

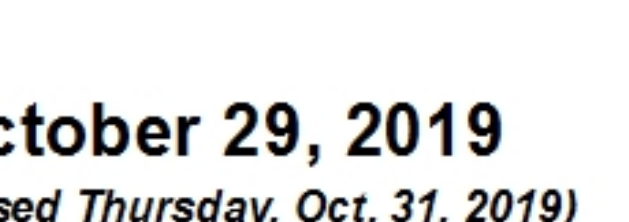
October 2019  
Newsletter

## Drought in the NW Climate Hub Region

Rain across the northwest climate hub region has improved conditions. Oregon, Washington and Idaho are considered drought-free.

Conditions have also improved in Alaska since last month. Extreme drought conditions (D3-red) have improved to severe drought (D2-orange) in southern southeast. Baranof Island to Skagway and westward have improved to abnormally dry (D0-yellow). Above average precipitation has reduced drought conditions to no drought (white) and abnormally dry (D0-yellow) in southcentral Alaska. Similarly, drought conditions for Kodiak Island and the Anchorage area have improved to abnormally dry status (D0-yellow). Drought conditions have receded from the the Alaskan Peninsula.

Drought maps are published every Thursday. Click on the U.S. Drought Monitor link below to view the latest map. Many sources of information inform drought maps, including reports from the public. Click on each icon below to get information about the National Integrated Drought Information System (NIDIS), to submit data via the CoCoRHaS network, or to report drought impacts.



U.S. Drought Monitor

## USDA Northwest Climate Hub

October 29, 2019

(Released Thursday, Oct. 31, 2019)  
Valid 8 a.m. EDT



	Drought Conditions (Percent Area)					
	None	D0	D1	D2	D3	D4
Current	93.17	4.05	1.37	1.40	0.00	0.00
Last Week 10-22-2019	92.03	4.61	1.96	1.40	0.00	0.00
3 Months Ago 07-30-2019	38.86	37.27	18.70	4.55	0.61	0.00
Start of Calendar Year 01-01-2019	71.65	11.73	5.73	8.16	2.73	0.00
Start of Water Year 10-01-2019	88.75	7.34	2.51	0.79	0.61	0.00
One Year Ago 10-30-2018	69.83	11.14	6.10	8.99	3.93	0.00

**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. See accompanying text summary for forecast statements.

Author:  
David Simeral  
Western Regional Climate Center



droughtmonitor.unl.edu

## USDA Climate Hub Liaison Detail for 2020

**USDA NRCS Employees:** Seeking applicants for USDA Climate Hub Liaison detail for 2020. NRCS supports the 10 USDA regional Climate Hubs each year by providing three employees as "Agency Project Liaisons." The selected employees are on detail for the calendar year, remain at their current duty station, and under NRCS supervision and funding, but work full time directly with a specific climate hub on a focused project that provides benefits to both NRCS and the USDA Climate Hub. This detail is open to all employees regardless of grade, but applicants should be capable of creating their own workload, functioning independently, and managing their time. **\*\*\*Action requested by 1 DECEMBER, 2019\*\*\* (Deadline extended)**

## Webinars

**Restoring soil in fire-prone landscapes: A strategy for using biochar to sequester carbon** by Dr. Page-Dumroese hosted by USDA Forest Service on 1 November 2019 11 am MT / 10 am PT. For audio, dial: 1-888-844-9904 and use access code: 3847359. Click here for web login details.

**Watershed Applications of Agricultural Conservation Planning Framework (ACPF) on 4 November 2019 11am CT/9am PT.** The webinar will provide an overview of the ACPF and how it can help individuals working in a watershed context determine conservation solutions at the field scale, engage diverse stakeholders in the watershed planning process, and determine which sub-watershed to focus on and which landowners to engage. Attendees will also hear how the ACPF compares to similar watershed planning tools to help you determine which tools will best serve your needs. Click here to register.

**Green on Black: A Fire History of the Pacific Northwest** by Stephen Pyne who will discuss the Pacific Northwest's unique fire history and management practices and address connections to recent megafires, smoke, and current opportunities for policy reform. This webinar is hosted by Northwest Fire Science Consortium 7 November 2019 1 pm PST.

**Amplifying Actionable Science Through Intentional, Integrated and Creative Communications**, fall 2019 webinar series by the Northwest Climate Adaptation Science Center (NW CASC) Click on the details below to register.

**5 November 11 am PT | Better Stories, Bigger Impact: How Scientists Can Engage Effectively with the Media to Share Their Science** with Julia Rosen

**3 December 11 am PT | What Can Successful Communication Look Like in Actionable Science?** Examples from the Climate Adaptation Science Centers with presenters from across the CASCs

**National at 12 pm AKT by the Alaska Climate Assessments and Policy Center** that reviews recent climate and looks ahead at future climate predictions. Click each date below to register for the monthly webinar.

**22 November** -click to register

**20 December** -click to register

**Pacific Northwest Drought & Climate Outlook 16 December, 2019 11 am PST** hosted by the Pacific Northwest Drought Early Warning System (PNW-DEWS) provides regular drought and climate outlook webinars designed to provide stakeholders and other interested parties in the region with timely information on current drought status and impacts, special topics, and a preview of current and developing climatic events. Click here to register for 16 Dec webinar.

For a recording of October's outlook webinar, click here

**USDA Natural Resources Conservation Service** hosted a webinar on dry farming organic vegetables. The webinar discusses drought mitigation tools and strategies for growing crops with little or no irrigation.

**USDA Natural Resources Conservation Service** hosted a webinar on emerging technologies that improve agricultural practices and operational efficiency without sacrificing yields. The focus was on Internet of Things (IoT), or devices that enable users to collect and exchange data to increase farm productivity. Examples provided included how to reduce water and nutrient inputs.

## Conferences, Workshops & Trainings

**OSU Extension Learn and Burn 4 November 2019 9 am-5 pm Eugene, Oregon.** This hands-on slash and burn workshop emphasizes fire science and safety, burn pile building, smoke management, and more. Click here for details.

**Intermountain Native Plant Summit IX 5-6 November Boise, Idaho.** There will be presentations on native plant restoration, genetics and adaptation on native plants, producing native seed for restoration and more. Registration is free but advanced notice is preferred. For more information about presentations and the agenda contact Thomas.jones@usda.gov. To register email kyle.forsyth@usda.gov with "INPS" in the subject line and provide your name(s), mailing address, affiliation, and phone in the body of the email.

**Oregon/Washington Water Year 2019 Recap and 2020 Outlook 5 November Portland, Oregon.** This is a one-day workshop to debrief over the last water year (1 Oct 2018 - 30 Sept 2019) and discuss the forecast, with the goal of identifying vulnerabilities and opportunities to build resilience. Click here to register.

**Washington Forest Collaboratives Summit 6-7 November 2019 Wenatchee, Washington.** Goals of the workshop include networking, partner/agency collaboration, sharing of innovations and lessons learned, and to articulate the role of collaboratives in Shared Stewardship Investment Strategy. The Eastern Washington Collaborative Learning Exchange meeting will be held the day before the summit. Click here for registration details for both events.

**The Northwest Natural Resources Group** is hosting a series of training workshops on climate change adaptation strategies for Pacific Northwest forests. These trainings are created for land managers and professional foresters. Topics covered focus on the impacts of climate change to forests and adaptive management approaches for Western Oregon and Washington. Click here for more information or register for each event below.

**6 November Everett, WA** click here to register

**14 November Olympia, WA** click here to register

**5 December Salem, OR** click here to register

**University of Idaho Extension Forestry Shortcourse 7 November in Coeur D'Alene, Idaho.** This shortcourse aims to improve understanding of basic principles of forest ecology and silviculture, how to apply that knowledge to your forest to meet your goals, and how to develop a written forest management plan for your property. The shortcourse is also offered in Sandpoint, Idaho. **Register by 1 November.**

**Eighth Western Native Plants Conference 12-14 November Olympia, Washington** hosted by the Western Forestry and Conservation Association. Topics covered include climate impacts, pollinators, restoration, and seed propagation.

**The Washington Environmental Council's 2019 Carbon Friendly Forestry Conference 12 November SeaTac, Washington.** Featured topics include the roles of climate-smart forests and forest products as natural climate solutions in mitigating and adapting to climate change. **Early registration ends 30 September 2019.**

**The 30th Idaho Water Quality Workshop 11-13 February 2020 Boise, Idaho.** This year's featured topics include: Idaho water quality, results, trends and discussions; remote sensing; and groundwater modeling. **Abstracts are due 1 November 2019** and all water quality topics are welcome. **Registration is free.**

## Funding opportunities

**NOAA Office of Education Environmental Literacy Program-** 2020 grant funding for building environmental literacy to enhance community resilience through education. Eligible applicants are educational institutions, nonprofits, state and local government agencies and tribal governments. The pre-application (required) deadline is **25 November 2019** (11:59 pm EST). Full application deadline is **26 March 2020** (11:59 pm EDT).

**USDA Citizen Science Collaborative Funding Program** services units and partners to apply for up to \$30,000 for collaborative citizen science projects. **Applications due 3 December 2019 (11:59 pm EST).** Click here for criteria and application details, including a recorded informative webinar.

**2020 Joint Fire Science Program** has funding opportunities **open through 5 December 2019 (5 pm MST).** The Joint Fire Science Program (JFSP) is a partnership of six federal wildland fire management and research agencies that have a shared need to address problems associated with managing wildland fuels, fires, and fire-impacted ecosystems. Opportunities include:

- Graduate Research Innovation Grant
- Regional Fire Science Exchange Announcement
- Performance of Fuel Breaks and Fuel Break Systems

**USDA NRCS Regional Conservation Partnership Program (CRPP)** seeks applications to partner in efforts to invest in innovative solutions to on-farm, watershed, and regional natural resource conservation challenges. The CRPP program now has \$300,000 annually to divide between state or multi-state level applicants, and eligible producers and landowners in Critical Conservation Areas. Click here to learn more about other changes to the program, along with eligibility and application details. **Applications due 5 December 2019.**

**USDA Forest Service - The Community Forest and Open Space Conservation Program** requests applications to establish community forests through fee simple acquisition of private forest lands. The purpose of the program is to establish community forests. Local governments, qualified nonprofit organizations, and Indian tribes are eligible to apply. **Applications due 6 January 2020.**

**Department of Defense's Strategic Environmental Research and Development Program (SERDP)** announced two Resource Conservation and Resiliency Core solicitations for FY 2021. **Pre-applications are due 7 January 2020 by 2 pm ET.** Click here for details.

- Advanced Biosecurity Tools for Controlling Invasive, Alien Terrestrial Species (IATS) in Support of Enhanced Strategic Mobility
- Research to Improve Installation Infrastructure Resiliency Processes, Systems, and Tools

## Information

**Video: Current outbreak of Hemlock Sawfly in Southeast Alaska.** This video features the lifecycle, damage and monitoring of the hemlock sawfly by USDA Forest Service Forest Health Protection.

**The Intergovernmental Panel on Climate Change (IPCC) Special Report** on the Ocean and Cryosphere in a Changing Climate was recently completed, highlighting impacts to oceans and mountain regions. Click here to find fact sheets, summaries, a video to the report press conference, offering a deep dive into the results.

**Climate change impacts to Alaskan ways of life for plants, animals, and humans.** New York Times article with contributions from Rick Thoman at the Alaska Center for Climate Assessment and Policy. The article marks the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (linked above).

**The Village of Newtok** has begun their move to Mertarvik, villages in southern Alaska. About a third of residents of Newtok are forced to move due to large-scale erosion occurring with melting permafrost.

**Story Map about the change to Alaska's coastal resources and shoreline**, developed by the USDA Forest Service Pacific Northwest Research Station. See the video link below for additional research details and results.

**Video: shoreline change on traditional foods and gathering patterns in Southeast Alaska.** Highlights research conducted by Dr. Adelaide Johnson of the USDA Forest Service Pacific Northwest Research Station and partners.

**NPR highlights how Pacific Northwest Tribes** adapt to climate change using ancient practices, clam gardens.

**2019 Tribes and First Nations Climate Summit Proceedings** from the Affiliated Tribes of Northwest Indians, which includes an executive summary and recommendations.

**Tool: Washington State Groundwater Projects** from the USGS Washington & Texas Water Science Centers features 131 groundwater studies across Washington including information about ongoing or completed groundwater-focused studies. The studies provide historical context and insights into groundwater conditions that can be used in the continued development, management, and protection of Washington's groundwater resources.

**Tool: The Eco-Adapt Climate Adaptation Knowledge Exchange** is a web page that provides a platform for accessing adaptation resources and case studies, sharing ideas, opportunities and lessons-learned. Click here to explore the recently revamped page.

**Tool: The Climate Smart Restoration Tool**, developed by scientists at the USDA Forest Service Rocky Mountain and Pacific Northwest Research Stations, in collaboration with others, improves adaptive planning by providing information on seed collection and transfer of native plants. The interactive maps show current and future seed transfer limits for plant species using provisional seed zones or those specific to sagebrush.

**Fact sheet from the National Drought Mitigation Center** which lists available USDA programs and resources that can help with drought and other natural disaster recovery, including assistance for damages to trees, crops, and livestock. Click here for more information.

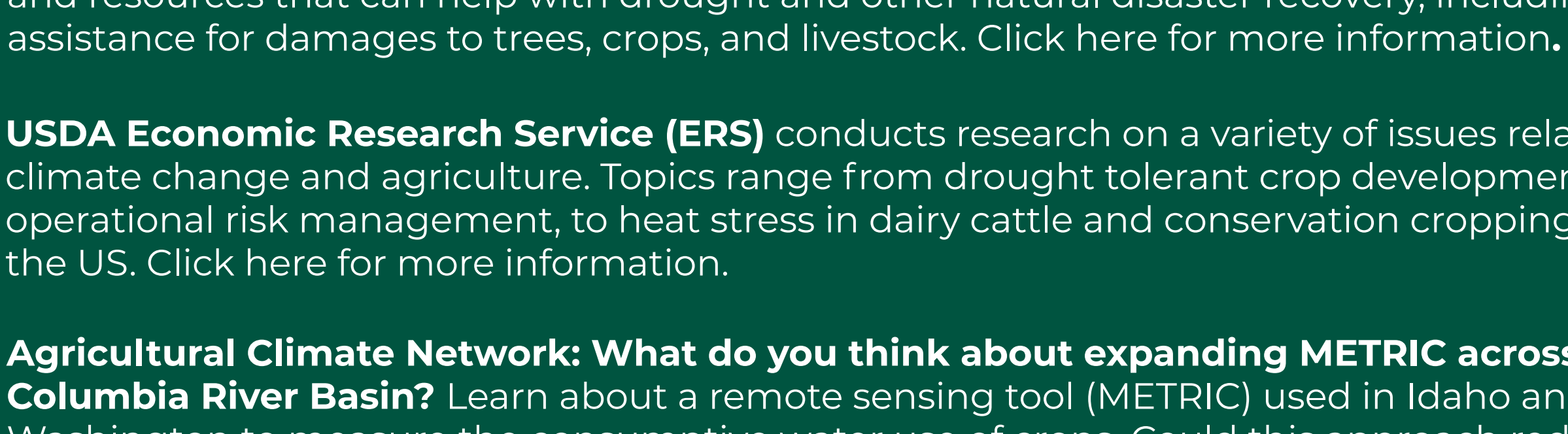
**USDA Economic Research Service (ERS)** conducts research on a variety of issues related to climate change and agriculture. Topics range from drought tolerant crop development and operational risk management, to heat stress in dairy cattle and conservation cropping across the US. Click here for more information.

**Agricultural Climate Network: What do you think about expanding METRIC across the Columbia River Basin?** Learn about a remote sensing tool (METRIC) used in Idaho and piloted in Washington to measure the consumptive water use of crops. Could this approach reduce conflict and be an alternative to allocating and measuring water use based on diversions alone?

**soil microbes play a key role in plant disease resistance**, says new research on sustainable food production.

**Agricultural Climate Network** highlights research on irrigation efficiency in the Yakima River Basin. The study addresses commonly oversimplified interactions between agricultural and physical processes, water rights, and dam operations.

## Newsletters Available on Hub Website



Signing up to receive the **USDA Northwest Climate Hub monthly newsletter** by clicking on this box and providing your contact information and areas of interest on the form.

