

## WEF Stormwater Seminar - June 15 -16, 2017

Quebec City, Canada

### DAY ONE – June 15

The first day of the event consists of presentations on Canadian and American programs/projects and discussion opportunities.

#### Optional Technical Tour – 8:00am – 10:00am

Free tour – need to register separately

The tour will explore the combined sewer system of the city of Quebec. It will discuss the wastewater treatment facility with focus on measurement and control and the other will discuss the sewer system and its global real-time control system. The global control system was developed to deal with the storm impacts. Also at the treatment plant their main control issues are to deal with wet weather overloads.

#### 10:00am

Networking Coffee Break – Workshop Check In

#### 10:20am

Welcome and Introduction –

- Virginia (Ginny) Roach, CDM Smith
  - Jason Vogel, Oklahoma State University
  - Branko Kerkez, University of Michigan, Civil and Environmental Engineering
- Fundamentals – First four speakers
  - Moving into Action – Fifth speaker
  - Case Studies – Sixth through twelfth speakers
  - Format is twenty-minute presentation with five-minute question time with morning and afternoon Buzz Groups with presenters

#### 10:30am – 10:50am

**Insights on how historical bmp monitoring lessons learned can help inform the role of big data in the stormwater sector - John Pedrick at Contech Engineered Solutions**

#### 10:50am – 11:10am

(11:10am – 11:15am Q&A with first two speakers)

**Evolving Tools for Big Data Management to Improve Stormwater Treatment - Dylan Ahern, Herrera Environmental Consultants, Inc.**

#### 11:15am – 11:35am

(11:35 – 11:40am Q&A)

**How the water industry is utilizing monitoring and control, advanced communication networks and the Internet of Things to provide accurate overview for water and wastewater installations, to correct and adjust systems and to improve overall efficiency of the water cycle; Luc-Réjean Lépine, Xylem and Terence Newcombe, Xylem**

#### 11:40am – 12:00pm

(12:00pm – 12:05pm Q&A)

**Using Technology to Improve Stormwater Data Management - Mark Doneux, Capitol Region Watershed District**

12:05pm – 12:45pm

Lunch

12:45pm – 1:05pm

(1:05pm – 1:10pm Q&A)

**Lessons Learned from Using Continuous Monitoring in Stormwater Research – Jason Vogel, Oklahoma State University**

1:10pm

Steering committee introduces Buzz Group concept. Each of the five morning speakers will be assigned a roundtable and we will have two 15 minute sessions of networking and discussion at the tables.

Attendees will move tables between sessions.

- Buzz Group One Session 1:15pm – 1:30pm
- Buzz Group Two Session 1:35pm – 1:50pm

1:50pm – 2:10pm

(2:10pm – 2:15pm Q&A)

**SMARTSHED: Intelligent Platforms for Stormwater Management – Sriniv Pillabhaneni, MWH/Stantec and John Abrera, Stantec**

2:15pm – 2:35pm

(2:35pm – 2:40pm Q&A)

Speaker TBD

2:40pm – 3:00pm

(3:00pm – 3:05pm Q&A)

**Technology, the new BMP: Utilizing Real-Time Automated Controls to Minimize Cost and Maximize Performance of a Flood Control BMP - Mark Doneux, Capitol Region Watershed District**

3:05pm – 3:20pm

Networking Soda Break

3:20pm – 3:40pm

(3:00pm – 3:05pm Q&A)

**Pervious Concrete Characterization using Computer Tomography; Alex McLemore, Oklahoma State University**

3:45pm – 4:05pm

(4:05pm – 4:10pm Q&A)

Speaker TBD

4:10pm – 4:40pm

(4:40pm – 4:45pm Q&A)

**Using Real Time Control and Data Management for Stormwater Management: A Case Study from Clean Water Services – Ting Lu, Clean Water Services**

4:40pm – 5:00pm

(5:00pm – 5:05pm Q&A)

**GreenHUB: New York City's Green Infrastructure Project Tracking System - Miki Urisaka, NYCDEP**

\

5:05pm – 5:45pm

Afternoon Buzz Groups. Each of the seven afternoon speakers will be assigned a roundtable and we will have two 15 minute sessions of networking and discussion at the tables. Attendees will move tables between sessions.

- Buzz Group One Session 5:10pm – 5:25pm
- Buzz Group Two Session 5:30pm – 5:45pm

## DAY TWO – June 16

The second day of the seminar will focus on overcoming social and technical barriers for the broad adoption of smart stormwater systems. The program will consist of presentations, guided discussion, break-out sessions, and a final summary session.

Facilitator: Branko Kerkez, Assistant Professor, University of Michigan, Civil and Environmental Engineering

8:30am

Welcome and Kick Off

8:35am – 9:00am

Presentation: State of the Art Stormwater Sensor and Control Solutions Summary

9:00am – 10:00am

Guided Discussion: What do you see as the major benefits and barriers in the adoption of smart stormwater systems?

### Breakout Topic 1

- What are the social and management barriers to adoption to smart stormwater systems?
- How do the public and managers perceive the safety, relevance, and investment into “smart” water systems?

10:00am – 10:30am

Networking Coffee Break

10:30am – 11:45am

Guided Discussion: What do you see as the major benefits and barriers in the adoption of smart stormwater systems?

### Breakout Topic 2

- Develop a set of case studies that can be used to vet the future efficacy of smart stormwater systems.

11:45am – 1:00pm

Networking Lunch

1:00pm -2:15pm

Summary Breakout:

Define the research horizon. What are the key technical challenges that must be addressed before smart stormwater systems become reality?

2:15pm

Seminar Wrap Up