

HALIFAX REGIONAL MUNICIPALITY

**DARTMOUTH LAKES ADVISORY BOARD  
MINUTES  
JULY 12, 2006**

PRESENT: Ms. Audrey Manzer, Chair  
Dr. Klaus Hellenbrand  
Dr. Mark Trevorrow  
Ms. Christine Hoehne  
Mr. Peter Connor  
Councillor Gloria McCluskey  
Mr. Mark MacLean  
Mr. Pierre Clement

ABSENT WITH  
REGRETS: Ms. Catherine Lunn, Vice Chair  
Dr. Ron Beazley  
Dr. Hugh Millward  
Ms. Stephanie Bird

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

HALIFAX REGIONAL MUNICIPALITY  
DARTMOUTH LAKES ADVISORY BOARD 2      July 12, 2006  
**TABLE OF CONTENTS**

1.	CALL TO ORDER	3
2.	APPROVAL OF MINUTES	3
3.	APPROVAL OF THE ORDER OF BUSINESS AND APPROVAL OF ADDITIONS AND DELETIONS	3
4.	BUSINESS ARISING OUT OF THE MINUTES	3
	4.1 Dartmouth Crossing Update	3
	4.2 Phosphorus Threshold for Russell Lake	3
5.	REPORTS	7
	5.1 STAFF REPORTS	
	5.1.1 Phosphorus Threshold for Morris Lake	7
	5.2 CHAIRMAN'S REPORT	8
	5.3 STAFF UPDATE	8
6.	ADDED ITEMS	9
7.	DATE OF NEXT MEETING	9
8.	ADJOURNMENT	9

1. **CALL TO ORDER**

The meeting was called to order at 5:35 p.m.

2. **APPROVAL OF MINUTES** - None

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

**MOVED** by Ms. Hoehne, seconded by Mr. Hellenbrand that the agenda, as distributed, be approved. **MOTION PUT AND PASSED UNANIMOUSLY.**

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

4.1 **Dartmouth Crossing Update**

Not available at this time.

4.2 **Phosphorus Threshold for Russell Lake**

- This matter was deferred from the May 31, 2006 meeting of the Dartmouth Lakes Advisory Board.
- A memo dated June 5, 2006 from Tony Blouin in response to the May 31, 2006 memo from the Russell Lake Residents Association, was before the Board. Also before the Board was a June 23, 2006 memo from the Russell Lake Residents Association.

The Chair read the June 5, 2006 memo from Tony Blouin, Manager, Environmental Performance, responding to questions in the Russell Lake Residents Association memo of May 31, 2006. She further indicated that Dr. Trevorrow had provided an e-mail summarizing this matter including recommendations and suggested that he review with the Board this information.

Mr. Blouin indicated that he had outlined the staff report at the May 31, 2006 meeting. He went on to indicate that as per CCME guidelines the pre-development threshold for the lake would be ten (10) micrograms (Fg) per litre (L). The first step under the CCME guidelines is to establish a management goal for the lake. The suggested management goal is to maintain the lake in its present mesotrophic state given that it has an extensively urbanized drainage and will be subject to further development. Mr. Blouin indicated that the range for a mestrophic lake is 10-20 Fg/L and noted that staff is recommending a mid-point threshold level of 15 Fg/L.

HALIFAX REGIONAL MUNICIPALITY

DARTMOUTH LAKES ADVISORY BOARD 4 July 12, 2006

Councillor McCluskey expressed concern that setting the threshold at 15 F<sub>g</sub>/L rather than at ten (10)F<sub>g</sub> /L provides a greater opportunity to increase the threshold to 20 if 15 F<sub>g</sub> /L is not attainable.

Mr. Blouin responded that the lake reached a level of 13.5 F<sub>g</sub> /L in 2005. The next step is further assessment including the identification of the sources of phosphorus and fecal coliform. Mr. Blouin indicated that staff has begun investigating these sources including the bog, overflow from the pumping station and another, as yet undetermined, upstream source.

Dr. Trevorrow reviewed his email including the following highlights:

- There is agreement that Russell Lake has exceeded the threshold levels for oligotrophic category in recent years
- There is a choice as to how the measurement can be arrived at: 1. a spring turnover measurement or a yearly average
- Setting the threshold at 15 F<sub>g</sub> /L implies that if the measurement goes over 15 F<sub>g</sub> /L, HRM will take action
- The Jacques Whitford testing is valuable in that it attempts to identify the relative change which will be caused by development. The report indicates that the values in the lake would change by 1.5 F<sub>g</sub> /L
- The basic question is regardless of whether the level is set at 10 F<sub>g</sub> /L or 15 F<sub>g</sub> /L, what is to be done if the level is exceeded
- Obvious actions would include identifying phosphorus sources and carrying out remediation in this regard

Mr. Clement suggested that it is difficult to apply thresholds and perhaps this is not the best course of action. However, if a trigger is to be established, what is the consequence if the trigger is exceeded. Mr. Clement suggested that more work relative to the consequence is required before a threshold is established.

Mr. Hellenbrand suggested that other lakes in Dartmouth have stabilized relative to phosphorus levels post development.

Mr. McLean noted that management decisions are more difficult because there is existing development on the lake, new development and other possible sources of phosphorus. He went on to suggest that perhaps a more focussed monitoring program on new development would be more appropriate.

In response to a question from Mr. Clement regarding what authority HRM has to require that new development not exceed the established phosphorus threshold, Mr. Blouin indicated that the Development Agreement would provide a vehicle to require the developer to manage stormwater and/or nutrients. He further indicated that HRM has adopted new stormwater management guidelines with the intention of incorporating

HALIFAX REGIONAL MUNICIPALITY

DARTMOUTH LAKES ADVISORY BOARD 5 July 12, 2006

these guidelines into revised by-laws which deal with development and disturbance of sites (e.g. Lot Grading and Top Soil By-laws).

The Chair commented that it appeared staff was proposing some preventative measures along with some measures to remediate the phosphorus which is presently entering the lake.

Mr. Blouin indicated that in terms of identifying the source of phosphorus, staff is focussing on the Gaston Road Pumping Station and the sewer watershed upstream.

Mr. Ian Guppy, indicated that investigation of the situation is ongoing. He noted that the Gaston Road Pumping Station is a Priority 2 project under the capital budget priority process. Overall HRM has approximately \$141 million in priority stormwater projects.

Mr. Blouin noted that there are some relatively simple actions to be taken to improve the situation including identifying and correcting cross connections, simple measures to prevent excessive stormwater getting into the system, and repairing manholes. Other more costly remediation will be dependent upon budget.

Mr. Connor suggested that establishing a threshold level will provide a tool to ensure that development does not add to phosphorus levels in the lake.

Mr. Blouin, referring to concern regarding continued monitoring, noted that Clayton Developments is required to carry out monitoring for one year after their development is complete. In addition, HRM has begun a more limited sampling which will serve as a check.

The Chair, summarizing the discussion, noted that the Board appeared to agree with the setting of a phosphorus level. However, there is also a need for remediation and preventative measures.

In response to a question from Mr. Mark McLean, Dr. Blouin indicated that the developer is required to provide data on their sediment control to the Nova Scotia Department of the Environment.

Mr. Connor noted that Mr. Hanusiak had suggested that more frequent monitoring for phosphorous would be possible if testing for other non problematic substances was reduced (e.g. metals). Mr. Blouin indicated that he would follow up with Mr. Hanusiak on this matter.

Mr. McLean suggested that it was important to identify the source points. He further suggested that having more sampling sites at strategic points will allow for a greater number of options in terms of management.

HALIFAX REGIONAL MUNICIPALITY

DARTMOUTH LAKES ADVISORY BOARD 6 July 12, 2006

**MOVED by Mr. Connor, seconded by Mr. Trevorror the Dartmouth Lakes Advisory Board endorse establishing a total phosphorus level for Russell Lake and further that:**

- 1. Total phosphorus in the lake be monitored on at least a monthly basis for one year**
- 2. HRM investigate and remedy potential sewage infiltration into the southwest part of the lake**
- 3. Voluntary phosphorus reduction strategies, such as reducing the use of lawn fertilizers, be adopted throughout the Russell Lake watershed.**
- 4. The current development and any future developments be required to monitor phosphorus levels at a near source of discharge, whether it be at point source or nearest predicted area of release of potential phosphorus, in addition to the current monitoring sources.**

**MOTION PUT AND PASSED.**

**MOVED by Mr. Trevorror, seconded by Mr. Connor the Dartmouth Lakes Advisory Board recommend to Harbour East Community Council that a phosphorus threshold value of 12 micrograms (Fg) per litre (L) based on an annual average be established for Russell Lake.**

A brief discussion ensued during which Mr. Blouin distributed a document entitled 'Use of Canadian Guidance Framework for the Management of Phosphorus in Freshwater Systems (Environment Canada, 2004) and the CCME: Phosphorous Guideline. Mr. Blouin briefly reviewed the document and in particular two illustrative case studies. He indicated that the recommendation made by staff is reasonable, however, the guidelines are flexible.

**MOVED by Mr. Clement, seconded by Mr. McLean that the motion be amended to include a recommendation that HRM expediently remediate the sewage issues which are presently impacting the phosphorus level. MOTION PUT AND PASSED.**

**MOVED by Mr. McLean, seconded by Mr. Clement that the motion be further amended to provide for an option to revisit the phosphorus threshold level every five (5) years with a view to reducing the level should the data indicate it is appropriate to do so.**

**MOTION PUT AND PASSED.**

The vote on the amended motion, as follows, was taken.

**MOVED by Mr. Trevorror, seconded by Mr. Connor that the Dartmouth Lakes**

**Advisory Board recommend to Harbour East Community Council that:**

- 1. A phosphorus threshold value of 12 micrograms (Fg) per litre (L) based on an annual average be established for Russell Lake.**
- 2. HRM expediently remediate the sewage issues which are presently impacting the phosphorus level.**
- 3. The phosphorus threshold level be revisited every five (5) years with a view to reducing the level should the data indicate it is appropriate to do so.**

**MOTION PUT AND PASSED.**

**5. REPORTS**

**5.1 STAFF REPORTS**

**5.1.1 Phosphorus Threshold for Morris Lake**

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

Mr. Blouin addressed the Board briefly reviewing the May 26, 2006 staff report. He noted that there is less background data relative to Morris Lake, however, the lake is in a mesotrophic state based on existing data. Like Russell Lake, Morris Lake is significantly urbanized. Morris Lake is a larger lake with a more complex basin and testing has indicated that the existing phosphorus level in the lake is 12.5 micrograms (Fg) per litre (L).

A brief discussion ensued including the following points:

- Morris Lake experiences rapid flushing due to the water which is utilized by the oil refinery
- A monitoring program will be carried out on Morris Lake in conjunction with the Phase 4 and 5 development of Portland Hills. This program will be a basic monitoring program done by HRM and partially funded by Clayton Developments as part of the terms of the Development Agreement on Phase 4 and 5.

**MOVED by Mr. Connor, seconded by Ms. Hoehne the Dartmouth Lakes Advisory Board endorse establishing a total phosphorus level for Morris Lake and further that:**

- 1. Total phosphorus in the lake be monitored on at least a monthly basis for one year**

2. **Voluntary phosphorus reduction strategies, such as reducing the use of lawn fertilizers, be adopted throughout the Morris Lake watershed.**
3. **The current development and any future developments be required to monitor phosphorus levels at a near source of discharge, whether it be at point source or nearest predicted area of release of potential phosphorus, in addition to the current monitoring sources.**

**MOTION PUT AND PASSED.**

**MOVED by Mr. Connor, seconded by Ms. Hoehne the Dartmouth Lakes Advisory Board recommend to Harbour East Community Council that:**

1. **A phosphorus threshold value of 12 micrograms (Fg) per litre (L) based on an annual average be established for Morris Lake.**
2. **The phosphorus threshold level be revisited every five (5) years with a view to reducing the level should the data indicate it is appropriate to do so.**

**MOTION PUT AND PASSED.**

The Board agreed that the following items be included on the agenda for the next meeting:

1. Wildlife and Insects on Lakes

The Chair indicated that she would arrange for wildlife expert to attend the next meeting.

2. Presentation re Shubie Canal (Bernie Hart) - Designation as Heritage River

The Board further requested a site visit of Dartmouth Crossing. July 26, 2006 beginning at 4:00 p.m. was agreed to as the date for the visit. The Chair will contact Brian White in this regard.

**5.2 CHAIRMAN'S REPORT - None**

**5.3 STAFF UPDATE - None**

**6. ADDED ITEMS - None**

**7. DATE OF NEXT MEETING - September 27, 2006**

**8. ADJOURNMENT**



HALIFAX REGIONAL MUNICIPALITY  
DARTMOUTH LAKES ADVISORY BOARD 9      July 12, 2006  
There being no further business, the meeting adjourned at 7:15 p.m.

Sherryl Murphy  
Legislative Assistant