



North Central Climate Adaptation Science Center

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Fireworks Article by Phil Higuera and Jennifer Balch Picked Up by Multiple Media Outlets

NC CASC University Director, Jennifer Balch, and Consortium Partner, Phil Higuera at the University of Montana, co-authored an article that was featured in The Conversation on June 30th. The article, "[Skip the fireworks this record-dry 4th of July, over 150 wildfire scientists urge the US West](#)," discussed record-dry levels and extreme fire danger that the US West currently faces and the dangers of fireworks on the 4th of July. The article was picked up by multiple media outlets, including NPR and USA Today. Find a [list of media coverage](#) on our website.



NC CASC Webinar Series:

*Our September webinar has been cancelled. Please check our **website** and email for more information about our next webinar, scheduled for October 14, when Keith Musselman from CU Boulder will be joining us to discuss snow pack.*

Photo credit: Grinter Farms/Travel Kansas

James Rattling Leaf to Speak at Several Upcoming Events

NC CASC PI James Rattling Leaf is scheduled to speak at several upcoming events. On September 2nd, James will speak on Day 2 of [USGS' National Imagery Summit](#): Landsat and Society, as the Tribal User Keynote. On September 28th, James will moderate a workshop at Free and Open Source for Geospace (FOSS4G) [2021 Annual International Gathering](#). And in October, James will speak at the [2021 Resilient Nation Partnership \(RNPN\) Annual Forum](#): Alliances for Climate Action. The Forum is scheduled for every Wednesday in October.





NC CASC Welcomes Elsa Culler

Elsa Culler has joined the NC CASC as an Education Trainer. Elsa is a member of [Earth Lab](#) at CU Boulder and an instructor for the [Earth Data Analytics-Foundations Professional Certificate](#). Prior to joining Earth Lab, she pursued a doctorate in Civil Engineering from CU Boulder. Her doctoral research focused on hydrologic triggers of post-wildfire landslides, and was conducted as part of an interdisciplinary project focused on cascading natural hazards housed at the Cooperative Institute for Research in the Environmental Sciences. Welcome, Elsa!

Laura Edwards Featured in South Dakota Public Broadcasting's, "The Moment"

NC CASC PI, Laura Edwards at South Dakota State University, was featured in the South Dakota Public Broadcasting (SDPB) radio show, "The Moment," on July 29th. Laura discussed drought conditions in South Dakota, higher night-time temperatures, and implications for people, plants, and animals. Listen to the [full interview](#) and check the SDPB [website](#) for more episodes featuring Laura.



Imtiaz Rangwala's Work Featured in Climate Toolbox Case Study

NC CASC Climate Science Lead, Imtiaz Rangwala, and his work for the Fish and Wildlife Service (FWS) on species status assessment was included in Climate Toolbox's Case Studies on their website. The [case study](#) shows how Imtiaz uses the Climate Toolbox to gather data in order to help FWS assess the potential impact of future climate on different species. Find more information on the Case Study Series [here](#).

Lisa Dilling Quoted in AP Article on Greely's Water Supply

NC CASC's Adaptation Co-lead, Lisa Dilling, was quoted in an August article by AP about Greely, Colorado's water supply. The article, "[Booming Colo. Town asks, 'Where will water come from?'](#)" discusses the challenges the town faces in securing water as demand increases with a growing population.

**Photo by David Zalubowski, AP News*



NC CASC Tribal Climate Adaptation Newsletters Online

Tribal Climate Adaptation Newsletters contain information relevant to tribal partners and are posted monthly on our [website](#). The [July](#) 2021 newsletter is now online. Interested parties can use [this link](#) to subscribe to the Tribal Climate Adaptation newsletter.



Recent NC CASC Webinars now on YouTube

In July, Dr. Gregor Schuurmann at NPS presented “[How the Resist-Accept-Direct \(RAD\) Framework clarifies the challenge of modern natural resource management and supports strategic, forward-looking action.](#)” In August, Balaji Rajagopalan presented “[Understanding and projection of space-time variability of summer hydroclimate and ecology in the United States.](#)” Recordings of past NC CASC webinars, abstracts, speaker bios, and more about our webinar series can be found on our [website](#).

Two New Projects Fully Open at NC CASC

Two new projects, funded by the NC CASC, are now up and running at the NC CASC. Find information about each project below:

- [“Creating a North Central Regional Invasive Species \(NC RISCC\) Management Network”](#)
- [“Estimating future high-mountain snowpack to inform terrestrial and aquatic species status assessments, recovery plans, and monitoring”](#)

Recent Publications

Divergent, plausible, and relevant climate futures for near- and long-term resource planning
August 2021 • Climate Change Journal • Brian Miller

The impact of production network economies on spatially-contiguous conservation– Theoretical model with evidence from the U.S. Prairie Pothole Region
May 2021 • Journal of Environmental Economics and Management • Funded by NC CASC

Recent Climate Changes Across the Great Plains and Implications for Natural Resource Management Practices
May 2021 • Journal of Rangeland Ecology and Management • Funded by NC CASC

Weather affects post-fire recovery of sagebrush-steppe communities and model transferability among sites
April 2021 • Ecosphere Journal • Funded by NC CASC

Runoff response to directional land cover change across reference basins in the conterminous United States
April 2021 • Advances in Water Resources • Gabriel Senay

Increased burning in a warming climate reduces carbon uptake in the Greater Yellowstone Ecosystem despite productivity gains
November 2020 • Journal of Ecology • Funded by NC CASC

Tracking rates of postfire conifer regeneration vs. deciduous vegetation recovery across the western United States
October 2020 • Journal of Ecological Applications • Funded by NC CASC

Operational Global Actual Evapotranspiration: Development, Evaluation, and Dissemination
March 2020 • Sensors Journal • Gabriel Senay

Evaluation of hydrologic impact of an irrigation curtailment program using Landsat satellite data
January 2020 • Journal of Hydrological Processes • Funded by NC CASC