In 2016 alone, the United States experienced 15 billion-dollar weather and climate disasters, which resulted in 138 fatalities and cost $46 billion.

For more than 20 years, the NOAA Regional Integrated Sciences and Assessments (RISA) Program has been producing actionable climate research, helping to reduce economic damages that Americans face every year due to droughts, floods, forest fires, vector-borne diseases, and a host of other climate and extreme weather impacts. The network of ten RISA teams across the country work hand-in-hand with stakeholders and decision makers in regions across the United States to ensure that research and information is responsive to their needs.

The sustained regional presence of RISA enables teams to effectively support responses to extreme events. In 2012, CCRUN’s expertise in coastal inundation informed New York City planning efforts after Hurricane Sandy, WWA researchers aided Colorado after 2013’s record flooding, and RISA teams in the Western United States have supported the region during its recent intense drought.

Research produced by the RISA program has educated, informed, and closely interacted with thousands of decision makers across the nation, helping them build the expertise to better plan and prepare for climate variability and extreme weather events. RISA products are making a difference today, helping communities and individuals improve resilience, enhance growth, and reduce costs in a variety of sectors. RISA is supported by the National Oceanic and Atmospheric Administration’s (NOAA) Climate Program Office.
HOW IS RISA HELPING COMMUNITIES NEAR ME?

Established in 2003, the Carolinas Integrated Sciences & Assessments (CISA) program is an interdisciplinary team working to integrate decision-relevant climate science with water, health, and coastal issues in the Carolinas. Since its inception, CISA has worked to help communities in the Carolinas build their capacity to respond and adapt to weather- and climate-related stresses. CISA partners with decision makers to characterize climate risks, vulnerabilities, and potential impacts and develop decision-relevant tools and analyses. Ongoing projects focus on addressing challenges associated with heat-related illness, droughts, extreme rainfall events, and sea level rise. CISA also conducts a climate outreach program that includes the biannual Carolinas Climate Resilience Conference and sector-specific workshops.

HEAT HEALTH VULNERABILITY IN THE CAROLINAS

CISA conducts applied research to answer stakeholders’ questions about climate variability, extremes, and other climate-related impacts. CISA’s research to improve the understanding of heat-related illness was used in the development of the Heat Health Vulnerability Tool, which predicts emergency department visits for heat-related illness based on historical data. The tool is housed on the new Convergence website, a climate and health information portal for the Carolinas, which is being developed in collaboration with health decision makers and stakeholders in the region.

“Awareness of the importance of engaging the community at this phase of tool development is increasing, and I thought the session truly empowered those in attendance... As a climate adaptation facilitator, I’m excited to refer back to these tools to effectively communicate with our partners, using sound science-based tools.”

▪ Alba Polonkey,
  Sustainable Sandhills, Fayetteville, NC