



Climate adaptation

Though each climate disaster brings setbacks and loss to agricultural producers and forest landowners, extreme events also offer opportunities to learn about climate resilience. After Hurricanes Irma and Maria devastated Puerto Rico and the U.S. Virgin Islands in 2017, the Caribbean Climate Hub launched a post-hurricane assessment to understand what factors govern the capacities of farmers, forest landowners, and communities to adapt to hurricanes. A peer-reviewed paper, [READY OR NOT? Hurricane preparedness, response, and recovery of farms, forests, and rural communities in the U.S. Caribbean](#), features findings from focus group discussions and in-depth interviews with 152 farmers, forest owners, and agriculture and forest experts in Puerto Rico and the USVI that can improve planning, preparation, and recovery from hurricanes.



Justice 40 and tribal relations

The Northern Forests Climate Hub, Northern Institute for Applied Climate Science, and tribal partners collaborated to encourage the use of the Tribal Forest Protection Act (TFPA) to advance tribal climate adaptation priorities. In a recent workshop sharing information from this [webinar series](#), Tribes and their Forest Service partners identified mutual climate adaptation priorities and developed projects that Tribes can initiate through the TFPA. Participants considered projects related to promoting the regeneration of culturally important trees and understory medicinal plants, the indigenous use of prescribed fire, and more.

Fire, Reforestation, and Restoration

After large wildland fires, reforestation is a priority on National Forests and surrounding lands. Long-term drought and changes in climate have left forest land managers wondering what to plant that will survive now and into the future to meet their management goals. The [Seedlot Selection Tool](#) was developed by Forest Service scientists and collaborators to assist land managers in identifying where to plant or source seeds and seedlings. The Northwest Climate Hub partnered with the National Forest System to develop a [video tutorial](#) for the Seedlot Selection Tool that works through scenarios to help land managers make climate-informed decisions. The Hub is collaborating with the Office of Sustainability and Climate to host a webinar series to help silviculturists apply the tool in their reforestation work.

Managing forest carbon

Forest carbon offset markets are proliferating quickly and claim to sell credits that can help individuals and companies achieve carbon neutrality. But the details of these new carbon markets remain difficult to access. Additionally, the legitimacy of carbon offset credits has been called into question. Through funding and collaboration from the [USDA Northeast Climate Hub](#), researchers at Pennsylvania State University have studied the validity of carbon offset credits and alternative solutions for incentivizing carbon sequestration. The researchers have presented their findings to large groups of forestry practitioners across the Northeast to increase awareness on the topic.

Hubs working with National Forests

Southwest Climate Hub

- Rocky Mountain Region 2: Workshop using the Adaptation Workbook to walk through two projects on the Rio Grande National Forest.

California Climate Hub

- Pacific Southwest Region 5: Climate literacy trainings to increase understanding and application of climate forecast tools. Two of the six trainings will be held in the San Bernardino National Forest and the Stanislaus National Forest.

Northern Forests Climate Hub

- Eastern Region 9: Watershed Restoration Action Plans (WRAPs) workshops.

USDA Climate Hubs Mission Area Highlights

Natural Resources and Environment – Forest Service

FY23 Q1



Looking ahead

New projects and collaborations

- The Foreign Agricultural Service is hiring a Director for the International Climate Hub (ICH) and developing a landing page for the ICH on the USDA Climate Hub website.
- NIFA Hub-Extension projects starting in 2023:
 - The Migrant Clinicians Network and the Caribbean Hub will collaborate in Building Capacity Among Community Health Centers to Address Climate Change's Impacts on Agricultural Workers in Puerto Rico and the Virgin Islands.
- The US Forest Service added support for fellowships at the Regional Climate Hubs, bringing capacity to 20 fellowships in support of research and science translation aligned with the FS and ARS Hubs' mission and those of the FS Research Stations and the National Agroforestry Center where the fellows are located.
- The California Climate Hub is developing the California Reforestation Toolshed, which will be a significant advancement to the [reforestation resources](#) currently hosted by the Regional Hub.

Upcoming meetings

- USDA Climate Hub Directors Forum, March 30-31, Washington DC.
- 2023 All Authors Meeting for the Fifth National Climate Assessment, April 3-5, Washington DC.
- Alaska Natives in Prince William Sound and the Kenai Peninsula Webinar, April 19, virtual.
- Pacific Northwest Drought Early Warning System: April Drought & Climate Outlook, April 24, virtual.
- In May, the Northwest Climate Hub is hosting a [workshop](#) to promote shared learning around selection of plant materials for climate-informed reforestation.

Top pick

Southwest Climate Hub podcast "Come Rain or Shine" – New episode on [Biochar: Uses and Potential Benefits](#)

By the numbers

The USDA Climate Hubs

- 10 Regional Directors,
- 20 Regional Co Leads,
- 10 Regional Coordinators,
- 1 Regional Tribal Coordinator,
- 3 agency liaisons,
- 25 research and other staff,
- 1 National Coordinator, and
- 1 National Lead.

Engagements

In QR1, the Hubs hosted, participated in, or led

- 62 workshops and webinars
- 6,028 participants
- 72 presentations

Publications

The Hubs published 52 products in the first quarter, including

- 11 peer reviewed publications
- 41 white papers or grey literature

Website and social media

- 18,933 website users
- 16,345 sessions in the third quarter,
- Twitter account featured 19,115 impressions, demonstrating increasing social media engagement.

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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