

## Day Two - Track Two

Thursday, March 22<sup>nd</sup>, 2018

3:30 p.m. – 4:00 p.m.

## Policy Implications of a Zero Discharge System

**Presenter:** Brett Emmons, Emmons & Olivier Resources, Inc.

### Biography



Brett Emmons has 25 years experience in integrated water resources management. His career has included international water work as well as public sector consulting both with a regional firm and with the firm he co-founded, Emmons & Olivier Resources (EOR). Currently he is CEO of EOR and leads new initiatives, sustainability issues, and multi-disciplinary projects in several states throughout the Midwest. He holds a Master's degree in Civil and Environmental Engineering from the University of Wisconsin-Madison and an Undergraduate Degree in Forest Ecology from the University of Illinois. He is a registered professional engineer in Minnesota, Wisconsin, Iowa, and South Dakota.

### Abstract

Stormwater control continues to be a priority in many urban areas, with ever increasing flooding and water quality problems. This is especially true in newly developing areas where stricter stormwater standards can be a challenge for developments. When a metro community of MN, Inver Grove Heights, was facing development obstacles due to no natural drainage outlet, creative new methods were sought to solve this major obstacle to development. The innovative approach led to a zero discharge management system for the newly expanding portion of town. The new system led to many accolades for the city, including state, national, and international awards. What served as the foundation for this was a set of unique policies and ordinances that enabled this system to work with an unconventional approach. Policies and standards were developed for density flexibility, clustering, open space, parking, street widths, and runoff calculations that all became part of an overlay district ordinance. Hear how these standards served to preserve the development potential in an affordable way, while also preserving landscape character, reducing regional infrastructure costs, improving environmental outcomes, and reducing flood risks over conventional systems. While it almost sounds too good to be true, this unique approach brought together modern land planning concepts with new stormwater approaches to create a win-win solution for the community.

## Learning Objectives

1. Learn how planning/land use concepts, that build better communities, were combined with stormwater requirements, for improved system performance for costs, the environment, and community-building;
2. Learn how low impact development (LID) can have a beneficial effect on not just water quality, but also flood control; and
3. Understand the synergies behind how modern stormwater controls and flexible land planning can benefit each other in efficient and creative ways.