The 46th Annual Drainage Engineers Conference

The 2014 Drainage Engineers Course and Conference at the Holiday Inn Guelph Hotel and Conference Centre.

- Thursday, October 23 - 7:00 to 9:00 pm – Drainage Practitioners Meeting, including Tribunal Updates
- Friday, October 24 – Drainage Engineers Conference,

Drainage Conference Program

Welcome and Opening Remarks, Tim Oliver, Chair, OSPE Land Drainage Committee

Smart Stress Management – shifting from defense to performance. Kathy Somers, Stress Management and High Performance Clinic, University of Guelph

“Stress makes you stupid!” Do you want to think more clearly when you’re put on the spot? Learn brief and effective brain/body calming techniques that power up performance, focus, and energy. Practice how to:
- shift gears from defense (fight/flight) to effective coping & smart action
- think like a “good stress coper”
- identify and defuse the most common stress escalators
- use the BMW approach to relaxing mind and body

A New Tool for Managing Water Flow on the Rural Landscape, Alec M. Scott, Water and Planning Manager, Ausable Bayfield Conservation Authority

As part of an initiative to improve water quality along the Lake Huron shoreline between Tobermory and Sarnia, the Healthy Lake Huron group has undertaken a project to develop a Rural Stormwater Management Model (RSWMM). This new model provides a tool to better understand how storm runoff moves across the rural landscape and allows for evaluating the impacts of various conservation practices to help reduce erosion and water quality pollution.

The model has been developed using the existing PCSWMM software base and therefore has a strong hydraulic component. Because of this, the RSWMM may also have applications for the agricultural drainage industry.

The presentation will introduce the new model and offer some suggestions for possible

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uses.

**Changes to the Fisheries Act**, Thomas Hoggarth, Fisheries and Oceans Canada

In 2012 the Government of Canada made changes to the Fisheries Act. These changes to the Act came in force on November 25, 2013. The presentation will discuss these changes and identify implications to the drainage community.

**Drain Crossing Assessments**, Tony Peralta, N.J. Peralta Engineering Ltd.

This session provides an overview of an assessment rationale based on a fair and equitable method of distributing costs for Municipal Drain crossings, through the provisions of the Drainage Act.

Tony is a licensed professional engineer in the province of Ontario. He currently serves as a drainage practitioner for N.J. Peralta Engineering Ltd., working primarily on Municipal Drainage projects within Southwestern Ontario. Tony’s experience spans over 16 years, as both a technologist and an engineer, having expertise in all aspects of field surveying, drafting, detailed design, project management and construction administration for drainage projects, as well as all types of municipal infrastructure projects. Tony is currently a member of the OSPE Land Drainage Committee.

**Agriculture, Food and Rural Affairs Appeal Tribunal Update**, Ed Dries, P.Eng (Retired)

The Tribunal will be represented by Edward Dries, P. Eng. (Retired) who currently serves on the Tribunal. This session offers a brief update of Tribunal activities over the past year including comment on some significant decisions on cases that have recently been decided by the Tribunal.

**Working in Water and Other Random Thoughts**, Harry Reinders, R&M Construction

Working in existing flow conditions. What are the benefits? What are the negative impacts to the site? This session will look at projects that included working with equipment in flowing stream conditions and how that affected construction, timing of the work as well as how the project performed overall. Turbidity monitoring results taken before, during and after construction will also be discussed as well as the sediment load impacts on the downstream reach at these sites.

**Stream Restoration and Agricultural Drainage: An Opportunity?**, Brad Fairley, Stream Restoration Service Leader, Stantec Consulting Ltd.

The science of stream restoration is relatively new — starting in early 1990s. During the early days, there were a large number of poorly designed and poorly constructed projects and a large number of failures. By the mid-2000s, the science had evolved to
the point where engineers and scientists were able to design and construct a stable channel. However, the restored channels were not rebuilding lost ecological functions. During the last 10 years there have been a number of developments that have improved the science of stream restoration. These improvements have helped reduce construction cost and improve the ecological performance of stream restoration projects. Designs can now be done in 3D, allowing for optimization of the design and the use of GPS-enabled construction equipment. New instream structures have reduced the need for repairs and improve ecological function. A better understanding of sediment transport processes has strengthened the long-term performance of stream restoration projects. As a result, there may be opportunities for stream restoration techniques in the context of agricultural drainage.

**Closing Remarks** – Tim Oliver, Chair OSPE Land Drainage Committee