

## February 2024 Newsletter

### Featured Article

#### Celebrating 10 Years of the USDA Climate Hubs!



Over the past ten years, the Climate Hubs have worked across the USDA and with partners to support climate-informed decisions for robust agriculture, healthy forests, and resilient communities. We continue to expand upon the following priorities for agriculture, forestry, and grazing lands:

- getting a clearer picture of how climate change might impact natural and working lands
- facilitating the development of science-based solutions to climate challenges
- helping people put climate solutions into action
- building tools to understand and use climate-informed and nature-based solutions

Check out some projects and highlights from the past 10 years!

### Opportunities

#### Climate Resilience Producer Survey

Washington State Department of Agriculture is working on a Climate Resilience Plan to support agricultural producers as they adapt to the effects of a changing climate. **Respond by TOMORROW, 23 February.**

#### Working Lands Climate Corps Request for Proposals

The Working Lands Climate Corps (WLCC) will train the next generation of conservation leaders in climate-informed agriculture and forestry. Eligible organizations may apply to host one or several WLCC members. This initiative aims to engage at least 100 WLCC members with host organizations across the country. **Proposals due 5 pm EST, 8 March.**

# Drought Update

Moisture from recent storm systems brought rain and snow to Idaho, Oregon, and Washington. Pockets of improvements occurred in Idaho, where recent precipitation has reduced drought signals in the short and longer terms. Central Idaho has seen mild improvements in moderate drought (D1 – tan), though northern Idaho remains in moderate and severe drought (D2 – orange). Improvements to drought conditions in western Oregon occurred, though moderate drought expanded into southern Oregon. In Washington, despite recent precipitation, abnormally dry conditions (D0 – yellow) persist in much of the central and northwestern parts of the state. Alaska remains free of drought and abnormal dryness.



**National Integrated Drought Information System**

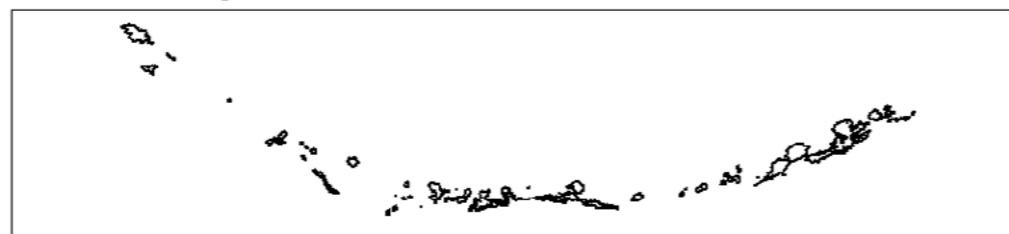
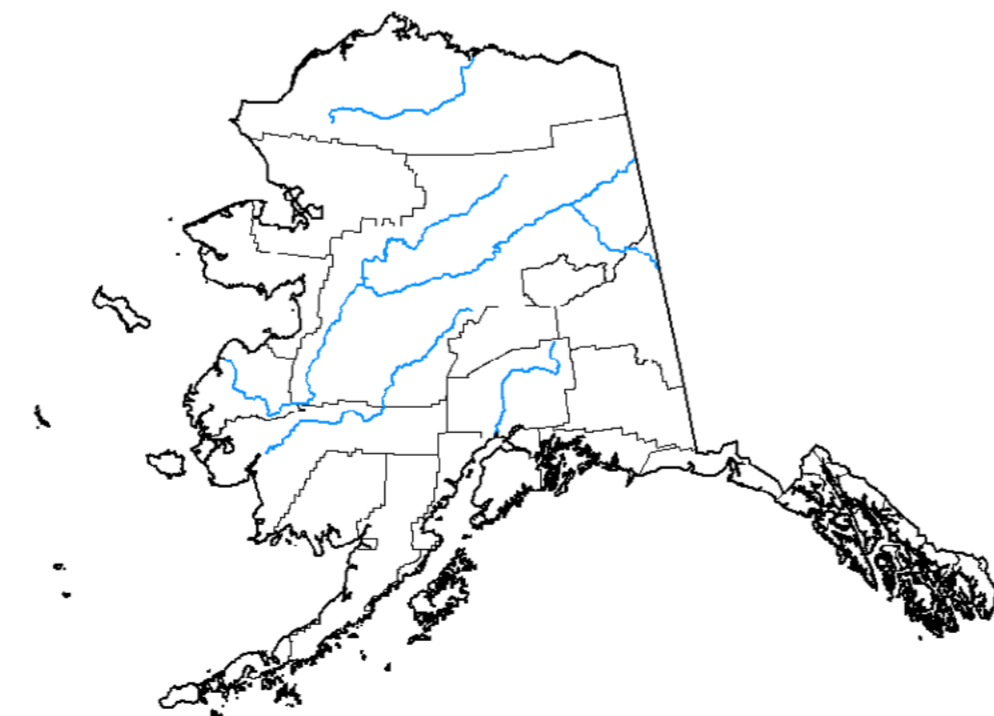
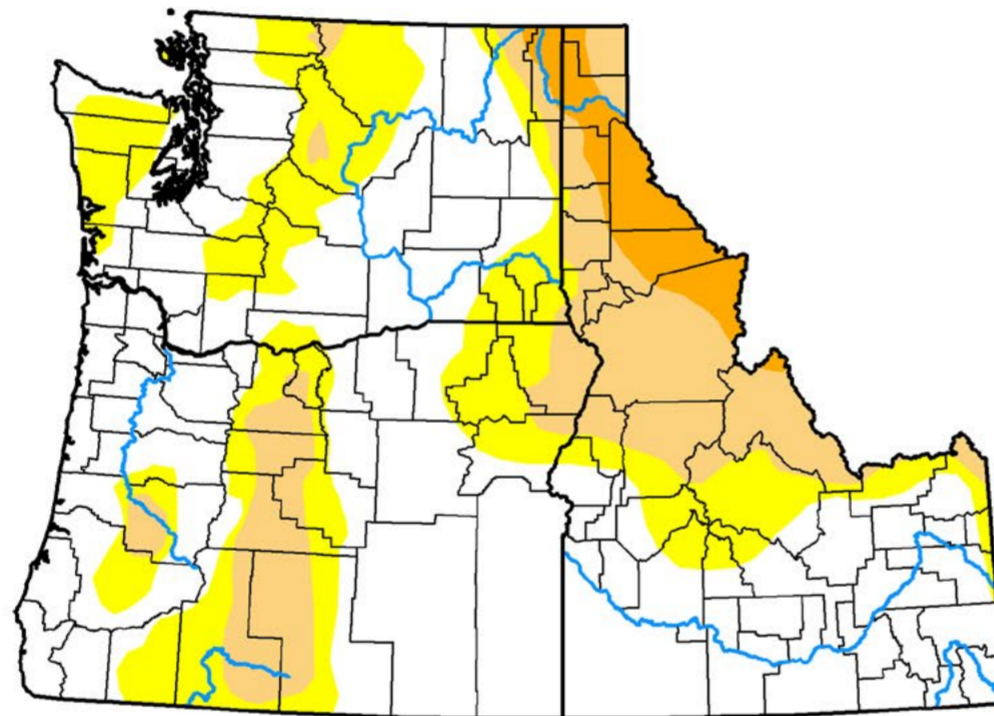


**CoCoRaHS Community Rain Hail Snow Network**



**Condition Monitoring Observer Reports**

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



**February 20, 2024**

(Released Thursday, Feb. 22, 2024)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	87.53	12.47	5.76	1.20	0.00	0.00
<b>Last Week</b> 02-13-2024	89.53	10.47	5.76	1.20	0.00	0.00
<b>3 Months Ago</b> 11-21-2023	83.85	16.15	10.40	3.54	0.00	0.00
<b>Start of Calendar Year</b> 01-02-2024	84.63	15.37	5.68	1.00	0.00	0.00
<b>Start of Water Year</b> 09-26-2023	80.15	19.85	14.48	7.82	1.55	0.00
<b>One Year Ago</b> 02-21-2023	75.27	24.73	17.00	5.75	1.69	0.16

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

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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[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



## 2022 Census of Agriculture

The USDA National Agricultural Statistics Service recently released the 2022 Census of Agriculture. The census shows a continued decline in the total number of U.S. farms, but a rise in the number of new and beginning, as well as young, producers.



## One Year into Washington's Climate Commitment Act: Impacts on Agriculture

This Agricultural Climate Network article reviews how farmers are faring under Washington's ambitious state law to reduce greenhouse gas emissions.



## Virtual Fencing Excludes Cattle from Burned Areas in the Sagebrush Steppe

This Hub Adaptation in Action profile highlights the work of USDA researchers who used virtual fencing to keep cattle off of recently burned areas in the sagebrush steppe. This work has implications for grazing allotments throughout the sagebrush biome.



## The Stocking Impact and Financial-Climate Risk of the Livestock Forage Disaster Program

This USDA report looks at the effectiveness of the Livestock Forage Disaster Program for producers experiencing drought. With climate change, the program may increase annual expenditures by 45 to 135 percent by 2100.



## 2023 Forest Health Summary for Oregon and Washington

This USDA Forest Service StoryMap covers forest health highlights from 2023 in the Pacific Northwest. Topics include observed forest damage, elevated fir mortality, and increased mountain pine beetle activity.



## Mechanical Fuel Treatments for Climate Resilience

In dry Northwest forests, mechanical fuel treatments can reduce the likelihood of high-intensity wildfires, improve ecological conditions, and increase resilience to climate change impacts. Learn more from this Hub article.



## Hypoxia Vulnerability in the Salmon Watersheds of Southeast Alaska

Climate change increases the potential for drought and warmer water temperatures, both of which could decrease the amount of oxygen in water available to salmon. This journal article explores the occurrence, cause, and identification of low-oxygen stream reaches.



## Wildfire and Permafrost Thaw: Lidar Detection

Surface vegetation helps protect permafrost from increasing summer warmth. Changes to vegetation cover after wildfire could increase thaw. This research paper discusses the use of Landsat products to estimate fire-induced permafrost thaw in interior Alaska.

# Workshops and Conferences



## **Native Youth Climate Adaptation Leadership Congress. Meeting in June, apply by 15 March.**

The Native Youth Climate Adaptation Leadership Congress is held annually during the last week of June in Shepherdstown, West Virginia. The Congress includes a diverse mix of urban and rural students from tribal communities located throughout the continental US, Alaska, Hawaii and American Samoa. Each year, the Congress averages around 50 high school students alongside their mentors, representing 20+ indigenous tribes and communities.



## **2024 National Tribal Leaders Climate Summit, 15–17 April, Auburn, Washington.**

The summit will engage tribal leaders, citizens, staff, youth and collaborators in conversation about navigating the cultural, economic, and social challenges of climate change. The goals of the event include hearing from tribal communities on the frontlines of climate change; exploring what a just transition looks like for diverse tribal nations; and discussing how tribal sovereignty and co-management can advance climate action.



## **7th International Fire Behavior and Fuel Conference—Fuel, Fire and Smoke: Evolving to Meet Our Climate Challenge, 15–19 April, Boise, Idaho.**

In a changing climate, understanding altered fire behavior and human responses is critical. This conference shares knowledge from past fire management experience, current work, and emerging research, innovation, and techniques to develop integrated solutions to fire management challenges.



## **2024 Lowell Wakefield Fisheries Symposium, 16–18 April, Sitka, Alaska.**

Climate change is causing shifts in the distribution of fish and other aquatic species. The symposium will bring together fishery researchers and managers to address how political decisions, jurisdictional arrangements, and survey management structures can adapt to environmental changes and shifting species distributions.



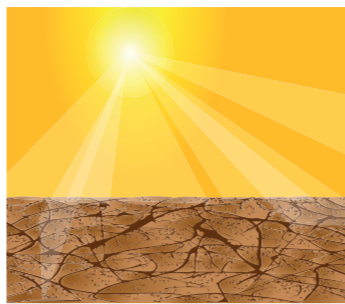
## **National Adaptation Forum, 14–16 May, St. Paul, Minnesota.**

The National Adaptation Forum is a bi-annual convening for adaptation professionals to innovate, network, and focus on established and emerging climate adaptation issues of the day. The forum provides opportunities for professional development through training sessions, facilitated presentations and panels, and formal and informal networking sessions.



**Tribal Forestry: Understanding Current Issues and Challenges in Contemporary and Traditional Management of Forested Landscapes, Thursdays until 25 April, 9am PST.**

Tribes and first nations have been forest stewards since time immemorial. This webinar will focus on the current state of tribal forest management and indigenous stewardship in the context of climate change with a series of speakers from different tribes, universities, non-profits, and agencies.



**Pacific Northwest Drought Early Warning System February Webinar, 26 February, 11am PST.**

This webinar will provide timely information on current and developing drought conditions in the region, and climatic events like El Niño. Speakers will also discuss the impacts of these conditions on issues such as wildfires, floods, disruption to water supply and ecosystems, as well as impacts to affected industries like agriculture, tourism, and public health.



**Extreme Precipitation in Southeast Alaska: Visualizing Climate Modeling with a StoryMap, 27 February, 11am AKST.**

Learn about the latest precipitation models for Southeast Alaska in a visually captivating format. These models anticipate an increasingly wet climate interspersed with extreme drought episodes. Join this Alaska Center for Climate Assessment and Policy webinar to explore how future climates might unfold.



**Wildfire Risk and Mitigation Opportunities in the U.S. Sagebrush Biome, 29 February, 10 am PST.**

This webinar from the USDA Forest Service Missoula Fire Sciences Lab will unveil risk and mitigation opportunities for wildfire in the sagebrush biome, describing a customized regional modeling effort to help guide investments in woody fuel treatments and fuel break systems.



**Biochar Production, Benefits, and Barriers in Forested Lands, 6 March, 9am PST.**

Join this Science You Can Use webinar focused on the benefits and barriers of biochar production. Webinar presented by USDA Forest Service Rocky Mountain Research Station scientists and collaborators.



**Incorporating Climate and Environmental Justice into Research and Resource Management, February to May.**

In partnership with the U.S. Fish and Wildlife Service National Conservation Training Center, the National Climate Adaptation Science Center is hosting a webinar series and two coffee hour discussions. This series aims to engage audiences interested in the intersection between climate and environmental justice and environmental research.

**Webinars, 29 February to 9 May, 12pm PST, every other Thursday.**



In this series, speakers will explore the ethics of engaging with the populations most vulnerable to the impacts of environmental and climate change, which are often low-income communities, communities of color, indigenous and tribal communities, and people experiencing disenfranchisement.

**Coffee hours, 29 March or 10 May, 1pm PST.**



These coffee hours allow participants can further explore series topics in facilitated breakout group discussions. Registration is limited to 40 people each.

# Funding

## February



### Hazard Mitigation Assistance Grants.

Climate change is likely to increase the risk of extreme events in the Northwest. These two mitigation grant programs, funded by the Federal Emergency Management Agency, provide states, local communities, Tribes and territories funding to address high-level future risks to natural disasters such as wildfires, drought, hurricanes, earthquakes, extreme heat, and increased flooding to foster greater community resilience and reduce disaster suffering.

**Applications due 29 February.**

## March cont.



### Oregon and Idaho Conservation Stewardship Program (CSP).

The Natural Resource Conservation Service CSP grants help producers build on existing conservation efforts while strengthening their operations. Benefits can include enhanced resilience to weather and market volatility, decreased need for agricultural inputs, and improved wildlife habitat conditions. **Applications due 27 March for Oregon and 3 May for Idaho.**

**Oregon**

**Idaho**

## March



### University Consortium-Directed Research Funding.

The Northwest Climate Adaptation Science Center Research Fellowship Program supports research related to climate adaptation for Northwest natural and cultural resource management and provides training in the principles and practices of developing decision-relevant science. Graduate students from several universities in the Northwest are welcome to apply. **Proposals due 11 March.**

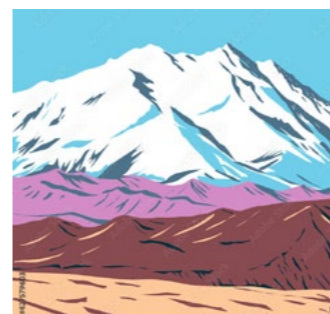
### Washington Water-Smart Environmental Quality Incentives Program (EQIP).

Through this grant, the USDA Natural Resource Conservation Service can assist private landowners with the implementation of conservation practices that remove irrigated systems from groundwater to surface water. Practices include pumping plant, irrigation pipeline, well decommissioning, structures for water control, and conservation cover.

**Applications due 12 March.**



## Ongoing



### NRCS Alaska Environmental Quality Incentive Program (EQIP).

This program provides agricultural producers with financial assistance and conservation planning services to help private landowners implement improvements on their land using what NRCS conservation practices. Using these practices can lead to cleaner water and air, healthier soil, and improved wildlife habitat, all while enhancing agricultural operations. **Applications funded on a rolling basis but must be submitted by 19 April 2024 to be considered for Fiscal Year 2024.**



### Rural Energy for America Program Renewable Energy Systems & Energy Efficiency Improvement Guaranteed Loans & Grants.

This program provides loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems, or to make energy efficiency improvements. Funds may be used for the purchase and installation of renewable energy systems, or for the purchase, installation, and construction of energy efficiency improvements. Agricultural producers may apply for new energy efficient equipment and new system loans for agricultural production and processing. **Applications are accepted for multiple deadlines until 30 September 2024.**

