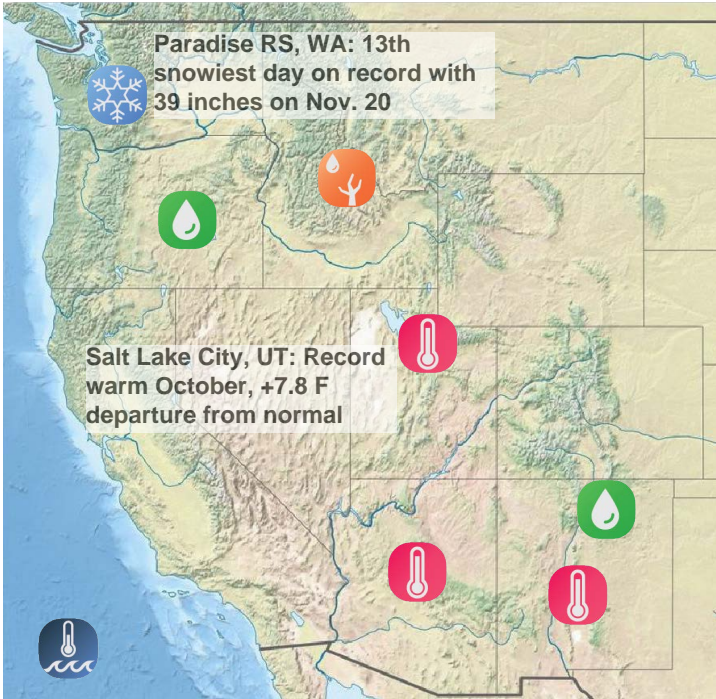




Significant Events for Sep-Oct-Nov 2024

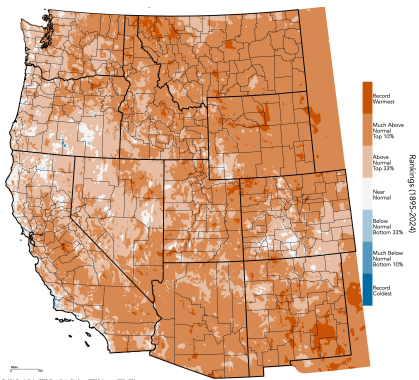


Sep-Oct-Nov Highlights

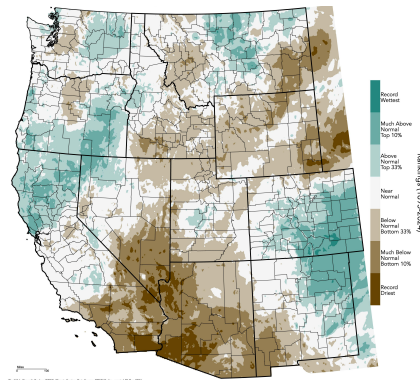
- Warmest September on record for AZ and warmest October for AZ, NM, and UT.
- Snowy November in parts of the Cascades: Paradise Ranger Station, WA received 150.9" of snowfall.
- Record wet November in central and eastern OR and record wet October in portions of eastern New Mexico.
- Record dry October in western Montana and south-central Idaho led to drought persisting and expanding.
- ENSO neutral conditions persisted for much of Autumn with a Sep-Nov Oceanic Niño Index Value of -0.2 degrees Celsius.

Regional Overview for Sep-Oct-Nov 2024

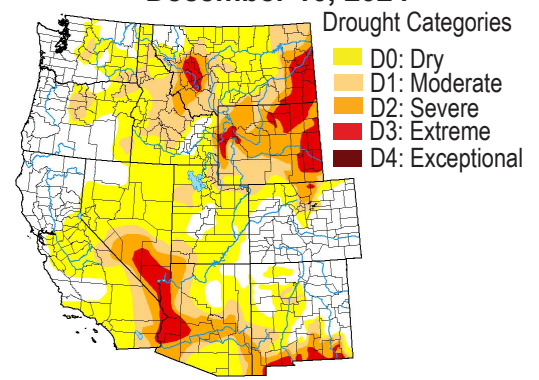
Mean Temperature Percentile
Sep-Oct-Nov 2024



Precipitation Percentile
Sep-Oct-Nov 2024



US Drought Monitor
December 10, 2024



Autumn temperatures were above normal across the west and every state except for Oregon had a top ten warmest since 1895. Montana ranked second warmest, Idaho, Utah, and New Mexico ranked third warmest, and Washington and Arizona ranked fourth warmest. At the local scale, Albuquerque, NM, Salt Lake City, UT, and Missoula, MT all had the hottest Autumn on record.

Northern California, southern Oregon, central Montana, and northeast New Mexico all saw areas of well above normal precipitation in Autumn. Southeast California, southern Nevada, and western Arizona were exceptionally dry; Las Vegas, Nevada, Blythe, California, and Phoenix, Arizona all had no measurable precipitation in Autumn.

At the end of Autumn 17% of the West was moderate drought (D1), 12% in severe drought (D2), 7% in extreme drought (D3), and no areas of exceptional drought (D4). Drought expanded in southern Nevada, Arizona, and eastern New Mexico. The greatest drought reductions were found throughout central Washington, Oregon, northern California, and northeast New Mexico.

Regional Impacts for Sep-Oct-Nov 2024

Recreation and Fisheries

Portions of the Big Hole River in southwest Montana were closed to fishing in late summer and remained closed through much of September due to low flows and high water temperatures caused by prolonged drought conditions.

Pacific Storm Impacts

A powerful Pacific Storm that underwent bombogenesis that coupled with an atmospheric river created major impacts along the coast from northern California north to Washington. Hundreds of thousands lost power due to high winds and downed trees and two people were reported dead in Sonoma County, California.

Wildfire

The Mountain Fire ignited in early November in Ventura County, California and spread quickly due to high winds and critically low humidity. The fire burned just under 20,000 acres, destroyed 243 structures, and damaged another 127 structures.

Drought and Water Supply

Colorado River water shortages continue with Lake Mead at 33% of capacity and still below the the Tier I shortage threshold.

Extreme Rainfall and Flash Flooding in New Mexico

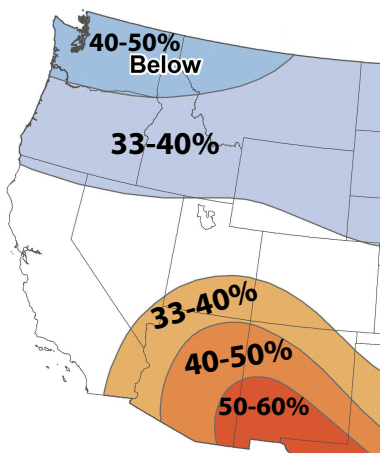


Figure: Mud and silt cover the floor of the Roswell Convention Center after flood waters receded. High water marks can be seen on the walls. Credit: Zachary Lujan

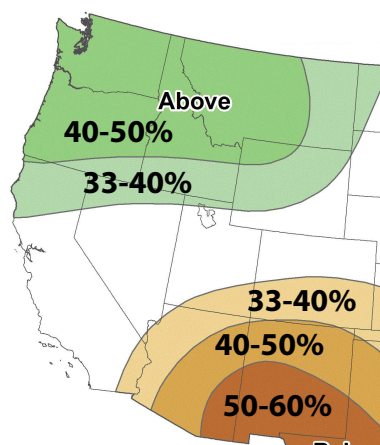
Roswell, in southeast New Mexico, had its wettest October since records began in 1894 with nearly all of the rainfall coming in a single day. On October 19, 5.78 inches of rain was recorded which was the single wettest day on record for the station. Much of that rainfall came in just a few hours with rates of 1-2 inches per hour. The atmospheric driver of this event was an upper-level cut-off low pressure system that stalled over the region and entrained excessive amounts of moisture from the Gulf of Mexico. At least two people were confirmed dead and at least 290 people were rescued.

Regional Outlook for Jan-Feb-Mar 2025

CPC Temperature Outlook



CPC Precipitation Outlook



Numbers indicate percent chance of temperatures in warmest/coolest one-third and precipitation in wettest/driest one-third. Outlook produced December 2024.

The CPC outlook for January-March favors above normal temperatures and below normal precipitation for the southern tier of the Southwest, below normal temperatures and above normal precipitation for the Pacific Northwest and Northern Rockies, and equal chances elsewhere. This outlook reflects a typical La Niña pattern. Although ENSO neutral conditions are still present a weak La Niña event is forecast to develop during winter. If the the outlook were to verify it would likely bring some relief to areas of Montana and Idaho that are currently experiencing prolonged drought conditions.

Western Region Partners

Western Regional Climate Center
wrcc.dri.edu/my

National Integrated Drought Information System (NIDIS) - drought.gov

Western Governors' Association
westgov.org

Western States Water Council
westgov.org/wswc

NOAA/ESRL Physical Sciences Division
esrl.noaa.gov/psd

NOAA Climate Prediction Center
www.cpc.ncep.noaa.gov

National Centers for Envir. Info. (NCEI)
www.ncei.noaa.gov

USDA/NRCS National Water and Climate Center - www.wcc.nrcs.usda.gov

National Interagency Fire Center
www.nifc.gov

Western Water Assessment
www.colorado.edu

Climate Assessment for the Southwest
climas.arizona.edu

California Nevada Applications Program
cnap.ucsd.edu

Climate Impacts Research Consortium
pnwclimate.org/resources

NWS Western Region Forecast Offices
www.wrh.noaa.gov/