



# Climate Program Office Review

May 24-26, 2022

Pre-Recorded Presentation

Supporting Review Activity Area 2: Climate and Societal Interactions

Regional Integrated Sciences and Assessments (RISA) Program

Presenters: Chelsea Combest-Friedman and Caitlin Simpson

CPO RISA Team includes Ariela Zycherman, Sean Bath and Genie Bey

# Additional Information

For more information on the breadth of the program and the RISA approach: [RISA Story Map](#)

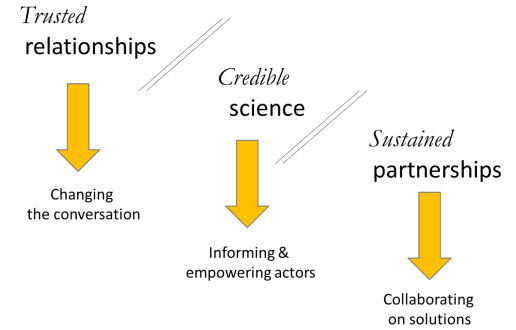
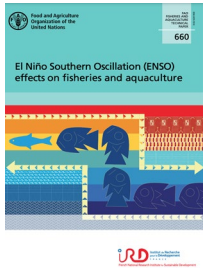
For more information on currently funded RISA teams please see: <https://cpo.noaa.gov/RISA/RISA-Teams>

For an additional reference, see:  
Combest-Friedman, C., C. Nierenberg, C. Simpson 2019. “Building a Learning Network: Reflections from the RISA Program” Current Opinion in Environmental Sustainability. 39: 160-166

# RISA Program Evolution: A Collaborative Network of Shared Learning



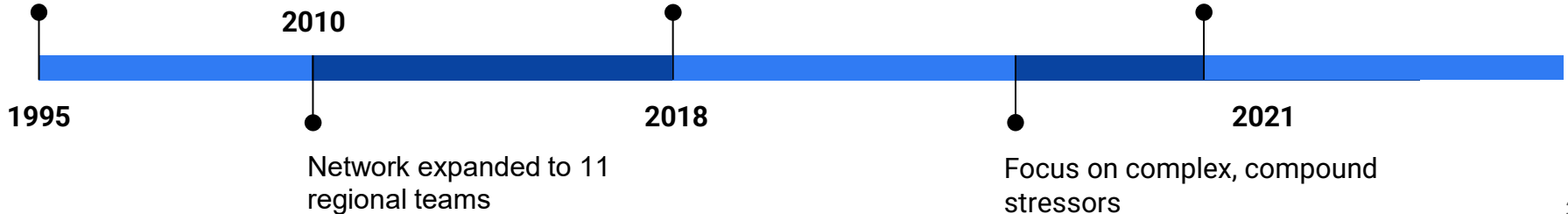
***Project foci and stakeholder engagement determined through on-the-ground analysis of needs in the specific region***



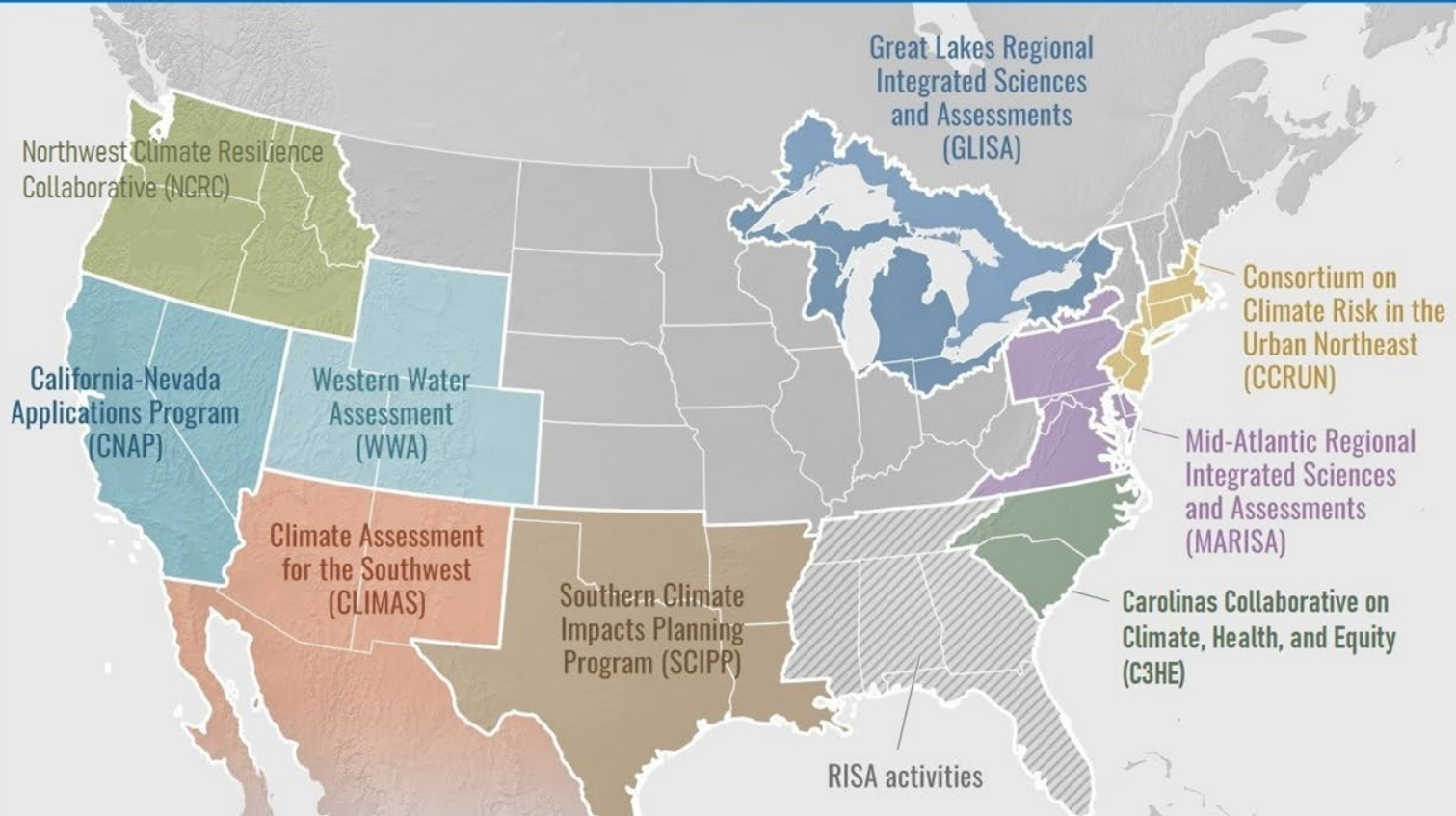
Established 1995 pilot regional assessment in the Pacific Northwest

Visioning a robust national RISA network

Emphasis on frontline communities and equity



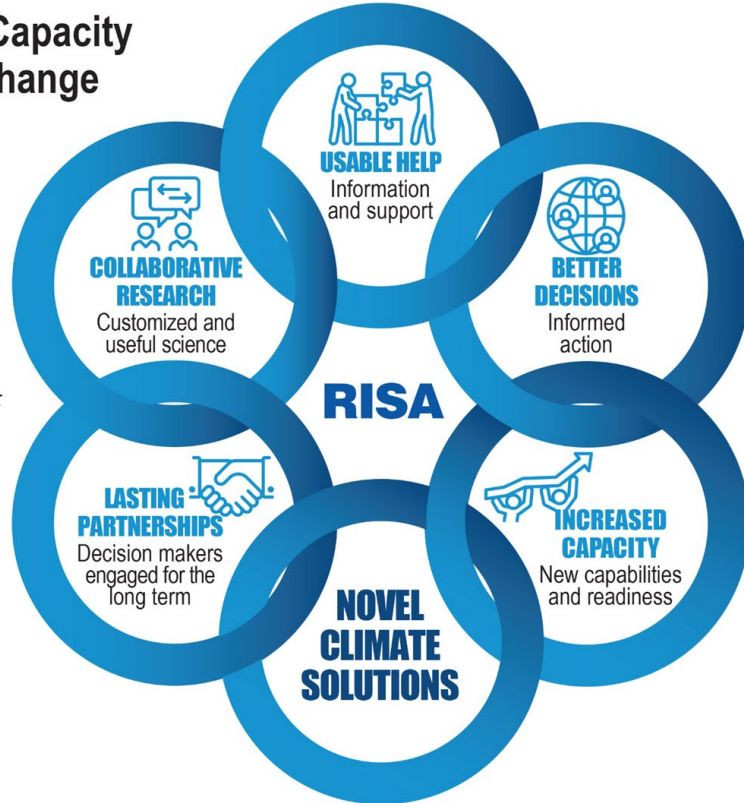
# NOAA's Regional Integrated Sciences and Assessments (RISA)



<b>31</b>	<b>400+</b>	<b>350+</b>	<b>450+</b>
U.S. states served	Communities	State & local partners	Private sector partners

## Expanding Regional Capacity to Adapt to Climate Change

*RISA's Regional Teams build sustained relationships between decision makers and researchers that support collaborative and equitable adaptation to climate risks*



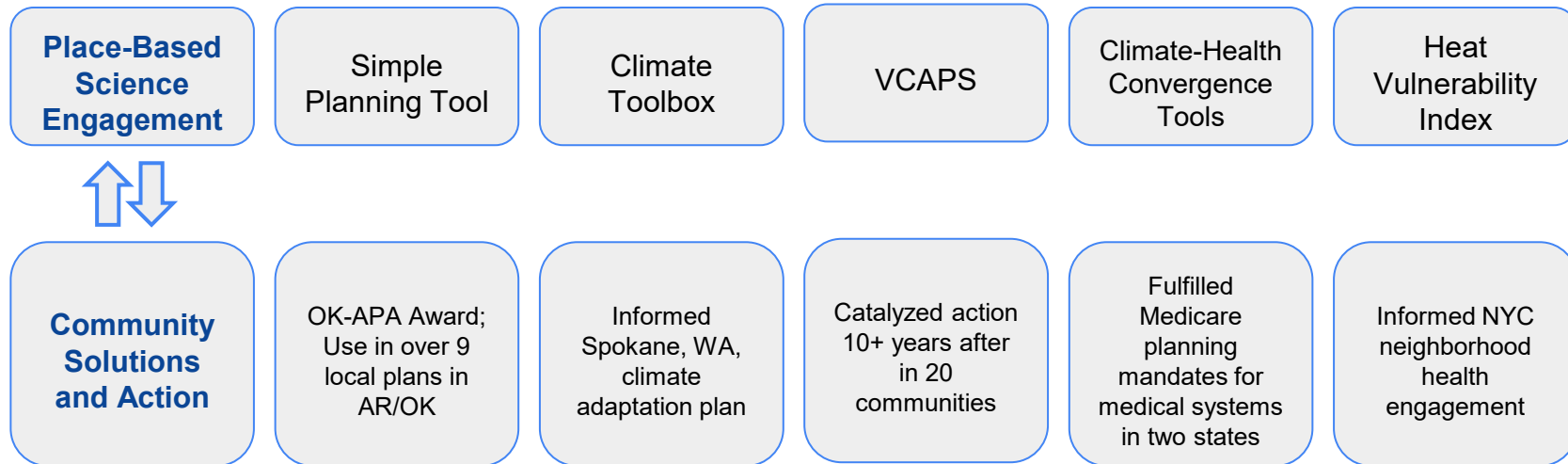
"A central principle at NOAA is that we commit to long-term engagement with the people who need those resources for making decisions. We call this hand-in-hand process "co-production" and it allows equity -- a priority for NOAA -- to remain at the center of decisions. We learned this principle through our Regional Integrated Sciences and Assessments Program (RISA)."

- Dr. Spinrad, NOAA Administrator

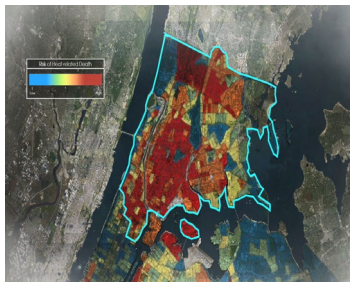
## 1037 cross-disciplinary publications

Foundational science impact in:

- Knowledge co-production
- Climate service evaluation



# Key Accomplishments (FY17-21) – Quality



Urban Northeast RISA co-created a social vulnerability index for heat with the NYC Department of Health to help the city identify their most heat-vulnerable neighborhoods.

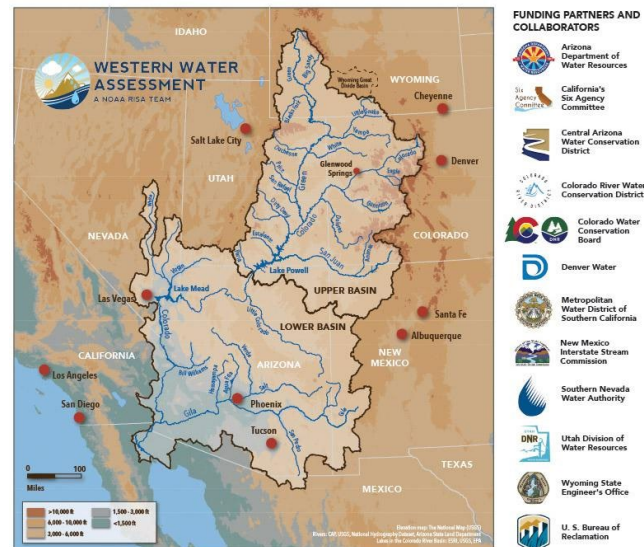
The index was used by the Mayor's office to prioritize community outreach in the \$106 million Cool Neighborhoods program.



“The relationships between scientists, stakeholders, and Federal agencies that made this Report possible are critical to [the Bureau of] Reclamation’s ongoing commitment to using sound science in its management of the Colorado River.”

— Terry Fulp, Regional Director, Interior Region 8: Lower Colorado Basin,

## Bureau of Reclamation



<https://www.colorado.edu/publications/reports/CRBReport/>



# Key Accomplishments (FY17-21) – Relevance



## Breakthrough Research

Heat & Global  
Aviation Impact

## Community Engagement

Climate migration  
in the Pacific

## Vulnerability Studies

Extreme Impacts to  
Infrastructure in Texas

## Climate Planning

Adaptive Ranching  
in Idaho

# 22

Resource  
management  
plans

# 31

Water  
infrastructure  
plans

# 28

Climate  
assessments

# 56

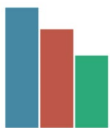
Hazard  
mitigation /  
risk plans

# Annually\*

\* Based on 2019 count



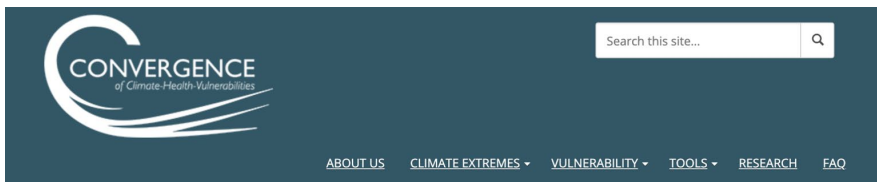
# Key Accomplishments (FY17-21) – Quality and Relevance



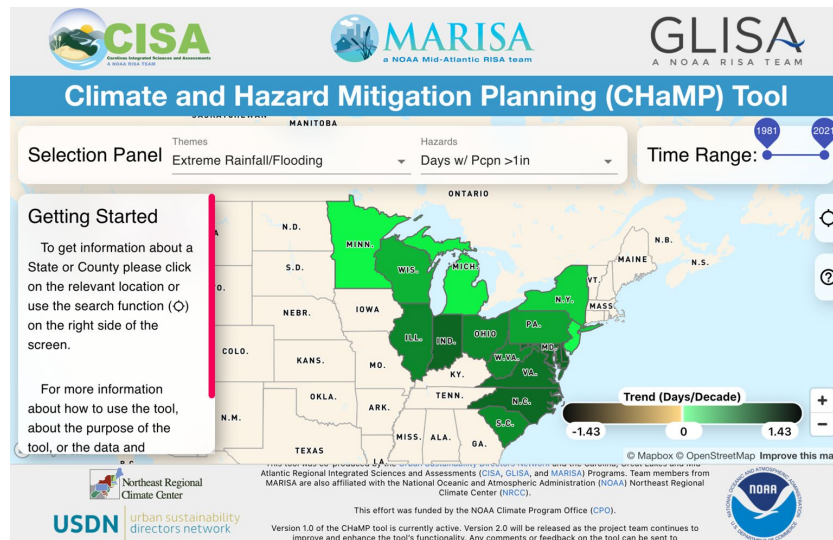
## ASAP Private Sector Climate Service Providers Academy



The ASAP Private Sector Climate Service Providers Academy, an online course hosted by American Society of Adaptation Professionals in partnership with [Adaptation International](#), [Great Lakes Integrated Sciences and Assessments](#), [Climate Assessment for the Southwest](#), and [Carolinas Integrated Sciences and Assessments](#) to help businesses succeed in the rapidly evolving climate services marketplace.



The [Climate and Hazard Mitigation Planning \(CHaMP\)](#) tool (below), co-produced by the [Urban Sustainability Directors Network](#) and the [Carolina, Great Lakes and Mid-Atlantic Regional Integrated Sciences and Assessments \(CISA, GLISA, and MARISA\)](#) Programs and the [Northeast Regional Climate Center \(NRCC\)](#).



[Convergence](#) (left) represents a collaboration to identify and address the impact of extreme weather and climate events on communities in the Carolinas, and is the product of community engagement and the support of the [Carolinas Integrated Sciences and Assessments \(CISA\)](#) and the [Southeast Regional Climate Center \(SERCC\)](#).



# Key Accomplishments (FY17-21) – Relevance

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**Water Utilities' 2017 [Letter](#) urging Congress to reject proposed budget cuts**

*“RISA program research is vital to our members, who work to protect the nation’s water supplies and plan, develop, and deliver high-quality drinking water.”*

***2021 Congress “directs NOAA to expand the geographic coverage of the RISA program with a long-term goal of providing comprehensive decision support services and tools to local and regional decision makers in all States and territories”***

# Key Accomplishments (FY17-21) – Relevance



Working together to generate impact & value to communities

## 1. Flood resilience

Direct savings & co-benefits \$4m in reduced flood insurance costs in SC

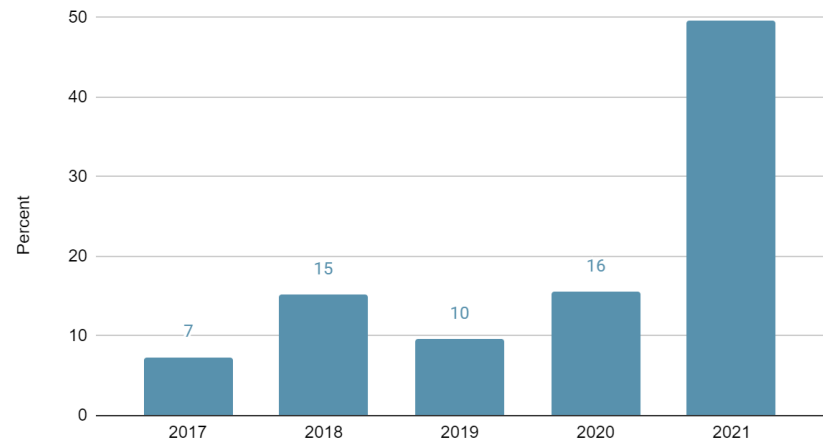
Revealing asset vulnerability \$1.3B in Charleston, SC property at risk of inundation

Supporting \$80-100m City of Charleston sea wall

## 2. Informing human health risks

\$27m per year in hospital costs due to heat

Percent of Justice & Equity Projects



**FEDERAL PARTNERS (300+)\*:** EPA, OAR (Sea Grant, CPO, CIs), DOI, NWS (local field offices, Climate Services Division), NESDIS (Regional Climate Centers and Regional Climate Services Directors), USDA, NOS/OCM

**STATE & LOCAL PARTNERS (900+)\*:** Local government - urban & rural, planners, States, resource managers, communities, non-profit organizations, emergency managers, underserved communities, resource users, Tribes, engineers, for-profit corporations

# Key Accomplishments (FY17-21) - Performance



## Managing a Thriving Network

### Engage

58 network meetings

Added:

- Annual orientation
- Office hours
- Communities of practice

### Learn

9 Final Five-year Reports  
55 Annual Reports

Updated & streamlined reporting  
Shared folder with learning resources

### Innovate

Competed 11 regions and multiple cross-regional, topical, and planning projects

Updated & streamlined Funding Opportunities

## Effective Implementation

### Build adaptive capacity

\$46,291,635 in research & engagement implemented  
~500 adaptation plans, policies, activities supported

### Support frontline communities

Increased projects centering justice & equity by 233%  
(36 to 84)

### Grow the network

Maintained & strengthened 11 regions serving 31 states & 400+ communities annually

Gained\*: US Caribbean & Central Midwest regions

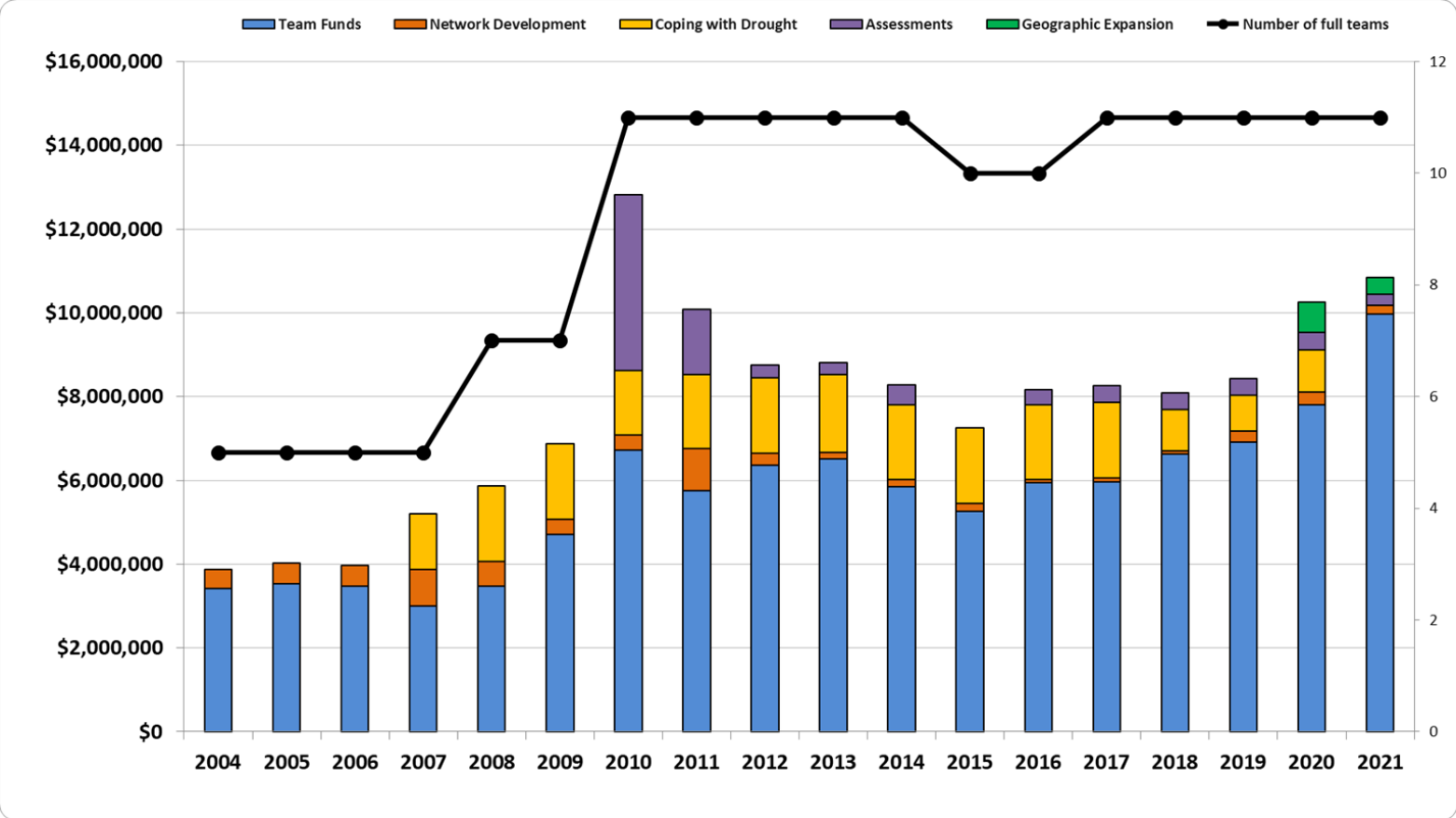
Exploring: Southeast, Appalachia, Upper Northeast

\*Pending FY22 Appropriations and Grant Competitions

## Our role as experts in science policy

- Leadership in federal science community
  - US Global Change Research Program (USGCRP) Social Science Committee
  - National Climate Assessment
  - IPCC
- Partnerships with professional adaptation science community
  - Sponsors of and leadership in American Society of Adaptation Professionals (ASAP)
- NOAA and federal agency review panels, project advisory committees, COP26, & internal agency engagements
  - Serving as SMEs on co-production, networks, JEDI

# RISA Budget (Actual \$): Growing During Lean Times



**Increasing Visibility  
and Presence**



**Expanding the reach**

**Aligning and  
Deepening the Work**



**Strategizing for impact**

**Changing and Disrupting  
the Status Quo**



**Improving human welfare**

As a robust, fully national network, RISA will be able to more effectively share knowledge, tools and expertise across the U.S., achieving far wider impact. Plans for a full RISA network include:

- **Geographic coverage:** 18-20 teams would enable a RISA presence in all U.S. states and territories
- **Cross-regional RISA activities** to share, test and scale knowledge, practices, and tools across regions of the U.S., to enhance scalability and transferability
- **National set of sustained assessment specialists**, housed at RISAs, to better connect regional needs and assessment information with a robust national climate assessment effort
- **Funding opportunities for community organizations** working with the most climate-vulnerable populations to enhance resilience capacity and strengthen their partnership with RISAs, who are trusted climate experts and sources of climate information in their regions.
- **Climate adaptation fellows:** hosted by RISA teams to connect with policymakers in state legislatures and local Congressional offices
- **Collaborate with Adaptation Science:** topics of importance to the broader adaptation science community and to the RISA community