Drought in the NW Climate Hub Region

December 2018 newsletter

In much of Oregon, Washington, Idaho and southeast Alaska drought conditions persist (red: D3-Extreme drought, orange: D2-Severe drought, tan: D1-Moderate drought, yellow: D0-Abnormally dry). In southeast Alaska, drought conditions persist (D0-D2).

Warm snow drought, warm temperatures leading to rain rather than snow, is occurring in the Kenai Peninsula drainage basin where snow water equivalent is currently 38% of the 1981-2010 median and water year-to-date precipitation is 167% of 1981-2010 average. Click on the icon below to learn more about snow drought.

Many sources of information go into developing drought maps including reports from the public. Click on the icons below to get more information from the National Integrated Drought Information System (NIDIS), to submit precipitation data via the CoCoRHaS network, or to report drought

impacts for the Pacific Northwest.



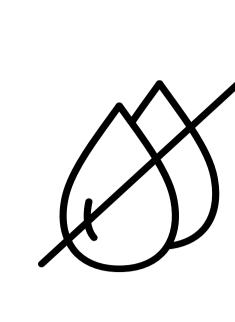


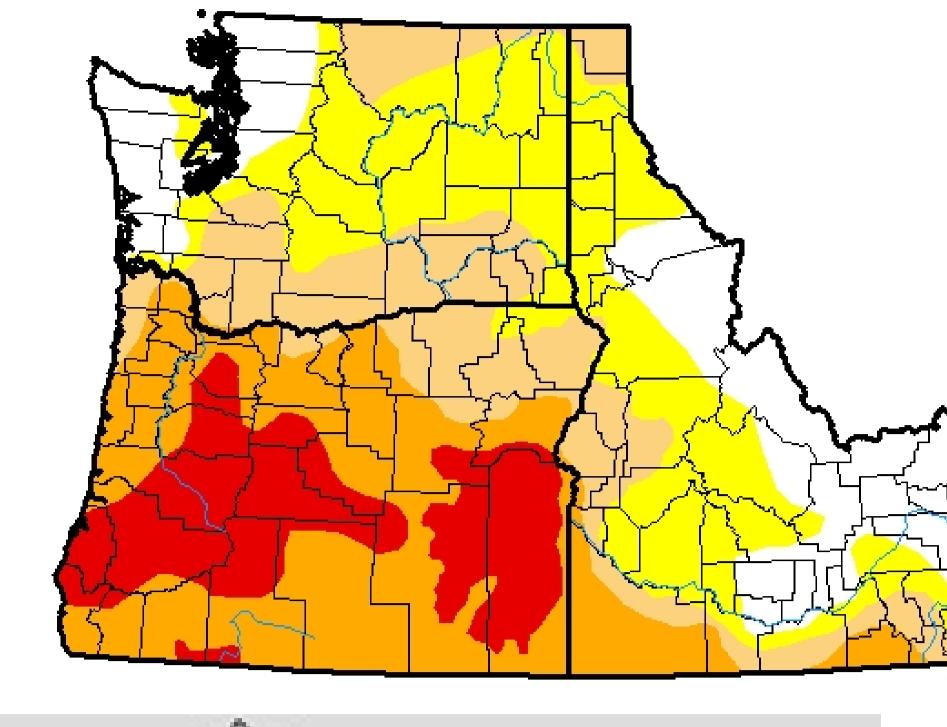


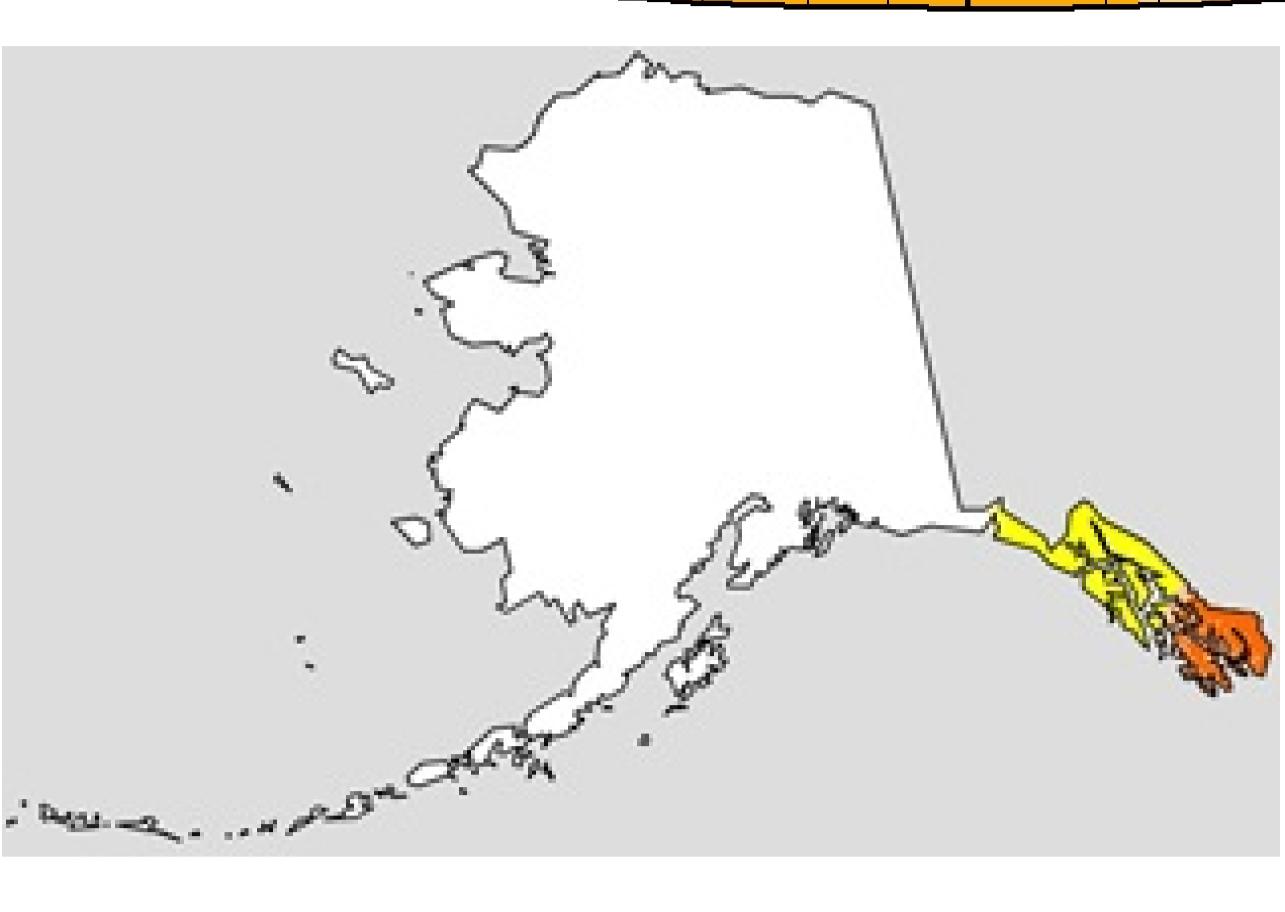
Pacific Northwest Drought Impacts

USDA Northwest Climate Hub

U.S. Drought Monitor







Valid 7 a.m. EST Drought Conditions (Percent Area) None D3

December 11, 2018

(Released Thursday, Dec. 13, 2018)

71.16 10.44 5.81 8.34 4.25 0.00 Current Last Week 71.70 9.90 5.81 8.59 4.00 0.00 12-04-2018 3 Months Ago 67.14 12.30 8.84 9.08 2.64 0.00 09-11-2018 Start of 100.00 0.00 0.00 0.00 0.00 0.00 Calendar Year 01-02-2018 Start of 12.24 67.14 6.76 10.17 3,69 Water Year 0.00 09-25-2018 One Year Ago 99.99 0.010.00 0.00 0.00 12-12-2017 Intensity: D3 Extreme Drought D0 Abnormally Dry

D2 Severe Drought The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

D1 Moderate Drought





Author:





D4 Exceptional Drought

4th National Climate Assessment

impacts across the United States, now and throughout this century. Volume I presents an assessment of the physical science underlying Volume II provides information on impacts, risks, and adaptation in the United States. Below are links to a few of the 29 chapters that are of particular interest to our region. Chapter 1: Overview Chapter 10: Agriculture and Rural Communities

The National Climate Assessment (NCA) assesses the science of climate change and variability and its

Chapter 2: Our Changing Climate Chapter 15: Tribes and Indigenous Peoples Chapter 3: Water Chapter 24: Northwest (ID, OR, WA) Chapter 6: Forests Chapter 26: Alaska

Chapter 8: Coastal Effects Chapter 28: Reducing Risks Through Adaptation

Chapter 29: Reducing Risks Through Emissions Mitigation

NCA4 Summaries and Presentations

During the Pacific Northwest Drought Early Warning System Webinar 17 Dec 11 am PT key points from the Northwest and Water chapters will be presented after the climate recap and seasonal climate

outlook. Click text to go to registration page. During the Pacific Northwest Tribal Climate Change Network call 19 Dec 10 am PT key points from the

Tribes and Indigenous Peoples and Northwest chapters will be presented. Call in 888-844-9904 access code: 5064716 Adobe Connect web meeting http://oregonstate.adobeconnect.com/tribalclimate/ Blog post on Agriculture Climate Network: Check it out: The State of the Science on Climate Change in

the Pacific Northwest Article in Capitol Press: Federal report: Climate change imperils some farms, but there's hope

Workshops

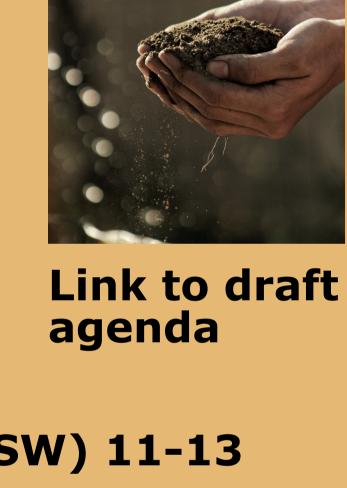
Healthy soils, healthy region workshop 12-14 March 2019, Pendleton, OR Coming together to increase the adoption of soil health practices through coordination and training.

The workshop will bring together agricultural professionals and producers from Washington, Oregon, and Idaho for a 3-day workshop to improve awareness of existing, new, and evolving regional soil health practices and assessment methods. The workshop will provide hands-on training on soil health practices, improve understanding of the

practical barriers producers face when implementing soil health practices, and increase

familiarity with tools that can be used by producers to make decisions related to soil

health. We will also strive to get the various groups working on soil health in the region on the same page regarding sampling protocols, method selection, and the current state of the science. **Register** by January 30th for early bird \$90 rate! 17th Annual Climate Prediction Applications Science Workshop (CPASW) 11-13 June Charleston, South Carolina. This workshop will bring together a diverse community to share developments in research and application of weather and climate information for societal decision-making. The





planners, practitioners, social scientists, and others making weather and climate-sensitive decisions. Abstract deadline 1 February. Registration available after 1 April. Conference 2019 North American Agroforestry Conference 24-27 June Corvallis, OR.

Agroforestry for Sustainable Production + Resilient Landscapes hosted by Oregon State

University as well as the 16th biennial conference for the Association for Temperate

meeting format will include a combination of symposia, panel sessions, discussions, and

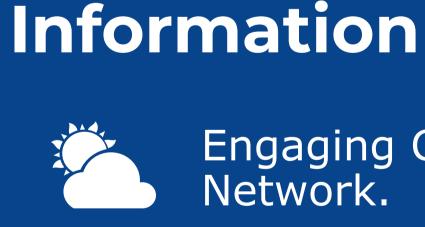
Reduction". Participants include researchers, service producers, resource managers,

keynote speakers that address the workshop theme: "Climate Information for Coastal Risk

Agroforestry. Abstract deadline 4 January. Registration opens 18 January.

Climate Network.

calendar year 2017.



Engaging Climate Science through Citizen Science Apps, a blog post on Agriculture Climate Network.



Alaska Forest Health 2017, report in StoryMap format showing read the forest health highlights & view an interactive aerial survey damage map

Flexibility is Key to Northwest Cattle Production's Future Success, a blog post on Agriculture

Global Carbon Budget 2018 published in Earth System Science Data. An international team of more than 70 authors from dozens of institutions around the world analysed observations and

models to compile an accurate account and projection of global carbon sources and sinks for the



Science You Can Use by the Forest Service Rocky Mountain Research Station. OneUSDA Internship Program: An internship with the Federal government is a great way to get real-world experience while you're working on your college degree and begin your professional career. Internship during summer 2019. Applications due 18 January.

Jump-starting Recovery of Wyoming Big Sagebrush and Other Native Plants out on the Range,



climate is expected to change in places that they care about. It provides maps, graphs, tables and descriptions of projected changes.

Tribal Climate Tool: Future climate projections for Pacific Northwest and Great Basin Tribes.

This tool is designed to help tribes in the Pacific Northwest and Great Basin understand how the

Alaska Climate Dispatch is a state-wide seasonal summary and outlook for May - October 2018.

Pacific Northwest Drought

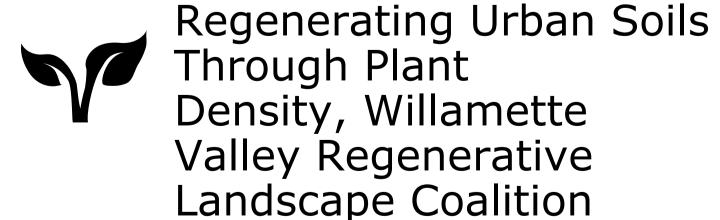
outlook, key points from

NW Early Warning System Climate Webinar: Climate recap &

4 National Climate

17 Dec 11am PT

Assessment



Webinars

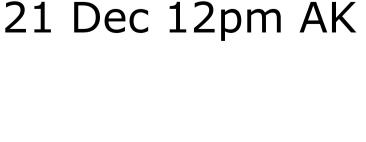


Data Records to Study the Shortwave Radiation Budget of Snow vs Sea Ice and Arctic vs Antarctic 19 Dec 11am AK Funding opportunities



Using Satellite Climate

U. S. Forest Service announces a Citizen Science Competitive Funding Opportunity



December 2018 National

Weather Service Alaska

Climate Outlook Briefing

Resilience Dialogues:

Connecting communities

with experts via online

dialogues to lay the

18 Dec 10am AK

groundwork for long-

term climate resilience

To promote collaboration in support of these goals by bringing together partners, volunteers and the Forest Service in pursuit of sound science and meaningful community engagement. This is

the second year this program is offered and is emphasizing shared real magnitudes of funding will be incubator model that supports projects in all phases of maturity. Three levels of funding will be incubator model that supports project Dovelopment and Implementation (\$25,000) and available for 2019: Ideation (\$10,000), Project Development and Implementation (\$25,000) and Ongoing Project (\$10,000). Project applications are due January 31, 2018 by 11:59 pm ET. For questions, email: FSCCS@fs.fed.us. **Western SARE** <u>Graduate Student Grants in Sustainable Agriculture</u> (due January 9, 2019, noon MST) The Graduate Student Grants provide a maximum of \$25,000 and may last for up to 2 years.

institution's requirements) at accredited colleges or universities in the Western region. An applicant is eligible for only one grant during his or her graduate program. Proposals are due

CLIMATE

January 2019. New email addresses coming in 2019 As a part of the OneUSDA indicative all Forest Service employees have new email addresses that end

Those eligible to apply are masters or Ph.D. students enrolled full time (as determined by the

 Holly Prendeville, Coordinator holly.prendeville@usda.gov gabrielle.roeschmcnally@usda.gov Gabrielle Roesch-McNally, Fellow

Katherine Smith, Acting Director

these email addresses now to contact us:

NORTHWEST HUB Signup to receive our newsletter by clicking on this box and providing your contact information on the form.

katherine.l.smith@usda.gov

with @usda.gov. Currently, we are in a transition period and both @fs.fed.us and @usda.gov email addresses will work. Come spring 2019 we'll be transferring over to @usda.gov. You can start using