

Interagency Collaboration: Three Federal Climate Networks Partner to Enhance Regional Adaptation and Resilience



Communities across the country are severely impacted by a changing climate, and climate extremes are expected to continue.

With continued growth in emissions at historic rates, annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century—more than the current gross domestic product (GDP) of many U.S. states.

On a regional scale, decision makers and communities’ demand for actionable scientific information on adaptation and resilience is outpacing supply. Three federal climate science-to-action networks collaborate closely to ensure relevant scientific information and adaptive management strategies are available to address stakeholder-identified needs: the U.S. Department of Agriculture’s (USDA) Climate Hubs, the U.S. Department of the Interior’s (DOI) Climate Adaptation Science Centers (CASCs), and the National Oceanic and Atmospheric Administration’s (NOAA) Regional Integrated Sciences and Assessment Program (RISA).



These networks have a shared goal of building national resilience to climate change by offering long-term and engaged support with localized scientific expertise and tailored solutions. All three networks rely on partnerships within their regions, which include scientists, practitioners, and local decision makers, to identify regional vulnerabilities, scientific needs and data, and methods for mitigating impacts and adapting to changing conditions. This growing interagency coordination supports the expansion of the networks’ reach in serving communities, resource managers, federal, state and local governments, and tribes. It allows more stakeholders to know where to go for comprehensive climate information and expertise. Coordination and collaboration across these networks at the national and regional level helps leaders identify common needs across sectors, develop best practices for information sharing, and leverage resources to create stakeholder-driven solutions.

Examples of Collaboration between the RISAs, CASCs and Climate Hubs:

- At “Three Centers Retreats,” RISA’s Western Water Assessment, the North Central CASC, and the Northern Plains Climate Hub meet twice a year to share regional knowledge, collaborate on projects, and coordinate initiatives across programs.
- The Northwest Climate Hub, the Alaska CASC, and the Alaska RISA—Alaska Center for Climate Assessment and Policy (AACAP) have been working together to address drought in their state. Since early 2018, Southeast Alaska has experienced abnormally dry conditions, affecting hydroelectric power generation, drinking water, streams, fish, and fish hatcheries. The three entities have collaborated to refine drought categories for the region, increase awareness of the U.S. Drought Monitor, strengthen adaptation strategies, and assess drought information.
- Nationally, the RISAs, CASCs, and Climate Hubs have invested in wildfire research and engagement efforts across regions to assess the relationship between climate and fire, communicate indigenous knowledge around fire, and evaluate fire’s impact on a variety of human, ecological, and agricultural systems.



This portfolio of work supports a wide variety of decision makers, including land managers, public health officials, and emergency responders. This work is essential to constructing effective wildfire mitigation and adaptation plans across the country.

CONTACT INFORMATION FOR INTERAGENCY COLLABORATORS

RISA: oar.cpo.risa@noaa.gov

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Climate Hubs: climatehubs@usda.gov

USDA Climate Hubs

Climate Hubs develop and deliver science-based, region-specific information and technologies to agricultural and natural resource managers leveraging USDA investments and regional partner networks to enable climate-informed decision making, reduce agricultural risk, and build resilience to climate change. The Climate Hubs ensure the Nation’s farmers, ranchers, and forest managers have useful and usable information about climate change and its impacts when making strategic and operational management decisions.

DOI CASCs

CASCs identify the effects of climate change on fish, wildlife, and their habitats and conduct adaptation science to provide natural and cultural resource managers with the information and tools needed to support adaptation planning. The CASCs operate as partnerships between U.S. Geological Survey and universities, Tribal Nations, and non-governmental organizations located throughout the country, leveraging diverse expertise to tackle the most pertinent climate issues within each CASC region.

NOAA RISA

RISA builds sustained relationships between decision makers and researchers that support collaborative and equitable adaptation to climate risks. Regionally-based interdisciplinary research teams partner with public and private entities to identify climate relevant scientific needs and inform innovative solutions that promote social welfare, equity, and community resilience across a diverse range of sectors and landscapes.