



Stormwater Conference

"Enhancing Stormwater Resilience in the Built Environment"

May 7 - 8, 2018 – Sheraton Hotel, Portsmouth, NH

Agenda - Monday, May 7, 2018

8:00 AM	Registration/Continental Breakfast/ Exhibits	
8:45 AM	Welcome and Opening Remarks Jennifer Lachmayr, NEWEA President-Elect Angela Blanchette, Chair, Stormwater Committee	
9:00 AM	Keynote: Building Stormwater - Resilient Communities: Encouraging Community Involvement to Soak Up the Rain – Cindy Brown, US EPA Region 1 and Lisa Loosigian, NH DES	
9:30 - 12pm	Concurrent Sessions 1 (Ballroom) & 2 (Harbor's Edge)	
	Concurrent Session 1 – Cities and States Path Towards Resiliency Case Studies Moderator: Ginny Roach, CDM Smith	Concurrent Session 2 – Infrastructure Engineering and Design with Resiliency in Mind Moderators: David Bedoya, Stantec
9:30 AM	Miami Beach Case Study – Advancing Strategy of Green & Grey Infrastructure Towards Advancing Coastal Resilience – Bernadette Callahan, Stantec	Post-Storm Infrastructure Improvements and Stream Restoration: Three Case Studies – Thomas Graupensperger, Dewberry
10:00 AM	Rhode Island's Resiliency Efforts – Jan Greenwood, Woodard & Curran and Shaun O'Rourke, State of RI	Design and Construction of Resilient Stormwater BMPs to Address Climate Change and Improve Water Quality – Nick Cristofori, Comprehensive Environmental Inc.
10:30 AM	Break/Exhibits - Ballroom	
11:00 AM	Restoring Boston's Bays and Streams – Julie Wood, Charles River Watershed Association	Designing for the Impact of Future Climate Conditions – Mark Costa, VHB
11:30 AM	Integrated Coastal and Stormwater Flood Resiliency for Rebuild by Design Hudson River Project in Hoboken, NJ – Rahul Parab, Dewberry	Sharing a Drainage System to Build Stormwater Resilience – Dr. Yovanni Catano, Stantec and Richard Raiche, City of Somerville, MA
12:00 Noon	Lunch/Exhibits/Networking - Ballroom	
1 - 3:30pm	Concurrent Sessions 3 (Ballroom) & 4 (Harbor's Edge)	
	Concurrent Session 3 – Opportunities/Strategies to Help Build a Sustainable and Resilient Future Moderator: Zach Henderson, Woodard & Curran	Concurrent Session 4 – Stormwater Resiliency Funding via Strategic Regulation and Management Moderator: Natalie Pommersheim & Eric Kelley, Env.Partners
1:00 PM	Resilient Ecosystems: Quantifying the Co-benefits of Green Infrastructure – Dr. Indrani Ghosh, Kleinfelder and Kathy Watkins, Cambridge, MA	Implementation of Flow Restoration Plans to Address Stormwater Impaired Streams – Thomas DiPietro and David Wheeler, City of South Burlington, VT
1:30 PM	Increasing Resilience through Intelligent Water Mgmt – Scott Simpson and Tatjana Toeldte, Optii	Resilient Bylaws & Ordinances – Jennifer Kelly Lachmayr and Kathryn Edwards, Arcadis
2:00 PM	Break/Exhibits - Ballroom	
2:30 PM	A Resiliency State of Mind: Living with the Bay Resiliency Strategy – Jason Hellendrung and Jake Oldenburger, Tetra Tech	Piece by Piece: Funding Targeted Resiliency Projects Through a Phased Approach – Paul Jacques, Woodard & Curran and Braydon Marot, Town of Weymouth, MA
3:00 PM	Private Development - Public Benefit: Tuscan Village Floodplain Improvements in Salem, NH – Joseph Persechino and David Azinheira, Tight & Bond	Using Asset Management to Maintain a Resilient Stormwater System – Annie Bastoni and Kelly Siry, VHB
3:30 PM	Green Infrastructure Implementation Tour (transportation provided - meet in hotel lobby)	
6:00 PM	Networking Event at Portsmouth Brewery - Join us for appetizers, drinks & networking	



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Agenda - Tuesday, May 8, 2018

- 8:00 AM Registration/Continental Breakfast (provided) - Prescott Room
- 8:30 AM **Welcome and Opening Remarks**
Jim Gebhardt, Director of Water Infrastructure and Resiliency Finance Center, USEPA
Martha Sheils, Director, New England Environmental Finance Center (NEEFC)
- 9:30 AM **Moving from Contemplation to Implementation of your Stormwater Management Plan**
Moderator: Martha Sheils, NEEFC
Ed Suslovic, New England Environmental Finance Center
- 10:00 AM Break
- 10:15 AM **Harnessing Technical Assistance and Tools to Access and Plan for Stormwater Funding**
Moderator: Jack Kartez, New England Environmental Finance Center
Bill Boulanger, Utilities Superintendent, Dover, NH
Tom Ballestero and James Houle, UNH Stormwater Center
- 11:00 AM **Panel Discussion: State Source of Funding**
Moderator: Martha Sheils, NEEFC

A panel of experts representing New England state funding and financing agencies will discuss novel approaches to incentivize improvements to local water quality by reducing non-point sources. Discussions will include examples of projects sponsored by the RI Infrastructure Bank, including bridge loans, incentives and sources of funds for stormwater and regional cooperation in NH, and the formation of a Sponsorship Program in VT to finance green infrastructure projects using CWSRF's:

Jeffrey R. Diehl, Rhode Island Infrastructure Bank
Ted Diers, New Hampshire Department of Environmental Services
Terisa Thomas, Vermont Department of Environmental Services
- 12:00 PM Adjourn/Box Lunch (provided)





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DESCRIPTIONS OF PRESENTATIONS

SESSION 1

Miami Beach Case Study — Advancing Strategy of Green & Grey Infrastructure Towards Advancing Coastal Resilience

Presented by: Bernadette Callahan, Stantec

Rhode Island's Resiliency Efforts: How Rhode Island is prioritizing projects that integrate climate change and stormwater considerations into their plans and objectives. Presented by: Jan Greenwood, Woodard & Curran and Shaun O'Rourke, State of RI

Restoring Boston's Bays and Streams: This presentation will showcase results of years of natural history research and conceptual designs for using historic waterways and wetlands to restore our urban landscapes and help the city adapt to future flooding. Presented by: Julie Wood, Charles River Watershed Association

Integrated Coastal and Stormwater Flood Resiliency for Rebuild by Design Hudson River Project in Hoboken, NJ: The presentation will showcase the methodology, challenges, opportunities and the tools used by Dewberry to develop innovative flood risk reduction strategies in a dense urban environment that would provide the community of Hoboken, Weehawken and Jersey City with a flood risk reduction system that blends into the urban fabric of the community. Presented by: Rahul Parab, Dewberry and Kathy Watkins, City of Cambridge, MA

SESSION 2

Post-Storm Infrastructure Improvements and Stream Restoration: Three Case Studies: This session will present case studies for three projects that improve resiliency and sustainability of vulnerable infrastructure by using Natural Stream Channel Design and Restoration techniques. Presented by: Thomas Graupensperger, Dewberry

Design and Construction of Resilient Stormwater BMPs to Address Climate Change and Improve Water Quality: This presentation will highlight several recent projects undertaken by Yarmouth Massachusetts to reduce climate change impacts and improve water quality through construction of specially designed stormwater BMPs, along with lessons learned, challenges encountered, and next steps. Presented by: Nick Cristofori, Comprehensive Environmental Inc.

Designing for the Impact of Future Climate Conditions Presented by: Mark Costa, VHB

Sharing a Drainage System to Build Stormwater Resilience: Connecting City's infrastructure with MBTA's to mitigate street flooding in Union Square. Presented by: Dr. Yovanni Catano, Stantec and Richard Raiche, City of Somerville, MA

SESSION 3

Resilient Ecosystems: Quantifying the Co-benefits of Green Infrastructure: The City of Cambridge, Massachusetts, recently completed a first-of-its-kind Climate Change Vulnerability Assessment and has embarked on its Climate Change Preparedness and Resilience Plan. One of the focus areas of the Plan is "resilient ecosystems" that integrate the built environment with green infrastructure, the urban forest, and natural areas. The Plan has developed a unique approach to quantitatively evaluate the cobenefits of green infrastructure and urban forest canopy to mitigate urban heat island (UHI) effect, improve water quality and reduce flooding. Presented by: Dr. Indrani Ghosh, Kleinfelder and Kathy Watkins, City of Cambridge, MA

Increasing Resilience through Intelligent Water Management: This presentation serves as a discussion for how smart technology can be used to increase flood resilience, citing examples and applications across the country. Presented by: Scott Simpson and Tatjana Toeldte, Opti

A Resiliency State of Mind: Living with the Bay Resiliency Strategy: Living with the Bay is one of the innovative projects funded from HUD's Rebuild by Design Competition, an initiative to create innovative solutions to future storm resilience following Superstorm Sandy. Presented by: Jason Hellendrung and Jake Oldenburger, Tetra Tech

Private Development - Public Benefit: Tuscan Village Floodplain Improvements in Salem, NH: A discussion of the comprehensive hydraulic evaluation performed as part of a redevelopment project to consider potential for reducing flooding at offsite and onsite locations. The Conditional Letter of Map Revision (CLOMR) application process through FEMA will also be discussed, including applicability, requirements, and guidelines. Presented by: Joseph Persechino and David Azinheira, Tighe & Bond

SESSION 4

Implementation of Flow Restoration Plans to Address Stormwater Impaired Streams: A discussion of the City of South Burlington's efforts to implement stormwater TMDLs. Presentation will provide a general overview of the Flow Restoration Plans prepared for these watersheds and focus on implementation of a large scale treatment wetland in the Bartlett Brook watershed. Presented by: Thomas DiPietro and David Wheeler, City of South Burlington, VT

Resilient Bylaws & Ordinances: Climate change and updates to the MS4 permits in New England call for communities to update ordinances, bylaws, and regulations to achieve compliance (with MS4 permit) while also providing flexibility for communities to shape their stormwater management programs to incorporate climate change and meet changing water quality and community development needs. Presented by: Jennifer Kelly Lachmayr and Kathryn Edwards, Arcadis

Piece by Piece: Funding Targeted Resiliency Projects Through a Phased Approach: This presentation will show how towns can pursue important stormwater solutions that balance the many needs of a community by pursuing a phased approach to project funding. Presented by: Paul Jacques, Woodard & Curran and Braydon Marot, Town of Weymouth, MA

Using Asset Management to Maintain a Resilient Stormwater System: This presentation will highlight the benefits of a centralized stormwater asset management system to reduce the likelihood of damage by intense storms and initiate rapid response when disasters strike. Presented by: Annie Bastoni and Kelly Siry, VHB



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Exhibitors & Sponsors

ACF Environmental	ILC Dover
Advanced Drainage Systems, Inc.	New England Environmental Equipment
AECOM (Sponsor)	NEWEA
ARCADIS (Sponsor)	Nitsch Engineering (Sponsor)
Best Management Products	Stantec (Sponsor)
Brown and Caldwell (Sponsor)	StormTrap
Burt Process Equipment	Tata & Howard (Sponsor)
CDM Smith (Sponsor)	Ted Berry Company (Sponsor)
CH2M is now Jacobs (Sponsor)	Tetra Tech (Sponsor)
Dewberry (Sponsor)	Ti-Sales Inc./Neptune Technologies
Environmental Partners Group (Sponsor)	Tighe & Bond (Sponsor)
EST Associates (Sponsor)	VHB (Sponsor/Exhibitor)
Flow Assessment Services LLC (Sponsor/Exhibitor)	Vortex Companies
Fuss & O'Neill (Sponsor)	Weston & Sampson (Sponsor)
Hazen and Sawyer (Sponsor)	Woodard & Curran (Sponsor)
Hoyle, Tanner & Associates, Inc. (Sponsor)	Wright-Pierce (Sponsor/Exhibitor)
Kleinfelder (Sponsor)	

TRAINING CONTACT HOURS (TCHs) will be awarded for operator recertification for participating states. If you need TCHs, please **sign-up when you leave each day** (see the registration desk). Certificates will be emailed to attendees following the conference.

May 7th: CT, MA, NH and RI will award 5.0 TCHs

May 8th: CT, MA NH and RI will award 3.0 TCHs

Tour: MA and RI will award 1.0 TCHs; CT and NH will not award TCHs.

EVALUATIONS: Evaluations will be handed out during the event. Please take a moment and complete the form. This allows the committee to plan future events.

PROCEEDINGS: In an effort to reduce/reuse/recycle, copies of today's presentations will be posted on the NEWEA website. Attendees will be notified via email when the presentations are available online.

This specialty conference was hosted by NEWEA's Stormwater Committee and the New England Environmental Finance Center. Thank you for making this event successful!