

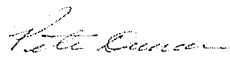


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**Chebucto Community Council**  
**September 5, 2011**

**TO:** Chair and Members of Chebucto Community Council

**SUBMITTED BY:**   
Peter Duncan, Acting Director, Infrastructure and Asset Management

**DATE:** August 11, 2011

**SUBJECT:** Road Salt Management: Whimsical Lake

**INFORMATION REPORT**

**ORIGIN**

Status Sheet: Whimsical Lake  
Resident Requests (copies with personal information removed in Attachment One)

**BACKGROUND**

During the winter of 2010, the Halifax Regional Municipality (HRM) staff and Elected Officials received contradictory requests from different residents living near the storm water shed around Whimsical Lake. One resident living on a street where sand was used, requested municipal operations use salt; and another resident living on a neighbouring street where salt was used, requested sand.

## **DISCUSSION**

Attachment Two shows the Whimsical Lake Storm Sewer System. Storm water runoff from the entire area ends up in Whimsical Lake. Using differing road management practices on different streets in the same storm sewer system is not logical or effective. The implications are:

- increased costs to the tax payer;
- operational budget risk; and
- no real improvement to the ecology of the lake.

Following discussions with Halifax Water (responsible for storm water management) on the subject, staff learned and shared with Community Council the following:

- Typically in winter months, HRM's road salting operations discharge into the storm sewer system at levels that exceed the Halifax Water Rules and Regulations;
- An organic alternative (a Beet derivative) that is being used in other jurisdictions exceeds organic parameters for the storm sewer system;
- Sanding operations not only cost HRM tax payers more but, due to the requirement for increased maintenance on catch basins, will increase costs to Halifax Water Ratepayers (generally the same people). There are also workplace and resident safety implications related to sanding (i.e. breathing in sand dust and inconsistent road conditions); and
- While not the case with Whimsical Lake, many areas at HRM have combined sewer and what goes into the storm sewer impacts waste water treatment facilities.

As such, working on solutions for winter road maintenance is a file that Municipal Operations and the Halifax Water staff (formerly HRM Technical and Underground Services staff) have been working on for a number of years.

HRM staff has been active regarding the development of an economic, environmental, and social (safety) solutions. It is a work in progress.

In 2004, HRM participated in the development of an Environment Canada Code of Practice for the Environmental Management of Road Salts

([www.ec.gc.ca/nopp/roadsalt/cop/pdf/1774\\_EngBook\\_00.pdf](http://www.ec.gc.ca/nopp/roadsalt/cop/pdf/1774_EngBook_00.pdf)). The intent is to reduce the amount of salt used in winter operations. As part of this work, HRM has initiated practices such as pre-salting, using brine, and trialing different operational practices. This work is ongoing with the intent of:

- meeting the allowable environmental parameters;
- providing the safe driving conditions residents expect; and
- finding a solution that reduces budgetary risk and meets reasonable economic and financial parameters.

As this example demonstrates, across HRM Municipal Operations, staff has acquiesced to residential requests by interjecting sanding alternatives. This inconsistent approach increases cost to the municipality, reduces driving safety, and is only providing token ecological enhancement. As such, staff recommends adoption of consistent winter road management practices as a logical and reasonable practice. Staff also recommends continued adoption of progressive road salt management practices and examination of alternative solutions, in collaboration with the Halifax Water staff.

### Environmental Impact

After a brief review of Whimsical Lake data, and benchmark comparison to a lake with no urban development, it is reasonable to see that sodium, chlorides, dissolved solids, conductivity and salinity results are higher in Whimsical Lake. One would expect that, recognizing that it receives the impact from a fully developed urban area. As such, it is fair to say that road salt practices have impacts on all lakes.

Following the residents submissions, HRM will deliver consistent Road Salt Management practices around Whimsical Lake, and strive to reduce the usage of salt to meet Halifax Water's Rules and Regulations Regarding Discharge into the Stormwater System.

This report will be forwarded to the Environment and Sustainability Standing Committee of Regional Council for consideration and direction to staff for Regional initiatives to reduce the use of road salt for winter operations. Water Resource Management is within the mandate of that Committee.

### **BUDGET IMPLICATIONS**

Winter Road Maintenance Operations is one of the most expensive operations HRM undertakes and, due to weather variances, of substantial budget risk. Increasing variations to maintenance operations exponentially increases that budget risk. Making variation recommendations on a street by street basis can have impacts to that budget in the tens of thousands of dollars.

### **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

### **COMMUNITY ENGAGEMENT**

This report is in response to community requests.

### **ALTERNATIVES**

Community Council could recommend to Regional Council that staff adopt variant winter road maintenance practices. A more detailed Budget Implication would be articulated with that report. Regionally, the impact could be in the tens to hundreds of thousands of dollars.

### **ATTACHMENTS**

Attachment One: Excerpts from resident correspondence

Attachment Two: Whimsical Lake Storm System

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A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/cc.html> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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