

Local Solutions:

Eastern Regional Climate Preparedness Conference

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Convened by Antioch University's Center for Climate Preparedness & Community Resilience in partnership with the U.S. Environmental Protection Agency

April 4-6, 2016 • Baltimore, Maryland



**ANTIOCH
UNIVERSITY**
NEW ENGLAND

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United States
Environmental Protection
Agency

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Alexandar Iotzov, Shutterstock; Courtesy Chicago Botanic Garden; Shutterstock; Courtesy The Horticultural Society of New York

Business Continuity (Day 3)

- 15 Business Continuity Agenda & Keynote
- 16 Business Continuity Sessions

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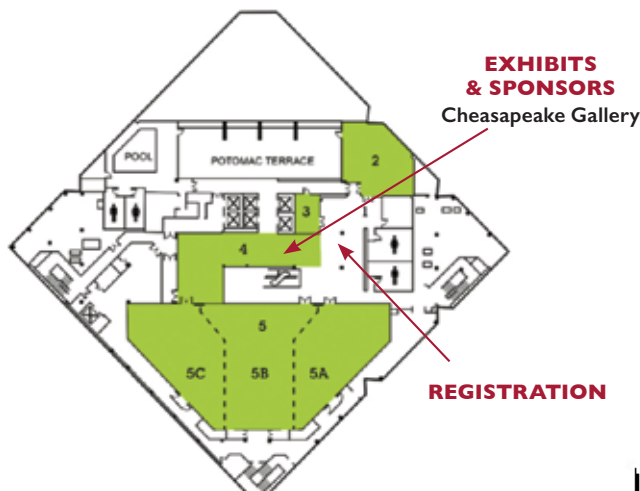
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- 24 Days 1-3

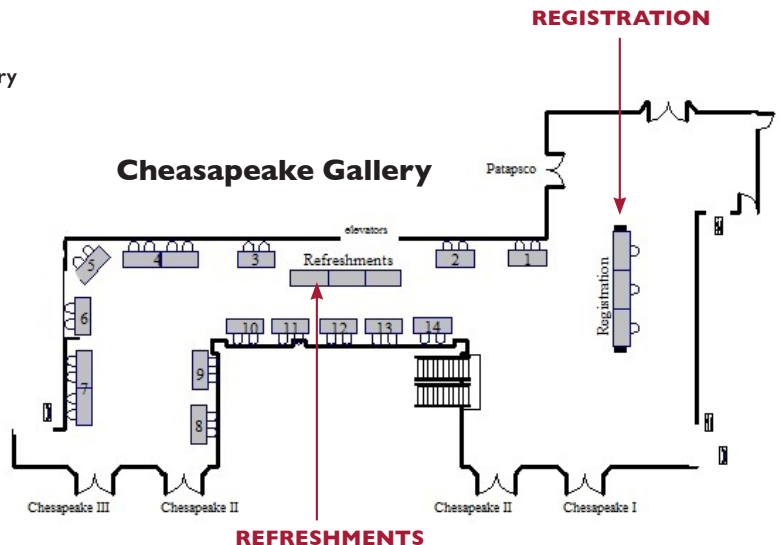
Sheraton Inner Harbor Hotel

Please see insert for exhibitor booth assignments



Third Floor

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- Room 2 Potomac Room
- Room 3 Patapsco
- Room 4 Chesapeake Gallery
- Room 5 Chesapeake Ballroom



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- Room 7 - Board Room
- Room 8 - Sassafra
- Room 9 - Loch Raven Gallery
- Room 10 - Loch Raven Room
- Room 10A - Loch Raven Room I
- Room 10B - Loch Raven Room II

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James Wilkins, South Carolina Botanical Garden, Clemson Experimental
Forest

LOCAL SOLUTIONS:

Eastern Regional Climate Preparedness Conference

Agenda: Day I

Monday, April 4, 2016

7:30 am **Breakfast/Registration**

9:00 am **Welcome**
 Stephen B. Jones, *President, Antioch University New England*
 Mayor Stephanie Rawlings-Blake, *City of Baltimore*
Keynote
 Avis Ransom, *Commission on Sustainability Baltimore*

9:45 am **Break**
 Exhibit Hall

SESSIONS					WORKSHOP
10:00 am	Equitable Adaptation: Collaborating for Resilience	Planning for the Needs of At-Risk Communities	Living with the Old, Building for the New: Resilient Buildings	Partnerships that Work: Enhancing Ecosystem Services	10:00 am—Noon Part I: Adaptive Gradients in the Coastal Environment: A Framework for Decision-Making on Infrastructure Responses
11:30 am	Break Exhibit Hall				
Noon	Lunch—Keynote A. Stanley Meiburg, Acting Deputy Administrator, U.S. EPA				

SESSIONS					WORKSHOP
1:45 pm	Effectively Using the Preparation Frame	Conducting Vulnerability Assessments: Flooding	Turning Up the Heat	Understanding the Psychology of Trauma: Key Competencies for Working with Survivors of Climate Change Impacts	1:45–5:15 pm Part 2: Adaptive Gradients in the Coastal Environment: A Framework for Decision-Making on Infrastructure Responses
3:15 pm	Break Exhibit Hall				

SESSIONS					WORKSHOP
3:45 pm	Picture this ... Using Visualization and Storytelling to Engage around Climate Risk and Resilience	Conducting Vulnerability Assessments: Heat	Critical Infrastructure: Energy & Transportation, What Can Local Decision Makers Do	Low-Cost Resiliency: Ecosystem Services and the Municipal Budget	Part 2: Continued
5:15 pm	Cocktails Exhibit Hall				

Dinner for Networking (on your own)

LOCAL SOLUTIONS:

Eastern Regional Climate Preparedness Conference

Agenda: Day 2

Tuesday, April 5, 2016

7:30 am **Breakfast/Registration**

9:00 am **Opening—Keynote**
Mark Z. Jacobson, *Stanford University & The Solutions Project*

9:45 am **Break**
Exhibit Hall

SESSIONS

10:00 am	Reaching Beyond the 'Usual Suspects': Innovative Strategies to Engage the Community	Incorporating Adaptation into Day-to-Day Planning	Living with Water	The Future of Ecosystem Services: Does climate change really matter?
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11:30 am **Break**
Exhibit Hall

Noon **Lunch—Panel: Financing Strategies**
Deb Markowitz, *Secretary, Agency of Natural Resources, State of Vermont*
Joel D. Scheraga, *Senior Advisor for Climate Change Adaptation, EPA*
Robert Sanders, *Senior Finance Director, Clean Energy Group*

WORKSHOPS

WALKING TOUR(S)

1:45 pm	Community- and City-Scale Options for Transforming Energy to 100% Wind, Water, and Solar	How to (and Not to) Talk About Climate Change for Resilience: A Workshop on Using National Trends, Local Data, and Behavioral Science to Customize Your Message	Local Climate Change Visioning: Using Future Scenarios and Visualization to Enhance Planning and Engagement	Monitoring Adaptation Progress: From Assessing Climate Impacts to Evaluating Implementation Success	<ul style="list-style-type: none"> • Historic Buildings Walking Tour • Green Bike Tour • Bird-Friendly Baltimore: A Community Engagement Walking Tour
	Navigating the Stafford Act and the New FEMA Requirements for Mitigation Assistance	Implementing a Climate Resilience Program: U.S. Climate Resilience Toolkit and Using Downscaled Climate Data	Communicating About Climate Impacts and Engaging Stakeholders in Solutions		

3:15 pm **Break**
Exhibit Hall

WORKSHOPS

WALKING TOUR(S)

3:45 pm	(continued)	(continued)
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5:00 pm **End**

Dinner for Networking (on your own)

Keynote and Panel Speakers

Monday-Tuesday, April 4-5

Monday Morning Keynote



Avis H. Ransom

*Commission on Sustainability
Baltimore*

Avis Hurt Ransom is a co-founder and senior consultant with Baltimore Racial Justice Action. In that capacity she provides training, consultation and coaching to individuals, and organizations that are seeking to develop skills and abilities to mitigate racism and its effects in their lives, their communities, and in the operation

of their organizations through racial equity transformation processes. Avis is a co-founder of Jobs Opportunity Task Force, a local non-profit organization that focuses on improving systemic employment outcomes for Maryland's unemployed and under employed citizens, she is a member of the Baltimore Workforce Investment Board, and a member of the board of directors of the Baltimore Algebra Project, a student-run advocacy and academic tutoring organization. She recently became a member of Baltimore's Commission on Sustainability, where she is helping to strengthen their capacity to apply a racial equity lens to their work. As a chemist and systems engineer she recently conducted research at Morgan State University on a Department of Energy funded project on energy efficiency in commercial buildings.

Monday Lunch Keynote

A. Stanley Meiburg

Acting Deputy Administrator, U.S. EPA

Stan Meiburg serves as the Acting Deputy Administrator of EPA, continuing a career spanning over 36 years at EPA in locations around the country. He has broad experience in the management of the agency across the spectrum of EPA's activities, and has received numerous awards, including recognition as a Distinguished Federal Executive in 2012 and as a Meritorious Federal Executive in 1997.

He received EPA's Gold Medal in 1990 for his work on the Clean Air Act Amendments, and Silver Medal in 1983 for work on state-federal relations.



Meiburg spent 18 years as Deputy Regional Administrator of EPA's Region 4 office in Atlanta, Georgia, following service as Deputy Regional Administrator in EPA's Region 6 office in Dallas, Texas. He is the second person in EPA history to serve as Deputy Regional Administrator in more than one region. From 1990 to 1995, Meiburg was Director of Region 6's Air, Pesticides and Toxics Division. From 1985 to 1990, he was Director of the Planning and Management Staff of EPA's Office of Air Quality Planning and Standards in Durham, North Carolina, leading work on the 1990 Clean Air Act Amendments as well as planning and budgeting for the air program. Meiburg joined EPA in 1977, serving in a variety of positions in Washington, D.C., Research Triangle Park, N.C., and Dallas, Texas, before coming to Atlanta. Meiburg holds a B.A. degree from Wake Forest University and M.A. and Ph.D. degrees in political science from The Johns Hopkins University.

Tuesday Morning Keynote

Mark Z. Jacobson

Director, Atmosphere/Energy Program, Stanford University

Mark Z. Jacobson is Director of the Atmosphere/Energy Program and Professor of Civil and Environmental Engineering at Stanford University. He is also a Senior Fellow of the Woods Institute for the Environment and the Precourt Institute for Energy. He received a B.S. in Civil Engineering, an A.B. in Economics, and an M.S. in Environmental Engineering from Stanford in 1988. He received an M.S. and PhD in Atmospheric Sciences in 1991 and 1994, respectively, from UCLA and joined the faculty at Stanford in 1994. He has published two textbooks of two editions each and 150 peer-reviewed journal articles. He received the 2005 AMS Henry G. Houghton Award and the 2013 AGU Ascent Award for his work on black carbon climate impacts and the Global Green Policy Design Award for developing state and country energy plans. He has served on an advisory committee to the U.S. Secretary of Energy, appeared in a TED talk, appeared on the David Letterman Show to discuss converting the world to clean energy, and cofounded The Solutions Project (www.thesolutionsproject.org).



Tuesday Lunch Panel

Financing Strategies



Deborah Markowitz

Secretary of the Vermont Agency of Natural Resources

Deborah Markowitz has shaped the environmental agenda of the state of Vermont as Secretary of the Agency of Natural Resources, focusing on the challenges of climate change, strategic land conservation, growing threats to forest health and integrity, and

improving the water quality of Vermont's lakes and rivers.

A graduate of the University of Vermont (B.A., 1983), Markowitz received her Juris Doctorate degree from the Georgetown University Law Center (*magna cum laude*, 1987). She served as a law clerk with Justice Louis Peck of the Vermont Supreme Court (1987-1988) and practiced law with Langrock, Sperry, Parker and Wool (1988-1990). She served as the founding director of the Vermont League of Cities and Towns Municipal Law Center (1990-1997).

Markowitz is the author of the Vermont Municipal Guide to Land Use Regulation (1997) and Vermont Municipal Environmental Handbook (1995). She serves as the Chair of Vermont's Climate Cabinet and represented Vermont on the White House Task Force on Climate Preparedness and Resilience. She serves on the Executive Board of the Environmental Council of the States and on the Boards of Advisors for the Georgetown Climate Center, Antioch's Center for Climate Preparedness and Community Resilience, and for the University of Vermont's Rubenstein School of Environment and Natural Resources.

Robert Sanders

Senior Finance Director, Clean Energy Group

Rob Sanders provides analysis and designs and promotes finance strategies to engage multifamily affordable housing developers, municipalities and other project developers in community resilient power. With over twenty-five years of experience in community development and energy-related commercial finance, Rob offers deep expertise in designing, implementing and evaluating financing programs, financial products and related services in the areas of clean energy and sustainable community development. Rob was formerly the Managing Director of Energy Finance for The Reinvestment Fund, serving as Fund Manager for the Sustainable Development Fund, as well as TRF Fund Manager for the Pennsylvania Green Energy Loan Fund and the Philadelphia metropolitan area EnergyWorks Loan Fund. Rob holds an MCP from the University of California at Berkeley and a B.A. from Stanford University.



Joel D. Scheraga

Senior Advisor for Climate Adaptation in the Office of the Administrator at the EPA

Dr. Joel D. Scheraga is leading the EPA's efforts to adapt to climate change to ensure the Agency continues to protect human health and the environment even as the climate changes. A central element of EPA's efforts is to strengthen the adaptive capacity of states, tribes, and local communities. Dr. Scheraga was on the team that produced President Obama's Climate Action Plan in 2013. He was a Lead Author for the Intergovernmental Panel on Climate Change, which was awarded the 2007 Nobel Peace Prize. Dr. Scheraga received an A.B. degree in geology-mathematics/physics from Brown University in 1976, and a Ph.D. in economics from Brown University in 1981.



MONDAY WORKSHOP

This workshop will run a total of 5 hours and consist of 2 parts. It will take place during the morning and afternoon sessions of Day One.

10 AM - 5:15 PM

10 - noon; Lunch Break; 1:45 - 5:15 (with Break)

Adaptive Gradients in the Coastal Environment: A Framework for Decision-Making on Infrastructure Responses

AICP CM 5

Leading experts will present the latest research and best practices of coastal adaptation response.

This workshop will cover:

- Introduce a comprehensive approach for consideration of the technical inputs, planning and zoning drivers that inform potential solutions.
- Be introduced to the basic geomorphology that contributes to susceptibility.

- Understand risk frameworks
- How to incorporate adaptation responses into already planning processes.
- Best practices for assessing vulnerability indicators and the conditions that will result in projected climate change.

Participants will then be introduced to a case study that reflects how best to employ a comprehensive framework for increasing community preparedness and resilience.

Workshop Facilitators:

Thomas Sheahan, *Department of Civil & Environmental Engineering at Northeastern;*

Elisabeth Hamin, *Landscape Architecture and Regional Planning, University of Massachusetts*

Sessions & Workshop Descriptions

Monday-Tuesday, April 4-5

DAY I Sessions

MONDAY, APRIL 4

ALL SESSIONS WILL RUN 1.5 HOURS

10 AM- 11:30 AM

Communication and Engagement Track

Equitable Adaptation: Collaborating for Resilience

AICP CM 1.5

The challenging impacts of climate change disproportionately affect those with the least resources to prepare, sustain and recover such as low-income communities and many communities of color. How do municipal and county decision makers and civic leaders support social cohesion, and promote effective engagement with all community members, especially those that are likely to be most impacted?

This session will cover:

- A basic primer on justice considerations and social cohesion for equitable adaptation
- Tips for promoting effective engagement with community-based organizations and historically marginalized populations

Participants will leave with useful methods for building equity into resilience and adaptation planning and implementation.

Moderator: Abigail Abrash Walton, Antioch University New England

Speakers/Panelists:

Damaris Reyes, Executive Director, Good Old Lower East Side, Inc. (GOLES)

Sarika Tandon, Senior Program Associate, Center for Whole Communities

10 AM- 11:30 AM

Planning and Process Track

Planning for the Needs of At-Risk Communities

AICP CM 1.5

This session will address how to make our plans work for our most vulnerable people. As events such as Hurricane Sandy and Katrina have shown, these events hit front line communities harshly with loss of homes, resources and inadequate access to health care during extreme events.

This session will cover:

- Best practices for assessing and incorporating vulnerable populations needs.
- How to incorporate the public needs of the most vulnerable populations into traditional municipal and regional planning processes.

Participants in this session will leave with an increased appreciation of the importance of prioritizing the needs of seniors, people living in poverty, people of color, First Nations people and children. They will also learn more comprehensive planning practices that ensure these vulnerable populations do not bear the brunt of the impacts from extreme climate events.

Speakers/Panelists:

Katherine Johnson, District of Columbia Department of Energy & Environment

Mark Barnes, PhD., Morgan State University, Baltimore, MD

10 AM- 11:30 AM

Built Environment Track

Living with the Old, Building for the New: Resilient Buildings

AICP CM 1.5

This session provides best practices for local decision makers to identify risks to existing buildings from climate change and to plan for new construction in consideration of those risks. Building and zoning regulatory changes focused on resiliency, adaptation, and mitigation will be examined through the lens of case studies.

This session will cover:

- Smart growth, low impact development, and best planning and design practices to enhance building resilience
- How the design of buildings that are core to community functions - healthcare, public safety, and key commercial buildings - are being designed differently to enhance resilience and provide for the changing climate
- Practitioners' recommendations about design for climate adaptation that should be incorporated into community and regional planning, overlay districts, and building codes
- Consideration of enhancing protective measures in increasingly vulnerable areas versus relocating

Participants will leave this session with an understanding of resources and tools that can be used to conduct vulnerability assessments and designs and retrofits to foster resilience through assimilating or accommodating projected impacts.

Moderator: Rob Graff, Manager, Office of Energy and Climate Initiatives, Delaware Valley Regional Planning Commission

Speakers/Panelists:

Alex Wilson, President, Resilient Design Institute

Willa Kuh, Director of Planning Sustainability Practice, Affiliated Engineers, Inc (AEI)

10 AM- 11:30 AM

Human Health and Ecosystem Services Track

Partnerships that Work: Enhancing Ecosystem Services

AICP CM 1.5

This session will provide information on how to recognize and integrate ecosystem services that enhance community resilience, existing partnership examples, strategies to initiate collaborative actions, and how to deal with some of the challenges that may exist from projected increase of frequency and scale of impacts from a changing climate.

This session will cover:

- Identifying gaps in knowledge and expertise required to more fully inform local decision makers about the efficacy of on-the-ground actions.
- How best to leverage existing partnerships and create links between existing efforts in the context of limited resources to enhance community preparedness.

Participants will gain knowledge of actions developed by organizations and institutions that have identified effective ways to address the link between ecosystem services and human health and safety at the municipal and regional scale.

Moderator: Adam W. Whelchel

Speakers/Panelists:

Adam W. Whelchel, *Director of Science, The Nature Conservancy in CT*
Jessica Noon, *Manager, Green Infrastructure Partnerships, Philadelphia Water*

1:45 PM - 3:15 PM

Communication and Engagement Track

Effectively Using the Preparation Frame: Communicating Climate Impacts and Engaging Stakeholders

AICP CM 1.5

What can polling and social science tell us about building decision maker and public support for climate mitigation and adaptation? This session will explore strategies for connecting with a range of audiences by focusing on climate impacts. Participants will gain insights on how to frame messages and develop engagement strategies that overcome polarization and fatalism.

Moderator: Christa Daniels, *AICP, Antioch University New England*

Speakers/Panelists: Cara Pike, *Founder and Director, Climate Access*

1:45 PM – 3:15 PM

Planning and Process Track

Conducting Vulnerability Assessments: Flooding

AICP CM 1.5

Participants in this session will gain a comprehensive practical understanding of how to conduct a vulnerability assessment of their community with regards to the effects of flooding, whether generated by precipitation or short-term sea-level rise, and mitigating the effects on city functions.

This session will cover:

- Identifying zones of risk from projected flooding
- How best to engage in dialogue about future threats
- How best to prioritize a response to impacts

Participants will leave this session with tools to communicate effectively and devise regional adaptation strategies with the participation of a wide-range of stakeholders from municipal governments, active community groups, NGOs and Federal agencies.

Moderator: Catherine Morris, *Senior Mediator & Facilitator, Consensus Building Institute*

Speakers/Panelists:

Nancy Gassman, *Assistant Director of Public Works, City of Fort Lauderdale*

Jessica Whitehead, *North Carolina Sea Grant, Carolina Integrated Sciences & Assessments*

Amy Morsch, *Director of Sustainability and Engagement, Center for Climate and Energy Solutions (C2ES)*

1:45 PM – 3:15 PM

Built Environment Track

Turning Up the Heat

AICP CM 1.5

In a time of increasingly frequent heat waves, it is imperative that communities understand what their needs are during heat waves and how they will meet those needs.

This session will cover:

- Be introduced to design and retrofit strategies within an urban environment to mitigate extreme heat events.
- Address how to develop plans to identify and assist the most vulnerable populations to urban heat island impacts.

Participants will leave with a greater understanding of how to address increasingly common and intense heat events, including keeping essential systems functioning and assisting the most vulnerable populations.

Moderator: Sara Hoverter, *Senior Fellow at Harrison Institute for Public Law, Georgetown University Law Center*

Speakers/Panelists:

Maria Koetter, *Director of Sustainability at City of Louisville*

Dr. Jalonnie L. White-Newsome, *Senior Program Officer at The Kresge Foundation*

1:45 PM – 3:15 PM

Human Health and Ecosystem Services Track

Understanding the Psychology of Trauma: Key competencies for working with survivors of climate change impacts

AICP CM 1.5

Working with people who have experienced trauma, including those affected by climate change impacts, requires an intentional approach to nurture resilience and recovery.

This session will cover:

- Introduce a necessary understanding of the human stress response in order to incorporate trauma-informed practices.

Sessions & Workshop Descriptions

Monday-Tuesday, April 4-5

- Identify the key competencies for all stakeholders involved in community resilience and business continuity.

Participants will gain knowledge of the importance for all responders to the impacts of extreme weather events to interact with survivors in a manner that is not “re-traumatizing”.

Speaker and Moderator: Cathy Lounsbury, Antioch University New England

3:45 PM – 5:15 PM

Communication and Engagement Track

Picture this ... Using Visualization and Storytelling to Engage around Climate Risk and Resilience

AICP CM I.5

Americans largely accept the threat of climate change yet a “Not Me-Not Here-Not Now” challenge remains as the issue is still a low priority for most due to the fact the issue remains distant in time and space; and solvability is highly questioned. This calls for practitioners to test innovative forms of engagement that can illustrate the relevance of climate disruption and involve community members in developing pathways for response. Visit www.Here-Now-Us.org to check out the visualizations in advance!

This session will cover:

- An exploration of using visualization to engage the public in a discussion of the need to respond to future vulnerabilities.
- An introduction to a narrative personal story approach to increasing concern over climate impacts.

Participants will leave with an approach to engage the public and move towards actual action at the local level to build community resilience.

Moderator: Cara Pike, Climate Access

Speakers/Panelists:

Leslie Alden, Policy Aide to Supervisor Kathrin Sears, Marin County Board of Supervisors, California

Erika Spanger Siegfried, Union of Concerned Scientists

3:45 PM – 5:15 PM

Planning and Process Track

Conducting Vulnerability Assessments: Heat

AICP CM I.5

Participants in this session will gain a comprehensive practical understanding of how to conduct a vulnerability assessment of their community with regards to the effects of heat, particularly heat-island effects, projected increase in 90+ days, and mitigating the effects on the population.

This session will cover:

- Approaches for identifying populations and neighborhoods most vulnerable to extreme heat events

- Prioritizing vital community infrastructure most vulnerable to extreme heat
- How best to use multiple stakeholders to develop increased resilience to projected heat island impacts.

Participants will leave this session with tools to communicate effectively and devise region-wide adaptation strategies with other municipal governments nearby, as well as regionally active community groups, NGOs and Federal agencies.

Moderator: Lauren Thie, North Carolina Department of Health and Human Services, Building Resilience Against Climate Effects (BRACE)

Speakers/Panelists: Nathalie Beauvais, APA, International Association AIA, LEED AP - Kleinfelder

Amy Morsch, Director of Sustainability and Engagement, Center for Climate and Energy Solutions (C2ES)

3:45 PM – 5:15 PM

Built Environment Track

Critical Infrastructure: Energy & Transportation What Can Local Decision Makers Do?

AICP CM I.5

Due to an increased frequency of extreme events associated with climate change, communities are experiencing increased interruption in the systems supporting their lighting, heating, cooling, and transportation needs. The electric and natural gas grids are critical pieces of the built environment, yet they are not under the control of local decision makers. Transportation systems must remain operational during extreme events to allow emergency response, move people to safety, and transport essential goods.

This session will cover:

- Vulnerabilities of power and transportation systems and hierarchy of importance.
- The best way communities can engage with utilities to increase the resiliency of their power systems.
- Practitioners' recommendations about design for preparedness that should be incorporated into planning.

Participants will leave with a deeper understanding of how to mitigate the vulnerabilities of their local electrical supply, the benefits and implementation of alternatives such as microgrids, and how to best prepare to ensure transportation systems remain operational during extreme events to allow emergency response, move people to safety, and transport essential goods.

Moderator: Chris Lotspeich, Director of Sustainability, Celtic Energy

Speakers/Panelists:

Susanne DesRoches, Deputy Director for Policy Infrastructure, Mayor's Office of Recovery and Resiliency, NYC

John Murach, Manager, Energy Efficient Programs, Baltimore Gas & Electric

3:45 PM – 5:15 PM

Human Health and Ecosystem Services

Low Cost Resiliency: Ecosystem Services and the Municipal Budget

AICP CM 1.5

In the last few decades, the ecosystem services approach has been integrated into public management and local government decisions through cyclical, integrated management and planning. A considerable number of municipalities have embarked in using integrated and regional nature of ecosystem resources to leverage solutions that conserve resources, increase climate change resiliency, save money and make environmental common sense.

This session will cover:

- Explore sustainable landscape opportunities in reducing runoff, increasing stormwater infiltration capacity and capturing toxins before they reach local waterways.
- Build understanding the cost benefit associated with using this approach in climate change resiliency."

Participants will leave this session with knowledge and skills necessary in making informed decisions related to budgeting and investing resources on solutions related to climate change resilience and sustainable development activities.

Moderator: Peter Walker, Principal, VHB

Speakers/Panelists: Bethany Eisenberg, LEED AP, Director of Stormwater Services, VHB

Eric Walberg, Senior Program Leader, Climate Services, Manomet

DAY 2 Sessions

TUESDAY, APRIL 5, 2016

ALL SESSIONS WILL RUN 1.5 HOURS

10 AM- 11:30 AM

Communication and Engagement Track

Reaching Beyond the 'Usual Suspects': Innovative Strategies to Engage the Community

AICP CM 1.5

Getting stakeholders to meetings has been a constant struggle for community leaders. A leading question for participants to understand is whether having a face-to-face meeting is the right thing to do based on your objectives. If not, what are other innovative methods of collecting public input?

This session will cover:

- Innovative stakeholder engagement strategies that have been successfully employed by municipalities. .
- How best to create venues and opportunities where community members feel empowered and part of the solution.

Participants will leave this session with an understanding of how to best structure and roll out these types of methods based on their own target audiences.

Moderator: James Gruber, Antioch University New England

Speakers/Panelists:

Kristin Baja, City of Baltimore

Angela Vincent, Senior Resiliency Planner at BSC Group

10 AM – 11:30 AM

Planning and Process Track

Incorporating Adaptation into Day-to-Day Planning

AICP CM 1.5

Participants in this session will learn how to approach development, financing and implementation of climate adaptation strategies.

This session will cover:

- How to determine those activities that a municipality already does and how to incorporate adaptation thinking into such day-to-day municipal processes.
- Incorporation of climate preparedness strategies into a comprehensive Master Plan.
- Develop measureable benchmarks for assessing progress towards stated climate adaptation and mitigation objectives.

Participants will leave this session with strategies of finding funding for climate adaptation efforts, and how best to (plan to) cover budget gaps.

Moderator: Steve Whitman, AICP

Speakers/Panelists:

Steve Whitman AICP, Resilience Planning and Design

Rhett Lamb, Director of Planning, City of Keene, NH

Jessica Grannis, Georgetown Climate Center

10 AM – 11:30 AM

Built Environment Track

Living with Water

AICP CM 1.5

This session addresses assessment, planning, and adaptation to not only better prepare for the next storm, but also to sustainably manage flooding, stormwater, and water supply to maintain human health and a vibrant local economy.

This session will cover:

- Knowledge about innovative stormwater control initiatives
- How to best adjust building codes and master plans to build community resilience.
- Pioneering hydrology-based, sub-watershed approaches that have shown mitigation potential not only for stormwater and flooding, but to the loss and degradation in quality of water supplies.
- A comparison of costs of green strategies to traditional gray infrastructure.

Participants will leave this session with an appreciation of maintaining landscape to mitigate projected impacts along with enhanced knowledge on application of low-impact development (LID), site design, and other smart growth practices to address these effects.

Moderator: Robert Roseen, Principal, Waterstone Engineering

Sessions & Workshop Descriptions

Monday-Tuesday, April 4-5

Speakers/Panelists:

Stephen Marks, *City of Hoboken, NJ*

Jo Ann Macrina, *Commissioner, Department of Watershed Management, City of Atlanta, GA*

10 AM – 11:30 AM

Human Health and Ecosystem Services

The Future of Ecosystem Services: Does climate Change Really Matter?

AICP CM 1.5

A warmer climate, with extreme weather events and shifting rainfall patterns, is affecting ecosystems, from the species to the community levels, thus potentially altering the ability of these ecosystems to provide critical services.

This session will cover:

- The complex links that exist between climate change and ecological services
- How to identify appropriate investments in ecosystem services to mitigate and adapt to climate change.

Participants will gain a deeper understanding how to identify and assess ecosystems services and how to translate these to actions that a community can take to build resilience.

Moderator: Germán Mora, *Director of the Environmental Studies Program, Goucher College*

Speakers/Panelists:

Richard Pouyat, *Senior Policy Analyst, Climate Resilience and Land Use, Office of Science and Technology Policy*

Alexander J. Felson, *School of Forestry & Environmental Studies and Yale School of Architecture*

Clyde F Casey, *USGS*

TUESDAY AFTERNOON WORKSHOPS

All sessions will run approximately 3 hours

1:45 PM – 5:00 PM with a 30 minute break from 3:15 PM to 3:45 PM

Creating an Effective Engagement Strategy in Your Community: Using the Latest Social Science to Motivate Action

AICP CM 1.5

Workshop Facilitator: Cara Pike, *Climate Access*

Summary: Need help developing effective climate engagement strategies for your audiences? Struggling to reach and motivate stakeholders to engage in outreach events? Join climate and environmental communications expert Cara Pike for a training session

aimed at helping you develop effective public engagement strategies and framing in support of climate action and sustainability goals. Through lectures, group discussion, and problem solving sessions, you will learn about common communication challenges and how to overcome these challenges based on translated and applied social science research.

Monitoring Adaptation Progress: From Assessing Climate Impacts to Evaluating Implementation Success

AICP CM 1.5

Workshop Facilitator: Rachel M. Gregg, *EcoAdapt*

Summary: Climate change is having far-reaching effects on natural resources and human communities, and decision makers often struggle with how to identify, prioritize, and evaluate the effectiveness of climate adaptation actions. In order to determine what is and is not working, monitoring and evaluation is a much needed - although less developed - adaptation discipline. This session will explore ways to improve our success in adaptation planning from identifying how climate change will affect our goals and what adaptation actions should be prioritized to determining the effectiveness of implemented actions. Incorporating monitoring and evaluation into the adaptation planning process from the beginning will allow us to improve our long-term success.

Community- and city-scale options for transforming energy to 100% wind, water, and solar

AICP CM 1.5

Workshop Facilitator: Mark Z. Jacobson, *Director, Atmosphere/Energy Program, Stanford University*

Summary: Communities and cities can help significantly to transform the energy infrastructure of the 50 United States to 100% wind, water, and solar power for all purposes. This interactive workshop will discuss some proven and some simulated methods that many people are not aware of to help accomplish this goal. The proven methods include community-scale underground heat storage in soil and community or city-scale heat exchanging combined with WWS electricity. The simulated methods include installing large arrays of offshore wind turbines to generate electricity year-round (thus paying for themselves) while simultaneously reducing hurricane and severe weather impacts at no additional cost. These topics will be discussed in light of their cost, reliability, and feasibility. Additional methods of changing energy at the local and regional scale will also be discussed.

Local Climate Change Visioning: Using Future Scenarios and Visualization to Enhance Planning and Engagement

AICP CM 1.5

Workshop Facilitator: Dr. Stephen R.J. Sheppard, *Collaborative for Advanced Landscape Planning, UBC*

Summary: Most cities around the world are now starting to gear up

for climate change planning, to implement and mainstream adaptation and mitigation. However, difficulties include: the problem of uncertainties and unfamiliarity with both future impacts and their solutions; the need to bring the public on board in supporting new policies and embracing behaviour change; and how to build additional considerations into current planning methods when staff resources are stretched. This workshop demonstrates a participatory process for visioning local futures with climate change, for purposes of planning, community engagement, and decision-making. This process, using best available data, scenarios, and powerful visualization, has been shown through evaluation research to increase awareness and support for policy change among stakeholders and councils, leading in some cases to rapid implementation of adaptation measures. Through hands-on exercises with a local community area, drawing on compelling examples and techniques from the facilitator's book *Visualizing Climate Change*, participants will learn how they can structure an enhanced planning/engagement process that integrates:

- best available data from multiple sources/disciplines

- climate change impacts and vulnerability mapping
- potential adaptation and mitigation scenarios
- meaningful themes and formats for developing different visualization types for different purposes
- input from experts and multiple stakeholders in a working group
- credible presentation techniques for wider engagement and awareness building.

Participants will also review software and staffing needs/resources applicable to their own jurisdictions. Bring your laptop if possible!

Navigating the Stafford Act and the New FEMA Requirements for Mitigation Assistance

AICP CM 1.5

Workshop Facilitators:

Kevin W. Geiger, *AICP CFM, Senior Planner, Two Rivers-Ottawaquechee Regional Commission*

TUESDAY AFTERNOON WALKING TOURS

All tours will run approximately 3 hours

Historic Buildings Walking Tour

Baltimore City's Jones Falls Valley is home to nationally significant historic mill buildings, which are enjoying a renaissance as a series of mixed-use redevelopment projects. These projects have transformed these largely under-utilized but historically significant properties into attractive hubs for high-quality housing, office space and restaurants, returning the mill complexes to their historic position as economic hubs for the community. The revitalization has occurred thanks in large part to historic rehabilitation tax credit. The same river that powered the mills in the 19th century attracted the redevelopment of the properties for residential and commercial use today. Despite these successes, these buildings are located within a floodplain, and as the City strengthens its floodplain regulations to address these life and safety issues, the face of redevelopment in the area is changing. As historic preservationists, we must rethink how the design of these buildings is impacted by the new regulations. Although historic preservation and floodplain regulations could be at odds, creative designs and compromise will be the key to the continued redevelopment of the historic mill valley.

Tour Leads: Lauren Schiszik and Stacy Montgomery, *City of Baltimore Historic and Cultural Assets Division*

Green Bike Tour

Through the Growing Green Initiative, the City of Baltimore is investing heavily in transforming blighted vacant land into sites that cool the city, sequester carbon, promote food resilience, filter storm-water, and meet community needs. Join the Baltimore Office of Sustainability on a bike tour to see examples

of this strategy in action, including community gardens, urban farms, urban forests, and more. In addition to seeing the sites and meeting site managers, we will discuss the policies that have supported their development, including the adoption of plans, tax credits, leasing programs, and a design competition.

Tour Leads: Jenny Guillaume, *Growing Green Coordinator, City of Baltimore* and Abby Cocke, *Environmental Planner, City of Baltimore*

Bird-Friendly Baltimore: A Community Engagement Walking Tour

Discover urban habitats in many shapes and sizes! Baltimore's Patterson Park Audubon Center will lead you through their successful bird-friendly garden projects the city. Known for engaging a multicultural community, the Center is active in improving neighborhoods for people as well as wildlife. Visit habitats in 155-acre Patterson Park, a documented migratory stopover, Library Square's vacant lot converted to a thriving garden and framed by a colorful mural, and the famous habitat canoe! Stroll with PPAC's education team to explore these, followed by a visit to Audubon's Maryland headquarters for a presentation by teenaged Green Leaders on climate change and birds. Note: Walk is mostly paved with some uneven surfaces, and the Audubon offices are only accessible by stairs.

Tour Leads: Susie Creamer, *Director of Urban Education and Conservation, Patterson Park Audubon Center, National Audubon Society*

Chandra Taylor Smith, Ph.D.

Vice President, Diversity and Inclusion, National Audubon Society

Sessions & Workshop Descriptions

Monday-Tuesday, April 4-5

Kevin Snyder, *Federal Disaster Recovery Coordinator, FEMA Region III*

John Malueg, *Stantec*

Kürt D. Blomquist, *PE, Public Works Director/Emergency Management Director, City of Keene, NH*

Summary: What Will FEMA Fund? Communities expect that the Federal Emergency Management Agency (FEMA) will be there to cover the cost of recovery once an extreme weather event, such as tropical storm Irene and Superstorm Sandy is declared a federal disaster. This is rarely the case for disaster recovery and getting funds approved for resilience can be significantly expedited by pre-event planning. In this workshop, participants will learn some of the basics of the FEMA Recovery Programs and receive advice on resilience funding and how to avoid pitfalls in the process of navigating Stafford act requirements.

Implementing a climate resilience program: A practical approach

Part I: Navigating the U.S. Climate Resilience Toolkit: How the Toolkit can support local planning and decisions for enhanced community resilience

Workshop Facilitator: David Herring, *NOAA*

Participants in this workshop will learn how the U.S. Climate Resilience Toolkit (toolkit.climate.gov) can be used to support local planning and decisions for enhanced community resilience. The workshop will walk participants through the Toolkit's 5-Step Planning Process and examples of its use.

The 5-Step Planning Process includes:

- Identifying the problem: Focusing on climate stressors that threaten people, buildings, natural resources, or the economy in your area.
- Determining vulnerabilities: Identifying specific populations, locations, and infrastructure that may be impacted by the climate problem you identified
- Investigating options: Compiling a list of potential solutions, drawing on the experiences of others who have addressed similar problems.
- Evaluating the risks and costs: Considering risks and values to analyze the costs and benefits of favored options. Select the best solution for your situation and make a plan.
- Taking action: Implementing your plan and monitoring your progress.

Part II: Sources and Use of Downscaled Climate Data to Support Infrastructure Adaptation

Workshop facilitator: Latham Stack, *Syntectic International*

Participants in this second section of the workshop will:

- Learn tactics for arriving at reliable specifications to inform infrastructure adaptation.
- Identify sources for downscaled climate data: Current publicly-available downscaled climate data. Sources and how to obtain
- Working with this data: Turning downscaled data into design events and infrastructure specifications

How to (and Not to) Talk About Climate Change for Resilience: A Workshop on Using National Trends, Local Data, and Behavioral Science to Customize Your Message

AICP CM 1.5

Workshop Facilitators: Bessie Schwarz, *Yale Program on Climate Change Communication*

Jennifer Marlon, *Yale Program on Climate Change Communication*

Lisa Fernandez, *Yale Program on Climate Change Communication*

Summary: The Yale Program on Climate Change Communication specializes in understanding the public's knowledge, policy preferences, and behavior around climate change. We conversely study the underlying psychological, cultural and political factors that drive public responses. This workshop will provide practical insight and actionable guidance for understanding your audience's relationship to the issue, determining the right climate or renewables messages to use, and finding the best community members to work with to disseminate your message. We will share data, tools and insights from a decade of public opinion polling, our segmentation of the American public ("Global Warming's Six Americas"), and web maps of local public opinion (Yale Climate Opinion Maps). This workshop shows participants through how to turn the latest communications research in useful to strategies for local and regional work.

Business Continuity: In the Face of Extreme Weather

Agenda

Wednesday, April 6, 2016

8 AM	Breakfast/Registration
9 AM	Welcome and Opening Remarks: Michael Simpson Topic: Primer on Science of Extreme Weather and Sea-Level Rise
9:30 AM	Panel Discussion: What Could Happen When That Big Storm Hits
10:45 AM	Networking Break
11:00 AM	Business Continuity Planning Overview — Lessons Learned and Best Practices: Scott Cave
NOON	Lunch
	Keynote Speaker: Bob Perciasepe Topic: Building Business Resiliency Strategies
1:15 PM	Business Continuity Exercise — Put Your Plan to the Test: Scott Cave Topic: Is Your Business Prepared to Weather the Storm?
3 PM	Networking Break
3:15 PM	Debrief of the Day: Michael Simpson Topic: Important First (Next) Steps for Businesses
4:00 PM	End



Business Continuity Keynote Speaker

Bob Perciasepe

President, Center for Climate and Energy Solutions

The Center for Climate and Energy Solutions is widely recognized in the United States and internationally as a leading, independent voice for

practical policy and action to address our energy and climate challenges. Mr. Perciasepe has been an environmental policy leader in and outside government for more than 30 years, most recently as Deputy Administrator of the U.S. Environmental Protection Agency (EPA). He is a respected

expert on environmental stewardship, natural resource management, and public policy, and has built a reputation for bringing stakeholders together to solve issues. In 2002, Mr. Perciasepe joined the National Audubon Society, one of the nation's oldest conservation organizations, as its senior vice president for public policy. He served as the group's chief operating officer from 2004 to 2009, and worked to protect wetlands and expand environmental education. He has also held top positions in state and municipal government — as Secretary of the Environment for the state of Maryland from 1990 to 1993 and as a senior planning official for the city of Baltimore, where he managed the city's capital budget.

Business Continuity: In the Face of Extreme Weather Descriptions

Wednesday, April 6, 2016

9-9:30 AM

Welcome and Opening Remarks

Presenter: Michael Simpson, *Chair, Environmental Studies Department, Antioch University, Keene NH*

An overview of the science associated with a changing climate will be presented, describing the recorded changes in the frequency of extreme climate events, as well as the changing rate of sea-level rise expected. This will be followed by the most-likely projections about changes into the future on which businesses can base future planning in regards to reducing Their risks.

9:30-10:45 AM

What Could Happen When That Big Storm Hits

Business owners will discuss what happened when they faced extreme weather events like Hurricanes Irene and Sandy. This will include the preparations they made, the immediate concerns after the storm, lessons learned, and changes implemented to be more prepared for the next big storm.

Moderator:

Kevin Geiger, *Two Rivers-Ottawquechee Regional Commission, Woodstock, VT*

Panelists:

Victor Chan, *SUteiShi Restaurant, New York, NY*

Brian Arnold, *Nepenthe Homebrew, Baltimore, MD*

Gene Taylor, *National Aquarium, Baltimore, MD*

10:45 AM

Networking Break

11 AM-Noon

Business Continuity Planning Overview: Lessons Learned and Best Practices

Presenter: Scott Cave, *Atlantic Business Continuity, Charleston SC*

Business Continuity is the cornerstone of preparedness for any organization. However this session focuses on the shift from preparedness to readiness for any future emergency, disaster, or other crisis. Participants will gain insight into the key elements of a business continuity plan and how to effectively implement them. A review of best practices will provide participants with a methodology to either start their plan from scratch or improve their current plan. This session will provide important foundational information for effective business continuity planning so participants are ready to join our interactive exercise session in the afternoon.

NOON

Lunch

12:30-1:00 PM

Building Business Resiliency Strategies

Keynote Speaker: Bob Perciasepe, *President, Center for Climate and Energy Solutions*

1:15-3:00 PM

Business Continuity Exercise: Put your Plan to the Test!

Facilitator: Scott Cave, *Atlantic Business Continuity, Charleston SC*

This session will utilize a common emergency scenario to test the participants' ability to work through the various phases of response and recovery. The exercise will lead participants to work through and consider the expected and unexpected issues for employee safety, facility damage assessment, crisis communications, technology recovery, and operational continuity. Participants will work together in groups through each phase of the scenario to share ideas and solutions. Each participant should leave this session with a detailed understanding of the gaps and issues in their current plans, and actions to be taken to address them. This session is designed both for participants with current business continuity plans as well as those who do not yet have a plan. Regardless of your current plan status, you will leave this session with a clear understanding of your organization's business continuity planning needs.

3 PM

Networking Break

3:15-4:00 PM

Debrief of Day: Important (First) Next Steps for Business

Presentor: Michael Simpson, *Center for Climate Preparedness and Community Resilience, Antioch University New England*

LOCAL SOLUTIONS:

Eastern Regional Climate Preparedness Conference

Education Summit

Agenda

Wednesday, April 6, 2016

7:30 a.m.

Breakfast/Registration

8:30 a.m.

Welcome to the Summit

Melinda Treadwell, Vice President for Academic Affairs, Antioch University New England

Welcome To Baltimore

Nick McDaniels, Teacher, Mergenthaler Vocational Technical High School, Baltimore, Maryland

Panel: How can we build community resilience through education?

8:40 a.m.

Rose Chaffee-Cohen, High School Science Teacher, Kent Place School, Summit, New Jersey

Ashley Edwards, Senior at Baltimore City College High School

Marianne E Krasny, Professor, Department of Natural Resources and Director of the Civic Ecology Lab at Cornell University

Break

INFORMATIONAL SESSIONS

9:30 a.m.

Track I: How can your school contribute to community resilience? (Formal)

9:35 a.m.

- Complexity Builds Resilience: Building Oyster Reefs and Community Connections
- Nature-Based Guides to Effective Teaching and Learning
- Become an Energy Savings Superhero

Track II: How can we educate in our local communities to build resilience? (Non-Formal)

- Living Shore: Building Resilience through Education and Collaboration on the Eastern Shore of Virginia
- What's the Sweatuation?: Using informal approaches to climate change education and network building
- Education About and Toward Resilience: Examples from NYC post-Hurricane Sandy

10:35 a.m.

Break



Education Summit Keynote Speaker

Bill McKibben

Author and Founder of 350.org

Bill is a founder of the grassroots climate campaign 350.org and the Schumann Distinguished Professor in Residence at Middlebury College in Vermont. He is a 2014 recipient of the Right Livelihood Prize, sometimes called the 'alternative Nobel.' He has written a dozen books about the environment, including his first, *The End of Nature*, published 25 years ago, and his most recent, *Oil and Honey*.

10:40 a.m.

INFORMATIONAL SESSIONS

Track I: School-Based Education (Formal)

- Earthling Power: How Nature Study & Play Shape Our Understanding of Community
- Leading Resilience through Leading Institutions
- Climate Change Education in Baltimore

Track II: Community Education (Non-Formal)

- Community Climate Change Fellowship Program: Building Climate Change Resilience at the Community Level.
- Climate Change Communication Strategies
- Building Student Environmental Leadership for a Greener School System

11:40 a.m.

Lunch and Focused Conversations

12:45 p.m.

PROFESSIONAL TRAINING WORKSHOPS

- Climate Change Integration Module: A STEM Integration Tool for Teacher Education Curricula
- Resilience, Adaptation, and Climate Communication: Applying Research Findings to Environmental Education Programs
- Climate Justice and Community Resilience: An Interactive Dialogue

COLLABORATIVE ACTIVITY: MAKING CHANGE

INFORMATIONAL SESSIONS

12:45 p.m.

Track I: School-Based Education (Formal)

- A Place-based, Educational Videogame for Building Awareness and Motivation around Climate Change with High School Students: "Future Delta 2.0"

Track II: Community Education (Non-Formal)

- Climate Kids: Weaving Art, Science, and Storytelling to Support Community Resilience

1:55 p.m.

Break

INFORMATIONAL SESSIONS

2:00 p.m.

Track I: School-Based (Formal)

- Examining Student Identity and Agency in Relation to Climate Change: a Case Study with 6th Grade Learners

Track II: Community Education (Non-Formal)

- What's the Sweatuation?: Using Informal Approaches to Climate Change Education and Network Building

12:45 p.m.

SciTech Field Trip

3:15-3:30 p.m.

Keynote Speaker

Bill McKibben, *author and a founder of 350.org*

3:30-4:00 p.m.

Participant Forum

What's Next?

Education Summit

Sessions & Workshop Descriptions

Wednesday, April 6

8:30-8:35 AM

Welcome to the Education Summit

Melinda Treadwell, *Vice President for Academic Affairs, Antioch University New England*

8:35-8:40 AM

Welcome To Baltimore

Nick McDaniels, *Teacher, Mergenthaler Vocational Technical High School, Baltimore, Maryland*

8:40-9:30 AM

Panel: How can we build community resilience through education?

Three panelists will briefly address the theme of the Education Summit, and then there will be time for questions and comments from summit attendees.

Panelists:

Rose Chaffee-Cohen, *High School Science Teacher, Kent Place School, Summit, New Jersey*

Ashley Edwards, *Senior at Baltimore City College High School*

Marianne E Krasny, *Professor, Department of Natural Resources and Director of the Civic Ecology Lab at Cornell University*

9:35-10:35 AM

Informational Sessions

(Two tracks, three options per track)

Track I: How can your school contribute to community resilience?

Track I sessions offer participants opportunities to learn how schools can help to build community resilience on multiple scales, including through individual well-being and personal resilience, teacher-student initiatives at school and in the larger community, and/or collaboration with community partners. Schools can provide climate change education, which is the foundation for climate preparedness and community resilience, and sessions in Track I give participants knowledge, skills, and resources that empower them to work through their schools to build community resilience.

Complexity Builds Resilience: Building Oyster Reefs and Community Connections

Restore Urbanna Creek is a community project connecting schools, non-profit organizations, public utility companies, and government agencies in order to build oyster reefs in Urbanna Creek that will

improve the water quality. Oyster reefs are complex ecosystems, and to build them requires complex communications between many people working toward one goal. Many people collaborating on a regular basis builds a healthier more resilient community. Oysters in the Chesapeake Bay are iconic symbols of sustainability as they provide jobs, strengthen the local economy, and improve the environment by filtering water and providing habitat. Restore Urbanna Creek improves water quality, builds stewards for the future, and brings people closer together to solve complex, authentic problems.

Presenter: Will Smiley, *High School Science Teacher, Christchurch School, Christchurch, Virginia and Project Manager of Restore Urbanna Creek*

Nature-Based Guides to Effective Teaching and Learning

Lessons from and in nature are powerful ways to enhance teaching and learning in all school subject and skill areas. They help optimize individual student achievement. They contribute to positive school and classroom environments. They encourage creativity, comprehension and collaboration to support students' development of executive function skills, a predictor of school and life success. Come to this session for specific examples, tools, and resources to bring nature to life in your classroom or school and help build resilience in your community.

Presenter: Cheryl Charles, Ph.D., *Executive Director of the Nature Based Leadership Institute, Antioch University New England, and Co-Founder, President, and CEO Emerita of the Children and Nature Network*

Become an Energy Savings Superhero

This interactive and fun session will illustrate the relationship between our energy choices and our changing climate. Come learn about THE EmPOWERS - a group of Energy Savings Superheroes who represent the energy sources where we derive electricity. By utilizing the free resource, THE EmPOWERS Activity Kit, we will focus on where our energy comes from, how much we use every day, and how that impacts the environment and connects to climate change. You will also learn about the interactive Energy Arcade that brings energy efficiency to life. The Kit is designed for kindergarten through 6th grade, however it can be adapted for high school student so that they learn how to lead the lessons for the younger students.

Presenter: Larissa Johnson, *Climate Change Outreach Coordinator, University of Maryland Center for Environmental Science*

Education Summit

Sessions & Workshop Descriptions

Wednesday, April 6

Track II: How can we educate in our local communities to build resilience?

Track II sessions offer participants opportunities to learn how they can educate their local communities about climate change and engage people in climate preparedness to insure a more equitable, just, and healthy environment for more people. Sessions address ways in which our local places, both natural and built, can be used to teach about climate change, its consequences, climate preparedness, and mitigation. Sessions in Track II also focus on how local resources (non-profit organizations, community members, businesses, municipal departments and offices, etc.) can be utilized effectively to build capacity for community resilience through education.

Living Shore: Building Resilience through Education and Collaboration on the Eastern Shore of Virginia

In the face of climate change and visible shoreline erosion due to sea level rise, restoration activities and environmental education open a powerful space for community collaboration. With funding from a Toyota TogetherGreen Innovation Grant Chincoteague Bay Field Station (CBFS) began work in 2014 on the Living Shore Project, which brings together groups in Greenbackville and Accomack County, Virginia, to restore a severely eroding shoreline. In the first year of the project, diverse families, members of a gated community, members of traditional Eastern Shore communities, college students, and college faculty worked together to install Oyster Castles®, stabilize the shoreline, plant native marsh grasses, and remove invasive Phragmites. CBFS is now building on the success of the initial project with the assistance of an EPA EE Local Grant. This spring, CBFS will begin developing an outdoor classroom and a public model for enhancing coastal resilience on the Eastern Shore. Through a community collaborative forum, environmental education, and demonstration of best practices, CBFS will engage diverse learners in creating a climate-literate and climate-adaptable community. Participants will learn about CBFS's community engagement process as well as lessons learned and plans for the future.

Presenter: Anne Armstrong, *MS/PhD candidate in the Civic Ecology Lab, Cornell University Department of Natural Resources*

What's the Sweatuation?: Using informal approaches to climate change education and network building

The Climate & Urban Systems Partnership (CUSP) rallies local stakeholders to figure out how to engage communities in climate change more often and more effectively. The project brings together informal educators, learning scientists, climate scientists, and local stakeholders to find an approach to climate change education that is informed by the latest research and best practices. As a result, CUSP

champions an approach to climate change education that is "local, relevant, and solutions-focused," and that focuses first, and most, on resiliency as a gateway to getting the general public to learn more about the larger issue. CUSP has also found that informal approaches are key to building a network and engaging the public. Learn how these approaches have manifested themselves in Philadelphia (including a 6-week "Sweatuation" campaign focused on sweaty body parts...) and how CUSP leaders have been educating communities, one neighborhood at a time.

Presenter: Richard Johnson, *Franklin Institute Project Manager of the Climate and Urban Systems Partnership*

Education About and Toward Resilience: Examples from NYC post-Hurricane Sandy

This presentation is about how environmental educators and related professionals contributed to the resilience and adaptation of New York City communities while also responding to new opportunities that arose in the three years after Hurricane Sandy. We will describe challenges and successes in efforts to incorporate the concept of resilience into educational practices and in efforts to respond to the needs of nearby communities and ecosystems. We will draw on these cases in order to highlight key opportunities for educators to contribute to resilience in their local communities and to be intentional about how they are engaging with the concept of resilience. We will be joined by an educator interviewed in this research to talk about his/her work first hand. Participants will be given a resilience fact sheet to take home.

Presenter: Bryce DuBois, *Extension Associate, Cornell University and a doctoral candidate in Environmental Psychology, City University of New York Graduate Center*

10:40- 11:40 AM

Informational Sessions

(Two tracks, three options per track)

Track I: School-Based Education (Formal)

Earthling Power: How Nature Study & Play Shape Our Understanding of Community

When children fall in love with nature the world changes -- a bewildering dimension opens and they realize we are no longer at the center of the universe. We are but a single creature among many; we are one of the Earthlings. When we study and play in the forest the presence of the other Earthlings (and the odd powers they exhibit) rouses our curiosity. And it's exactly this interaction that teaches us about our primary power . . . our imaginations. Nature is the great

equalizer. When we are enmeshed in the more-than-human world we realize that community isn't solely a human affair -- it is the domain of Earthlings. Big, small, bipedal, rooted, or tailed, we all play a vital role in shaping and maintaining a healthy, Earthy community. In this session we will explore how nature-based education and play fosters a more encompassing, complex, and joyful understanding of community, and how this orientation is necessary in building our sustainable future.

Presenter: Michel Anderson, *Ecoliteracy and Sustainability Coordinator, Waldorf School of Baltimore*

Leading Resilience through Leading Institutions

Higher education organizations serve as a community-based institution of learning and therefore have a large role in communities and their economic and environmental resilience. Campuses also serve as a living lab, provide programming, curriculum, career pathways, and community leadership, all critical to a community's resilience. This session will highlight the latest trends in higher education and resilience planning. Attendees will explore the American Association of Community College's (AACC) report, "A Guide to Climate Resiliency & the Community College" where they will learn about tools and resources available to support their communities. This presentation will review a practical resilience agenda that considers jobs, economic development, training partnerships, and evolving programs through case studies surrounding energy efficiency, emergency response, green infrastructure, healthcare, and cross-sector planning for student success. Attendees will gain a greater understanding of the capacity and role of community colleges and a framework to support partnerships in the community, as well as set of tools to support the work.

Presenters:

John Dyer, *Director of Workforce and Economic Development, American Association of Community Colleges*

Amanda Kosty, *Project Coordinator of Workforce and Economic Development, American Association of Community Colleges*

Climate Change Education in Baltimore

Learn from a panel of Baltimore teachers about how they are bringing climate change education into their classrooms.

Presenters: Baltimore Teachers

Track II: Community Education (Non-Formal)

Community Climate Change Fellowship Program: Building Climate Change Resilience at the Community Level

Learn how 26 Community Climate Change Fellows from all over North America are using innovative environmental education strategies to address climate change issues in their communities. For example, Jennifer Hubbard-Sanchez in Frankfort, Kentucky is working with Kentucky State University and the Kentucky Association for Environmental Education to create and implement sustainability, environmental, and climate change education with a broad range of multilingual communities; Maria Talero in Denver, Colorado is training community members to facilitate discussions around climate change; and Jason Davis in Boston, Massachusetts hosts an interactive online platform for individuals to share stories about the effects of climate change on our lives and in our communities. Be inspired by these

innovative initiatives that use education to build community resiliency.

Presenter: Anne Umali Ferguson, *Project Manager for the EECapacity Project, Cornell University*

Climate Change Communication Strategies

Why is climate change such a polarizing topic? How can educators address this loaded issue effectively in their communities and programs? Participants will start by exploring ideas like terror management theory and the impact of social and cultural identities on climate-change related behavior. They will then move on to discussing climate change communications techniques identified in research that can be applied to education programs. Participants will also pinpoint areas in their own practice in which they can implement climate change communications strategies.

Presenters:

Anne Armstrong, *MS/PhD candidate, Civic Ecology Lab, Cornell University's Department of Natural Resources*

Marianne E Krasny, *Professor, Department of Natural Resources and Director of the Civic Ecology Lab, Cornell University*

Building Student Environmental Leadership for a Greener School System

The Baltimore Office of Sustainability engages students and teachers in environmental leadership through a range of programs, including mini-grants, internships, summits, and celebrations. The reach of this work has been tremendous, with approximately 70% of the city's public schools, and thousands of young people, engaging with them since 2010. During that time, the number of city schools certified via a state-wide Green Schools program has more than doubled, and the City School Board has moved to adopt new environmental policies and standards. Come learn about the partnerships and programs that have helped enable this shift, and how you can replicate them for your school system.

Presenters:

Abby Cocke, *Environmental Planner, Baltimore Office of Sustainability*
Andrea Calderón, *Green Schools Assistant, Baltimore Office of Sustainability*

11:40-12:30

Lunch and Focused Conversations

12:45-3:15

Activities

Options: Professional Training Workshops, Collaborative Activity, Informational Sessions, or Field Trip

12:45-3:15

Professional Training Workshop

Climate Change Integration Module: A STEM Integration Tool for Teacher Education Curricula

Climate Change is an issue that data suggests will affect the planet now and for future generations. It is important that educators understand how to explore / investigate this "real world" problem in the context of STEM teaching and learning within diverse communities. Trans-disciplinary learning is a pedagogical method that teachers can

Education Summit

Sessions & Workshop Descriptions

Wednesday, April 6

use to teach aspects of climate change. A Climate Change Integration Module will be presented that can be used in teacher education curriculum by pre-service and in-service teachers. In addition, data will be presented that represents evidence of a changing global climate.

Presenter: Dr. Kevin A. Peters, *Director, Center for Excellence in Mathematics and Science Education, Morgan State University*

Resilience, Adaptation, and Climate Communication: Applying Research Findings to Environmental Education Programs

It often feels like we are constantly bombarded with the latest buzzword or scientific term—sustainability, resilience, cultural cognition, and even terror-management theory. Yet behind these terms, there is real research that can be applied to education programs. Learn about research on how education is fostering community resilience and climate adaptation and on how different groups react to climate change messages and messengers. Engage in a scenarios game where you apply this research to your own program. Finally participate in a discussion about how education programs can realistically apply findings from resilience, adaptation, and climate communications research.

Presenters:

Marianne Krasny, *Professor, Department of Natural Resources and Director of the Civic Ecology Lab, Cornell University*

Anne Armstrong, *MS/PhD candidate in the Civic Ecology Lab, Cornell University's Department of Natural Resources*

Bryce DuBois, *Extension Associate, Cornell University and a doctoral candidate in Environmental Psychology, City University of New York Graduate Center*

Anne Umali Ferguson, *Project Manager for the EECapacity Project, Cornell University*

Climate Justice and Community Resilience: An Interactive Dialogue

This participatory session creates space for educators to learn from each other around issues of equity, justice, and community resilience in the face of climate change. In this era of intense, unpredictable impacts of climate change, bridging environmental education and social justice is essential to enhance community resilience alongside fair, affordable food, housing, and health for all. Our theme will be: As educators, what can we do—individually and collectively—to increase equity and justice in the face of climate change, now and into the future? We will offer an overview of climate justice, share curricular resources, and engage in educational activities and collective dialogue fueled by your passions. We invite educators to explore climate justice and share their experiences, successes, challenges, and tensions through an interactive process. Come ready to actively contribute to,

and be inspired by, what matters most in this essential work.

Presenters from Antioch University New England Community:

Ben Currotto, *Community Garden Connections Coordinator*

Tori Dahl, *Garden Connections Coordinator*

Andrew Graham, *Community Garden Connections Coordinator*

Jean Kayira, *Professor, Department of Environmental Studies*

Libby McCann, *Professor, Department of Environmental Studies*

Jennifer Trapani, *Community Garden Connections Coordinator*

Collaborative Activity

Making Change

Spend the afternoon collaborating with other educators and students to create a document to influence education policy makers. What are the climate change and resilience issues we most want to convey to our local elected and appointed officials who make decisions that impact education and community resilience? What do we want to tell them about what is needed to build community resilience through education? Join with others in a facilitated process informed by your experiences in the Education Summit morning activities to influence policy makers. In addition to sharing what we write with your own local policy makers, perhaps we will also send the statement to candidates for U.S. President. WE are change agents!

Facilitators:

Abi Abrash Walton, *Director of Center for Academic Innovation; Director, Advocacy for Social Justice and Sustainability Concentration, Environmental Studies Master's Program; Co-Director of Climate Preparedness and Community Resilience, Antioch University New England*

Chelsea Coombes, *MS candidate, Environmental Studies, Antioch University New England*

Informational Sessions

12:45-1:45 PM

Track I: School-Based Education (Formal)

A Place-based, Educational Videogame for Building Awareness and Motivation around Climate Change with High School students: "Future Delta 2.0"

This session introduces a unique and compelling video game that schools can use to build interest, awareness, and motivation among students on climate change and community resilience. Future Delta 2.0 is a realistic, place-based, commercial-style videogame, co-designed with teachers and students to engage ninth to twelfth graders in learning about and responding to climate change in their own neighborhoods. It provides experiential and fun learning activities in

which the player uses novel tools such as Carbon Vision and Future Vision to tag everyday objects, earn knowledge points, interact with non-player characters, pursue discovery quests, and choose between alternative scenarios out to 2100. This information session provides participants with the latest research results and knowledge of powerful visual learning tools, using slides, video, and demos to explain how the game works, what results might be expected, and how the game could be used in classes in schools across North America. Teaching resources offered include the textbook "Visualising Climate Change" (Sheppard, 2012) and a website with the free downloadable game at <http://futuredelta2.ca>.

Presenter: Stephen Sheppard, *PhD., ASLA, Professor, Forest Resources Management, University of British Columbia*

Track II: Community Education (Non-Formal)

Climate Kids: Weaving Art, Science, and Storytelling to Support Community Resilience

Climate Kids is a series of community-level collaborative projects to support youth engagement on climate change through action-based science activities, storytelling, and art. Each Climate Kids project brings together artists, scientists, and storytellers in a unified partnership to inspire and educate children. Learn more about how this collaborative approach is weaving together science, storytelling, and art to increase understanding of climate change and the actions we can take to minimize these risks. Learn about opportunities to join this collaborative effort and start a Climate Kids Project in your city today!

Presenter: Amber Pairis, *Ph.D., Director of the Climate Science Alliance-South Coast*

2:00-3:00 PM

Track I: School-Based (Formal)

Examining Student Identity and Agency in Relation to Climate Change: A Case Study with 6th Grade Learners

How today's learners come to understand their own capacities to act in relation to climate change may have crucial implications for our climate future. This session will present insights from an in-depth case study of sixth grade students' identity and agency development as they engaged with the topic of climate change in their middle school science classroom. Using data from interviews (students, parents, and teachers), focus groups, student work, and classroom observations, the presentation will synthesize the "story" of climate change from the sixth graders' perspective. The presenter will highlight the students' developing views of themselves and their capacities to act in relation to climate change and will discuss possible implications for climate change education.

Presenter: Emily Hestness, *Ph.D. candidate in Science Education, University of Maryland, College Park*

Track II: Community Education (Non-Formal)

What's the Sweatuation?: Using Informal Approaches to Climate Change Education and Network Building

The Climate & Urban Systems Partnership (CUSP) rallies local stakeholders to figure out how to engage communities in climate

change more often and more effectively. The project brings together informal educators, learning scientists, climate scientists, and local stakeholders to find an approach to climate change education that is informed by the latest research and best practices. As a result, CUSP champions an approach to climate change education that is "local, relevant, and solutions-focused," and that focuses first, and most, on resiliency as a gateway to getting the general public to learn more about the larger issue. CUSP has also found that informal approaches are key to building a network and engaging the public. Learn how these approaches have manifested themselves in Philadelphia (including a 6-week "Sweatuation" campaign focused on sweaty body parts...) and how CUSP leaders have been educating communities, one neighborhood at a time.

Presenter: Richard Johnson, *Franklin Institute Project Manager of the Climate and Urban Systems Partnership*

12:45-3:15

SciTech Field Trip

Visit SciTech and explore hands-on, minds-on learning activities to help your students dive deeper into studying climate change! Participants in this field trip will explore the question of warming oceans' ability to absorb carbon dioxide using a self-designed experimental procedure. Wonder what you can do with proxy data? Our second activity will explore how paleobotanists use ancient pollen to find out about earth's climatic past.

Housed in the Columbus Center in Baltimore's Inner Harbor, TU's Center for STEM Excellence includes the SciTech program which offers science lab activities in our dedicated student learning lab; provides qualified Maryland teachers free loaner lab kits complete with curriculum, reagents, and equipment necessary to conduct the lab investigation; and holds teacher professional development opportunities throughout the year. We are partnering with MADE CLEAR to increase our program offerings to support students learning about climate change.

3:15-3:30

Keynote Speaker: (pre-recorded video)

Bill McKibben, *author and a Founder of 350.org*

Followed by a brief discussion facilitated by Lisa Maggio, Education Summit Coordinator, Antioch University New England Graduate Student

3:30-4:00

Participant Forum

What's Next?

Participants will engage in a facilitated activity that will provide opportunities to reflect on their Education Summit experiences and encourage and inspire each other to proactively build resilience through education in their own communities.

Facilitator: Susan Jane Gentile, *Education Summit Director, Antioch University New England*

Session Speakers

Abigail Abrash Walton

Antioch University New England

Abigail serves as Director, Center for Academic Innovation; Director, Advocacy for Social Justice and Sustainability Concentration, Environmental Studies Master's Program; Co-Director, Center for Climate Preparedness and Community Resilience, Antioch University New England; and as faculty in the Department of Environmental Studies, where she directs the Advocacy for Social Justice and Sustainability master's degree concentration. Abigail chaired the City of Keene's Planning Board (2011-2014) and served on the Steering Committee for the City's Master Plan, which focuses explicitly on sustainability, climate change mitigation and adaptation. She has been a commentator for The Washington Post, The New York Times, National Public Radio, "Democracy Now!" and "The News Hour with Jim Lehrer," among other media outlets. Abigail holds a M.Sc. in Political Theory from the London School of Economics and Political Science, a B.A. in International Relations from the University of Pennsylvania, and a Permaculture Design Certificate from the Occidental Arts & Ecology Center.

Michel Anderson

Waldorf School of Baltimore

Known to his students as King Compost, Michel Anderson is the Ecoliteracy and Sustainability Coordinator for the Waldorf School of Baltimore. There he facilitates daily Nature Study lessons for elementary students and is the founder and director of the Forest Aftercare Program. Over the last 10 years he has explored sustainable living practices throughout the United States and Southeast Asia. He is graduating with a M.Ed. in Educating for Sustainability from Antioch University New England in May 2016. Michel is fascinated by permaculture, earthships, honeybees, and mythology.

Leslie Alden

Policy Aide to Supervisor Kathrin Sears, Marin County Board of Supervisors, California

Leslie Alden is a regional climate and sustainability leader, whose work is focused on mitigation of the environmental and social impacts of climate disruption in the San Francisco Bay Area, where 9 counties, 7 million people, and billions of dollars are at risk from sea level rise. She brings a multi-disciplinary approach that emphasizes community involvement to move sustainability policies forward. Recent projects include two of the nation's breakthrough climate initiatives: Marin Clean Energy, the first Community Choice Energy program in California and the first in the US focused exclusively on renewable energy; and the 2015 "Marin Here-Now-Us Project", a partnership between Marin County, Climate Access, and FEMA, which tested a virtual reality tool designed to engage the community on sea level rise. These two projects have led to dramatic ghg emissions reduction, increased public awareness, and significant participation by decision makers. Leslie holds a degree in education and public policy from UC Berkeley, and sees both hope and peril in the decades to come. Borrowing from Dr. Martin Luther King, Jr., she recognizes "the fierce urgency of now".

Anne Armstrong

Civic Ecology Lab at Cornell University

Anne Armstrong holds a BA in English Literature with a minor in Geosciences from Hamilton College and a Masters in Environmental Interpretation from SUNY College of Environmental Science and Forestry. She has been working in the field of Environmental Education for eight years and seeks to forge connections between community, conservation, research, and education. After leaving SUNY, Anne worked as the Education Director of the Chincoteague Bay Field Station, a residential environmental education and research field station on the Eastern Shore of Virginia. In 2015, she returned to school and started working towards her MS/PhD with Dr. Marianne Krasny in the Civic Ecology Lab, part of Cornell University's Department of Natural Resources. Anne's research focuses on climate change communication strategies in environmental education.

Kristin Baja

City of Baltimore

Kristin Baja is the Climate and Resilience Planner with the Office of Sustainability at Baltimore City. She is responsible for development and implementation of the City's Disaster Preparedness Project and Plan (DP3) which integrates climate adaptation with hazard mitigation efforts. She is also responsible for climate change communication and outreach, Community Rating System certification, resiliency planning, and STAR Communities certification. Kristin is a Certified Floodplain Manager and is also responsible for regulating the city's floodplain. She is an active member of the Urban Sustainability Directors Network, Climate Communications Consortium of Maryland, American Society of Adaptation Professionals, and the Baltimore City Forestry Board. Kristin holds a Master of Urban Planning degree and a Master of Science degree from the University of Michigan.

Nathalie Beauvais

APA, AIA International Associate, LEED AP - Kiefelder

Ms. Beauvais is a senior member of Kiefelder's sustainability practice where she currently manages the team of scientists, academics and sustainability experts conducting the City of Cambridge Climate Change Vulnerability Assessment and Adaptation Plan, the MassPort Resiliency Planning Study and the Washington DC Adaptation Plan. An author and speaker on comprehensive planning, sustainable planning and climate change, Ms. Beauvais presented at conferences nationally and internationally on urban ecology and infrastructure projects. She taught on Climate Change at Northeastern University in the Master Program in Design for Environmental Planning and at Wentworth Institute of Technology. Ms. Beauvais holds a Masters Degree in Architecture from Harvard University Graduate School of Design and a Baccalaureate in Architecture from l'Université Laval, Québec, Canada.

Kürt D. Blomquist

*PE, Public Works Director/Emergency Management Director,
City of Keene, NH*

Kürt Blomquist is the Public Works Director and Emergency Management Director for the city of Keene. His responsibilities included being a liaison with the state and federal authorities and the authorities of other nearby political subdivisions as to ensure the most effective operation of the emergency management plan. Before assuming those responsibilities, he served over seven years in the Air Force and eighteen years in the Air Force Reserve.

Andrea Calderón

Baltimore Office of Sustainability

Andrea Calderón is the Green Schools Assistant in the Baltimore Office of Sustainability. Andrea manages the Green, Healthy, Smart Challenge, a grant program that Baltimore City Public Schools to implement student-led sustainability projects. Andrea also directs and advises the Student Environmental Leadership Action Team (SELAT), which brings student voices together, works to set priorities for the school system, discuss environmental issues, and plan future events and actions to support youth environmental leadership in Baltimore and beyond. Andrea has previously worked in four different City Schools and completed two Americorps terms developing the Baltimore Green Schools Network at City Schools. She has also worked with the Baltimore Ecosystem Study on their Long Term Ecological Research Project in Baltimore and has assisted Recreation and Parks canoe and kayak program.

Clyde F Casey

USGS

Dr. Frank Casey is an agricultural and natural resources economist and serves as the Ecosystem Services Theme Lead for the Science and Decisions Center at the US Geological Survey. His responsibilities include incorporation of ecosystem services and their valuation (including market mechanisms) in adaptive management research and planning for resource conservation on both public and private lands. Dr. Casey directs a seminar series on economic valuation of ecosystem services, participates in several governmental and external advisory committees related to ecosystem service measurement and valuation, and is active in applying ecosystem services concepts and valuation in the context climate change and the conservation of at-risk species. He has applied ecosystem services valuation in the context of public forest and rangelands lands, refuges, and private rangelands in the US. Frank served as the Chairperson of the bi-annual Conference of A Community of Ecosystem Services (ACES) in 2012 and 2014. He has a PhD in Food and Resource Economics from the University of Florida and an MS in Agricultural Economics from Cornell University.

Scott Cave

Atlantic Business Continuity Services

Over his career, Mr. Cave has worked in a variety of management roles, including Finance, Human Resources, Information Technology, and Business Continuity. Mr. Cave consults with a variety of businesses, governmental agencies, and non-profit organizations to develop and

maintain their business continuity, disaster recovery, and emergency plans. As a Certified Business Continuity Professional, Mr. Cave has written plans for a variety of organizations over the past 15 years, facilitated dozens of tabletop exercises, and led many successful recovery efforts. Mr. Cave served on the Charleston Metro Chamber's Business Continuity Planning Council as Chairman from 2008 – 2010, and has served as a leader of the Business and Industry Emergency Support Function for the Charleston County Emergency Operations Center since 2010. Mr. Cave has participated in several national community resilience programs, including a pilot of FEMA's Net Guard program in 2010 and the Community and Regional Resilience Initiative (CARRI) from 2009 to 2011.

Rose Chaffee-Cohen

Kent Place School

Rose Chaffee-Cohen is a member of the Upper School Science Department at Kent Place School, an all-girls K-12 independent day school in Summit, NJ. At KPS, she teaches AP Environmental Science, Biology, Chemistry, and The Bioethics Project, a student-directed research project. She enjoys bringing relevant issues into the classroom and discussing them from multiple perspectives. Past curricular projects have incorporated her experiences with Climate Ride, an environmental charity bike ride, and participation in an American Youth Leadership Program to Bangladesh, which merged cultural exchange with climate change literacy. Rose has also served as an instructor for "Sustainability and Environment" with the Global Competency Certificate, which is an online program for educators and is affiliated with World Savvy and Columbia Teacher's College.

Cheryl Charles

Antioch University New England

Cheryl Charles, Ph.D., is an innovator, author, organizational executive, and educator. She is founding Executive Director of the Nature-Based Leadership Institute at Antioch University New England (AUNE), which applies nature's lessons to achieve economic, environmental, and social justice. Cheryl is also the Co-Founder, President and CEO Emerita of the Children and Nature Network. Currently she coordinates the Network's international activities and participates as a member of the Science of Nature-Based Learning Collaborative Research Network. Cheryl served as founding national director of the K-12, interdisciplinary environmental education programs, Project Learning Tree and Project WILD. Author Mark Gerzon named Cheryl a "new patriot" for her pioneering work to bring ecological concepts into the mainstream of schooling.

Abby Cocke

Environmental Planner, City of Baltimore

Abby Cocke joined the Baltimore Office of Sustainability in 2011. She earned a BA in Environmental Studies with a Minor in Writing at UMBC, and worked for five years at the Parks & People Foundation, first as a Community Organizer, and then as the Manager of Community Greening Programs. Currently she focuses on urban agriculture, green school initiatives, and forest conservation. She is an Ednor Gardens resident, and grew up just outside the city in Baltimore County.

Session Speakers

Chelsea Coombes

Antioch University New England

Chelsea is a Masters International Student whose passion for policy has led her to Antioch University of New England. She will be obtaining her degree in Advocacy for Social Justice and Sustainability, while also serving two years in Kosovo as a Peace Corps volunteer. In Kosovo she will be teaching English at the primary education level, as well as developing projects to engage the community with environmental awareness. After her educational career comes to a close she plans to work with at risk communities to combat the disparities many face with regards to pollution and public health.

Susie Creamer

Patterson Park Audubon Center

Susie Creamer leads the Patterson Park Audubon Center in Baltimore City, where she and her staff create bird habitat in the urban context and instruct nature-based education programs for all ages in a multicultural community. Programs and projects of the Center take place in English and in Spanish. Before she began work at Audubon, Susie managed education programs at Irvine Nature Center, taught middle school science, and served as a Peace Corps Volunteer in Paraguay, South America. Susie has a BS in biology from Washington and Lee University and an MS in environmental science from Johns Hopkins University.

Ben Currotto

Antioch University New England

Ben is the Westmoreland Garden Project Manager with Community Garden Connections at Antioch University New England, where he is also pursuing a Masters in Environmental Studies with a concentration in Environmental Education. Prior to attending AUNE, Ben spent several years living and working in Baltimore as an outdoor educator. Many of his summers were spent at Nature Camps, Inc. in Monkton, MD, facilitating wonderment in nature with children and leading biking, farming, and camping trips with teens. He also worked as an educator, farmer, and beekeeper at Real Food Farm in Clifton Park, facilitating high school farm internships and summer job programs. His work at AUNE is focused around emancipatory place-based youth education and resilient agriculture systems.

Tori Dahl

Antioch University New England

Tori is a first-year graduate student at Antioch University New England working towards her Masters of Science in Environmental Studies with a concentration in Advocacy for Social Justice and Sustainability and a focus on Food Justice and Environmental Education. Tori graduated from California Lutheran University in 2014 with a BA in Biology, a BA in English with a Writing Concentration, and a minor in Environmental Studies. Her interest in community-based sustainable agriculture and agricultural education began during her time in the Episcopal Service Corps where she served the city of St. Louis, MO and worked at EarthDance Organic Farm School in Ferguson,

MO. At EarthDance, Tori coordinated a six-month apprenticeship program for 33 apprentices, affectionately known as (future) "farmies."

Christa Daniels AICP

Antioch University New England

Christa Daniels (Koehler), AICP is a community planner that specializes in resiliency and sustainability planning along with citizen engagement strategies. Christa is currently the Program Manager for the Antioch Center for Climate Preparedness and Community Resilience and is a PhD candidate at Antioch University. Previously, Christa has worked as the Manager of the State and Local Government Program at Clean Air-Cool Planet (CA-CP) where she guided municipalities to become energy independent, reduce traffic congestion, curb local air pollution, create sustainable local economies, and increase their resiliency to the changing climate. Christa earned her B.A. in Political Science at Pace University and her M.S. in Resource Management and Administration at Antioch Graduate School. Christa's past experience includes working for the United Nations, NH Department of Environmental Services and as a city planner for Keene, NH. Christa is also an adjunct faculty member at Antioch University New England.

Susanne DesRoches

Deputy Director for Policy Infrastructure, Mayor's Office of Recovery and Resiliency, NYC

Susanne DesRoches is the Deputy Director for Infrastructure in the NYC Mayor's Office of Recovery and Resiliency (ORR) leading the City's efforts to adapt infrastructure systems across the region to the risks of climate change. Prior to joining ORR, Susanne was the Chief of Resilience and Sustainability in the Engineering Department at the Port Authority of NY & NJ where she oversaw incorporation of sustainability and climate resiliency into agency capital projects and programs. She led the development of the Climate Resilience Design Guidelines, which incorporates future climate impacts into design strategies. Susanne holds a Bachelor of Industrial Design from Pratt Institute and a MPA in Environmental Science and Policy from Columbia University. She is faculty in the Master of Science in Sustainability Management at Columbia University.

Bryce DuBois

Civic Ecology Lab at Cornell University

Bryce is an Extension Associate with Cornell University and a doctoral candidate in Environmental Psychology at the City University of New York, Graduate Center. As an Extension Associate, Bryce assists in research on urban environmental education with the Civic Ecology Lab (PI, Marianne Krasny) and on human dimensions of natural resources management on a project called Visionmaker: Jamaica Bay (PI, Shorna Allred). Broadly, Bryce's own research is on the conflicts over the uses and meanings of public spaces, especially public parks and beaches. His dissertation research looks at conflicts relating to restoration practices of Rockaway Beach post-Hurricane Sandy.

John Dyer

American Association of Community Colleges

John is the Director of Workforce and Economic Development at the American Association of Community Colleges (AACC). AACC is the primary advocacy organization for the nation's community colleges. The association represents nearly 1,200 two-year, associate degree-granting institutions and more than 13 million students. AACC promotes community colleges through five strategic action areas: recognition and advocacy for community colleges; student access, learning, and success; community college leadership development; economic and workforce development; and global and intercultural education. Mr. Dyer is the former Director of Community and Corporate Affairs at White Mountains Community College, in Berlin, New Hampshire, where he was responsible for the workforce, economic, and community development efforts of the college.

Ashley Edwards

Baltimore City College High

Ashley is a high school senior at Baltimore City College High. Ashley is an outspoken youth leader and is passionate about community, food, and the environment. Her passion began with doing trail work with Civic Works as a member of Baltimore's Conservation Leadership Corps. She has worked as a youth crew intern at a small Baltimore farm, "Real Food Farm," where her interest developed further in learning about methods of farming that are beneficial to the sustainability of her city and the future of the planet. Currently Ashley works as an intern at the Baltimore Office of Sustainability, alongside the people that plan the future of local school and housing infrastructures, striving for a more beautiful and sustainable Baltimore.

Bethany Eisenberg

LEED AP, Director of Stormwater services, VHB

Ms. Eisenberg is VHB's Director of Stormwater services and has more than 30 years of experience in hydrology and hydraulics, stormwater permitting and management. She specializes in Green Stormwater Infrastructure (GSI) design and construction, Low Impact Development (LID) site planning and Complete Streets planning and design. Ms. Eisenberg has specific and current experience in permeable pavements design and engineering. She is the Co-chair for the American Society of Civil Engineers (ASCE) Environmental Water Resources Institute Permeable Pavement Committee that has finalized the Committee Book on Permeable Pavements, April 2015. The book, designed by VHB includes a summary of current engineering practices, as well as performance, design, installation and maintenance information. She has co-presented six ASCE Permeable Pavements Design Webinars, (2013, 2014, 2015), as well as GSI and LID training and educational presentations for transportation agencies, private clients and municipalities as well as Seminars for students at Harvard University School of Landscape Architecture, and MIT Environmental Engineering Program.

Alexander J. Felson

School of Forestry & Environmental Studies and Yale School of Architecture

Dr. Felson is an associate Professor at Yale University and an urban ecologist and a registered landscape architect. He directs the joint degree program between the School of Architecture and the School of Forestry and Environmental Studies and is the founder of the Urban Ecology and Design Lab (UEDLAB). Felson led the design on the HUD National Disaster Resilience Competition and served as a core member of Rebuild by Design. Governor Malloy selected Felson to serve on SAFR the 12-member "State Agencies Fostering Resilience Council". Most recently, Felson spoke at Columbia, Cornell, UPenn's Simulating Natures Symposium, AIA's Center for Architecture conference on Extreme Heat, WNPR's Where We Live, and led an ASLA symposium.

Anne Umali Ferguson

Civic Ecology Lab at Cornell University

Anne is the Project Manager for the EECapacity Project, the U.S. Environmental Protection Agency's national environmental education and training program, led by Cornell University. Anne builds collaborative relationships with project partners and EPA with respect to policy, program planning and implementation, evaluation, outreach, and finances. Anne brings to her role nearly 15 years experience working in conservation education, extension, and training in the U.S. and Latin America. Anne has worked with a variety of national and international conservation and education organizations, including the National Audubon Society, The Field Museum, and the U.S. Peace Corps.

Lisa Fernandez

Lisa Fernandez oversees program management, operations, and outreach at the YPCCC. She guides YPCCC's international networking efforts, building a global network of climate communication scholars and practitioners. Previously, she worked in urban environmental conservation and sustainable development in the US and Latin America. She has served as a consultant to the United Nations Development Programme, the Organization for Economic Cooperation and Development, and the World Bank. She was a Fellow at the World Wildlife Fund-USA and a City Planner implementing solid waste prevention policy for the City of New York. Lisa co-authored *Toward a New Consciousness: Values to Sustain Human and Natural Communities and Institutionalizing Sustainability in Higher Education*.

Nancy Gassman

Assistant Director of Public Works, City of Fort Lauderdale

Dr. Nancy J. Gassman received her Ph.D. from the University of Miami researching a variety of issues impacting coastal ecosystems. Earlier in her 19 years in public service, she has worked on integrated water resources planning and environmental monitoring including construction of a LEED-certified environmental chemistry laboratory. She has been a major contributor to developing technical tools for the Southeast Florida Regional Climate Change Compact including

Session Speakers

the Unified Sea Level Rise Projection for Southeast Florida. In her current role as the Assistant Public Works Director for Sustainability in the City of Fort Lauderdale, she is implementing sustainability, climate mitigation and adaptation strategies within government operations and throughout the City.

Kevin Geiger AICP CFM

Senior Planner, Two Rivers-Ottawaquechee Regional Commission

Kevin Geiger is the Senior Planner at the Two Rivers-Ottawaquechee Regional Commission. He has worked in regional and community planning for over 80 towns in Vermont since 1990. He specializes in land use planning and regulation, brownfield assessment, climate change, water quality, and emergency management. Most of his time for the past four years has been focused on recovery from Tropical Storm Irene through buyouts of flood damaged homes, as well as creating a HUD-funded, award-winning regional sustainability plan that can be found at www.ecvermont.org.

Rob Graff

Manager, Office of Energy and Climate Initiatives, Delaware Valley Regional Planning Commission

BIO: Mr. Graff manages the Office of Energy and Climate Change Initiatives for the Delaware Valley Regional Planning Commission (DVRPC), the MPO and regional planning forum for Greater Philadelphia. Mr. Graff manages initiatives to reduce energy use and greenhouse gas emissions, and to prepare the region for the long-term impacts of a changing climate. Mr. Graff represents DVRPC on numerous initiatives, taskforces, and committees related to energy and climate change issues, including two transportation research advisory panels for the National Academy of Sciences. He serves by gubernatorial appointment as a member the State of Pennsylvania's Climate Change Advisory Committee. Prior to joining DVRPC in 2007, Mr. Graff served as an associate scientist at Tellus Institute where he was instrumental in developing the Global Reporting Initiative's sustainability reporting guidelines. Mr. Graff earned a Master of Public Affairs and Urban & Regional Planning degree from the Woodrow Wilson School at Princeton University.

Andrew Graham

Antioch University New England

Andrew is an M.S. Candidate in Environmental Studies at Antioch University New England. While at Antioch, Andrew has focused his coursework on environmental education, outreach, community engagement, climate change adaptation, and food systems. He has worked as a coordinator for Community Garden Connections and for the 2016 Local Solutions Climate Preparedness Conference. Andrew earned a B.S. in Community and International Development from the University of Vermont, after which he served for a year in AmeriCorps NCCC, doing hurricane recovery work in the Gulf of Mexico, and a year with AmeriCorps VISTA, doing poverty remediation and community development work in Vermont. Andrew can be found making food for social events or enjoying nature on two feet or two wheels.

Jessica Grannis

Georgetown Climate Center

Jessica Grannis is the Adaptation Program Manager for the Georgetown Climate Center (GCC) and a staff attorney and adjunct professor at the Harrison Institute, at Georgetown University Law Center. She supervises students and staff and works directly with state and local government officials on projects to help them adapt to climate change. Her recent publications include a book chapter on Coastal Retreat in the Law of Adaptation to Climate Change: U.S. and International Aspects (2012, with Peter Byrne) and an Adaptation Tool Kit for Sea Level Rise (2012). Prior to joining the Climate Center, she was staff counsel for the California State Coastal Conservancy and the Ocean Protection Council.

Rachel M. Gregg

EcoAdapt

Rachel is a Lead Scientist at EcoAdapt with over a decade of experience in the application of natural and social science and management. She brings expertise in impacts assessment, adaptation planning, and developing guidance to support decision-making and management in a changing climate. Rachel created and manages EcoAdapt's State of Adaptation program and serves as the Content Editor for the Climate Adaptation Knowledge Exchange (CAKE; www.CAKEx.org). She has served as an expert in different capacities including acting as a reviewer for the Intergovernmental Panel on Climate Change Fifth Assessment Report, contributing author to the National Climate Assessment, and member of the U.S. Urban Adaptation Assessment Advisory Committee and the Central Puget Sound Regional Open Space Ecosystem Services Committee. She earned her undergraduate degree from Smith College in Government and Marine Science, and a Master's in interdisciplinary marine science and policy from the University of Washington.

James Gruber

Antioch University New England

BIO: Jim Gruber is the Director of the PhD Program in Environmental Studies at Antioch University New England. He has consulted to national and state governments, regional organizations, universities, and local governments in the United States, Eastern Europe, Mexico, South America, and Africa on environmental policy, community-based natural resource management, social capital building, facilitating systemic change, and climate adaptation and resilience. His work has a strong focus on citizen engagement in developing and implementing community environmental policy and community environmental programs. He previously served as a municipal manager. He holds a PhD from the University of Zagreb in Environmental Resource Management, a MPA from Harvard Kennedy School of Government, and a MS from Massachusetts Institute of Technology. He is also a Professional Civil Engineer (PE).

Jenny Guillaume

Growing Green Initiative Coordinator, City of Baltimore

Jenny Guillaume has been the Growing Green Initiative Coordinator since joining the Office of Sustainability in 2014. Her work focuses on developing sustainable greening strategies for vacant lots and coordinating City agencies, non-profit partners, and residents in vacant lot transformation. She also has a strong background in urban agriculture and food systems, and has managed urban farms in Washington DC and Brooklyn NY and helped coordinate a Healthy Corner Store Campaign in DC. Jenny holds a B.A. in Environmental Studies from Bates College.

Elisabeth Hamin

Landscape Architecture and Regional Planning, University of Massachusetts

Dr. Hamin is the department head for Landscape Architecture and Regional Planning. She teaches and researches in land use planning, with a particular focus on planning for climate change adaptation. Through studios and projects, she works with regional planning agencies and communities on master plans, special projects, and climate change planning. She served as program director for the PhD in Regional Planning for over ten years. Prior to coming UMass, Dr. Hamin taught at Iowa State University from 1995 to 2001. During her doctorate, she worked in land use and energy consulting, and before her doctorate, she worked in real estate consulting and development, providing financial and marketing analysis to major real estate developers across the United States.

David Herring

Director of Communication and Education in NOAA's Climate Program Office

As Director of Communication and Education in NOAA's Climate Program Office, David Herring serves as Program Manager of NOAA's Climate.gov portal. Last year, in response to the President's Climate Action Plan, David led development of the U.S. Climate Resilience Toolkit, an interagency partnership to help businesses and communities build their resilience. Before joining NOAA, he worked for 16 years at Goddard Space Flight Center, where he led development of NASA's Earth Observatory, Visible Earth, and NEO websites. David holds a Master's Degree in Science and Technical Communication from East Carolina University. He is an elected fellow of the American Association for the Advancement of Science.

Emily Hestness

University of Maryland, College Park

Emily is a Ph.D. candidate in Science Education at the University of Maryland, College Park. As an environmental educator, Emily has worked in variety of urban environmental learning settings in Minneapolis, Chicago, and Washington, D.C. She has also served as an Education and Technical Training Specialist at Peace Corps headquarters in Washington, D.C. At the University of Maryland, Emily has taught undergraduate courses in Elementary Science Methods and is currently a researcher with the NSF-funded MADE CLEAR project. Emily's

research examines the sociocultural dimensions of climate change teaching and learning. Her dissertation is focused on middle school learners' identity and agency in relation to climate change. In addition to climate change education, Emily conducts research in the areas of teacher education, informal science education, and citizen science.

Sara Hoverter

Senior Fellow at Harrison Institute for Public Law, Georgetown University Law Center

Sara Pollock Hoverter is a senior fellow and adjunct professor at the Harrison Institute for Public Law at Georgetown Law. Sara works primarily with local governments to help them protect their most vulnerable residents from the public health and environmental impacts of heat in urban areas and on implementing green infrastructure to manage stormwater. Relevant publications include Urban Heat Adaptation: A Toolkit for Local Governments (2012), as well as Federal Funding Compendium for Urban Heat Adaptation (2013). Sara's past positions have included jobs at the National Partnership for Women and Families, the Center for Law and the Public's Health, and the DC Appleseed Center for Law and Justice. Her education includes a B.A. from Yale University, a J.D. from Georgetown University, and an LL.M. from Georgetown University.

Katherine Johnson

District of Columbia Department of Energy & Environment

Kate Johnson is a Climate Program Analyst for the District of Columbia Department of Energy & Environment. She manages the District's efforts to measure and reduce greenhouse gas emissions and is currently leading the development of a citywide climate resilience plan to help the District prepare for and adapt to the impacts of climate change. Kate also tracks and analyzes climate related policies including federal rules to regulate carbon pollution. Prior to joining DOE, Kate worked for the American Council for an Energy-Efficient Economy providing technical assistance and policy support for local energy efficiency programs. Kate received a Master of Public Administration degree from Columbia University's School of Public and International Affairs in 2012.

Larissa Johnson

University of Maryland Center for Environmental Science

For the last ten years, Larissa has dedicated her life to working with and for communities, helping people create sustainable, walk-able, bike-able, healthy neighborhoods that cultivate hale and hearty children and invigorate community. As the Climate Change Outreach Coordinator for the University of Maryland Center for Environmental Science, she educates Marylanders, from the mountains to the coast and across political and socioeconomic subgroups, about the connection between climate and energy.

Richard Johnson

The Franklin Institute, Climate and Urban Systems Partnership

Richard of The Franklin Institute is the Senior Project Manager of the Climate and Urban Systems Partnership, a project funded by the Na-

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tional Science Foundation to engage people in cities in climate change issues. Richard has been an environmental educator both in the U.S. and abroad and will do almost anything to get people to laugh and learn about the environment. He was an Environmental Education Specialist in the Dominican Republic with the Peace Corps. He has also worked with Philadelphia high schoolers, helping them start green businesses and graduate from the city's lowest performing schools.

Jean Kayira

Antioch University New England

Jean Kayira holds a Ph.D. in Environment and Sustainability from University of Saskatchewan in Canada and an M.A. in Environmental Science and Policy from Clark University in Massachusetts. She is core faculty in the Environmental Studies Department at Antioch University New England where she teaches courses such as Urban Environmental Education and Citizen Participation and Sustainable Communities, among others. Committed to enhancing community resilience and food access in the face of climate change, Professor Kayira also co-directs Community Garden Connections. She has been engaged in a variety of research working with youth and teacher candidates on issues of sustainability, particularly examining Indigenous knowledge and sustainability, youth identity in relation to place and sustainability, and social and ecological justice pedagogies. Jean loves gardening and Zumba!

Maria Koetter

Director of Sustainability at City of Louisville

Maria Koetter is Louisville's first Director of Sustainability and is responsible for city-wide strategic sustainability planning, policy development and program implementation. Ms. Koetter developed Louisville's comprehensive sustainability plan "Sustain Louisville", which was released in 2013. Ms. Koetter formerly worked in the environmental and sustainability consulting industry and has extensive experience with corporate social responsibility and organizational sustainability planning. Ms. Koetter was formerly employed at the top 10 national consulting firm Tetra Tech Inc. as a senior project manager. In this capacity, Ms. Koetter managed and supported numerous multi-project portfolios and worked within a wide array of state and federal EPA regulatory programs for both government and Fortune 500 private sector clients.

Amanda Kosty

American Association of Community Colleges

Amanda currently serves as a Project Coordinator for Workforce and Economic Development at the American Association of Community Colleges. In this role, she helps manage the SEED Center. This initiative supports sustainability education and economic development work throughout community colleges by providing free resources, mentorship, professional development opportunities, as well as tools and guides. Community colleges play a vital role in workforce development for the clean economy, and this initiative provides resources to help community colleges meet this demand.

Prior to this role, Ms. Kosty served as the Director of Operations for a technology start-up company focused on reducing waste in the manufacturing industry.

Marianne E. Krasny

Civic Ecology Lab at Cornell University

Marianne E Krasny is a professor in the Department of Natural Resources and Director of the Civic Ecology Lab at Cornell University, author of *Civic Ecology: Adaptation and Transformation from the Ground Up* (with Keith Tidball, MIT Press 2015), instructor for Reclaiming Broken Places edX Massive Open Online Course (MOOC), and a 2015 Public Voices Fellow with The Op-Ed Project. She initiated the Garden Mosaics community gardening education program, conducts research on resilience and environmental education, and has published popular pieces in the Huffington Post, PBS, The Nature of Cities, The Guardian, and other media.

Willa Kuh

Director of Planning Sustainability Practice, Affiliated Engineers, Inc (AEI)

Ms. Kuh is Director of Planning and a member of Affiliated Engineers' Sustainability Practice. Ms. Kuh assists clients with planning at the campus scale for water conservation, energy management, sustainability and infrastructure development. In design of healthcare and lab facilities, she articulates AEI's approach and guides its strategy for efficient water use. She is a leader of AEI's commitment to excel at designing to optimize both energy demand and water consumption and to designing for climate change. Ms. Kuh has a bachelor's degree in history from Hampshire College and a Master in City and Regional Planning from Harvard University.

Rhett Lamb

Director of Planning, City of Keene, NH

Since 1996, Rhett Lamb has been the Planning Director for the City of Keene, New Hampshire, where he performs a broad array of planning tasks including the development of comprehensive plans, drafting of zoning ordinances and subdivision/site plan regulations, and review of development proposals. Mr. Lamb has a Masters Degree from Tufts University, Department of Urban and Environmental Policy and Planning where he specialized in land use and water resource protection issues. Mr. Lamb served on the New Hampshire Governor's Climate Change Policy Task Force and has been working on the City of Keene's Climate Initiative since 1998. Mr. Lamb is on the Board of Directors of the Hannah Grimes Center and the Monadnock Conservancy. He is currently co-chair of the New England Municipal Sustainability Network, sponsored by US EPA .

Chris Lotspeich

Director of Sustainability, Celtic Energy

Chris Lotspeich MPPM, MES, CEM (pending) is Director of Sustainability Services at Celtic Energy Inc. Recent projects include microgrid planning for the State of Rhode Island; work with Arup on solar power plus energy storage for San Francisco critical facilities; and resilience consulting for the City of Stamford, Connecticut and

the FBI. He is a Board Advisor to the Resilient Design Institute. From 1994–2001 Chris was Executive Assistant to Amory Lovins and Senior Associate at Rocky Mountain Institute where he worked on six continents and led resource efficiency surveys in factories and on a Navy cruiser. He earned two masters degrees from Yale from the School of Management and the School of Forestry and Environmental Studies. Chris volunteered as a wilderness EMT and firefighter in three states.

Cathy Lounsbury

Antioch University New England

Cathy Lounsbury serves as Chair of Antioch's Applied Psychology Department. She received her doctorate in Counselor Education from the University of Maine, Orono, and has been a Licensed Clinical Professional Counselor in the state of Maine for twenty years. Cathy comes to Antioch with over 25 years experience in the mental health field working with both children and adults, specializing in those who have experienced trauma. She has provided consultation, training and supervision to schools and communities throughout New England on Post-traumatic Stress Management, Fostering Resiliency in Children, Mitigating the Effects of Secondary Traumatic Stress, and Promoting Positive Youth Development. Cathy has led several federal initiatives, including Safe Schools Healthy Students and Grants to Reduce Alcohol Abuse, to create better systems to support youth and families and is the past president of the Southern Maine Counseling Association.

Jo Ann Macrina

Commissioner, Department of Watershed Management, City of Atlanta, GA

Jo Ann J. Macrina, PE, serves as the Commissioner of the City of Atlanta Department of Watershed Management. She was appointed by Mayor Kasim Reed in 2011 and leads the integrated management and operation of water, wastewater, and stormwater systems. The Department oversees the production and supply of drinking water as well as the collection and treatment of wastewater for approximately 1.2 million customers. Macrina manages 1500 personnel with an annual budget of \$600M and a \$1B capital improvement program including a \$280M raw water supply tunnel and 2.4B gallon raw water storage facility. For more than 25 years, Macrina has worked both in the public and private sectors and has received numerous project awards for environmental excellence. Macrina holds a Bachelor's degree in Civil Engineering from the University of Texas and a Master's degree in Public Administration from the University of South Florida.

John Malueg

Stantec

Mr. Malueg is a senior principal with Stantec Consulting Inc. and is Stantec's national manager for resiliency programs. He is an expert in community-based resiliency planning, critical infrastructure, risk identification and hazard mitigation. Mr. Malueg is a graduate of University of Wisconsin and his knowledge stems from a 30-year career holding leadership and management positions in both government and private consulting. Career highlights include serving as a Manager for Greensboro, North Carolina's

newly formed stormwater utility, leading New York City's post-Sandy disaster response for Bellevue, Coler and Coney Islands hospitals and most recently supporting HUD's National Disaster Resilience Competition.

Stephen Marks

City of Hoboken, NJ

Bio: Stephen D. Marks is the Municipal Manager for the City of Hoboken, New Jersey. In 2012, Stephen was the acting-administrator when Superstorm Sandy struck Hoboken. Before joining the city administration, Stephen worked for Hudson County, New Jersey for over 18 years in a variety of positions, including County Planning Director. As Planning Director, he managed the drafting and adoption of Hudson County's 2002 Master Plan, Hudson County's 2004 Open Space, Recreation and Historic Preservation Plan, Hudson County's 2005 Stormwater Management Plan, and Hudson County's 2009 Site Plan and Subdivision Review Regulations for Smart Growth and Sustainable Development. Stephen graduated with a Bachelor's degree in political science from The College of New Jersey and earned a Master's degree in Public Administration from Rutgers University. He is a state licensed and nationally certified Professional Planner. He is also a Certified Floodplain Manager by the Association of State Floodplain Managers and a Green Associate by the U.S. Green Building Council's Green Building Certification Institute.

Jennifer Marlon Ph.D.

Associate Research Scientist, Yale School of Forestry and Environmental Studies and the Yale Program on Climate Change Communication (YPCCC)

Jennifer Marlon obtained her Ph.D. and M.S. in Geography from the University of Oregon. Dr. Marlon uses surveys, experiments, modeling, and other methods to study human perceptions of and responses to environmental change, particularly relating to climate and extreme weather events. Her current projects include the "Yale Climate Opinion Maps" (<http://environment.yale.edu/poe/v2014/>), which allows users to visualize and explore spatial differences in Americans opinions of climate; an examination of Americans' risk perceptions of heat waves; and a study of coastal Connecticut residents designed to support communication relating to storm evacuations.

Libby McCann

Antioch University New England

Libby McCann is a professor and Environmental Education Director in Antioch University New England's Environmental Studies Department. She co-directs Community Garden Connections, which enhances community resilience and food access amid climate change impacts. Libby received her Ph.D. in adult education from University of Wisconsin-Madison and M.S. in natural resource policy and administration from University of Michigan. Her travels to Cuba and research exploring farmers' beliefs and practices reflect her interests in sustainable agriculture and food justice. Professor McCann has directed a national teacher professional development program to restore native habitats as outdoor classrooms. She has consulting experience in program evaluation, curriculum design, intercultural competency, strategic planning, and teambuilding. Libby finds joy in the sustainable acts of cycling, gardening, and chicken wrangling.

Session Speakers

Nicholas McDaniels

Baltimore City Schools at Mergenthaler Vocational-Technical High School

Nick has been teaching in Baltimore City Schools at Mergenthaler Vocational-Technical High School where he has taught English and Law and Leadership since 2009. He has earned degrees from Marquette University, the Johns Hopkins University, and the University of Maryland School of Law and has twice been nominated as a finalist for Baltimore City's Teacher of the Year Award. Since 2009, he has worked at his school and across the district to further school "greening" efforts, planting over a hundred trees on and removing over a half acre of impervious surface from his school's campus, diverting tons of paper from landfills, securing tens of thousands of dollars in grant funding, and involving hundreds of students in school "greening" efforts.

Stacy Montgomery

City of Baltimore Historic and Cultural Assets Division

A native of Baltimore, Stacy Montgomery has been working for the City of Baltimore as a Historic Preservation Planner for Commission for Historical and Architectural Preservation since 2010. She is the administrator of the City's Historic Rehabilitation and Restoration Tax Credit, which encourages substantial rehabilitation of historic buildings throughout the City. Since 1996 the program has generated over \$744 million in investment in Baltimore City. Stacy holds a master's degree in Historic Preservation from the University of Maryland, College Park. She sits on the Downtown Partnership of Baltimore's Façade Improvement Program committee and was heavily involved with the Urban Land Institute's Partnership for Building Reuse study in Baltimore City in 2014. She is also part of the Preservation Rightsizing Network that addresses large-scale vacancy in Legacy Cities.

Germán Mora

Director of the Environmental Studies Program, Goucher College

Germán Mora is the Jane and Robert Mayerhoff Associate Professor and founding director of the Environmental Studies at Goucher College. His expertise lies in the areas of climate change, terrestrial biogeochemistry, paleoclimate analysis, stable isotope geochemistry, and water quality. Prior to joining Goucher College, Dr. Mora taught at Iowa State University and Montgomery College, was a post-doctoral fellow at the Johns Hopkins University, and worked as an environmental consultant. He holds a Ph.D. in geochemistry from Indiana University, a M.Sc. in geology from Indiana University, and a B.Sc. in geology from the National University of Colombia.

Catherine Morris

Senior Mediator & Facilitator - Consensus Building Institute

Catherine's 40-year career has focused on how to solve some of our most intractable energy, health and environmental problems by bringing together trusted information and open-minded individuals within a well-structured collaborative process. Previously, Catherine worked with The Keystone Center, MA Department of Public Utilities, The Electricity Journal, and a policy analyst with several organizations, including the U.S. EPA, Integrated Energy Systems, the

Environmental Law Institute, and the Center for Clean Air Policy. Catherine holds an M.R.P. in Environmental Planning from the University of North Carolina-Chapel Hill, and a B.A. in Economics from the College of William and Mary. She completed her negotiation and mediation training at the Northern Virginia Mediation Center at George Mason University. Catherine is listed on the roster of conflict resolution professionals of the U.S. Institute for Environmental Conflict Resolution.

John Murach

Manager, Energy Efficient Programs, Baltimore Gas & Electric

John Murach is currently the Manager of Energy Efficient Programs with Baltimore Gas & Electric Company. John leads various technology application and opportunity studies and supports the development and implementation of business processes to integrate new technologies with the utility systems. Areas of interest include distributed generation, distributed resources and energy applications on the customer side of the meter, and BGE's Electric Vehicle planning and readiness efforts. John was one of the leads in developing BGE's proposal for a Public Purpose Microgrid pilot in Maryland.

Jessica Noon

Manager, Green Infrastructure Partnerships, Philadelphia Water

Jessica Noon is the Manager of Green Infrastructure Partnerships for Philadelphia Water. Jessica manages interagency coordination and partnership funding for Green City, Clean Waters, an innovative 25-year program to manage stormwater through green infrastructure and green space development throughout Philadelphia. Beginning in 2011, Philadelphia Water has partnered with a variety of public and private entities to develop green infrastructure on schools, parks, streets, city facilities, vacant lands and private property citywide. Jessica is also active in her own neighborhood, serving as a member of South Kensington Community Partners, South Kensington Neighborhood Advisory Committee and La Finquita community farm.

Amber Pairis, Ph.D.

Climate Science Alliance-South Coast

Dr. Amber Pairis is the Director of the Climate Science Alliance-South Coast covering southern California and Baja. Her current work focuses on building a science-focused network of leaders, scientists, and managers focused on sharing ecosystem-based resilience approaches to safeguard our communities and natural resources from climate change. Pairis leads several initiatives related to innovative community engagement, including Climate Kids, and the role of art and artists in building community engagement on climate change. In 2013 Pairis was appointed by Governor Brown as the Assistant Secretary for Climate Change of the California Natural Resources Agency. Pairis served as the Climate Change Advisor for the California Department of Fish and Wildlife and worked for the Association of Fish and Wildlife Agencies, Washington D.C. as the Science Liaison on energy and climate. Pairis received her Ph.D. at Antioch University New England and is a fellow of the Robert and Patricia Switzer Foundation.

Dr. Kevin A. Peters

Morgan State University

Dr. Kevin Peters is a senior career administrator and educator, with over 30 years of experience in developing, implementing, and evaluating educational programs at the K-12, community college, and university levels. His academic strengths include: project management, teaching (higher education, biology, marine, estuarine, and environmental science, physical science, and instructional technology), developing collaborations and partnerships with K-12 school systems, conference planning and implementation, grant writing, and evaluation and assessment of education programs. Dr. Peters is the principal investigator for the NASA Maryland Pre-service Teacher Network. He is also the CoPI for the Department of Homeland Security (DHS) project entitled, "Visual Analytics for Science and Technology (VAST)." Dr. Peters is currently the Director of the Center for Excellence in Mathematics and Science Education (CEMSE) at Morgan State University.

Cara Pike

Founder and Director, Climate Access

Cara Pike is one of North America's leading climate and environmental communicators, researchers, strategists and trainers. With more than two decades of experience developing campaigns that grow public support for environmental policies and action, Cara's expertise is sought-after by climate practitioners, non-profit organizations and government agencies across the continent including the Obama Administration, Union of Concerned Scientists and Clean Energy Canada. Cara is the founder and executive director of Climate Access, a non-profit organization providing communications and behavior change research and training to a network of more than 2,000 climate leaders in 57 countries. As the former Vice President of Communications for the leading nonprofit environmental law firm Earthjustice, Cara pioneered innovative programs that used communications and public engagement to leverage and sustain the organization's legal victories. With a graduate degree in environmental science and communications, Cara has a deep understanding of environmental issues and how they intersect with cultural trends and concerns.

Richard Pouyat

Senior Policy Analyst, Climate Resilience and Land Use, Office of Science and Technology Policy

Richard Pouyat received his Ph.D in ecology from Rutgers University in 1992 and an M.S. in forest soils and B.S. in forest biology at the College of Environmental Science and Forestry in 1983 and 1980, respectively. Dr. Pouyat is the National Program Lead for Air and Soil Quality Research for Research & Development at the Washington DC headquarters of the United States Forest Service. He is currently on a detail to the White House Office of Science and Technology Policy (OSTP) and was recently elected President of the Ecological Society of America (ESA). Dr. Pouyat is an original co-principal investigator of the Baltimore Ecosystem Study; a Long Term Ecological Research site funded by the National Science Foundation.

Damaris Reyes

Executive Director, Good Old Lower East Side, Inc. (GOLES)

Damaris Reyes, Executive Director of GOLES, has been with the organization since 2000. She is the chair of LES Ready, a recovery and disaster network with 40 organizational members, and a member of the NY Rising committee, created by the Governor's office to develop resiliency initiatives. Reyes currently sits on the Center for Neighborhood Leadership advisory board and the National Center for Law and Economic Justice board of directors. She is also a member of Manhattan Community Board 3 and sits on the first ever Public Housing Committee, its Land Use, Zoning & Housing committee, and the Waterfront Taskforce, charged with the East Side Coastal Resiliency Project, which was recently awarded \$335 million to design flood protections along the East River. She has received numerous honors for her work, including the 2006 New York Women's Foundation's Neighborhood Leadership Award and the 2009 Jane Jacobs Medal from the Rockefeller Foundation and the Municipal Arts Society.

Robert Roseen

Principal, Waterstone Engineering

Dr. Robert Roseen, PH.D., D.WRE, PE is a Principal at Waterstone Engineering in Stratham New Hampshire. Rob has 20 years of experience in the investigation, design, testing, and implementation of innovative approaches to stormwater management and was director of the University of New Hampshire Stormwater Center until 2012. Rob has studied role of Green Infrastructure as a municipal adaptation measure for a climate adaptation planning effort in Exeter, NH, its impact on the 100-year floodplain for communities in the Lamprey River Watershed, and its role as a damage and cost avoidance measure in Newmarket, New Hampshire. He has participated in many significant green infrastructure projects.

Lauren Schiszik

City of Baltimore Historic and Cultural Assets Division

Lauren Schiszik is a historic preservation planner for the City of Baltimore's Department of Planning. She holds a Masters degree from the University of Maryland. She has a professional background in archaeology. In her previous job, she participated in a study of coastal climate change, specifically focusing on cultural resources impacted by sea level rise.

Bessie Schwarz

As a former organizer and the chief strategist at YPCCC, Bessie Schwarz operationalizes the program's public opinion and behavioral science research for advocacy groups, government officials, businesses, and anyone else engaging the public around climate change. She oversees the program's communications, advises stakeholders on strategy, and conducts trainings on climate communication. Bessie has extensive experience designing, running and winning national and local grassroots campaigns during her time as the Field Director for Environment Colorado, the Field Coordinator with Environment America, and in local campaigns. She holds a BA in Philosophy and Environmental Science from Carleton College and a Master's of Science in political communication from Yale.

Session Speakers

Thomas Sheahan

Department of Civil & Environmental Engineering at Northeastern

BIO: Tom Sheahan is a professor in the Department of Civil & Environmental Engineering at Northeastern and the Senior Associate Dean for Academic Affairs for the College of Engineering. He received his B.S. in Civil Engineering from Union College, and his M.S. and Sc.D. in the Department of Civil Engineering at MIT. Presently, in addition to his involvement as education and training lead on an NSF Research Coordination Network project on coastal adaptation, he is the Training Core Leader for the National Institute of Environmental Health Sciences (NIEHS) program called PROTECT. Prof. Sheahan is the author of 90 publications, including co-author of a textbook on geotechnical engineering. He has been recognized with outstanding teaching awards at Northeastern, and received the national Tau Beta Pi (engineering honor society) McDonald Mentoring award for his work as a faculty advisor, mentor to junior faculty, and his advising of student groups.

Stephen Sheppard

University of British Columbia

Stephen, PhD., ASLA, is a Professor in Forest Resources Management at the University of British Columbia, teaching in landscape and climate change planning, community engagement, and visualization. He directs UBC's new Urban Forestry program and the Collaborative for Advanced Landscape Planning (CALP), an interdisciplinary research group which works with communities on capacity-building and developing climate change solutions. He has over 30 years of experience in environmental assessment, landscape planning, visual media, public involvement and extension. He has published four books, including *Visualizing Climate Change* published by Earthscan/Routledge. His research interests include social mobilization for low-carbon resilient communities, videogames as an engagement tool on climate change, and climate-proofing cities through urban forestry.

Michael Simpson

Chair, Environmental Studies Department, Antioch University New England

Professor Simpson's primary research focuses upon impact to riparian corridors and estuaries, from changes in land-use combined with increases in storm intensity and frequency due to projected climate change. He also has conducted numerous economic cost/avoided cost analyses related to decisions regarding resource utilization and conservation. His current, research funded over the last ten years by NOAA and the US EPA, has focused concurrently in assessing vulnerability of built-infrastructure and in building local stakeholder capacity so to identify potential risks from projected climate and land-use change. All his applied research has included a process to develop an adaptation strategy for communities to better prepare for projected impacts. Within the department, he has taught graduate level courses in climate adaptation and resilience, materials and energy sustainability, wetlands ecology, watershed management, and environmental site assessment.

Will Smiley

Restore Urbanna Creek

Will holds a B.S. in Biology from Washington College in Maryland and a M.Ed. in Educating for Sustainability from Antioch University New England in New Hampshire. He has spent time working with the Chesapeake Bay Foundation conducting watershed education programs for local schools, and, during his time as a ninth and tenth grade science teacher at Christchurch School in Christchurch, Virginia, he has inspired his students to save the oyster population of the Rappahannock River. Today Will is the Project Manager of Restore Urbanna Creek, connecting local schools and businesses to restore the area's oyster population. He enjoys being on the water and exploring with his wife and three children.

Chandra Taylor Smith

National Audubon Society

Chandra Taylor Smith heads Audubon's diversity and inclusion program. Since she started at Audubon in 2012, Taylor Smith has established a sustainable structure for launching the cross flyway strategy, Creating Bird-friendly Communities (BFC). With a background in education policy, Christian ministry, and an academic concentration in ecological theology, Taylor Smith brings her passion, commitment to education, and life-long interest in the intersection of the cultural, spiritual, and physical health dimensions of human connections with nature to Audubon's extensive network of environmental learning opportunities.

Erika Spanger-Siegfried

Union of Concerned Scientists

Erika Spanger-Siegfried, a senior analyst in the Climate and Energy program at the Union of Concerned Scientists, currently manages UCS's Climate Preparedness Project, a multi-pronged effort to explore and elevate the stories of current and rapidly changing climate risks and the steps needed to prepare for them. She formerly managed multiple climate impacts research efforts, including the Northeast Climate Impacts Assessment, a collaboration between UCS and a multi-disciplinary team of more than 50 scientists from across the region. Previously, Erika was an associate scientist at the U.S. Center of the Stockholm Environment Institute. Earlier in her career, Erika worked with the Harvard Center for Health and the Global Environment and the Massachusetts Department of Public Health's environmental laboratories. She has an M.A. in energy and environmental analysis from Boston University and a B.S. in fisheries biology from the University of Massachusetts Amherst. Erika blogs regularly on aspects – from the scientific to the political to the personal – of life in a warming world.

Latham Stack

Managing Scientist at Syntectic International, LLC

Latham Stack has led stormwater adaptation projects at Syntectic International since 2005. His role on these projects has included statistical downscaling of global climate model output to the local scale.

Sarika Tandon

Program Director, Center for Whole Communities

Sarika Tandon is the Whole Measures Program Director at Center for Whole Communities where she works to support organizations in developing and implementing holistic participatory frameworks that support equitable community engagement, program planning, and evaluation. Prior to her work with CWC, Sarika worked with the Institute for Sustainable Communities on a multi-stakeholder climate and disaster resilience planning process that resulted in a Roadmap to Resilience for the State of Vermont. Sarika holds a Master's degree in Advocacy for Social Justice and Sustainability from Antioch University New England's Department of Environmental Studies, and undergraduate degrees in Peace and Conflict Studies and Conservation and Resource Studies from the University of California at Berkeley.

Lauren Thie

North Carolina Department of Health and Human Services, Building Resilience Against Climate Effects (BRACE)

Lauren Thie is an environmental program consultant for the North Carolina Department of Health and Human Services. Lauren serves as Principal Investigator for the Building Resilience Against Climate Effects grant. The Centers for Disease Control and Prevention funded Building Resilience Against Climate Effects grant focuses on assessing vulnerabilities to climate and preventing illness associated with climate hazards in North Carolina, such as health impacts associated with heat-related illness. Lauren has collaborated on public health projects in Kenya, Mali, Southern California, and Vietnam. She is a 2009 graduate of the University of North Carolina at Chapel Hill's Gillings School of Global Public Health.

Jennifer Trapani

Antioch University New England

Jen hails from upstate New York and completed her B.S. in Biological Sciences at the University at Buffalo. She is currently a student at Antioch University New England pursuing her M.S. in Environmental Studies with a concentration in Environmental Education. She is interested in working with adult and senior audiences to foster resilient community-building initiatives through hands-on, experiential learning. Jennifer enjoys working as a Co-Coordinator for Community Garden Connections, an organization that has helped her to engage with her new Keene, NH community and allows her to help address issues surrounding food insecurity. In her free time, Jennifer loves to cook and experiment with new ingredients, explore nature through hiking and photography, and curl up with a good book.

Angela Vincent

Senior Resiliency Planner at BSC Group

Angela Vincent is the Senior Resiliency Planner at the BSC Group based in Boston. Ms. Vincent has more than 15 years of experience providing a wide-range of planning services, including land use planning, transportation planning, and hazard mitigation planning to clients within the local, regional, and private sectors. Ms. Vincent brings a

diverse set of expertise in the areas of sustainability and resiliency planning, having managed one of the first sustainability comprehensive plans in Massachusetts, the Greenfield Sustainable Comprehensive Plan. Ms. Vincent holds a Master's of Science in Resource Management and Administration from Antioch University New England, as well as a Bachelor of Science in Environmental Policy and Administration from Western Washington University. She is on the Executive Committee for the Massachusetts Association of Planning Directors and is the Massachusetts Sustainability Champion for the American Planning Association Sustainable Communities Division.

Eric Walberg

Senior Program Leader, Climate Services, Manomet

Eric Walberg is the Senior Program Leader for the Climate Services Program where he recently completed a three-year study of climate change adaptation strategies in New England and is now leading the development of the Climate Smart Land Network. Prior to joining Manomet, Eric was the Administrator of the Physical and Environmental Planning Department of the Hampton Roads Planning District Commission in Chesapeake, Virginia. In that role he focused on climate change adaptation in southeastern Virginia and was responsible for the development of Virginia's first regional green infrastructure plan. He holds a Master of Planning degree in Urban and Environmental Planning from the University of Virginia, a Bachelor of Science in Computer Science from Old Dominion University and a Bachelor of Fine Arts from Virginia Commonwealth University. Eric is a member of the American Planning Association and the American Institute of Certified Planners.

Adam W. Whelchel

Director of Science, The Nature Conservancy in CT

Dr. Adam Whelchel's twenty-five year career in leadership positions has catalyzed partnerships with strategic direction and transformative conservation while with government agencies, private firms, academic institutions, and non-profits in the United States, China, Southeast Asia, Caribbean, and Africa. As a Director of Science for The Nature Conservancy in Connecticut, Adam currently focuses on building resilient communities via the Coastal Resilience Network and Global Resilient Cities Initiative. Recently, Adam served as a key advisor on the Puerto Rico Climate Adaptation Plan and as a Lead Author for the U.S. National Climate Assessment. Adam is a member of the IUCN-CEM North America-Caribbean region.

Dr. Jalonne L. White-Newsome

Senior Program Officer at The Kresge Foundation

Jalonne White-Newsome is senior program officer at The Kresge Foundation, responsible for the Environment Program's grant portfolio on sustainable water resources management in a changing climate. Jalonne also leads the foundation's work addressing the intersection of climate change and public health.

Before joining Kresge in early 2016, Jalonne served as director of federal policy at West Harlem Environmental Action Inc. (WE

Session Speakers

ACT), where she was involved with leading national campaigns and a 42-member national coalition of environmental justice organizations. Her work helped ensure that the concerns of low-income communities of color were integrated into federal policy, particularly on clean air, climate change and health issues. She is a lecturer at The George Washington University in Washington, D.C., and an adjunct professor at Kettering University in Flint, Michigan. She continues to engage in research on climate, health and equity.

A native of Detroit, Jalonne earned a Ph.D. in environmental health sciences from the University of Michigan School of Public Health; a master's degree in environmental engineering from Southern Methodist University; and a bachelor's degree in chemical engineering from Northwestern University. She currently serves on the board of US Climate Action Network and was recognized by Grist Magazine as "The 50 People You'll Be Talking About in 2016."

Jessica Whitehead

North Carolina Sea Grant, Carolina Integrated Sciences & Assessments

Jessica Whitehead is the coastal communities hazards adaptation specialist for North Carolina Sea Grant. She assists coastal users with integrating information about coastal weather and climate hazards into their decision-making processes. Current projects include helping Hyde County, N.C. develop a flood resiliency plan, and assisting the Town of Nags Head, N.C. begin planning efforts to make public infrastructure and resources more resilient to sea-level rise over the next 10 to 30 years. Prior to joining North Carolina Sea Grant, Whitehead was the regional climate extension specialist for the South Carolina Sea Grant Consortium, North Carolina Sea Grant and CISA. Whitehead holds a doctoral degree in geography and a Master of Science degree in meteorology from the Pennsylvania State University. She also holds a Bachelor of Science degree in physics from the College of Charleston.

Steve Whitman AICP

Resilience Planning and Design

Steve Whitman is the founder and principal of Resilience Planning & Design of New Hampshire, and his work is focused largely on ecological design and planning for community resilience. Steve is a certified permaculture teacher, and is also an adjunct faculty member at Plymouth State University, Colby Sawyer College, and Green Mountain College. Steve frequently teaches courses in the US and internationally in environmental planning, community planning, permaculture, and high performance natural building. Steve lives in Plymouth, NH and participates in a wide range of grassroots efforts in his region that promote community resilience.

Alex Wilson

President, Resilient Design Institute

Alex Wilson is president of the Resilient Design Institute, a nonprofit organization in Brattleboro, Vermont that he launched in 2012 to advance the adoption of resilient design into buildings and communities. He also works part-time for BuildingGreen, Inc., the information company he founded in 1985 and led for many years that publishes information on green building practices. He is a widely published writer on green building, energy, and the environment and author or coauthor of several books, including *Your Green Home* (New Society Publishing, 2006), *The Consumer Guide to Home Energy Savings* (American Council for an Energy Efficient Economy, now in its 10th edition, 2013), and *Green Development: Integrating Ecology and Real Estate* (John Wiley, 1998). In 1993 he received the first Distinguished Service Award from NESEA; in 2008 he received the USGBC Leadership Award for Education; and in 2010 he received the second annual Hanley Award for Vision and Leadership in Sustainability.



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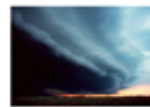
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