

# 2018 Carolinas Climate Resilience Conference



October 29 – 31, 2018

COLUMBIA, SC

## Final Conference Report

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## Contents

Acknowledgements .....	2
Building a Successful Carolinas Climate Resilience Conference.....	3
A Regional Adaptation Forum .....	3
Fostering a Network of Climate Adaptation Practitioners .....	4
Hurricane Florence Leads to Conference Rescheduling.....	4
The CISA Program Evaluation .....	5
Collaborations.....	6
American Society of Adaptation Professionals.....	6
Urban Offsets .....	7
The Conference Program .....	8
An Interactive Conference Format .....	8
Conference Attendees .....	8
Networking Focus.....	11
Plenary Sessions.....	11
Rising Waters: Flood Mitigation and Adaptation in the Carolinas.....	11
Adaptation Funding, Finance and Investment.....	12
The Future is Now: Capitalizing on Opportunities for Climate Resilience.....	13
Concurrent Sessions .....	14
Conference Survey Results.....	15
Value In Attending the Carolinas Climate Resilience Conference.....	15
Network Engagement.....	15
Achieving Conference Goals and Objectives.....	17
Most Valuable Takeaways .....	18
Beyond the CCRC: Next Steps for Conference Attendees .....	19
Looking Ahead.....	20
Appendix .....	21
Steering Committee Members.....	21
Program Committee Members .....	22

## Acknowledgements

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We also owe our thanks to USC Conference and Event Planning. Kate Shelton, Grace Salter and Sarah Long were key team members providing extensive logistical support and ensuring that the conference ran smoothly for all attendees and presenters, especially during the reschedule of the conference.

The conference would not have been possible without the support of all of our generous sponsors. We greatly appreciate their contributions to the success of the event.

### *Platinum Sponsors*

Atrium Health, North Carolina Department of Environmental Quality, USDA's Southeast Regional Climate Hub, and the University of South Carolina Geography Department

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American Society of Adaptation Professionals, EcoAdapt and the National Adaptation Forum, the State Climate Office of North Carolina, South Carolina Department of Health and Environmental Control, South Carolina Sea Grant Consortium, and YSI Xylem

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Black & Veatch, Hazen & Sawyer, North Carolina and South Carolina Chapters of The Nature Conservancy, North Carolina Sea Grant, the North Carolina Water Resources Research Institute, NOAA Office for Coastal Management, and the NEMAC-FERNLEAF Collaborative

### *Bronze Sponsors*

South Carolina State Climatology Office

The Carolinas Integrated Sciences & Assessments (CISA) is supported by NOAA's Regional Integrated Sciences & Assessments (RISA) program. Allocations from this grant were used to provide travel support for local government and community representatives, who play a crucial role in moving climate adaptation forward in the region.

## Building a Successful Carolinas Climate Resilience Conference

The [Carolinas Climate Resilience Conference](#) was borne from research to inform the Third US National Climate Assessment (NCA). In 2010 and 2011 researchers with the [Carolinas Integrated Sciences & Assessments](#) (CISA) conducted interviews with a variety of stakeholders and decision makers to inform a technical report for the NCA. This report, entitled [Engaging Climate-Sensitive Sectors in the Carolinas](#), revealed that interviewees rely primarily on in-person engagements such as meetings, workshops, and conferences to learn about sources of relevant and up-to-date climate information.

Interviewees indicated one-on-one interactions allowed them to gain insight into how climate is best incorporated into their own work. Interviewees viewed in-person engagements as pivotal to fostering personal connections and networks as well as facilitating cross-sector collaborations. The research also indicated a lack of coordinated networks within the Carolinas providing climate-specific or climate-focused information and services.

CISA set out to address this gap and support these networking and information needs by convening climate information providers and users at the first Carolinas Climate Resilience Conference (CCRC) in 2014. This event drew 197 people to the Charlotte, NC, area for two days of interactive sessions and engagement opportunities. Feedback from attendees and survey responses were overwhelmingly positive.

In 2016, CISA held the second CCRC, also in Charlotte, NC, building from successful interactions and opportunities in 2014. This event drew 272 attendees from fourteen states and the District of Columbia. Survey respondents noted that networking and learning about new climate resources, tools, and expertise were two of the most effective components of the conference program.

To maintain and increase the climate resilience and adaptation network that continues to grow and expand in the Carolinas, CISA hosted the third annual conference in 2018. The conference was held at the Columbia Metropolitan Convention Center in Columbia, SC on October 29-31, 2018, attracting 248 attendees and over 100 speakers. This report provides an overview of the 2018 CCRC including post-conference survey results and will be utilized to guide CISA's continued engagement with network development in the upcoming years.

### A REGIONAL ADAPTATION FORUM

In recent years, climate science has reached the national spotlight through advancements in science, technology, regulations, and communications. Forums at the national scale, such as the [National Adaptation Forum](#) (NAF) hosted by EcoAdapt, provide a venue in which invested participants from around the nation can exchange ideas and practices. Regional Adaptation Forums (RAFs), like the Carolinas Climate Resilience Conference, inform the issues brought to the national level. The regional nature of climate and resilience activities allows for smaller forums like the CCRC to focus on climate events,

issues, programs and projects on a localized scale with national implications. Other RAFs are held in California, the Great Lakes region, and south Florida, to name a few. CCRC organizers stay connected to other RAF leaders through calls hosted by the American Society of Adaptation Professionals (ASAP) in order to share lessons learned and discuss similarities and differences in how adaptation is progressing across the country. These organizers have also convened sessions at NAF to discuss the benefits of hosting regional events and the role regional forums play in expanding the national network of adaptation practitioners.

## FOSTERING A NETWORK OF CLIMATE ADAPTATION PRACTITIONERS

Knowledge of climate change and current climate variability are growing, as is the necessity to adapt to future conditions. Resilience is an important step in preparing for future challenges. Sharing knowledge of the success and failures in resilience policies, projects, and communications is key to informing a more vital future for the Carolinas in the face of projected challenges. The 2018 Carolinas Climate Resilience Conference aimed to provide a venue for scientists, academics, NGOs, the private sector, and government stakeholders at all levels to share resilience strategies and engage in discussion to assist with future endeavors.

The CCRC is designed for participants in climate resiliency to learn and share knowledge. Thereby the conference program was developed to:

- Support on-the-ground climate resilience efforts by providing managers and regional experts with an opportunity to share lessons learned and discuss resources and tools for incorporating climate information into their work.
- Contribute to the development of a climate information network for the Carolinas.
- Provide a venue for practitioners, resource people, and researchers to share information about current activities, plans, and opportunities for collaboration.

## HURRICANE FLORENCE LEADS TO CONFERENCE RESCHEDULING

The 2018 CCRC was originally scheduled for September 17-19, 2018 in Columbia, SC. The week prior to the conference, the forecasted path of Hurricane Florence appeared to directly impact the Carolina coasts as well as Columbia. Under an abundance of caution, CISA postponed the CCRC. In addition to safety concerns, CISA acknowledged many registered attendees would be called into service during and after the hurricane. In collaboration with the Columbia Metropolitan Convention Center, based on site availability and attendance potential, CISA chose to reschedule on October 29-31, 2018. Forty-four attendees and 34 speakers cancelled their registration due to the reschedule, though 3 presenters gave their presentations remotely and 5 presenters arranged for replacement speakers. However, 32 new attendees registered for the rescheduled conference who had not been registered for the September dates.

## THE CISA PROGRAM EVALUATION

Utilizing the unique opportunity that the CCRC provides to meet with CISA partners, stakeholders, and decision makers, as well as learning about the efforts of our team members and collaborators, CISA hosted three external program reviewers at the 2018 CCRC. Reviewers evaluated CISA work-to-date and will assist in considering project priorities for the remainder of CISA's current grant term (2011-2018). During the CCRC, evaluators met individually with CISA core team members, collaborating investigators, advisory committee members, and research assistants to gain insights into individual projects and needs that CISA fulfills throughout the region.



*Representatives from the Coharie, Lumbee, and Mashpee Wampanoag Tribes spoke during the "Resilience in the Face of Climate Change: When Earth becomes Non-Native" session on Monday, October 29*

## COLLABORATIONS

### American Society of Adaptation Professionals

The [American Society of Adaptation Professionals](#) (ASAP) is a professional society for adaptation and resilience practitioners which connects and supports climate adaptation professionals, while advancing innovation and excellence in the field of climate change adaptation. For the 2018 CCRC, CISA collaborated with ASAP on two fronts.

CISA partnered with ASAP to present the first ever Carolinas [Regional Adaptation Leadership Award](#) (RALA). The RALA, first awarded in California in 2016, recognizes individuals who have distinguished themselves in the climate adaptation field through exceptional leadership. It acknowledges the fact that deliberate, proactive adaptation, preparedness, and resilience-building is a change process, a deviation from business-as-usual, and a courageous act of doing something new and different. At its heart are individuals who make this change happen, sometimes with very few resources. The RALA recognizes distinguished adaptation leaders who approach their work in a strategic, sophisticated, well-informed, inclusive, and effective manner.



*Rachel Jacobson (ASAP) and 2018 Carolinas RALA winner Holly White, RALA Honorable Mention John Fear, and Kirstin Dow (CISA)*

The 2018 Carolinas Regional Adaptation Leadership Award was presented to **Holly White, the Principal Planner for the Town of Nags Head, North Carolina**. Holly established the Town of Nags Head as a model for other communities to emulate in their adaptation efforts. She crafted a vision for a resilient Nags Head by learning about adaptation and

engaging the public. To approach adaptation planning, Holly assembled a team across town departments that included planning, engineering, public works, and septic health. Her leadership has fostered integrated, interdisciplinary resilience. Holly is now sharing lessons learned from Nags Head throughout northeastern North Carolina, initiating efforts to reach across the border with Virginia as well as rural northeastern NC counties. Honorable mentions for the RALA award included **John Fear, the Deputy Director of North Carolina Sea Grant and NC Water Resources Research Institute**, and **Steven Frank, an Associate Professor of Entomology at North Carolina State University**.

An additional collaborative effort between CISA and ASAP focused on the “Accelerating Climate Action through Innovation and Technology” track as part of the conference program. Presentations for this track highlighted cutting-edge, transformative technologies, policies, and financing opportunities, particularly those happening in the Carolinas or with applications in the Carolinas. The goal was to craft sessions that attracted diverse participants from multiple sectors — for example, bringing together innovative producers with end users, or connecting resources with needs of underrepresented communities. The track led the Tuesday, October 30<sup>th</sup> agenda with a plenary panel discussion on “Adaptation Funding, Finance, and Investment” and continued with three successive sessions including topics of Clean Resilience, Data-Driven Climate Innovation, and Innovation Technologies for Flood Resilience.

### Urban Offsets

[Urban Offsets](#) is a Greensboro, NC based organization that helps corporations and higher education institutions invest carbon offsets in the places and relationships that matter to them. This transforms carbon offsets into assets that help fight climate change, strengthen strategic partnerships, and create climate resilient cities. Using a Sustainability Portfolio approach, Urban Offsets evaluates and grades carbon offsets and bundles them with community development programs that sustainably engage nonprofit partners in each city. As corporations and institutions purchase credits, Urban Offsets funds local tree planting and maintenance programs in the nonprofit's local community. Urban Offsets currently operates in 12 U.S. markets and supports more than 10,000 new trees planted in 2017.

Since the 2016 Carolinas Climate Resilience conference, CISA has committed to holding a carbon neutral event. In 2018, CISA partnered with Urban Offsets to reduce the carbon impact of the CCRC. Two Carbon Neutral Sponsors, [Clean Air Carolina](#) and [geothinQ](#), funded the carbon offsets and tree plantings. In addition to trees planted in NC, CISA partnered with the City of Columbia to choose a site in our host city and plant 19 of the purchased trees along a restored greenway.

*City of Columbia Park Rangers planting trees along the Broad River to help make the 2018 Carolinas Climate Resilience Conference a carbon neutral event.*





# The Conference Program

## AN INTERACTIVE CONFERENCE FORMAT

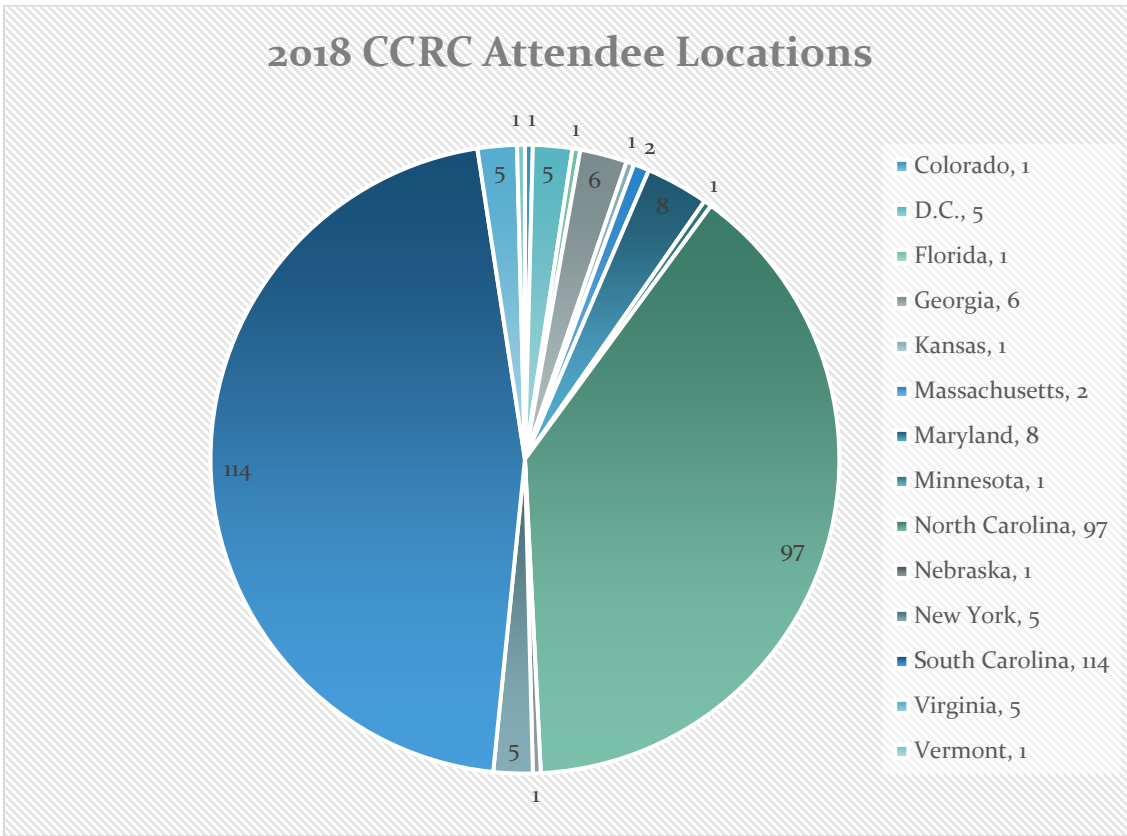
The Carolinas Climate Resilience Conference is designed to create an interactive environment to enhance communications and engagement for attendees. CISA's goal is to create opportunities for discussion about relevant climate-related topics to contribute to the knowledge and capabilities of those in the field. Plenary speakers, sessions, and presentations at the CCRC are designed around alternative formats to allow for this type of interaction. Convened Sessions on the agenda were self-organized by speakers and moderators. The format of these sessions ranged from individual presentations with Q&A afterwards, to panel discussions, to interactive demonstrations of climate resources. Individual presentations were organized into sessions around key climate resilience topics. Opportunities for audience engagement and interaction during these sessions were heightened by various presentation formats. Session presenters were asked to choose one of five [interactive presentation formats](#). These included:

- “Ask the Climatologist”, in which presenters shared information on current climate in the Carolinas, climate variability, and projected future change
- “Climate Adaptation Tools in Action”, in which presenters demonstrated the nuts and bolts of adaptation resources through real-world applications in the Carolinas
- “Connect the Dots”, in which presenters promoted audience participation to provide feedback that could help inform their work
- “Sharing Lessons Learned”, designed to share how actions to address climate variability and change have succeeded and provide recommendations for others engaging in similar efforts
- “What’s Going On?”, in which the audience could learn what organizations and communities are doing to increase climate resilience in the Carolinas

The [poster session](#), held during the Monday evening networking reception, included 13 poster presentations on a variety of climate-related topics.

## CONFERENCE ATTENDEES

The 2018 Carolinas Climate Resilience Conference convened members of federal, state, tribal, and local governments, university researchers, and private sector practitioners to share knowledge of climate resilience related experiences, resources and tools. There were 248 attendees at the conference from thirteen states and the District of Columbia (Figure 1). The majority were from the Carolinas though many other U.S. regions were represented. Rescheduling of the conference due to Hurricane Florence resulted in over 40 attendee cancellations, while over 30 new attendees registered for the rescheduled dates.



*Figure 1: 2018 CCRC Attendee Locations*

Conference planning and publicizing reached diverse sectors to encourage participation across affiliations. University researchers represented the largest affiliation of attendees (22%), while NOAA and other federal agencies were also among the largest representation (22% cumulatively). Tribal attendance increased slightly for the 2018 CCRC (3%) when compared to the 2016 CCRC (1%). The presence of local governments and NGOs also increased in 2018.

A full list of [conference attendees and their affiliations](#) is available on the homepage of the conference website.

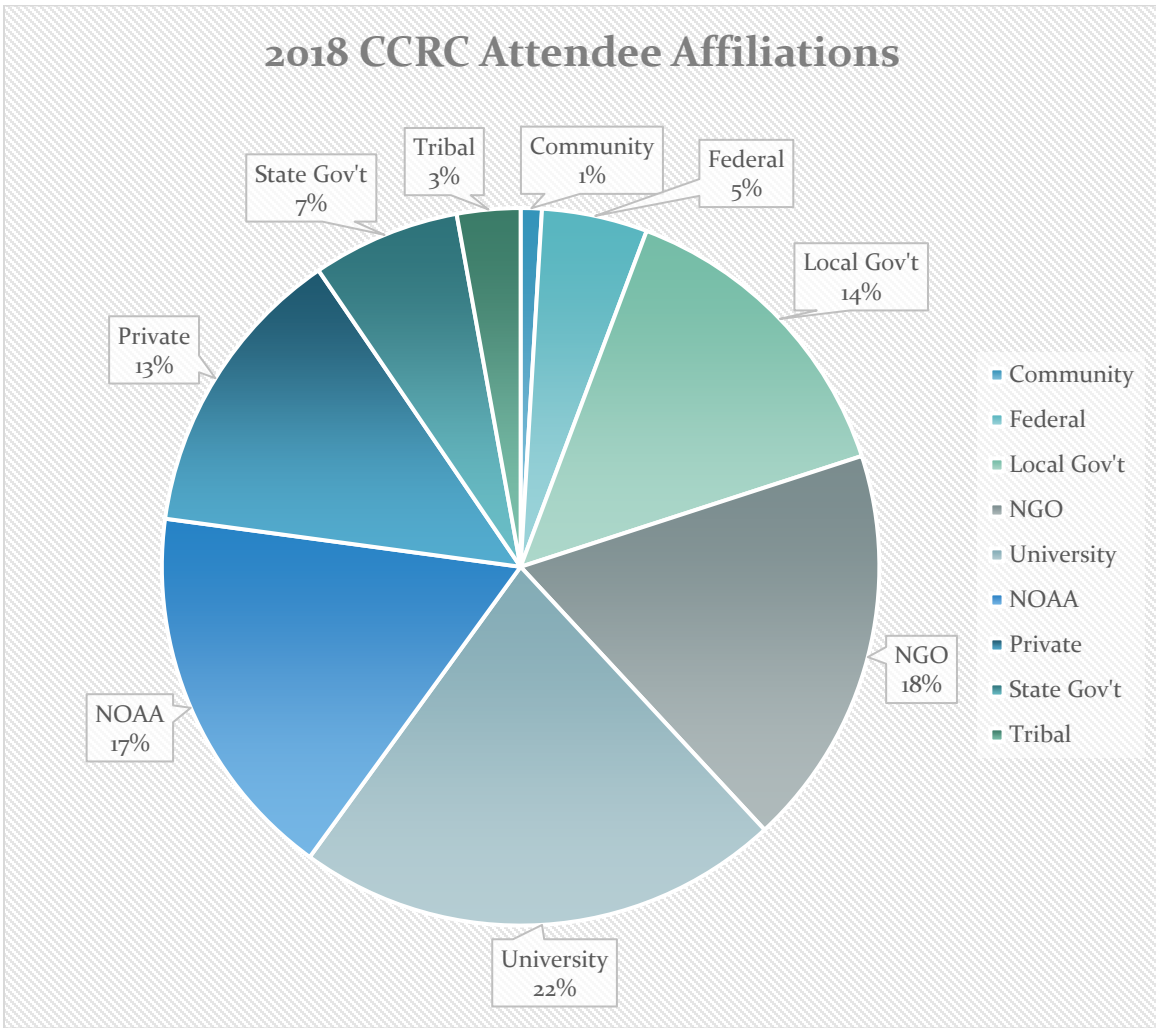


Figure 2: 2018 CCRC Attendee Affiliations

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*“The CCRC is a unique opportunity to connect in-person with other people working in the field. There is no substitute for in-person time with people. Face time makes future correspondence with people easier and comfortable and allows opportunities for brainstorming ways we must work together in the future with other peoples’ programs and projects.”*

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## NETWORKING FOCUS

The conference steering and program committees worked to enhance the networking opportunities provided at the 2018 CCRC. Breaks between sessions and interactive presentation formats were utilized to foster discussion opportunities. A networking reception was held on Monday evening after the first half day of sessions in concurrence with the poster session. Additionally, the American Society of Adaptation Professionals (ASAP) held a Tuesday reception for ASAP members and those interested in joining the association.

## PLENARY SESSIONS

### Rising Waters: Flood Mitigation and Adaptation in the Carolinas

Recent extreme events in the Carolinas have brought flooding concerns to the forefront for decision makers and local stakeholders. Events, such as the October 2015 flood and Hurricanes Florence, Irma and Matthew, have increased the need for opportunities to share lessons learned and potential adaptations to minimize future life and property losses.

The opening plenary for the 2018 Carolinas Climate Resilience Conference hosted a panel which included local, state, and national perspectives on improving resilience to flooding. Tim Troutman, the Charlotte-Mecklenburg Flood Mitigation Program Manager, and Linda Joyner, the Commissioner and Mayor Pro Tem of the Town of Princeville, NC, shared accounts of the efforts of their communities to improve resilience to flooding. Following these local examples, Maria Cox Lamm, South Carolina Flood Mitigation Program Coordinator, and Dr. Robert Hartwig, Director of the Risk and Uncertainty Management Center at the University of South Carolina, shared broader government and private-sector perspectives on flood insurance, response, and mitigation.

### *Local Perspective*

Troutman recounted how multiple flood events in the mid-1990s were a catalyst for adopting a long-term vision to “let the floodplains flood” and focus on getting communities out of harm’s way in the Charlotte-Mecklenburg region. He highlighted a successful acquisition program that buys out and removes homes and businesses in the floodplain with the goal of eventually restoring these areas and transforming them into community recreation spaces. This program is largely made possible by Charlotte-Mecklenburg’s stormwater utility which manages the water run-off from property. By charging property owners for water run-off, the stormwater utility is able to implement a multi-pronged strategy to reduce flood exposure and damage.

Princeville, NC – the first town to be chartered by freed African American slaves following the end of the Civil War – has weathered many floods since its settlement due to its location in the floodplain of the Tar River. After a short video narrating some of this history, Commissioner Joyner discussed the town’s ongoing process of recovery in the aftermath of Hurricane Matthew. Princeville is committed to learning from the past to

ensure that they become more resilient to future floods. One solution has been to annex a 52-acre parcel of land on higher ground into Princeville. This will allow some of the most vulnerable homeowners and community buildings to move out of the floodplain. Other strategies like elevating structures, buyouts, and using sustainable building materials are also being considered. The focus on long-term resilience means that the recovery after Hurricane Florence has been slower compared to the aftermath of Hurricane Floyd when the focus was simply on rebuilding what once existed. Despite these challenges, Joyner shares that the community remains determined to continue the proud legacy of their ancestors.

### *State and National Perspective*

Maria Cox Lamm gave an overview of the role of the Flood Mitigation Program at the SC Department of Natural Resources. This program is responsible for administering the National Flood Insurance Program (NFIP) with the goal to protect both lives as well as property from flood waters. Meeting this goal in a state where an estimated 20% of land is in a 100-yr floodplain comes with challenges. Lamm shared some of these considerations:

- limitations of engineering approaches to flood avoidance,
- the need to balance the negative effect of relocation away from the floodplain on the local tax base,
- and the much slower pace of “recovery done right”.

Following this talk, Dr. Robert Hartwig added his thoughts about the potential role of private insurance in this realm. In particular, he focused on issues that threaten the long-term sustainability of the NFIP. Hartwig believes that improved flood risk assessments and realistic flood insurance pricing can provide strong incentives for individuals and communities to make decisions that reduce their risk of flood damages.

### **Adaptation Funding, Finance and Investment**


With more Carolinas communities looking to participate in climate resilience activities, the question of financing is of increasing concern. On Tuesday, October 30, 2018, Rachel Jacobson, senior program manager for the American Society for Adaptation Professionals (ASAP), hosted the “Adaptation Funding, Finance, and Investment” panel. This plenary featured Ben Cohen of Quantified Ventures, Josh Sawislak of 427, and Clint Shealy of the City of Columbia, SC who each discussed different opportunities to fund infrastructure investments that protect against flood damage. Columbia Water addressed these issues by implementing stormwater fees in 2010 and steadily increasing those fees as they identify projects that will prevent future flooding problems. Shealy noted that City residents have been very accepting and encouraging about paying these fees to fund the necessary investments. Cohen discussed Quantified Ventures’ outcomes-based financing, which ties loan repayment to the performance of an environmental project. Sawislak discussed

broader issues of thinking creatively about adaptation and the role the market has begun to play in assessing climate risk. Rather than focusing on risk, organizations should capitalize on the opportunities available to adapt. He emphasized the need for:

- accurate accounting,
- the importance of allowing voices to be heard through the voting process, and
- effectively communicating with colleagues, friends, and family about the local impacts of climate change.

### The Future is Now: Capitalizing on Opportunities for Climate Resilience

As demonstrated during many presentations at the CCRC, strides are being made, but more can be done to prepare for the challenges that climate change will present. On October 31, 2018, during the closing plenary of the 2018 CCRC, attendees heard from two speakers on what is and can be done now to increase resilience to climate change.

 **Dr. Jessica Whitehead**  
@JCWclimate

Following

Sushma Masemore @NCDEQ gives #climate #resilience practitioners and researchers attending #CCRC2018 an overview of @NC\_Governor Executive Order 80 on mitigation and adaptation in NC.



### North Carolina's Governor Cooper Issues Executive Order to Address Climate Change

On October 29, 2018, Governor Roy Cooper signed an executive order which calls for agencies to integrate climate change mitigation into state programs, creates a new interagency council to address the issue, increases energy and water conservation, and encourages the use of zero-emission vehicles. Sushma Masemore, the Deputy Assistant Secretary for Environment and Air Quality Planning Chief for the North Carolina Department of Environmental Quality, provided a brief on the executive order during the closing plenary. As of the publishing of this report, the newly established North Carolina

Climate Change Interagency Council is planning its first convening to begin the work necessary to implement the actions called out in the executive order.

### Former City of Charleston Mayor Joe Riley Continues His Work for Climate Resilience

Joseph Riley served as Mayor of Charleston for 40 years, from 1975 to 2016. He led a city government with an impressive record of innovation in public safety, housing, arts and culture, children's issues, and economic revitalization and development. During his term, he increased Charleston's resilience through initiatives to prevent flooding and plan for sea level rise. In his keynote address, "The Future Is Now: Capitalizing on Opportunities for Pre-Disaster Mitigation in the Carolinas", he spoke about the importance of partnerships and working together as a society to create change. The Carolinas have seen

billions of dollars in damage from hurricanes, droughts, and fires that are all expected to increase in severity with the progression of climate change. Mayor Riley compared climate change to war by saying we should “gather up the courage and discipline to achieve progress [...] with the same sense of duty as we would if there was an enemy attacking our border.”

Mayor Riley outlined two steps that need to be taken to make the Carolinas more resilient to climate change. The first is to push for reform of the National Flood Insurance Program, arguing that the program should make communities more resilient through long-term planning and investment. The required disclosure of flood risk when selling properties and plans to discourage the rebuilding of recurrent loss properties should be included in an updated policy.

The second step is to explore smarter investments before disasters hit. “In doing so,” he explained, “we will save lives and prevent most of the damage.” Mayor Riley highlighted a bipartisan solution that is currently working its way through Congress that would create a loan fund for state and local governments to finance projects to protect from flooding and severe weather.

Mayor Riley emphasized that, while the dollar amount necessary to protect our country from climate change is large, each project has a human face. “It is about the citizens,” he concluded, “their quality of life and their sense of security.”

## CONCURRENT SESSIONS

The conference program encapsulated a wide variety of topics in order to provide the greatest benefit to the interdisciplinary audience. Concurrent sessions included both convened sessions and individual presentations. Major themes of concurrent sessions included:

- Accelerating climate action through innovation and technology
- Community engagement
- Creating climate adaptation networks
- Effectively communicating about climate
- Inclusive climate adaptation
- Public health impacts of climate variability and change
- Resilience and adaptation in action
- Water resources management

The 2018 CCRC [agenda](#) and [presentations](#) are available on the conference website. Conference survey respondents indicated their overwhelming satisfaction with the diversity of topics and sessions offered. More details about the conference evaluation and survey responses follows in the next section.

## Conference Survey Results

At the conclusion of the conference, a survey was sent to all attendees to request feedback about their experiences at the CCRC. The survey assessed the benefits participants received from attending the conference, what the conference was effective in achieving, and needs for additional climate information and resources. Forty-one percent of attendees responded to the survey (n = 101).

### VALUE IN ATTENDING THE CAROLINAS CLIMATE RESILIENCE CONFERENCE

Ninety-eight percent of survey respondents indicated that the conference was worth or more than worth their investment of time and expense. The following reasons were frequently cited as being of particular value:

- The opportunity to network with other attendees
- Seeing examples of how organizations of different types can work together
- Learning about current work in this field to take back to their own job

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*“The CCRC is now a dependable, predictable event. The CISA network is very embedded across many areas – much like the glue that helps facilitate and allow for collaborations that would not otherwise happen.”*

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### NETWORK ENGAGEMENT

Survey participants were given the opportunity to provide an open-ended response regarding the value they derive from interactions with networks like the one convened at the CCRC. Most answers followed these themes:

- The diversity of knowledgeable contributors helps participants identify experts on different topics within the network
- Learning how other organizations of the same type are preparing for and addressing the same issues – and finding opportunities to collaborate, where possible
- Bringing scientists and decision makers together, allowing decision makers to learn about current research and scientists to learn how to communicate this information to decision makers.

Participants also agreed that the opportunity to meet one another face-to-face is invaluable, whether they are meeting for the first time, the first time in-person, or for the



tenth time. Below are several examples of open-ended responses that indicate what this conference uniquely provides to participants.

<i>“The value of the interactions is more qualitative in that, for me, it is energizing to know that others think similarly on these types of issues.”</i>
<i>“It is the only event which puts academics, managers, and communities in one place to share experiences and provide advice and assistance.”</i>
<i>“It allows opportunity to glean from the wisdom of seasoned advocates as well as create relationships and allies to be able to join forces to be more effective in our efforts towards environmental justice, etc.”</i>
<i>“The interdisciplinary aspect is essential. Government, land use planners, engineers, geography, water quality, air, and social scientists converge to discuss a common topic.”</i>
<i>“Keeps me up to date on latest research, helps us coordinate with efforts of other groups and foster partnerships to work on overlap areas going forward.”</i>

Table 1: Sample responses to conference survey question about the value of interacting with networks like that at the CCRC



*More time for networking and discussion is a consistent request from conference attendees*

## ACHIEVING CONFERENCE GOALS AND OBJECTIVES

Participants were asked to indicate whether the conference was effective in meeting its intended goals. Responses indicate that participants generally agreed that the conference succeeded in doing so.

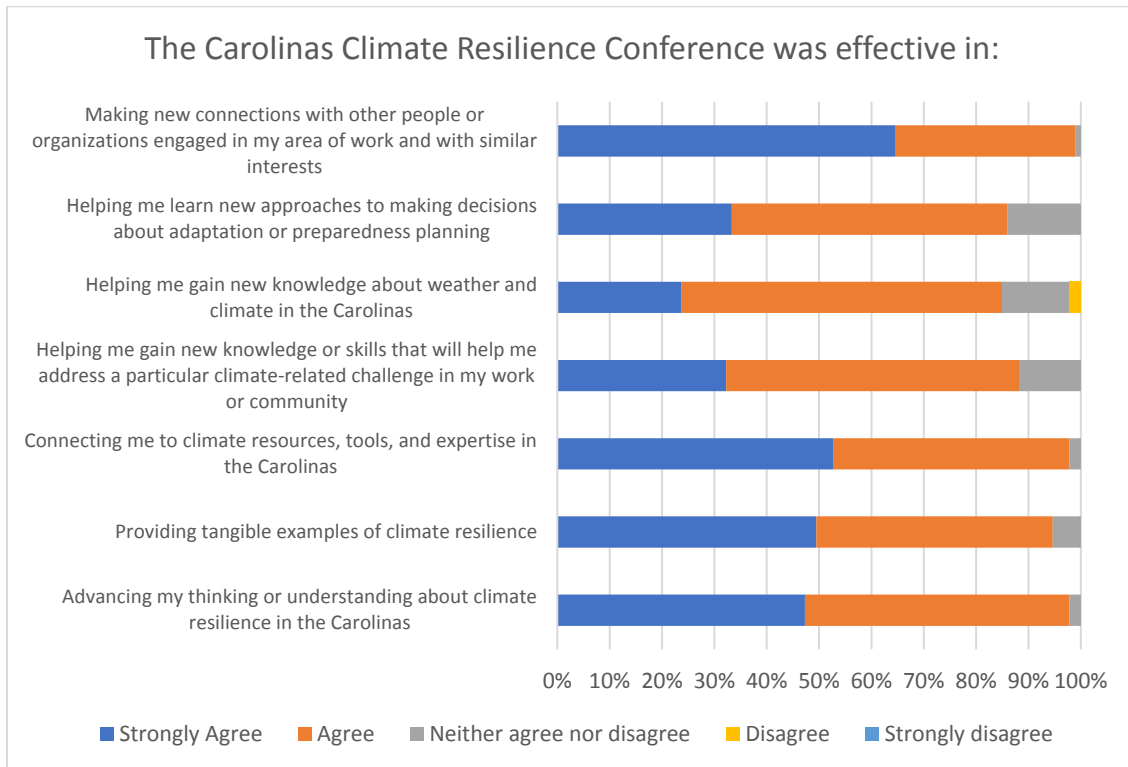


Figure 3: Conference attendees' perceptions of how well the CCRC achieved its goals

### Praise for the 2018 Carolinas Climate Resilience Conference

When asked what they would change or keep for the next conference, participants consistently praised the non-standard presentation formats, which allowed for more interaction between presenters and conference attendees. Participants also praised the smaller size of the conference, which allowed for more networking. There were many comments on how well everything came together with the rescheduled conference.

## MOST VALUABLE TAKEAWAYS

Participants were asked to provide an open-ended response to the question, “What is the most valuable thing you learned during the conference?” The majority of responses fell into the following categories:

- What has been accomplished already and where further research is needed
- Specific examples of how private organizations and governmental entities are responding to climate change
- Availability of resources for their job – tools, strategies for communicating climate change, how to incorporate climate change into planning documents, networking/collaboration opportunities

There was a clear sense of pride in the resiliency work being conducted in the Carolinas.

<i>“...we are making good progress...the effort we are jointly putting in is starting to make a big difference in the Carolinas.”</i>
<i>“More information about cities – Nags Head and Charleston, especially – that are taking clear adaptation actions to increase their resiliency.”</i>
<i>“...there are many more people and resources available than I realized and there is a willingness among those working on climate resilience to work collaboratively with all who are concerned.”</i>
<i>“A lot of communities are still really looking for a starting point for implementing their plans because they have so many constraints. Already knew that, but several speakers really brought that home.”</i>
<i>“...how resilience and adaptation planning can be “worked” into other guiding documents such as comprehensive plans, long-term land use decisions, hazard planning and mitigation. There are more ways to incorporate such activities than developing a stand-alone Resilience and Adaptation Plan”</i>
<i>“The breadth of work being done in the Carolinas. Also proud to see the work being done to address the social vulnerable.”</i>

Table 2: Sample responses to conference survey question asking about the most valuable thing attendees took away from the conference

## BEYOND THE CCRC: NEXT STEPS FOR CONFERENCE ATTENDEES

Participants were asked what they will do or change as a result of the conference and whether they have any specific plans for follow-up actions. This question was intended to further assess what information was most useful to participants. Respondents indicated that they plan to:

- Share contact information and examples of resilience activities with their coworkers
- Connect or collaborate with people they met at the conference
- Strategize direction of future work or research
- Apply what they learned to improve public communications and outreach about climate change
- Apply tools and information to practices in their community

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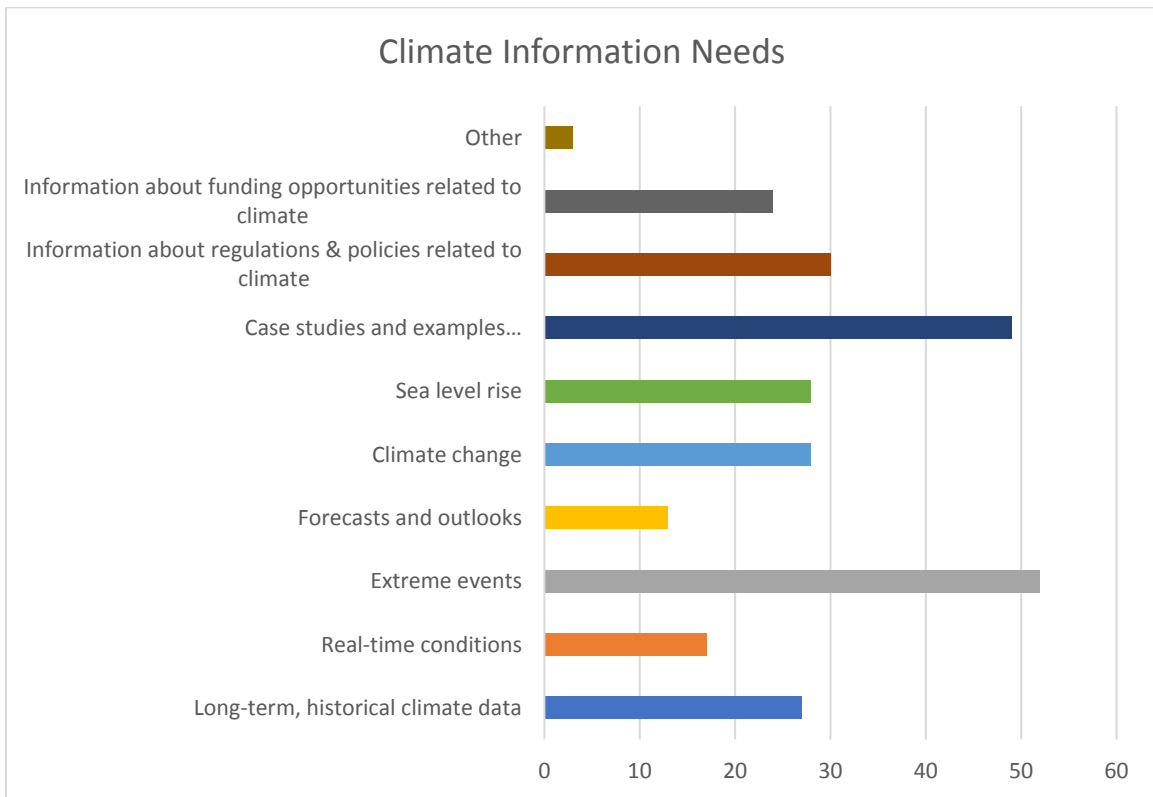
*“...will revise approach for resilience/adaptation planning assistance to incorporate successful approaches used elsewhere.”*

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### *Climate Information and Resource Needs*

When asked what types of climate information were most relevant for their organization, the top two selections were “extreme events (e.g. heat waves, freezing events, droughts, floods, tropical storms, hurricanes)” and “case studies and examples of what other communities and organizations are doing to build climate resilience”.

Participants indicated that they prefer to receive climate-related news and information through several different formats. The top selection was via websites. Emails/e-newsletters and ½ day to 1-day meetings or workshops came in almost equally as the next preferred methods to receive climate information. This information is very useful for the CISA team as we assess our niche role in the Carolinas and how to best serve the needs of our stakeholders.



## Looking Ahead

To continue to provide support for a network of climate adaptation practitioners in the Carolinas, CISA will host the fourth Carolinas Climate Resilience Conference in 2020. Lessons learned from the previous conference and assessment of regional climate information needs will be used to inform the conference program. CISA’s other projects and activities will also be informed by conference participant feedback.

CISA is also committed to support the [Southeast and Caribbean Climate Community of Practice](#) (CCoP). The CCoP provides a forum for sharing lessons learned and best practices related to climate communication and adaptation. The CCoP also provides networking opportunities for its members. CISA will work in partnership with the Southeast Regional Sea Grant programs, and NOAA’s Southeast and Caribbean Regional Team (SECART), to host in-person meetings of this group in 2019 to expand the network throughout the region.

CISA looks forward to all of these interactions with stakeholders and decision makers throughout the Carolinas and beyond to work towards our overarching goal of increasing adaptive capacity in the region.

## Appendix

### STEERING COMMITTEE MEMBERS

<b>Frank Alsheimer</b>	<b>NOAA National Weather Service, Columbia, SC</b>
<b>Mary Pat Baldauf</b>	City of Columbia, SC
<b>Carol Boggs</b>	University of South Carolina
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