

# March Newsletter

## Featured Article



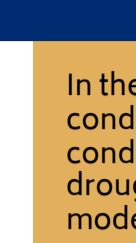
### Atmospheric Rivers in the Northwest

Atmospheric Rivers are large bands of water vapor that bring precipitation and moisture to the Northwest. These events can be positive, bringing rain and snow in times of drought, but they can also cause damage if too much precipitation falls at once. Climate change may increase the number of detrimental atmospheric rivers.

## Opportunities



**Northwest Climate Hub Alaska Fellow.** The Hub, Washington State University, and the Northwest Sustainable Agroecosystems Research Unit are seeking a fellow for Alaska to develop a current state of knowledge on how to improve soil health for a variety of terrestrial crops grown in Alaska, and develop a summary of soil amendment rates, recipes, biochar, fish waste, etc. via technical guides and fact sheets. This position is based in Palmer, AK. **Applications due 20 March.**



**SARE Fellows Program.** This program will help participants enhance their understanding of sustainable agriculture through broad-based training and interpersonal interactions at unique agriculture operations nationwide. Participating Fellows build professional relationships, improve their teaching and technology transfer skills, and are better prepared to develop programs that meet the needs of their local agricultural communities. **Applications due 8 May.**

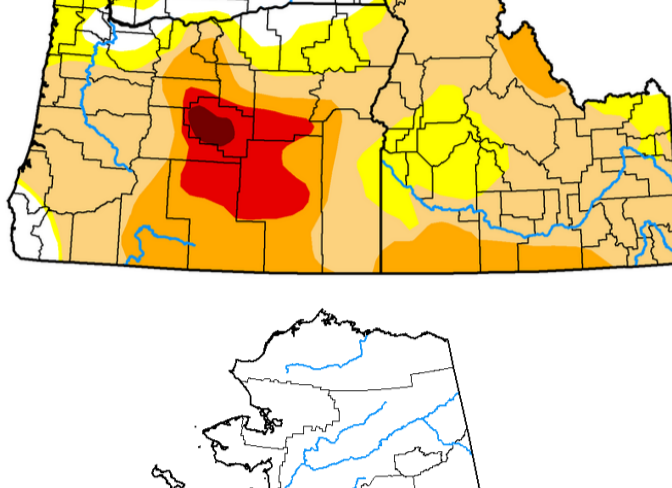
## Drought Update

In the Northwest, especially Oregon, precipitation in the past few weeks has not improved drought conditions. In Oregon, reservoirs remain depleted at record- to near-record low levels. Drought conditions have expanded in southwestern Washington and northwestern Oregon, changing from no drought to abnormally dry (D0-yellow). In western Oregon, there was also some expansion of moderate drought (D1-tan). Conditions in much of Idaho have remained consistent, except for a worsening of conditions from abnormally dry (D0-yellow) to moderate drought (D1-tan) in northern Idaho.

Alaska remains drought-free.



### U.S. Drought Monitor USDA Northwest Climate Hub



**March 14, 2023**  
(Released Thursday, Mar. 16, 2023)  
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	75.00	25.00	16.78	5.62	1.58	0.16
Last Week 03-07-2023	74.51	25.49	16.75	5.85	1.69	0.16
3 Months Ago 12-13-2022	72.58	27.42	16.42	7.57	3.06	0.16
Start of Calendar Year 01-01-2023	75.01	24.99	15.00	7.57	3.06	0.16
Start of Water Year 06-27-2022	70.29	29.71	18.36	7.80	3.90	0.16
One Year Ago 03-15-2022	75.56	24.44	22.90	14.63	6.40	1.84

**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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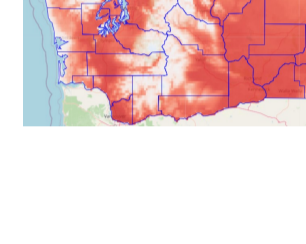


## Information



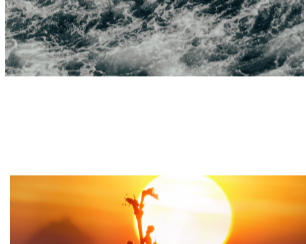
### 2022 Pacific Northwest Water Year Impacts Assessment

This assessment summarizes the water year conditions and sector and provides a resource for future management of drought and other climate extremes in the Idaho, Oregon, and Washington.



### Climate Mapping for a Resilient Washington

This tool provides state agencies, local governments, and communities with data and information on expected changes in climate and related natural hazards. Information aims to inform assessment and planning for climate resilience.



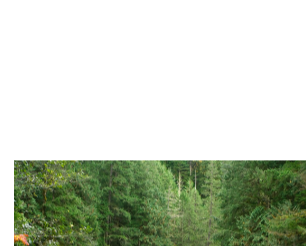
### Climate Change and Coastal Storms in Western Alaska

In this Hub article, learn how climate change is intensifying the impacts of coastal storms on the ecology and communities of western Alaska.



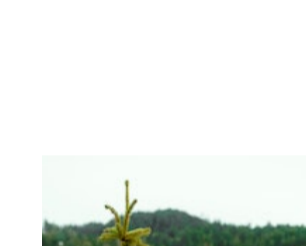
### Climate Change and Wildfire in Alaska Factsheet

This Hub factsheet summarizes how increases in temperature and longer growing seasons are intensifying fire seasons in Alaska.



### AgriSolar Podcast: Birds, Bees, and Butterflies – Solar Pollinator Habitat

This episode of the AgriSolar podcast discusses the benefits of pollinator habitat at solar energy sites, pollinator habitat design, seed mixes, pollinator health and quality, and what people can do to help pollinators in their own backyard.



### Come Rain or Shine Podcast: Biochar Uses and Potential Benefits

Biochar can be used to improve soil health and sequester carbon. In this podcast episode from the Southwest Climate Hub, U.S. Forest Service scientists discuss biochar and its many uses.



### USDA Invests More than \$48.6 Million to Manage Risks, Combat Climate Change

These projects will help mitigate wildfire risk, improve water quality, restore forest ecosystems, and ultimately contribute to the USDA's efforts to combat climate change.



### Want to Live Longer? Plant a Tree

This article by the Washington Post discusses the findings of research from the U.S. Forest Service. The research discovered that where a nonprofit planted more trees in Portland, Oregon, fewer people died.

## Workshops and Conferences



**2023 US Drought Monitor Forum, 11-13 April, Boulder City, NV.** Instances of drought are likely to increase with climate change in the Northwest. The goal of this forum is to provide an in-depth discussion on the current state of US Drought Monitor production, and to provide stakeholders with an opportunity to give feedback and ask questions about the US Drought Monitor process. Regional drought issues and the state of science related to drought monitoring across the U.S. will also be discussed.



**Cross Boundary Landscape Restoration Workshop: Adapting to a Climate-Altered West, 2-4 May, Fort Collins, CO.** This workshop unites land and fire managers, researchers, and stakeholders to develop strategies that apply evidence-based collaborative management of forest landscapes in the Intermountain West. Topics and sessions include: crossing boundaries to realize cumulative impacts for effective landscape outcomes, understanding compounding disturbances, climate adaptation responses and needs, and incorporation of rapid adaptive management in changing ecological and social climates.



**2nd National Flash Drought Workshop, 2-4 May, Boulder, CO.** This workshop will bring the flash-drought research community and practitioners together to promote coordination, discuss the state of the science, resources, and tools related to flash drought, and identify outstanding research and information needs. **Flash drought tools, presentations, and poster abstracts due 22 March.**



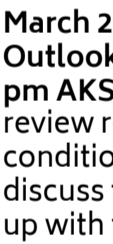
**Northwest Reforestation: Choosing Plant Materials Suited to Current and Future Climates, 23 May, Olympia, WA.** This Hub workshop aims to promote shared learning around selection of plant materials for climate-informed reforestation. It will bring together technology transfer specialists and practitioners from across Idaho, Oregon, and Washington to discuss the lessons learned from established assisted migration plantings. The primary focus will be on assisted population migration (movement of seed sources within a species range), but assisted range expansion and species migration (movement of seed sources just outside and well beyond the current species range) will also be discussed. Land managers from federal, state, and tribal agencies are encouraged to attend.



**Interagency Conference on Research in the Watersheds, 5-8 June, Corvallis, OR.** The Interagency Conference on Research in the Watersheds brings together watershed scientists, stakeholders, and managers to share scientific advances and management strategies to sustain the country's water resources. The goals are to better understand the factors driving change and associated impacts, and to incorporate societal needs and scientific uncertainties in the sustainable management of water resources.



**2023 Northwest Tribal Clean Energy Summit, 13-15 June, Tulip Resort and Casino, Marysville, WA.** The Summit will engage Tribal leaders, citizens, staff, youth, and collaborators in conversation about navigating the cultural, economic, and social challenges of implementing clean-energy projects. This summit aims to ensure that Tribes have the information, support, capacity, and resources necessary to plan for and implement Tribal Energy Projects. Tribal leaders, staff, citizens, and tribal collaborators are invited to attend.



**2023 Native Youth Climate Adaptation Leadership Congress, 25 June-1 July, Shepherdstown, WV.** This experience invites Native communities to work together to address conservation challenges by providing training in leadership principles and conservation skills. Application is open to high schoolers from federally recognized Tribes in their junior year (11th year). Students must be in a cohort of 3-5 individuals from their Tribe, and they will need a community mentor to accompany them.

## Webinars

**March 2023 Alaska Climate Outlook Briefing, 24 March, 12 pm AKST.** This webinar will review recent and current climate conditions around Alaska, discuss forecast tools, and finish up with the Climate Prediction Center's forecast for April 2023 and the early spring season. Join to learn what has happened and what may be in store with Alaska's seasonal

**Spring 2023 Science You Can Use Webinar Series, every Wednesday until 29 March, 9 am PST.** This series features seven land-manager focused webinars presented by U.S. Forest Service Rocky Mountain Research Station scientists and collaborators. These one-hour sessions will begin with concise presentations, followed by Q&A and discussion. Webinar topics include reforestation, assessing wildfire risk, and diversity and inclusion in outdoor recreation.

**Resources for Private Forestland Risk Reduction and Post-Fire Restoration, 5 April, 6 pm PST.** This webinar will explore the complexities and realities of "restoring" forests and other ecosystems to historical conditions. The last talk in this series will discuss resources for private forestland risk reduction and post-fire restoration. This series is not about telling the listener what is best, but rather collectively thinking about how resilience in the landscapes we collectively steward can be promoted.

**What's Happening with Sudden Oak Death, 11 and 18 April, 4 pm PST.** This two-part webinar series will provide updates on the sudden oak death (SOD) infestations in Curry County, Oregon. Participants will learn about what SOD is, how it spreads, symptoms, treatment approach, sampling and detection strategies, current research, and citizen-science opportunities. Climate change is likely to decrease the resilience of forests and tree species, making them more susceptible to pathogens like SOD.

**Vulnerability of Alaska Natives in Prince William Sound and Adjoining Kenai Peninsula to Selected Climate and Non-climate Stressors, 19 April, 1:30 PM AKST.** This webinar, co-hosted by the Northwest Climate Hub, will discuss recent findings about vulnerabilities of subsistence in Alaska for seven Tribes located in south-central Alaska. The webinar will be held on Microsoft Teams.

**Tribal Health and Adaptation Peer-Learning Roundtable Webinars, 20 April and every 3rd Tuesday until October 2023, 10 am PST.** This training is open to Tribes and Tribal-serving professionals throughout the United States who work at the intersections of climate change, health, and community well-being. The April webinar will focus on coordinating climate adaptation, and Tribal disaster and emergency management and public health. These monthly 2-hour webinars will further advance the knowledge, skills, and networks of Tribes adapting to climate change.

## Funding

### March

**Urban Agriculture and Innovative Production Competitive Grants Program.** This pilot project from the Natural Resources Conservation Service (NRCS) aims to support the development of urban agriculture and innovative production, particularly for planning and implementation projects. Planning projects should initiate, develop, or support the efforts of farmers, gardeners, citizens, government officials, schools, or members of Tribal communities in areas where access to fresh foods is limited or unavailable. Innovation may include new and emerging, as well as traditional or indigenous, agricultural practices. **Applications due 27 March.**

**Rural Energy for America Fiscal Year 2023 Grants.** This USDA Rural Development program provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or energy-efficiency improvements. Agricultural producers may also apply for new energy-efficient equipment and new system loans for agricultural production and processing. **Applications due 31 March.**

### April continued

**National Coastal Resilience Fund.** The goal of this fund is to enhance protections for coastal communities from the impacts of storms, floods, and other natural coastal hazards, and to improve habitats for fish and wildlife. The National Fish and Wildlife Foundation is making approximately \$140 million in grants available to create and restore natural systems to increase protection for communities from current and future coastal hazards and improve habitats for fish and wildlife species. These funds will make investments in planning, design, and implementation of natural and nature-based solutions. **Pre-proposals due 12 April.**

**Safeguarding Tomorrow Revolving Loan Fund Program.** The Federal Emergency Management Agency (FEMA) is launching a new revolving loan fund to allow local jurisdictions to reduce vulnerability to hazards, foster greater community resilience, and reduce suffering after disasters. The program provides funding to states and federally recognized Tribes that received a major disaster declaration during the five-year period ending on 1 January 2021. **Applications due 28 April.**

### April

**USDA Announces Conservation Reserve Program Signup for 2023.** The Conservation Reserve Program is a voluntary conservation program offered by the U.S. Department of Agriculture Farm Service Agency to address climate change and help agricultural communities invest in the long-term well-being of their land and natural resources. **Applications due 7 April.**

**Environmental Justice Government-to-Government Program.** The Environmental Justice Government-to-Government (EJG2G) program provides Environmental Protection Agency (EPA) funding at the state, local, territorial, and Tribal level to support government activities that lead to measurable environmental or public health impacts in communities disproportionately burdened by environmental harms. EJG2G programs should leverage existing resources to develop processes or tools that integrate environmental justice considerations into governmental decision-making at all levels. **Applications due 10 April.**

### May

**Planning Proposals to Catalyze Innovative and Inclusive Wildland Fire Science through Diverse Collaborations.** The National Science Foundation is calling for planning proposals for advancing inclusive wildland fire science via diverse knowledge systems. Proposals that aim to develop a deeper understanding of wildland fire as integrated social-cultural-ecological-technological systems and improve education across multiple levels, in informal settings and/or formal settings and spanning pre-college through postsecondary levels, are also encouraged. Budget requests may not exceed \$100,000 per year, with a duration of up to two years. **Applications due 31 May.**

### June

**Climate Pollution Reduction Grants.** This program will provide grants to states, local governments, Tribes, and territories to develop and implement plans for reducing greenhouse gas emissions and air pollution. These grants support the development and implementation of strong, two-stage greenhouse gas reduction strategies. This local-greenhouse gas grant program provides funding of \$250 million for noncompetitive planning grants, and \$4.6 billion for competitive implementation grants. **Applications due 15 June.**

## Ongoing

**Agriculture and Food Research Initiative (AFRI) Foundational and Applied Science Program.** This National Institute of Food and Agriculture (NIFA) program invests in agricultural production research, education, and extension projects for more sustainable, productive, and economically viable plant and animal production systems. 2023 priority areas include plant health and production; animal health and production; food safety, nutrition, and health; bioenergy, natural resources and environment; agriculture systems and technology; and agricultural economics and rural communities. Applications that address climate change, food security, expanding markets for producers, traditional ecological knowledge, and equity for underserved producers are welcome. **Applications due between August and November 2023 based on Program Priority Areas.**

**Extension, Education & USDA Climate Hubs Partnership,** program priority area has been updated to allow for maximum award amounts of \$1 million for 3-5 years and projects can be in one Climate Hub region. **Letters of interest due 4 May.**

**Sabbatical Research and Education Call for Proposals.** This Western Sustainable Agriculture Research and Education (SARE) Sabbatical Grants provide an opportunity for faculty around the world to partner with farmers, ranchers, agricultural professionals, and researchers of the western U.S. region for conducting research, education, and extension activities. Projects focused on unexplored topics in underserved communities and understudied geographic locations are of special interest. \$75,000 limit/one year in scope. **Proposals due 21 November.**