

*Environmental Business Council of New England, Inc.
Sustainable Solutions Lab at the University of Massachusetts Boston*

Nature-Based Adaptation: Getting to Scale

Friday, December 9, 2022

CDM Smith

75 State Street, Suite #701
Boston, Massachusetts 02109

and

Streaming virtually on Zoom



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EBC & Sustainable Solutions Lab at UMass Boston – Quarterly Climate Adaptation Forum

EBC Contact: Ann Gisinger, agisinger@ebcne.org

SSL Contact: Gabriela Boscio Santos, Gabriela.Boscio@umb.edu

www.climateadaptationforum.org

AGENDA

8:30 a.m. Registration & Networking

9:00 a.m. Welcome

- Kelly Knee, Forum Organizer
Executive Director Ocean Science, RPS North America

Welcome from Weston & Sampson – Official Sponsor of Virtual Presentation

- Julie Eaton Ernst, Resilience Team Leader, Weston & Sampson – *virtual presenter*

Welcome from Host

- Lauren M. Miller, Associate, Discipline Leader – Climate Resilience, CDM Smith

Program Introduction

- Melanie Gárate, Forum Co-Chair, Director of Climate Engagement, Stone Living Lab & Boston Harbor Now

Nature-Based Approach at Scale: Research, Planning, & Implementation

9:20 a.m. Transforming Urban Water: Multi-benefit Solutions for the San Francisco Bay

- Heidi Nutters, Senior Program Manager, San Francisco Estuary Partnership – *virtual presenter*

9:40 a.m. Living Breakwaters Billion Oyster Project

- Pippa Brashear, Resilience Principal, SCAPE Studio – *virtual presenter*

10:00 a.m. The Evolution of Dredged Sediment in New Jersey

- Stephen Rochette, Chief of Public Affairs
U.S. Army Corps of Engineers (USACE) Philadelphia District

10:20 a.m. Networking Break (*Breakout Rooms for Virtual Attendees*)

Local Implementation: Regulatory & Engineering Challenges and Opportunities

10:40 a.m. Introduction

- Nasser Brahim, Forum Co-Chair, Senior Climate Resiliency Specialist
Woods Hole Group

10:45 a.m. Large-Scale Dune and Beach Restoration on the Massachusetts South Shore

- Jason Burtner, South Shore Regional Coordinator
Massachusetts Office of Coastal Zone Management (CZM)

11:00 a.m. Narragansett Bay – Rose Larissa Park

- Leah Feldman, Coastal Policy Analyst
Rhode Island Coastal Resource Management Council (CRMC)

11:15 a.m. Regulatory Challenges and Opportunities for Living Shorelines in New England

- Alison Bowden, Director of Science & Strategy, The Nature Conservancy (TNC)

11:30 a.m. Panel Discussion

Panel Moderator: Nasser Brahim, Woods Hole Group

Panelists:

Alison Bowden, TNC
Jason Burtner, CZM
Leah Feldman, CRMC
Stephen Rochette, USACE

11:55 a.m. Closing Remarks

- Mark Costa, Forum Co-Chair, Senior Water Resources Engineer, VHB

12:00 p.m. Adjourn

FORUM CO-CHAIRS

Nasser Brahim, Senior Climate Resiliency Specialist
Woods Hole Group
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Mr. Brahim is a Senior Climate Resiliency Specialist at Woods Hole Group, an integrated coastal engineering, science, and technology firm. He helps coastal communities build climate resilience through vulnerability assessments, resiliency plans, and design and operational improvements. Mr. Brahim has advised local, State, and non-profit partners on how to integrate climate resiliency considerations in policies and regulations, including Boston, Hingham, Hull, Gloucester, Oak Bluffs, Swampscott, Westport, Massport, and the Conservation Law Foundation. He has also led climate resiliency projects with municipalities, wastewater utilities, non-profit land conservancies, higher education institutions, and real estate property managers. His projects have earned numerous engineering, planning, and design awards and been covered by NPR, The Boston Globe, New York Times, The Washington Post, and PBS NewsHour. Mr. Brahim is the Board Vice-President of the Mystic River Watershed Association and a certified consultant under the Massachusetts Municipal Vulnerability Preparedness (MVP) Program. He holds a Master of Environmental Management from Yale University and Bachelor of Arts from Florida International University.

Mark Costa, Senior Water Resources Engineer
VHB
101 Walnut Street, Watertown, MA
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Mark is a water resources engineer and project manager in VHB's Watertown office with 15 years of professional experience. Mark focuses on surface hydrology, riverine and coastal hydraulics, stormwater, climate change adaptation, resilient design, and permitting for a wide range of land development, energy, municipal, and transportation improvement projects.

Mark's experience includes innovative coastal and riverine flood modeling that incorporates future climate conditions to evaluate flood impacts. This modeling is used to support his engineering design projects that focus on infrastructure improvements, nature-based solutions, and hybrid solutions to increase flood resilience. Some examples of his work include the design of the Rumney Marsh salt marsh restoration in Saugus, the restoration of Sweetwater Brook in Woburn, the Philadelphia Airport Resiliency study, and the Suffolk Downs Climate Adaptation Study that studied regional flood protection to the communities of Boston and Revere.

Melanie Gárate, Director of Climate Engagement
Stone Living Lab & Boston Harbor Now
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Melanie Gárate is the Director of Climate Engagement at the Stone Living Lab (SLL) and Boston Harbor Now. Her work focuses on increasing the resilience of people and coastal systems impacted by climate change. With community equity and health as a priority, she focuses on enhancing climate solutions within the Harbor via nature based approaches and social change. Prior to SLL, Melanie worked at the Mystic River Watershed Association where she worked with municipal staff, community based organizations, service providers, and local residents to increase regional climate resilience. Melanie has also worked on coastal conservation and environmental education in the greater Boston area at Mass Audubon and the New England Aquarium. Melanie holds a Master of Science degree in Marine Ecology and Climate Change from the University of Rhode Island, where she obtained a NSF Graduate Research Fellowship to study mangrove ecology and perform community outreach in Puerto Rico.

SPEAKERS

Alison Bowden, Director of Science & Strategy
The Nature Conservatory
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Alison is a conservation leader and innovator who works across boundaries to develop and implement strategic initiatives to protect healthy rivers, estuaries and oceans and the benefits they provide to people—clean water, climate resilience, and sustainable seafood. Specialized in influencing policy through sound science, building partnerships, and finding intersections among differing perspectives to build support for conservation action among decision-makers and the public. Alison received her B.A. in Environmental Science from American University, and her M.S. in Water Resource Management from University of New Hampshire.

Pippa Brashear, Resilience Principal
SCAPE Studio
277 Broadway, Ninth Floor, New York, NY 10007
212-462-2628 | PIPPA@scapestudio.com

Pippa Brashear, RLA, is Resilience Principal at SCAPE. A leading national expert on resilience planning and design for climate adaptation, Pippa works with multi-disciplinary teams to develop landscape strategies and next-century infrastructure that integrate environmental, economic and social benefits. She leads both planning and built work teams within the firm, bringing an ecological and people-driven approach to SCAPE's projects—informed by systems thinking; an understanding of natural and nature-based systems; engineering methods; and social and environmental equity.

Pippa holds a Master's in Landscape Architecture and Master's in Urban Planning with Distinction from the Graduate School of Design (GSD) at Harvard University. She also holds a Bachelor's of Arts, cum laude, in Environmental Science and Public Policy from Harvard College.

Jason Burtner, South Shore Regional Coordinator
Massachusetts Office of Coastal Zone Management (CZM)
c/o Stellwagen Bank National Marine Sanctuary, 175 Edward Foster Road, Scituate, MA 02066
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Jason has worked for CZM as the South Shore Regional Coordinator since 2001 and is responsible for providing direct technical assistance to 11 coastal towns in the region on a variety of topics ranging from port and harbor planning to coastal resiliency. As part of his work he helps administer Coastal Resilience grants in the region by working directly with grant recipients and contract consultants through all aspects of the project from project scoping through implementation. Jason has a B.S. in Environmental Science and Biology with a Specialization in Marine Science from

Boston University where he participated in the B. U. Marine Program (BUMP) and received a M.A. from Tufts University's Department of Urban and Environmental Policy and Planning.

Leah Feldman, Coastal Policy Analyst
Rhode Island Coastal Resources Management Council (CRMC)
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Leah Feldman is a Coastal Policy Analyst for the Coastal Resources Management Council of Rhode Island. Originally from New York, Feldman received her undergraduate degree from Colgate University with dual degrees in Environmental Studies and English Literature. She received her Master of Arts in Marine Affairs from the University of Rhode Island before being selected for the prestigious NOAA Coastal Management Fellowship, which placed her in New York State's Coastal Program working for the Department of State's Office of Community Planning, Development and Community Infrastructure. During her two years with the NOAA Fellowship, Feldman assisted the Ocean and Great Lakes Team in creating scenario planning focused resiliency efforts on Lake Ontario. In her current role with the CRMC, Leah Feldman focuses on issues regarding public access to the shoreline, community engagement, habitat and shoreline change policy efforts, and resilience.

Heidi Nutters, Senior Program Manager
San Francisco Estuary Partnership
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Heidi Nutters, Senior Program Manager, leads Climate Resilience programming including the Transforming Urban Water Initiative. Core focus areas include collaborative process, advancing on the ground nature-based shoreline infrastructure projects and integrating racial equity into the Partnership's projects. Prior to joining the Partnership, she managed the Coastal Training Program for the San Francisco Bay National Estuarine Research Reserve. She received a B.A. in Cultural and Interdisciplinary Studies from Antioch College and a M.A. in Environmental Studies from Brown University.

Stephen Rochette, Chief of Public Affairs
U.S. Army Corps of Engineers (USACE) Philadelphia District
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Steve Rochette is Chief of Public Affairs for the U.S. Army Corps of Engineers (USACE) Philadelphia District. He has served with USACE for the past 13 years and has been involved with a variety of water resources projects in the mid-Atlantic region including Coastal Storm Risk Management studies and projects, dredging and beneficial use projects, and environmental restoration activities. He deployed to assist with federal responses for Hurricane Irma (2016), Hurricane Sandy (2012) and 2011 flooding along the Mississippi River. He has a Master's degree from Villanova University and a Bachelor's degree from Boston University.