

*Environmental Business Council
and
Sustainable Solutions Lab at UMass Boston
Climate Adaptation Forum*

Building Climate Resilience into Infrastructure

Friday, November 22, 2019

University of Massachusetts Club | Boston, Massachusetts



Save the Date! February 28, 2020
Climate Adaptation Forum
The Evolving Role of Insurance and Insurers

EBC & Sustainable Solutions Lab at UMass Boston – Quarterly Climate Adaptation Forum
EBC Contact: Ann Gisinger, agisinger@ebcne.org | SSL Contact: Rebecca Herst, rebecca.herst@umb.edu
www.climateadaptationforum.org

AGENDA

- 8:00 a.m. Welcome:** David Cash, Ph.D., Forum Organizer
Dean, John W. McCormack Graduate School of Policy and Global Studies
University of Massachusetts Boston
- 8:05 a.m. Forum Introduction & Overview – What You Will Learn**
- Ralph Child, Forum Organizer; Shareholder, Mintz
- 8:10 a.m. Keynote Presentation: Evaluating Investments in the Name of Resilience**
- Jesse M. Keenan, Ph.D., J.D., LL.M., Faculty of Architecture
Graduate School of Design, Harvard University
- Keynote Q&A Moderator**
- Aaron Weieneth, AICP, Forum Co-Chair
Manager of Climate Change and Resilience, AECOM
- 9:00 a.m. Preparing Boston’s Water and Sewer Systems for Future Design Storms**
- John Sullivan, P.E., Chief Engineer, Boston Water and Sewer Commission
- 9:25 a.m. Development of Statewide Climate Resilience Standards and Capital Planning Tools**
- Mia Mansfield, Director of Climate Adaptation and Resilience
Massachusetts Executive Office of Energy and Environmental Affairs
- 9:50 a.m. Networking Break**
- 10:15 a.m. Rebuilding Stream Crossing Infrastructure After Tropical Storm Irene**
- Rob Evans, CFM, Manager, Rivers Program
Vermont Department of Environmental Conservation
- 10:40 a.m. Redesigning Communications Systems to Preserve Access**
- Greta Byrum, Co-Director, Digital Equity Laboratory at The New School
- 11:05 a.m. Panel Discussion/Q&A Session**
- Panel Moderator**
- Lauren Miller, Forum Co-Chair
Principal, Climate Change Services, CDM Smith
- Panelists**
- Greta Byrum, Digital Equity Laboratory at The New School
 - Rob Evans, Vermont Department of Environmental Conservation
 - Mia Mansfield, Commonwealth of Massachusetts
 - John Sullivan, Boston Water and Sewer Commission
- 11:40 a.m. Closing Remarks:** Kelly Knee, Forum Organizer
Executive Director, Ocean Science, RPS Group
- 11:45 a.m. Adjourn**

FORUM CO-CHAIRS

Lauren Miller, Principal, Climate Change Services
CDM Smith
75 State Street, Suite 701, Boston, MA 02109
617-452-6737 | millerlm@cdmsmith.com

Ms. Miller specializes in climate change services, including climate change vulnerability assessments, resiliency and adaptation plans, and greenhouse gas mitigation. She has served as the technical lead on municipal climate change-related projects throughout the United States and internationally in her 15 years of experience. She is a co-leader of CDM Smith's resiliency implementation team, working with a cross-disciplinary group to enhance the firm's resiliency services. She is trained in the Community Resilience Building facilitation process through the Massachusetts Vulnerability Preparedness (MVP) program and certified by the American Water Works Association Utility Risk & Resilience to facilitate utility's compliance with the America's Water Infrastructure Act. For the past decade, she has volunteered on Cambridge's Climate Protection Action Committee, serving as chair for three years. In 2019, she was appointed to the Cambridge Climate Resilience Zoning Task Force. Ms. Miller has a B.S. in Environmental Studies from Elon University and an M.A. in Energy and Environmental Analysis from Boston University.

Aaron Weieneth, AICP, Manager of Climate Change and Resilience
AECOM
250 Apollo Drive, Chelmsford, MA 01824
978-905-3225 | aaron.weieneth@aecom.com

Aaron is an environmental planning specialist with over 18 years of experience in hazard mitigation planning, climate change adaptation and resilience services, socioeconomic and demographic analyses, water resources planning, and environmental assessments. Aaron serves as AECOM's New England Manager of Climate Change and Resilience and coordinates with technical staff across business lines to integrate climate change and resilience considerations into infrastructure and planning projects for municipal, state, and federal clients. He recently managed development of the Massachusetts State Hazard Mitigation and Climate Adaptation Plan—a first of its kind statewide plan that fully integrates a traditional hazard mitigation plan with a climate change adaptation plan—and is currently part of the consulting team supporting the Commonwealth's Resilient Massachusetts Action Team with implementation of the Plan's strategy. Aaron has a BA in Environmental Science from Simpson College and a MS in Geography from the University of Massachusetts, Amherst.

KEYNOTE SPEAKER

Jesse M. Keenan, Ph.D., J.D., LL.M., Faculty of Architecture
Harvard University, Graduate School of Design
208 Sackler Hall, 48 Quincy Street, Cambridge, MA 02138
617-496.2530 | M 347-443-6421 | jkeenan@gsd.harvard.edu

Jesse M. Keenan is a social scientist and a member of the faculty of the Graduate School of Design, with a joint appointment at the John F. Kennedy School of Government, in Science, Technology and Public Policy at Harvard University. Keenan's principle research focus is on climate change adaptation and the built environment, including aspects of design, engineering, financing, regulation and planning. Keenan holds concurrent appointments as a member of the U.S. delegation to the Intergovernmental Panel on Climate Change (IPCC) and as a Visiting Scholar at the Federal Reserve Bank of San Francisco.

Keenan's research has partnered with a variety of global actors, including the AIA, Audi, Carnegie Corporation, EPA, Goldman Sachs, Google, ICC, Knight Foundation, MoMA, Mori Foundation, Lennar Foundation, NASA, National Security Council, National Institute of Standards and Technology, NSF, Open Society Foundation, Regional Plan Association, RAND Corporation, States of California and Massachusetts, the White House and the U.N. Keenan's books include *Blue Dunes: Climate Change by Design* (Columbia University Press), *Climate Change Adaptation in North America: Experiences, Case Studies and Best Practices* (Springer) and *Climate Adaptation Finance and Investment in California* (Routledge). Keenan holds degrees in the law (J.D., LL.M.) and science of the built environment (M.Sc.), including a Ph.D. from the Delft University of Technology.

SPEAKERS

Greta Byrum, Co-Director

Digital Equity Laboratory, The New School
79 5th Avenue, 16th Floor, New York, NY 10011
347-489-9101 | byrumm@newschool.edu

Greta Byrum reimagines the way we design, build, control, and govern communications systems. As Co-Director of the Digital Equity Laboratory at the New School for Social Research and Director of the Community Tech New York project, she builds digital justice through applied research, community collaborations, and policy strategy. Previously Byrum founded and led the Resilient Communities program at New America, where she developed and led Resilient Networks NYC, an initiative bringing training, tools, and equipment for storm-hardened mesh WiFi to five neighborhoods in NYC's flood zones. Current projects include community wireless network collaborations in rural Tennessee and the Hudson Valley and a curriculum manual for 2020 digital decennial census preparedness. An urban planner, poet, and digital justice organizer, Byrum also serves on the board of the Metropolitan New York Library Council.

Rob Evans, CFM, Manager, Rivers Program

Vermont Department of Environmental Conservation
1 National Life Drive, Main 2, Montpelier, VT 05620-3522
802-490-6152 | rob.evans@vermont.gov

Rob is a hydrologist with over 20 years of experience in flood hydrology, hydraulics, and floodplain management. In his current role as manager of the Vermont Rivers Program, he oversees an interdisciplinary team of engineers and scientists responsible for protecting and restoring natural river and floodplain processes to enhance water quality, ecological health, and flood resilience. River resource protection is achieved through a combination of permitting, regulatory/non-regulatory technical assistance, assessment, planning, education, and outreach. Rob holds a B.S. in Environmental Science from Mary Washington College and an M.S. in Watershed Science from Colorado State University.

Mia Mansfield, Director of Climate Adaptation & Resiliency

Executive Office of Energy and Environmental Affairs
Commonwealth of Massachusetts
100 Cambridge Street, Suite 900, Boston, MA 02114
617-626-1162 | Mia.Mansfield@mass.gov

Mia is the Director of Climate Adaptation and Resilience at the MA Executive Office of Energy and Environmental Affairs. In this role, she leads the implementation of the State Hazard Mitigation and Climate Adaptation Plan, and the Municipal Vulnerability Preparedness (MVP) program. She most recently managed the Climate Ready Boston initiative for the City of Boston, where she led implementation of the Climate Ready Boston Plan and Resilient Boston Harbor Vision. She has a Master's in City Planning from MIT and a BA from Brandeis University.

John Sullivan, PE, Chief Engineer

Boston Water and Sewer Commission
980 Harrison Avenue, Boston, MA 02119
617-989-7444 | sullivanjp@bwsc.org

John Sullivan, PE, is the Chief Engineer of the Boston Water and Sewer Commission (BWSC), where he has held that position for the past 30 years. Mr. Sullivan holds an Engineering degree from UMass Amherst, an MBA degree from Northeastern University as well as a Master's degree in Emergency Management from Massachusetts Maritime Academy. He is a Registered Professional Engineer in the Commonwealth of Massachusetts, as well as a Board Certified Environmental Engineer of the American Academy of Environmental Engineers. In the last 25 years he has overseen over a billion dollars of water, sewer, and drain improvements. Mr. Sullivan is a Commissioner of the New England Interstate Water Pollution Control Commission, as well as the Boston Conservation Commission (for over 25 years). He is President of the National Association of Clean Water Agencies, and Chairman of the Water Information Sharing & Analysis Center, as well as an Emeritus Director of The Water Research Foundation.