



FY24 Q3-Q4 ACCOMPLISHMENTS

PARTNERING TO SHARE SCIENCE, RESOURCES AND INFORMATION

Climate Conversations with NRCS

USDA Natural Resources Conservation Service staff are on the frontlines of helping farmers, ranchers, and foresters adapt in a changing climate. Ensuring they have access to the latest science is a top priority for the Climate Hubs, to help inform their conservation plans, which may include adaptation practices to increase resiliency of working lands or mitigation practices to increase soil carbon. With this in mind, the Northern Plains and Southwest Climate Hubs worked together to exchange knowledge with NRCS employees in Wyoming about observed trends, impacts, and weather-ready tools to help prepare for and reduce the impacts of extreme events. Drought and wildfire topped the list of concerns, followed by shifts in seasonal patterns, changes in the growing season, and increased pest pressure. In the upcoming year, NPCH will be reaching out to NRCS in each of our six states to discuss ways the Hub can assist them with weather and climate-related outreach and in-reach needs.



RESEARCH INFORMS ADAPTATION THROUGH FOREST ASSISTED MIGRATION

Wildfires have burned over a million acres across the Northern Plains region this season. The rapid pace of climate change and increased intensity of wildfires are making it harder for forests to naturally regenerate and migrate with the shifting climate. Managers are therefore using forest assisted migration as an adaptation strategy, and they need the latest science to inform these adaptation efforts. Katie Nigro, a postdoctoral fellow with the NPCH and Forest Service Rocky Mountain Research Station, presented on forest assisted migration at the Society of American Foresters annual conference and at a field day for silviculture instructors from across the country. She also hosted several cone-collection field days, in conjunction with Colorado State Forest, to train woodland conservation volunteers to identify and gather seed sources for reforestation.

By delivering 68 presentations, webinars, and workshops...



and creating 13 publications, white-papers, tools, and curricula...

as well as engaging in 106 less-formal conversations...



the NPCH reached at least 7,076 people in FY24 (Q1-Q4)!

Meet the NPCH core team!



Dannele Peck
Hub Director
Ag Economics



Windy Kelley
Coordinator
UW Extension



Lee Schmelzer
Ag Risk Fellow
MSU Specialist



Averi Reynolds
Outreach Fellow
Ag Communications



Katie Nigro
Forest Service Fellow
Silviculture



Hannah Rodgers
ARS Hub Fellow
Dryland Crop Systems

WORKING-LANDS MANAGERS ARE HUNGRY FOR LOCAL CLIMATE DATA

Outreach in Montana helps agriculture get weather-ready

A NIFA-funded agricultural risk specialist with the Northern Plains Climate Hub, Lee Schmelzer, gave invited presentations about mesonet data and tools for agriculture at the Musselshell Watershed Coalition meeting in Roundup, Montana, and ACES (Agricultural Community Enhancement & Sustainability) Meeting in Winnett, Montana. Among the 55 attendees, one producer noted, "Lots of information, good information. There is a serious problem though: Now I can spend the whole day looking at the weather instead of just checking it once in the morning."

Lee's work in Montana with farmers, ranchers and forest land managers, which aims to enhance their decision-making capacity in a changing climate, is funded by USDA National Institute of Food and Agriculture - Extension, Education, and USDA Climate Hubs Partnership Grant Number 2022-69014-36369. Lee is also helping the NPCH better serve Native American producers and land managers by collaborating with a Flathead Reservation Tribal Extension agent to share information on rangeland grazing strategies, irrigation and water use efficiency, soil health, and other topics on climate resiliency. This work is supported through a non-assistance cooperative agreement between USDA Agricultural Research Service and Montana State University Extension (#58-3012-3-023).

ADDRESSING CLIMATE CHALLENGES

Conditions monitoring and reporting supports tech transfer

The Northern Plains Climate Hub Coordinator, Windy Kelley, led the Wyoming Conditions Monitoring Team (WCMT) - a collaboration of state, Tribal, and federal partners. WCMT provides weekly input to the U.S. Drought Monitor and hosts a monthly Wyoming Conditions and Outlooks Webinar, which shares information about current drought conditions and climate outlooks. In FY24, they organized 11 webinars, drawing 453 real-time viewers plus 417 online views. One attendee shared they participate because, "It's helpful for me to hear the experts discuss current conditions and future forecasts." In addition to the webinars, Windy and Hub Outreach Fellow, Averi Reynolds, collaborated on expanding the frequency of column for readers of a regional agricultural newspaper. This bi-weekly column shared current conditions and outlooks, including updated Grass-Cast maps and management implications for rangeland productivity, as well as timely and critical resources for producers and land managers affected by wildfires in Wyoming and Montana.

Welcome, Hannah!

The NPCH welcomes Hannah Rodgers to our team. Her background is in soil health of semiarid cropping systems. Through the Climate Hub, Hannah hopes to find ways to enhance soil and crop health, as well as economic and climate resilience through collaborations with producers.

Agro-Climate Curricula

To empower future growers in Wyoming's challenging climate, Hub Fellows Hannah and Averi joined forces to engage Wyoming 4-H volunteers in a hands-on soil health activity and shared K-12 lessons around climate, agriculture, and sustainability, including how to teach these topics in ways that help students feel curious and confident.

Many thanks to the NPCH leadership team!



Justin Derner

Research Leader, ARS
Rangeland Science



Matt Reeves

Co-Lead, FS
Rangeland Modeling



BJ Shoup

FY24 Co-Lead, NRCS
Soil Science



Jeff Morisette

Collaborator, FS
Human Dimensions



Mike Battaglia

Collaborator, FS
Silviculture

New NPCH Newsletter

The Northern Plains Climate Hub will be rolling out a new way to stay connected with us through GovDelivery. Keep an eye out for this convenient way to stay up-to-date on the latest research, tools, and outreach available for land managers.

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