

Carolinas Climate Connection

Carolinas Integrated Sciences & Assessments, a NOAA RISA Team
Integrating Climate Science and Decision Making in the Carolinas



carolinas climate resilience conference

Don't Miss Out!
Registration for the
2018 Carolinas Climate Resilience
Conference is open!

More information available here.

Newsletter Contents

- 1 Getting to Know Your RISA
Featured Team Member: Leah Moore
- 2 Year in Review
Highlights from the 2017 - 2018 CISA Annual Report
- 3 New CISA Video
Helping Coastal Communities make Climate-Smart Investments
- 3 CISA and ASAP Join Forces at the 2018 CCRC
- 4 2018 CCRC Program Highlights and Sponsorships

Getting to Know Your RISA

Featured Team Member: Leah Moore

Leah Moore is a CISA Undergraduate Research Assistant with a double major in Environmental Science and Physical Geography. She moved to Columbia, SC from small-town Eaton, OH to pursue her dual degree from the University of South Carolina. After obtaining her Bachelor's, she plans to pursue a graduate degree in oceanography or meteorology. Because of her interests and career goals, Leah was awarded the NOAA Ernest F. Hollings scholarship this year, a scholarship that provides each recipient with funding for their junior and senior years of college, and provides them with a 10 week paid research internship with a NOAA mentor during the summer before their senior year.



Leah loves exploring new places—here she is on the second floor of a double-decker coffee shop in Asheville, NC.

In addition to working for CISA, Leah works for the South Carolina State Climatology Office as a Climate Research Intern. She loves both CISA and the State Climate Office, and both opportunities have solidified her certainty that she's pursuing the right career path. Past school, CISA, and the State Climate Office, Leah loves to serve as Co-Director of Training for USC's Capstone Scholars mentor program, Capstone Connectors. Capstone Connectors focuses on making sure every scholar adjusts well to university life. She also loves attending her church, Midtown Fellowship, and serving as a host on Sunday mornings. In her spare time, Leah enjoys trips to the beach, Soda City Farmer's Market, and eating good food with close friends.

Upcoming Events

Carolinas Climate Resilience Conference

September 17-19, 2018
Columbia, SC

South Carolina Water Resources Conference

October 17-18, 2018
Columbia, SC

National Adaptation Forum

April 23 - 25, 2019
Madison, WI

Carolinas Climate Listserv

Subscribe to the Carolinas Climate Listserv to learn about the latest climate research and information, upcoming events, funding opportunities, and other relevant news for the Carolinas.



USC Department of Geography
Callcott Building
709 Bull Street
Columbia, SC 29208
www.cisa.sc.edu
(803) 777-6875
cisa@sc.edu
@CarolinasRISA
www.facebook.com/usccisa



RISA
Regional Integrated Sciences
and Assessments



UNIVERSITY OF
SOUTH CAROLINA

The University of South Carolina is an equal opportunity institution.

Carolinas Climate Connection

Carolinas Integrated Sciences & Assessments

Back to Page 1

Year in Review: Highlights from CISA's 2017 -2018 Annual Report

By: Leah Moore

- We are investigating new ways to relay heat-health information through web bulb globe temperature and a web-based application to show individual risk levels.
- We are collaborating with Healthy Native North Carolinians to develop Climate-Health Community Profiles specific to Native American communities in North Carolina.
- A beta version of the new Hazardous Events Risk Assessment (HERA) tool is posted to the Convergence website. HERA provides decision support through data visualizations; county-level data and information on extreme events including probabilities and recurrence intervals; comparisons across counties to state averages; and information on event-specific impacts.
- CISA graduate student Ellie Davis is working with farmers in Hyde County, NC to research coastal soil salinization caused by sea level rise, which is affecting agriculture in the region.
- Through our long-term partnerships with NC Sea Grant, 2 new small project partnerships were supported over the last year.
 - » The data and photographs produced from the NC King Tides citizen science water-level monitoring effort will be used by the scientific, regulatory, and management communities, as well as the public, to gain a better understanding of what drives water levels in NC as well as to stimulate thinking about rising seas.
 - » Work in the Albemarle-Pamlico Peninsula engaged low-lying, rural, minority communities that are highly vulnerable to coastal flooding and sea level rise impacts, to better understand perceptions of adaptive capacity and barriers to flood management.
- In partnership with the SC State Climatology Office, the SC Water Resources Center, and the SC Emergency Management Division, we led the first-ever drought and water shortage exercise for the state of South Carolina.
- Three workshops were hosted in Charleston, Columbia, and Greenville as part of the South Carolina Climate Connections workshop series, "Weathering the Storm: Impacts of Extremes on SC's Built and Natural Environment." The workshops focused on the recent extremes that have impacted the state, what state agencies have learned from these experiences, and how they have incorporated lessons learned into new ways of planning for and mitigating future impacts.

[Read the Full Report Here](#)

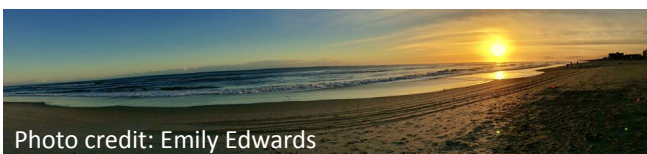


Photo credit: Emily Edwards

Key Project Research Findings

- As part of our work with the Southeast Conservation on Adaptation Strategy (SECAS) project, we examined the State Wildlife Action Plans to learn more about how states are incorporating climate adaptation strategies. Interstate and regional collaboration for vulnerability assessment will be an important component for the success of these planning efforts moving forward.
- The CoCoRaHS condition monitoring project is gaining traction with drought decision makers. The reports provided by these citizen scientists provides useful information, not available through other sources, and has been used to inform state and national drought designations.
- As development of the Coastal Salinity Index (CSI) continues, we calculated the index for additional locations to assess how well the CSI matches up with other drought indices and to determine the best time scale for using the CSI. The analysis showed that salinity response to drought is often slower than other indicators. Results will be used to develop guidance for potential users of the CSI, including State Climate Offices, drought committees, and coastal resource managers.

CISA BY THE NUMBERS

June 2017 - May 2018



CISA By The Numbers infographic summarizes CISA's accomplishments during the last annual report period.

Carolinas Climate Connection

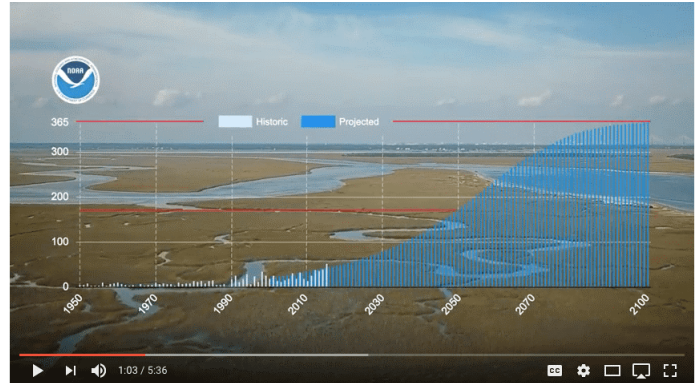
Carolinas Integrated Sciences & Assessments

[Back to Page 1](#)

New CISA Video: Helping Coastal Communities Make Climate-Smart Investments

The impacts of sea level rise along South Carolina's coastlines are becoming more and more obvious, where rising tides are creeping into neighborhoods and business districts on sunny days. The threats of extreme events such as hurricanes and storm surge also continue to increase with booming populations and development. There are also many rich historical and cultural treasures to preserve in these communities.

This video shares the story of how CISA is helping the Cities of Charleston and Folly Beach proactively consider how to increase their resilience to stresses from coastal flooding and sea level rise. Sarah Watson, the Coastal Climate and Resilience Specialist jointly funded by CISA and the S.C. Sea Grant Consortium, provides technical and organizational assistance to these communities to help them consider risks, identify viable solutions, and educate community members.



As the number of days of nuisance flooding per year continues to rise, CISA is helping communities in the SC Lowcountry develop adaptation strategies to reduce the impacts. Learn more about our work in this new video.

CISA and ASAP Join Forces at the 2018 Carolinas Climate Resilience Conference

By: Kerry Guiseppe

AMERICAN SOCIETY OF ADAPTATION PROFESSIONALS

Introducing the Carolinas Regional Adaptation Leadership Award

CISA is excited to partner with the American Society of Adaptation Professionals (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. The 2018 Carolinas RALA will be awarded at the 2018 Carolinas Climate Resilience Conference on Tuesday, September 18 during the morning plenary. Thank you to the selection committee for their diligence in selecting a winner from an incredibly dedicated pool of candidates.

Accelerating Climate Action through Innovation and Technology Track

Organized in collaboration with the ASAP, the 2018 CCRC program includes an exciting new track that highlights cutting-edge, transformative technologies, policies, and financing opportunities, particularly those happening in the Carolinas or with applications in the Carolinas. This track complements field-wide climate adaptation efforts to accelerate the pace and effectiveness of technological, policy, and finance innovation, scaling, transfer, and use, in order to inspire adaptation action that move beyond the status quo. Sessions in the track will be held on Tuesday, September 18, following a kick-off plenary focused on Adaptation Funding, Finance, and Investment.

Don't Forget! Submit Your Abstracts to the National Adaptation Forum by August 3, 2018.

The 4th National Adaptation Forum will take place April 23 - 25, 2019 in Madison, WI at the Monona Terrace Community and Convention Center. The Forum gathers the diverse adaptation community to foster knowledge exchange, innovation and mutual support for a better tomorrow. This event includes opportunities for professional development through formal trainings, facilitated practitioner presentations, and in-person discussions which afford attendees the opportunity to learn, share, and network to be climate-informed. The 2019 Forum will continue to engage practitioners from all levels of government, tribal members, non-governmental organizations, natural resource managers, conservation biologists, health professionals, equity leaders, community groups, businesses, academia, planners, architects, and anyone working to prepare for climate change.



Proposals are now being accepted for all session types that reflect the best thinking in the adaptation field. **Deadline for proposal submission is August 3, 2018.**

Carolinas Climate Connection

Carolinas Integrated Sciences & Assessments

Back to Page 1

What to Expect: 2018 Carolinas Resilience Conference Program Highlights

By: *Kerry Guiseppe*

On September 17-19, 2018, CISA will host the [Carolinas Climate Resilience Conference \(CCRC\)](#) at the Columbia Convention Center in Columbia, SC. Following the successful 2014 and 2016 convenings, this year's CCRC will continue to focus on providing a platform to share experience and knowledge of opportunities, tools, resources, local initiatives, and expertise. Although research findings will be shared, this conference is intended to foster real-world solutions to climate adaptation in the Carolinas.

We are excited to share new details about the sessions, speakers, panel discussions and more for the upcoming conference.

Plenary Speakers to Discuss Incentives to Act, Innovations in Adaptation, and Success Stories

The opening plenary on Monday, September 17th, will feature **Dr. Ryan Emanuel**, an Associate Professor and University Faculty Scholar in the Department of Forestry and Environmental Resources at North Carolina State University. Ryan is an environmental scientist whose research focuses mainly on two-way interactions between hydrological and ecological processes in natural and human-altered environments. A member of the Lumbee Tribe, Emanuel works to broaden participation of American Indians and other underrepresented groups in the environmental sciences. In recent years, this work has expanded from outreach and education among young people to partnerships with tribal governments and inter-tribal organizations that address issues related to environmental quality, environmental justice, climate change, and related public policies affecting indigenous peoples.

On Tuesday, September 18th in collaboration with ASAP, we will launch the "[Accelerating Climate Action through Innovation and Technology](#)" track with a panel discussion on opportunities for financing climate adaptation for flood resilience. Panel speakers will include Carolyn DuPont and Paul Robinson. **Carolyn DuPont** is the Director of environmental transactions at **Quantified Ventures**, an impact investing advisory firm that simplifies the process of financing innovative and evidence-based environmental, health, and educational outcomes. **Paul Robinson** is the Executive Director of **RISE**, a new nonprofit organization whose goals is to encourage private sector innovation that enhances resilience of coastal communities and help them adapt to the increasing risks and impacts associated with sea level rise and recurrent flooding. **Clint Shealy**, Assistant City Manager for the **City of Columbia, SC** will discuss Columbia's approach to flood mitigation and how the options presented by Quantified Ventures and RISA, might (or might not) work here.

On Wednesday September 19th, **Joseph P. Riley, the former Mayor of Charleston, SC** (1975-2016), current professor of American Government and Public Policy at The Citadel, and Executive in Residence at the Joseph P. Riley, Jr. Center for Livable Communities at the College of Charleston will give the keynote speech at the CCRC. Riley is well known for numerous accomplishments during his term as mayor including his work to implement flood-management to better prepare the City for natural disasters, such as smart urban design, improvements to stormwater systems, and a strategy to address sea level rise. Riley is currently a Pew Distinguished Fellow where he advises on policy measures including disaster mitigation and natural infrastructure efforts to protect people and property from extreme weather events.



Joe Riley, former Mayor of Charleston (1975 - 2016), will be the keynote speaker during the 2018 CCRC closing plenary.

Program Agenda

We are extremely pleased to announce there will be 40 sessions at the conference this year, encompassing over 70 presentations. The [2018 Agenda](#) is currently available online.

Session topics include:

- Agriculture, Conservation, and Natural Resources Management
- Effective Climate Communications
- Interdisciplinary Partnerships in Resilience
- Public Health Vulnerabilities and Climate
- Resilient Populations including Native Americans, Faith leaders, and the Gullah/Geechee
- Sea Level Rise and Flood Resilience
- Trends and Projections in Climate Extremes



Participants at the Carolinas Climate Resilience Conference have ample time for networking and discussion, to share their own experiences and learn from others working to solve our most pressing climate-related issues in the Carolinas.

Carolinas Climate Connection

Carolinas Integrated Sciences & Assessments

Back to Page 1

A Big Thank You to Our 2018 CCRC Sponsors!

Interested in Being a Sponsor or Exhibitor? [Learn More Here.](#)

Platinum Level Sponsors:



Carbon Neutral Level Sponsors:



Gold Level Sponsors:

AMERICAN SOCIETY OF
ADAPTATION PROFESSIONALS



a xylem brand



Silver Level Sponsors:



Carbon Neutral Conference



It's no surprise that conference events produce a lot of carbon – from the emissions produced by attendees traveling into town to the energy expended to air condition dozens of hotel rooms. The CCRC has enlisted the help of Urban Offsets to offset the total carbon emissions from the three-day event. The costs of these offsets have been sponsored through the Carbon Neutral Sponsorships provided by Clean Air Carolina and geothinq. As part of our carbon neutral activities, during the CCRC there will be an opportunity for conference attendees to partake in a tree planting event organized in collaboration with the City of Columbia.