

Drought in the NW Climate Hub Region

Abnormally dry (D0-yellow) and drought conditions are expanding throughout Idaho, Oregon and Washington. Recent storms improved conditions in Alaska, where abnormally dry conditions (D0-yellow) have improved in the northeastern Interior and western North Slope.

For Oregon, the highest level of drought severity, exceptional drought (D4-maroon), is occurring in parts of Klamath and Lake counties. This is only the second time D4 has been declared in Oregon since 2000, when the US Drought Monitor began. Extreme drought (D3-red) expanded in Klamath, Crook, Jefferson, and Wasco counties because of low snowpack, streamflows, and soil moisture. Abnormally dry conditions (D0-yellow) and moderate drought (D1-tan) are expanding along the coast.

In Washington, abnormally dry conditions (D0-yellow) now exist along much of the coast because of low precipitation and streamflow. In central and eastern Washington low precipitation and soil moisture have led to severe (D2-orange) drought conditions and expansion of moderate drought conditions (D1-tan) and abnormally dry conditions (D0-yellow).

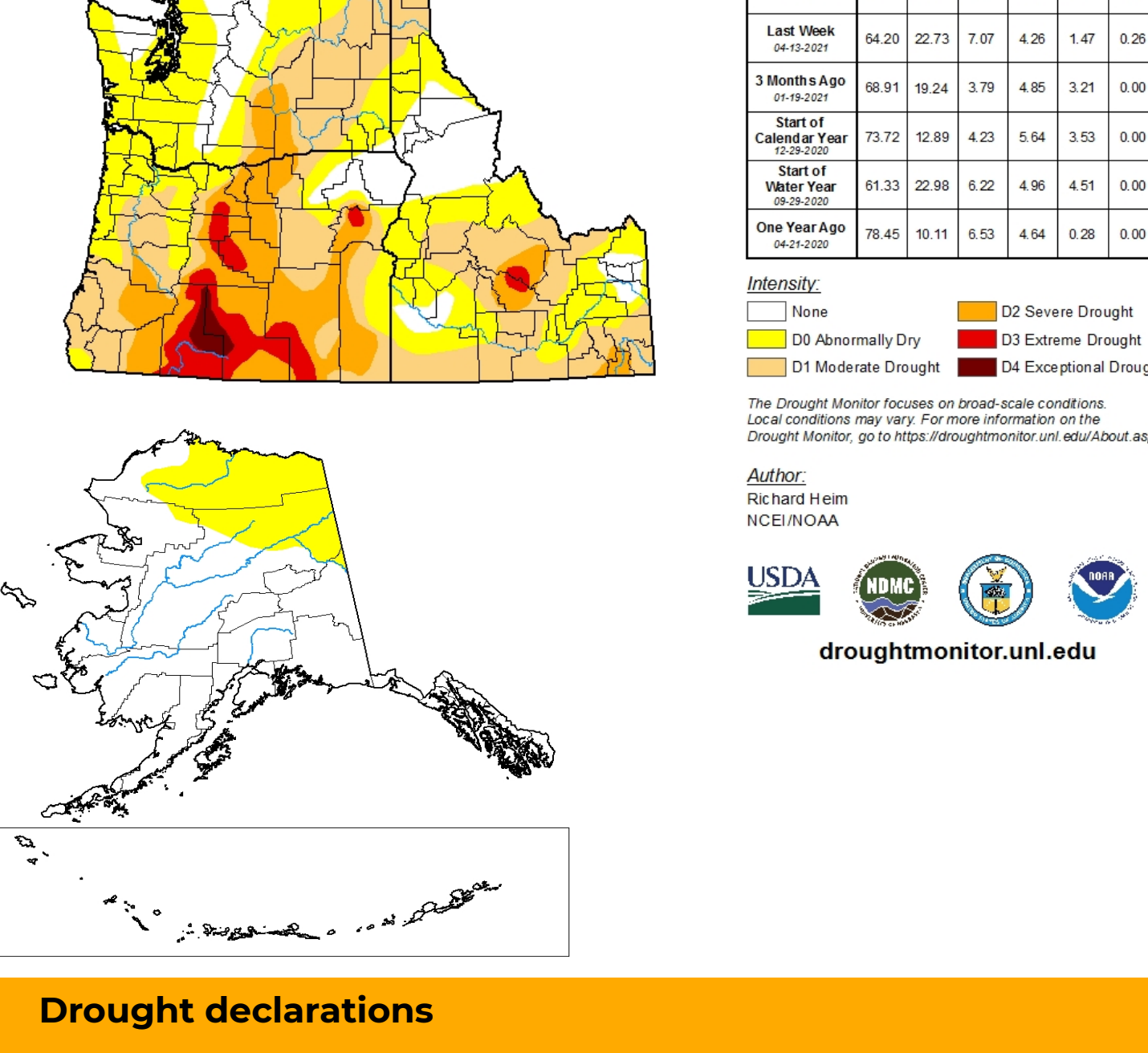
Drought conditions worsened across Idaho since last month, where severe drought (D2-orange) reemerged in the southeast, moderate drought (D1-tan) expanded in the west-central region as well as the northern panhandle, and abnormally dry conditions (D0-yellow) expanded throughout the northern Panhandle and in the northeast corner of the state.



U.S. Drought Monitor

USDA Northwest Climate Hub

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Drought declarations

- Klamath county in Oregon declared drought on 31 March
Klamath county water distribution updated documents
- Jackson county in Oregon declared drought on 13 April
Jackson county drought information
- Lake county in Oregon submitted request for declared drought
- Blaine county in Idaho, Commissioners announce drought emergency



Northwest state-level drought information and resources

Funding: Extension, Education & USDA Climate Hubs Partnership

The U.S. Department of Agriculture National Institute of Food and Agriculture (NIFA) has a request for applications for a new program area priority, "Extension, Education & USDA Climate Hubs Partnership" to provide effective, translatable, and scalable approaches to address climate change through regional partnerships including the USDA Climate Hubs and extension (e.g., the Cooperative Extension Service). The regional partnerships should work towards one or more of the following long-term socioeconomic impacts: 1) net-zero emissions agriculture; 2) working lands adapted to climate change; 3) a diverse workforce that can effectively communicate about climate change with a variety of stakeholders and can incorporate climate considerations into managing working lands; and 4) climate justice including equity in opportunities and burden-sharing. For fiscal year 2021 funds, **applications are due 22 July 5pm ET.**

Webinars & Trainings

- Pacific Northwest Drought & Climate Outlook, 26 April 11 am PDT.** This series of region-specific drought and climate outlook webinars provides timely information on current drought status and impacts, a preview of current and developing climatic events, and special topics. The April webinar will highlight recent changes to the Drought.gov website and provide an overview of the 5th Oregon Climate Assessment.
- Cultural Burning, Collaborative Fire Research and Management: Approaches for Respectfully Partnering with Tribes, 27 April 11 am PDT.** The webinar will discuss the historical context of cultural burning, clarify misconceptions about cultural burning, and present a decolonizing framework for shared values and resource objectives in fire management. Dr. Frank Lake, US Forest Service, will share best practices and lessons learned from projects with tribal partners.
- Navigating the Climate Adaptation Science Centers: A National Network of Climate Adaptation Support for Native Nations, 28 April 11 am PDT.** Tribal resilience liaisons will lead an introduction to the Climate Adaptation Science Centers (CASCs) and the tribal resilience liaison network. They will share some examples of projects and efforts, and share insights on how to engage with CASCs for support.
- Northwest River Forecast Center Monthly Water Supply Briefing, 4 May 10 am PDT.** This is the last in a series of monthly water supply briefings for the year. Registration is required.
- Oregon State University Extension Wildfire Wednesdays.** A webinar series to provide homeowners with information about fire preparedness and what to do to improve fire safety on their property and in their community.
 - It Takes a Village,** highlights community-scale preparedness. (recorded)
 - From Home to Landscape,** discusses individual and landscape level fire preparation. (recorded)
 - Building community for wildfire resilience,** steps to take to reduce fire risk around your home and community. (recorded)
 - Be Ready, Be Set, Go!** 28 April 12-1 pm PT. Evacuation preparedness at the individual, community and landscape levels. Register here.

NWCH Water Resilience Series: Soil Conservation

The second in a series of resources for building regional water resilience is now available. Learn about soil conservation for improving moisture and drought resilience, and reducing water demands. A list of USDA resources available to help implement changes on the ground is included.

Information

- Water Reliability in the West 2021 SECURE Water Act Report.** This web portal provides timely information about changing water conditions, expected climate change impacts as well as adaptation and mitigation efforts across the West. This report also has basin reports for the Columbia River and Klamath.
- Invasive Species in Forests and Rangelands of the United States: A Comprehensive Science Synthesis for the United States Forest Sector.** This book compiles science and management strategies for invasive species across the US, which include early intervention strategies, tools and technologies, climate change effects, and social and societal aspects. Regional summaries for Alaska, Oregon, Washington, and Idaho are included.
- Human Land Uses Reduce Climate Connectivity.** In response to a changing climate some species move to more suitable habitat, and open landscapes provide opportunity for this to occur and reduce the likelihood of extinction. Recent research suggests that conservation planning in North America should consider human land uses that reduce corridors for species movement and adaptations to protect corridors that represent ideal pathways.
- Sagebrush Conservation Strategy—Challenges to Sagebrush Conservation.** This cross-agency report highlights pressures from wildfires, invasive annual grasses, cropland conversion, and other disturbances on sagebrush ecosystems. Impacts to human and wildlife communities dependent on healthy sagebrush are addressed.
- How Can New Remote Sensing Technologies Help Evaluate the Effectiveness of Resource Conservation Measures?** A new approach to riparian conservation uses drones to help monitor vegetation health. This technique is being tested in Washington State's popular Voluntary Stewardship Program (VSP). Read further to find out how using drones and other remote-sensing tools is getting simplified for non-expert users interested in riparian conservation in agricultural settings.
- Alaska's Environmentally Threatened Communities.** This story map highlights 144 communities in Alaska that are currently threatened by flooding, erosion, and permafrost change. An interactive, searchable dashboard is included that provides baseline information, current monitoring data, and risk assessment information for each community.
- Oregon Climate Assessment Identifies Advances in Climate Science and Opportunities for Resilience.** Oregon Climate Change Research Institute Director Erica Fleishman shares highlights from the Fifth Oregon Climate Assessment. Advances in climate change science, the effects of climate change on Oregon's energy supply, wildfire risk mitigation, and other topics are discussed.
- Adaptation Policies Will Affect Coastal Communities' Risk to Flooding and Erosion.** Recent research exploring climate adaptation to coastal flooding and erosion hazards in Tillamook County, Oregon suggests that human decision making (e.g. land development decisions) strongly influence risk. Read more to learn about what different combinations of human and natural system scenarios can tell us about planning for change.
 - Full article**
- Cross-Laminated Timber and Green Building.** This two-page information sheet provides case study examples of cross-laminated timber (CLT) use for large-scale green building projects in Portland, Oregon and other cities. Find quick facts and background information about CLT, including structural and environmental advantages.
- Forests of the Future: Climate Change Impacts and Implications for Carbon Storage in the Pacific Northwest, USA.** A recent study looked at the effects of climate change on Northwest forests and their carbon storage capacity. Two case studies are used to illustrate expected climate change effects on moist and dry forest ecology and carbon storage, and to inform several regional forest restoration and management adaptation strategies.

Podcast Highlights

Drought is on many of our minds this year as conditions continue to be much drier than normal in many locations across the West. In a recent episode, the Southwest Climate Hub's *Come Rain or Shine* podcast addressed several challenges related to drought and natural resources management.

Conferences & Workshops

- Connect: Oregon Conservation Education & Assistance Network Annual Conference (virtual), 11-13 May.** This year's three-day, multidisciplinary workshop will feature a variety of talks for conservation specialists focused on rural and urban conservation implementation, managerial and administrative function, policy, and education.
- 2021 Forest Graduate Student & PostDoc Symposium, 19-20 May.** This year's virtual conference will feature pre-recorded presentations with live question and answer sessions. Topics include climate change and adaptation, conservation genetics, resilience, and restoration. Recordings and presenter registration are **due by 3 May.**
- Virtual Wildland Fire Safety Summit & Human Dimensions of Wildland Fire Conference, 24-27 May.** This event will focus on recent fires and trends in safety to promote best practices and share safety-related information for wildland fire management. Lessons learned, current work, and emerging ideas and technologies will be showcased. This year's conference will also address challenges associated with COVID-19 and its effects on wildland fire management.
- National Congress of American Indians Mid-year Conference (virtual), 20-24 June.** The conference will provide an opportunity for researchers, practitioners, community members, and others to present research and data findings on issues facing tribal Nations to tribal leaders, policymakers, and tribal citizens. **Early bird registration deadline 30 May.**

Opportunity

CASC Network Climate Adaptation Postdoctoral Fellows Program. Two-year post-doctoral appointments are available to take part in a regional-to-national syntheses of climate change impacts on fire regimes, fire management, and fire response. This effort will explore future fire effects on fish, wildlife, and ecosystems and provide the scientific research necessary to help managers adapt to these changes. Opportunities are now available through the University of Alaska, Fairbanks; University of Montana; University of California, Davis; and North Carolina State University. **Positions are open until filled.**

Funding Opportunities

- Rural Health and Safety Education Competitive Grants Program.** Proposals should focus on community-based outreach education programs, including human health, information. Applications can address rural environmental issues that directly impact extension outreach. Applications can and access to health promotion and educational activities, training for volunteers and health services providers, and more. **Applications are due 29 April 2021.**
- Community Food Projects and Planning Projects Competitive Grants Programs.** Funding is available for Community Food Projects (CFP) and Planning Project (PP) grants. CFPs should focus on community-based food projects. PPs should include a complete a plan for improving community food security and detail the activities and outcomes of the project. **Applications are due 4 May.**
- Conservation Innovation Grants (CIG) NRCS-Idaho & NRCS-Oregon.** CIG is a voluntary program intended to stimulate the development and adoption of innovative conservation approaches and technologies for agriculture production. CIG promotes sharing of skills, knowledge, technologies, and facilities among communities, governments, and other institutions to ensure that scientific and technological developments are accessible to a wider range of users. **Applications are due via Grants.gov**
 - NRCS ID CIG Applications due 3 May by 11:59 pm ET**
 - NRCS OR CIG Applications are due 7 May**
- Environmental Justice Small Grants Program.** This opportunity provides funding for environmental justice efforts via two programs. 1) Small grants are independent efforts and should focus on local-scale engagement, education, and empowerment around environmental/public health issues. 2) Cooperative agreements must include established partnerships and focus on substantive activities (e.g. training or experiments). **Applications are due 7 May.**
- NRCS Alaska Offers Second Sign-up Opportunity for 2021 Environmental Quality Incentives Program (EQIP).** A second opportunity to apply for EQIP funds is available to Alaskan producers. EQIP provides financial and technical help to agricultural and forestry producers to address natural resource concerns and deliver environmental benefits. **Apply at your local NRCS Alaska field office by May 14.**
- Western Sustainable Agriculture Research and Education (SARE) Program.** This opportunity funds researcher and producer collaborations on research and education related to sustainable agriculture. Collaborations should focus on profitable approaches to natural resource conservation through communication to producers and other professionals. Activities can include demonstrations and farmer-to-farmer education. **Pre-proposals are due 20 May.**
- Regional Conservation Partnership Program (RCPP) from USDA NRCS offers eligible farmers, ranchers and forest owners (who manage property within a current RCPP project area) conservation assistance from NRCS and other partners. Projects are impactful and have innovative solutions to on-farm, watershed, and regional natural resource concerns. **Applications due 28 May.****
- Agroforestry Outreach—Request for Proposals 2021.** Submit a proposal to improve the availability of science-based information to inform landowner decisions on the adoption and design of agroforestry systems. Awards are anticipated to be up to \$100,000, with a minimum of \$35,000 for a single project. **Proposals are due 28 May.**
- National Forest Foundation 2021 Matching Awards Program.** The Matching Awards Program funds on-the-ground projects for forest health and outdoor experiences on national forests and grasslands. Tribes, non-profits, and universities are eligible and must provide a 1:1 funding match for projects lasting no more than 12 months. **Applications due 9 June.**
- Agriculture and Food Research Initiative - Sustainable Agricultural Systems.** This opportunity is focused on: (1) sustainable agricultural intensification; (2) agricultural climate adaptation; (3) value-added innovation; and/or (4) food and nutrition translation. Proposed work should result in societal benefits, such as rural prosperity and enhancement of quality of life, for all those involved in food and agricultural value chains. **Applications due 1 July 2021.**
- Agriculture and Food Research Initiative - Foundational and Applied Science Program.** Grant funds are available in priority areas, which include plant or animal health, production, and products; food safety, nutrition, and health; bioenergy, natural resources, and environment; agriculture systems and technology; and agriculture economics and rural communities. Research-only, extension-only, and integrated research, education and/or extension projects are eligible. **Applications due 29 July 2021.**

