



WEF Stormwater Summit

Day 2

Wednesday, June 29

(Last updated May 25, 2022)

Hyatt Regency Minneapolis
Minneapolis, Minnesota
June 27-29, 2022

www.wef.org/stormwatersummit

#WEFStormwater



This conference is held by the Water Environment Federation Stormwater Institute (SWI) in cooperation with the Central States Water Environment Association.

Facility Tour: Down at the Lab – St Anthony Falls Lab (SAFL)

Wednesday, June 29, 2022, 8:30 a.m. – 11:00 a.m.

Limit of 50 People

(Additional fees apply)

The St. Anthony Falls Laboratory (SAFL) is a unique interdisciplinary fluid mechanics research and educational facility on the bank of the Mississippi River. Within the College of Science and Engineering at the University of Minnesota, we are engineers and scientists who collaborate across disciplines to solve fluids-related problems in the Earth-surface environment. Founded in 1938, SAFL takes advantage of its unique location in downtown Minneapolis adjacent to the St. Anthony Falls - the largest waterfall on the Mississippi River - by diverting up to 300 cfs (cubic feet per second) of river water through the building for use in our research and experiments. In the realm of stormwater management, SAFL has completed third party testing of stormwater treatment & retention devices, discharge and velocity meters, pumps, erosion control countermeasures, sample analysis, and many others. A tour through this historic facility will showcase current research projects as well as the range of experimental facilities available for use by researchers and SAFL collaborators.

Accessibility Notice: Tour route adjustments are needed to accommodate guests with mobility restrictions. Please indicate any such restrictions when you register. PPE Notice: Participants in this field tour are required to wear closed-toed shoes; flip flops, sandals, and open-toed shoes are not permitted.

Session 09: New Approaches in Water Quality
Wednesday, June 29, 2022, 8:30 a.m. - 10:00 a.m.

- 8:30 a.m. A Novel Modeling Framework for Predicting Water Quality Results Based on Storm Parameters in Northeastern Los Angeles County**
Jinshu Li, Gurjot Kohli, Darin Son, Stantec; Julie Carver, City of Pomona; Jonathan Abelson, Stantec
- 9:00 a.m. Innovative Methods to Select and Implement Green Infrastructure Improvements within large watershed areas — A case study of GI planning and design within four sub-watersheds in DC’s Anacostia Watershed.**
Nirali Desai, Michael Moscariello, Arcadis US Inc; Jo-Elle Burgard, District Department of Transportation
- 9:30 a.m. Prediction of Stormwater Pond TP Removal Performance by Limnological Investigation and Rapid Field Assessment Methods**
David Austin, Roger Scharf, Jacobs
- 10:00 a.m. Session adjourns for networking break**
- Alternate: Pond Treatment with Spent Lime to Control Sediment Phosphorus Release**
Greg Wilson, Barr Engineering Company

Session 10: Developing a Plan? Keep Your Watershed in Mind
Wednesday, June 29, 2022, 8:30 a.m. - 10:00 a.m.

- 8:30 a.m. Watershed Master Planning Tools to Support National Flood Insurance Program and Community Rating System Goals for Lowering Insurance Premiums for At-Risk Communities**
Daniel Meeroff, Frederick Bloetscher, Hongbo Su, Florida Atlantic University; Eva Suarez, Palm Beach State College; Yan Yong, Florida Atlantic University; Tucker Hindle, AECOM; Jared Weaver, City of Marathon
- 9:00 a.m. Developing and Deploying a One-Water Planning Approach for the Cambie Corridor**
Brian Busiek, Herrera Environmental Consultants
- 9:30 a.m. Triple Bottom Line Evaluation of Stormwater, Watershed, and Wastewater Opportunities to Support Springfield’s Integrated Plan**
David Carani, Lacey Hirschvogel, John Christiansen, HDR; Saki Urushidani, City of Springfield
- 10:00 a.m. Session adjourns for networking break**

Session 11: Stormwater Modeling, Monitoring, and Maintenance
Wednesday, June 29, 2022, 8:30 a.m. - 12:15 p.m.

- 8:30 a.m.** **Sizing of Stormwater Control Measures for Resiliency - The Four Rs**
Gregory Williams, StormTrap
- 9:00 a.m.** **Does Mesh Resolution Matter? The Importance in 2D Modeling**
Ryan Brown, Innovyze
- 9:30 a.m.** **Sensoring Permeable Pavement to Document Performance and Crediting**
Aaron Fisher, Ernest Maier; Joseph Diekfuss; Doug Buch, PaveDrain
- 10:00 a.m.** **Networking break**
- 10:45 a.m.** **An Automated Open-Channel Deficiency Rating Classification Model Based on Machine Learning in Los Angeles County**
Jinshu Li, Darin Son, Gurjot Kohli, Jonathan Abelson, Stantec; Abdul Haikal, Los Angeles County Public Works
- 11:15 a.m.** **New Manual of Practice Overview: Operations & Maintenance of Stormwater Control Measures**
Fernando Pasquel, Arcadis; Anwer Ahmed; Ed Othmer, Stantec
- 11:45 a.m.** **Are Stormwater Ponds Polluting Downstream Water Bodies?**
Poornima Natarajan, Vinicius Taguchi, Jacques Finlay, Ben Janke, University of Minnesota; John Gulliver
- 12:15 p.m.** **Session adjourns for luncheon in exhibit hall**

Technology Spotlight II
Wednesday, June 29
10:03 a.m. – 10:40 a.m.

*Please grab a coffee/tea and then the five exhibitors listed below will each be holding the same 20-minute presentation two times in a row. Participants are invited to join a different presentation at each of the times listed below. Choose the top two you would like to attend. Each presentation happens at the exhibitor's booth. Presentations kickoff concurrently at: **10:05 AM** and **10:25 AM** in each of the three booths.*

10:03 AM Mobile Session Introduction at entrance to exhibit hall
10:05 AM 3 Simultaneous Presentation A
10:25 AM 3 Simultaneous Presentation B

Booth tbc Optimizing Solutions to Water Resources Problems
Nigel Pickering, *Geosyntec Consultants*

Booth tbc Advances in Filtration Media for Treatment of Specific Stormwater Pollutants
Vaikko Allen, *Contech*

Booth tbc Digitizing Stormwater Management/Compliance Program
Aimee Grove, *CloudCompli*

Session 12: Great Green Stuff in Program Development
Wednesday, June 29, 2022, 10:45 a.m. - 12:15 p.m.

10:45 a.m. Controlling the Source: Identifying Impactful, Cost-Effective Projects using Overflow Reduction Efficiencies and Opportunity Identification Processes
Andrew Potts; [Tim Prevost](#), Alcosan; Leah Rominger, Jacobs; Julia Spicher, Alcosan

11:15 a.m. Policy Basis for Incentivizing Green Infrastructure Implementation in the City of Seattle through Partnerships
[Dustin Atchison](#); Santtu Winter, Jacobs; Brian Mickelson, Tracy Tackett, Shanti Colwell, Dave LaClergue, Seattle Public Utilities

11:45 a.m. Green Infrastructure Guidance: Making LID in the Right-of-Way Standard Practice
[Matthew Moore](#), WSP

12:15 p.m. Session adjourns for luncheon in exhibit hall

Session 13: Case Studies in Comprehensive Stormwater Planning
Wednesday, June 29, 2022, 10:45 a.m. - 12:15 p.m.

- 10:45 a.m. District Stormwater for a New Community: From Planning to Construction**
Nathan Campeau, Barr Engineering Co.; Bob Fossum, Capital Region Watershed District
- 11:15 a.m. Long-Term Creation of Nature Based Integrated Stormwater Management Systems**
Barbara Barnes, Nitin Katiyar, HDR
- 11:45 a.m. English Coulee Water Quality Renewal Plan**
Amber Lefers, Advanced Engineering and Environmental Services Inc
- 12:15 p.m. Session adjourns for luncheon in exhibit hall**
- Alternate Stormwater Forecasting — A New Indicator to Manage Basin-Scale Urban Runoff Volume**
Katherine Atteberry, Atlanta Regional Commission; David Bell, Rashi Gurney, Jacobs

Session 14: Latest in Hydrology and Hydraulics
Wednesday, June 29, 2022, 1:30 p.m. - 4:45 p.m.

- 1:30 p.m. Monitoring Nature-Based Solutions from Space: Assessing the Influence of Urban Greenness and Green Stormwater Infrastructure on Watershed Hydrology with Satellite Remote Sensing**
Gary Conley, 2NDNATURE; Nicole Beck; Robert McDonald, The Nature Conservancy
- 2:00 p.m. Restoring Predevelopment Hydrology with Smart Stormwater Controls in Aiken, South Carolina**
Jason Hetrick, McCormick Taylor; Dayton Marchese, OptiRTC, Inc
- 2:30 p.m. Leveraging Artificial Intelligence to Support Advanced Impervious Surface Data Extractions**
Brandon Palin, Ecopia
- 3:00 p.m. Networking break**
- 3:45 p.m. Innovative Stormwater Data Collection- Lawrence, KS**
Aaron Jones, Trekk Design Group, LLC; Lucas Gillen; Matt Bond, City of Lawrence, Kansas
- 4:15 p.m. Creating Smart Stormwater Solutions in a Digital World**
Andrew Sauer, Burns & McDonnell; Matt Bond, City of Lawrence, Kansas; Mitchell Goedeken, Burns & McDonnell
- 4:45 p.m. Conference adjourns**
- Alternate Building Urban Stormwater Resiliency by Incorporating Global Climate Change Projections to Local Runoff Modeling**
Tyler Nodine, Gary Conley, Catherine Riihimaki, 2ndNature; Nicole Beck

Session 15: There's an App for That: Technology Applications for Storm Water Utility Formation, Management, and Outreach
Wednesday, June 29, 2022, 1:30 p.m. – 3:00 p.m.

Coordinator: Julie Beth Hinds, Birchline Planning LLC

Presenters: Roger Babcock, University of Hawaii; Lauren Roth Venu, 3RWater, Inc.; Laurens D Van Der Tak, Jacobs

This session will highlight ways in which a suite of technologies, including land use scenario planning software and mobile applications, can benefit communities that are seeking to establish a fee-based storm water program (i.e., storm water utility), to enhance customer service, to improve billing and data management, and to promote the use of financial incentives (i.e., storm water fee credits) to expand green infrastructure and other storm water BMP use by customers. The recent and ongoing experience of the City and County of Honolulu will be used to highlight how technology applications are being used to support implementation of a new utility; presenters also will highlight recent applications from other communities with older utility programs.

While the outcome of Honolulu's path towards a fee-based utility is yet to be finalized, the process has highlighted important opportunities for applying technology in ways that increase the transparency, efficiency, and reach of a fee-based storm water program. As older storm water utilities re-assess the efficacy of ERU-based fees and credit programs, or modernize GIS systems, the potential benefits of applying and integrating multiple technologies can stretch from initial feasibility analysis to enhancing ongoing billing systems and customer experiences.

A full detailed agenda for this session is coming soon.

Session 16: Leveraging GIS
Wednesday, June 29, 2022, 3:45 p.m. - 4:45 p.m.

3:45 p.m. **Green Infrastructure Siting Using Robust Efficient Procedure**
Khaled Abdo, Arcadis; Hazem Gheith

4:15 p.m. **Digital Data Collection for Storm Water Inspections**
Amber Shows, GHD

4:45 p.m. **Conference adjourns**

Alternate **Technology in Stormwater Data Collection and Analysis**
Michael Yost, Apex Companies, LLC

Session 17: Diversity, Equity, and Inclusion
Wednesday, June 29, 2022, 1:30 p.m. – 3:00 p.m.

More information about this session is coming soon.

Session 18: From National to Local Perspectives on Environmental Justice and Climate Resilience
Wednesday, June 29, 2022, 3:45 p.m. – 4:45 p.m.

Coordinators: Nancy Ellwood, retired from CDM Smith; JB Hinds, Birchline Planning LLC; Bianca Pinto, WEF

This session aims to provide an overview of the environmental justice initiatives at a national and local level, especially focusing on urban flooding and climate resilience. It will be a (1) hour panel discussion with three panelists presenting and opening the floor for discussions and questions.