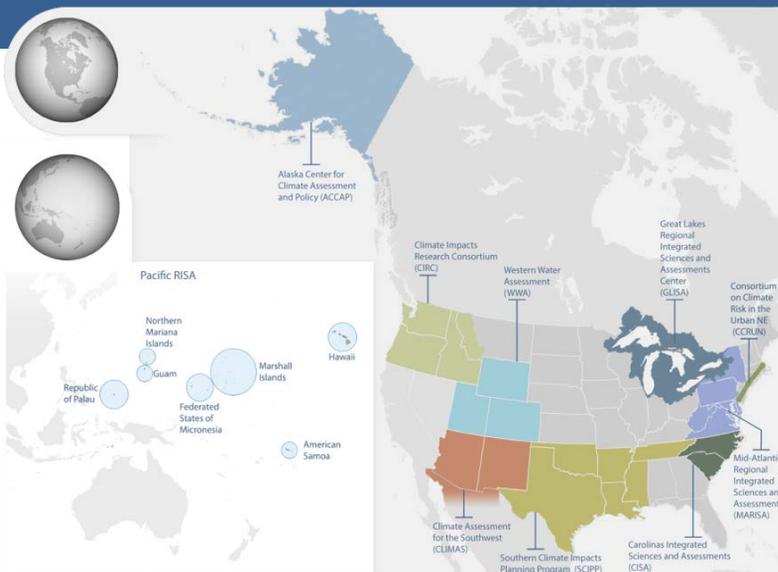


# REGIONAL INTEGRATED SCIENCES & ASSESSMENTS (RISA)

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 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.



Photo Courtesy: WWA

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.



Photo Courtesy: Pacific RISA

Updated: April 2017

Learn more: [CPO.NOAA.gov/RISA](http://CPO.NOAA.gov/RISA)



# HOW IS RISA HELPING COMMUNITIES NEAR ME?

The **Pacific Northwest Climate Impacts Research Consortium (CIRC)** supports communities, policy makers, and resource managers in Oregon, Washington, Idaho, and western Montana as they work to address weather and climate risks. From farmers bracing for drought, ocean-side homeowners troubled by rising sea levels, and American Indians concerned about rising temperatures' effects on salmon and other sacred cultural resources, everyone in the Pacific Northwest is connected to climate.

**CIRC's aids Pacific Northwest communities as they develop strategies to stay resilient under changing weather and climate conditions.**

## PACIFIC NORTHWEST CLIMATE IMPACTS RESEARCH CONSORTIUM (CIRC)



## PLANNING A FUTURE IN IDAHO'S BIG WOOD BASIN

Idaho's Big Wood River Basin is more than 3,000 square miles—an area larger than the state of Delaware. Like much of the West, the Big Wood is facing potential water scarcities as warming temperatures lead to less snowpack.



The changing hydrology in Big Wood affects everyone from skiers to farmers. To understand how climate could impact life in the basin, researchers from the CIRC RISA conducted a five-year, stakeholder-driven effort to explore how climate impacts and other drivers of change—including population growth and changes in land use—could affect local water resources. CIRC's team worked with local community members, engaging everyone from local farmers and businesses to policymakers and conservation groups. By combining this local knowledge and climate information into computer models, the result was the Big Wood Basin Alternative Future Project.

The idea behind the project was simple: Give local stakeholders a glimpse into the many possible future paths they might take as their climate changes, and allow them to explore the policy and resource management paths that are right for them. The researchers learned that there were a number of actions—from policy actions to changes in farming practices—that Big Wood community members could take to make their basin more resilient in the face of change.