EBC Water Resources Webinar
Challenges Facing our Water Resources under a Changing Climate

Thursday, July 23, 2020

This program is supported by our Sponsor

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AGENDA

9:00 a.m. Welcome: Peter F. Durning, Chair, EBC Water Resources Committee
Managing Shareholder, Mackie Shea Durning, PC

Introduction – Program Overview and What You Will Learn
• Andrea Braga, Program Co-Chair
  Principal Water Resources Engineer, Jacobs

9:30 a.m. Sea Level Rise Impacts on Groundwater and Infrastructure
• Jennifer Jacobs, Ph.D., P.E.
  Professor, Department of Civil and Environmental Engineering
  Director, The Infrastructure and Climate Network
  University of New Hampshire

10:00 a.m. Island End River: District scale climate adaptation strategies and
implementation projects in Chelsea, MA
• Alexander Train, AICP, Director of Housing and Community Development
  City of Chelsea

10:30 a.m. Networking Opportunity

10:50 a.m. Break

11:00 a.m. Stormwater Considerations Due to Climate Change at BWSC
• Charlie Jewell, Director of Planning and Sustainability
  Boston Water & Sewer Commission
11:30 a.m.  Moderated Discussion
Moderator: Mike Scipione, Program Co-Chair; Weston & Sampson
Panel Members:
• Jennifer Jacobs, University of New Hampshire
• Charlie Jewell, Boston Water & Sewer Commission
• Alexander Train, City of Chelsea

12:00 p.m.  Adjourn – Closing Remarks – Peter Durning

PROGRAM CO-CHAIRS

Andrea Braga, PE, CPESC, Principal Water Resources Engineer
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Andrea Braga is a Principal Water Resources Engineer in Jacobs' Boston office. She has 15 years of professional experience focused on helping clients develop innovative solutions to their complex water quality, flooding, and regulatory compliance issues. She specializes in stormwater management system design, modeling and analysis, from project planning and permitting to whole life-cycle costing, construction oversight, and performance monitoring. Andrea's client sector includes municipalities, state and federal agencies, private industry and university clients. Her practice focuses on developing innovative strategies for stormwater management using advanced green stormwater infrastructure (GSI) and low impact development (LID) design technologies. Her practice also includes National Pollutant Discharge Elimination System (NPDES) compliance and permit support; municipal stormwater program planning and implementation; watershed planning and water resource master planning; and climate change adaptation and resiliency planning.

Andrea has a B.S. in Civil and Environmental Engineering and an M.S. in Water Resources and Environmental Engineering, both from Villanova University. She is a registered professional engineer in Massachusetts and New York.

Mike Scipione, President
Weston & Sampson
55 Walkers Brook Drive, Suite 100, Reading, MA 01867
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Michael J. Scipione, P.E., is president and CEO of Weston & Sampson and has over 30 years of civil engineering experience. Mr. Scipione joined Weston & Sampson in 1985 and has been instrumental in the development and success of various business units. Elected to Weston & Sampson's Board of Directors in 2002, Mr. Scipione served as Chief Operating Officer from 2002 through 2004. In January 2005, Weston & Sampson's Board of Directors elected and promoted Michael J. Scipione, P.E., to the position of President and Chief Executive Officer. Since that time, Weston & Sampson has grown geographically to include regional offices along the East Coast.
As the firm’s president, Mr. Scipione continues to provide clients and business associates with an accessible and hands-on approach to projects while fostering Weston & Sampson’s tradition of prompt client service and response. In addition, he provides the transportation, solid waste, wastewater, and water divisions with management and training to support various projects.

With registration as a professional engineer in the states of Connecticut, Maine, Massachusetts, New Hampshire, Vermont, and Rhode Island, Mr. Scipione has been an active participant in national and regional professional organizations throughout his career.

Mr. Scipione earned a Master of Science degree in Environmental Engineering from Northeastern University and a Bachelor of Science degree in Civil Engineering from Worcester Polytechnic Institute. He is a graduate of ACEC’s Senior Executive Institute and Harvard Business School’s Program for Leadership Development.

In addition to his involvement in the EBC, he is also on the Board of Directors for the American Council of Engineering Companies of Massachusetts (ACEC/Ma). Mr. Scipione is a member of the American Water Works Association (AWWA), the Solid Waste Association of North America (SWANA), (WTS), and the New England Water Environment Association (NEWEA).

SPEAKERS

**Jennifer Jacobs**, Ph.D., P.E., Professor  
Professor, Department of Civil and Environmental Engineering  
Director, The Infrastructure and Climate Network  
University of New Hampshire, 453 Morse Hall  
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Jennifer Jacobs is a Professor in the Department of Civil and Environmental Engineering at the University of New Hampshire. She has a Sc.B. from Brown University, an M.S. from Tufts University, and a Ph.D. from Cornell University. She has over 25 years of experience using novel weather and climate information to enhance infrastructure design and practice with a specialty in cold weather and snow. She has over 90 published journal articles on these topics. She is the Director of the National Science Foundation funded Research Coordination Network: The Infrastructure and Climate Network (ICNet) and the newly established ICNet Global. ICNet brings together climate scientists and civil engineers to accelerate research for climate resilient infrastructure. Dr. Jacobs has provided expertise on design and managing transportation infrastructure under a changing climate to numerous national and international organizations and was the Lead Author for the Transportation Sector Chapter of the 4th National Climate Assessment.

**Charlie Jewell**, Director of Planning and Sustainability  
Boston Water & Sewer Commission  
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Mr. Jewell currently holds the position of Director of Planning and Sustainability at the Boston Water and Sewer Commission. He has over 30 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.
The Planning Department coordinates projects related to the Commission’s CSO and Stormwater NPDES Permits, Discharge Permit with the MWRA and helps coordinate work for the Commission’s Consent Decree with the EPA. The Commission is also working with other City Agencies with addressing Climate Change issues.

**Alexander Train, AICP, Director of Housing and Community Development**  
City of Chelsea  
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Alexander Train serves as the Director for the City of Chelsea’s Department of Housing and Community Development (H+CD). He oversees the Department’s comprehensive community resilience and development agenda, focused on the areas of affordable housing, open space, infrastructure, public social services, food security, and climate resiliency. In partnership with local community leaders, he’s worked at the helm of the City COVID-19 response, where new approaches and methods in community resilience have been applied. He sits on the board of the North Suburban HOME Consortium, the Steering Committee of the Mystic River Watershed Association, and various boards, commissions, and community groups. Born in Boston, Massachusetts, Alex holds a Masters of Regional Planning from the Department of Landscape Architecture and Regional Planning at UMass Amherst, as well as a Bachelors in History from Suffolk University. Outside of work, he spends his time reading, gardening, and supporting animal rights and environmental justice causes.