

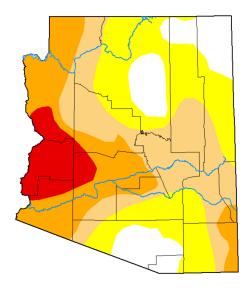
Department of Commerce // National Oceanic and Atmospheric Administration



Link to the latest U.S. Drought Monitor

- SEVERE TO EXTREME DROUGHT EXPANDING ACROSS WESTERN AND CENTRAL ARIZONA
- Drought intensity and Extent
 - D3 (Extreme Drought): La Paz, northern Yuma, and NW Maricopa counties
 - D2 (Severe Drought): southern Yuma, much of Maricopa, and far northern Pinal counties
 - D1 (Moderate Drought): far southern Maricopa, central Pinal, and Gila counties

U.S. Drought Monitor Arizona



November 12, 2024 (Released Thursday, Nov. 14, 2024) Valid 7 a.m. EST

	Drought Conditions (Percent Area)						
None D0-D4 D1-D4 D2-D4 D3-D4 D							
Current	14.46	85.54	56.04	29.18	8.34	0.00	
Last Week 11-05-2024	14.45	85.55	52.56	26.89	0.00	0.00	
3 Month s Ago 08-13-2024	17.24	82.76	20.84	1.92	0.00	0.00	
Start of Calend ar Year 01-02-2024	5.62	94.38	53.37	33.54	5.75	0.00	
Start of Water Year 10-01-2024	27.62	72.38	39.91	4.61	0.00	0.00	
One Year Ago 11-14-2023	8. 18	91.82	57.19	34.84	6.09	0.00	

Intensity:



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

<u>Author:</u> Richard Tinker CPC/NOAA/NWS/NCEP



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 5 am MST November 12, 2024





Link to the latest U.S. Drought Monitor

- EXTREME TO SEVERE DROUGHT EXPANDING INTO SOUTHEAST CALIFORNIA
- Drought intensity and Extent
 - D3 (Extreme Drought): far eastern Imperial and Riverside counties
 - O **D2 (Severe Drought)**: eastern Imperial and Riverside counties
 - O **D1 (Moderate Drought)**: western Imperial and central Riverside counties

-00

U.S. Drought Monitor

California

November 12, 2024 (Released Thursday, Nov. 14, 2024) Valid 7 a.m. EST

	Drought Conditions (Percent Area)						
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	
Current	25.51	74.49	17.00	5.50	0.95	0.00	
Last Week 11-05-2024	25.53	74.47	12.26	4.30	0.00	0.00	
3 Month s Ago 08-13-2024	77.29	22.71	5.32	0.00	0.00	0.00	
Start of Calendar Year 01-02-2024	96.65	3.35	0.00	0.00	0.00	0.00	
Start of Water Year 10-01-2024	28.40	71.60	10.67	0.08	0.00	0.00	
One Year Ago 11-14-2023	95.32	4.68	0.00	0.00	0.00	0.00	

Intensity:



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

<u>Author:</u> Richard Tinker CPC/NOAA/NWS/NCEP



droughtmonitor.unl.edu

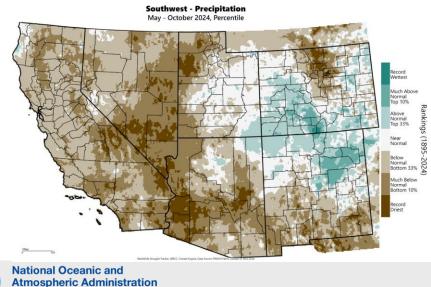
Image Caption: U.S. Drought Monitor valid 4 am PST November 12, 2024





U.S. Department of Commerce

- Rainfall across central and western Arizona, as well as SE California has been primarily less than 50% of normal the past 6 months
- The worst conditions were experienced in western Arizona where the driest monsoon on record occurred
- Rapid intensification of short term drought impacts have been seen since this summer



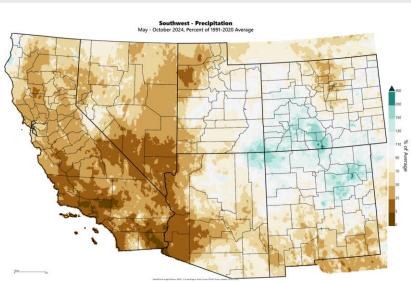
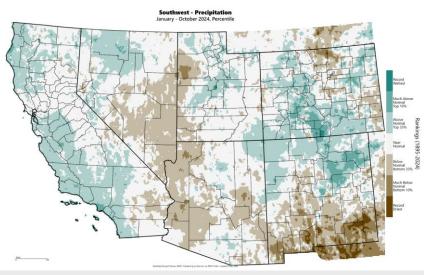


Image Captions:

Left - 6 Month Precipitation Percentile Ranking Right - 6 Month Percent of Normal Precipitation Data Courtesy <u>WestWide Drought Tracker</u>. Data over the past 6 months ending October 2024



- Despite wetter weather early in the year, the dry conditions are becoming more prominent since the monsoon season
- Many locations in central and western Arizona are now in a below normal category for the calendar year with less than 70% of normal this calendar year



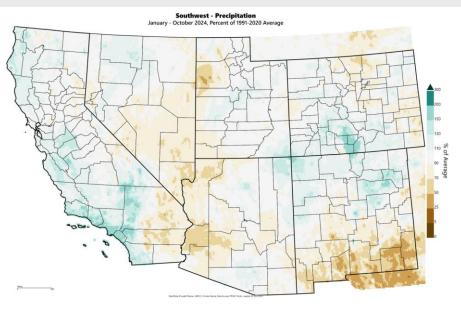


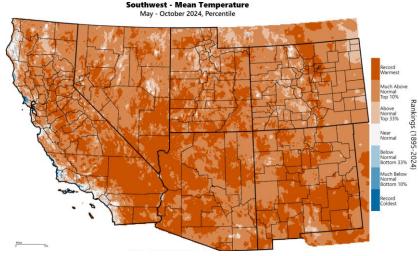
Image Captions:

Left - Year to Date Precipitation Percentile Ranking Right - Year to Date Percent of Normal Precipitation Data Courtesy <u>WestWide Drought Tracker</u> Year to Date Precipitation ending October 2024





- Much of the region has just experienced its hottest 6month time frame in the entire historical record (since 1896) with average temperatures more than 2°F to 3°F above normal
- The record hot summer has heightened evapotranspiration losses and more rapidly depleted soil moisture





National Oceanic and Atmospheric Administration



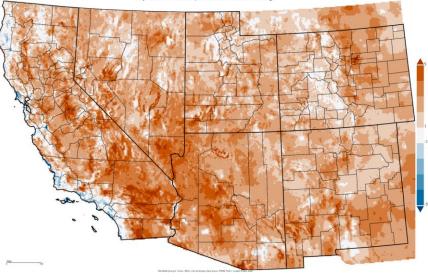


Image Captions:

Left - 6 Month Temperature Percentile Ranking Right - 6 Month Departure from Normal Temperature Data Courtesy <u>WestWide Drought Tracker</u> Data over the past 6 months ending October 2024



Summary of Impacts

Links: See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

Hydrologic Impacts

- Tier 1 shortage conditions are currently in effect on the Colorado River impacting water deliveries in Arizona
- Lakes Powell and Mead levels will remain nearly steady through the end of the year with a continuation of Tier 1 shortage deliveries in 2025

Agricultural Impacts

• There are no known impacts at this time

Fire Hazard Impacts

• An unusually long wildfire season continued through the monsoon and into the fall season stressing resources across the state

Other Impacts

• Ranchers in western Arizona have experienced a significant lack of forage growth due to absent monsoon rainfall. Supplemental feed will be necessary in many locations to compensate.

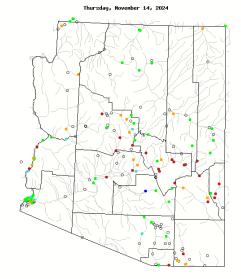
Mitigation Actions

• A Drought Emergency Declaration remains in effect for the state of Arizona as signed by the governor in accordance with the <u>Arizona Drought Preparedness Plan</u>. The continuation of this Drought Emergency has been recommended by the <u>Drought</u> <u>Interagency Coordinating Group</u>



Hydrologic Conditions and Impacts

- Small, unregulated rivers and streams across central Arizona were generally flowing at below to much below normal levels
- Small to medium sized reservoirs remained above the long term average, but below levels seen last year
- Larger reservoirs on the Colorado river continue to hover well below average forcing shortage conditions and reduced water deliveries



≊USGS

Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal	nign	

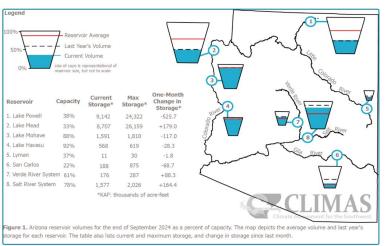


Image Caption:

Left: USGS 14 day average streamflow compared to historical streamflow valid Nov 14, 2024. Data courtesy of <u>USGS</u>

Right: Arizona reservoir status. Data courtesy of <u>CLIMAS</u>



Fire Hazard Impacts

Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

- Recent dry conditions have pushed dead fine fuels below 8% over much of the local area despite cooler temperatures
- Although the threat of significant large wildland fires is near normal, smaller wildfires have still been occurring across parts of Arizona this autumn which is fairly unusual for this time of year

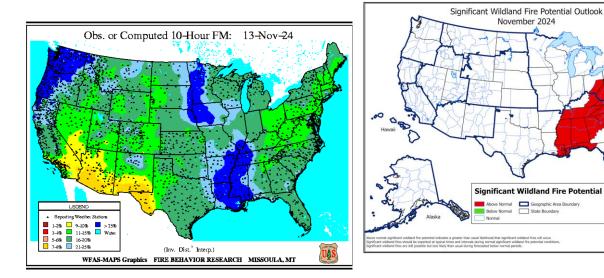


Image Caption: Left - 10-hour dead fuel moisture from <u>Wildland Fire Assessment System</u> Right - Significant Wildland Fire Potential Monthly Outlook

for November 2024



Puerto Rico

National Interagency Fire Center

Next issuance December 2, 202

Boise, Idaho Issued November 1, 2024

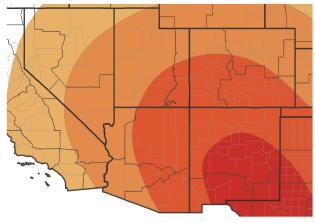


Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Temperatures over the next 3 months (Nov-Dec-Jan) have a better chance of reaching above normal levels across Arizona and southeast California
- Odds are slightly tilted towards total precipitation during the Nov-Dec-Jan time frame falling in a below normal category

Seasonal (3-Month) Temperature Outlook for November 1, 2024-January 31, 2025



Probability of Below-Normal Temperatures

40%

33%

50% **Probability of Above-Normal Temperatures**



70%

80%

90%

100%

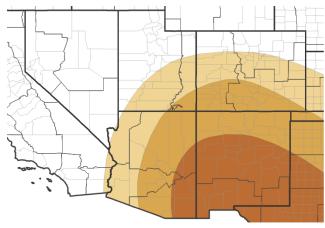
100%

60%

Probability of Near-Normal Temperatures

33%	40%	50%
Source(s): Climate Predic	tion Center; image courtesy of Drought.gov	Last Updated: 10/17/24

Seasonal (3-Month) Precipitation Outlook for November 1, 2024-January 31, 2025



Probability of Below-Normal Precipitation

33%	40%	50%	60%	70%	80%	90%	100%

Probability of Above-Normal Precipitation



Probability of Near-Normal Precipitation

33%	40%	50%
Source(s): Climate Predic	tion Center; image courtesy of Drought.gov	Last Updated: 10/17/24

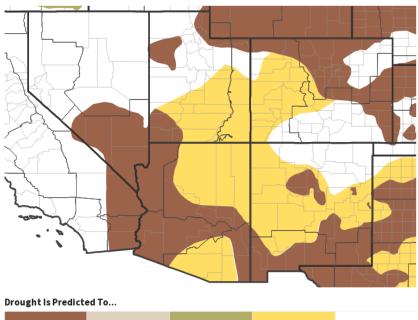


Drought Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Severe to Extreme Drought currently exists over portions of central and western Arizona, as well as far southeast California
- Winter precipitation will be crucial in future drought trends
- Given a weak La Nina forecast, drought could develop or worsen over parts of the region

Seasonal (3-Month) Drought Outlook for October 31, 2024–January 31, 2025



Persist Improve End Develop No Drought Source(s): Climate Prediction Center; image courtesy of Drought.gov Last Updated: 10/31/24

National Weather Service Phoenix

Links to the latest:

<u>Climate Prediction Center Monthly Drought Outlook</u> Climate Prediction Center Seasonal Drought Outlook



National Oceanic and Atmospheric Administration U.S. Department of Commerce