



# USDA Climate Hubs Quarterly Report

Q1 FY19

## PURPOSE

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.

## Assessments & Syntheses

**Northeast Hub:** Northeast Climate Hub partners have published two new studies exploring how a changing climate is affecting regional crops and livestock. They produced 2 webinar presentations from the lead authors of these studies, "Impacts and Opportunities of Climate Change on Northeast Crops and Livestock" A third webinar in the series focused on "A New Shallow Groundwater Well for Small Agriculture Supply" (*USDA Partners: USFS, NRCS*)

## Outreach & Education

**Northwest Hub:** Co-sponsored and served on the steering committee for the 9th annual Northwest Climate Conference, 'Working together to build a resilient Northwest', held in Boise, Idaho. Over 250 researchers and practitioners participated in this conference to discuss scientific results, challenges, and solutions related to the impacts of climate on people, natural resources, and infrastructure in the Northwest. (*USDA Partners: USFS, NRCS*)

**Southern Plains Hub:** The Southern Plains Climate Hub (SPCH) represented the entire Hubs program at the USDA Farm Production and Conservation (FPAC) Technology Showcase, held November 1, 2018 in Norman OK. In the role, the SPCH demonstrated Climate Hub tools (e.g., AgRisk Viewer) and shared information with USDA executives, program managers, and regional field staff from multiple agencies. Outcomes from the Showcase included interest from RMA, FSA, and NRCS in specific collaboration opportunities to build on existing Hub products and services. (*USDA Partners: FSA, NRCS, RMA*)

**Midwest Hub:** Climate change education with the North Central Region Water Network (NCRWN). Director, Dennis Todey, presented and co-coordinated two sessions at NCRWN extension education events (Sioux Falls, SD and Indianapolis, IN). The two conferences reached over 120 attendees in extension and USDA.

**California Hub:** Engaged with the California almond growers and industry professionals at the Almond Conference which promised to yield new connections and potential for future partnership for the program.



Rangeland climate and drought workshop event in Loomis California co sponsored by University of California cooperative extension, USDA CA climate hub and NDMC.

## Outreach & Education

**Southwest Hub:** In 2018, exceptional drought persisted over the headwaters of the Colorado River and Rio Grande. Agriculture, public lands, recreation and tourism were severely impacted. In response, the SWCH, NIDIS, CPC and others organized three webinars in Q4 (attended by 300+) highlighting drought impacts and resources. The webinars were “invaluable for those of us on the San Juan National Forest tracking fire weather, drought, and hydrologic conditions.... the consolidated information is so helpful.... spot-on for delivering relevant information to land management agencies. I hope to see more in the future.” Webinars and transcripts are hosted on [drought.gov](http://drought.gov). 30+ newspaper articles resulted from these webinars.

**Northern Plains Hub:** The Northern Plains Hub interacted with 200 agricultural producers and conservation district members at three events in Colorado and Wyoming. The Hub delivered a 1-hour interactive session at The Soil Revolution in Boulder, Colorado, asking audience members “Is Your Soil Weather-Ready?” Participants identified soil health practices that strengthen their farm’s resilience to extreme weather events and a changing climate. The Hub also hosted booths at annual meetings of the Colorado Association of Conservation Districts and Wyoming Association of Conservation Districts. Booth visitors improved their awareness of USDA programs and other resources for coping with drought, blizzards, and other extreme events. (*USDA Partners: NRCS, USFS*).



Northern Plains Climate Hub Director, Dannele Peck, kicks off her interactive presentation at The Soil Revolution event in Boulder, Colorado, on December 12, 2018. Photo credit: Vanessa McCracken @BoulderCountyAG.

## Technical Support

**Southeast Hub:** Hub partner, the University of Florida’s AgroClimate group, launched five new web-based decision support tools: 1) ARID – a water stress monitoring tool designed to quantify crop water stress at a particular time or period, and estimate yield loss due to drought, 2) a heat stress monitoring tool based on accumulated daily maximum temperature above a user-defined threshold, (3) the Extension Ag Weather Report with weekly temperature and rainfall data from local weather stations and organized by district, (4) My Florida Farm Report that includes current and forecast station data, and 5) the Climatology-Caribbean tool with monthly ENSO-specific climate data.



Dr. Jonathan Crane, Tropical Fruit Crop Specialist with the University of Florida’s Tropical Research & Education Center, presents management options for fruit grove producers to maintain productivity and resilience to Hurricanes during the Southeast Hub “Building Agricultural Resilience to Hurricanes: Before, During and After” workshop on November 15, 2018.