CAROLINAS CLIMATE CONNECTION

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SCDRP AND SECOORA TO HOST VIRTUAL WINTER MEETING

The Southeast & Caribbean Disaster Resilience Partnership will host a Winter Meeting on January 26 – 28, 2021. It will be a free, virtual event and registration is open now. The meeting will centre around the theme of resilience with sessions on climate adaptation, capacity-building, and emerging priorities. Highlighting our ongoing business disruption research, CISA will be alongside several others on a panel session exploring extreme weather and disaster recovery from a business perspective. Explore additional session topics and register for the meeting **here**.

CISA FEATURED RESEARCHER

MEET EMILY GVINO

Emily Gvino grew up in rural northeastern Ohio. She attended the University of Virginia in Charlottesville, Virginia, double majoring in Spanish and Urban and Environmental Planning. Emily worked at a healthcare consulting tech firm in Washington, D.C. for about three years and served as a pro bono consultant; during this time, she realized that she wanted to re-focus her career at the intersection of public health and urban planning. In the fall of 2018, she enrolled in graduate school at the University of North Carolina, Chapel Hill pursuing a Master of Public Health and a Master of City and Regional Planning. Her career goals are to utilize my interdisciplinary experience in public health and urban planning to create healthier, more livable, and more resilient communities that combat issues of environmental injustice and social inequity.

Emily began working with CISA in May 2020 with Dr. Ferdouz Cochran to deliver a public health needs assessment survey to public health practitioners in the southeastern United States. The information from this survey will be utilized for the expansion of the Hazardous Extremes Risk Assessment (HERA) tool. The survey results will also be interwoven with her Master's thesis for the Department of City and Regional Planning, focusing on a better framework for public health professionals and planners to collaborate on addressing the health impacts of extreme heat.

COCORAHS CONDITION MONITORING FINAL PROJECT UPDATE

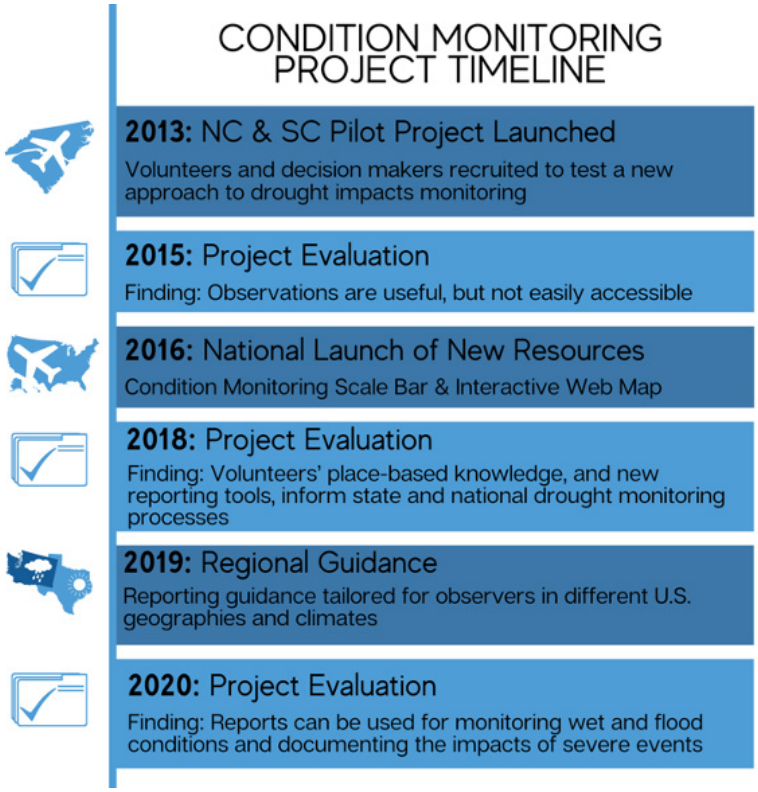
The CISA team launched the Citizen Science Condition Monitoring program in the Carolinas in September 2013 as part of the National Integrated Drought Information System (NIDIS) Coastal Carolinas Drought Early Warning System. The project was designed to test a new method of drought impacts monitoring and reporting. By submitting regular reports describing how recent precipitation may, or may not, have impacted their local community and environment, volunteers create a baseline for comparison of change over time and help to document impacts at different drought stages.

In collaboration with the Community Collaborative Rain, Hail & Snow (CoCoRaHS) network the pilot evolved into a national program. Condition Monitoring reports are now used to inform drought designations not only in the Carolinas, but for the entire U.S. Drought Monitor map.

We are pleased to share our final deliverables from the project including two story maps and observer guidance to ensure the success of CoCoRaHS volunteers. Additional information and resources are also available on the **CoCoRaHS website** and **CISA Condition Monitoring project webpage**.

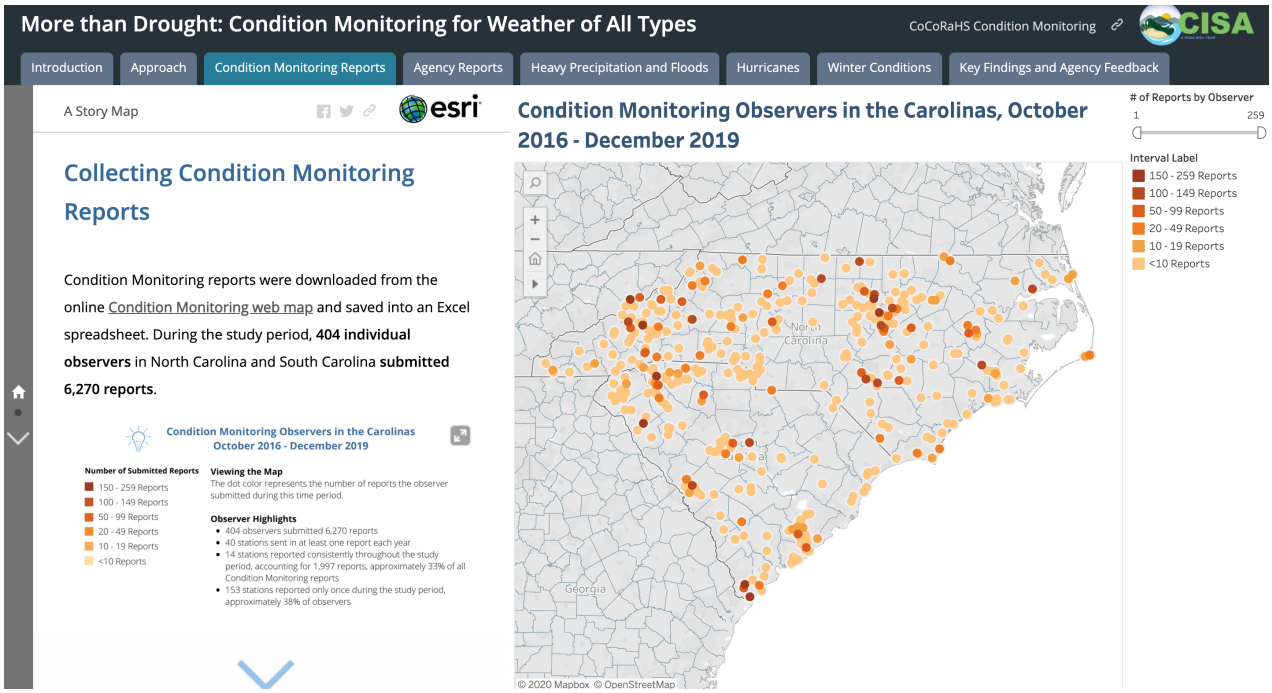
CoCoRaHS Condition Monitoring Story Map

The **"CoCoRaHS Condition Monitoring" story map** describes the Condition Monitoring program and how it contributes to drought impacts monitoring and reporting throughout the U.S. The story map shows the creation of the Condition Monitoring program, from when it started as a trial program in the Carolinas to where it stands today as a source of drought impacts information nationally. Viewers will also learn more about how reports are used by organizations such as the National Weather Service, state climate offices, and U.S. Drought Monitor map authors.



More Than Drought: Condition Monitoring for Weather of All Types

The **"More Than Drought: Condition Monitoring for Weather of All Types" story map** summarizes the CISA team's exploration into new ways of using Condition Monitoring reports. We analyzed Condition Monitoring reports in comparison to agency reports from NWS, the NC and SC State Climate Offices, and the Southeast Regional Climate Center to determine similarities in the content, scale, location, and times of reports. The analysis helped us to consider how our volunteers' observations might help to further inform agency reports for other types of weather and climate events, in addition to drought.



Helpful Reporting Hints Observer Guidance

The **"Helpful Reporting Hints for CoCoRaHS Observers"** was developed to support volunteers in providing relevant observations through three different CoCoRaHS report types: significant weather reports, daily comments with precipitation measurements, and Condition Monitoring reports. The guidance is intended to further improve the types of information volunteers provide in the most useful report format for agencies.

Regional Guidance Documents

The **Condition Monitoring Regional Guidance Documents** were created to support CoCoRaHS volunteers throughout the different climates and geographies in the U.S. Individual guidance documents were created for seven regions in the U.S., including a Spanish language version for Puerto Rico.

Citizen Science Condition Monitoring Final Report

This **report** summarizes the major components of our efforts over the last two years, including outreach and support for volunteers and a research project to explore the content and potential applications for Condition Monitoring reports beyond the original intent of drought impacts monitoring.

PREPARING FOR THE CAROLINAS CLIMATE RESILIENCE CONFERENCE

The CISA team and our planning committee partners have been hard at work preparing for the **2021 Carolinas Climate Resilience Conference**. Our request for presentation and session topics recently closed, and we look forward to reviewing them over the next month. We will share our draft program in February. The CCRC community submitted over 120 ideas and we are excited for attendees to both share and learn from one another in pursuit of our goal to grow adaptive capacity in the region. To complement these ideas, committees have been hard at work organizing a plenary session for each day of the conference focused on the following topics:

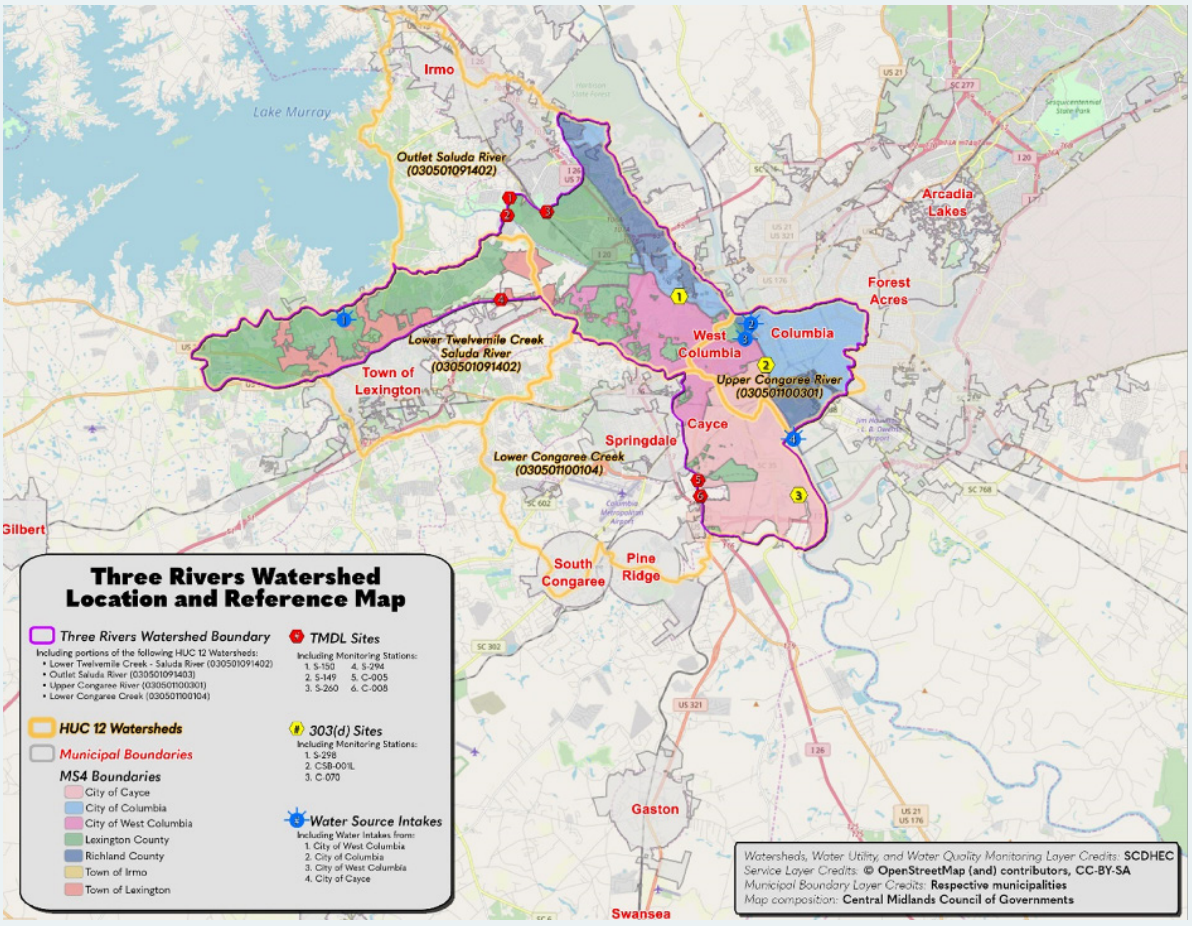
- **Living in Interesting Times: The Challenges We Face and What Gives Us Hope**
- **State and Local Level Risk Assessment and Resilience Planning**
- **Climate Communications through the Arts**

We look forward to welcoming you to a collaborative discussion of climate resilience in the Carolinas next year. Taking place May 10 – 12, the conference will be a hybrid event to allow for full participation either remotely or in-person in Durham, NC. The virtual conference platform will include options to interact with in-person attendees, speakers, exhibitors, and sponsors. Look out for information to register in the new year, and keep up to date with the evolving program and registration openings via our **conference website**.

Special thanks to our sponsors, whose generous support helps us put on a collaborative event that builds climate resiliency while remaining carbon neutral.

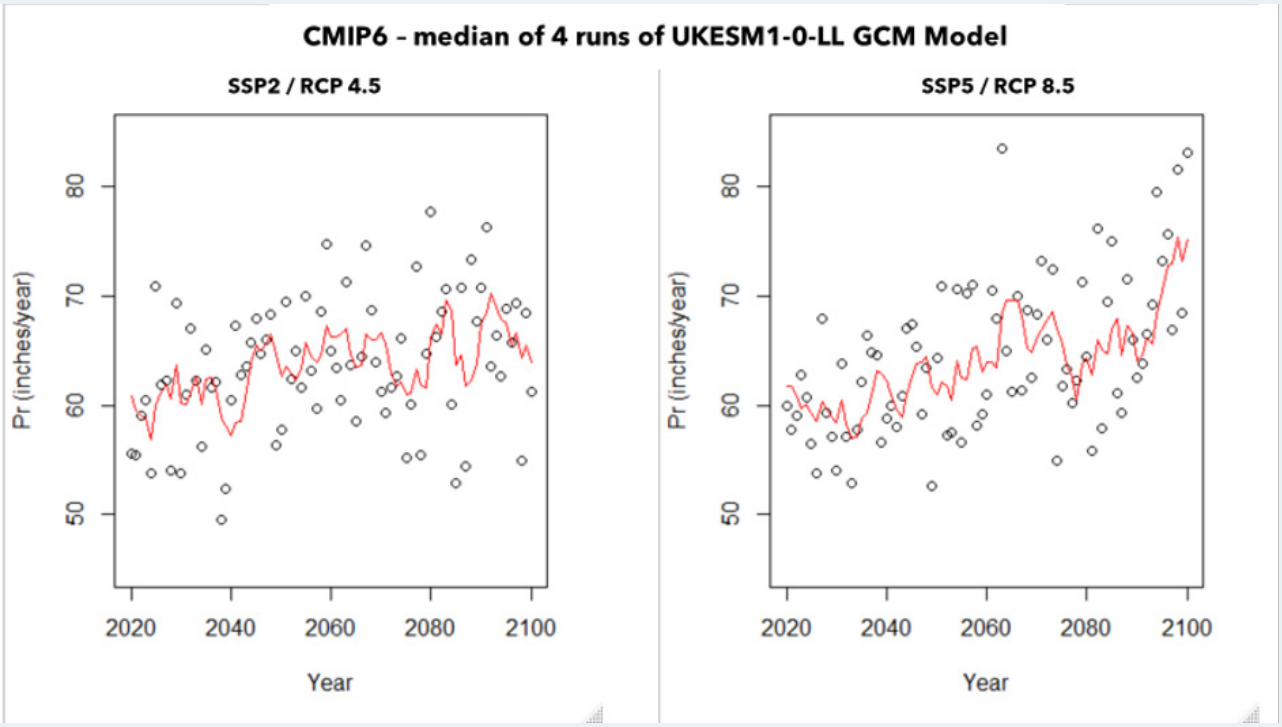
INCORPORATING CLIMATE INTO A LOCAL WATERSHED PLAN

CISA has partnered with the Central Midlands Council of Governments (CMCOG) to help integrate climate change information in local planning. The CMCOG is developing a watershed-based plan to cover the Three Rivers Watershed, a confluence of the Broad, Saluda and Congaree Rivers near downtown Columbia, SC. The inclusion of climate change was spurred by new guidance from the South Carolina Department of Environmental Health & Control on including climate considerations into watershed planning across the state.



A map of the Three Rivers Watershed produced by the Central Midlands Council of Governments

CISA is working alongside the project consultants at McCormick Taylor to incorporate climate as a core component throughout the plan. Our initial work is centred around distilling outputs from global climate models so that future shifts in annual precipitation are reflected in the model behind the plan's recommendations. CISA is also working to ensure the plan contributes to building adaptive capacity in the watershed by ensuring the plan considers a changing climate when recommending best management practices. The project is ongoing through the Spring and we look forward to sharing our journey facilitating adaptation in an area that is home to several CISA team members.



A figure showing precipitation data from one climate model for the watershed area. CISA is investigating multiple models to report how annual precipitation could change in future scenarios.