

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

# Item No. 12.3.1 Environment and Sustainability Standing Committee December 6, 2018

TO: Chair and Members of Environment and Sustainability Standing Committee

-Original Signed-

SUBMITTED BY:

Kelly Schnare, Chair of Regional Watersheds Advisory Board

DATE: November 15, 2018

**SUBJECT:** Water Quality Monitoring in HRM Lakes

## **ORIGIN**

Meeting of Regional Watersheds Advisory Board November 15, 2018.

## LEGISLATIVE AUTHORITY

Regional Watersheds Advisory Board Terms of Reference:

"As subject matter experts, with respect to watershed management, the Watersheds Advisory Board:

1. Advises the Environment and Sustainability Standing Committee on municipal policy projects as required under the HRM Charter, the Regional Municipal Planning Strategy, and Secondary Planning Strategies, and as may be specifically assigned by the Environment & Sustainability Committee;"

# **RECOMMENDATION**

The Regional Watersheds Advisory Board recommends that the Environment and Sustainability Standing Committee request staff prepare a report considering:

- 1. Strategic partnerships with volunteer community groups in monitoring the water quality of Halifax Regional Municipality lakes and collecting base line data;
- 2. Investing in water testing equipment, specifically a Conductivity Temperature Depth (CTD) instrument, for multiple parameter testing;
- 3. Activating the Green Network Plan strategy and expand its approach to watershed issues; and
- 4. Consider this recommendation when receiving upcoming studies and reports.

### **BACKGROUND/DISCUSSION**

Staff provided an update on the benthic macroinvertebrate study in Lake Charles to the Regional Watersheds Advisory Board on November 14, 2018. The study is to assess potential impacts of sedimentation on lake health. This area is a cove that experiences heavy sedimentation during every rain event. Area residents want change and are concerned that the sedimentation levels are harmful to the lake. For the first time, Nova Scotia Environment and the Halifax Regional Municipality are co-paying for a study into this area in order to assess whether the turbidity and sedimentation are affecting the health of the lake. The contractor, Envirosphere Limited, has collected a sampling and the results are expected in January 2019.

This information led the Board to discuss the many preventative and informative reasons for continual and consistent lake testing, and the merits of reinstating the lake testing program throughout the Municipality. The Board questioned whether there were enough previous baseline measurements to determine the significance of samples collected for this study. In their view, the issues in other lakes in the Halifax Regional Municipal would impact one another and that treating only one lake would be unsuccessful. The Board supports an integrated stakeholder management approach but suggested that baseline information is needed to properly manage water quality issues. The Board discussed cost effective water monitoring equipment, such as Conductivity, Temperature, Depth (CTD) probes and the equipment bank at the Atlantic Water Network. They encourage staff to collaborate with academia and other volunteer community groups to collect baseline data for all HRM lakes.

Recognizing the scope of the Municipality, the Board put forward the recommendations presented in this report to the Environment and Sustainability Standing Committee.

## **FINANCIAL IMPLICATIONS**

If supported, the financial implications would be identified in a subsequent staff report.

## **RISK CONSIDERATION**

There are risks with proceeding as recommended, such as purchasing inappropriate equipment, and engaging community members in activities with poorly defined objectives and no strategy to assess or act upon findings.

#### **COMMUNITY ENGAGEMENT**

The Regional Watersheds Advisory Board is an advisory committee to the Environment and Sustainability Standing Committee and is presently comprised of one (1) citizen at large appointed from Harbour East-Marine Drive Community Council and one (1) citizen at large appointed from Halifax and West Community Council, three (3) water related professionals at large, and one (1) member of academia. The meetings are open to the public and the agendas and minutes are posted on Halifax.ca in advance of the meeting.

## **ENVIRONMENTAL IMPLICATIONS**

Should the recommendations be approved, subsequent activities may generate an increase in water quality data available for lakes within the Municipality.

#### **ALTERNATIVES**

No alternatives were provided by the Board.

## **ATTACHMENTS**

None.

A copy of this report can be obtained online at  $\underline{\text{halifax.ca}}$  or by contacting the Office of the Municipal Clerk at 902.490.4210.

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