

[Subscribe](#)[Past Issues](#)[Translate ▾](#)[RSS](#)[View this email in your browser](#)

Southwest Climate Hub Bulletin

News and events for the Southwest Hub region

March 2022

Come Rain or Shine Podcast

Want to listen to a podcast that reports actionable science to facilitate adaptation and resilience in the Southwest? Give Come Rain or Shine a try! Here's a look at some of our most recent episodes:

Adaptive Silviculture for Climate Change (ASCC) project, a collaborative effort to establish experimental trials of climate change adaptation strategies across different forest ecosystems in the United States and Canada with Dr. Linda Nagel and Courtney Peterson.

Katharine Hayhoe on Hope & Healing In a Divided World, an interview with world-renowned climate scientist and Chief Scientist for The Nature Conservancy on her most recent book titled *Saving Us: A Climate Scientist's Case for Hope and Healing in a Divided World*.

Sustainability In Beef Supply Chains, a discussion around sustainability challenges and opportunities within the U.S. beef supply chain with Dr. Sheri Spiegel.

Forest Transformation in the Southwest, a conversation with Dr. Craig Allen and Dr. Nate Stephenson on how the convergence of climate stress, human land use patterns and histories, and disturbance trends in the southwestern United States are leading to forest ecosystem changes and transformation.

Find us on Buzzsprout at: <https://rainorshine.buzzsprout.com/>

Want to know when a new episode is released? Sign-up for email alerts [here](#).



NRCS Climate Conversations

Sara Thompson

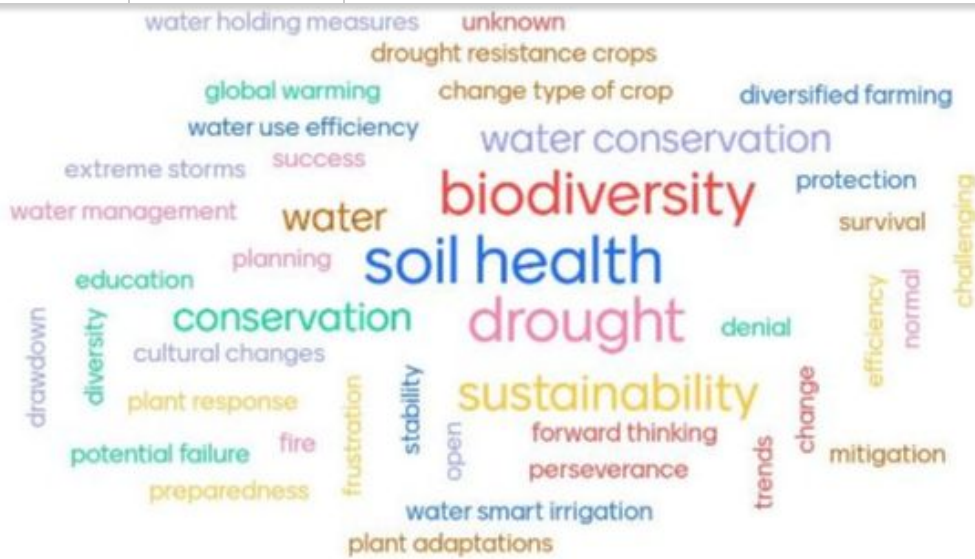
The Southwest Climate Hub and NRCS teamed up to host "Climate Conversations" with NRCS and Partner staff in all 5 States covered by the Southwest Hub (Arizona, Hawai'i, New Mexico, Nevada, and Utah). With the goal of increasing climate change literacy and knowledge of available resources. Read more [here](#).

Subscribe

Past Issues

Translate ▾

RSS



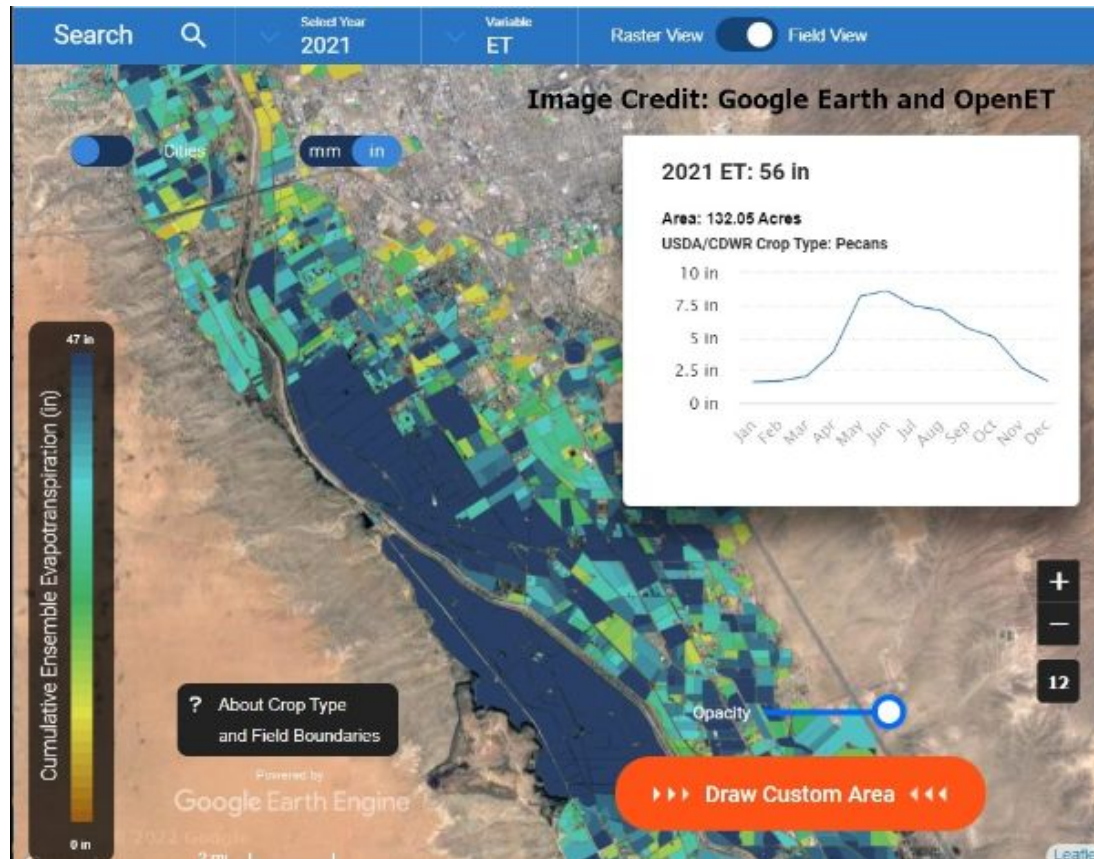
New Case Study on the NDMC's Drought Impacts Toolkit Available on the CCAST Dashboard

The Southwest Drought Learning Network (DLN) works closely with the Collaborative Conservation and Adaptation Strategy Toolbox (CCAST) to highlight Case Studies on drought and climate change adaptations. Please visit and share the DLN's latest CCAST Case Study, which explores the development and use of the National Drought Mitigation Center's (NDMC) Drought Impacts Toolkit. The online StoryMap may be found [here](#), and its accompanying two-page handout [here](#). A special thank you to NDMC intern, Bryce Carlen, who worked with the DLN and CCAST to develop these resources!



Introducing OpenET

OpenET is an online tool that provides satellite-based estimates of evapotranspiration (ET). The purpose of the tool is to enable improved water management across the western United States. Users create a free account to access the **Data Explorer** and once in the interface can explore monthly and yearly ET rates for a selected agricultural field or 1/4 acre resolution. The example image here shows annual ET from pecan orchards south of Las Cruces, NM. For more examples of how OpenET can be used, please visit the website: <https://openetdata.org/openet-use-cases>



Announcing Southwest Climate Hub Partnerships

Two new partnerships between the Southwest Climate Hub, Northern Plains Climate Hub, and extension will bolster climate research and connect and share climate-smart solutions directly with the agricultural community. The two projects were funded through the National Institute of Food and Agriculture's program to provide effective, translatable, and scalable approaches to address climate change through regional partnerships. The first partnership aims to strengthen the role of USDA Climate Hubs in Indian Country by enhancing Native agroecosystem resilience through expansion of climate services and outreach in collaboration with Desert Research Institute. The second partnership, with Montana State University, the University of California at Davis, and the National Center for Appropriate Technology expands the utility and accessibility of the **AgRisk Viewer**.

New Wildfire and Climate Change Module for High School Teachers!

Get hands-on with the causes and consequences of increasing wildfire risk in the Southwest with the newest lessons, *Climate Change and Wildfire*, from the Southwest Climate Hub and Asombro. Read more [here](#).

[Subscribe](#)[Past Issues](#)[Translate ▾](#)[RSS](#)

Society for Range Management Virtual Conference 2022

Joel Brown, Southwest Climate Hub Co-lead, organized a symposium that addressed *Transformational Climate Change on Rangeland Ecosystems*. View recordings [here](#).

Helena Deswood, Southwest Climate Hub Tribal Coordinator, co-organized a symposium, *Building Resilience in Indigenous Natural Resources*, with the Native American Range Advisory Committee and Grazing Lands Committee. View recordings [here](#).

Introducing the AgriSolar Clearinghouse

Our colleagues at the National Center for Appropriate Technology (NCAT) recently launched the [AgriSolar Clearinghouse](#). The Clearinghouse is a nationwide resource to connect businesses, landowners, and researchers with trusted resources to support the growth of co-located solar and sustainable agriculture, also known as agrivoltaic development. Their information library highlights a variety of topics including system design, financial resources, solar dairy, solar farming, and solar irrigation. According to the website, expanding agrivoltaics on solar-appropriate lands can allow agricultural and solar producers to maximize land use while increasing revenue.

IPCC Releases Report Assessing the Impacts and Risks of Climate Change

The Intergovernmental Panel on Climate Change – the United Nations body for assessing the science related to climate change - released the Working Group II [report](#) focused on climate change impacts, adaptation and vulnerability. The report assesses the impacts and risks of climate change, looking at ecosystems, biodiversity, and human communities at global and regional scales. The Working Group II report follows the [Working Group I report](#) describing "The Physical Science Basis". We expect two additional IPCC reports in 2022, one focused on climate mitigation and the other synthesizing information for a non-technical audience.

Recent Publications

Climate Adaptation for Tropical Island Land Stewardship: Adapting a Workshop Planning Process to Hawai'i

[Subscribe](#)[Past Issues](#)[Translate ▾](#)[RSS](#)

private landowners participated in a training to consider climate change information and identify adaptation actions for forests and native Hawaiian ecosystems. Indigenous science and knowledge were integrated into the workshop through intentional program planning within an Indigenous framework, centering community well-being and availability of resources in conservation and stewardship practices. This publication highlights how the virtual training helped to foster ideas around adaptation planning and improve capacity of the many organizations and individuals dedicated to addressing the threat of climate change impacts to natural resources in tropical island systems. Read more [here](#).

Criollo cattle - new publications from the Sustainable Southwest Beef Project

We would like to highlight recent articles from Shelemia Nyamuryekung'e and Matt McIntosh, both post-doctoral researchers with hub partners - the [Sustainable Southwest Beef project](#) at New Mexico State University. The Sustainable Southwest Beef team are evaluating Raramuri Criollo cattle, precision technologies, and tradeoffs among beef supply chain options from pasture to plate to enhance ranch and southwestern rangeland resilience. Shelemia and Matt's research focuses on the behavior of Criollo cattle and their use of landscape and response to heat.

[Foraging behavior and body temperature of heritage vs. commercial beef cows in relation to desert ambient heat](#)

[Movement, activity, and landscape use patterns of heritage and commercial beef cows grazing Chihuahuan Desert rangeland](#)

[Weight gain, grazing behavior and carcass quality of desert grass-fed Rarámuri Criollo vs. crossbred steers](#)

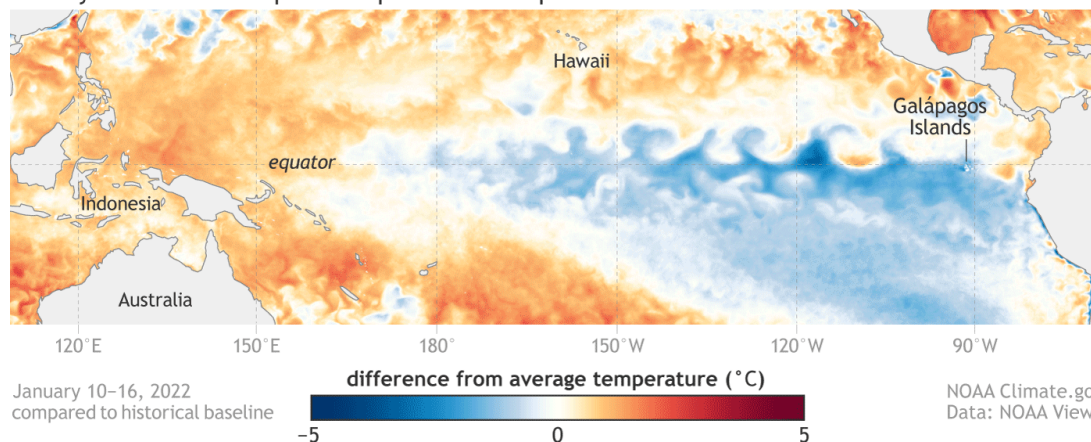
Climate reporting for the Southwest

El Niño/Southern Oscillation (ENSO)

As of March 10, 2022, the ENSO alert system status is [La Niña Advisory](#). Forecasters predict a 53% chance of La Niña to continue into summer. Learn more about additional ENSO perspectives and analysis available at the NOAA [ENSO Blog](#) and the [Southwest Climate Outlook](#), an analysis by [CLIMAS](#).

Weekly sea surface temperature patterns in tropical Pacific

JANUARY 10-16



National Weather Service Climate Prediction Center Outlooks

1-month outlook

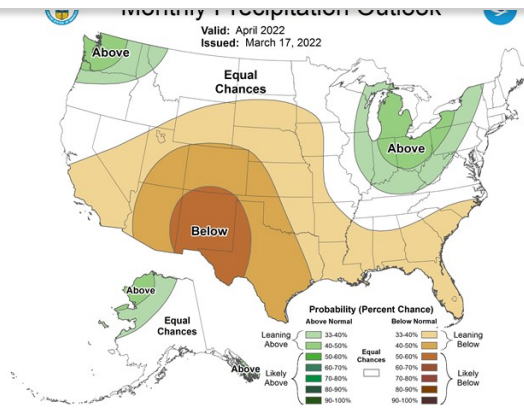
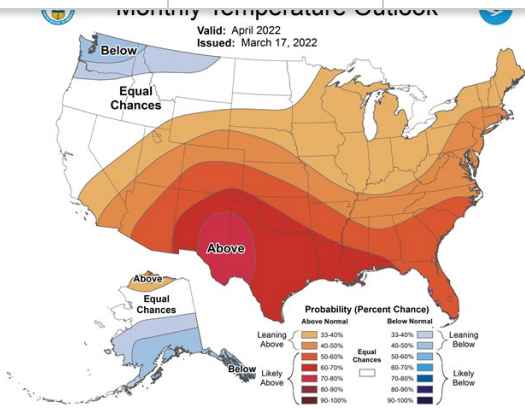
As of March 17, the [one-month outlook](#) for April shows a 33-80% chance for above-normal temperature for the southwest and a 33-50% chance for below-normal for Utah and Nevada. There will be a 33-60% chance for below-normal precipitation for the southwest.

Subscribe

Past Issues

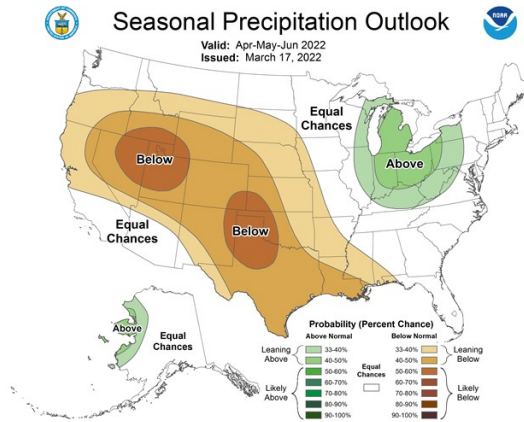
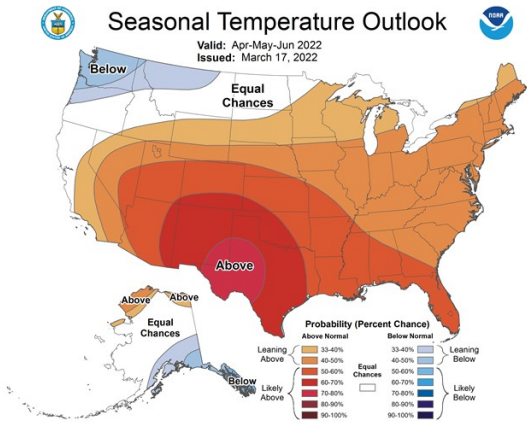
Translate ▾

RSS



3-month outlook

As of March 17, the **three-month outlook** (Apr-May-Jun 2022) shows a 33-80% chance of above-normal temperatures for the southwest. There will be a 33-60% chance of below-normal precipitation for the southwest and an equal chance for precipitation for southern Arizona. These outlooks are created monthly by NOAA Climate Prediction Center and based on departures from the 1991-2020 base period. To view more short-term outlooks, please visit the [NOAA's National Weather Service Climate Prediction Center](#).



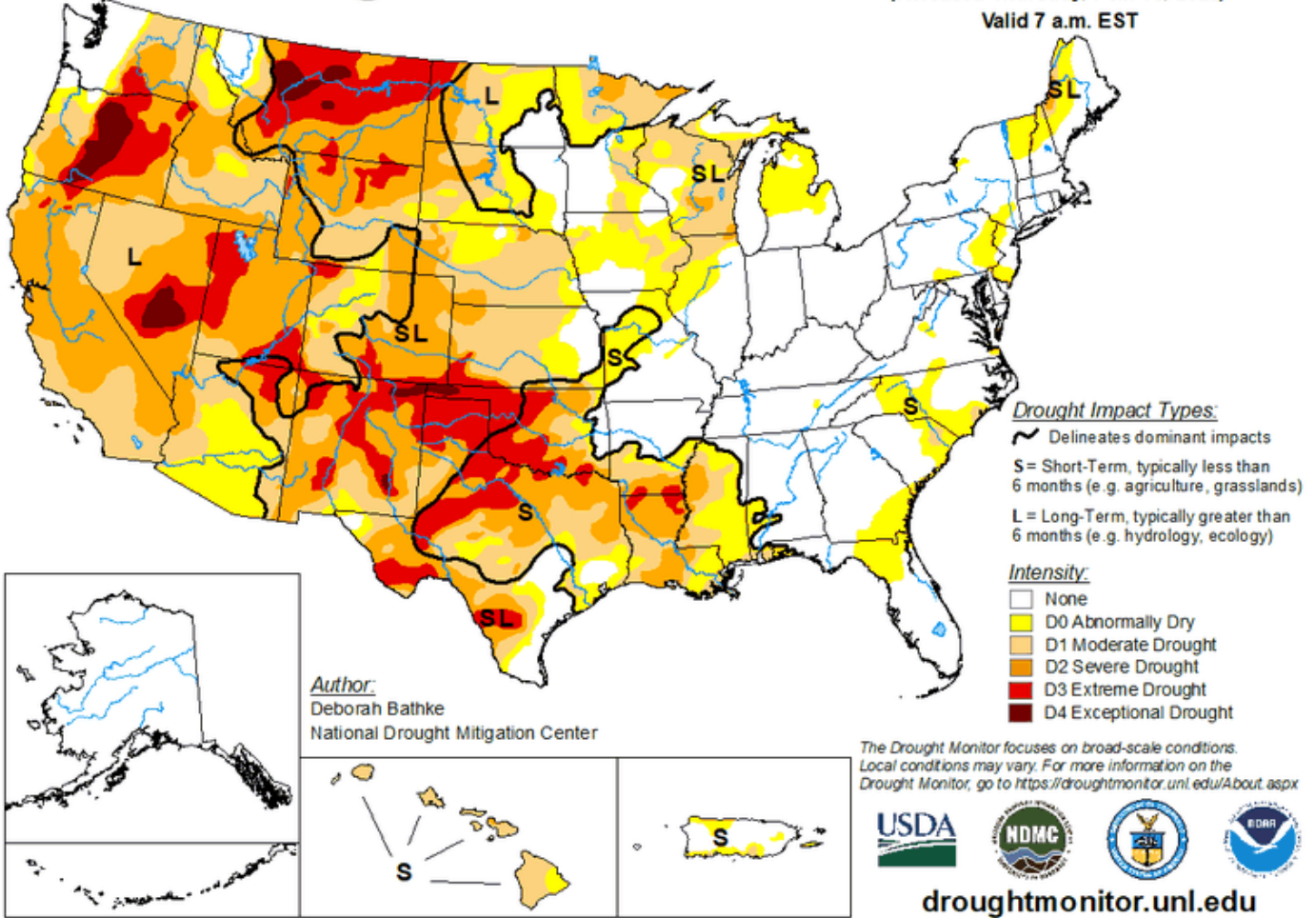
Drought

Drought conditions remain in the southwest and Hawai'i. You can also view the [U.S. Drought Monitor Class Change map](#) to see how conditions have improved or degraded in your area over a period of time. Below is an [animation map](#) for the past 6 weeks of the drought monitor maps. For a more detailed drought summary, visit the U.S. Drought Monitor [website](#).

U.S. Drought Monitor

(Released Thursday, Feb. 10, 2022)

Valid 7 a.m. EST



Announcements

New Mexico Department of Agriculture Healthy Soil Program

The New Mexico Department of Agriculture (NMDA) 8-week application period for Healthy Soil Program FY23 grants will open **March 18 - May 12, 2022**. In tandem with the launch, NMDA will host webinars on March 18 to walk through an application with potential applicants. Register here for webinars.

NMDA seeks applications for on-the-ground projects that will directly improve soil health in New Mexico by implementing one or more soil health principles. Please visit [NMDA's Healthy Soil Program website](#) to prepare to apply, as well as to subscribe to the Healthy Soil Program newsletter.

Natural Resources Workforce Development 2022-2023 Fellowship

The Southwest Climate Adaptation Science Center (SW CASC) Natural Resources Workforce Development (NRWD) Fellowship was developed to provide graduate students with opportunities for training and practice in developing use-inspired and actionable science to inform natural resource management decisions. Key aspects of the training include: methods to foster collaborations and the development of science that informs resource management decisions; experience in interacting and collaborating with natural resource management decision-makers; and experience in effective communication of research results to enable use of that research. **Deadline: April 4, 2022.** Find the application and more information, [here](#).

[Subscribe](#)[Past Issues](#)[Translate ▼](#)[RSS](#)

Online Climate Course: Climate Change Impacts and Adaptation

In Spring 2022, the South Central Climate Adaptation Science Center (SC CASC) at the University of Oklahoma will offer two short courses that will dive into the impacts of climate change and adaptation strategies. The courses are free and online, so anyone from anywhere may participate! You will have the opportunity to learn from climate experts at OU and SC CASC partner institutions. Upon successful completion of the short course, you will receive a personalized certificate. This course will be live from **April 4 - 29, 2022**. [Register here](#).

Call for Proposals: National Tribal & Indigenous Climate Conference.

The National Tribal & Indigenous Climate Conference is now accepting proposals for the 2022 conference. Proposal types include presentations, working groups, trainings, and climate conversations. The NTICC 2022 will be held August 29 - September 1, both virtually and in St. Paul, MN. **Deadline for proposals: April 22, 2022**. Learn more [here](#).

Fire and Climate Change Webinar Series

Join the South Central Climate Adaptation Science Center and U.S. Forest Service for our upcoming webinar series. The webinars are open to South Central CASC tribal partners and resource managers working in the realm of fire and climate change and the Southern Region (Region 8) USFS ecologists, planners, foresters, fire personnel, Tribal Liaisons, climate change coordinators, and natural and cultural resources staff. Topics discussed will include an introduction to the intersection of fire and climate change, Indigenous fire perspectives, and Indigenous fire practices. Webinars will occur from 9:00 am-10:30 am central on **May 3rd, 10th, 17th, and 24th**. [Register here](#)

Climate Adaptation for Land Trusts

This online course is designed for land trusts actively working on stewardship projects in rural, suburban and urban forests, forested watersheds, and wetland systems. Land trusts can participate as individuals or in groups. Climate vulnerability and management information will be targeted to ecosystems in the Western U.S. Virtual Class Schedule: 90-minute sessions on **May 4th, 11th, and 25th** at 10 a.m. Pacific time (11am MT/12pm CT, 1pm ET). Thanks to the generous support of the USDA Climate Hubs, the course is being offered at a discounted cost of \$20 for Land Trust Alliance members, \$30 for non-members. [Register here](#)

Funding Opportunities

Partnerships for Climate-Smart Commodities – Building Markets and Investing in America’s Climate-Smart Farmers, Ranchers & Forest Owners to Strengthen U.S. Rural and Agricultural Communities

Deadline: April 8, 2022, for the first funding pool. May 27, 2022, for the second funding pool.
Award Ceiling: \$100,000,000

Meat and Poultry Processing Expansion Program

Deadline: April 11, 2022
Award Ceiling: \$25,000,000

WaterSMART: Applied Science Grants for Fiscal Year 2022

Deadline: April 14, 2022
Award Ceiling: \$200,000

Announcement for Program Funding for NRCS’ Conservation Innovation Grants (CIG) for Federal fiscal year (FY) 2022 – New Mexico

Deadline: April 22, 2022
Award Ceiling: \$50,000

[Subscribe](#)[Past Issues](#)[Translate ▼](#)[RSS](#)**Deadline:** April 25, 2022

Award Ceiling: \$250,000

Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship**Deadline:** April 26, 2022

Award Ceiling: \$262,500

WaterSMART Small-Scale Water Efficiency Projects**Deadline:** April 28, 2022

Award Ceiling: \$100,000

Water Conservation Field Services Program: Financial Assistance for Fiscal Year 2022**Deadline:** April 29, 2022

Award Ceiling: \$25,000

Announcement for Program Funding for NRCS' Conservation Innovation Grants (CIG) for Federal fiscal year (FY) 2022 – UTAH**Deadline:** April 29, 2022

Award Ceiling: \$200,000

Conservation Innovation Grants Pacific Islands Area State Program**Deadline:** May 2, 2022

Award Ceiling: \$450,000

Specialty Crop Block Grant Program – Farm Bill**Deadline:** May 3, 2022

Award Ceiling: \$23,268,871

Fiscal Year 2022 Tribal Wildlife Grant (TWG) Program**Deadline:** June 24, 2022

Award Ceiling: \$200,000

Agriculture and Food Research Initiative Sustainable Agricultural Systems**Deadline:** July 28, 2022

Award Ceiling: \$10,000,000

Agriculture and Food Research Initiative - Foundational and Applied Science Program**Deadline:** December 31, 2022

Award Ceiling: \$15,000,000

Events






- March 29, 2022, 2:00-3:00 pm ET - **Practical Applications of Soil Moisture Information**
 - April 1-29, 2022 - **Online Climate Course: Climate Change Impacts and Adaptation**
 - April 5, 2022, 1:00-2:00 pm MT - **Southwest Drought Briefing: A Focus on Snowpack**
 - May 3-24, 2022 - **Fire and Climate Change Webinar Series**
 - May 4- 25, 2022 - **Climate Adaptation for Land Trusts**
 - May 9-12, 2022 - **Native American Fish and Wildlife Society 39th Annual National Conference**
-

Subscribe

Past Issues

Translate ▼

RSS

-  Southwest Climate Hub
-  Email
-  SW Climate Hub
-  Come Rain or Shine
-  @USDAClimateHubs

Copyright © 2022 USDA Southwest Climate Hub, All rights reserved.

Want to change how you receive these emails?
You can [update your preferences](#) or [unsubscribe from this list](#).