



# Welcome to NIFA's Information Webinar on Climate Change Programs

- All participants are automatically muted by webinar administrators.
- Feel free to enter questions in the Q&A Box.
- We will be monitoring both the Q&A Box and the chat.
- During the Q&A session, participants will have a chance to unmute and ask questions.
- This webinar will be recorded and made available to the public.



National Institute of Food and Agriculture

U.S. DEPARTMENT OF AGRICULTURE

BIOENERGY, CLIMATE, AND ENVIRONMENT  
FOOD PRODUCTION AND SUSTAINABILITY  
YOUTH, FAMILY, AND COMMUNITY  
FOOD SAFETY AND NUTRITION  
INTERNATIONAL PROGRAMS

# NIFA Welcome

## Information Webinar on Climate Change Programs

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# Presidential Executive Order: Tackling the Climate Crisis at Home and Abroad

*“America’s farmers, ranchers and forest landowners have an important role to play in combating the climate crisis and reducing greenhouse gas emissions, by sequestering carbon in soils, grasses, trees and other vegetation and sourcing sustainable bioproducts and fuels.”*

*– Executive Order on Tackling the Climate Crisis at Home and Abroad, Jan. 27, 2021*







# USDA Strategic Plan: FY 2022 - 2026:

## Strategic Goals:

- 1) Combat climate change to support America's working lands, natural resources and communities
- 2) Ensure America's agricultural system is equitable, resilient and prosperous
- 3) Foster an equitable and competitive marketplace for all agricultural producers
- 4) Provide all Americans safe, nutritious food
- 5) Expand opportunities for economic development and improve quality of life in rural and tribal communities
- 6) Attract, inspire and retain an engaged and motivated workforce that's proud to represent USDA

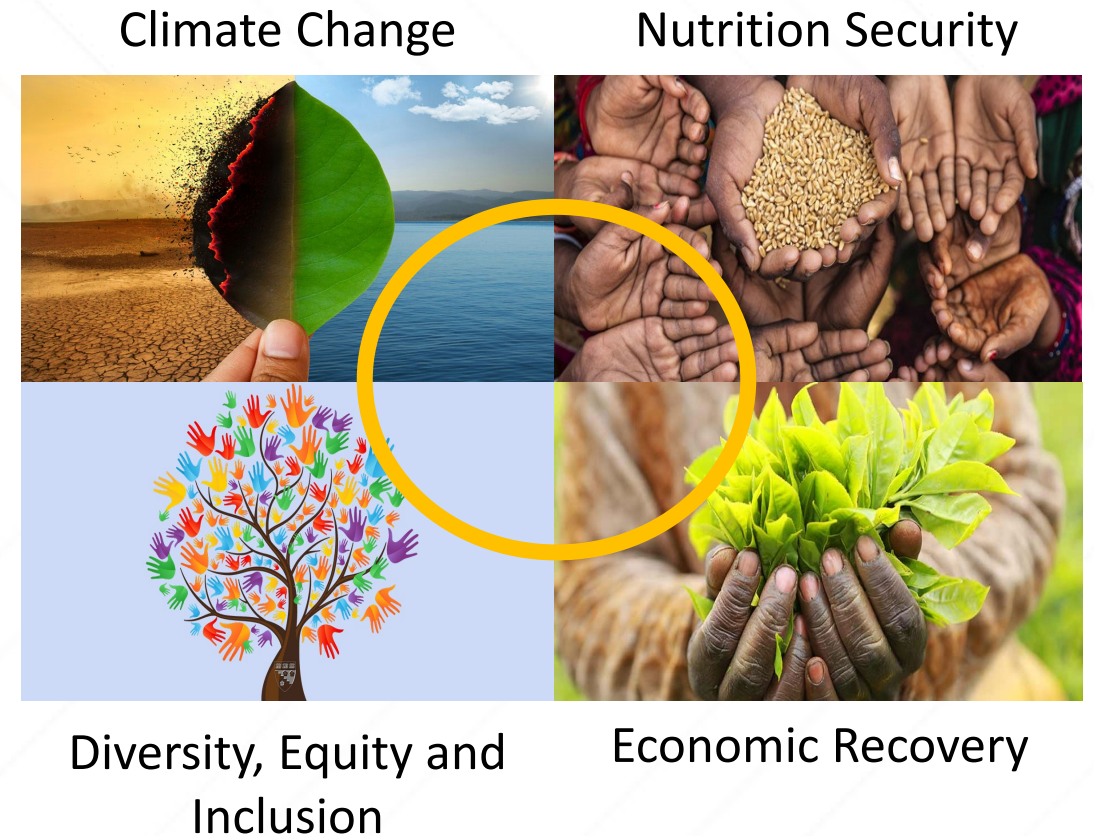


# **Strategic Goal 1: Combat Climate Change to Support America's Working Lands, Natural Resources and Communities**

- 1.1** Use Climate-Smart Management and Sound Science to Enhance the Health and Productivity of Agricultural Lands
- 1.2** Lead Efforts to Adapt to the Consequences of Climate Change in Agriculture and Forestry
- 1.3** Restore, Protect and Conserve Watersheds to Ensure Clean, Abundant and Continuous Provision of Water Resources
- 1.4** Increase Carbon Sequestration, Reduce Greenhouse Gas Emissions and Create Economic Opportunities (and Develop Low-Carbon Energy Solutions)

# NIFA: Driving Innovation in Research, Education & Extension

- Fill knowledge gaps & identify opportunities
- Spur innovation & accelerate change
- Empower individuals and communities
- Synergize across diverse priorities





# Roadmap for Webinar

## Programs Highlighted:

- Extension, Education & USDA Climate Hubs Partnership (A1721)
- Sustainable Agroecosystems: Health, Functions, Processes and Management (A1451)
- Rapid Response to Extreme Weather Events Across Food and Agricultural Systems (A1712)

**Data Gateway and How to Use It**

**Question & Answer Session**







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## Extension, Education & USDA Climate Hubs Partnership (A1721)

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# Extension, Education and USDA Climate Hubs Partnership A1721

**Proposed Budget Requests:** \$1,500,000 total per project for project periods of 3–5 years

**Project Types:** Extension Projects or Integrated (Extension and education) Projects, and a CAP project

**Grant Types:**

- Standard
- FASE
  - Strengthening Standard & New Investigator
- **Application Deadline:**
  - **2022: October 6, 2022**, at 5 p.m. EDT
- **Contact:** Dr. Lydia Kaume, [lydia.kaume@usda.gov](mailto:lydia.kaume@usda.gov), (816) 642-4607





# Meet the A1721 Team



**Amy Ganguli**  
Sustainable  
Agroecosystems



**Lydia Kaume**  
Nutrition



**Maurice Smith**  
4-H positive youth  
development  
programs &  
Workforce  
Development



**Adam Wilke**  
Social Science



**Erica Kistner-Thomas**  
Entomology



**Charlotte Tuttle**  
Economist



**Andres Cibils**  
Animal Science



**Steve Thompson**  
Agricultural Systems,  
Crop Production



# Climate Hubs Partnership Program Area Priority Description

Supports projects that provide *effective, translatable* and *scalable* approaches to address climate change through **regional partnerships** including the USDA Climate Hubs and Extension (e.g., the Cooperative Extension Service)

# USDA Climate Hubs

- **Unique collaboration across USDA agencies**
  - 10 Regional Hubs led by Agricultural Research Service (ARS), Forest Service (USFS), and the Natural Resources Conservation Service (NRCS)
- **Vision: Robust and healthy agricultural production and natural resources** under increasing climate variability and change
- **Mission: Develop and deliver science-based, region-specific information and technology** to agriculture and natural resource managers to...
  - Science and data syntheses, tool and technology development, outreach and engagement



**Further Information:**  
[climatehubs.usda.gov](https://climatehubs.usda.gov)





# Intent of the Program

## **Regional partnerships including the USDA Climate Hubs and Extension**

1. Net-zero emissions agriculture;
2. Working lands adapted to climate change;
3. A diverse workforce that can effectively communicate about climate change with a variety of stakeholders and can incorporate climate considerations into managing working lands; and
4. Climate justice including equity in opportunities and burden-sharing

## **Broad emphasis areas include:**

- Training on climate-smart food systems, including effects of climate on nutrition security and components of nutrient density, food safety and food waste



# Coordinated Agricultural Project For Climate-Smart Agriculture

- **National Climate-Smart Extension Initiative** to connect and extend national and regional Extension programs
  - create community-based and culturally appropriate approaches to CSAF practices,
  - mitigation of agricultural greenhouse gas emissions,
  - resilient food systems, and nutritional security in rural and urban communities.



# Extension, Education and USDA Climate Hubs Partnership A1721

## **Broad emphasis areas include...**

- K-12 teacher or Extension educator training for climate learning
- Public and private sector technical service provider training
- Climate-smart food systems training, e.g. food waste, nutrition security
- Programming for underserved/underrepresented groups that considers diverse literacy and language skills

# Inaugural Year Overview (FY 2021)

- 6 projects funded for \$9 million
- 9 of the regional Climate Hubs were included in the partnership submissions
  - 8 included in awards
- 5 awards led by academic institutions and 1 led by the Caribbean Climate Hub
- 3 Extension projects and 3 integrated Extension and Education projects



 **Funded Projects**



# Enabling Climate-Smart Decisions for Agriculture and Forestry in the U.S. Caribbean

- USFS/ Caribbean Climate Hub
- All Agroecosystems

## Extension Project

- **Develops & delivers** region- and sector-specific climate information & train-the-trainer material (in Spanish and English)
- **Actions** support adoption of adaptation and mitigation practices that reduce GHG, sequester C, build resilience



# Native Climate: Strengthening the Role of Climate Hubs in Indian Country

- Desert Research Institute
- SW and NP Climate Hubs
- Crops and Rangelands

## Extension Project

- **Creates** a *Native Climate* regional partnership to address place-based adaptation resources and issues of climate justice and inequities
- **Supports** Native Climate Fellows and Native Climate Reporters
- **Develops** a Native Climate Toolkit





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# NIFA

## Sustainable Agroecosystems: Health, Functions, Processes and Management (A1451)

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**Amy Ganguli**  
**NPL**



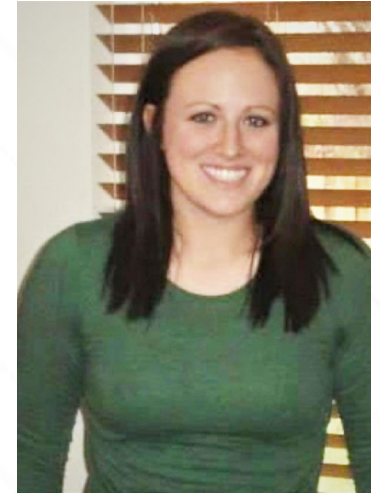
**Amber Campbell**  
**PS**



**Adam Wilke**  
**NPL**



**Diomy Zamora**  
**NPL**



**Andi Thompson**  
**PA**

**Institute of Bioenergy,  
Climate, and Environment**

**Meet the A1451 Team**





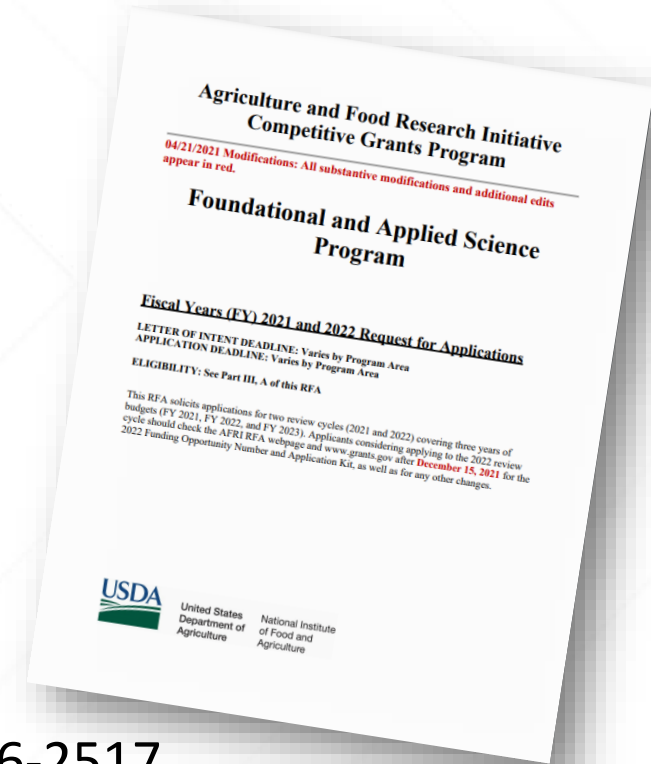
## Sustainable Agroecosystems: Health, Functions, Processes and Management (A1451)

**Proposed Budget Requests:** \$650,000 total per project for project periods of 3–4 years;  
\$800,000 with specific partnerships

**Project Types:** Research projects only

### Grant Types:

- Standard
- FASE
- Strengthening Standard & New Investigator
- Seed Grants (\$300,000)
- Conference or Equipment Grants (\$50,000)
- **Application Deadline:**
  - 2022: September 15, 2022, at 5 p.m. EDT
- **Contact:** Dr. Adam Wilke, [adam.wilke@usda.gov](mailto:adam.wilke@usda.gov), (970) 556-2517



# Sustainable Agroecosystems A1451 Program Snapshot



**Research Projects Only**



**Diverse Systems (Managed)**



**Focus: Ecosystem Health & Production**

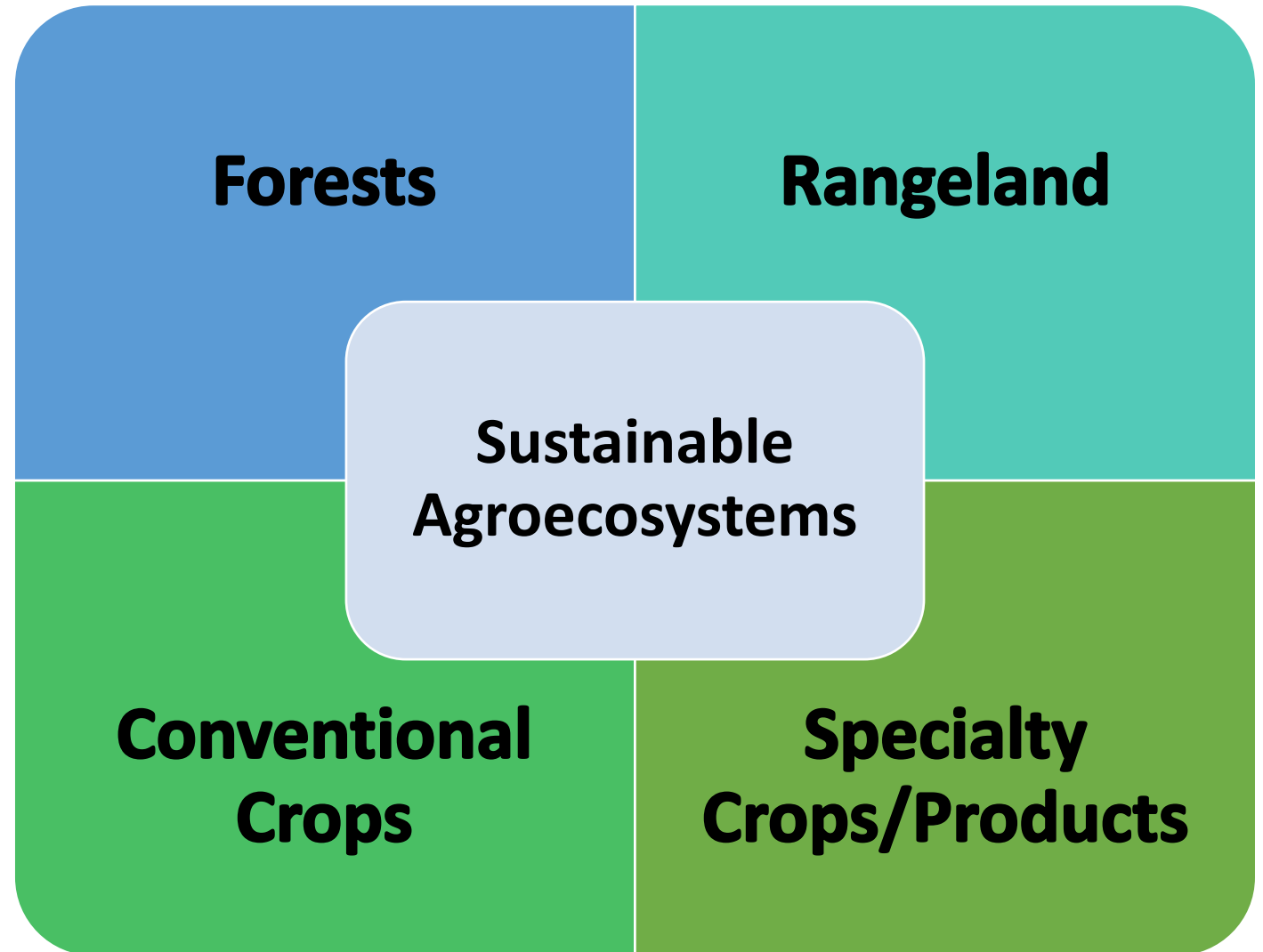


**Emphasis: Ecosystem Services**



**Biophysical & Social Sciences**

# Spectrum of Research Projects



# A1451 Priority Area Details



Improvement of ecosystem health and productivity in managed systems currently under stress



Advance scientific understanding of processes and interactions



New management or conservation practices with a focus on ecosystem services





**Innovative strategies  
to maintain or  
improve productivity  
while enhancing  
ecosystem services**

---

**Approaches that increase ecosystem health and resilience, along with the output or value of more than one ecosystem service**

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**Connection of ecosystem health to production system functionality, productivity, socioeconomic viability, sustainability, biodiversity and the production of other ecosystem services**



**Conference on  
'Making Climate-Smart Agriculture Work'**

# Conference Awarded

<https://agmip.org/making-climate-smart-agriculture-work/>

*Integrating science, modeling and economics to help farms, ranchers and foresters mitigate and adapt to the challenges of climate change*

Virtual Conference May 24 – 26, 2022



United States Department of Agriculture  
Research, Education & Economics Information System



**Source: AGRICULTURAL AND ENVIRONMENTAL GEOGRAPHIC INFORMATION SYSTEMS** submitted to 

**MAKING CLIMATE-SMART AGRICULTURE WORK**

<b>Sponsoring Institution</b>	National Institute of Food and Agriculture	<b>Project Status</b>	NEW
<b>Reporting Frequency</b>	Annual	<b>Funding Source</b>	AFRI COMPETITIVE GRANT
<b>Grant No.</b>	2022-67019-36398	<b>Accession No.</b>	1028070
<b>Proposal No.</b>	2021-12628	<b>Project No.</b>	VA.W-2021-12628
<b>Program Code</b>	A1451	<b>Multistate No.</b>	(N/A)
<b>Project End Date</b>	Nov 30, 2022	<b>Project Start Date</b>	Dec 1, 2021
		<b>Grant Year</b>	2022



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# NIFA

## Rapid Response to Extreme Weather Events Across Food and Agricultural Systems (A1712)

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# Rapid Response to Extreme Weather Events Across Food and Agricultural Systems (A1712)

**Proposed Budget Requests:** \$300,000 total per Standard and Strengthening Standard project for project periods of 12 months

**Project Types:** Extension or Integrated (research and Extension) Projects only for Standard/Strengthening Standard

## Grant Types:

- Standard, Strengthening Standard & New Investigator
- FASE
- **Application Deadline:**
  - **2022 Standard and Strengthening Standard:** submitted within 21 calendar days after LOI decision response
- **Contact:** Dr. Amy Ganguli, [amy.ganguli@usda.gov](mailto:amy.ganguli@usda.gov), (816) 642-0813





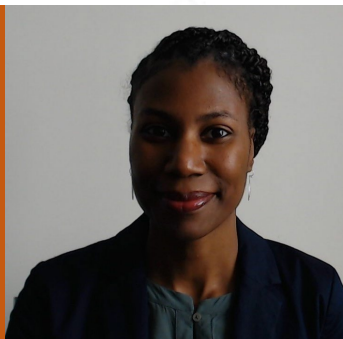


# Meet the A1712 Team



**ASHLEY MUELLER**

*National Program  
Leader, Institute of  
Youth, Family, and  
Community*



**COURTENAY  
SIMMONS**

*Program Specialist,  
Institute of Food  
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**MICHELLE COLBY**

*National Program  
Leader, Institute of  
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Sustainability*



**DANIELLE FARLEY**

*Program Specialist,  
Institute of Food  
Production and  
Sustainability*



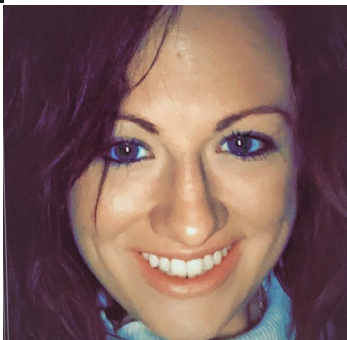
**DERECKA  
ALEXANDER**

*AAAS Fellow,  
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**PETER  
THOMPSON**

*Division Director,  
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**ANDIE THOMPSON**

*Program Assistant,  
Institute of Bioenergy,  
Climate, and  
Environment*



**AMY GANGULI**

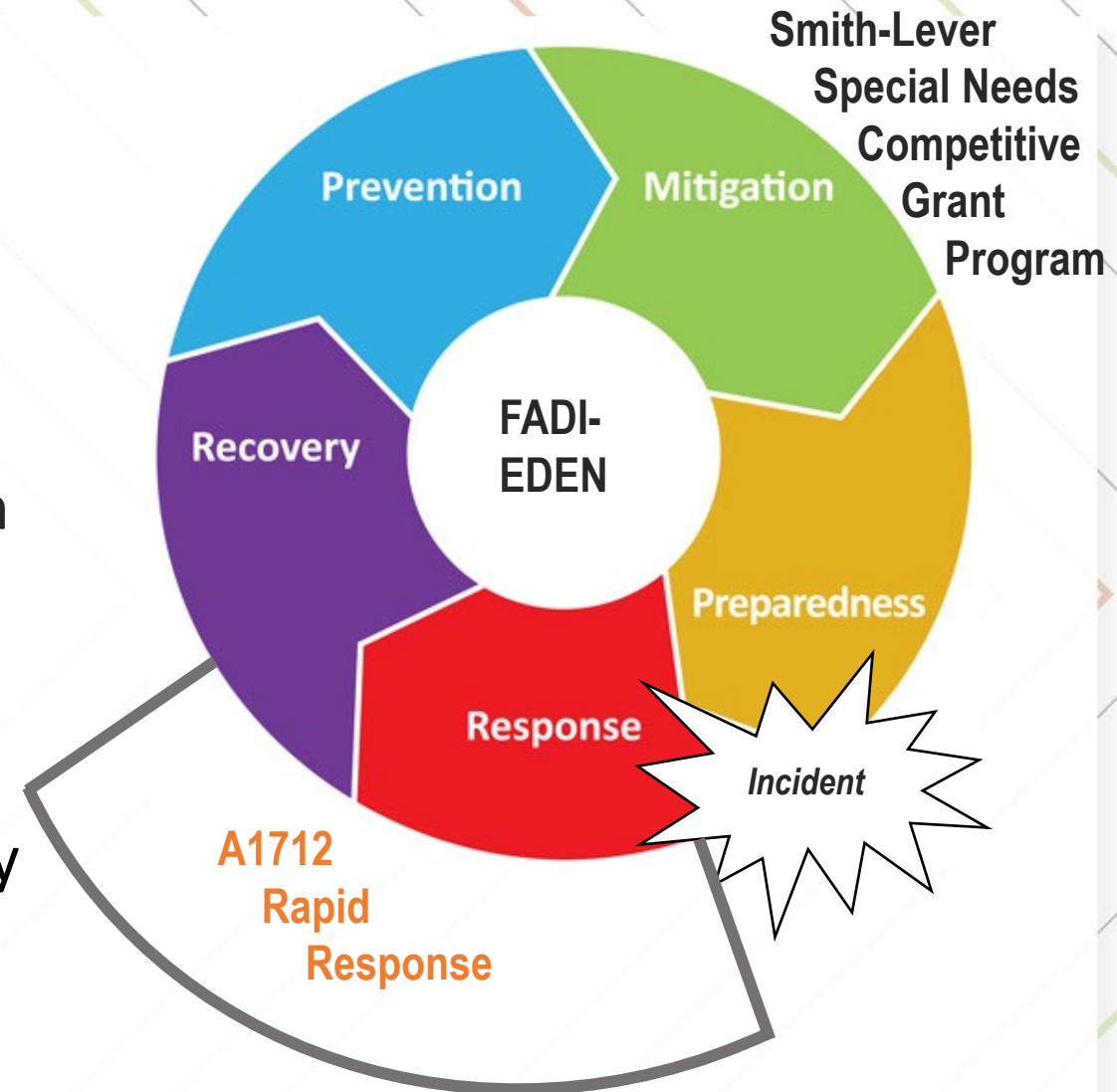
*National Program  
Leader, Institute of  
Bioenergy, Climate,  
and Environment*



# A1712 Program Rationale

Climate change exacerbates the risk of **extreme weather-related disasters**, caused by naturally occurring hazards that often disrupt agricultural, forestry and rangeland production systems.

In addition to land degradation, **agricultural supply chains are often adversely impacted** by these disasters at production, processing, storage, distribution and consumption stages.





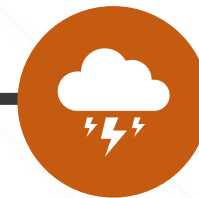
# A1712 Program Purpose



Designed to **rapidly deploy strategies** and **fill knowledge and information gaps** to protect the nation's food and agricultural supply chains during and after weather-related disasters.



Strategies should **buffer effects** from disasters and **ensure availability** of an accessible, safe, nutritious, affordable and abundant food supply.



Projects **must directly address** effects associated with an extreme weather event or disaster.

*Applicants will have the opportunity to justify the need for funding based upon localized impacts.*





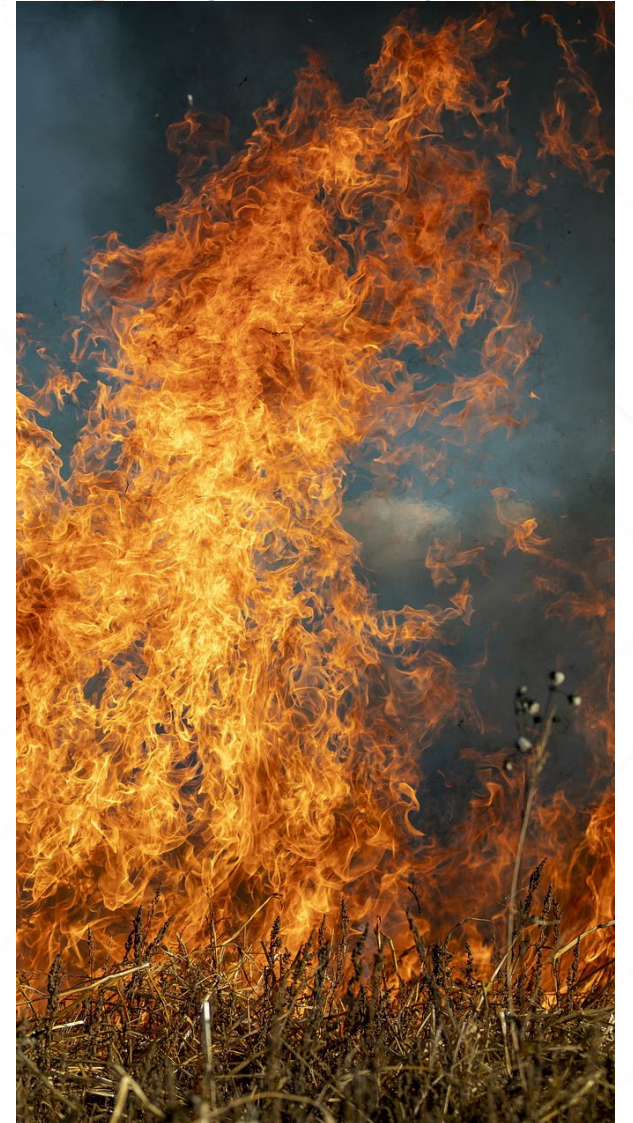
# A1712 Program Information

Funded projects are expected to **provide solutions** that may include trainings, communication strategies, tools and technologies, food supply logistics, and climate-smart practices **that can be rapidly adopted** by various end-users, as well as explain how adoption potential of proposed solutions will be measured.



FY 2022 AFRI RFA, page 98  
7h. Rapid Response to Extreme Weather Events  
Across Food and Agricultural Systems

<https://nifa.usda.gov/sites/default/files/rfa/FY22-AFRI-FAS-RFA-508-Fv2.pdf>







# A1712 Program Details

This program seeks applications that:



Focus on critical and urgent solutions in rapid response to disaster impacts on the nation's food and agricultural systems.



Clearly describe short-term deliverables *within 3 months of award receipt*.



Clearly define the geographic scope of the project as related to the weather-related event or disaster.

Applications must address one or more of the following:



Agroecosystem Resilience



Commodity & Nutrition Security



Health, Well-Being & Safety



# Additional Resources



Program Area Priority Website:

<https://nifa.usda.gov/grants/programs/rapid-response-extreme-weather-events-across-food-agriculture-systems-a1712>



Fact Sheets  
Informational Webinars

Available on the Program  
Area Priority Website



AFRI Request for  
Applications:

<https://nifa.usda.gov/sites/default/files/rfa/FY22-AFRI-FAS-RFA-508-Fv2.pdf>

A1712 starts on page 98



# NIFA Climate Programs (summary)

- Climate-relevant programs are found throughout NIFA's funding priority areas — not just in the areas we highlighted.
- When in doubt, reach out to NIFA program staff to inquire about program fit!





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# NIFA

## NIFA Data Gateway

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# Get to know funded projects: NIFA Data Gateway

[https://portal.nifa.usda.gov/enterprise-search/project\\_details](https://portal.nifa.usda.gov/enterprise-search/project_details)

### Project Details Search ?

Project Details

Financial Details

Advanced Search

Annual Reports on Planned Programs

Search these terms... ?  
A1451

↕ Search in these fields... ?

↕ Show these fields in the results... ?

View results as: ☐ Document ☒ Tabular (\* always hidden in tabular view)

Expected Results: 104 Projects

Search

Reset



# NIFA Gateway Results for A1451

[https://portal.nifa.usda.gov/enterprise-search/project\\_details](https://portal.nifa.usda.gov/enterprise-search/project_details)

## Filters ?

↔ Hide Filters ↑ Filter Chooser

### Sponsoring Agency ?

- ☐ National Institute of Food and Agriculture (2)
- ☐ State Agricultural Experiment Station (1)

### Recipient Organization Type ?

- ☐ Forestry School (1)
- ☐ State Agricultural Experiment Station (2)

### Funding Mechanism ?

- ☐ NIFA Formula (1)
- ☐ NIFA Non Formula (1)
- ☐ State Funding (1)

### Funding Source ?

- ☐ Hatch/Multi-State (1)
- ☐ State (1)
- ☐ Non Formula (1)

### Recipient State ?

Start typing to filter values...

- ☐ ARIZONA (1)
- ☐ MARYLAND (1)

## 3 Projects Found ?

↑ Project Title	↓ Accession Number	↑ Sponsoring Agency	↑ Funding Mechanism	↑ Award Number	↑ Initial Award Fiscal Year	↑ Recipient Organization	↑ Project Director	↑ Project Start Date	↑ Project End Date
Best management practices for mitigating and adapting to saltwater intrusion on coastal farmlands in eastern Maryland	1016911	State Agricultural Experiment Station	State Funding	Not applicable	Not applicable	SAES - UNIVERSITY OF MARYLAND	Tully, Katherine	07/19/2018	06/30/2019
Eastern White Pine Health and Responses to Environmental Changes	1010424	National Institute of Food and Agriculture	NIFA Formula	Not applicable	Not applicable	SAES - UNIVERSITY OF MAINE	Livingston, W	10/01/2016	09/30/2021
Assessing Future Ecosystem	1005827	National Institute of Food and	NIFA Non Formula	2015-67019-23185	2015	NORTHERN ARIZONA UNIVERSITY	Fule, Peter	02/01/2015	01/31/2019



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<https://www.usda.gov/non-discrimination-statement>

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- Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.
- To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).
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# Questions?

Feel free to enter questions in the Q&A box  
or raise your Zoom hand, so the web administrators  
can give permission to speak.

# NIFA

## Contacts for Programs Highlighted Today:

Lydia Kaume: [Lydia.Kaume@usda.gov](mailto:Lydia.Kaume@usda.gov)

Adam Wilke: [Adam.Wilke@usda.gov](mailto:Adam.Wilke@usda.gov)

Amy Ganguli: [Amy.Ganguli@usda.gov](mailto:Amy.Ganguli@usda.gov)