



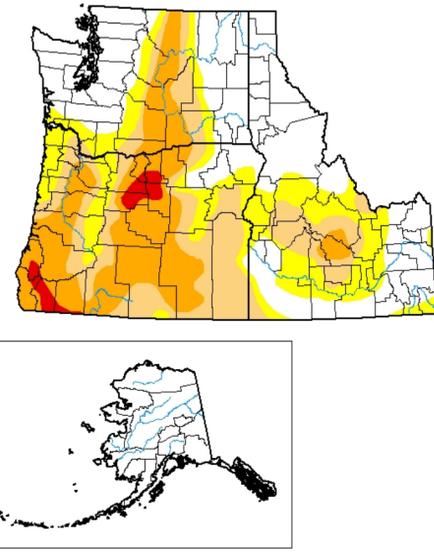
Drought in the NW Climate Hub Region

June precipitation slowed the expansion of dry conditions across much of the region. Since the end of May, widespread abnormally dry (D0-yellow) conditions in western and eastern Washington improved to normal conditions. Idaho also experienced improvements on the east side of the state. Reductions in moderate drought conditions (D1-tan) occurred in the Lemhi and Washington counties in Idaho. Improvements were less significant in Oregon, but areas in extreme drought (D3-red) in the southwest and northcentral regions reduced in size. Areas in moderate drought (D1-tan) east and west of the Cascades also receded slightly. Severe drought (D2-orange) expanded through the middle of the state.

Alaska continues to remain free of drought or dry conditions.



U.S. Drought Monitor June 23, 2020 USDA Northwest Climate Hub (Released Thursday, Jun. 25, 2020) Valid 8 a.m. EDT



	Drought Conditions (Percent Area)					
	None	D0	D1	D2	D3	D4
Current	81.14	5.96	6.16	6.19	0.56	0.00
Last Week 06-16-2020	80.33	6.70	6.36	6.06	0.56	0.00
3 Months Ago 03-24-2020	83.45	7.18	8.23	1.14	0.00	0.00
Start of Calendar Year 12-31-2019	70.58	22.31	7.10	0.00	0.00	0.00
Start of Water Year 10-01-2019	88.75	7.34	2.51	0.79	0.61	0.00
One Year Ago 06-25-2019	81.98	10.10	5.09	2.23	0.61	0.00

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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droughtmonitor.unl.edu

Northwest State-level Drought Resources

Check out a new collection of state-level drought resources for Alaska, Idaho, Oregon, and Washington from a variety of state and federal sources. Summaries are included to guide users by helping to differentiate among the information sources available and clarify uses and benefits.



Significant Wildland Fire Potential Outlook for July 2020

Large portions Oregon, Washington and Idaho are above normal wildland fire potential while Alaska is predicted to experience normal fire conditions according to the July's Significant Wildland Fire Potential Outlook from the National Interagency Coordination Center.

New Northwest Climate Hub Director - Jessica Halofsky



Jessica Halofsky joins the Climate Hub us with over a decade of experience as an ecologist, specializing in fire regime and vegetation shifts in response to climate. As a scientist with the University of Washington, she focused on applied research of fire and disturbance ecology, vegetation dynamics, and climate change impacts and adaptation. Jessica has an extensive background working with land managers to address climate change and environmental threats, including engagement through a series of climate change vulnerability assessments throughout the West. Jessica is also the new director of the Western Wildland Environmental Threat Assessment Center (WWETAC) and is based in Olympia, Washington. Welcome Jessica!

Information

Water Supply Reports. Find June water supply reports for Oregon, Idaho, Washington and Alaska with updated basin-scale outlooks on this season's snowpack status and water availability.

[Oregon](#) [Idaho](#) [Washington](#) [Alaska](#)

Assessing the U.S. Climate in May 2020. Highlights of May climate conditions from NOAA includes information about record-breaking May temperatures in Nome, Alaska as well as May 2020 being the sixth driest on record for Alaska, with record-setting low precipitation in parts of the North Slope and Central Interior regions. Find maps and information on drought in the west.

Drought Emerges Across the Pacific Northwest in Spring 2020. Check out this time-lapse map of drought development from February to May across the U.S. and a discussion of how below-average precipitation contributed to drought conditions in Oregon and Washington.

Are There More Multiyear Snow Droughts in Our Future? An article from the Agriculture Climate Network highlights research on the future likelihood of consecutive years of low snowpack in the Northwest. It also explores seasonal changes in the timing of peak snowpack, which influences the timing and volume of streamflow through spring and summer.

Snow Drought: Current Situation and Impacts in the West. Mid- to low-elevation mountain snowpack across Oregon, Washington, and Alaska melted one to four weeks early this season due to warm temperatures and low snowpack. Early snowmelt has implications for drought risk. Find further information, including maps and links to snow drought information tools.

Drought Less Predictable Under Declining Future Snowpack. A study in Nature Climate Change suggests that snowpack losses due to climate change will reduce the ability to measure seasonal water storage and thus limit reliable drought monitoring. Lower elevation mountain ranges in coastal areas, like those found in the Northwest, are particularly vulnerable to losses and drought prediction challenges.

[Full article](#)

New Forest Landscape Model Predicts How Management Policies Affect Future Wildfire Impacts. A new model, LSim, simulates forest management over time and predicts how management decisions in the short term influence the impacts of future wildfires. An accelerated forest restoration scenario for the Deschutes National Forest was simulated in LSim to study how it might affect future wildfire. Click here for key findings and model details.

Forestry as a Natural Climate Solution: The Positive Outcomes of Negative Carbon Emissions. This Science Finding highlights recent discoveries about the volume of current and future carbon storage potential in Alaska's forests. Find out how management decisions influence storage potential.

[Additional information on estimates of carbon storage and emissions by state.](#)

Nature's 'Slow Lanes' Offer Hope For Species Feeling Heat of Climate Change. A ScienceDaily article summarizes recent research that looks at the confluence of disturbances like drought, insect outbreaks, and fire in forests and how these interact to influence forest refugia. The study aims to expand understanding of refugia and provide insight into adaptations and vulnerabilities that inform future management.

[The full article can be found in a special issue on refugia research.](#)

Farms Under Threat, State-Based Webinars. State-specific webinars from the American Farmland Trust address threats to farmlands for 28 states. An overview of state policy and spatial analyses are provided, along with a demonstration of an interactive website where state-level information can be explored and downloaded.

[Idaho](#) [Washington](#) **Upcoming!** [Oregon](#) Wednesday 1 July 10-11 am PT. [Register here](#)

Northwest Drought Workshop

The Northwest Climate Hub and National Drought Mitigation Center are hosting a virtual workshop on **28 & 30 July**. This event is aimed at USDA agency staff and federal partner's including Soil and Water Conservation Districts, Watershed Councils, University Extension, Tribes, and other state and federal agencies. The objectives of these workshops are to get a better sense of drought and how it's monitored, impacts of drought and interconnections in Oregon, Washington and Idaho, and how USDA programs are affected by drought. Panelists and peer-to-peer learning will include agriculture, forestry, and rangelands.

Recorded Webinars

Impact of Anthropogenic Warming on an Emerging North American Megadrought. The webinar discusses research that suggests 2000 - 2018 were the driest 19-year period since 800 CE. The severe and persistent 21st-century drought in the Southwest has led to comparisons with medieval megadroughts and raised questions about the role of human-caused climate change.

Biochar from Forest to the Farm. This is the third in a series of webinars on biochar from the US Forest Service and covers animal bedding, irrigated lands, high value crops, and improving forest soil with biochar.

Drought Decision-Making Tools You Can Use. Learn about the Integrated Water Portal and The Climate Toolbox, including how the Climate Toolbox is currently used by managers in Washington. These tools support drought monitoring and drought decision-making across the lower 48 states.

Webinars

Wildfires in Western Washington, A Different Animal, Tuesday, 30 June, 6-8 pm PT. This webinar will address what forest fire looks like west of the Cascades. Other topics covered include how wildfire behavior and forest fire ecology are unique to this region, how climate change is influencing the risk of catastrophic fires, and implications for forest management.

Pacific Northwest Drought & Climate Outlook, 24 August, 11 am PT. The Pacific Northwest Drought Early Warning System hosts a series of region-specific, timely information and climate outlook webinars to provide timely information on current drought status and impacts, a preview of current and developing climatic events, and special topics.

National Weather Service Alaska Climate Outlook Briefings. This monthly webinar series on Fridays at 12 pm AKT by the Alaska Climate Assessment and Policy Center that reviews recent climate and looks ahead at future climate projections. Click each date below to register for the monthly webinar.

17 July - [Click here to register](#)

Monthly Series of West-Wide Rangeland Fuel Assessments. A series of recorded webinars analyzing current rangeland fuel conditions across the west will be available on the first Monday of each month. Forecasts are based on the new FuelCast model and hosted by Matt Reeves from the US Forest Service Rocky Mountain Research Station. The 1 June session is available now.

Podcast Highlight

California Burning: Solutions to California's Wildfire Problem. What can we learn about adapting to increased wildfire from our neighbors to the south? Check out this podcast series on wildfire from National Public Radio that covers the history of fire in California, including indigenous fire management practices, and addresses the collision of dense population centers with increasing intensity and frequency of wildfire due to climate change.

Funding opportunities

The Farm Loan Discovery Tool can be used to help farmers, ranchers, and forest landowners identify loan opportunities to address pandemic-related challenges. The tool walks users through a decision tree process to identify appropriate loan opportunities.

Renewable Resources Extension Act-National Focus Fund/Projects provide funding for forest and rangeland projects that address these priority areas: 1) regional/national projects on the nexus of critical forest and rangeland resources issues; 2) Innovative approaches to program delivery, and current knowledge about non-formal adult education; 3) The transfer of new knowledge to forest and rangeland owners and managers. **Applications due 28 June.**

Energy Technology Deployment on Tribal Lands 2020. Funds are available to tribal organizations and tribal governments to install energy systems, improve efficiency, or obtain emergency power systems to improve energy security and community resilience. A 50% cost-share is required. **Applications due 1 July.**

WaterSMART Drought Response Program funding is available to states, tribes, irrigation districts, water districts, and other organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation on Drought Resiliency Projects projects that build long-term resilience to drought and reduce the need for emergency response actions. This includes improvements to water supplies, water management, or projects that benefit fish, wildlife and the environment. **Applications due 8 July.**

Diesel Emissions Reduction Act Grant Opportunity for Tribes. Tribal governments, intertribal consortia, or Alaska native villages with jurisdiction over transportation or air quality are eligible to submit projects that address reducing diesel fuel emissions. Plans may include non-road engines used for agriculture or energy production. **Applications due 9 July.**

Oregon & Washington Rangeland Resource Management Program. This grant opportunity through the Bureau of Land Management includes coordination with participants to carry out land improvements and monitor outcomes, with the goal of building rangeland resilience. Improvement s can include vegetation restoration, soil surveys and erosion control, endangered and special status species recovery, grazing of domestic livestock, recreation, forest management, hazardous fuels reduction, and post-fire rehabilitation. **Applications due 20 July.**

Tribal Transportation Program Safety Fund provides funds through the Federal Highway Administration to federally recognized Tribes to build transportation resilience, including data assessment, transportation improvements, safety analyses; and infrastructure improvements. **Applications due 20 August.**

Conferences, Workshops & Trainings

Soil and Water Conservation Society's 75th Annual Conference Goes Virtual 26-29 July. The conference theme of "Expanding Horizons: Where Conservation Meets Innovation" inspires 12 focal topics including soil health, applied data in agriculture, water resources, monitoring, and more.

North American Congress for Conservation Biology Goes Virtual, 26-31 July. This year's theme is "Crossing boundaries: innovative approaches to conservation" with a focus on innovative approaches to bringing together experts across disciplines to solve pressing issues related to population growth, land use, and climate change.

National Tribal & Indigenous Climate Conference, Tribal Resilience for Seven Generations, 31 July- August-4 September in St. Paul, Minnesota. Proposal submissions are requested. Featured topics include climate-related impacts, assessments, tools, mitigation, and the intersection of western science and adaptation strategies with Traditional and Indigenous Knowledge. The conference is open to all US tribal nations and indigenous peoples across the world, with an emphasis on including elders and youth. **Registration is open until 31 July.**

Ecological Society of America Virtual Annual Conference, 3-6 August. The theme of this year's conference is "harnessing the ecological data revolution." Presentations will be pre-recorded to conveniently view over 3,000 options from this year's event. **Register by 26 July to attend.**

The 2020 National Soil Moisture Workshop 12-13 August National Agricultural Library in Beltsville, Maryland. This opportunity brings leaders in soil moisture research and development together in an interactive workshop format to exchange ideas and enhance collaborations. **Abstracts extended 1 July and register by 1 August.**

Tribal Climate Camp 2020 Postponed to 23-28 May 2021. Planning for online introductory components before May 2021 is in progress and Tribal delegations are still encouraged to submit applications by **26 June 2020** in order to attend. Tribal Climate Camp support teams of tribal leaders, climate change coordinators, planners, and program managers to build skills, gather information, and develop tribal policy needed to address climate change impacts.

The Second High Five Conference (H5II) on the Research and Management of High Elevation Five Needle Pines in Western North America Postponed 5-7 October 2021 Missoula, Montana. Hosted by the Whitebark Pine Ecosystem Foundation, topics include restoration management of 'High-5' species, ecology, genetics, disturbance, blister rust and resistance, planting, and climate change. **Registration and abstract submissions will remain open.**

To receive the USDA Northwest Climate Hub monthly newsletter via email, signup by clicking on this box and providing your contact information and areas of interest on the form.

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