

# HALIFAX REGIONAL MUNICIPALITY

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## DARTMOUTH LAKES ADVISORY BOARD MINUTES MAY 31, 2006

PRESENT: Ms. Audrey Manzer, Chair  
Ms. Catherine Lunn, Vice Chair  
Dr. Ron Beazley  
Dr. Klaus Hellenbrand  
Dr. Mark Trevorrow  
Mr. Mark MacLean  
Mr. Pierre Clement  
Ms. Christine Hoehne  
Mr. Peter Connor

ABSENT WITH  
REGRETS: Councillor Gloria McCluskey  
Dr. Hugh Millward  
Ms. Stephanie Bird

STAFF: Mr. John MacPherson, Planning & Development Services  
Mr. Tony Blouin, Manager, Environmental Performance, EMS  
Mr. Hanita Koblents, Planner  
Ms. Sherryl Murphy, Legislative Assistant

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**1. CALL TO ORDER**

The meeting was called to order at 5:20 P.M.

**2. APPROVAL OF MINUTES**

**MOVED by Mr. Hellenbrand, seconded by Mr. MacLean that the minutes of the April 26, 2006 meeting of the Dartmouth Lakes Advisory Board, as distributed, be approved. MOTION PUT AND PASSED UNANIMOUSLY.**

**3. APPROVAL OF THE ORDER OF BUSINESS AND APPROVAL OF ADDITIONS AND DELETIONS**

The agenda, as distributed, was accepted.

**4. BUSINESS ARISING OUT OF THE MINUTES**

Referring to agenda item 8.1 Cranberry Lake of the April 26, 2006 meeting, Mr. Hellenbrand advised that no action had been taken with regard to the pile of soil.

The Legislative Assistant noted that staff had indicated in response to an e-mail request that steps would be taken to this matter. An update will be sought for the next meeting of the Board.

**4.1 Dartmouth Crossing Update**

A representative of Dartmouth Crossing, provided an update of the Dartmouth Crossing development including the following highlights:

- On May 19, 2006 there was a rain event during which the cap on a pipe came loose releasing water from the not yet completed dam very near to Lake Micmac
- Ground water was released under the culvert to Lake Micmac for approximately ½ hour after which the contractor corrected the situation by erecting a temporary dam
- The resulting silt into Lake Micmac was contained in the slit curtain
- During two rain events since that time no problems have been encountered

In response to a question, the Board was advised that during construction the dam will remain capped and closed. Once the site is stable the cap will be removed.

**5. NEW BUSINESS**

Referring to items 5.1 and 5.2, the Chair indicated that there is a misconception that the Dartmouth Lakes Advisory Board would be establishing a phosphorus threshold value for

Russell Lake. She advised that the Board is advisory to the Harbour East Community Council and as such will make a recommendation to the Community Council in this regard. The decision to set the levels will be made by the Harbour East Community Council.

The Chair went on to indicate that Board members had not received the information relative to this matter in sufficient time to undertake a thorough review of the material. Consequently, the Board will hear the presentations, ask questions but defer their decision to allow members an opportunity to digest the information.

### **5.1 Presentation: Clayton Developments re Russell Lake Modelling**

- A report entitled Modelling the Watershed of Russell Lake (Report No. SD191984) was before the Board.
- Correspondence from Ben Jenkins, Russell Lake Residents Association, dated May 31, 2006 regarding agenda items 5.1 and 5.2 was before the Board.

Mr. Paul Morgan, Planner, noted that the agreement for the Russell Lake West development introduced a requirement for water quality monitoring. Mr. Morgan went on to indicate that he had mistakenly been working from the position that the Dartmouth Lakes Advisory Board would be setting the threshold levels. In fact, as the result of an amendment to the proposed Development Agreement, the matter will be referred back to Community Council for decision.

Mr. Mike Hanusiak, Vice President, Clayton Developments, noted that as part of the development agreement to develop lands at Russell Lake West, Clayton Developments is obligated to undertake a water monitoring program. The terms of that program have been developed at arms length from Clayton Developments by Jacques Whitford. The terms of the study were reviewed/accepted by HRM staff and the work was carried out by Jacques Whitford. The findings have been disseminated to HRM staff and are now the property of HRM.

Mr. Hanusiak introduced Dr. Jay Walmsley, Project Manager, Jacques Whitford and Dr. Walton Watt, a PhD in Liminology, who prepared the phosphorus modelling for Russell Lake.

Dr. Walmsley addressed the Board and presented the report including the following highlights:

- Provided an aerial photo to orient the Board to Russell Lake and to illustrate the level of development around the lake
- Identified four (4) sampling sites on the lake as follows: the North inlet, the deepest point of the lake, the South inlet, and the outlet
- Samples were taken in April, June, August and November
- The data is available from April 2005 to March 2006

- Monitoring will be ongoing with the same sites and same timing
- Sampling has indicated that the PH was well within the range expected and metals, oil and grease were not an issue
- Sodium Chloride occurred in most of the lakes, indicating that salts going into the lake is a problem
- Nutrient levels varied widely throughout the year
- At the south inlet there are very high phosphorus levels
- Provided an explanation of the phosphorus modelling which was undertaken
- Two samples were taken prior to any work being carried out on the site which identified: 1. that high levels of phosphorus pass through the wetland to the lake  
2. estimated the differences in phosphorus in the lake pre-construction and post construction

Conclusions:

- Russell Lake has been experiencing a reduction in trophic status in recent years
- During the study period (2005-06) the lake passed through periods of apparent oligotrophy, then mesotrophy and eutrophy
- In the 2005-06 study period, about 25 kg of excess phosphorus leached out of the contaminated west wetland -- probably as result of sewage discharge from the trailer park
- The Russell Lake West development is expected to increase the TP concentration in the lake by about 1.5mg/M
- This can be mitigated by reducing or eliminating the TP input from the contaminated wetland
- It is not feasible to restore Russell Lake to it's presumed pre-development oligotrophic condition because of the extensive land use changes in the drainage area
- Russell Lake can be restored to a stable mesotrophic state and maintained in that state for the foreseeable future

Dr. Walmsley and Dr. Watt responded to questions from members of the Board.

Mr. Hanusiak suggested, in light of the phosphorus issue in Russell Lake and the relative lack of metal, oil and grease findings, HRM may wish to decrease the sampling for these and increase it for phosphorus.

In this regard, Dr. Watt suggested, for example, the following program:

- Four samples taken every second month
- Phosphorus sampling each month
- Full range of testing four times per year

The Chair reiterated her previous comments regarding the resolution of this matter and

noted that the Board would be making a recommendation to Harbour East Community Council.

Mr. Morgan noted that the policies relative to the water quality monitoring have been approved. Harbour East Community is anticipating a recommendation relative to the eutrophication threshold levels.

## **5.2 Russell Lake Phosphorus Threshold**

- A staff report dated May 26, 2006 was before the Board.

Dr. Tony Blouin, Manager, Environmental Performance, briefly reviewed the May 26, 2006 staff report noting that:

- The report outlines staff's position relative to a phosphorus threshold on Russell Lake
- He had presented a process by which to determine a phosphorus threshold to the Board at a previous meeting
- There is a national protocol for managing phosphorus in freshwater lakes - Canadian Council of Ministers of Environment (CCME) Guidelines
- As guidelines they have no regulatory force
- The guidelines do not recommend a national threshold, but provide a protocol and process for determining a phosphorus threshold

Dr. Blouin went on to review with the Board pages 4 and 5 of the staff report. Dr. Blouin indicated that as Russell Lake is not a pristine lake, and there is significant development on the lake, a reasonable management objective is to preserve the current mesotrophic status. Consequently staff have recommended a threshold of 15 micrograms ( $\mu\text{g}$ ) per litre (L).

Concluding his remarks, Dr. Blouin indicated that HRM is investigating the source of phosphorus at the south inlet.

In response to questions from members of the Board, staff indicated the following:

- The threshold set for Russell Lake will apply to future development
- HRM will not likely take action unless the threshold is found to be consistently above that what is set and may even use an annual average
- In terms of the source of the phosphorus, there is a pumping station at the downstream end of the of the trailer park which overflowed three times in 2005 during heavy rain conditions. Phosphorus levels are equally as high up stream which may be the result of cross connections. HRM will be working toward identifying the source of the phosphorus and will take the appropriate remedial action as budget allows.

In response to the Chair, Mr. Hanusiak indicated that at least a portion of the cattail marsh is contaminated and this contamination contributes to the phosphorus in the lake. He indicated that consideration is being given to re-directing the water from that portion of the bog once the source of the contaminant has been found. A large portion of the bog will remain intact.

Dr. Blouin responded to questions from members of the Board providing the following information:

- Short term measures to moderate the flow from the cat tail bog would be subject to the budgetary process (i.e. identification of priority)
- Overall an annual average phosphorus measure from the deep station would be most representative of the lake as a whole
- HRM is not able at this time to regulate the personal use of fertilizers, but can educate the public with regard to the issues around the use of fertilizers adjacent to water bodies

The Chair invited representatives of the Russell Lake Residents Association to present their concerns.

A representative indicated that the Association's concerns are set out in the May 31, 2006 written submission. He went on to indicate that the Russell Lake Residents Association is not against development, but are looking at ways to mitigate areas of concern. He expressed concern that the Russell Lake Modelling report was prepared on behalf of the developer rather than being funded by the developer and prepared on behalf of HRM.

Mr. Hanusiak reiterated that the testing and reporting had been carried out at arms length from Clayton Developments.

**The Board agreed that consideration of this matter would be deferred to the next meeting of the Board scheduled for June 28, 2006.**

### **5.3 Case 846 - Portland Hills - Development Agreement - Stormwater Management Plan and Sediment Control Plan**

- A document entitled Portland Hills Environmental Protection Plan, Schedule "I", dated May 24, 2000 was before the Board. A Concept Plan for Portland Hills, Phase 5, May 2006 was also before the Board.

Ms. Hanita Koblents, Planner, briefly introduced the matter indicating that Clayton Developments has made an application for an expansion of the Portland Hills development. Staff have been working with a Public Participation Committee (PPC) to negotiate a development agreement. Ms. Koblents went on to review the process followed noting that

staff and the PPC believe the policy requirements have been met. She further indicated there is an Erosion Control Plan which the developer will discuss in more detail. Concluding her remarks, Ms. Koblents noted that a water monitoring program would be undertaken relative to this development and an explanation of the approach and program would be also be discussed later in the meeting.

Mr. Mike Hanusiak, Clayton Developments introduced the members of his team and providing a brief background to this application. He noted that Harbour East Community Council had approved the development of the first 93 acres of an approximate 260 acre parcel of land owned by Clayton Developments in 2000. The original development agreement included a comprehensive Stormwater Management and Erosion and Sediment Control Plan for the entire 260 acre parcel. A subsequent application was approved to allow for the development of additional acreage. Mr. Hanusiak indicated that there are now 103 acres of land remaining to be developed.

Mr. Hanusiak went on to indicate that Clayton Developments is proposing the continued use of the previously approved Storm Water Management and Erosion Control Plan. These plans have worked well to this point. He went on to outline the following features:

- The plans have been updated to bring them into compliance with the Regional Plan
- The same monitoring procedures will be carried out for this area
- There are two (2) CDS units for this area. A large portion of this area will drain into an existing CDS unit which has been sized and approved for this development. A second CDS unit will handle the remaining drainage
- There is an emphasis on single family dwellings in this phase
- 100% of the lake frontage is public parkland
- The buffer is at least 100 feet and in some areas is 200 feet
- The buffer zone along Bell Brook meets or exceeds the requirements of Regional Plan
- The steeply sloped area is to be a public park which is essentially a non-disturbance area
- A series of walking and higher order trails are dispersed throughout the development

Mr. Koblents noted that the development agreement has been endorsed by the Public Participation Committee and a recommendation is going forward to Harbour East Community Council. She went on to review the approach to the water quality monitoring program noting that HRM, through the Environmental Management Group, would be responsible for the testing with Harbour East Community Council establishing the phosphorus levels. Noting that Clayton will developing a relatively small portion of the watershed, Ms. Koblents advised that Clayton will provide a cash contribution of approximately \$3,000 for the first phase and \$1,000 for subsequent phases.

Dr. Blouin indicated that the HRM program provides for three single deep water samples

per year from 52 lakes.

Following a brief discussion and questioning of staff and the developer, **the Board endorsed the measures set out in the Development Agreement relative to green space and lake protection measures. It further agreed that development proceed utilizing the previously approved Stormwater Management and Sediment Control Plan.**

6. **CHAIRMAN'S REPORT** - None
7. **STAFF UPDATE** - None
8. **ADDED ITEMS** - None
9. **DATE OF NEXT MEETING**

The next regular meeting of the Dartmouth Lakes Advisory Board is scheduled for Wednesday, June 28, 2006 beginning at 5:15 p.m.

10. **ADJOURNMENT**

There being no further business, the meeting adjourned at 7:35 p.m.

Sherryl Murphy  
Legislative Assistant