Spring 2019 - Issue 1

USDA California Climate Hub News & Notes



United States Department of Agriculture California Climate Hub

The USDA California Climate Hub within the Agricultural Research Service at the UC Davis John Muir Institute works with partners across federal and state agencies, universities, and industry to help enable climate-informed decision making and advance the adaptive capacity for California's working and managed agricultural, range, and forest lands. These monthly newsletters are just one approach toward meeting this objective. We encourage you to get in touch with us if we can be of further service or assistance.

Visit the USDA Climate Hub Website

Sierra Snowpack Updates

As of the start of March, the Sierra snowpack is ~150% of normal in terms of snow water equivalent for this date. Continued atmospheric river storms have bolstered the snowpack, with more snow forecast for the Central Sierra in the coming days.



California Dept. of Water Resources Snow Summary

California's 4th Climate Change Assessment:

Central Coast Region



The Central Coast is a diverse geographic region, home to hardwood forests, scrublands, grasslands, small cities, and rural agricultural lands. Warmer temperatures and greater precipitation fluctuations will affect the region's ecosystems and inhabitants. The 4th California Climate Change Assessment Central Coast Regional Report highlights some of the impacts of these changes. Here we provide a few key findings and encourage you to visit the full report with the button below.

- Precipitation changes include:
 - Fewer days with rain, but an increase in total annual precipitation between 3 and 10 inches.
 - More variability in precipitation year to year
 - **Uncertain** impacts to **fog** because of complex system feedbacks. This could be of critical importance to species such as redwoods, manzanitas, coastal chaparral, orchids, and salmon.
- Temperature changes include:
 - Warmer daytime and nighttime temperatures
 - An increase in average maximum and minimum temperatures of 4-5°F by mid-century
- Impacts include:
 - Sea level rise impacting more than 10,000 residents and eroding beaches
 - Wildlife migration to climate refugia at higher, cooler locations
 - Stressed steelhead and coho due to extreme swings between drought and flood
 - Increased wildfire activity
 - Multiple agricultural vulnerabilities in the Salinas Valley

Central Coast Regional Climate Change Assessment

What will your city feel like in 60 years?

Published in Nature Communications, <u>a new paper</u> examines climate analogues for 540 cities

across North America at the end of the century. For each urban area, the authors matched the expected future climate with the current climate at another location. Their results show that for most urban dwellers, the future shifts in climate will be akin to moving tens or hundreds of miles away to a new, often much warmer, city. In addition to their publication, the authors also worked to create an interactive of map projected climate



analogs. By 2080, under a high emissions scenario, Sacramento will feel most like Oildale! You can check out the results for your city here.

Upcoming: Tree Mortality Data Network Workshop

Sustained drought and subsequent tree mortality events are likely in the future. Now is the time to discuss what proactive forest management and rapid response looks like. The Sierra Nevada Tree Mortality Data Network Workshop will take on these challenges with a full day of presentations and round table discussions.

The workshop will be held on **March 14th** from **10am - 4:30pm** at the USFS Wildfire Training Center in McClellan.

Register by March 8! http://ucanr.edu/2018treemortality Registration is free

For more information and a an additional link to register, click the button below.

TREE MORTALITY WORKSHOP INFO AND REGISTRATION

Other Upcoming Events

(click on each for more info)

2019

Sustainable Water Management Conference Tucson, Arizona - March 31st-April 3rd

National Adaptation Forum

Madison, Wisconsin - April 23rd - 25th

Stay in Touch

Let us know if you have news worthy items, outputs or products, or associated resources that may be of interest to the USDA California Climate Hub community. You can email items to <u>Steven Ostoja</u>, USDA California Climate Hub Director, or to <u>Lauren Parker</u>, USDA California Climate Hub Postdoctoral Fellow.





STAY CONNECTED

USDA California Climate Hub I climatehubs.oce.usda.gov



