



Dannele Peck
Director
Ag Economics



Windy Kelley
Coordinator
Extension



Julie Elliott
NRCS Liaison
Rangeland Planning



Toni Klemm
Postdoc
Geography



Katie Walsh
Postdoc
Social Science



Matt Reeves
Co-Lead, FS
Rangeland Modeling



Rafael Guerrero
Co-Lead, NRCS
Tech Center Director

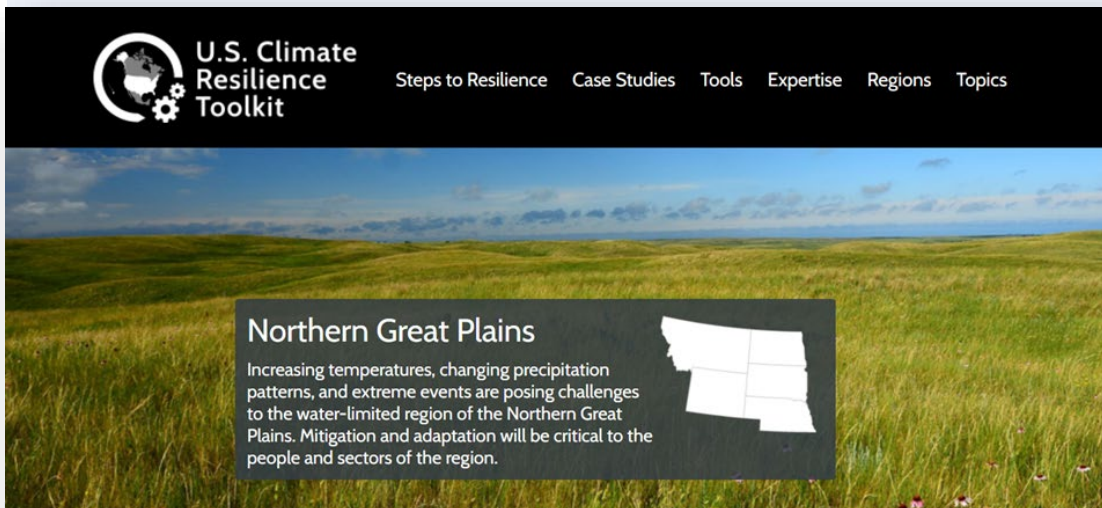


Justin Derner
Res. Lead, ARS
Rangeland Science

Select Accomplishments in FY21 Q4 (July - September 2021)

Outreach & Engagement

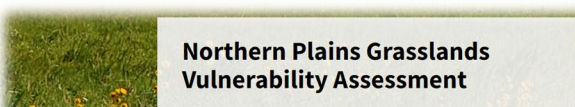
Working-land managers across the Northern Plains are increasingly concerned about **climate risks to their production of food, fiber, and ecosystem services**. They want **regionally relevant** case-studies, tools, and science to help inform their actions. So, the Climate Hub contributed to a new section of the **U.S. Climate Resilience Toolkit** for the **Northern Great Plains**, led by the National Oceanic and Atmospheric Administration's Climate Program Office.



Screenshot of the U.S. Climate Resilience Toolkit for the Northern Great Plains.

This **new webpage** describes how climate change is affecting water, agriculture, ecosystems and biodiversity, recreation and tourism, and Indigenous peoples, as well as **practical steps towards resilience**.

Building & leveraging partnerships are essential for meeting the public's climate-change needs. Therefore, the Northern Plains Climate Hub co-hosts a **Joint Stakeholder Committee** with the North Central Climate Adaptation Science Center (NC-CASC). Together, the Hub and NC-CASC held a **listening session** recently with Committee members to learn about their **needs** related to **climate change and grasslands**. To start the conversation, two postdocs from the Hub and NC-CASC—Dr. Toni Klemm and Dr. Christy Miller-Hesed—presented their **coordinated efforts** to synthesize the management needs and scientific literature on **Northern Great Plains grasslands in a changing climate**.





Science & Synthesis

Researchers are increasingly **working across disciplines** and **with partners** who are close to the land, bringing **multiple types of knowledge** to the table. To be mutually beneficial, researchers should follow **best practices for engagement**, but these are not always widely known. Therefore, the Climate Hub helped write **two journal articles** about best practices.

The first, published in *Rangelands*, describes “Campfire Conversations” – facilitated discussions among people who might not otherwise interact, to amplify new or underrepresented voices. <https://doi.org/10.1016/j.rala.2021.04.003>

The second, in *Environmental Management*, expands **ethical principles for partnership-building** in **transdisciplinary science**. <https://doi.org/10.1007/s00267-021-01508-4>



Looking Back at FY21 (Q1 – Q4)



Delivered **67** presentations, webinars or workshops

Created **29** outreach products



Coauthored **4** journal articles

Looking Ahead to FY22



Thunder Basin in eastern Wyoming (photo credit: USDA)

The **Northern Plains** and **Northwest** Climate Hubs have partnered to establish a new interagency agreement with **USDA Forest Service** to conduct a **climate vulnerability assessment for the Medicine Bow-Routt National Forests and Thunder Basin National Grassland**. This diverse landscape covers nearly 2.9 million acres from north central **Colorado** to central and northeastern **Wyoming**. Postdoctoral social scientist, **Dr. Katie Bills Walsh**, will lead the Northern Plains Climate Hub’s efforts on this cross-agency project during FY22.