

Mass ECAN Conference 2019

Poster Session Abstracts

1. Anne Herbst

Metropolitan Area Planning Council

Looking to the Past to Predict the Future: Strategies for Identifying Future Inland Flooding Location

This will be an update to a poster presented at the National Adaptation Forum. It presents research indicating that 90%+ of flood claims from the federal flood disaster in March 2010 in eastern MA were located outside of the FEMA 1% chance flood zone. Climate, planning, and regulatory implications considered.

2. Pallavi Mande

Director of Watershed Resilience

Blue Cities for Watershed Resilience

Restoring urban greenscapes and natural hydrologic function is at the heart of CRWA's Blue Cities Initiative. Using historic maps as a starting point to understand how rainwater once functioned before urbanization, Blue Cities analyses evaluates opportunities for restoration that work with, rather than against, natural hydrology. CRWA's work includes partnering with others to build and monitor our demonstration projects, modeling the potential impacts of large scale Blue Cities designs, and training other environmental advocates, local residents, and municipal officials.

3. Peter Phippen

Massachusetts Bays National Estuary Program, Merrimack Valley Planning Commission

The Great Marsh Partnership

The Great Marsh Partnership is an ad hoc group of scientists, managers, and practitioners who have joined together to protect, restore, and improve the resiliency of the Great Marsh, both holistically and comprehensively at a marsh-wide and estuary-wide scale.

4. Heidi Ricci

Mass Audubon

Catalyzing Transformative Change: Planning together for resilient communities through nature-based solutions

The Resilient Taunton Watershed Network (RTWN), formed in 2014, is an award-winning collaboration of organizations and agencies who care about the future health and resilience of the Taunton River Watershed and believe that nature-based solutions have economic, social, and ecological benefits. With funding from a 2018 Southeast New England Program (SNEP)

Watershed Grant, the RTWN is working with partners at the Southeast Regional Planning and Economic Development District (SRPEDD), Mass Audubon, The Nature Conservancy, and Manomet to promote resilience in the watershed in the face of climate change and development. The RTWN is providing information, education and resources to municipalities to address the ecological, economic, social, and environmental justice issues associated with climate change.

5. Julie Richburg

The Trustees of Reservations

Addressing Erosion in Natural Areas Under a Changing Climate

As natural resource managers, our efforts to address the impacts of climate change on our properties have focused on protecting habitats, maximizing connectivity, managing for ecological processes and functions, limiting non-climate stresses, and maintaining species richness. We need to continue to expand our toolbox to address new challenges such as increased rainfall resulting in new areas of runoff and erosion.

6. Eric Roberts

The Nature Conservancy

Applying Living Shoreline Approaches to Increase Resilience and Reduce Risk in New England

Collaborating regionally via the Northeast Regional Ocean Council, coastal zone managers from five states and their partners are building living shoreline projects across a range of coastal habitats and applying a standardized suite of monitoring metrics to advance siting, design, permitting, construction, and monitoring and maintenance of living shorelines in New England.

7. Noah Slovin

Milone & MacBroom

Small But Mighty - Building Community Resilience through Local Small Businesses

Following a hazard event, local businesses that reopen help restart the local economy, are an important source of goods and services for residents who are moving back and trying to recover, provide a space for people to congregate, eat, use restrooms, and charge electronic devices, and restore a sense of normalcy, hope, and identity within the local community. Businesses can also be an important safe haven during hazard events if the event damages homes, cuts power, or interrupts other utilities and services. Most businesses, however, do not survive being impacted by a natural hazard event. The State of Rhode Island has conducted interviews and vulnerability assessments with 100 small businesses in that state, and used the results to develop a suite of Risk Reduction Guides. These guides focus on actions that are specific, relevant, and accessible to small business owners, and that will allow these important engines of the local economy to get back up and running following a storm.

8. Seth Tuler and Stephen McCauley

Global School, Worcester Polytechnic Institute, Worcester, MA

A Community Science Campaign to Map Extreme Heat Locations in Worcester, Massachusetts

Communities face an unprecedented challenge of preparing for a global climate system marked by new extremes and uncertainties. Urban areas face threats from increasing intensity, duration, and frequency of climate-induced extreme weather events. Extreme heat events will exacerbate risks to residents in urban areas who are already exposed to higher temperatures due to the urban heat island effect. Temperature and humidity effects are distributed unevenly across the urban landscape and interact with social factors that make some residents more vulnerable to extreme heat events than others. This project examined the distributional effects of temperature and humidity in Worcester, MA, and engaged communities in community science and awareness raising. 1 Next steps include working with public agencies and private organizations providing health services to vulnerable populations in the city to identify and prioritize strategies to mitigate and respond to risks from extreme heat events.