

# STORMWATER CONGRESS

October 5–9, 2013 | Hyatt Regency McCormick Place | Chicago, Illinois, USA



The Stormwater Pavilion is the focal point of the Water Environment Federation's Stormwater Congress on the exhibit floor. In addition to industry leading companies, WEF's Stormwater Pavilion contains a theater with short invited sessions and videos. The Water Environment Federation has put together a program for the theater that spans user-fee funded stormwater utilities, tree box filters, the U.S. EPA's Campus RainWorks Challenge, and much more. Come by Booth 5216 Oct. 7–9 anytime between 9:00 a.m. – 5:00 p.m. to learn about WEF's stormwater program and publications.

## STORMWATER PAVILION PROGRAM

### Monday, October 7

9:00 am – 1:00 pm

Come by to relax and watch stormwater videos or discuss WEF's stormwater program and publications. Pick up a free copy of WEF's inaugural issue of *World Water: Stormwater Management*.

1:30 – 1: 45 pm

**Session 234 PaveDrain: The Sustainable Stormwater Solution**

*Speaker: Doug Buch, President at PaveDrain, LLC*

Stormwater management infrastructure can be expensive. The PaveDrain® system is an innovation-award-winning Permeable Articulating Concrete Block/Mat (P-ACB/M™). This aesthetically pleasing system can be installed in mattress form or by hand. Its concrete blocks combine a patented arch that provides storage, strength, infiltration, detention, conveyance and a paving surface all in one sustainable product. As a component of low impact Development (LID), the PaveDrain System reduces stormwater infrastructure costs while minimizing environmental impact. The PaveDrain system infiltrates stormwater in excess of over 4,000 inches per hour per ASTM C1701.

2:00 - 2:15 pm

**Session 233 StormTV Project**

The StormTV Project is an effort to share through video, creative ways of managing stormwater, improving water quality, and informing the public. The top four videos, selected by WEF's Stormwater Committee, will be announced and shown in the Stormwater Pavilion. Winners of nonprofit/government programs and for-profit projects categories will be shown Monday, and winners of the stormwater equipment and public education/informational pieces will be shown Tuesday.

2:30 - 2:45pm

**Session 235 Stormwater Calculator Demonstration**

*Speaker: Lisa Biddle, Environmental Engineer at U.S. EPA*

Come check out a demonstration of the U.S. EPA's National Stormwater Calculator. It is a desktop application designed to help city planners, landscape architects, developers, and property owners assess the runoff-reduction benefits of green infrastructure on specific sites. Taking into account local soil conditions, land cover, and historical rainfall records, the calculator will determine the annual amount and frequency of stormwater runoff from locations anywhere in the U.S. The tool can examine how stormwater runoff changes under different development and green infrastructure scenarios. Want to try the tool before the training? Download it at <http://1.usa.gov/1aVZAxm>.

3:00 – 3:15 pm

**Session 236 User-Fee Funded Stormwater Utilities**

*Speaker: Laurens van der Tak, Vice President at CH2M HILL*

User-fee funded stormwater utilities are increasing in number and offer one way to pay for the rising costs of stormwater management in communities across the U.S. Changing requirements for stormwater programs have increased the need for stormwater utilities, and 20 years of industry insight have improved both stormwater utility management and the way utilities manages stormwater. In this presentation, Laurens van der Tak will discuss WEF's soon to be released update to the 1994 manual on user-fee funded stormwater utilities, including lessons learned and best practices for developing stormwater fee programs, such as using advanced billing systems based on GIS and developing creative credit programs.

3:30 – 4:30 pm

**Session 237 Campus RainWorks Challenge**

*Speaker: TBA and Lisa Biddle, Environmental Engineer at U.S. EPA*

This past year, the U.S. EPA hosted its first-ever Campus RainWorks Challenge, an innovative green infrastructure design competition for students. More than 200 student teams participated, representing 42 states. Winning teams hailed from the Illinois Institute of Technology, University of Florida, Missouri University of Science and Technology, and the University of Arizona. The student designs proposed transformative additions to the campus landscape to reduce stormwater impacts while educating students about the movement of water through the urban environment. Hear more about both this and next year's competition from U.S. EPA officials, and learn more about the winning designs from participating students.

5:00pm - 6:00pm

**Networking Reception**

**Tuesday, October 8**

9:00 – 9:15 am

**Session 322 Stormwater Mobile Session**

*Moderator: TBD*

WEF has developed a new way to learn at WEFTEC that blends technical programming with the exhibition experience. During the stormwater mobile session, attendees will convene in the Stormwater Pavilion for a short discussion, and then depart to visit a variety of stormwater exhibitors. Vendors offer technical presentations and hands-on learning opportunities.

9:30 – 9:45 am

**Session 337 The Importance of Characterizing Particle Size in Stormwater Management Studies**

*Speakers: Mike Stenstrom, Distinguished Professor at the University of California*

Mike Stenstrom has served as Editor-in-Chief for WEF's premier international research journal, Water Environment Research. He is also a distinguished professor in the Civil and Environmental Engineering Department at the University of California. He will speak on his research findings, including a discussion on metals in highway runoff as well as particle characterization in stormwater runoff. Dr. Stenstrom will also discuss his experience working on Water Environment Research. Find copies of the latest issue of Water Environment Research, which focuses on stormwater, in the Stormwater Pavilion.

10:00 – 10:15 am

**Session 333 Retrofitting Urban Streets to Green Streets: Lessons Learned Using Planter Systems in the Public Right-of-Way**

*Speakers: Will Harris, Western Regional Engineer at KriStar Enterprises, Inc.*

Stormwater planter boxes and tree box filters are a sustainable stormwater control design option for use in "green street" and roadway improvement projects. In high-density areas, there is typically little space for these devices due to existing infrastructure and underground utilities. This presentation covers various alternative space-saving solutions and options. Find out what the difference is between large stormwater planter box systems and smaller, more compact versions. Also learn about maintenance as well as details on cost, design, components and installation.

10:30 – 10:50 am	<p><b>Session 334 Atlanta Rainwater Harvesting System Utilizes UV Pure Upstream</b>  <i>Speakers: Grant Thornley, UV Pure Technologies</i></p> <p>Therell High School is the first school with a rainwater harvesting system in Atlanta. It is using UV Pure Upstream to eliminate any harmful organisms in the water. The project objective was to reduce potable water used for flushing toilets by 50% to meet LEED standards. Presenters will discuss how RainHarvest performed a demand and supply analysis. They will also delve into project challenges, such as sizing the UV sterilizer, sediment filtration and day tank, as well as solutions and results.</p>
11:00 – 11:15 am	<p><b>Session 335 Highlights from WERF Stormwater Research and Future Opportunities</b>  <i>Speaker: Jeff Moeller, P.E., Director of Water Technologies at the Water Environment Research Foundation</i></p> <p>Selecting the appropriate best management practice (BMP) hinges on a variety of factors, including environmental factors, site constraints, pollutant removal efficiencies, maintenance, and cost. The Water Environment Research Foundation is helping to improve BMP selection by advancing the stormwater sector's understanding of BMP performance. Ongoing research is providing guidance on selecting and designing BMPs for receiving water protection. Additionally, WERF is looking at how to integrate green infrastructure into urban development, not only from a technical perspective, but through management and incentive programs as well. WERF also manages the international stormwater BMP database along with a similar database under development for agricultural practices.</p>
11:30 – 11:45 am	<p><b>Session 336 Green Infrastructure Implementation</b>  <i>Speaker: Carol Hufnagel, National Wet Weather Practice Leader at Tetra Tech</i></p> <p>As the benefits of green infrastructure are becoming better understood, more communities are interested in moving forward on implementation programs. But just how do we go about making green infrastructure our standard way of managing stormwater? Carol Hufnagel will discuss green infrastructure implementation, including obstacles that communities encounter and approaches to overcome them at the programmatic level. Five basic steps to moving forward with a green infrastructure program will be identified. Carol Hufnagel is one of the lead authors of a WEF green infrastructure implementation manual to be released in 2014.</p>
1:30 – 1:45 pm	<p><b>Session 437 Stormwater Year in Review</b>  <i>Speakers: Seth Brown</i></p> <p>Seth Brown, WEF Stormwater Program and Policy Director, will discuss significant stormwater events, policies, and court cases from the past year. He will discuss the future implications of current events and how past events have led to the current state of the industry. Brown will cover stormwater market information as well as related WEF programs and products.</p>
2:00 – 2:15	<p><b>Session 436 StormTV Project</b></p> <p>Winners of the stormwater equipment and public education/informational categories will be shown Tuesday. <i>(See further description of this session above.)</i></p>
2:30 – 3:00 pm	<p><b>Session 438 Meet Speakers from the Low Impact Development Symposium</b>  <i>Speakers: Dr. Scott Struck, Senior Professional at Geosyntec Consultants; Dr. William Hunt, Professor and Extension Specialist at North Carolina State University; and Dr. John Chapman, Program Director at University of Minnesota.</i></p> <p>Come to the Stormwater Pavilion to meet speakers from the Best of the International Low Impact Development Symposium session. Dr. Scott Struck has 13 years of experience in water resources management with a focus on planning and implementation of LID into local and state programs. He also manages and supports federal government work, primarily with EPA and DoD. Dr. John Chapman's primary research interests are soil and water behavior and interaction. He has worked on</p>

	natural hazard and erosion prediction, construction site erosion control, shoreline erosion, and stormwater quality. Dr. William Hunt has assisted with the design, installation, and monitoring of over 90 stormwater best management practices and teaches short courses and workshops on stormwater BMP design and function.
4:00 – 5:00 pm	<p><b>Session 439 Sneak Peak: Water Blues, Green Solutions</b>  <i>Speaker: Frank Christopher, Producer/Director, Penn State Public Media</i></p> <p>Come to the Stormwater Pavilion for a sneak peak of <i>Water Blues, Green Solutions</i>, an interactive documentary project from Penn State Public Media that tells stories of communities creating green solutions for our water blues—flooding, pollution, and scarcity. The documentary focuses on green infrastructure in Portland, Ore.; San Antonio, Texas; Philadelphia, Penn.; and the Bronx, NY. Hear from Director and Producer Frank Christopher with details on the project and his perspectives on green infrastructure. The full documentary will be released in November 2013.</p>
<b>Wednesday, October 9</b>	
10:00 – 10:30 am	<p><b>Session 529 Design of Urban Stormwater Controls Trivia!</b>  <i>Hosted by Virginia Roach, Stormwater/Green Infrastructure Lead Practitioner at CDM Smith</i></p> <p>WEF and ASCE released <i>Design of Urban Stormwater Controls</i>, also known as MOP 23, last summer. The book focuses on consolidating technologies to foster a convergence between traditional stormwater controls and 'green' infrastructure. Even if you haven't read it yet, join us for a brief overview of the manual and test your stormwater knowledge in a related trivia game. The game will be hosted by one of the book's lead authors, Virginia Roach.</p>
12:00 - 5:00 pm	Come by to relax and watch stormwater videos or discuss WEF's stormwater program and publications. Pick up a free copy of WEF's inaugural issue of <i>World Water: Stormwater Management</i> .