



Drought in the NW Climate Hub Region

Drought conditions in Idaho, Oregon and Washington have continued to worsen, with all three states currently experiencing exceptional drought conditions (D4). Last week was the first time exceptional drought conditions had been declared for any part of Washington since 2000, the start of the U.S. Drought Monitor. Washington has declared a drought for much of the state, which allows the state to provide emergency drought relief. Idaho has also seen expansion of exceptional drought conditions in Blaine and Custer counties, and a new area with exceptional drought conditions in the western panhandle. Exceptional drought conditions have also expanded in northcentral Oregon.

In Alaska, recent precipitation returned conditions to normal in areas of the North Slope. Abnormally dry conditions (D0-yellow) developed along the eastern border of the state to Southcentral Alaska including the Kenai Peninsula. Moderate drought conditions (D1-tan) developed this week in the Yukon Flats to Fairbanks.

- Washington 2021 Drought page
- Washington Drought Declaration
- Oregon directs state agencies to conserve their water use in response to drought conditions
- Northwest state-level drought information

Are you seeing drought impacts, like trees with brown leaves, low stream levels, or damaged crops? Report these impacts to help the US Drought Monitor to understand the impacts of drought in your area.



U.S. Drought Monitor

USDA Northwest Climate Hub

July 20, 2021
(Released Thursday, Jul. 22, 2021)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	49.64	17.26	9.46	9.15	9.16	5.34
Last Week	52.15	20.38	4.36	10.22	10.08	2.81
3 Months Ago	59.80	24.29	9.39	4.79	1.47	0.26
Start of Calendar Year	73.72	12.89	4.23	5.64	3.53	0.00
Start of Water Year	61.33	22.98	6.22	4.96	4.51	0.00
One Year Ago	79.72	8.50	4.52	5.81	1.48	0.00

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>

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droughtmonitor.unl.edu

Did you or someone you know lose livestock or have crop damage after the extreme heat event?

Reach out to your local USDA Farm Service Agency county office to file a [notice of loss](#) due to drought, heat, or other related loss causes of either crops or livestock. Providing Farm Service Agency with this information will help identify current or future programs available from the USDA to potentially recover some of the financial losses. Click on your state and then county to find your local Farm Service Agency office.

National Significant Wildland Fire Potential Outlook

The National Wildland Significant Fire Potential Outlook shows above normal significant wildland fire potential for most of Washington and all of Idaho and Oregon. Alaska is expected to have normal conditions. Maps will be updated on 1 August.

Significant Wildland Fire Potential Outlook August 2021

Above normal significant wildland fire potential indicates a greater than usual likelihood that significant wildland fires will occur. Significant wildland fires should be expected at frequencies and intervals during normal significant wildland fire potential conditions. Significant wildland fires are still possible but less likely than usual during forecasted below normal periods.

Map produced by Predictive Services, National Interagency Fire Center
Base: Idaho
Issued July 1, 2021
Next issuance August 1, 2021

The National Preparedness Level is now at Level 5, indicating we are experiencing the highest level of wildland fire activity. This is the earliest move to Preparedness Level 5 in 10 years. It means that several geographic areas are experiencing large, complex wildland fire incidents, which have the potential to exhaust national wildland firefighting resources. At least 80% of the country's Incident Management Teams and wildland firefighting personnel are committed to wildland fire incidents. At this level, all fire-qualified federal employees become available for wildfire response.

Water Conservation Ideas

100 ways to conserve water via your daily activities
Water conservation ideas for municipalities, farms, homes, etc.

Information

- Let the Fish Do the Talking: How Fish Behavior Is Linked to Patterns of Temperature and Stream Discharge.** This latest Science Findings from the Forest Service Pacific Northwest Research Station provides a current baseline for understanding the connection between the movement, distribution, and management of water and fish. It also highlights ways in which the effects of climate change could be mitigated by managing stream flows at critical times of the year to benefit salmon migration. A key finding from this work is that water temperature and the rate of streamflow appear to be two of the environmental conditions that precipitate the migration of salmon to their freshwater spawning grounds.
- Yukon Flats Changes** highlights some of the changes in and around the Yukon Flats Refuge by sharing local stories on changes people have seen on the land and in their way of life, as well as information on climate, wildlife, wildfire, permafrost, wetlands, and rivers.
- Bering Science** winter report communicates science in and around the Bering Sea. The Bering Sea is experiencing many changes, from loss of sea ice to record high ocean and air temperatures, that continue to impact wildlife and all aspects of life for coastal communities. Find out about the most recent observations of the Bering Sea from state, federal, community, and university partners.
- Seeding Climate Resilience through Equitable Investment** shares six case studies of successful climate resilience investments, including one from Portland, Oregon that examines systems underlying the inequitable distribution of risk. Together, these case studies point to the urgency of acting quickly, strategically, and creatively to design and finance equitable climate resilience.
- Climate Change and Invasive Species: Northwest Regional Practitioner Survey** is a report from the Northwest Regional Invasive Species and Climate Change Network that highlights how regional practitioners are approaching invasive species management in the face of climate change, and their needs, opportunities, and limitations.
- Sin Tiempo Que Perder and Cambiando las Líneas de Nieve y las Líneas de Costa** are two previously published reports that are now available in Spanish. Sin Tiempo Que Perder summarizes the 2018 Intergovernmental Panel on Climate Change's Special Report on Global Warming of 1.5°C and answers questions such as: What are the anticipated global consequences of additional warming? and What are the implications for Washington state? Cambiando las Líneas de Nieve y las Líneas de Costa draws from the Intergovernmental Panel on Climate Change's (IPCC) 2019 Special Report on Ocean and Cryosphere in a Changing Climate, as well as research from the Climate Impacts Group at the University of Washington.

Webinars

- TODAY! Soil Moisture End Users Listening Session, 22 July, 10 am-12 pm PT.** The National Coordinated Soil Moisture Monitoring Network is hosting a listening session for soil moisture end users to share their thoughts, wish lists, and out-of-the-box ideas about what types of soil moisture products would best serve them. Target participants include federal, regional, and state program staff; state climatologists; water resource managers; extension agents; and any others who are interested in products derived from soil moisture data, whether it be from in situ mesonets, modeling outputs, and/or satellite retrievals.
- Towards a Durable Understanding of Soil Carbon as a Tool for Climate Adaptation and Mitigation, 17 August, 3 pm ET.** This seminar series will share diverse scientific perspectives from soil carbon researchers on key technical questions that inform how to sequester soil carbon in working lands. Check out recordings of previous webinars: 1) Stakeholder perspectives; Producer and policy advocates weigh in on soil carbon sequestration, and 2) Which emerging approaches can enable widespread soil carbon measurement and monitoring? The next webinar in the series is: When does increased soil carbon storage yield net removal of greenhouse gases?
- August 2021 National Weather Service Alaska Climate Outlook Briefing, 27 August 2021, 12-1 pm AKDT.** Rick Thoman, Alaska Center for Climate Assessment & Policy at the University of Alaska Fairbanks, will review recent climate conditions around Alaska, review some forecast tools, and finish up the Climate Prediction Center's forecast for August and the remaining summer season. Join the gathering online to learn more about Alaska climate and weather.

Funding Opportunities

National Interagency Drought Information System (NIDIS) FY 2022 Coping with Drought Competitions. NIDIS is drafting letters of intent for two competitive funding opportunities: 1) Ecological drought, and 2) Building tribal drought resilience. The ecological drought opportunity is focused on research to improve our understanding, early warning, and management of drought risk in terrestrial and aquatic ecosystems to inform more deliberate and expanded decision-making that supports sustainable, healthy, and resilient ecosystems. Proposals for two years of work may request funds up to \$600,000. **Letters of intent are due at 5 pm ET on 9 August, and full applications will be due at 5 pm ET on 18 October.**

- Notice of funding
- Information sheet
- Informational webinar

Building tribal drought resilience proposals should be developed by or in full partnership with tribal nations to fund the implementation of actions—together with research on those actions—to build drought resilience contained in existing plans and strategies. Plans may include, but are not limited to, drought contingency plans; drought, water, or natural resource plans; agricultural resource management plans; or climate adaptation plans. Proposals may request up to \$500,000 to expend over two years. **Letters of intent are due at 5 pm ET on 9 August, and full applications are due at 5 pm ET on 18 October.**

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Organic Farming Research Foundation is accepting letters of intent for research that maximizes the potential for organic agriculture to be part of the climate solution. This program will fund grants for up to \$20,000 for one year of research. Submissions must fall under at least one of the six research priority areas: soil health focus; weed, pest, and disease management focus; resilient cultivars focus; livestock and poultry focus; social science focus; and/or resilience focus. **Application are due by 5pm PST on 20 August.**

Tribal Climate Resilience Liaisons- Alaska, Northwest, Southwest Climate Adaptation Science Center (CASC) Regions. Bureau of Indian Affairs (BIA) announced funding to support the hiring of Tribal Climate Resilience Liaisons in Alaska, the Northwest, and the Southwest through the BIA's Tribal Resilience Program. Eligible applicants include Tribal non-profit, non-governmental organizations and Tribally-controlled colleges or universities (TCUs) that serve federally-recognized tribes. The BIA's Office of Trust Services, Tribal Climate Resilience Program, will evaluate all proposals and select three Tribal organizations (one per region) to hire:

- Alaska:** up to three Tribal climate resilience liaisons hosted at the Alaska CASC, Anchorage, AK, or University of Alaska, Fairbanks, AK.
- Northwest:** up to two Tribal climate resilience liaisons hosted at the Northwest CASC, Corvallis, OR, or University of Washington, Seattle, WA.
- Southwest:** up to two Tribal climate resilience liaisons hosted at the Southwest CASC, Tucson, AZ.

Applications are due 23 August.

Informational webinar on 23 July, 11 am MT / 10 am PT / 9 am AKT

FY 2022 Landscape Scale Restoration Competitive Grant Program announced by the Western Forestry Leadership Coalition will have formal western guidance posted sometime in July and plans to accept proposals starting on 5 August. **Proposals will be due 29 October.**

Upcoming Joint Fire Science Program Funding Opportunity. The interagency Joint Fire Science Program (JFSP) intends to request proposals through one or more formal Funding Opportunity Announcements (FOA) in July 2021. Once announced the FOA will remain open 60 days. The intent of this announcement is to provide an early alert to investigators interested in the topics below so they can begin considering responsive ideas with potential partners and collaborators.

- Social and ecological recovery of communities impacted by wildfire
- Collaborative development of ecosystem mapping products for fire and fuels management
- Graduate Research Innovation (GRIN) Award
- Regional Fire Science Exchange FOA

Sabbatical Research and Education Grants by Western Sustainable Agriculture Research and Education (SARE) will 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. **Applications are due on 18 November.**

Conferences & Workshops

Virtual Climate Change Adaptation Planning Course for Tribes, Western region, 9-13 August. This week-long virtual course will introduce planning for climate change impacts in the West, with examples of how Tribes have approached the adaptation planning process. The course is intended for tribal environmental and natural resource professionals who expect to be involved in climate change adaptation planning. This course employs a variety of instructional methods, including presentations, tribal case studies, and small-group / large-group discussions and activities. Participants will complete a pre-course assignment prior to attending the course. Applications received before or by 23 July will receive priority consideration.

Soil Health Institute's Annual Meeting, 11-12 August, 7-9 am PT & 10am-12pm PT, is a free, virtual event. Enriching Soil, Enhancing Life is designed to connect the science of soil health with the information farmers request when adopting soil health practices, and the environmental benefits that are followed. A wide array of practical information, research, and actionable takeaways will be presented that are relevant to farmers, agribusiness, consultants, scientists, field conservationists, government, and non-governmental organization professionals around the world.

The Dry Farming Project Summer Field Day, Save the Date: 26 August. A field day will be hosted at the Oregon State University Vegetable Research Farm in Corvallis to highlight the dry farming project. Portions of the field day will also be streamed live and/or recorded for online viewing.

Farm Planning for Climate Resilience for Oregon Agricultural Professionals, Save the Date: 2-4 November. Virtual sessions will be held from 10 am – 12 pm and 1 pm – 3pm PT each day. This training will advance your knowledge of farm-based solutions for climate resilience to reduce risks from extreme weather events, store more carbon, and work for a farmer's bottom-line. The intended outcome of this training is to create a community of practice in Oregon dedicated to supporting, improving, and better understanding farming for climate resilience in Oregon.

Click here to sign up for the Northwest Climate Hub email distribution list.

To unsubscribe email holly.prendeville@usda.gov

