USDA Climate Hubs Mission Area Highlights

Natural Resources and Environment - Forest Service

FY23 Q3





Managing saltwater intrusion

In the Northeast, many acres of forested land are lost every year because sea level rise, land subsiding, and subsequent saltwater intrusion result in trees becoming too wet and salty to support proper tree growth. This issue will accelerate over time, with increasing acreage affected in the mid-Atlantic region most specifically. Landowners and managers can benefit from knowledge about this climate threat, as well as adaptation strategies. The Northeast Climate Hub, in collaboration with Rutgers University, offers a website page of resources on saltwater intrusion and coastal forest dieback for landowners and managers who might be affected by saltwater intrusion.

Keeping up with climate change

Climate change is affecting national forests in many ways. Vulnerability assessments can help national forest managers develop adaptation strategies to reduce the negative effects of climate change. The Northwest Climate Hub presented climate change vulnerability assessments in the western U.S. as a part of the Pacific Northwest Research Station SciCast series. The webinar described an approach to vulnerability assessments, common vulnerabilities and adaptation options, and lessons learned from previous assessments.

Environmental justice and tribal relations

Spring precipitation alleviated long-term drought conditions throughout much of the Southern Plains. Rainwater harvest systems can provide a clean water source for use during periods of drought. The Southern Plains Climate Hub shared information and conducted demonstrations of rainwater harvesting systems via workshops and individual meetings with historically underserved farmers and ranchers in Okmulgee, Oklahoma; Navajo Sustainable Ag Project; conservation districts; Quapaw Tribe; Kaw Nation; Chickasaw Nation; Comanche Nation; Kickapoo Tribe of Kansas; Alabama–Coushatta Tribe of Texas, and Absentee Shawnee Tribe. Climate Hub staff shared information about the benefits of using these systems to address water scarcity and make their communities more resilient to drought.

Resilient forests

Forest landowners and managers in the southeast benefit from quidance based on peer-reviewed science to remain resilient and productive in the face of climate change and variability. As risks increase and emerging threats arise, guidance is developed and shared to help producers make climate-informed decisions. Therefore, the Southeast Climate Hub worked with state forest health managers in Florida and Louisiana to co-produce state-specific emerging forest threats facts sheets. These fact sheets educate forest landowners about threats their forests may encounter and provide management practices to maximize resilience and productivity in a changing climate



California Wildfire and Forest Resilience Task Force

In their role supporting the <u>Science Advisory Panel of the California Wildfire and Forest Resilience Task Force</u>, California Climate Hub wrote the Central Coast Regional Profile to summarize the socio-ecological context of the Central Coast region of California related to community and ecosystem resilience to wildfire and climate change. Hub staff conducted expert interviews (32 interviewes) and a stakeholder survey (784 respondents) to inform the profile. The profile was also informed by reviewing the best available science and incorporating current condition assessments developed by another research team. State decisionmakers, stakeholders involved in wildfire resilience-related projects, and the wider public received a new resource on the issues and opportunities for increasing ecological and community resilience to wildfire in the Central Coast.

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Hubs working with National Forests

- The Northwest Climate Hub and the Chugach National Forest: <u>Vulnerability of Alaska Native Tribes in Prince William Sound and Adjoining Kenai Peninsula to Selected Climate and Nonclimate Stressors</u>, webinar to provide key findings of a new report on climate change effects on Alaska Native Tribe subsistence.
- The Northern Forests Climate Hub and the Chequamegon-Nicolet National Forest: <u>Tribal Forest Protection Act (TFPA)</u> workshops. The Hub also has ongoing projects with Ottawa National Forest (2 projects), White Mt National Forest (1 project), Superior National Forest (2 projects), and Chippewa National Forest (1 project).
- The Southeast Climate Hub served as a resource for the Kisatchie National Forest, the Angelina National Forest and the Sabine National Forest in Q3. Hub staff is working on hurricane preparedness and recovery guide for the Angelina National Forest and a guide for pine forest landowners in Texas.

Looking ahead

New projects, collaborations and upcoming meetings

- The Caribbean Climate Hub provided three orientations with USDA agencies, Extension, Conservation Districts, and Climate-Smart Commodities Partners focused on agroforestry, coffee, and vegetables. Farmers-to-farmers presentations highlighted challenges and solutions amid climate change. Registration is now open for the next workshop on September 15th.
- The Midwest Hub is partnering with the University of Illinois to develop a climate training course for Illinois Extension specialists. Expected launch is fall 2023.

By the numbers

The USDA Climate Hubs

- National Office
 - 1Lead
 - 1 Coordinator
 - Supported by 3 agency liaisons
- Regional Climate Hubs
 - 10 Directors
 - 27 Co Leads
 - 10 Coordinators
 - 1 Tribal Coordinator
 - 17 Fellows
 - 8 Interns
 - 44 research and other staff
- International Climate Hub
 - 1 Director
 - 1 Coordinator

Engagements

In QR3, the Hubs hosted, participated in, or led

- 75 workshops and webinars
- 4,937 stakeholders engaged

Publications [PDF, 5 pages]

The Hubs published 62 products in the third quarter

- 10 peer reviewed publications
- 52 white papers or grey literature

USDA Climate Hubs

Building climate resilience and supporting equity by co-developing research, tools, outreach, and engagement with natural resource and agricultural managers.



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