

### **Featured Article**



## Adaptation in Action: Food Security and Justice at Calypso Farm, Alaska

Food security and justice are priorities in Alaska, where a majority of purchased food is imported, food prices are high, and 11% of residents receive supplemental nutrition assistance (SNAP) benefits. Much of Alaska's food security depends on long supply chains that can be disrupted by the increasing impacts of climate change, such as extreme weather and wildfire smoke. In response, Calypso Farm and Ecology Center is working to increase food security and justice through agricultural education programs and improving equitable access to local, nutritious food in Interior Alaska.

### **Drought Update**

Severe drought (D2 – orange) expanded into southeast and southwest Washington, and abnormally dry conditions (D0 – yellow) expanded into more of central Washington. In Oregon, severe drought expanded into the western and northeastern parts of the state, and moderate drought (D1 – tan) expanded in the northeast and southwest. Idaho saw the expansion of severe drought in the Panhandle and abnormally dry conditions in the central part of the state.

In Alaska, recent dryness led to the expansion of abnormally dry conditions and the introduction of moderate drought in the eastern interior, while the western Interior saw the expansion of D1 conditions. Enough rain fell in the southeast mainland and Panhandle in the past week to provide D1 and D0 removal.



**National Integrated Drought Information System** 



**CoCoRHAS Community Rain Hail Snow Network** 

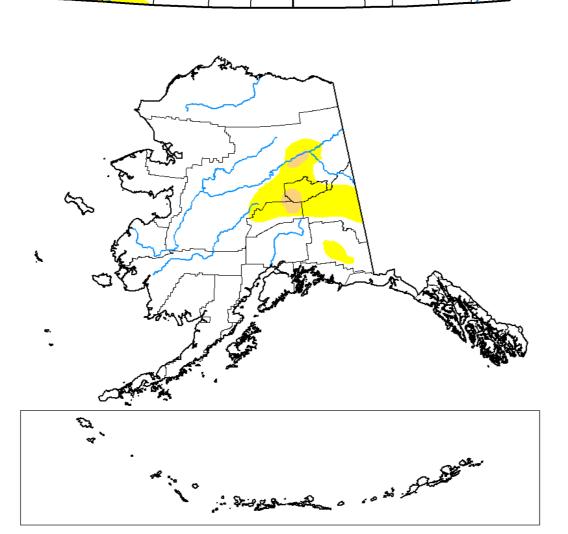


**Condition Monitoring Observer Reports** 

## U.S. Drought Monitor

## **USDA Northwest Climate Hub**





### **August 15, 2023**

(Released Thursday, Aug. 17, 2023) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	72.78	27.22	13.86	4.64	0.00	0.00
Last Week 08-08-2023	68.98	31.02	13.20	4.46	0.00	0.00
3 Months Ago 05-16-2023	82.42	17.58	8.39	1.56	0.29	0.00
Start of Calendar Year 01-03-2023	75.01	24.99	15.00	7.57	3.06	0.16
Start of Water Year 09-27-2022	70.29	29.71	18.36	7.80	3.90	0.16
One Year Ago 08-16-2022	79.42	20.58	12.65	7.75	3.90	0.16

#### 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. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

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droughtmonitor.unl.edu



# Adaptation Resources for Agriculture: Responding to Changes in Climate in Alaska

This Hub workbook provides information, resources, and case studies to help agricultural producers in Alaska adapt to a changing climate.



### Southeast Alaska Drought: Refining Drought Metrics for a Temperate Rainforest

Recordings and presentations given at the Southeast Alaska Drought Workshop in 2019 discuss how to refine drought metrics for a temperate rainforest.



## A Climate Resilience Guide for Small Forest Landowners

This Hub-sponsored guide provides information, resources, and management actions to help small forest landowners in western Washington adapt to a changing climate.



# Integrating Climate Change into Watershed Planning on the Gifford Pinchot National Forest

This Adaptation-in-Action profile from the Hub explores how restoring functioning watersheds in Washington helps national forests adapt to changing snowpack and streamflow.



# Are You a Beaver Believer? Reasonable Expectations for Beaver-Related Restoration

In this Hub-funded project, scientists with the Pacific Northwest Research Station devised a framework that identifies processes to achieve commonly desired outcomes with beaver restoration.



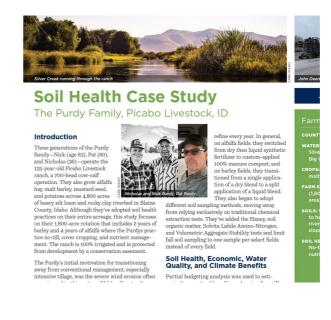
### Resources Planning Act Assessment

Published every decade with mid-decade updates, this assessment provides 50-year projections of the effects of climate and socioeconomic changes on forests, rangelands, urban forests, forest products, carbon, and more.



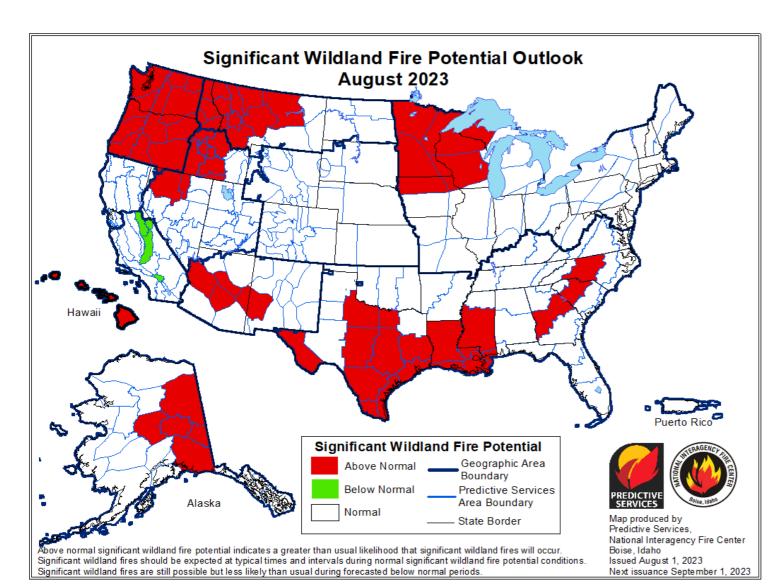
### Online Tools for Northwest Federal Rangeland Managers

This Hub webpage provides a collection of online tools covering vegetation production and other near real-time information for Northwest federal rangeland management.



### Idaho Soil Health Case Study

Picabo Livestock Ranch in Blaine County, Idaho has adopted cover cropping, no-till, and nutrient management to improve soil health on their farm. This American Farmland Trust case study includes more details about the effects of these practices on soil health and economics.



## National Significant Wildland Fire Potential Outlook

Above-normal significant fire potential is expected to persist into September across most of Idaho, Oregon, and Washington. These areas are forecast to return to nearnormal potential in October, except west of the Cascades, where offshore wind season will coincide with continued warmer and drier than normal conditions.

Eastern Interior Alaska is likely to experience above-normal significant fire potential throughout August, with conditions returning to normal in September.

### **Workshops and Conferences**



Northwest Innovative Forestry Summit, 30 August & 15 September, virtual and Blue River, OR. The Northwest Innovative Forestry Summit (NIFS) is a space for regional learning, exchange, and ongoing cooperation to foster ecologically based forest management strategies, with programs focusing on sustainable, forest-related innovation. NIFS will be hosting a webinar presentation and panel discussion highlighting the roles of traditional and non-traditional experimental forests in innovation. Following the webinar presentation and panel discussion, NIFS will hold two field tours at experimental forests in the Pacific Northwest to feature their roles in forest management and research.



Where the Forest Meets the Range: Connecting the Dots, 6 September, Carmen, Idaho. This University of Idaho workshop will cover a variety of topics related to the connections between forestry and rangelands and will include an afternoon field tour. Topics covered by experts will include invasive plants, timber stand management, targeted grazing, virtual fencing, and fuels management.



Invasive Species and Climate Change Symposium, 7-8 September, virtual.

The Northwest Regional Invasive Species and Climate Change Network (NW RISCC) is hosting an online symposium with talks from regional climate change and invasive species experts. All events are free of charge.



### SageCon Summit, 26-27 September, Lakeview, Oregon.

This summit will connect partners working toward resilient rangelands and sage-grouse conservation in southeastern Oregon and across the Great Basin; leverage collective knowledge with an emphasis on defending and growing core sagebrush rangelands; highlight efforts, celebrate successes, and share lessons learned from local partners in Lake County, Oregon; and scale up collaborative, cross-boundary work.



## Workshop for Building Drought Resilience in a Changing Climate with Upper Columbia and Missouri Basin Tribes, 26-28 September, Polson, Montana.

Co-hosted by NOAA's National Integrated Drought Information System (NIDIS) and the Confederated Salish and Kootenai Tribes, this interactive workshop will bring together tribal resource managers, leaders, and citizens, tribal college and university members, non-governmental organizations, and partners from government agencies, academia, and the private sector to discuss issues related to managing and identifying solutions for drought in a changing climate on tribal lands.



### 12th Northwest Climate Conference, 2-4 October, virtual.

Boise State University is hosting the 12th Northwest Climate Conference, which seeks to provide a networking and learning community for practitioners, scientists, tribal members, and community organizers interested in climate change impacts and adaptation in the Northwest. The conference is committed to supporting equitable climate adaptation outcomes and building equity and diversity in climate science, policy, and adaptation practice. **Accepting abstracts until 24 August**.



Society of American Foresters 2023 National Convention – Forestry: It's in Our DNA, 25-29 October, Sacramento, California. Forestry is multi-faceted, with many backgrounds, disciplines, and experiences shaping the profession's past, present, and future. This convention will bring together novel science and on-the-ground management techniques, while focusing on how to better communicate passion for forestry to the public and build a community that can tackle impacts from a changing climate.



**Sixth National Cohesive Wildland Fire Management Strategy Workshop, 6-10 November, Santa Fe, New Mexico.** This event will utilize the collective voice and brain trust of workshop attendees to identify solutions and actions for current barriers to fire management, as well as for the critical emphasis areas and challenges outlined in the Cohesive Strategy Addendum. The workshop aims to address issues that are keeping managers from implementing the Cohesive Strategy at scale.



### Tribal Climate and Health Summit, 8-9 November, Pala Casino and Spa Resort, California.

This 2-day training features interactive instruction and peer-to-peer learning activities that will build knowledge about developing, implementing, and evaluating adaptation strategies that safeguard Tribal health and are rooted in traditional knowledge and values. Organizers, guest speakers, and attendees will share successful practices that are increasing Tribal resilience to a variety of climate exposures throughout the US.



### Alaska Food and Farm Festival, 10-12 November, virtual and Anchorage, Alaska.

The goals for the festival are to (1) increase awareness of Alaska food issues among the general population; (2) provide training, resources, and networking opportunities to increase involvement in local food issues by community members and decision-makers; and 3) increase connections and build community between the public, Alaska food businesses, NGOs, governmental entities, tribal entities, and others to support local economic development and innovative solutions.

### **Webinars**



### August Alaska Climate Outlook Briefing, 18 August, 12 pm AKDT.

This National Weather Service webinar will review recent and current climate conditions around Alaska, discuss some forecasting tools, and finish with the Climate Prediction Center's forecast for September 2023 and the fall season. Join to learn what has happened and what may be in store with Alaska's seasonal climate solutions and achievements.



## Wildfire and Invasive Plants in Alaska's Boreal Forest, 22 August, 11am AKDT.

This presentation will highlight the current status of in non-native plant invasions in burned areas of Alaska's boreal forest region and ongoing research efforts studying long-term trends. There will be an overview of what factors influence the vulnerability of boreal forests to non-native plant invasions, and discussion of how non-native plants are reaching affected habitat.



## Fires of Unusual Size: Does it mean what you think it means?, 24 August, 10 am PDT.

Fires of Unusual Size (FOUS) are large fires that exhibit at least one rapid growth event and keep growing after that. Brian Potter, Research Meteorologist with the Pacific Northwest Research Station, will talk about the trends in FOUS, look at how weather influences their growth, and give some examples of unanswered questions about them.



## Solar Energy for Farmers and Rural Landowners, 30 August, 5:30 pm PDT.

Property sited solar energy systems have the potential to mitigate climate change, conserve energy, reduce utility bills, and serve as a visual example of a business' sustainable practices. In this Oregon State University presentation, attendees will learn what makes a good solar site, what it costs, what financial incentives are available, and next steps to getting started.



### Pacific Northwest DEWS August Drought & Climate Outlook Webinar, 28 August, 11 am PDT.

These webinars provide the region's stakeholders and interested parties with timely information on current and developing drought conditions, as well as climatic events like El Niño and La Niña. Speakers will discuss the impacts of these conditions on issues such as wildfires, floods, disruption to water supply and ecosystems, as well as impacts to affected industries like agriculture, tourism, and public health.



## First Friday All Climate Change Talks (FFACCTs), 1 September and the first Friday of every month, 11 am PDT.

FFACCTs is a monthly webinar series organized by the USDA Climate Hubs and Forest Service Research and Development that features presentations from USDA scientists and practitioners. Webinars explore connections between climate, agriculture, nature, and people, and discuss their struggles, hazards, solutions, and achievements.

### **August**



### National Oceanic and Atmospheric Administration (NOAA) Climate Resilience Regional Challenge.

Approximately \$575 million is available through NOAA and the Inflation Reduction Act for projects that build the resilience of coastal communities to extreme weather (e.g., hurricanes and storm surge) and other impacts of climate change, including sea-level rise and drought. Letter of intent due 21 August.

### September



### **NOAA Ocean Acidification Program Education Mini-Grant.**

This competitively-based initiative supports coastal and ocean acidification education. Ocean acidification is one aspect of global climate change that will affect food supplies for people and animals who rely on fish and shellfish. Priority goals include engaging diverse audiences in ocean acidification education and outreach, matching ocean acidification communication needs with existing research, education and outreach activities, while developing innovative approaches for community involvement. Letters of intent due 15 September.

### Joint Chiefs' Landscape Restoration Partnership.



The USDA Natural Resource Conservation Service and the Forest Service seek proposals for Joint Chiefs' projects to mitigate wildfire risk, protect water quality, improve wildlife habitat, restore forest ecosystems, and contribute to USDA's efforts to combat climate change. Proposals due 4 September.

### Solar for All.



The Environmental Protection Agency is launching a \$7 billion Solar for All competition. It is designed to spur the deployment of residential distributed solar energy to lower energy bills for millions of Americans. Solar for All will tackle the financial and non-financial barriers that limit the ability of low-income and disadvantaged communities across the country to benefit from the rapid growth in distributed solar capacity. Applications due 23 September.

### **Powering Affordable Clean Energy** (PACE) Program.



The PACE program is part of the Inflation Reduction Act. With \$1 billion in funding, PACE helps make clean, affordable, and reliable energy accessible to the people of rural America. This program will forgive up to 60 percent of loans for renewable energy projects that use wind, solar, hydropower, geothermal, or biomass, as well as for renewable energy storage projects. Letters of interest due by 29 September.

### Partners for Fish and Wildlife Program.



This voluntary, incentive-based program provides direct technical and financial assistance to private landowners to restore and conserve fish and wildlife habitat for the benefit of federal trust resources. Project work plans are developed strategically, in coordination with partners, and with substantial involvement from U.S. Fish and Wildlife Service field staff. Project selection will seek to align or support the Secretary's priorities. Program strategic plans inform the types of projects funded under this opportunity. Applications due by 30 September.

### October



Tribal Climate Resilience Program. The Department of the Interior is providing \$120 million in funding to help tribal communities plan for the most severe climate-related environmental threats to their homelands. Tribal communities can use this funding to proactively plan to adapt to these threats and safely relocate critical community infrastructure. Applications

due 13 October.



Extreme Weather & What to Do About It. As climate change increases instances of extreme weather, the CO2 Foundation focuses on helping leaders in all communities understand effective climate responses through grant programs. The foundation is soliciting applications for projects that 1) educate the public about the connections between extreme weather and climate change, risks their communities face, and resilience strategies; 2) develop approaches to enhance organizational and political stability in the face of climate-exacerbated disasters; or 3) facilitate effective responses to increasingly frequent and intense extreme weather events. Letters of inquiry due 15 October.

### Cost Share for Organic Certification.



Under the Organic Certification Cost Share Program, the USDA will cover 75% of the cost associated with organic certification (up to \$750) for funds spent between October 1, 2022, and September 30, 2023. Transitioning to organic farming may be one way for farmers to combat the climate crisis. Organic farming can help with carbon storage and improve soil health. Applications due 31 October.

### **November**



### Sabbatical Research and Education Call for Proposals.

This Western Sustainable Agriculture Research and Education (SARE) sabbatical grants provide an opportunity for faculty around the world to partner with farmers, ranchers, agricultural professionals, and researchers of the

Western U.S. region for conducting research, education, and Extension activities. Projects focused on unexplored topics in underserved communities and understudied geographic locations are of special interest. \$75,000 limit/one year in scope. Proposals due 21 November.

### **NOAA Climate Ready Workforce for** Coastal and Great Lakes States. The

National Oceanic and Atmospheric Administration (NOAA) seeks to establish programs that can place people into jobs that advance climate resilience and assist employers in developing a workforce that is climate literate, informed by climate resilience, and skilled at addressing challenges. This opportunity is open to state, tribal, territorial and local governments, institutions of higher education, and nonprofit organizations. Letters of Intent due 30 November.



### **Ongoing**



### Clean Energy Investment and Production Tax Credit.

The Investment Tax Credit and the Production Tax Credit work together to lower the costs of installing and operating new clean-energy power sources. These tax credits are intended to encourage more investments in clean- energy systems over the next few years. Tax credits can be claimed until January 2025, after which tax credits will be focused only on zero carbon sources of power, and the size of the credits will decrease.



Agriculture and Food Research Initiative (AFRI) Foundational and Applied Science Program. This National Institute of Food and Agriculture (NIFA) program aims to invest in agricultural production research, education, and extension projects for more sustainable, productive, and economically viable plant and animal production systems.

General information for AFRI grants program. 2023 priority areas include plant health and production and plant products; animal health and production and animal products; food safety, nutrition, and health; bioenergy, natural resources, and environment; agriculture systems and technology; and agricultural economics and rural communities. Applications that address climate change, food and nutrition security, expanding markets for producers, indigenous traditional ecological knowledge, and equity for underserved producers are welcome. Applications due based on Program Priority Areas, between August and November 2023.

### Rural Energy for America Program Renewable Energy Systems & Energy Efficiency Improvement **Guaranteed Loans & Grants.**

This program provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy-efficiency improvements. Agricultural producers may also apply for new energy-efficient equipment and new system loans for agricultural production and processing. Applications reviewed every three months between 30 June, 2023 and 30 September, 2024.