoreline as well as the overall water quality of the St. Mary's River.

- *The hydraulic modeling conducted by the Pointe Estates Development Group does not meet the permitting requirements and cannot be considered valid scientific evidence for the development application.*

Provincial guidance regarding the scientific requirements for permitting subdivision developments requires that a valid hydro geologic study be performed. There are no requirements or guidance indicating that hydraulic studies, surface water models, or the assessment of impacts of shipping or seiches needs to be conducted as part of the permitting process. Nor can the hydraulic model analysis be accepted in place of a valid hydro geologic study in the permitting process. Therefore, submission by the Pointes Estates Development Group of the hydraulic analysis cannot be considered by the SSMRCA as valid scientific evidence or as meeting the minimum permitting requirements.

- *A reputable hydro geologic firm needs to be retained by the Pointe Estates Development Group in order to carry out a valid, technically defensible hydro geologic study.*

As has been reiterated multiple times throughout this opinion, a valid hydro geological assessment needs to be conducted as originally requested by the SSMRCA. The hydro geologic assessment should clearly identify and address all potential impacts to residential wells or surface waters in the area. It is also important that a reputable hydro geologic firm be retained to conduct this work to insure that all technical work is conducted in accordance with the required permitting process.

[1] F.A. Breen is a professional hydro geologist and geochemist with expertise in the fate and transport of chemicals in surface and subsurface environments. He is president of Breen GeoScience Management Inc., and teaches hydrogeology, geochemistry, environmental science and project management at Lake Superior State University. He has over 20 years of technical experience and is a certified professional geologist in two states and is recognized by the National Association of State Board of Geology as a professional geologist.

Conceptual Model of Canal Water Migration Along the Shoreline of the St. Marys River from the Inlet Bay

Therefore, since the amount of water in the proposed canal is approximately twice the amount of water in the inlet bay, the potential for impacts to the water quality in the inlet bay is significant. In addition, once the water in the inlet bay is impacted, it will tend to migrate downstream along the shoreline. This will result in an increase risk to the residents along both the shoreline and inlet bay and should be avoided.