

Day Two - Track One

Thursday, March 26th, 2015

11:00 a.m. – 11:30 a.m.

Stormwater Management Asset Sustainability (\$ Savings = BMP Reinvestments + Regulatory Compliance)

Presenters: Andrew Palmer & Donald Moss, Greenland Group

Biographies



Andrew Palmer, B.E.S. (Hons) graduated in April 2013 from the University of Waterloo. He worked for the Greenland Group on municipal infrastructure and stormwater management projects during his Co-op work terms. Andrew joined Greenland full-time after graduation and assists the municipal asset management and business development teams.



Don Moss, M. Eng., P.Eng. is Greenland's climate change impact and environmental drainage mitigation design expert. Don has experience in all facets of water resources, urban system infrastructure design related assignments, flood mapping, and other municipal servicing assignments. He has over 30 years of experience in all facets of stormwater mitigation and infrastructure design and has considerable experience in directly related assignments.

Abstract

In 2014, the Greenland Group celebrated its 20th Anniversary. Greenland has grown (and evolved) into an award-winning, Canadian business with a global impact. The company provides stormwater asset sustainability services that include the design/supply/installation of innovative natural systems founded on the principles of biomimicry and water treatment technologies. The services include an “a la carte” approach with proprietary modeling tools; product performance monitoring; risk transference; construction management; maintenance

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oversight; and, operational planning to comply with fiscal restraints, policies and regulations. Greenland develops effective stormwater asset sustainability strategies that will ensure:

1. Assets function as designed to comply with approved functional designs and Certificates of Approval; and,
2. What types of new BMPs should be implemented to address climate change factors and reduce a municipality's costs and liabilities associated with the specified portfolio of identified stormwater management assets.

Greenland's project approach can also decrease phosphorous loads from stormwater management ponds and urban lakes. For example, Phoslock™, which is a patented/proven lanthanum-modified bentonite clay product, has been approved for use in stormwater management ponds that follow a Class E.A. process with qualified professional engineering oversight. Completed projects to-date (since 2012) and scheduled contracts (in 2015/16) include Brampton, Markham, Ottawa, Edmonton, Lethbridge and other municipalities in Ontario, Manitoba and Alberta. Phoslock™ can rapidly remove soluble phosphorus by creating a 'capping layer' at the bottom of a stormwater pond or urban lake. In some cases, a smaller post-application 'maintenance layer' may be required.

Greenland's asset sustainability approach (including Phoslock™ case studies) will be presented.

Learning Objectives

1. SWM Asset Sustainability;
2. Climate Change Impacts; and
3. Phoslock Performance Data.