EBC Water Resources Program
Impact of Climate Change on Stormwater Management
Shaping a Path Toward Resiliency

Thursday, October 26, 2017

Greenberg Traurig | Boston, Massachusetts

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AGENDA

8:00 a.m. Welcome – Blake Martin, Chair, EBC Water Resources Committee
Vice President, Weston & Sampson

Introduction and Program Overview
Andrea Braga, Program Chair and Moderator
Principal, Geosyntec Consultants

8:10 a.m. Where the Water Flows: in a Current and Future world
- Vandana M. Rao, Ph.D., Acting Director of Water Policy
  Massachusetts Executive Office of Energy and Environmental Affairs

8:40 a.m. Collaboration Towards a More Resilient System – How the Commission is Looking at Stormwater for Climate Change
- Charlie Jewell, Director of Planning
  Boston Water and Sewer Commission

9:10 a.m. Networking Break

9:30 a.m. Tools for Flood Risk Management and Increased Resiliency Through Intelligent Infrastructure Control
- David Roman, PE, CFM, CPESC, Project Engineer, Geosyntec Consultants, Inc.

10:00 a.m. Panel Discussion/Q&A Session
Moderator: Andrea Braga, Geosyntec Consultants, Inc.

10:30 a.m. Adjourn
PROGRAM CHAIR

Andrea Braga, P.E., CPESC, Principal
Geosyntec Consultants
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Andrea Braga is a Principal Water Resources Engineer for Geosyntec Consultants with more than 12 years of professional experience focused on helping clients develop innovative solutions to their complex water quality, flooding and National Pollutant Discharge Elimination System (NPDES) compliance issues. She specializes in stormwater system design, modeling and analysis, from project planning and permitting, to whole life-cycle costing, construction oversight, monitoring and maintenance.

Andrea's practice includes municipal stormwater program planning and implementation; watershed master planning; and climate changes adaptation and resiliency planning. Andrea is currently leading a project for the New York City Economic Development Corporation (NYC EDC) aimed at bringing innovative flood proofing technologies to small businesses in New York City affected by Superstorm Sandy through a program known as Resiliency Innovations for a Stronger Economy, or RISE: NYC. Andrea has a B.S. and M.S. in civil engineering and water resources engineering, respectively, both from Villanova University, and currently leads the water resources practice group for Geosyntec's New England offices.

SPEAKERS

Charlie Jewell, Director of Planning
Boston Water and Sewer Commission
980 Harrison Avenue, Boston, MA 02119
(617) 989-7431 | JewellC@BWSC.org

Mr. Jewell currently holds the position of Director of Planning and Sustainability at the Boston Water and Sewer Commission. He has over 26 years of experience directing and supporting public projects. Charlie earned a Bachelor of Science Degree from Texas State University in Urban and Regional Planning, a Master of Urban and Regional Planning from Texas A&M University and a Master of Business Administration from UMass Boston.

Charlie works with the public and municipal perspectives and concerns as they relate to infrastructure and CIP projects. The Planning Department recently completed the Wastewater and Storm Drainage Facilities Plan for the Commission, updated its Storm Drainage model to include Water Quality components and drafted a BMP Implementation Plan and is working on several Green Infrastructure projects in conjunction with other city agencies.

Vandana M. Rao, Ph.D., Acting Director of Water Policy
Massachusetts Executive Office of Energy and Environmental Affairs
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Vandana Rao is the Acting Director for Water Policy at the Massachusetts Executive Office of Energy and Environmental Affairs (EEA). She is responsible for developing policy and providing direction to the Secretary of EEA on water resource issues across the state. These include issues such as water quantity and quality, wastewater, habitat, watershed management, water conservation, and stormwater. Over the
years, she has worked on managing the State's drought response in 2015-2017, leading the development and update of the Massachusetts Water Conservation Standards, worked on the Sustainable Water Management Initiative, developing and implementing the Massachusetts Water Policy, managing development of guidance on nutrient reduction strategies, developing the State's first draft desalination policy, and streamlining the dam removal permitting process, among others. Vandana is also the Executive Director of the Massachusetts Water Resources Commission where she works with the Commission on Interbasin transfer issues, water policy and water resource management.

In past, she was closely involved in climate change adaptation efforts at the state – she was the editor of the Massachusetts Climate Change Adaptation report and worked on inter-agency collaborations. She has also worked as the Watershed Policy Coordinator with the Massachusetts Watershed Initiative at EOEEA. In this position she coordinated with 20 watershed team leaders as well as other agency staff to provide support and policy direction to 27 state-wide Watershed Teams.

Vandana received her Ph.D. in Environmental Policy from the University of Massachusetts at Boston, her Masters in Environmental Science from the University of Maryland, and her Bachelors in Life Sciences from the University of Bombay, India.

David Roman, P.E., CFM, CPESC, Project Engineer
Geosyntec Consultants, Inc.
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David has seven years of experience in water resources and coastal engineering and specializes in watershed based management, planning, and assessments. His experience includes: stormwater master planning, field data collection and GIS development, green infrastructure design, watershed monitoring and data analysis, hydrologic, hydraulic, and water quality modeling; development of technical guidance documents, preparation of engineering designs and specifications, construction administration, and permitting compliance and litigation support. He is an experienced project manager and task lead with strong organizational and communication skills.

David recently completed an internally funded project with partners from the Town of Upton, MA and the Town of Littleton, MA called DAM Dashboard: Dam Assessment and Management Tool Pilot Project, Massachusetts. The project establishes an information network on the status of reservoirs/dams that includes real-time data and reporting tools customized to the infrastructure management and regulatory needs of water suppliers, and infrastructure decision support tools that are web-accessible. The purpose of the project was to develop a tool to help water suppliers manage dams as assets for helping manage their water resources under the effects of climate change and the associated extreme weather climate change brings on.

Dave graduated from Tufts University with an M.S. in water resources and environmental engineering where his research focused on modeling annual sediment loads at ungauged river locations.
UPCOMING EBC PROGRAMS

OCTOBER 2017

October 27 – 11th Annual Dredging Conference: Beneficial Use of Dredged Material
October 31 – Energy Resources Program: Energy Storage Innovation – Next Steps and Beyond

NOVEMBER 2017

November 1 – CT Connecticut - An Introductory Workshop on PCB Assessment and Remediation
November 2 – Site Remediation Program: MassDEP Reopening Old Trichloroethylene (TCE) Sites
November 7 – Ocean & Coastal - Innovative Remote Sensing Techniques
November 7 – Solid Waste Management- Wrap & Roll – the Future of Rail Haul in New England
November 8 – MassDEP Commissioner Suuberg and the Western Region Leadership Team
November 9 – RI Climate Change – Briefing from Shaun O’Rourke, Director, Stormwater and Resiliency
November 9 – Professional Development Program: - Moving UP the Ladder
November 10 – Climate Change Program: Adaptation and Resiliency Programs Electric Utilities
November 13 – New Hampshire Chapter Program Planning Meeting
November 15 – Forecasting Trends - Environmental Engineering and Consulting Industry - Paul Zofnass
November 16 – Green Infrastructure Implications for Water/Wastewater Management
November 17 – EBC – UMASS Climate Adaptation Forum - Three Cutting Edge Adaptation Programs
November 21 – Ocean and Coastal Resource Management Program: Living Shorelines
November 28 – Climate Change Matchmaking Forum
November 29 – New Hampshire Program: New Hampshire Clean Energy Program Overview
November 29 – Meet the EBC Committees Wine Tasting
November 30 – Mass DOER Division Leadership Team – Creating a Cleaner Energy Future
November 30 – New Hampshire Ascending Professionals Program on the UNH Campus

DECEMBER 2017

December 6 – Energy Resources Program Planning Meeting
December 6 – Solid Waste Program Planning Meeting
December 7 – Rhode Island Chapter Program Planning Meeting
December 7 – Annual Winter Garden Party
December 8 – Water Resources Program Planning Meeting
December 12 – PCB & Emerging Contaminants Program Planning Meeting
December 13 – New Hampshire Holiday Party
December 14 – Rhode Island Holiday Party
December 14 – Connecticut Chapter Program Planning Meeting