

Featured Article



Climate Resilience Guide for Small Forest Landowners

This guide from the Northwest Climate Hub and the University of Washington Climate Impacts Group discusses climate impacts on forests and actions landowners can take to increase climate resilience. The guide is for small forest landowners in Western Washington, and organizations that support these landowners to manage their forests.

Drought Update

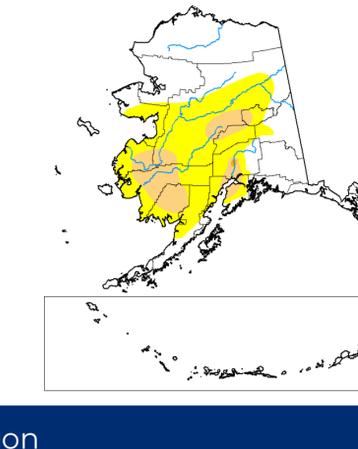
Much of Idaho, Oregon and Washington have seen improvements in recent months due to continuous storms and near to below-normal temperatures. That same pattern continued this week. Both northern Idaho, western Washington, and northwestern Oregon have returned to normal conditions. Areas of the southern Idaho and Oregon received precipitation that improved conditions. Despite these improvements there are still areas experiencing severe (D2-orange), extreme (D3-red), and exceptional drought (D4-dark red) in Idaho and Oregon.

Over 30% of Alaska is experiencing abnormally dry (D0-yellow) conditions. Moderate drought (D1-tan) conditions are affecting over 10% of the state with two areas in Southcentral and one area in Southwest. These dry conditions are a result of above-normal temperatures and below-normal precipitation.

NIDIS National Integrated Drought Information System | **CoCoRHaS Community Rain Hail Snow Network** | **Snow Drought Conditions** | **Pacific Northwest Drought Impacts Survey**

U.S. Drought Monitor
USDA Northwest Climate Hub

June 14, 2022
(Released Thursday, Jun. 16, 2022)
Valid 8 a.m. EDT



	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	49.63	50.37	22.01	8.40	5.02	0.23
Last Week 06-07-2022	52.03	47.97	18.00	10.81	5.85	0.67
3 Months Ago 03-15-2022	75.56	24.44	22.90	14.63	6.40	1.84
Start of Calendar Year 01-04-2022	74.10	25.90	23.79	15.09	6.81	2.01
Start of Water Year 09-28-2021	70.14	29.86	27.67	24.87	18.54	7.83
One Year Ago 06-19-2021	61.06	38.94	24.76	16.17	6.54	0.64

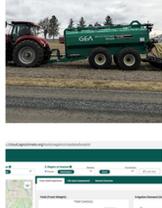
Intensity:
None (White), D0 Abnormally Dry (Yellow), D1 Moderate Drought (Tan), D2 Severe Drought (Orange), D3 Extreme Drought (Red), D4 Exceptional Drought (Dark Red)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/about.aspx>.

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NOAA/NWS/NCEP/CPC

USDA | NDMP | NIDIS | NOAA | droughtmonitor.unl.edu

Information



A Manure Maneuver
Dairy farmers are injecting manure directly into the ground to enrich soil, minimize soil disturbance, and combat the effects of climate change.



Rotational Grazing
This Northwest Climate Hubs article conveys how rotational grazing, a form of managed grazing, could help agricultural producers mitigate and adapt to the effects of climate change.



Digital Tools for Fruit & Vegetable Growers
The Agriculture and Food Systems Institute developed this tool to prepare farmers for the future and support long-term planning for fruit and vegetable production.



Climate Change & Agriculture
This webpage is a compilation of research of climate change issues related to agriculture completed by the USDA Economic Research Service.



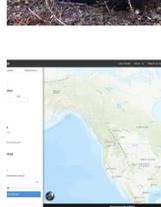
Check It Out: What We Know About Smoke & Wine Grapes
AgClimate.net provided a summary of a recent magazine article describing what we know about the complexities of wildfire smoke on grapes and wine.



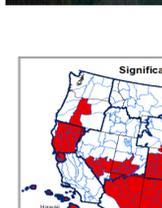
Short Films on Climate Adaptation Resources
A series of short films highlight the work of the USDA Climate Hubs, and describe ways to store carbon and reduce methane, enhance community resilience, and foster partnerships.



US Fish & Wildlife Service Spring news
A spotlight on the impacts of climate change on birds, habitat, and migration describes how collaborations between ranchers and indigenous groups are helping to address related issues.



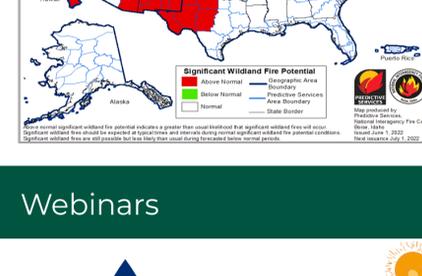
Biochar Basics: Science You Can Use
This guide discusses the ins and outs of biochar, including how it is made, processed, and used, and how it can help to sequester carbon.



Climate Change & Wildfire in Idaho, Oregon, & Washington
The Northwest Climate Hub describes the relationship between climate change and wildfire, and explores how changing wildfire patterns will affect forests.



Seedlot Selection Tool and Climate Smart Restoration Tool
A recent article in the journal Ecosphere discusses the use of two web-based tools for sourcing seed adapted to future climates and provides case studies of applications. La herramienta de selección de lotes de semillas está disponible en español



National Significant Wildland Fire Potential Outlook
This report describes potential for wildfire over the next four months across the country. The June report notes that significant wildfire potential is likely to be above normal for central Oregon in June, and this will expand across most of the Northwest by August. All other areas a projected to have normal significant wildland fire potential.

Webinars

Pacific Northwest Drought Early Warning System (PNW-DEWS) June Drought and Climate Outlook Webinar, 27 June, 11 am-12 pm PST.
These webinars provide timely information on current and developing drought conditions, as well as climatic events such as La Niña. Speakers will also discuss the impacts of these conditions. There will also be two specialty topic speakers who will share information related to drought.

Resilient Nation Partnership Network Ideation Hour: Extreme Heat Resilience. 29 June, 10 - 11 am EST. This webinar will focus on discussion about the impacts of extreme heat across the country, led by The Resilient Nation Partnership Network, University of Arizona, Arizona State University, and the City of Phoenix. Resilience ideas, projects, resources, and collaboration opportunities will be a welcome addition to the conversation. The session will include four breakout rooms about: extreme heat and housing; extreme heat as a threat multiplier; extreme heat as a public health hazard; and extreme heat and local planning and capital improvement.

2022 NWS Alaska Climate Outlook Briefing. This briefing will review recent and current climate conditions around Alaska, review some forecast tools, and finish up with the Climate Prediction Center's forecast for the following month and the summer season.

June 17, 12 - 1 pm AKST
July 22, 12 - 1 pm AKST

USGS and NOAA National Listening Session: Water availability prediction for ecosystems. 8 September, 10 - 12:30 pm PST. This listening session will include a short introduction to water availability prediction products for ecosystems, followed by guided discussions with participants on research priorities for product development or improvement at the national and/or regional scale.

Workshops & Conferences

2022 Annual Soil and Water Conservation Society Conference, 31 July-3 August, Denver, CO. This year's conference aims to bring together people from all backgrounds. It will feature the latest ideas, technologies, and practices and foster a dialogue around water conservation efforts. Through workshops, sessions, symposia, exhibits, and demonstrations, cutting-edge research and practice developments in soil health, water quality, and resource management will be shared. Current policies, practices, and research about climate change and climate-smart agriculture will also be shared.

How Can We Quantify and Reduce Agricultural N2O Emissions at Scale?, 12 July, 12 pm PST. This webinar will focus on nitrous oxide (N2O), the primary greenhouse gas emitted by agricultural soils. Dr. Allison Eagle will discuss N2O emissions accounting at large spatial scales, and Dr. Mike Castellano will discuss the potential for reducing N2O emissions through improved water management in the U.S. corn belt.

Tribal Lands and Environmental Forum, 8-11 August, Milwaukee, WI and online. The 12th annual forum for environmental professionals will provide a space for Tribes; state, local, and federal agencies; community organizations; and other interested parties to meet, share knowledge, and learn from one another how to improve management, protection, and restoration of Tribal lands for us and all our relations. **Registration must be completed by 25 July for in-person and 5 August for virtual.**

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National Tribal and Indigenous Climate Conference, 29 August-1 September, St. Paul, MN and online. This conference focuses on climate change adaptation and resilience efforts by Tribal and Indigenous people and communities. People from all backgrounds, including Tribal and Indigenous resource professionals, federal staff, personnel from universities and nonprofits, and students from academic institutions, including Tribal colleges and universities, are invited to attend.

Reforestation Pipeline in the Western United States, Missoula, MT, 27-29 September. Large scale reforestation is one proposed solution to help mitigate the effects of climate change. This conference will provide a forum to discuss the potential challenges to reforestation in the West. This meeting is a joint annual meeting for the Western Forest and Conservation Nursery Association, Intertribal Nursery Council, and Intermountain Container Seedling Growers' Association.

Oregon Conservation Education and Assistance Network (OCEAN) CONNECT+, 6-8 September in Seaside, OR. The three-day, immersive conference will bring together local, state, and federal decision-makers, professionals from conservation districts, watershed councils, land trusts, and others committed to conserving natural resources. This conference advances Oregon's conservation efforts through diversity, equity, and inclusion of all people across the state.

10th Annual Rising Voices Workshop, Virtual, 14-16 September. The Rising Voices Center for Indigenous and Earth Sciences facilitates opportunities for Indigenous and non-Indigenous scientific experts and community leaders from around the world to jointly address how extreme weather and climate events are impacting communities, and to develop action plans. This year's workshop theme, Reflect on Knowledge through Indigenous and First Science Collaborations, will serve as a bridge to emergent on where Rising Voices has been in its first decade, and what emerges into the next decade. Registration information for this virtual workshop to come.

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Funding Opportunities

June

August

2022 Matching Awards Program, National Forest Foundation. The National Forest Foundation is currently accepting proposals for its Matching Awards Program (MAP). MAP is a national, competitive grant program that provides federal funds for on-the-ground projects benefiting America's National Forests and Grasslands. The program supports action-oriented projects that enhance outdoor experiences, forest, and ecosystem health, and engage local communities in caring for their public lands. Promoting ecosystem health for forests and grasslands will ensure that they are capable of adapting to future changes in temperature and precipitation. **Applications due by 22 June.**

Clean Lakes, Estuaries, and Rivers Initiative. The USDA Farm Service Agency is offering a nationwide opportunity for landowners and agricultural producers currently implementing water quality practices through the Conservation Reserve Program to enroll in 30-year contracts, extending the lifespan and strengthening the benefits of important water quality practices on their land. To sign up, landowners and producers should contact their local USDA Service Center by **5 August**.

National Coastal Wetlands Conservation Grants. Coastal wetlands will become increasingly important for carbon sequestration and wildlife habitat, and may be threatened with sea-level rise. Protecting and enhancing coastal wetlands now will help them to be more resilient to future changes. The National Coastal Wetlands Conservation Grants Program annually provides grants of up to \$1 million to coastal and Great Lakes states, as well as U.S. territories, to protect, restore, and enhance coastal wetland ecosystems and associated uplands. **Applications due 24 June.**

Find you local service center by clicking here.

Proposals for the Joint Chiefs' Landscape Restoration Partnership. The U.S. Department of Agriculture (USDA) is asking for proposals from partners that aim to improve forest health on public and private lands by reducing wildfire risks in a municipal watershed or wildland-urban interface. USDA's Natural Resources Conservation Service and the Forest Service are seeking proposals by **5 August**.

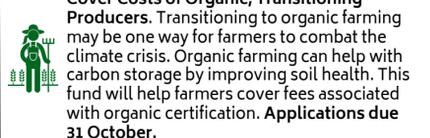
July

October

Bureau of Indian Affairs Tribal Climate Resilience Annual Awards Program. This fiscal year, approximately \$46 million in funding will be released to federally recognized Tribes for climate adaptation, ocean and coastal management, relocation, managed retreat, or protect-in-place, and internships and youth engagement. **Applications due by 6 July.**

USDA Accepting Applications to Help Cover Costs of Organic, Transitioning Producers. Transitioning to organic farming may be one way for farmers to combat the climate crisis. Organic farming can help with carbon storage by improving soil health. This fund will help farmers cover fees associated with organic certification. **Applications due 31 October.**

America the Beautiful Challenge. This new grant program is focused on locally led ecosystem restoration projects that seek to advance conserving and restoring rivers, coasts, wetlands, watersheds, forests, grasslands, and other important ecosystems that serve as carbon sinks; improving ecosystem and community resilience to coastal flooding, drought, and other climate-related threats; and more. Applicants will be encouraged to prioritize projects that uplift Tribal and Indigenous-led efforts and to consider how proposals build the conservation and resilience workforce of the future. **Applications due by 21 July.**



Ongoing

Rapid Response to Extreme Weather: Food and Agricultural Science Enhancement (FASE) Grant. This program is designed to rapidly deploy strategies and fill knowledge and information gaps to protect the nation's food and agricultural supply chains, from production through consumption, during and after extreme weather and disasters. All applicants must directly address effects associated with an extreme weather event or disaster that has occurred and address agroecosystem resilience, agricultural commodity, and nutrition security, and/or health, well-being, and safety. FASE grants will accept applications continuously, so long as a Letter of Intent is submitted within 14 days of an extreme weather event.

Opportunity

Call for Nominations for Review Editors for the 5th National Climate Assessment. The United States Global Change Research Program is seeking nominations for Review Editors for the Fifth National Climate Assessment (NCA5). The Review Editor ensures that the author teams have considered and responded to all public and peer-review comments appropriately. Review Editor nominees should be technical experts with climate-related proficiency in at least one of the regions, sectors, or response topics outlined in the NCA5 Table of Contents. **Nominations must be submitted by 11:59 PM ET on 1 July.**

University of Washington Climate Impacts Group Hiring New Director. The director's duties will include providing leadership for the organization, working collaboratively to set the direction for research, education, and outreach, and serving as the lead principal investigator on large research efforts, working with partners, and providing internal management. A successful candidate with a PhD or terminal professional degree and at least nine years of experience in a similar line of work. **Applications due by 15 July.**

Opportunity to Join Team in Developing Northwest Climate State of Knowledge Synthesis
The University of Washington Climate Impacts Group is seeking individuals from Northwest Climate Adaptation Science Center University Consortium members — Boise State University, Oregon State University, University of Montana, University of Washington, Washington State University, Western Washington University — who are interested in being part of a team to develop the Northwest Climate State of Knowledge Synthesis. Time commitment to this project can be as little as three months, but the project will be running through December 2023.