

Tuesday, May 12

National Adaptation Forum

May 12-14, 2026

Pittsburgh, PA

CCOM's Notes

Important to know:

*Climate resilience is commonly used synonymously with climate adaptation

*Climate adaptation can be woven into many town/county plans - public health department, buildings dept., public safety, emergency management, etc.

*Co-benefits are the additional social/economic/environmental benefits of a project that are not the main "objective" of the project. Identifying and promoting co-benefits can increase support for a project.

Tuesday, May 12

Forum Welcome & Plenary - Migration as Adaptation: The Impact of Climate Mobility on Cities and Ecosystems

Description: The 7th National Adaptation Forum kicks off. Join your adaptation peers in a plenary that will move you into a conference frame of mind.

- Welcome, Logistics and Insights on Adaptation. Dr. Lara Hansen, EcoAdapt, Chief Scientist & Executive Director
- Land Acknowledgement. Miguel Sague Jr., Council of Three Rivers American Indian Center
- Welcome to Pittsburgh. Mike Hiller, Upstream Pittsburgh, Executive Director
- Staying Steady in the Polycrisis: Risk-Savvy, Hopeful Adaptation Practice. Sarah Westlake & Michael Braithwaite, D.O.N.E. (Department of Nonprofit Efficiency)

Adaptation work is unfolding in a moment of layered uncertainty. Political volatility, legal pressure, media scrutiny, funding whiplash, and collective burnout increasingly shape how practitioners show up in their work. Let's create a shared frame for understanding today's risk landscape without amplifying fear or paralysis. Everything carries risk, and thoughtful adaptation means choosing which risks align with our values, our communities, and our long-term impact. You will leave oriented to the larger themes of the Forum, connected to one another, and invited into the deeper, hands-on exploration that follows in a workshop Tuesday at 1:45pm, From Risk to Possibility: Creative, Hope-Based Tools for Climate Adaptation in Room 316.

Migration as Adaptation: The Impact of Climate Mobility on Cities and Ecosystems

This panel will examine climate mobility as a critical dimension of climate adaptation and why it matters for practitioners working across sectors and geographies. The session will open with a facilitated conversation between climate mobility experts Dr. Adelle Thomas and Abrahm Lustgarten, grounding the topic in data, lived realities, and the broader social, political, and economic forces shaping climate-driven migration. They will explore how climate mobility, including local resilience and safe migration, intersects with adaptation planning at the local, regional, and national levels.

The conversation will expand to include Mayor Aftab Pureval and Dr. Alison Branco, bringing city-level, community-based and nature perspectives on climate migration planning, planned relocation, floodplain policy, nature conservation, and community engagement. Together, the speakers will surface practical lessons and transferable insights for adaptation professionals navigating a rapidly evolving and politically complex landscape.

Moderator

- [Abrahm Lustgarten](#), ProPublica

Speakers

- [Dr. Adelle Thomas](#), Natural Resources Defense Council, Senior Director, Climate Adaptation
- [Aftab Pureval](#), City of Cincinnati, Mayor
- [Dr. Alison Branco](#), The Nature Conservancy in New York, Director of Climate Adaptation

Camille's Takeaways

- When we think about adaptation—during extreme weather events, for example—community centers (churches, etc) and our 3rd places are the most resilient adaptation plans. Social cohesion can't be defunded by the federal government, making it resilient.
- There is a spectrum is climate mobility: involuntary immobility (don't have the resources to leave), forced mobility/temporary displacement (as in a natural disaster), voluntary mobility/planned relocation and voluntary immobility (don't want to leave)
- There is a gap in climate risk education - lower income folks or those who know little English are not reached
- We need to be aware of 2 things when planning climate migration/adaptation: our conserved/protected ecosystems and community's feelings/input
 - Food for thought: what happens to the houses/developed areas after communities migrate? Are they protected to support biodiversity/ecosystems? And where do people migrate to? We have to ensure they're not in places that we have preserved.
- Speakers acknowledged that in small communities, there is a strong sense of place - thus communities don't want to leave in the face of climate risks
 - However, if they do relocate, it should be their choice. An example was brought up about a community doing their own research (what place is culturally similar? What place has similar weather?) on where to move to
- Allison Branco from The Nature Conservancy
 - We can't let people move into high-risk houses
 - We need to frame climate migration/relocation as an opportunity, a vision of the future, and *not* what you're losing
 - Explained that you buy your community time with hard infrastructure, but you then need to use that bought time to do the long term planning

Session Block #1

[Moving the Needle: Evaluating Adaptation Outcomes in the Northeast using the Climate Change Response Framework](#) (Adaptation From the Land to the Sea: Addressing Unique Challenges for Rural & Island Landscapes)

The uncertainty around the impacts of climate change and extreme weather events poses a significant challenge to sustaining forest ecosystems in the Northeast. In response to this challenge, numerous real-world adaptation demonstrations have been developed over the past decade by early adopters using different adaptation strategies to maintain unique and diverse forest values in the face of changing environmental conditions. This presentation will synthesize the current state of adaptation in forested ecosystems across the Northeast

including climate change challenges, adaptation actions, and outcomes of real-world projects developed by natural resource managers using the Climate Change Response Framework, and describe how the selection of adaptation approaches has changed over the past 10 years. We will also introduce a Northeast forest adaptation guide for natural resource managers to use in real-world planning, which brings together current science and best practices into a succinct format to advance adoption of forest adaptation practices across the region.

Speakers

- [Danielle Shannon](#), Michigan Tech, NIACS, Climate Hubs
- [Samantha Myers](#), University of Vermont, NIACS, Northern Forest Climate Hub, Forest adaptation specialist

Camille's Takeaways

- This could be helpful in addressing the pine tree blight
- A tool to use: The [Climate Change Response Framework](#) will help provide technical support to Natural Resource managers
- You can look at their demonstration projects in the Upper Midwest and Northeast, including 14 national forests and millions of acres of forests, grasslands, wetlands, and coastal ecosystems

[Building Better: Bridging “Sustainability” and “Adaptation” to Implement Resilient Infrastructure](#) (Intersection of Adaptation & Mitigation)

Infrastructure planning has long separated climate adaptation from sustainability and climate mitigation. Critical infrastructure designed for resilience is increasingly challenged by climate change impacts that exceed traditional design assumptions. This presentation explores how integrating adaptation and sustainability alongside traditional resilience can support more reliable infrastructure that meets long term community needs. By expanding the concept of infrastructure resilience, practitioners are better equipped to evaluate not only whether they are doing a project right, but whether they are doing the right project.

This presentation highlights the San Francisco Public Utilities Commission's Sunol Valley Water Treatment Plant Ozonation Project as an example of leveraging Envision® to implement climate resilient infrastructure. The Institute for Sustainable Infrastructure's Envision functions as both a decision-making framework and a rating system for integrating sustainability and adaptation goals early in project planning. Designed to be flexible and applicable across infrastructure types and scales, Envision helps project teams evaluate environmental, social, and economic considerations while reducing maladaptation risk. The framework also fosters collaboration across project teams and phases to support sustainable, resilient, and equitable infrastructure.

Participants will leave with practical insight into how intentional process and integrated planning, using tools like Envision, can support climate resilient infrastructure across sectors.

Speakers

- [Jacky Kinson](#), CDM Smith Inc, Mechanical Engineer,
- [Kate Skaggs](#), CDM Smith Inc, Climate Resilience Planner

Camille's Takeaways

- A tool for the Town/County to use in planning/development: Envision
 - Envision functions as both a decision-making framework and a rating system for integrating sustainability and adaptation goals early in project planning

Bringing adaptation into County Hazard Plan (Intersection of Adaptation & Mitigation)

Historically, Hazard Mitigation Plans are led by County Public Safety teams through the lenses of hazard preparedness, public Safety and crisis resolution. For the first time, the City of Pittsburgh mandated the City Planning department and the Office of Emergency Management & Homeland Security to work together to create the first city All hazard Mitigation Plan and participate in the County's plan update following an unprecedented storm that cut power off to over 50% of the City residents.

The City is also currently undergoing public engagement for a Just Transition Comprehensive Plan where feedback around adaptation and hazard mitigation was lifted into proposed actions for the County Hazard Mitigation Plan.

This effort also resulted in bringing resilience and adaptation actions from neighborhood plans into the County Hazard Mitigation Plan. This work session will invite Cities to bring awareness where adaption work is housed in their respective government and explore opportunities for collaboration around hazard mitigation planning

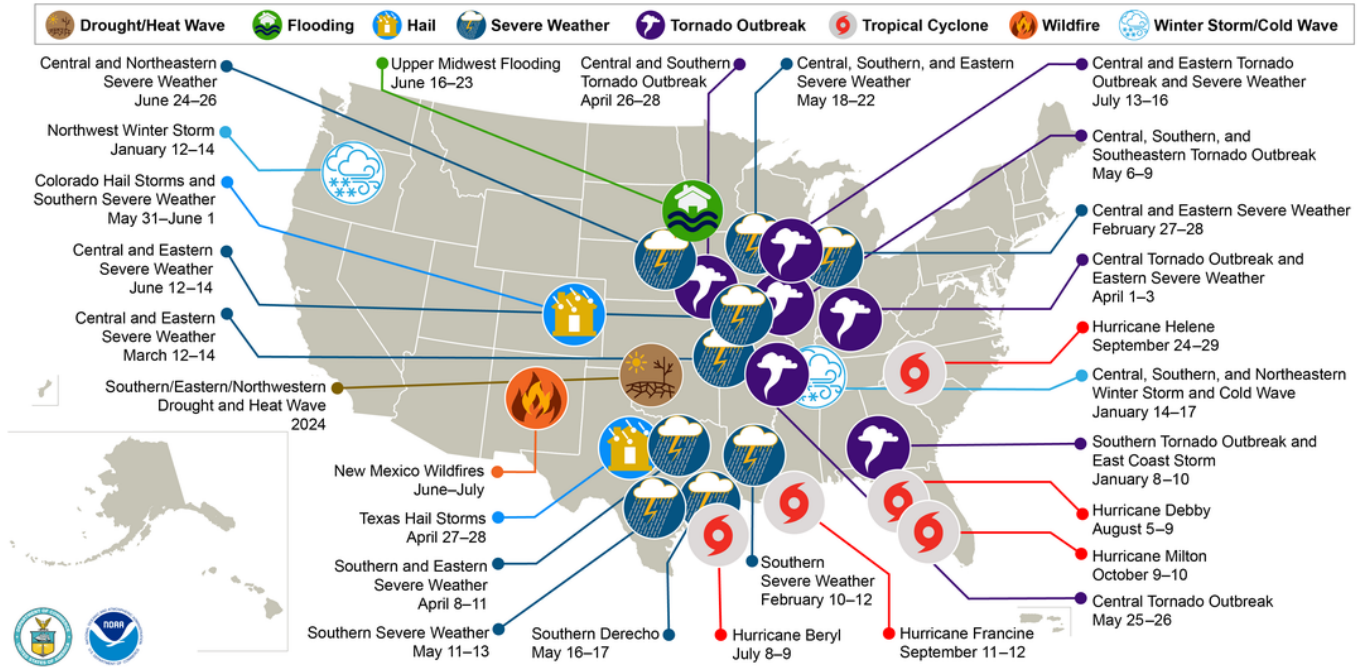
Speaker

- [Flore Marion](#), City of Pittsburgh Department of City Planning, Assistant Director, Sustainability and Resilience Division

Camille's Takeaways

- At the beginning of the presentation, the speaker showed a map of all the billion-dollar weather and climate disasters of 2024 (the number of billion-dollar disasters have been increasing). This helped me realize how big of a problem disaster relief/climate preparedness is.

U.S. 2024 Billion-Dollar Weather and Climate Disasters



- There was an unprecedented storm that cut power off to over 50% of Pittsburgh City residents. In response, for the first time, the City of Pittsburgh mandated the City Planning department and the Office of Emergency Management & Homeland Security to work together to create the first city Hazard Mitigation Plan and participate in the County's plan update – **large-scale power outages are something that will likely happen more frequently in Montauk**
- In the [Hazard Mitigation Plan](#) planning, getting involved with the county plan can bring more funding to adaptation projects because you show how many adaptation projects are needed
- Look at community resilience indicators like Social Vulnerability Index (SVI) to help find priorities - life expectancy, income, etc.

Session Block # 2

The Greatest Story Never Told: Adaptation's Communications Gap (COMMUNICATION & STAKEHOLDER ENGAGEMENT)

*Slides available - ask Camille at cnewman@preservemontauk.org to send them

Too many successful adaptation projects vanish without leaving a broader impact because communications is treated as optional. This panel will argue that communications is not garnish, but core adaptation infrastructure. We will explore how to integrate communications from the start of a project—structuring grant proposals to include meaningful funding for storytelling, building comms plans alongside technical deliverables, and identifying the right audiences early.

Panelists will highlight “silent successes”—adaptation and resilience projects that made real progress but disappeared without wider influence due to underfunded communications. They will also share examples of

projects that broke through by investing in strong, creative outreach. A key theme will be the importance of defining success in communications terms, not just technical outputs. Did the story spread? Did it influence policy? Did it inspire replication? These questions are as critical as metrics like acres restored or homes elevated.

Finally, we will consider what a national adaptation communications strategy might look like in the absence of federal leadership, and who could convene and guide such an effort. Attendees will leave with practical ideas for embedding communications into their projects so that adaptation success stories reach the audiences who need to hear them.

Hosts

- [Doug Parsons](#), America Adapts Media, Host/Director
- [Karen Wolfgang](#), CO2 Foundation, Executive Director

Panelist

- [Olga Loginova](#), Audiation, Inc., Producer/Reporter
- [Shaun Martin](#), World Wildlife Fund, Vice President, Adaptation and Resilience Deputy Lead, Climate Change
- [Beth Gibbons](#), Washtenaw County, Director Resiliency Office
- [Dr. Deb L. Morrison](#), UW - ISME, Learning Scientist
- [Pearl Marvel](#), Yale Climate Connections, Editora de YCC en español

Camille's Takeaways

- Mindset
 - We need to use Hollywood's model which is investing heavily in marketing even if it's a bad Avengers movie. You still get the word out and people still watch the movie because it gets exposure
- Take your communications dept seriously
- Methods
 - Equip your community to tell their own stories - you need to have that lived experience communicated and the emotion to bring others in
 - Hiring communications person
 - Work with **amazing partners** and **trusted messengers** - church leaders and community hub leaders can disperse knowledge better than local gov or nonprofit because they are trusted
 - Find out where the community gets their knowledge
 - Use sarcasm and comedy
- Content
 - Tell stories that are human-focused
 - Focus on the stories that offer solutions and show the good things happening
 - Don't lead with climate change. Instead meet them where they're at. You may see climate change, but the community member sees well-being for their family. However, don't tiptoe around climate change, people deserve to know what's coming.

Session Block #3

Adapting to Climate Change in the Electric Power Sector (ADAPTATION & MITIGATION INTERSECTION)

Ensuring a reliable and resilient power system in the future brings a host of challenges as technologies, customer demands, and climate conditions evolve. Given the criticality of the power system in maintaining lives, livelihoods,

and economic stability, it is important that investments are made to adapt appropriately to safeguard future operations. These adaptations can come in many forms, including physical hardening, diversification of assets, changes in technology types, relocation of key assets, and operational strategies. Determining which adaptation options make sense and are cost-effective depends on a range of factors. Efforts to improve the representation of such factors with planning studies require novel modeling approaches, additional data integration, and targeted decision-support frameworks to handle the uncertainties and complexities present. Done correctly, such methods can aid companies in confidently justifying and prioritizing adaptation investments. This session will explore power system adaptation through case study examples, methodological approaches, and real-world challenges facing companies. We will structure it as a panel discussion, with each presenter sharing introductory remarks related to their work, followed by moderated discussion using both prepared questions and audience engagement.

Speakers

- [Andrea Staid](#), EPRI, Principal Technical Leader
- [Jesse Bukenberger](#), EPRI, Operations Research Specialist
- [Sabrina Nguyen](#), Duquesne Light Company
- [M. Granger Morgan](#), Carnegie Mellon University

Camille's Takeaways

- We can try and predict when our power is going to be threatened by a storm
 - What streets are vulnerable to high wind? We can send crews there ahead of time.
- They talked about elevating a coastal utility substation, which may be in Montauk's future.

Research and Science of Adaptation

Subsession: [Informing Coastal Adaptation: Multi-Criteria Decision Analysis of Coastal Squeeze Solutions](#)

This presentation is focused on the co-migration of the coupled socio-ecological systems in the coastal zone. These systems represent one of the fastest-changing environments due to flooding, erosion, and human development. They also have limited accommodation space for landward/upslope migration of natural coastal habitats due to the expansion of the built environment and coastal protection infrastructure, resulting in coastal squeeze. To evaluate preferences for coastal squeeze solutions in the U.S. Mid-Atlantic coastal region (Hampton Roads and Eastern Shore, Virginia), we conducted a Multi-Criteria Decision Analysis (MCDA) at a workshop with 53 local adaptation experts and stakeholders. MCDA is a structured approach that allows researchers to identify preferred decisions by managing complexity in decision-making. Specifically, we used 1000Minds software that helps prioritize, rank, and choose among alternatives based on multiple criteria. After administering a baseline survey, we determined criteria for comparison of coastal squeeze solutions, their levels, and weights based on relative importance. Each step included a group discussion to provide reasoning about the selection. Preferred solutions to coastal squeeze are creating upland marsh migration corridors, incentives for development away from wetlands, marsh creation and restoration, construction of living shorelines, buyout programs, and conversion of acquired properties into wetland accommodation space.

Camille's Takeaways

- Methods of engaging the community and getting community-informed data - a workshop
 - Baseline survey
 - What are publicly acceptable coastal squeeze solutions? What are the primary obstacles to adopting coastal squeeze solutions?
 - Discussion about criteria
 - Discussion about solutions
 - Weigh criteria - 27 tradeoffs are shown and participants choose the alternative they think has higher relative importance
 - See results

Subsession: [Integrating Community Insights: Rethinking Nonstructural Flood Risk Reduction for Resilient Coastal Protection in Louisiana](#)

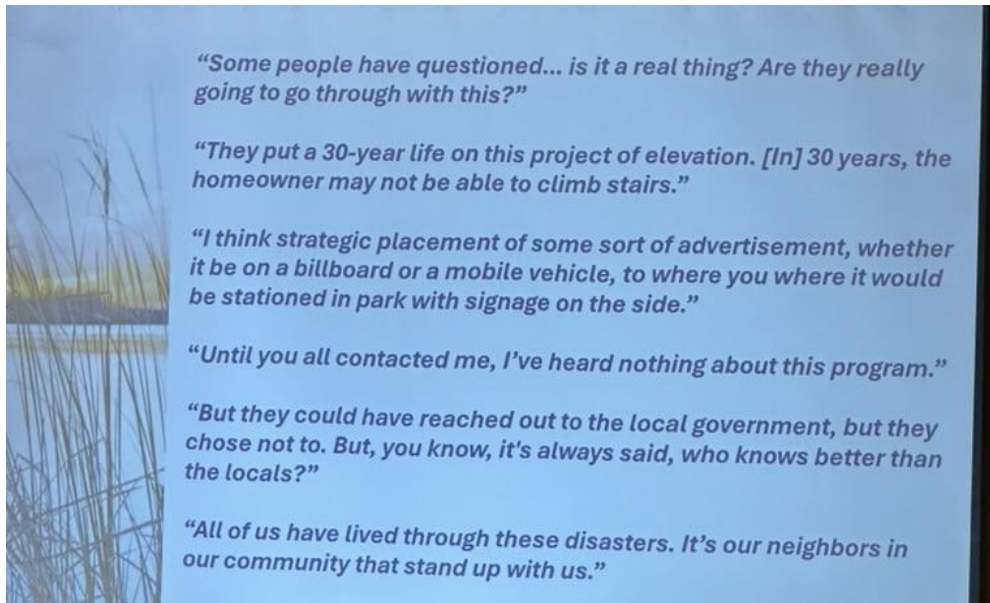
This presentation highlights the critical role of nonstructural flood risk reduction measures in Louisiana's Southwest Coastal Study (USACE), emphasizing the need for social science approaches to resilience planning. The primary research question was: How do communities in Southwest Louisiana perceive and/or act in response to state and federal nonstructural opportunities? Discussion centers on how communities in Cameron, Vermilion, and Calcasieu parishes perceive nonstructural strategies like home elevation, and their importance in the broader context of coastal protection. Qualitative data on community responses to nonstructural initiatives will be shared, exploring the challenges / opportunities in fostering engagement and participation including building trust with residents and community leaders. It will address the gap between state / federal programs and local needs, offering recommendations on improving communication, trust, and support for nonstructural measures. By incorporating community perspectives into resilience planning, it will highlight strategies / recommendations to reform nonstructural policies at the national level that meet the needs of residents today. Nonstructural measures for flood risk mitigation are trending upwards amongst residents wanting to stay in place, and implications of what happens with this SW Coastal project will be felt nationwide, as other regions begin to take on similar efforts at this scale.

- [Allison \(Allie\) Olsonoski](#), Environmental Defense Fund & Restore the Mississippi River Delta, Project Manager

Camille's Takeaways

- Research question: how do communities in Southwest Louisiana perceive and/or act in response to state and federal nonstructural (A flood risk management measure to reduce flood risk and damages by adapting to the natural characteristics of flooding within a floodplain) opportunities?
- Lessons learned that can be applied for our coastal resilience and water quality projects (septic upgrade)
 - You need a budget for extensive outreach, a dedicated point of contact, and frequent contact with the community
 - Educate and engage local community leaders to spread the word
 - Share visuals
 - Use mixed method communications - interviews, focus groups, analysis

- Quotes from the research:



Margaret A. Davidson Networking Reception & Poster Session (RECEPTION/POSTER SESSION)

109 posters

Networking is the added value of any in-person meeting and few people knew how to network better than Margaret A. Davidson. Not only was Margaret a leader in the field of adaptation, but also a consummate networker. In 2017, when we heard Margaret would be unable to attend the Forum, we wanted to make sure she was here in spirit, so we named the Tuesday Night Networking Reception in her honor — The Margaret A. Davidson Networking Reception. We continue to cherish her leadership, friendship, and vision, and encourage every Forum participant to honor her memory by moving climate adaptation forward. This honor for Margaret is even more fitting as she is one of the founders of the Forum. She joined the first planning call to create the Forum, signed on to the Steering Committee and helped guide the process forward, helping to make the event what it is today. Thank you, Margaret. Tuesday night we will network in your honor and hopefully live up to your example.

Attendees will enjoy time to network with fellow adaptationers and engage directly with poster presenters, who will be with their respective posters, to answer questions and discuss their work.

Camille's Takeaways

Exploring Barriers and Enablers to Living Shorelines as Perceived by Waterfront Property Owners in Virginia

- Application to us: we can do a survey in Montauk to see why people are hesitant to put in living shorelines
- Trang did a survey of 600 people, asking about 50 questions. North Carolina state has a policy mandating you put living shorelines in, and helps financially with up to ~\$20-30,000. She used the permits applied to by residents to send about 1500 emails.
- There needs to be more data/case studies on the successes of living shorelines. There are more for hard seawalls.

- Private ownership is a barrier. Most applicants were white and wealthy. Still, they didn't want to implement shoreline - aesthetic reasons, they don't like wildlife, etc.
- ~\$250/ft of living shoreline, but hard to approximate

Is academic research rooted in reality?

- In my conversation with the presenters, I told them about how the community often wants to complain but not offer solutions. They said sometimes you just need to give them space to do that. Then you can move onto productive conversations.
- I also asked about the length of projects. They said you have to tell the community to be patient with seeing results/action. It takes a long time. Sometimes it's the right thing, the right time, the right funding. It's not up to us sometimes.

Integration & Amplification of Public Health Co-Benefits into Climate Resilience Projects

- CCOM can frame certain projects to the Town Board as being beneficial to physical health, mental health and supporting equity, not just the environment. This will increase approval of a project.

Vulnerable Populations

Youth & High School Students

- Anxiety, depression & eco-anxiety
- Attention deficits
- Asthma & respiratory disease
- Childhood obesity

Older Adults & Aging Population

- Heat-related illness & mortality
- Cardiovascular disease
- Social isolation & depression
- Dementia & cognitive decline

Frontline Communities

- Chronic disease burden (asthma, diabetes, cardiovascular disease)
- Mental health stress & trauma
- Limited healthcare access

Others

- Unhoused
- Pregnant
- Children
- Disabled
- Outdoor Workers, etc.

Nature-Based Solutions' (NBS) Co-Benefits

NBS Type	Physical Health	Mental Health	Social/Equity
Bioretention/Rain Garden	• Improves air quality & reduces PM2.5 • Reduces flooding exposure • Reduces waterborne illness and vector-borne diseases	• Fosters nature connection • Reduces eco-anxiety	• Builds environmental literacy for youth • Creates shared stewardship spaces • Reduces social isolation
Community Garden	• Improves nutrition & food security • Increases physical activity through gardening • Helps manage chronic disease through increased activity	• Reduces anxiety & depression • Fosters sense of purpose • Strengthens social connectedness • Supports trauma recovery	• Creates intergenerational shared spaces • Improves social cohesion & community livability • Addresses food deserts
Tree Canopy/Urban Forest	• Lowers ambient temperatures and heat island effects • Intercepts PM2.5	• Restores attention • Reduces anxiety & depression • Improves birth outcomes via stress reduction	• Creates walkable, shared streetscapes *Majority Black & Brown neighborhoods have 33% less canopy.
Green Roof	• Reduces heat illness risk • Improves respiratory health • Manages stormwater at source	• Improves mental health through nature interaction • Supports workplace wellbeing	• Attenuates urban noise pollution
Native Planting/Meadow	• Intercepts PM2.5 and absorbs ground-level pollutants • Reduces stormwater runoff	• Reduces eco-anxiety in youth • Evokes positive emotions & relieves stress	• Increases community satisfaction & pride • Strengthens civic belonging & stewardship • Supports pollinator corridors

Case Study

Wednesday, May 13

Wednesday, May 13

Session Block #4

From the Assessment to Reality: Helene's Lessons for Community-Centered Resilience (EXTREME EVENTS)

In this symposium, Asheville-based climate practitioners from Fernleaf, UNC Asheville's NEMAC, Siler Climate Consulting (SCC), and the Urban Sustainability Directors Network (USDN) share lessons learned before, during, and after Hurricane Helene to illustrate how strong neighborhood networks strengthen community resilience and recovery. Reflecting on the City's 2018 climate resilience assessment, presenters will highlight how the report and regional assessments accurately identified multi-hazard vulnerabilities, while Helene exceeded 500-year flood projections and revealed critical gaps in regional interdependence, recovery timelines, and community preparedness.

The session weaves storytelling and technical insight to explore how social resilience interacts with the built environment and hazard mitigation systems. Presenters will discuss post-Helene initiatives and how emergent neighborhood "resilience hubs" and community-led coordination filled vital gaps when traditional systems were overwhelmed. Participants will then take part in an interactive Community Resilience Mapping exercise, learning and practicing a relational framework for building trust with residents, then mapping neighborhood assets such as skills, gathering spaces, and vulnerable populations to identify opportunities for collaboration. Together, we'll discuss how adaptation practitioners, from planners to emergency managers, can integrate social infrastructure into climate planning, hazard mitigation, and recovery frameworks, ensuring community networks are seen as critical components of climate resilience.

Speakers

- [Amber Weaver](#), USDN, VP Capacity Building
- [Matt Hutchins](#), Fernleaf, CEO and Senior Resilience Advisor
- [Karin Rogers](#), UNC Asheville's NEMAC, Director
- [Peyton Siler Jones](#), Siler Climate Consulting, Founding Principal

Camille's Takeaways

- Social infrastructure was critical in resilience after Hurricane Helene - immediate resilience hubs emerged
- We did an activity where we were asked to identify 5 of our closest neighbors (names and contact info). If you couldn't, then there's a gap you need to fill. Talk to your neighbors and exchange contacts! Next we were asked to think about what items we could offer in case of a natural disaster (flashlights, generator, food, water, medical assistance, childcare, menstrual products, etc). Then we were asked to think about what items we are missing. Lastly, we discuss the results and think about one way local governments can act to strengthen networks before a disaster occurs. **This could be a good exercise for us to do with the community.**

Section I Network Mapping



1. Draw their residence.
2. Draw the five closest households or neighbors.

Then answer the following questions for each neighbor:

- Do you **know this person by name**?
- Have you **exchanged contact information**?
- Have you **shared resources** (tools, food, childcare)?
- Would you **feel comfortable asking them for help in an emergency**?

Table Discussion I Connecting the Network



Discussion prompts:

- What patterns do you notice?
- What resources already exist in this network?
- Where are the gaps or vulnerabilities?
- What surprised you about the community assets that appeared?

- Preparation is critical, because the risks are big: if you don't have phone service, how can you get information about what is happening during a disaster? School was out for 12 weeks! Kids will miss out on education.

Session Block #5

Nature Based Solutions - 5 subsessions

Adaptation Starts Offshore: Understanding the Role of Marine Conservation in Coastal Resilience

Often discussions around adaptation in marine conservation focus on how different aspects of marine management allows key habitats and species to adapt to environmental changes within marine protected areas. Less discussed, but incredibly important, is how marine conservation and protected areas offshore can support the adaptation goals and resilience needs of coastal communities. This presentation will showcase some examples on how marine management decisions impact the adaptation options and resilience of coastal communities, the ways that can be considered in conservation decision-making, and the techniques and data sources marine conservation practitioners can use to factor community resilience into their management. The presentation will use the U.S. National Marine Sanctuary System as an example of how a network of marine protected areas impact communities across the country, while bringing in case studies from the Indo-Pacific region to provide global comparison points. After this presentation, attendees should feel empowered with the awareness and techniques required to directly consider the resilience capacity and adaptation needs of coastal communities in marine conservation decisions.

Speaker

- [Jillian Neuberger](#), National Marine Sanctuary Foundation/NOAA National Marine Protected Areas Center (Affiliate), Associate

Camille's Takeaways

- There is a Marine Protected Area that conserves kelp forests. **Maybe we can establish one for eelgrass in Montauk?**

Transforming the Scale & Equity of Living Shorelines and NBS in South Carolina

The Nature Conservancy in South Carolina received an award from the NOAA Transformational Habitat and Coastal Resilience Grant aimed to increase the scale and equity of living shorelines and other NBS across the coast of South Carolina. Acknowledging the successes and knowledge gleaned from past work, TNC-SC hopes to build on an established framework of NBS implementation in the state and identify opportunities to expand the implementation of these solutions across communities, partnerships, and cultures in SC. The proposal included three main tasks, each designed to address implementing work equitably throughout coastal ecosystems and within coastal communities. These tasks included the implementation of a 2,000 LF living shoreline in partnership with the Department of Defense at MCAS Beaufort, the development of a Living Shorelines Community Assistance Program to provide living shorelines installation in under-resourced communities across the coast, and the development of Coastal Resilience Implementation Plans to identify the next generation of large-scale transformational NBS projects in the state. TNC-SC is still actively working within each task, with the project period ending in 2028. The presentation will cover progress to date and lessons learned across all tasks, with emphasis on the equitable development of the Living Shorelines Community Assistance Program.

Speaker

- [Susanna Hopkins](#), The Nature Conservancy, Resilience Program Manager

Camille's Takeaways

- We can be in touch with the presenter at TNC to learn from their grant and project. It seems to be on the state-level.
- The grant covers a Living Shorelines Community Assistance Program for low-income communities

[It's not Black and White. It's Greenish-Gray: the Havre de Grace Deep-Water Living Shoreline](#)

Covid? Check. Staff turnover? Check. Funding Complexities? Check. Timeline delays? Check. Phase 3 of Havre de Grace's post-industrial waterfront transformation into a living shoreline encountered both anticipated and unexpected challenges, but what might seem like your typical shoreline restoration isn't actually so black and white. This project is defined by strong partnerships and a unique adaptation concept: a deep-water living shoreline in a high-energy wave environment that combines green and gray infrastructure to create a living bulkhead. This project not only provides structural integrity under the threat of increasing flooding, but pollution reduction benefits, habitat for wildlife, and recreational opportunities for the surrounding community. Gone are the impervious surfaces and invasive species, and in their place is now an innovative large-scale project that overcame the typical barriers of converting heavily polluted waterfronts into living ecosystems. The Havre de Grace waterfront transformation tells a story of how a community with previously limited access to green spaces capitalized on phased funding, balancing stakeholder interests, and the creativity and enhanced capacity that can come from partnering. Join NWF to hear the lessons learned while creating this 17 ft deep living shoreline, and how the team is moving forward with adaptive management.

Speakers

- [Kate Vogel](#), National Wildlife Federation, Senior Manager, Coastal Resilience
- [Jodie Shivery](#), City of Havre de Grace · Full-time, Manager of Living Shoreline

Camille's Takeaways

- More information:
<https://blog.nwf.org/2025/06/restoring-marylands-shores-an-innovative-coastal-resilience-strategy-in-havre-de-grace-maryland/>
- They built a deep, 17 foot deep living shoreline on a post-industrial waterfront with both green and gray infrastructure. It only took 2 months to build.
- They have someone leading selective vegetation management at the living shoreline to make sure the investment is worthwhile - pulling up invasive species to keep native species thriving. It is a volunteer-based program, with interns helping. **We could propose this to the town at the stormwater abatement locations.**

[ENACTS: Overview, Insights, and Applications](#) (didn't attend, but you can look it up online)

[The Boyd Living Shoreline: A Largescale Living Shoreline Project in South Carolina](#) (didn't attend, but you can look it up online)

[How do you Prepare Colder Places for Hotter Weather?](#) (Building Climate Resilient Health Systems (Special Session)) - working group style

In traditionally temperate climates, extreme heat represents a novel hazard with significant health impacts and unique challenges: (1) buildings, including homes and public facilities, are largely un-adapted, (2) community organizations have limited experience supporting residents during extreme heat events, and (3) public agencies have difficulty prioritizing extreme heat initiatives when heat waves may only happen a few times a year. In these regions, how do you build the interdepartmental and cross-sectoral capacity necessary to build resilience to rising temperatures?

In this session, three local jurisdictions, including two CDC Climate Resilient States and Cities Initiative (CRSCI) grantees will work with attendees to design, communicate, implement, and evaluate heat adaptation actions. The Santa Clara County Department of Public Health, San Francisco Department of Public Health, San Francisco Office of Resilience and Capital Planning, and King County will lead attendees in small group exercises to identify and address unique barriers to heat adaptation in cooler cities, and present lessons learned from their own initiatives. By the end of this session, attendees will have new insights on how to collaborate with health practitioners to build capacity through (1) expanding networks, (2) leveraging data, (3) changing behaviors, and (4) identifying interventions with health co-benefits.

Speakers

- [Matt Wolff](#), San Francisco Department of Public Health, Climate and Health Manager
- [Alex Morrison](#), San Francisco Office of Resilience and Capital Planning, Resilience GIS Analyst
- [Tonya Veitch](#), County of Santa Clara, Public Health Department, Climate and Community Resilience Manager
- [Daaniya Iyaz](#), King County Department of Natural Resources and Parks, Climate Preparedness Project Manager

Camille's Takeaways

- You can tie heat resiliency into plans by showing why it affects their department (e.g. public health dept.)
- In my working group, we discussed how schools cover large areas and can be used to incorporate green spaces to reduce heat risk to students and the greater community

Session Block #6

Climate Adaptation through School-Community Hubs (YOUTH ENGAGEMENT & EDUCATION)

We identify schools as promising sites for building community capacity for climate adaptation in historically under-served communities. Public schools are neighborhood institutions that are trusted by communities and have been used successfully to deliver community food and health services. However, schools have not been systematically mobilized to support community climate adaptation. Focusing on the 10,000 public schools serving Kindergarten through Grade 12 in California, our symposium highlights the potential pathways to schools supporting community climate adaptation and introduces a digital tool, the California Schools Climate Hazards Dashboard. Research demonstrates that schools contribute to climate adaptation in three ways. School buildings and grounds are used to test adaptation technologies/strategies. Schools are key sites for learning about climate adaptation, and schools can facilitate community climate adaptation. Our project seeks to integrate these three roles by creating pathways for California public schools to better prepare for the climate risks they face, to integrate this knowledge into their curricula, and to build adaptive capacity in both the schools and surrounding communities. The California Schools Climate Hazards Dashboard (<https://schoolclimatehazards.grit.ucsb.edu/>) can be used in classrooms as a first step in a school-led, community-engaged climate adaptation initiative.

Speakers

- [Simone Pulver](#), UC Santa Barbara, Associate Professor of Environmental Studies
- [Kaylee Laub](#), UC Santa Barbara, PhD Student, Gevirtz School of Education

Camille's Takeaways

- Our schools are natural hubs for community and knowledge. They can be used for climate adaptation too.
- There are curricular opportunities for climate change education
 - There can be co-benefits to incorporating climate change education (through curriculum or clubs) like reducing eco-anxiety
- Schools are key institutional partners

Wetlands for Climate: Breaking barriers, building partnerships, advancing resilience (Protecting Ecosystems & Biodiversity (Special Session)) - working group style

Wetlands are essential to climate resilience, biodiversity, and community well-being. They buffer against flooding, store carbon, filter water, and provide critical habitat. Yet wetlands face mounting pressures from development, climate change, erosion, and sea-level rise. Despite increased investment in wetland restoration, progress has not kept pace with the urgency and scale of need.

The Wetlands for Climate Partnership (W4C), led by The Nature Conservancy, is a collaborative effort that brings together scientists, policy advocates, and practitioners to break down barriers and accelerate progress towards climate-focused wetlands restoration, conservation, and management. The W4C is leading a series of multi-partner convenings in California, designed to identify solutions to accelerate the pace and scale of wetland restoration. In this interactive session, participants will step into the work of W4C through a mix of short presentations and collaborative exercises.

Panelists will highlight lessons learned from wetland projects around the country, and participants will engage in facilitated breakout groups to explore solutions to common wetland project challenges, such as permitting, funding, and long-term stewardship. The working group will offer an opportunity for participants to learn from each other and co-develop solutions and strategies for scaling wetland conservation as a climate adaptation solution.

Speakers

- [Piper Wallingford](#), The Nature Conservancy, Climate Resilience Scientist
- [Alyssa Mann](#), The Nature Conservancy, Climate Resilience Project Director
- [Sydney Chamberlain](#), The Nature Conservancy, Climate and Nature-Based Solutions Project Director
- [Lindy Lowe](#), Eastern Research Group, Director of Climate and Hazard Resilience

Camille's Takeaways

- We all agreed funding was a big problem. One solution was doing a funding “collab”, coming together with one voice to get funding so we’re stronger
- We discussed permitting issues. One real-life example was to have weekly/monthly meetings between agencies to discuss permitting issues.
- We identified that monitoring was mostly ignored in grants and sources of funding. This means that the project is completed, but there isn’t money to adapt the say living shoreline project, if a problem occurs. And the success is not measured because there’s no monitoring.

Session Block #7

Implementing Sea Level Rise Solutions: Lessons from the Field (Infrastructure)

As more communities move from planning to practice, the realities of implementing climate adaptation actions are becoming increasingly evident. This session will explore some of the practical realities of implementing local sea level rise projects and how communities are adjusting their approaches in response. Through case studies and discussion, climate adaptation practitioners from Seattle, Washington; Charleston, South Carolina; the Port of San Francisco; and Olympia, Washington will share how they are working with communities and elected officials on implementing sea level rise solutions, lessons learned to date, and how they are positioning their work going forward. Session participants will learn how:

- Seattle is prioritizing water resilience in neighborhoods most vulnerable to sea level rise-related flooding and beginning to implement solutions in partnership with these communities;
- Charleston is accelerating the implementation of water management strategies identified in the Charleston Water Plan to address multiple and increasing flood challenges in the wake of sea level rise;
- The Port of San Francisco is completing the San Francisco Waterfront Flood Study and advancing projects to increase the resilience of its waterfront; and
- Olympia is exploring options for financing sea level rise projects outlined in the Olympia Sea Level Rise Response Plan that are designed to alleviate coastal flooding in Washington State's capital.

Speakers

- [Lara Whitely Binder](#), King County, WA, Climate Preparedness Manager
- [Natalie Weiss](#), City of Olympia, WA, Climate Resilience Coordinator
- [Kaylan Koszela](#), City of Charleston, SC, Director of Resilience
- [Ann Grodnik-Nagle](#), City of Seattle / Seattle Public Utilities, Senior Advisor, Climate Adaptation and Built Environment
- [Luiz Barata](#), Port of San Francisco, Senior Planner/ Urban Designer, Waterfront Resilience Program

Camille's Takeaways

- In Charleston, SC there is a local resilience fund
- In SF, they did waterfront/walking tours for the community to participate in to connect ideas to a tangible place and to demonstrate that things are actually working (e.g. living shoreline)
- Interagency collaboration is very important - some keep regular meetings on the calendar to keep the issue of sea level rise elevated

Thursday, May 14

Thursday, May 14

Session Block #8

Protecting the Future of Ecosystems and Biodiversity Through Adaptation (Protecting Ecosystems & Biodiversity (Special Session)) - 5 subsessions

How is adaptation being incorporated into how we manage, govern, and steward ecosystems and ensure biodiversity protection?

The foundation of every aspect of our industries and livelihoods is dependent on how we protect the future of our ecosystems. However, with unprecedented climate change, adaptation practitioners must evolve their management approaches to meet the challenges of managing critical resources in a changing climate. This session explores how practitioners working to conserve ecosystems and biodiversity are embedding climate adaptation into their practices. Presentations include both successes and setbacks, with emphasis on lessons learned and practical insights gained through implementation, and feature efforts that contribute to advancing knowledge and practice in climate-informed protection strategies.

Subsessions

[Co-developing Coastal Resilience: The Stone Living Lab as a Collaborative Model for Nature-based Approaches](#) (didn't attend, but living seawall is very interesting idea)

[Dynamic Transects: A Framework for Increased Habitat and Community Resiliency in the Pocomoke Sound Corridor](#)

Camille's Takeaways

- We have to think about sea level rise and how that will affect oysters/shellfish. They prefer certain intertidal zones. There are ways to migrate them.

[Identifying climate-resilient native keystone plants in the Mid-Atlantic and South Central United States](#)

Camille's Takeaways

- Provided a guide: National Wildlife Federation Native Plant Finder to help practitioners plant natives that will survive long-term, considering climate changes
 - It's ranked by ability to support insects
 - You can use the list for decisionmaking
 - Which plant is best?
 - What plant is not best?

[Bay-Wise Living Landscapes Program: Catalyzing Climate Resilient Community Action in the Chesapeake Bay Watershed](#)

Camille's Takeaways

- This program is a certification program that started as a water quality program. It teaches ecological landscaping, and you can then become a master gardener.

- They showed photos of people's backyards that consistently flooded, and the reduced flooding once they designed a better ecological landscape - that would be great to show the public. Ask the public: do you experience flooding in your yard?
- The speaker noted the confusion about climate change with droughts and heavy rain: when there's drought, and then a flood, how can that be? An educational gap.
- 1% soil can hold 27,000 gallons of water

[Nationwide Perspectives from the Climate Adaptation Science Centers \(CASCs\): Science, Partnerships, and Adaptation in Action](#)

Camille's Takeaways

- Co-production model - project managers co-produce with community members → leads to better solutions
- The CASCs are a resource

Session Block #9

Coastal Towns to Agricultural Grounds: Examining Unique Transportation-based Climate Vulnerabilities in Rural North Monterey County (Unique Rural & Island Challenges (Special Session)) - presentation, then working group style

North Monterey County's rural areas are prone to repetitive flooding. In 2023, the Pajaro River levee breached, leading to widespread evacuations and extensive damage. The underserved Hispanic and Indigenous Mexican populations in the area experienced the greatest disruption, displacement and damage to their livelihoods, homes, and families. Increasing rainfall intensities and sea level rise-driven coastal flooding will keep these communities on the front lines of climate change impacts – despite agricultural production exceeding 1 billion dollars annually.

The Transportation Agency for Monterey County (TAMC) completed a climate vulnerability assessment in North Monterey, centering community insights and feedback in the assessment. Engaging with the Spanish-speaking population required personal and targeted outreach that met communities where they are. The project team collaborated with college student volunteers and local community-based organizations to maximize outreach efforts on a limited budget. Community members shared their experiences and identified flooded roadways that most impacted their daily lives.

This session will explore how TAMC merged and validated community experiences with an analytical multi-hazard analysis to prioritize future transportation-related climate adaptation projects that benefit local communities. Through facilitated group discussions, participants will leave with a fresh perspective on the resilience of communities that are often unseen and overlooked.

Speakers

- [Alissa Guther](#), Transportation Agency for Monterey County, Transportation Planner
- ~~[Eloy Ortiz](#), Regeneración Pajaro Valley Climate Action, Special Projects Manager~~
- ~~[Kris May](#), Pathways Climate Institute, CEO and Founder~~
- [Sierra Ramer \(She/Her\)](#), Pathways Climate Institute, Coastal Resilience Scientist

Facilitator

- [Maryellen Hearn](#), Pathways Climate Institute, Resilience Lead, Adaptation and Flood Risk

Camille's Takeaways

- The presentation was about their process completing a climate vulnerability assessment
- Discussed how roadways were vulnerable to flooding, and how that impacted daily lives
 - When there's a blocked roadway, school buses/schools, jobs, and families are affected. They used a community asset mapping activity to find what roads were most important to prioritize/protect. They used categories like school bus stop, bus stop, and business area to identify roads that were important to the community.
- You should start with the near-term hazards. What is the hazard right now? The community always wants that addressed, and will support that, because they are experiencing its effects. In the future, it's hard to imagine.
- They were presenting a tool that can be used locally