

HALIFAX/HALIFAX COUNTY WATERSHED ADVISORY BOARD
MINUTES
MAY 21, 2003

PRESENT: Dr. Wayne Stobo, Chair
Ms. Ellinor Williams
Mr. Shalom Mandaville
Dr. Barry Thomas
Mr. Ross Evans
Mr. Frank Hope
Dr. Spencer Lee
Mr. Keith Manchester

ABSENT: Mr. Walter Regan (regrets)
Ms. Christine Smith (regrets)
Mr. Lawrence White
Mr. Jim Holmes
Dr. S. Ray
Ms. Janis Rod (regrets)
Mr. Bill Ernst (regrets)
Ms. Susan Corser (regrets)

ALSO PRESENT: Captain John Owens (guest)
Ms. Lynne Le Boutillier, Legislative Assistant

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0.1 **AWARD OF PLAQUE BY THE SOIL & WATER CONSERVATION SOCIETY OF METRO HALIFAX**

Mr. Mandaville awarded Lynne Le Boutillier a plaque on behalf of the Soil & Water Conservation Society of Metro Halifax in recognition of her dedication. Captain Owens made some comments on his observations.

1. **APPROVAL OF AGENDA, ADDITIONS AND DELETIONS**

It was proposed by the Chair that items 3.1 and 4.1 related to presentations be moved up on the agenda. This was agreed to by consensus.

Item 4.4 should read Sheldrake Lake Hypolimnion Project not N.S. Hypolimnion Project

2. **APPROVAL OF APRIL 16, 2003 MINUTES**

It was noted that Mr. Manchester's name should appear as absent and regrets had been given by Mr. Murray. **MOVED BY Mr. Manchester, seconded by Mr. Hope that the April 16, 2003 minutes, as amended, be adopted. MOTION PUT AND PASSED.**

3. **NEW BUSINESS**

3.1 **PRESENTATION - WHY DOES A WATERSHED ADVISORY BOARD WORK?**

In his presentation Mr. Dwyer:

- C Expressed concern that a lot of watershed and environmental groups are disappearing. He reflected upon the 'mud on their boots' representatives being replaced with new members who are not as familiar with the area they represent. He foresaw this as a growing problem.
- C Mr. Dwyer recalled NSDOE&L initiatives related to encouraging the establishment of watershed advisory boards.
- C He observed that only 3% of the province's budget has been allocated to natural resources.
- C He made reference to a paper written by the Chair, Colleen McNeil and Susan Corser entitled "The Halifax County/Halifax Mainland Watershed Advisory Board Partnering with Government, Industry and the Public" presented at a 1999 conference in Greenwich. He felt the members would find reading this report annually worthwhile.
- C Referring to an article entitled "Developing Policies to Protect Undeveloped Areas" by Ralph Surette, he felt publicity would be beneficial. A copy of this article will be

provided in the next agenda package.

Dr. Stobo recalled that NSDOE&L held a forum on setting up advisory groups, but it was recognized that in order for them to be effective, they would have to be provided with support. The resultant report from the Forum leaders acknowledged that resources would be required and the idea apparently was shelved.

In the ensuing discussions, it was noted that participation is often issue driven. For example, Mr. Grace has been successful in reactivating a Springfield Lake group.

Mr. Mandaville indicated he was much more positive about the whole situation and cited examples of why. He felt it would be beneficial, given a lot of things discussed at the meetings are outside HRM's responsibility, that a representative of NSDOE&L attend meetings. (See item 6.)

4. **BUSINESS ARISING FROM MINUTES/STATUS SHEET**

4.1 **BIG SPRINGFIELD LAKE**

Mr. Ed Grace, who originally brought problems related to Big Springfield Lake to the Board's attention in January, was in attendance. Circulated in the agenda package was a letter outlining the situation which is causing concern re environmental matters. A draft letter from Mr. Regan on the subject and containing twelve (12) recommendations was also provided. Mr. Grace was seeking the help of the Board in having the problem resolved.

Following discussion of the situation with Mr. Grace, the Board decided to write a letter to the Mayor, with copies to Northwest Community Council (NWCC); DFO's Paul Boudreau, Manager of Habitat Management; Dan Hiltz, NSDOE&L, Central Regional Office and N.S. Department of Agriculture and Fisheries, Inland Fisheries Division, who Mr. Hope explained is responsible for fresh water habitat for Nova Scotia. He will provide a name and address.

This correspondence, which Mr. Manchester volunteered to draft, will recommend the following:

- C The need to first deal with the source of the problem before considering restoration. Item #3 in Mr. Regan's list.

Sediment holding ponds be created for each pit to control flow of water from the pit and sediment. In addition to reducing sedimentation, this measure would moderate the peak flows.

- C The ditches flowing towards Springfield Lake, which are now essentially dirt, should

be lined with heavy surge rock, in order to keep the water flowing through them clean. Ditches be properly sized.

- C The possible splitting of the flow going down Fenerty Road, to reduce the volume and velocity entering West Third Brook.

Consideration be given to splitting the flow further up the road where a number of brooks are located.

It was noted that in recommendations, associated with other developments, the Board has suggested similar measures.

- C The size of culverts be increased to deal with peak flows requirements.

Mr. Grace referred to discussions he had with Charles Lloyd, HRM Engineer re taking out gabions and putting in surge rock. He felt the surge rock would spread the water out and it will be easier on the tree roots. Mr. Manchester cautioned that surge rock only works well if mud hasn't filled in, thus the importance of stopping the source of the mud. The Chair reflected that this is why the installation of sedimentation ponds is so critical. These ponds will have to be properly sized and maintained or they will not fulfil the function.

- C Referring to Mr. Regan's recommendation 10, it was felt that sodding of drainage ditches would not be effective due to the gradient.

- C The Board will include recommendation 9 which reads "that the report also be provided to the H/HCWAB for comment".

A discussion followed as to whether this is the time to include recommendations associated with restoration, or wait until the erosion problem has been solved. The Chair cautioned that the Board may not have another opportunity to comment. He felt it important to communicate what the Board thought the process should be.

- C The effectiveness of the measures should be reviewed annually for the next five years and further remedial action be taken, if required.

- C Referring to recommendation 5 "that the wet area be investigated and repaired if required", it was felt this was dealt with in earlier comments.

- C Referring to recommendation 6 "that the banks of the feeder brook be restored...", it was suggested that lining with heavy surge would achieve this. Mr. Grace reflected that he thought Mr. Regan was proposing measures which would allow the return of fish, ie. making the bottom of the brook more hospitable to fish life. It was felt that

this would not be feasible given the amount of water flow. Mr. Grace noted that if the flow is split, the volume and velocity of water will be reduced. It was concluded that the measures proposed will protect the trees, but restoring the fish habitat isn't feasible.

- C Recommendation 2 "pre-existing flow rates be returned to the feeder brook". It was felt there can't be a return to pre-development flows and no one knows what they were, however as earlier stated, it is being recommended that some of the flow be diverted.
- C Recommendation 4 "the lake infill or sediment and road gravel be dredged and removed from the lake and the lake bottom be restored" - The Board will recommend the possible removal of material be investigated, ie. feasibility and potential benefits, in the context of value added.

Mr. Grace noted that his concern is more related to mud than gravel. He would like to know if there is some way to stabilize it.

During the course of this portion of the discussion, reference was made to Chris Taggart's involvement. It was not felt worthwhile having him give a presentation until the originating problems are addressed.

- C Referring to Mr. Regan's recommendation 1 "all lost fish habitat be restored", it was felt this recommendation was not practical.

When the draft recommendations are reviewed, the definition of 'maintaining' will be addressed. In the interim, the Chair plans to discuss the situation with Chris Taggart.

The preamble will note that development has already occurred and given this situation, the Board considered how the water flow could be mitigated.

The above noted recommendations will be drafted and reviewed next month. A copy will be sent to Mr. Grace.

3. **NEW BUSINESS (cont'd)**

3.2 **DEFINITION OF A QUALIFIED 'LIMNOLOGIST' AND OF AN 'APPLIED LIMNOLOGIST'**

Mr. Mandaville explained his concerns regarding the use of the designation limnologist. He noted that in actual fact there are very few limnologists in Nova Scotia. He is pushing for regulations regarding who can use this title. He is trying, through the Canadian

Limnology Society, to get a designation system developed for accreditation.

3.3 **MAKING OIL OUT OF GARBAGE**

Mr. Evans felt the Municipality should be considering such measures to deal with its garbage. He would like to bring to the Mayor's attention. He explained the process which involved grinding up various materials and the by-products produced. Reference was made to articles in "Discovery Magazine" and newspapers.

It was proposed that Mr. Evans make a written submission to the Board, accompanied by diagrams. It was felt a more meaningful discussion could be had after the members had an opportunity to digest the materials. The members were referred to the changingworldtech.com web site.

Referring to HRM being in the forefront of waste management, the Chair felt it may be appropriate in future to write the Mayor.

3.4/4.2 **FECAL COLIFORMS**

Two handouts were circulated to the members from Ms. Roberge. Ms. Roberge offered to come to the June meeting if the Board could clarify what their questions are. There was some confusion expressed regarding the origin of this item. Mr. Mandaville referred to the hiring of Jacques Whitford three years ago to carry out base line sampling in all lakes where development is happening. A reference was made to a presentation Ms. Roberge gave to DLAB. He would like her to attend a Board meeting to explain the conclusions, if any.

After discussion, it was concluded that the Board would like her to explain why they are bothering to collect the data; what they intend to do with it and what capacity they have to deal with it.

4.3 **PRESENTATION RE DEVELOPMENT IN HALIFAX IN GENERAL AND OVERALL IMPACT ON WATERSHEDS IN AREA**

Deferred in absence of Ms. Smith.

4.4 **SHELDRAKE LAKE HYPOLIMINION PROJECT/ NOVA SCOTIA LAKE HYPOLIMNION PROJECT**

C A copy of Nova Scotia Lake Hypolimnion Project prepared by M. Brylinsky for NS Dept. of Agriculture and Fisheries - dated January 2002.

This item should have been called Sheldrake Hypolimnion Project. Mr. Hope explained that nutrient levels in Sheldrake Lake are very high. He noted that Sheldrake Lake is one of six lakes in the watershed. Sheldrake Lake is fully developed, while the remaining five are at different stages. During the discussion, the following references were made:

- C Water study conducted in early 1990's - resultant recommendation to restore fish habitat.
- C Project resurrected in late 90's by Woodens River group
- C The proposal had been previously circulated to the Board in mid 2002.
- C Woodens River Environmental Organization raised \$40,000 for equipment and installed a facility beside the lake.
- C A trial of the system, which pumps oxygen into the lake, was held last November.
- C The organization is short \$4,000 to \$5,000.
- C They need \$1,000 to conduct a total phosphorus analysis by CWRS or the QE II to validate that the aeration system is working as designed and evaluate the results.
- C First time this process has been used on a lake of this size in Nova Scotia.
- C The testing will determine if the process works under local conditions and in a lake this shallow.
- C Mr. Hope was seeking a recommendation from the Board to put this project forward under the HRM Water Resource Management Strategy, i.e. in response to the Study. That a comparative proposal be submitted for funding by HRM.
- C Reference was made to Mr. Mandaville and NSDOE&L's work in the area.
- C It was felt that this would be an ideal situation to conduct a comparative study, i.e. opportunity to validate predictions done sometime ago.

A discussion followed on whether the Board felt the proposal to be potentially beneficial and wished to put an endorsement into HRM that the Board supports the initiative, particularly as it relates to the above noted HRM Study. Reference was made to the request for \$1,000 to conduct an analysis of Sheldrake Lake, and the desire to broaden the study to other lakes in the watershed which will require the expenditure of more funds. Caution was expressed that comparative studies are not something the Municipality gets involved with. It was felt that endorsement of the aeration process is something which might be worthwhile, as it may allow for remediation of other water bodies.

The Board reviewed various recommendations contained in the Study in Section 9, which were interpreted to support this process. The Chair noted the reference to monitoring programs. He felt this very different from a comparative study. The members were canvassed as to whether they felt the proposal fit with the recommendations contained in the Study and if so, did the Board feel the project would be appropriate.

As an alternative, it was suggested that the project is something which universities might be interested in for their graduate students, as it provides an opportunity for collaborative

research.

Mr. Hope indicated the Woodens River Environmental Organization would prepare a formal document for the Board's approval, to be submitted to HRM as part of the community based sponsorship initiative.

Caution was expressed that it may be sometime before the HRM Water Resource Management Study is adopted. Once it is and the policies contained therein, it would be the time to submit a proposal. It was felt that submitting a proposal now might confuse the issue. It was felt the Board could support the request for \$1,000, however.

To be effective, the testing costing \$15,000 annually, would have to be expanded to four or five years to determine a major change in bioindicators, for a cost of \$60,000 to \$75,000. It was felt this is something CURA might consider. Reference was made to a recent meeting of the consortium at which it was indicated that they were putting together a research proposal to the SSHRC (Social Sciences and Humanities Research Council) for \$1 million. Mr. Hope noted an application was made to CURA (Community University Research Alliance) and their response was that the project was not accepted for funding at this time. Nevertheless, the Chair felt it would be worthwhile pursuing with them.

Given the project is ready to go and the organization is trying to get funding from HRM based on a study not yet accepted, the Chair felt there is a remote possibility of receiving a positive response.

Mr. Hope noted that an application has been made to the HRM Capital Grants program for the \$1,000, in addition to the Feds and CURA. While it is expected that the \$1,000 grant will be approved, timing is critical.

In conclusion, it was decided that a letter be written immediately regarding the submission for a \$1,000 grant and stressing the need for an immediate response so the field season isn't missed. The Chair will write the letter to the Mayor.

It was also agreed that the Chair will draft a letter regarding the issue of the comparative study, to be reviewed at the next meeting.

4.5 **GLEN ARBOUR GOLF COURSE - AUDUBON PROGRAM**

Mr. Evans declaring a conflict of interest related to ownership of property in the vicinity, withdrew from discussions associated with this item.

C Information pertaining to the Audubon Cooperative Sanctuary System of Canada was circulated in the agenda package.

It was noted that there are seven categories for certification. The Board would like to know under what category Glen Arbour Golf course received their accreditation, given the concerns the Board has with the degradation of Sandy Lake from nutrient input. Rather than enquire of the Audubon Society, Dr. Thomas will contact the golf course care of the Golf Course Manager.

4.6 **GLEN ARBOUR "PARCEL D" RECOMMENDATION**

Circulated at the meeting were draft recommendations associated with the above noted item prepared by Ms. Smith and the Chair. The recommendations will be relayed to the appropriate Planner, Community Council and proponent.

4.7 **SEWAGE TREATMENT - SIR JOHN A. MACDONALD HIGH SCHOOL**

A letter was sent to Mr. C. Moir, NS Transportation and Public Works May 22, 2003 and copied to the Mayor regarding this item. Mr. Moir was asked to attend tonight's meeting. No response has been received to date. Mr. Mandaville referred to a public tender advertisement related to this project, which closes Thursday, May 29th. The Board did not feel HRM should allow this work to proceed without its input.

It was decided that a letter be written to the Mayor, attaching a copy of the previous correspondence to Mr. Moir and a copy of the advertisement. The Board would indicate they don't feel HRM should allow this project to proceed without consultation in this issue.

6. **ITEMS FOR NEXT AGENDA**

- C Representative of NSDOE&L attend Board meetings (Mr. Mandaville)
- C Discussion of Nova Scotia Hypolimnion Project - Report by Mr. Brylinsky (Mr. Mandaville) - refer item 4.4

INFORMATION ITEMS

HRM WATER MANAGEMENT STRATEGY

While a response has already been submitted on behalf of the Board to Mr. Sheppard, the Chair circulated a slightly revised version intended to be the Final Report. He has already discussed with Mr. Sheppard. It will be forwarded with an accompanying memo, a copy of which will be provided in the next agenda package.

MEETING SCHEDULE

The meeting schedule for May 16, 2003 was circulated at the meeting and reviewed. The Chair referred to a meeting being held May 28 on Westgate. He noted that the Board was to forward their minutes associated with the case, but he doubted the minutes would be of any assistance.

He also noted a meeting May 22, 2003 associated with Friends of Hemlock Ravine. The Secretary advised that the item was discussed at BWAC last week and the Friends of Hemlock Ravine indicated they are pleased with the developer's attempt to accommodate changes to the development originally proposed to allow for more protection of the watershed associated with Hemlock Ravine.

REVISED LIST OF BOARD RECOMMENDATIONS

The Chair asked the members to review again to determine if anything is missing and if they can provide better information on individual items.

9. DATE OF NEXT MEETING

Wednesday, June 18, 2003

10. ADJOURNMENT

Meeting adjourned at 9:45 p.m.

Lynne LeBoutillier
Legislative Assistant