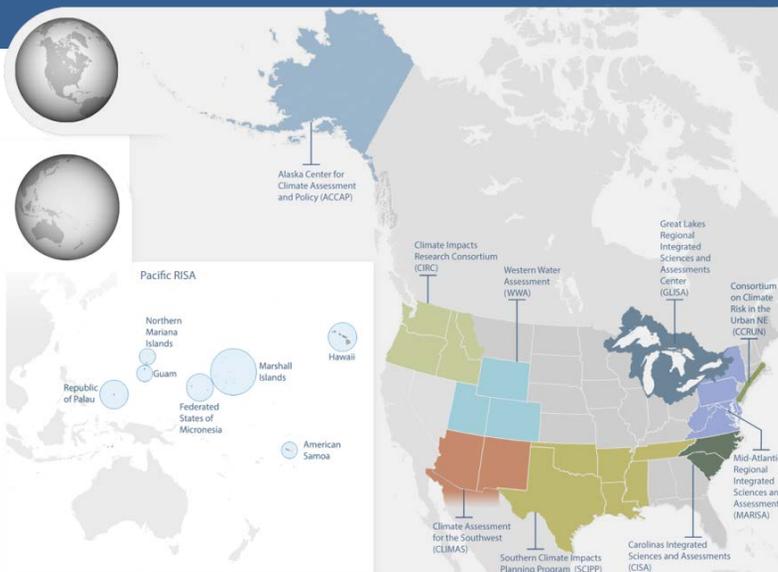


REGIONAL INTEGRATED SCIENCES & ASSESSMENTS (RISA)

Helping regions and communities better prepare and plan for hazards and extreme events for more than 20 years.

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 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 and ongoing drought.



Photo Courtesy: WWA

Research produced by the RISA program has educated and informed thousands of decision makers across the United States, 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.



Photo Courtesy: Pacific RISA

Updated: April 2017

Learn more: CPO.NOAA.gov/RISA



HOW IS RISA HELPING COMMUNITIES NEAR ME?

The **Climate Assessment for the Southwest (CLIMAS)** RISA engages in collaborative research with partners and stakeholders to develop solutions to weather and climate challenges across the Southwest. CLIMAS works with scientists, decision makers, resource managers, and educators, to integrate science into decision making to mitigate risk and promote resilience in the social and ecological systems of the U.S. Southwest.

“CLIMAS has been a great partner and advocate for helping build climate resilience in the Southwest.”

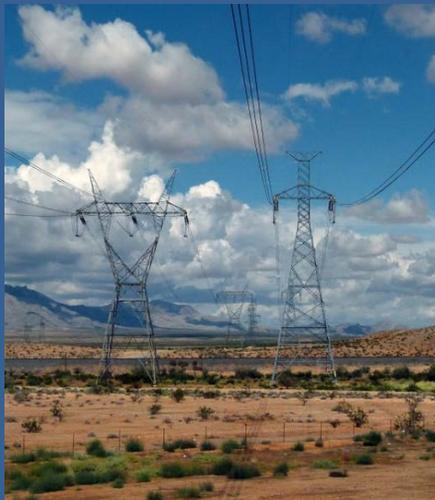
- *Charlie Ester*
Manager, Surface Water Resources,
Salt River Project

CLIMATE ASSESSMENT FOR THE SOUTHWEST (CLIMAS)



HELPING WATER AND ENERGY SECTORS ADAPT

Electric power contracts tend to be long-term and inflexible, but persistent drought and climate change affect energy and water management operations, especially in the arid and semi-arid regions of the U.S. Southwest.



The CLIMAS RISA worked with energy utilities and water supply organizations in the Southwest, alerting them to the impacts of climate change on peak electricity and water demand during the region's hot, dry summer. Using data from 1987-2008, the research team investigated the influence of drought on the market price of water and produced several tools and guidebooks aimed to enhance water supply reliability and help agencies manage high water demand and competing water needs. They also worked with electricity utilities and found that peak season electricity loads are highly sensitive to moderate increases in summer temperature.

This research helped develop new techniques for predicting and adapting to climate impacts in urban water supply, environmental water supply, and electric utility sectors. CLIMAS is ready to help electric utilities prepare to meet an increased demand during the peak warm seasons and to support water providers as they prepare for increased year-to-year and decadal variability in water supplies.