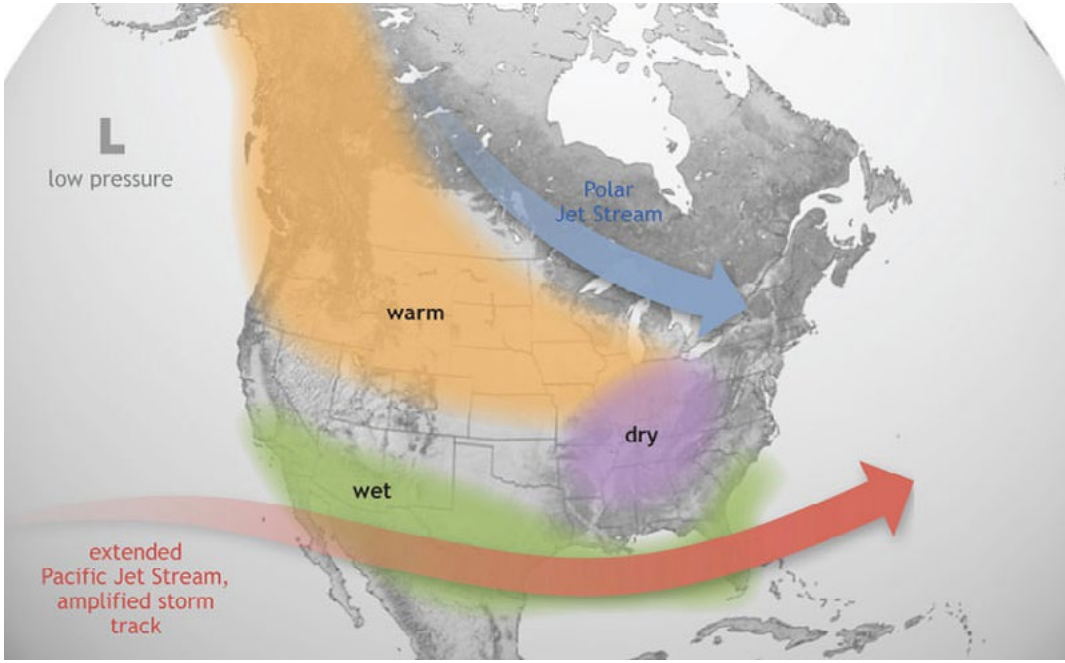


Featured Article



El Niño in the Northwest: What Can We Expect?

El Niño, a climate pattern caused by warming in the waters of the eastern tropical Pacific Ocean, is expected to peak early in winter this year. El Niño affects local weather conditions throughout Alaska, Idaho, Oregon, and Washington and often leads to warmer, drier winters than average. El Niño could increase the risk of drought, wildfire, and shoreline erosion, and cause changes to marine productivity and salmon populations this year.

Fifth National Climate Assessment Released



“Stream of Consciousness” by
Spencer Frazer

On November 14, the Fifth National Climate Assessment (NCA5) was released. This interagency report is updated approximately every four years and analyzes the impacts of global climate change in the United States. Jessica Halofsky and Dave Peterson of the Northwest Climate Hub were contributing authors on the Forests chapter.

NCA5 provides updates to topics relevant to the Northwest Climate Hub, including:



Forests



Tribes and Indigenous Peoples



Agriculture, Food Systems, and Rural Communities



Impacts in the Northwest Region (Idaho, Oregon, and Washington)



Impacts in Alaska

Upcoming webinars will provide details about chapters in the assessment. Find a list of upcoming webinars [here](#).

Opportunities

USFS Fellowship for Carbon Management on Working Lands

This ORISE fellow will engage with USDA Northwest Climate Hub staff to develop information on carbon management in forests, rangelands, and farms. The fellow will collaborate with USDA Climate Hub staff to develop resources to guide carbon management planning and practices on National Forest System and other public and private lands in the Northwest. **Apply by 2 February.**

Postdoctoral Research Associate Position

The USDA-ARS Forage Seed and Cereal Research Unit invites applications for a Postdoctoral Research Associate. This person will measure, monitor, report, and validate soil health, carbon-sequestration potential, and greenhouse gas fluxes and carbon stocks for the grass seed industry in the Willamette Valley, Oregon. Email your cover letter, curriculum vitae including citizenship, transcripts, and list of references to Dr. Jennifer Moore at Jennifer.moore2@usda.gov. **Position open until filled.**

Ambassadors for the National Greening Fire Team

The US Forest Service National Greening Fire Team is looking for ambassadors to join their team. Their mission is to achieve net-zero environmental impact on all large wildfires and within the fire community by 2030. Ambassadors must be federal employees.

Drought Update

A series of three atmospheric rivers reached the Northwest in the last month, relieving some drought conditions in the region. Cooler conditions during the first of these atmospheric rivers brought snow, but the following two arrived under warmer conditions. This caused significant rain-on-snow at higher elevations in much of Oregon and Washington. This heavy precipitation was not enough to alleviate the abnormally dry (D0 – yellow) and moderate drought (D1 – tan) conditions that persist throughout much of Washington and western Oregon. The panhandle of Idaho continues to experience severe drought (D2 – orange), moderate drought, and abnormally dry conditions.

Alaska remains drought free.



U.S. Drought Monitor USDA Northwest Climate Hub

December 19, 2023
(Released Thursday, Dec. 21, 2023)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|-------|-------|-------|-------|------|
| Current | 85.25 | 14.75 | 5.31 | 1.00 | 0.00 | 0.00 |
| Last Week 12-12-2023 | 85.00 | 15.00 | 5.54 | 1.27 | 0.00 | 0.00 |
| 3 Months Ago 09-19-2023 | 80.15 | 19.85 | 14.48 | 7.81 | 1.55 | 0.00 |
| Start of Calendar Year 01-03-2023 | 75.01 | 24.99 | 15.00 | 7.57 | 3.06 | 0.16 |
| Start of Water Year 09-26-2023 | 80.15 | 19.85 | 14.48 | 7.82 | 1.55 | 0.00 |
| One Year Ago 12-20-2022 | 72.58 | 27.42 | 16.42 | 7.57 | 3.06 | 0.16 |

Intensity:

None

D0 Abnormally Dry

D1 Moderate Drought

D2 Severe Drought

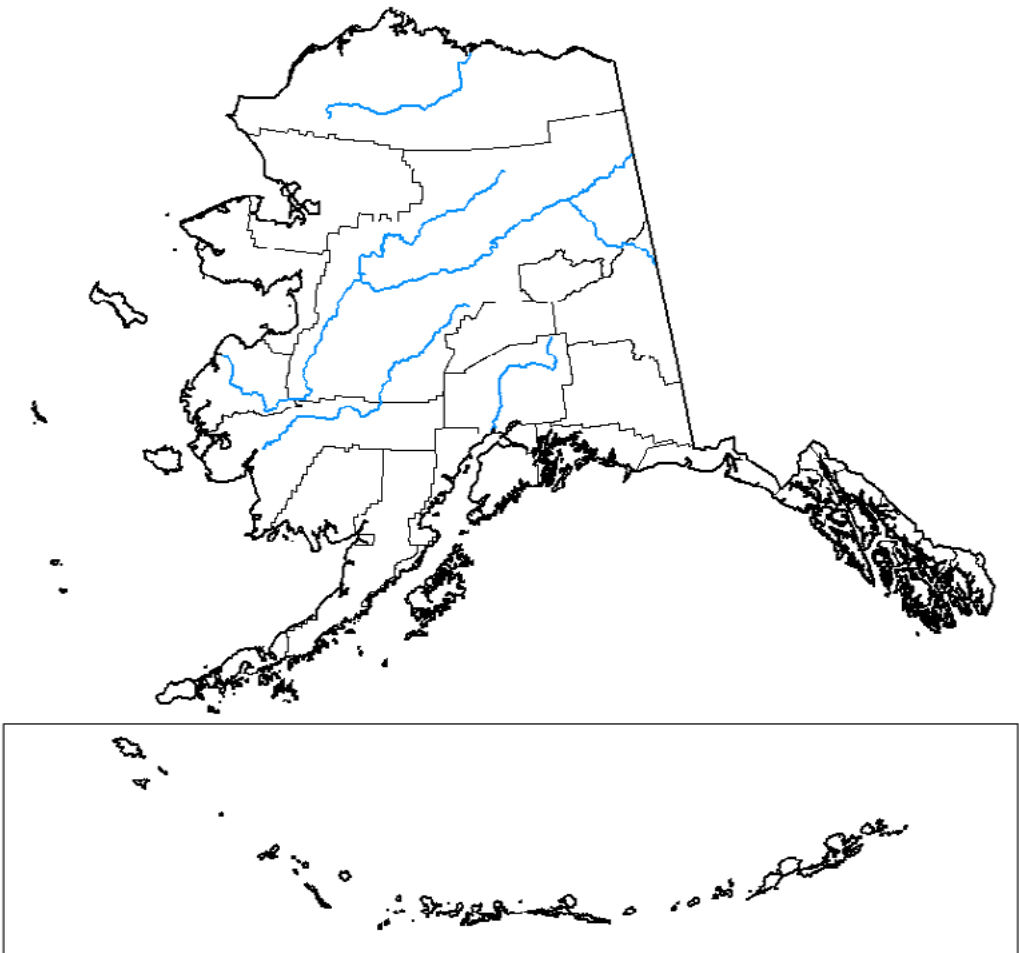
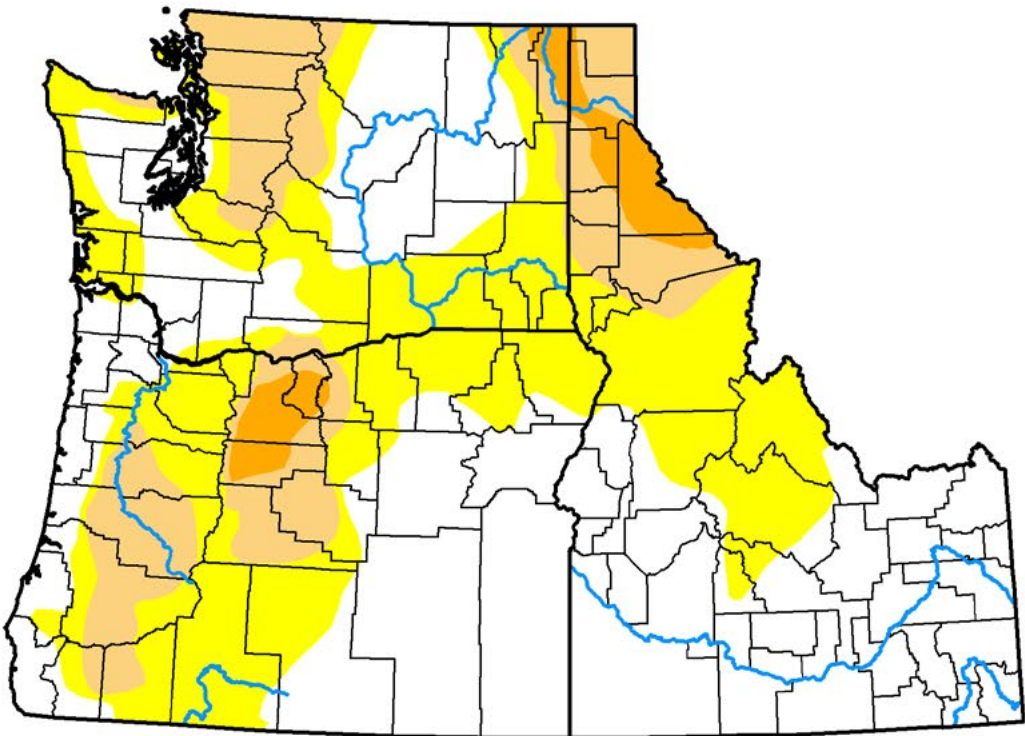
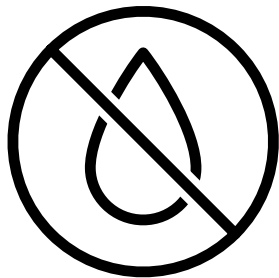
D3 Extreme Drought

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>

Author:
Curtis Riganti
National Drought Mitigation Center

droughtmonitor.unl.edu





Urban Agriculture and Innovative Production

This USDA webpage discusses different types of innovative production, some of which can support climate-resilient food systems by extending the growing season, conserving water, and providing local and regional food options.



Urban Agriculture in the Northwest

This Hub webpage discusses the benefits of urban agriculture and how growing food in local, urban environments can help make urban areas more resilient to climate change.



Oregon Post-fire Research and Monitoring Symposium: Abstract Compendium

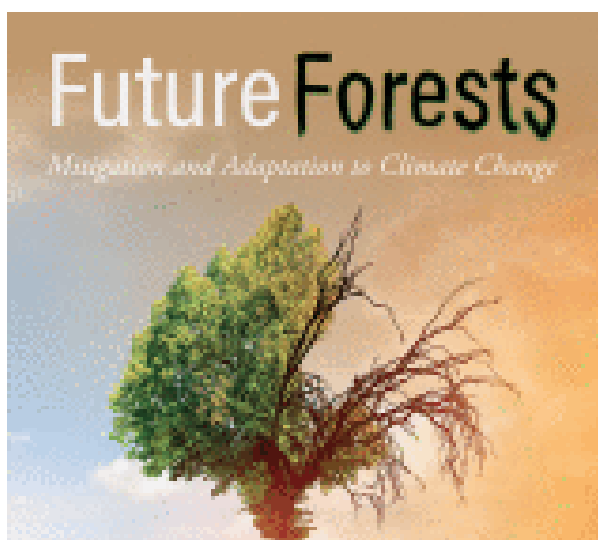
Oregon Post-Fire Research and Monitoring Symposium: Abstract Compendium

This report provides an overview of the information presented at the 2023 Post-fire Research and Monitoring Symposium that was organized by the Oregon Governor's Post-fire Science Team and supported by the Northwest Hub.



Drought Assessment in a Changing Climate Technical Memo

This national report highlights priority actions and research questions across 15 focus areas to improve drought assessment and address gaps identified by the research and practitioner community.



Temperate Forests Chapter in *Future Forests*

In this new book on Future Forests: Mitigation and Adaptation to Climate Change has a temperate forests and climate change chapter that the Northwest Climate Hub contributed to.



Climate Change Vulnerabilities Inform Watershed Restoration in Washington

In the Mt. Baker-Snoqualmie National Forest, forest staff and partners are preparing the Forest, its watershed, and its road system for climate change. Learn more from this Hub Adaptation in Action profile.

Workshops and Conferences



Change on the Range: Society for Range Management Annual Meeting, 28 January –1 February, Sparks, Nevada.

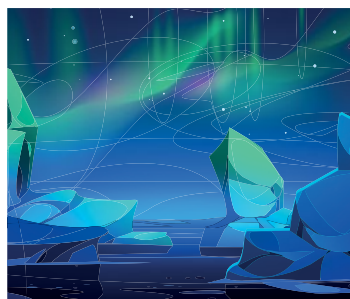
The annual meeting will include technical tours, sessions, and meeting events that focus on rangelands-related topics, including rangeland restoration, climate change adaptation, and wildland fire resilience.



Alaska Forum on the Environment, 5 – 9 February, Anchorage, Alaska and online.

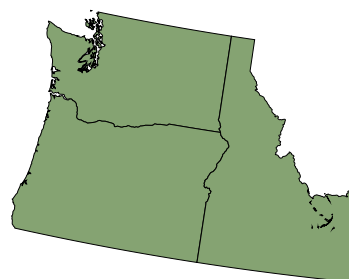
This is Alaska's largest statewide gathering of environmental professionals and will offer sessions on climate change, energy, environmental regulations, cleanup and remediation, fish and wildlife, solid waste, and more. This year, both in person and virtual attendance is available for attendees and exhibitors.

Webinars



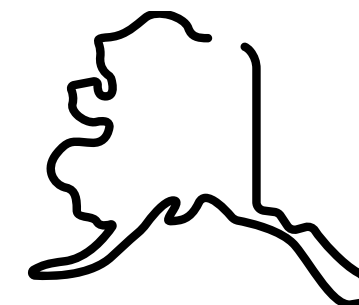
December Alaska Climate Outlook Briefing, 22 December, 12pm AKST.

This webinar will review recent and current climate conditions around Alaska, discuss forecasting tools, and end with the Climate Prediction Center's forecast for January 2024 and the winter season. Join to learn what has happened and what may be in store for Alaska's seasonal climate.



Fifth National Climate Assessment: Northwest Webinar, 9 January, 12pm PST.

The U.S. Global Change Research Program is holding an informational webinar covering the Northwest chapter of the Fifth National Climate Assessment. Authors of the chapter will present key findings and ideas.



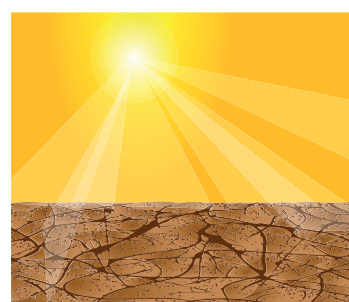
Fifth National Climate Assessment: Alaska Webinar, 17 January, 11am AKST.

The U.S. Global Change Research Program is holding an informational webinar covering the Alaska chapter of the Fifth National Climate Assessment. Authors of the chapter will present key findings and ideas.



Arctic Report Card: Background and Key Findings, 17 January, 11am AKST.

This webinar will review some of the highlights of the National Oceanic and Atmospheric Administration 2023 Arctic Report Card, with reports from lead authors on findings of direct importance to Alaska.



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.



Funding

December



Alaska Agricultural Conservation Easement Program.

This program helps landowners, land trusts, and other entities protect, restore, and enhance wetlands or protect working farms and ranches through conservation easements. As the climate changes, these easements may become places of refuge for plants and animals affected by changing conditions. **Applications due 29 December.**

March



Oregon 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.**

January



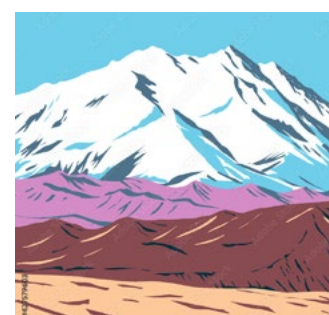
Farm to School Grants.

This program supports planning, developing, and implementing farm to school programs. USDA's Farm to School grants are an important way to help state, regional, and local organizations as they initiate, expand, and institutionalize farm to school efforts. Promoting a local food economy can help to reduce greenhouse gas emissions. **Applications due 12 January.**

Matching Awards Program: Connecting Forests to People.

This National Forest Foundation program pairs federal funds with non-federal funds raised by award recipients, multiplying benefits to the National Forest System. The program focuses on community engagement and stewardship activities with goals of allowing all communities, especially underserved communities, opportunities to benefit from activities on National Forest System lands or adjacent public lands. **Applications due 16 January.**

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 from 31 December 2023 to 30 September 2024.**

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.**

