The Climate Hubs reduce climate related risks to agriculture, forestry, and rural communities by working with and through USDA agencies and partners. The hubs develop and deliver science-driven strategies and tools so that USDA programs, advisors, and land managers can make informed decisions to manage risk.

The Northern Forests Climate Hub, American Forests, and the Northern Institute of Applied Climate Science are responding to the need for an understanding of the connections between human health, equity, and climate benefits of urban forests by developing a Climate and Health Action Guide. The guide builds on the concepts described in the Adaptation Workbook, while incorporating human health and carbon mitigation concepts relevant to urban forestry, in an accessible virtual format. The guide was recently used in urban forest adaptation planning by the city of Providence, RI.

The landscape of weather/climate information and outlooks can be daunting for general public stakeholders, and specific sectoral stakeholders (such as agriculture) and is often difficult to interpret for specific sectoral issues. To address current and projected weather/climate issues, the Midwest Climate Hub has partnered with Midwest and Plains regional partners to share information through monthly webinars.

The Southern Plains Climate Hub (SPCH) has an ongoing demonstration project at Pope Hilltop Farm in Loyal, OK. The project highlights the benefits of utilizing soil health practices and the conversion of ground enrolled in the Conservation Reserve Program (CRP) to crop and/or livestock production. Check out the Southern Plains Perspective for more info!

Outreach and education are critical for sharing the most up-to-date science and hearing feedback from stakeholders. The Southeast Climate Hub developed a seminar series "Science in Practice," to share research and educate stakeholders. These presentations delivered information and guidance to help agricultural land managers make climate informed decisions and improve productivity and resilience to threats.
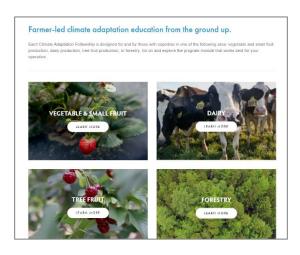

While extreme climate events can be devastating, their effects can sometimes be transformed into opportunities. When Hurricane Maria left millions of fallen trees in Puerto Rico, most logs were chipped due to lack of processing capacity and a ready local wood market. To help build capacity to better respond to future storms so that downed wood is utilized in ways that promote carbon storage, soil health and rural economic development, the Caribbean Climate Hub developed a bilingual video series that shares helpful tips for wood salvage and product development and highlights the value of trees and locally produced forest products.
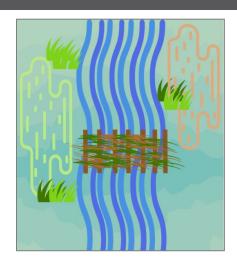
The California Climate Hub staff gave a presentation on the role of severe drought and forest management with special attention to the role of climate change and extreme weather events at the 2020 Natural Areas Conference (held virtually this year). The session evolved from the recently published USFS GTR on drought impacts and forest management in a changing climate, of which CACH staff were co-authors.

January 2021 started a year-long peer learning program for specialty crops growers. The program curriculum was developed by the Northeast Climate Hub (NECH) and partners and focuses on climate adaptation. Program participants had an interest in how their operations could contribute to climate mitigation, so NECH and University of Maine integrated soil carbon, energy use, and other climate mitigation topics into a new open-source educational module. "Climate Change Mitigation: What can Agriculture Do?" will be piloted at the opening workshop along with on-farm mitigation resources.

Building a comprehensive picture of statewide drought impacts is essential for understanding how droughts affect the various sectors that depend on Utah's natural resources. However, drought impacts in Utah have historically been under-reported, meaning that important information does not consistently reach Utah decision-makers or Drought Monitor authors. The Southwest Hub and Drought Learning Network partners delivered an online workshop for land and natural resource managers, Extension, ranchers, farmers and others to learn about evaluating, measuring and reporting drought.

Beaver are natural landscape engineers who currently have small populations in comparison to historical sizes, due to past hunting and control tactics in place because of the perception that beavers are a nuisance. However, using beaver-related stream restoration is a low-cost, nature-based approach to restore habitats, improve water availability and reduce erosion. To support future beaver-related stream restoration efforts, the Northwest Climate Hub created a StoryMap that summarizes five case studies of beaver-related stream restoration in western rangeland.

The state of Colorado experienced widespread drought during 2020. Roughly 77% of the state was experiencing extreme or exceptional drought (D3-D4) in mid-October, when the state's second largest wildfire on record (the East Troublesome Fire) began. Considering Colorado's intense drought and wildfires, the Colorado Association of Conservation Districts invited the Northern Plains Climate Hub to deliver an opening presentation about "Agricultural Climate Resilience" for Day 2 of their 2020 Virtual Annual Meeting.