EBC Water Resources Program
Climate & Extreme Weather Trends and the Impact on Water Infrastructure Systems

Tuesday, March 28, 2017
McLane Middleton | Woburn, Massachusetts

AGENDA

8:00 a.m. Welcome
- Blake Martin, Chair, EBC Water Resources Committee
  Senior Associate, Weston & Sampson

Introduction & Overview
- Michael Scipione, P.E., Program Co-Chair, President, Weston & Sampson
- Steve Roy, LEED AP, Co-Chair and Moderator
  Vice Chair, EBC Water Resources Committee, Climate Adaptation and Green Infrastructure Service Line Manager, Ramboll

8:30 a.m. Climate Change Science – Weather Trends and Impacts Relative to Water Infrastructure
- Ellen M. Douglas, P.E., Ph.D., Associate Professor, Hydrology
  School for the Environment, University of Massachusetts – Boston

9:10 a.m. Approaches and Actions in Response to Climate Impacts
- Lise Marx, Senior Program Manager, Planning, MWRA

9:40 a.m. Wastewater Infrastructure – Operations Changes Planned and Implemented to a Treatment Facility
- Janine Burke-Wells, Executive Director, City of Warwick Sewer Authority

10:15 a.m. Networking Break

10:45 a.m. Panel Discussion
Panel Moderator: Steve Roy, Ramboll
Panel Members:
- Ellen M. Douglas, University of Massachusetts – Boston
- Lise Marx, Massachusetts Water Resources Authority
- Janine Burke-Wells, City of Warwick Sewer Authority

11:30 a.m. Closing Remarks – Adjourn
Michael Scipione, P.E., President and CEO
Weston & Sampson
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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).

Steve Roy, LEED AP, Climate Adaptation and Green Infrastructure Service Line Manager
Ramboll
3 Carlisle Road, Suite 210, Westford, MA 01886
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Steven Roy has more than 35 years of experience in environmental program management and administration, with emphasis in water resources and stormwater management, water conservation and environmental impact assessment. His current work focuses on climate adaptation and green infrastructure. His experience includes Low Impact Development stormwater designs, watershed planning, innovative approaches to urban stormwater management and climate impact analysis. Currently Steve is managing urban stormwater and climate adaptation projects including a Cloudburst Mitigation Pilot Project in NYC. Steve serves on the Board of Directors of the Low-Impact Development Center, and has presented at numerous technical conferences and published a variety of journal articles. He earned an MS in Water Resources from SUNY College of Science and Forestry and a BS in forest hydrology from the University of Massachusetts-Amherst.
**SPEAKERS**

**Janine Burke-Wells**, Executive Director  
City of Warwick Sewer Authority  
125 Arthur W Devine Blvd, Warwick, RI 02886  
401.738.0354 | Janine.Burke-Wells@warwickri.com

Janine Burke-Wells has worked in the public sector for more than 25 years. She initially worked at U.S. EPA for a decade before moving into local government. In 2008, she began serving in her current capacity as executive director of the City of Warwick (R.I.) Sewer Authority, overseeing operations of a 7.7 million gallons per day wastewater treatment facility as well as 48 pumping stations and nearly 300 miles of collection system infrastructure. Burke-Wells has a bachelor's degree in Chemical Engineering from the University of Rhode Island and a Master of Public Administration degree from Northeastern University. She also holds a Rhode Island Grade II wastewater operator's license.

**Ellen M. Douglas, P.E., Ph.D.**, Associate Professor, Hydrology  
School for the Environment  
University of Massachusetts, Boston  
617.287.7437 | ellen.douglas@umb.edu

Dr. Ellen Douglas is a hydrologist and engineer with broad expertise in the analysis of water-related issues. She earned a BS in Hydrology and an MS in Civil Engineering from the University of New Hampshire and a PhD in Water Resources Engineering from Tuft University in 2002. Dr. Douglas joined the faculty of UMass Boston in 2006 and was granted tenure in 2012. Dr. Douglas' research interests include evaluating the impacts of climate change on New England hydrology, assessing the vulnerability of coastal communities to flooding, improving methods for sustainable water resource management and monitoring the performance of river restoration through dam removal. Dr. Douglas has authored or co-authored 29 peer-reviewed publications, four book chapters, and is a contributing author for the 2013 U.S. National Climate Assessment and the IPCC Fifth Assessment Report. She is a co-author of "Climate Ready Boston: Results of the Boston Research Advisory Group" and "Preparing for the Rising Tide", reports outlining the impacts of climate change on Boston and surrounding communities. Dr. Douglas was awarded a 2013-14 Fulbright Scholarship to work in Australia with the CSIRO on the Water Values and Benefits project.

**Lise Marx**, Senior Program Manager, Planning  
Massachusetts Water Resources Authority  
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Lise Marx has 33 years of experience working on planning issues at the local, state and regional level. Currently, she is the Senior Program Manager for Planning at the Massachusetts Water Resources Authority where she is working with engineering, operations and financial staff to update the Water System Master Plan which address capital needs for over six billion dollars worth of water system assets. Prior to this position, Ms. Marx spent nine years with MWRA's CSO Program where she was responsible for regulatory compliance, water quality issues, facility siting and public participation efforts. She has a Master of Regional Planning degree from the University of North Carolina at Chapel Hill.