

Drought monitoring and reporting in Utah: building a network for drought response

Date and time: December 4, 10 a.m. - 12 p.m. MST

Location: Zoom online meeting

Meeting Objective: The Utah Drought Task Force seeks to engage with stakeholders to build a network of reporters to share information about drought impacts in Utah. This information helps the State of Utah in drought monitoring and planning efforts. Additionally, the Drought Task Force shares drought impacts information with the authors of the U.S. Drought Monitor, thus helping to provide a much clearer perspective of how different levels of drought affect the various sectors that depend on Utah's natural resources. Currently, the Utah Drought Task Force needs more representatives from all sectors to share their observations of drought. We invite natural resource managers, Extension, and other natural resource professionals to attend our workshop to learn about and discuss:

- (i) ways to evaluate, measure, and report drought,
- (ii) current and projected conditions through winter 2021
- (iii) available tools for analyzing and reporting drought at their location

Agenda:

- 10:00 **Welcome, Introduction and Objectives:** *Laura Haskell, Utah Department of Water Resources*
- 10:05 **Current conditions and winter outlook:** *Andrea Bair, NOAA National Weather Service*
- 10:15 **The U.S. Drought Monitor:** *Brian Fuchs, National Drought Mitigation Center (NDMC)*
- 10:30 **CoCoRaHS:** *Jon Meyer, USU, CoCoRaHS Regional Coordinator*
- 10:45 **2020 Drought Impacts in Utah - Group discussion**
- 11:00 Stretch Break
- 11:05 **#UtahDrought - tracking drought conditions on Twitter:** *Simon Wang, Professor, USU*
- 11:15 **CMOR drought - Condition Monitoring Observer Reports:** *Kelly Smith (NDMC)*
- 11:30 **Introduction to the Utah Drought Task Force:** *Laura Haskell*
- 11:40 **Challenges and opportunities in reporting drought - Group Discussion**
- 11:55 **Closing summary:** *Laura Haskell*
- 12:00 Workshop end



Southwest Climate Hub
U.S. DEPARTMENT OF AGRICULTURE



WESTERN WATER
ASSESSMENT
A NOAA RISA TEAM



Center for Climate Adaptation
Science & Solutions

Presenters and organizers

Seth Arens is the Utah Research Integration Specialist for the Western Water Assessment (WWA), which is a university-based applied research program that addresses societal vulnerabilities to climate variability and climate change, particularly those related to water resources. Seth has worked for the WWA since 2015. He has a keen interest in supporting drought response and monitoring in Utah.

Andrea Bair is the Climate Services Program Manager for the Western Region of the National Weather Service. She has a Bachelor's Degree in Atmospheric Sciences and a Master's Degree in Geography, both from the University of Utah. Andrea is proud to have worked for NOAA/National Weather Service for the past 25 years.

Tonya Bernardt joined the National Drought Mitigation Center in 2009. She is an education and outreach specialist at the NDMC and has been involved in a variety of projects. Within these projects she communicates with and educates stakeholders, develops educational activities and outreach components, writes grants, and facilitates workshops and events. She participates on UNL's Extension Resiliency, EDEN drought, and NIDIS Engaging Preparedness Communities working groups.

Emile Elias is the Director of the USDA Southwest Climate Hub. She conducts research and outreach in how climate stressors impact hydrology, water quality and agricultural communities in the Southwestern United States. Emile collaborates with partners to study and report on the impacts of regional changes on water resources, agriculture and interconnected communities reliant on these resources.

Brian Fuchs joined the National Drought Mitigation Center (NDMC) in 2005. Brian's responsibilities with the NDMC include working as a climatologist for the center, with various duties related to this position. Brian is a U.S. Drought Monitor author, and he serves as a media contact for the NDMC for climate- and drought-related topics.

Laura Haskell works at the Utah Division of Water Resources. She coordinates Division drought efforts with federal and other state agencies, and collects and compiles water flow data for the Utah water budget. She keeps a close watch on drought conditions around the state to inform state officials and U.S. Drought Monitor map authors. She joined the Division in 2017 after over 15 years in the private and public engineering sectors. She has been coordinating the drought effort since 2018.

Kelly Helm Smith is a long-time employee of the National Drought Mitigation Center, which is based at the University of Nebraska-Lincoln. She works on drought impacts, including how people experience and report the effects of drought.

Joel Lisonbee is the Regional Drought Information Coordinator for NOAA's National Integrated Drought Information System (NIDIS) Intermountain West and Southern Plains Drought Early Warning System.

Amanda Leinberger is the Adaptation Program Manager for the Center for Climate Adaptation Science and Solutions based in Tucson, AZ.

Jon Meyer is a climate scientist with the Utah Climate Center and Utah State University's Climate Science Program. He specializes in numerical modeling applications serving research to operational goals of the climate center. He is the state coordinator for Utah's CoCoRaHS network and an active participant in Utah's drought monitoring community.

Sarabjit Mukherjee is a brand-new PhD in Computer Science from Utah State University. He has been working in the Utah Climate Center for some years. Sarabjit's expertise is in machine learning algorithms.

Caiti Steele is Coordinator of the USDA Southwest Climate Hub. In this position, she is primarily responsible for stakeholder outreach, and regional and national partnerships. She is a geographer by trade with expertise in remote sensing, geographical information systems and climate impacts on cropland agriculture and rangelands.

Simon Wang is a professor of climate at Utah State University. His research includes climate variability and extremes, including the recent droughts across the United States and South Asia. Simon is also engaged in developing climate services.