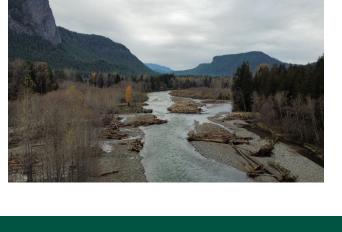
## Climate Change and Watershed Planning on

#### This Northwest Climate Hub's Adaptation-in-Action series profiled the work of the aquatics team on the

the Gifford Pinchot National Forest

Gifford Pinchot National Forest in southwestern Washington. The team is restoring historically damaged watersheds and including climate change adaptation planning into their work. By incorporating climate change information, they can restore functioning watersheds while helping forests adapt to changing snowpack and streamflow. Check out the profile to learn more about the aquatics team's great work. **Drought Update** 



#### Alaska is not currently experiencing any abnormally dry or drought conditions. A wet week for much of Idaho, Oregon, and Washington improved the start of the current water year, with continued wetness helping with long-term drought issues. Temperatures were cooler than

normal for most of the region, with some areas of Oregon 8-10°F below normal over the past week.

Improvements in drought conditions occurred in coastal regions of Oregon and Washington, where moderate and severe drought (D1-tan, D2-orange) were reduced to abnormal dryness (D0-yellow). -With recent moisture, southeast Washington and northeast Oregon went from abnormal dryness (D0 yellow) to no drought (white). Areas of northern Idaho also had drought conditions improved, moving from moderate drought (D1-tan) to abnormally dry (D0-yellow). Southeastern Idaho saw a small reduction in Extreme Drought (D3-Red). Northcentral Washington saw moderate drought expand. CoCoRHaS **Condition Monitoring National Integrated** Community Rain **Drought Information** Observer Reports - Drought Hail Snow Network System





USDA Northwest Climate Hub

(Released Thursday, Nov. 10, 2022) Valid 7 a.m. EST Drought Conditions (Percent Area)

71.35

70.19 29.81 24.61

Current

Last Week

**November 8, 2022** 

None D0-D4 D1-D4 D2-D4 28.65 19.32 8.02 3.37

0.16

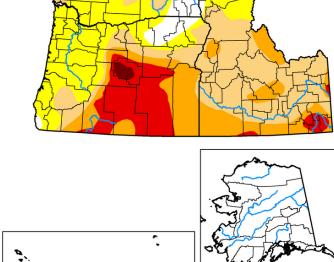
0.16

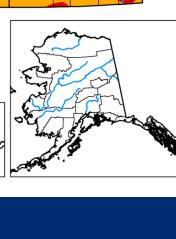
2.01

0.16

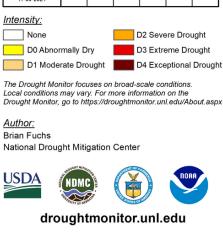
3.90







3 Months Ago 08-09-2022 80.42 19.58 12.45 7.82 3.95 Start of Calendar Year 74.10 25.90 23.79 15.09 6.81 Start of Water Year 09-27-2022 70.29 29.71 18.36 7.80 3.90 One Year Ago 73.09 26.91 26.36 23.64 13.95







greenhouse gases.

in the Northwest

soil, and limits the release of

Snow Water Equivalent (SWE)

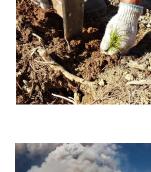
Climate change will affect amount and duration of snow,

a critical source of water. This

Hub webpage describes the



Information



learn about the increasing risk of large, frequent, and severe wildfires in Alaskan forest and tundra ecosystems.

Fast-Onset Droughts are

Accelerating

**Northwest Cover Crops** This Hub webpage describes

how cover crops can make

farms more resilient to the

enhancing soil health and

for Future Forests in

This Adaptation-in-Action profile explores how assisted

conifers could help increase

Climate Change and Wildfire

Explore this Hub webpage to

population migration of

resilience of Washington

forests to climate change.

water quality.

Washington

in Alaska

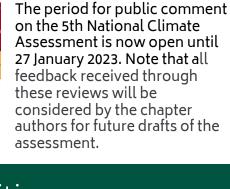
impacts of climate change by

**Assisted Population Migration** 

Learn how fast-evolving drying events are becoming more common throughout the United States, threatening crops, livestock, and livelihoods.

Assessment Public Comment

**5th National Climate** 





importance of SWE for Northwest agriculture, rangelands, and forestry. Increasing La Niñas and Climate Change Explore this AgClimate article to learn about how changes in sea temperatures due to climate change are

causing increased La Niña

Implementing the Steps to

Resilience: A Practitioner's

This NOAA framework helps

understand exposure, assess

risk, investigate options, and

climate service practitioners to

years.



prioritize, plan, and take action on climate resilience planning. 2022 Water Year Impacts Survey The goal of this survey is to gather information about impacts and response actions implemented during the 2022

water year (October 1, 2021 -September 30, 2022) due to

abnormally dry or abnormally



USFS Fellowship on Climate Change Integration in Tribal Forest Management. The Northwest Climate Hub is accepting applications for a fellowship opportunity that will focus on supporting the integration of climate change in tribal forest management plans. The fellow will develop relationships with Tribes in Idaho, Oregon, Washington, and Alaska, as well as scientists at the Pacific Northwest Research Station. Applications due 22 November. USFS Fellowship on Climate Change Integration in National Forest Management in the Pacific Northwest. The Northwest Climate Hub is accepting applications for a fellowship opportunity that will focus primarily on efforts to support integration of climate change in national forest management in the USDA Forest Service's Pacific Northwest Region. The fellow will develop relationships with scientists and land managers at the Pacific Northwest Research Station and Pacific Northwest Region of the USDA Forest Service. **Applications due 22 November.** 



wet conditions.

#### Art x Climate: A Project of the Fifth National Climate Assessment. Artists are invited to engage in the development of the Fifth National Climate Assessment by creatively visualizing climate change in the United States. Art x Climate seeks to strengthen partnerships between science and art and

on 27 January 2023.



USDA Forest Service Resource Assistant Program Climate Change Communications Fellow. This fellowship with the Northwest Climate Hub offers a unique opportunity to build skills in science delivery, public relations, communications, partner engagement, and outreach. The fellow will translate science and develop Northwest Climate Hub communication materials, such as newsletters, briefing papers, web content, infographics, presentations, and webinars. Open until filled. Apply here (bottom of the page)

demonstrate the power of art to advance the national conversation around climate change. Selected art submissions will be featured in the Fifth National Climate Assessment. Selected artworks may also be used in case studies, public events, or communication materials. Submissions due by 11:59 PM ET



Webinars

Restoring Oregon's Dry Side Tribal Health and Adaptation November Alaska Climate Forests, every other Wednesday Roundtable Webinars, every 3rd Outlook Briefing, 18 November, Tuesday until October 2023, 10 12 pm AKST. The briefing will from 7 December - 5 April, 6-7:30 PM PST. This series will explore am PST. Monthly, 2-hour review recent and current climate webinars will advance the the complexities of "restoring" conditions around Alaska, discuss forecast tools, and conclude with knowledge, skills, and networks forests and other ecosystems to of Tribes adapting to climate the Climate Prediction Center's conditions in keeping with change. The training will include forecast for December 2022 and historic conditions. The

the winter.

State University, will summarize recent research examining the equity implications of rising wildfire risk and associated costs, including insurance coverage and the comparative costs for risk management activities in populations with different incomes. December Alaska Climate Outlook Briefing, 16 December, 12 pm AKST. The briefing will

instruction, tools, and templates

opportunity to contribute to live

Considering Equity in Wildfire

December, 10 am PST. This

webinar, organized by Oregon

conversations or asynchronously

on advanced health adaptation

topics and discussions.

to "wisdom wells."

Risk and Protection, 1

Participants will have the



occurrences of fires in regions where wildfire was rare, and unprecedented increases in the size of the largest fires in regions where fires were common (i.e., in the western United States). Join this webinar from the North Central Climate Adaptation Science Center to learn more.

Pacific Northwest Drought Early

Warning System December Drought and Climate Outlook, 18

December, 11 am PST. This

webinar will provide timely

information on current and

developing drought conditions. Speakers will also discuss the

impacts of these conditions on

Fires of Unusual Size: Future of

Continental United States, 8

December, 11 am-12 pm MT.

Climate change in the coming

decades will drive more frequent

Extreme Wildfire in the

events such as wildfires, floods, disruption to water supply and ecosystems, as well as impacts to affected industries like agriculture, tourism, and public 2022 Affiliated Tribes of Northwest Indians Tribal Leaders Climate Change Summit, 28-30 November, Spokane, WA. The Summit will engage Tribal leaders, citizens, staff, youth and

Adaptation for Urban Forests, 14 **December, Time TBA**. The issues caused by climate change affect all landscapes but can be exacerbated in an urban setting. This webinar will explore ways that the urban forestry community and partners are adapting to climate change by taking actions to create more climate-resilient communities.

series considers ecological

conditions, implications of long-

term fire suppression, invasive

species, and changing climate conditions, and how objectives

Climate Change Resilience and

and perceptions influence management actions.

limitations and desired



#### discoveries in western Oregon wildfires can inform future decisions, and aims to promote collaboration between institutions/agencies involved in post-fire research and monitoring. Register by 15 January.

expand monitoring of carbon in soil on

climate-smart practices are affecting

carbon sequestration. The Natural

working agricultural lands and assess how

**Funding Opportunities** 

management can advance climate action.

and water flows, state lands, and forest carbon science.

#### November Funding to Expand Monitoring of Soil Carbon. This program will support and

one agreement in the West. Funding ranges from \$1.5 to \$2 million, and projects will last two to four years. Applications must include a strategy to reach equity of program delivery in historically underserved communities. Partners will work collaboratively to complement soil carbon monitoring efforts taking place across USDA. Applications due 28 November. Climate Change and Health **Demonstration Sites.** The National Association of County and City Health Officials is providing funding that supports local efforts to track, prevent, and mitigate

### and/or extension projects are solicited. Applications due 31 December.

December Cont.

Foundational and Applied Science Program. The USDA National Institute of

Food and Agriculture's Agriculture and

both fundamental and applied sciences important to agriculture. The six priority

production and animal products; food

natural resources, and environment; agriculture systems and technology; and

agriculture economics and rural

safety, nutrition, and health; bioenergy,

communities. Research-only, extension-

only, and integrated research, education

plant products; animal health and

Food Research Initiative supports grants in

six priority areas to advance knowledge in

areas are: Plant health and production and

January **Cultural and Community Resilience Program.** The National Endowment for the Humanities Division of Preservation and Access is accepting applications for the

Cultural and Community Resilience Program. This program supports community-based efforts to mitigate climate change and COVID-19 pandemic impacts, safeguard cultural resources, and foster cultural resilience through identifying, documenting, and/or collecting



cultural heritage and community experience. The program prioritizes projects from disadvantaged communities in the U.S., and encourages applications that use inclusive methodologies. Applications due 12 January. **Building Resilient Infrastructure and** Communities Program. This program funds states, U.S territories, Indian tribal governments, and local communities for pre-disaster mitigation, with a focus on disasters, risks, and hazards, including

those associated with climate change. The

program offers support through capability-

reduce losses and minimize impacts on the

and capacity-building, innovation,

promoting partnerships and enabling investments to reduce risk from natural

hazards, providing an opportunity to



## December

the health effects of climate change. This funding can be used to incorporate adaptation planning into land use, housing,

disaster planning. They will provide four groups with up to \$20,000 each. Applications due 12 December. **USDA Regional Food Business Centers** Request for Applications. The Regional Food Centers will serve as the cornerstone of USDA's development of local and regional supply chains. They will offer coordination, technical assistance, and capacity building support to small and midsized food and farm businesses, with the goal of creating a more resilient, diverse,

due 15 December. National Fish Passage Program, U.S. Fish and Wildlife Service. This voluntary program aims to maintain or increase fish populations to improve ecosystem resilience and to provide quality fishing experiences for the American people. Building resilience for fish populations through improved habitat will be important because climate change will decrease summer river flow and increase water temperature, making it more difficult for fish to survive. Example project types include dam removals, culvert

replacements, and the installation of fishways. **Applications due 30 December.** 

CLIMATI

Signup to receive our newsletter by clicking on this box and providing your contact information on the form. To unsubscribe email holly.prendeville@usda.gov

# Resources Conservation Service will fund

Oregon Post-Fire Research and Monitoring Symposium, 7-8 February, Corvallis, OR and virtual. The symposium will provide practitioners and policy-makers an opportunity to discuss how new

