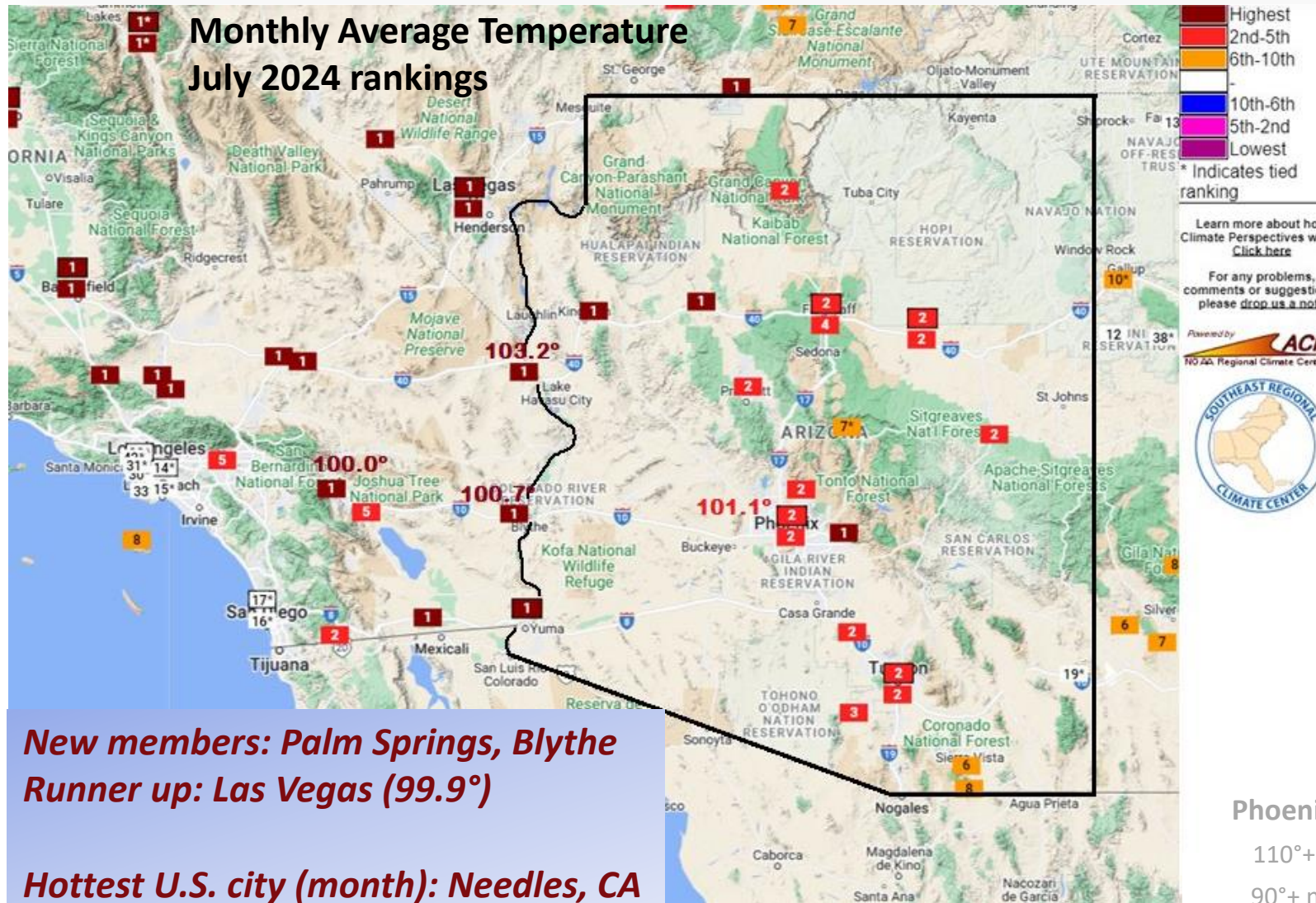
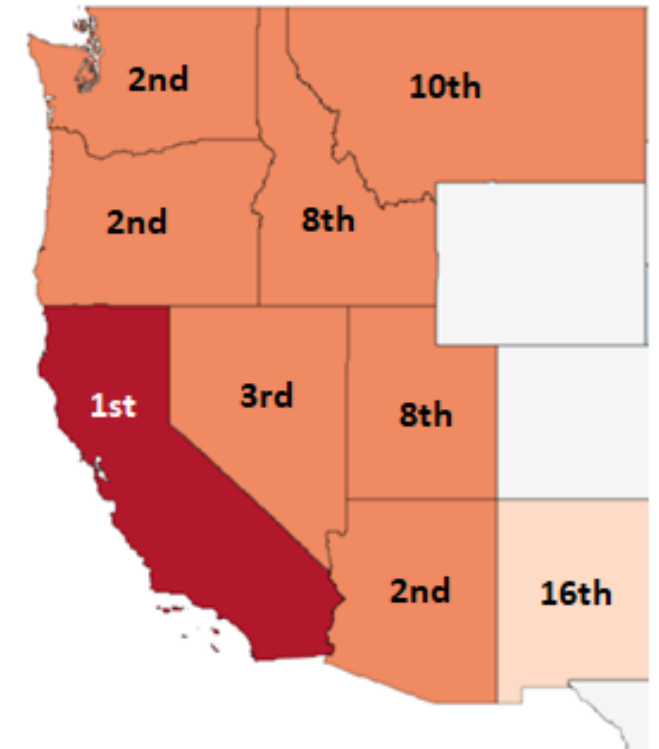


# The 100°+ month club...

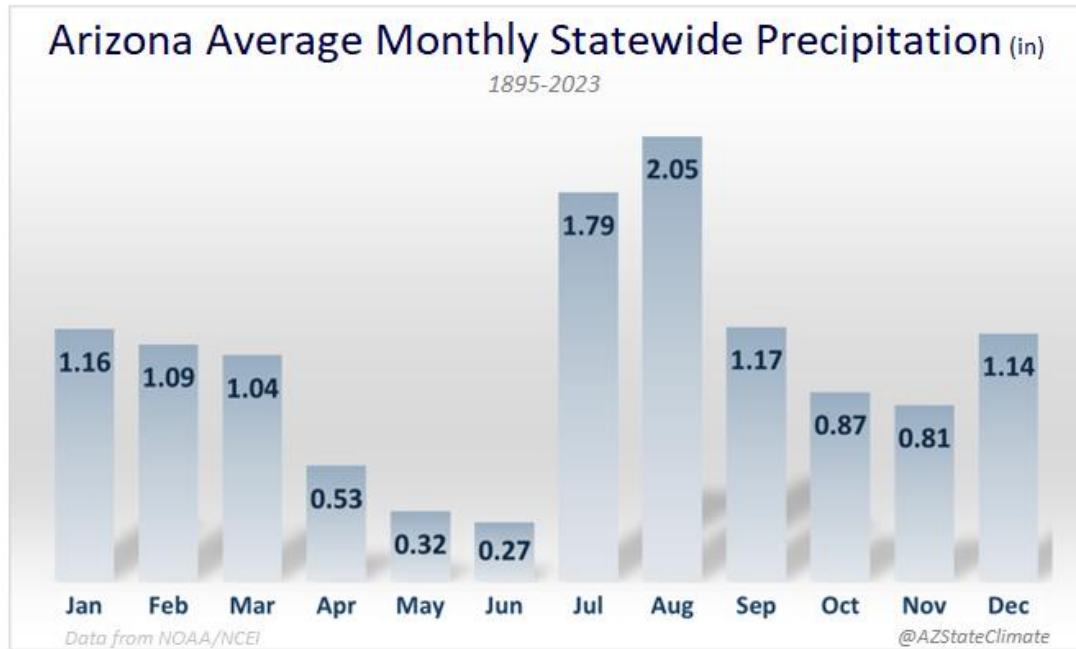


**July 2024**  
Statewide Average Temperature Rank  
*data from NOAA/NCEI 130 years*



# Some better news!

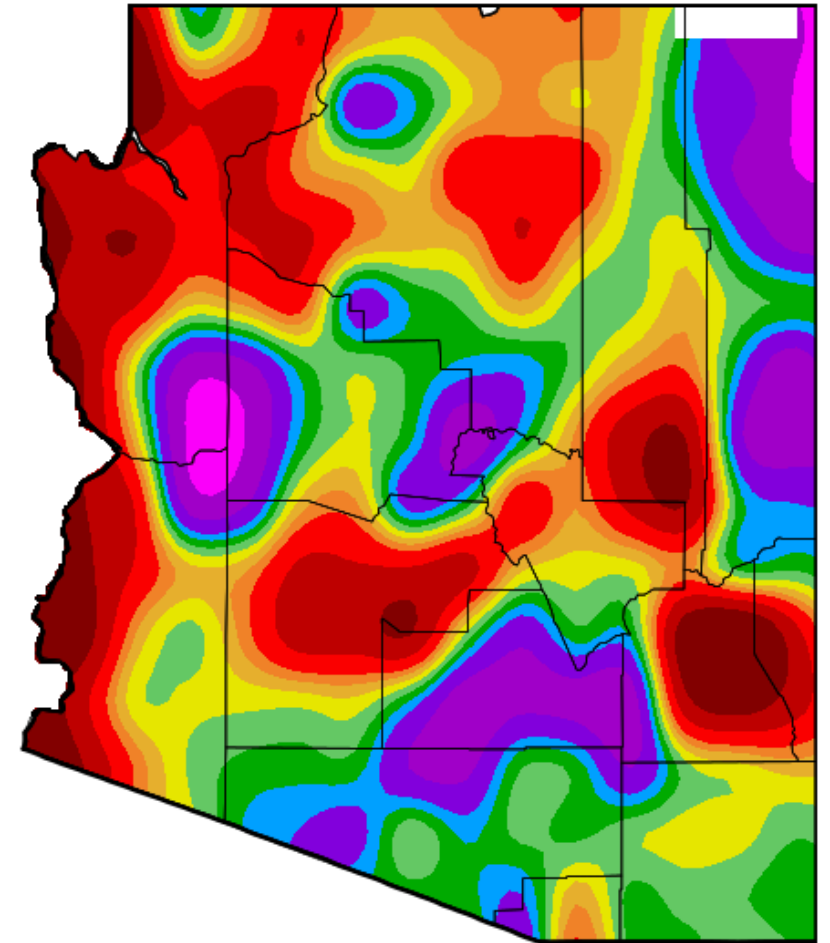
August (statewide) is the wettest month



*Southern tier gets up to ¼ annual precip in summer  
Rest of the state roughly half annual precip in summer  
(statistically...every summer is different!)*

## Monsoon 2024 Halftime Report

Jun 15 to Aug 13

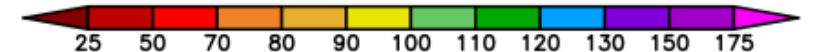


Better (so far):  
Apache, Cochise, Pinal,  
Pima, Yavapai counties  
Mogollon Rim (central)

Needs improvement:  
Graham, Greenlee,  
La Paz, Mohave,  
Maricopa, Santa Cruz,  
Yuma counties

Percent of Average Precipitation (%)

@AZStateClimate

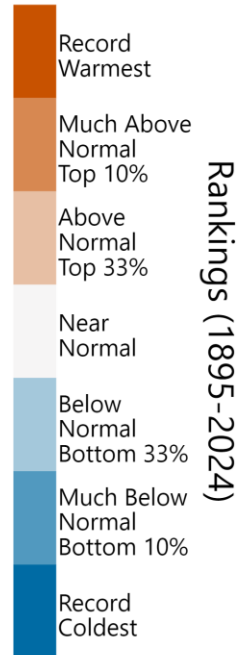
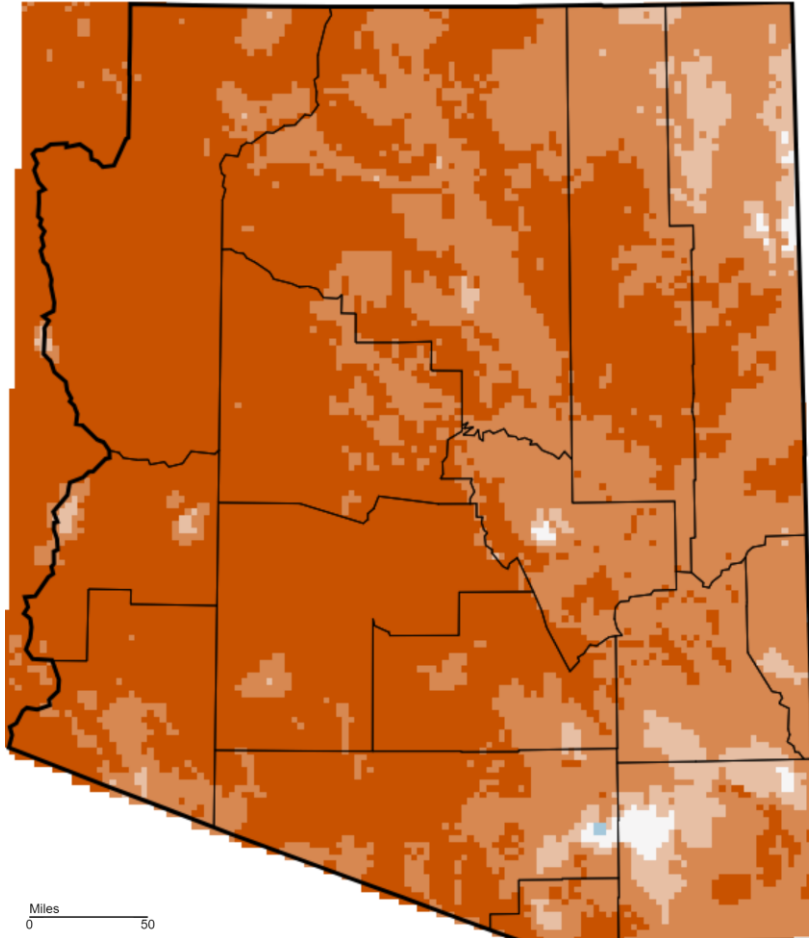


Generated 8/14/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

# July 2024: 2<sup>nd</sup> hottest July

Temp: 84.8°F Rank: 2<sup>nd</sup> hottest Anomaly: 5.1°F

**Arizona - Mean Temperature**  
July 2024, Percentile



Rankings (1895-2024)

Miles  
0 50

WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Aug 2024

## Monthly County Average Temperature

July 2024

*Preliminary data from NOAA/NCEI*

Arizona Counties	Temp	Depart	Rank
Apache	74.1°	3.1°	4 <sup>th</sup> warmest
Cochise	81.9°	3.8°	2 <sup>nd</sup> warmest
Coconino	78.6°	5.4°	Tied 1 <sup>st</sup> warmest
Gila	82.8°	4.7°	2 <sup>nd</sup> warmest
Graham	83.4°	4.3°	2 <sup>nd</sup> warmest
Greenlee	77.9°	3.7°	3 <sup>rd</sup> warmest
La Paz	97.8°	6.4°	1 <sup>st</sup> warmest
Maricopa	95.5°	6.1°	2 <sup>nd</sup> warmest
Mohave	89.0°	6.2°	1 <sup>st</sup> warmest
Navajo	77.6°	4.5°	3 <sup>rd</sup> warmest
Pima	89.9°	4.8°	2 <sup>nd</sup> warmest
Pinal	92.3°	4.9°	2 <sup>nd</sup> warmest
Santa Cruz	80.6°	4.0°	3 <sup>rd</sup> warmest
Yavapai	83.5°	5.4°	2 <sup>nd</sup> warmest
Yuma	97.0°	6.4°	1 <sup>st</sup> warmest

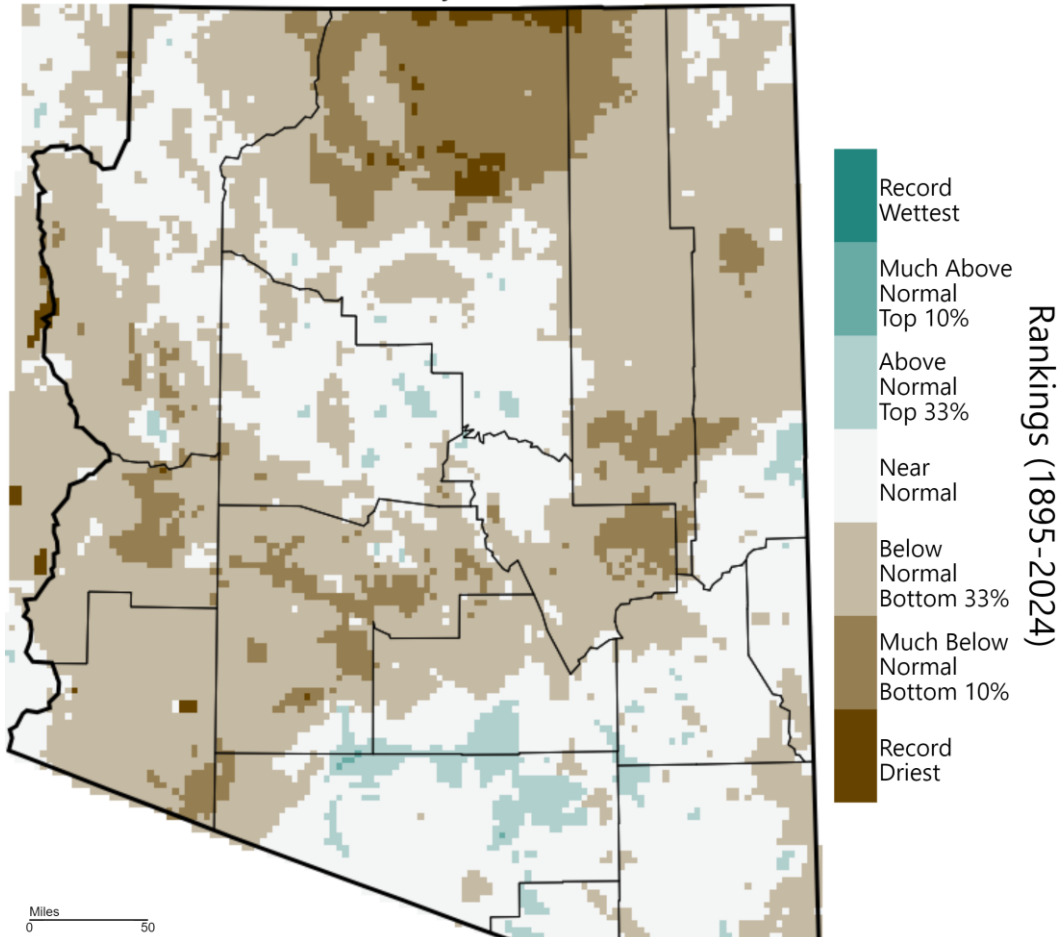
Record coldest	Top 10% coldest	Top 33% coldest	Normal	Top 33% warmest	Top 10% warmest	Record warmest
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# July 2024: back to dry

Total: 1.24" Rank: 35<sup>th</sup> driest Anomaly: -0.56"

**Arizona - Precipitation**  
July 2024, Percentile



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Aug 2024

## Monthly County Precipitation

July 2024

*Preliminary data from NOAA/NCEI*

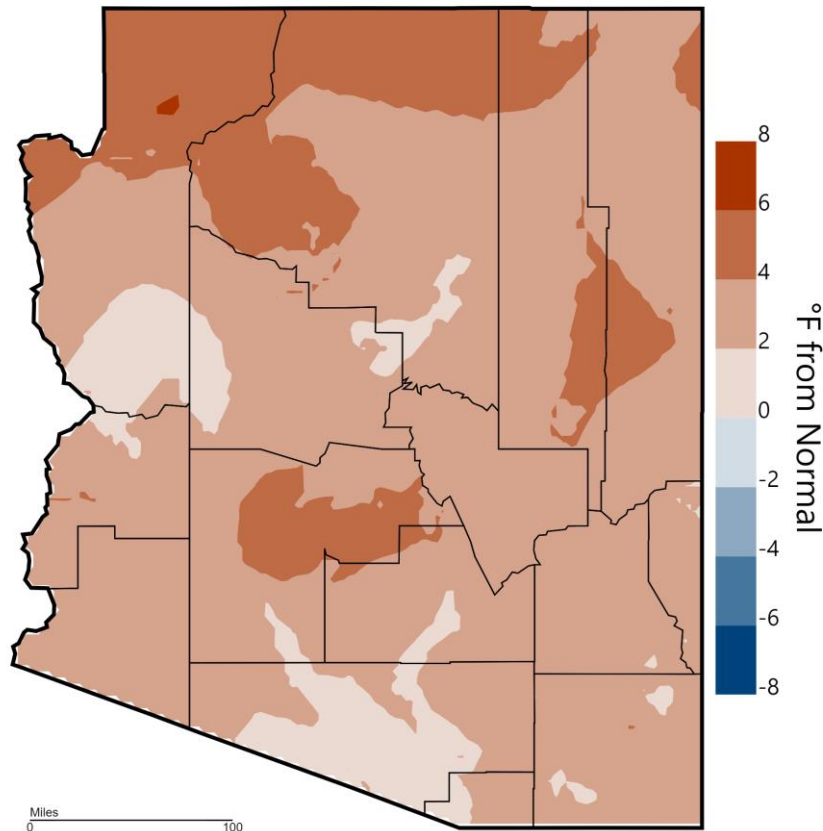
Arizona Counties	Total	Depart	Rank
Apache	1.36"	-0.60"	36 <sup>th</sup> driest
Cochise	2.36"	-0.86"	33 <sup>rd</sup> driest
Coconino	0.84"	-0.88"	21 <sup>st</sup> driest
Gila	2.05"	-0.48"	44 <sup>th</sup> driest
Graham	1.39"	-1.17"	20 <sup>th</sup> driest
Greenlee	2.66"	-0.14"	60 <sup>th</sup> driest
La Paz	0.40"	-0.23"	50 <sup>th</sup> driest
Maricopa	1.10"	0.05"	49 <sup>th</sup> wettest
Mohave	0.61"	-0.56"	34 <sup>th</sup> driest
Navajo	0.61"	-1.14"	13 <sup>th</sup> driest
Pima	2.20"	-0.17"	64 <sup>th</sup> wettest
Pinal	1.73"	-0.05"	57 <sup>th</sup> wettest
Santa Cruz	3.60"	-0.79"	44 <sup>th</sup> driest
Yavapai	1.70"	-0.31"	57 <sup>th</sup> driest
Yuma	0.09"	-0.42"	17 <sup>th</sup> driest

Record driest	Top 10% driest	Top 33% driest	Normal	Top 33% wettest	Top 10% wettest	Record wettest
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# August still hot, some areas wet (so far)

## Arizona Contours

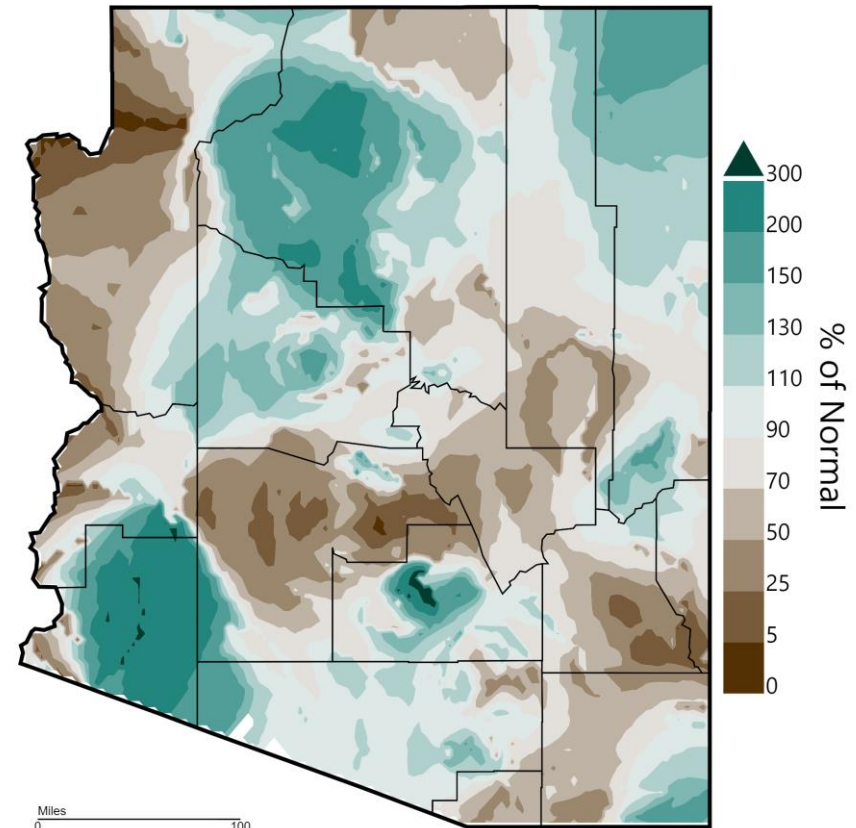
Mean Temperature Departure from Normal (August 1, 2024 - August 13, 2024)



Western Regional Climate Center / High Plains Regional Climate Center

## Arizona Contours

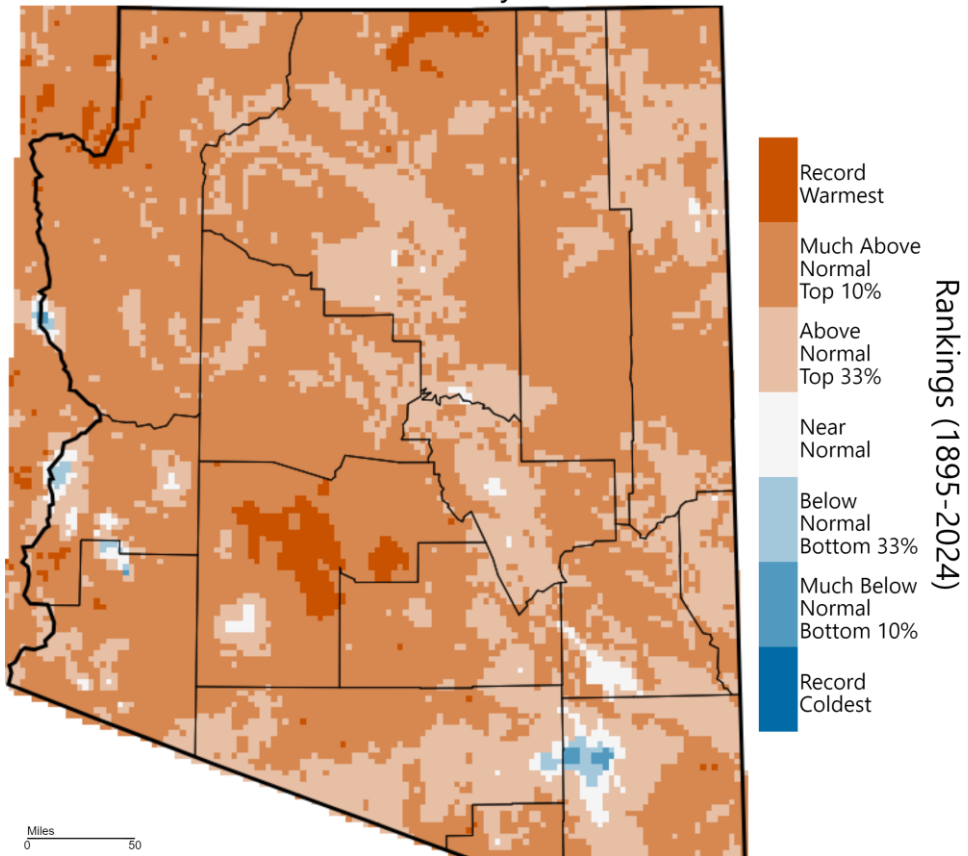
Total Precipitation Percent of Normal (August 1, 2024 - August 13, 2024)



Western Regional Climate Center / High Plains Regional Climate Center

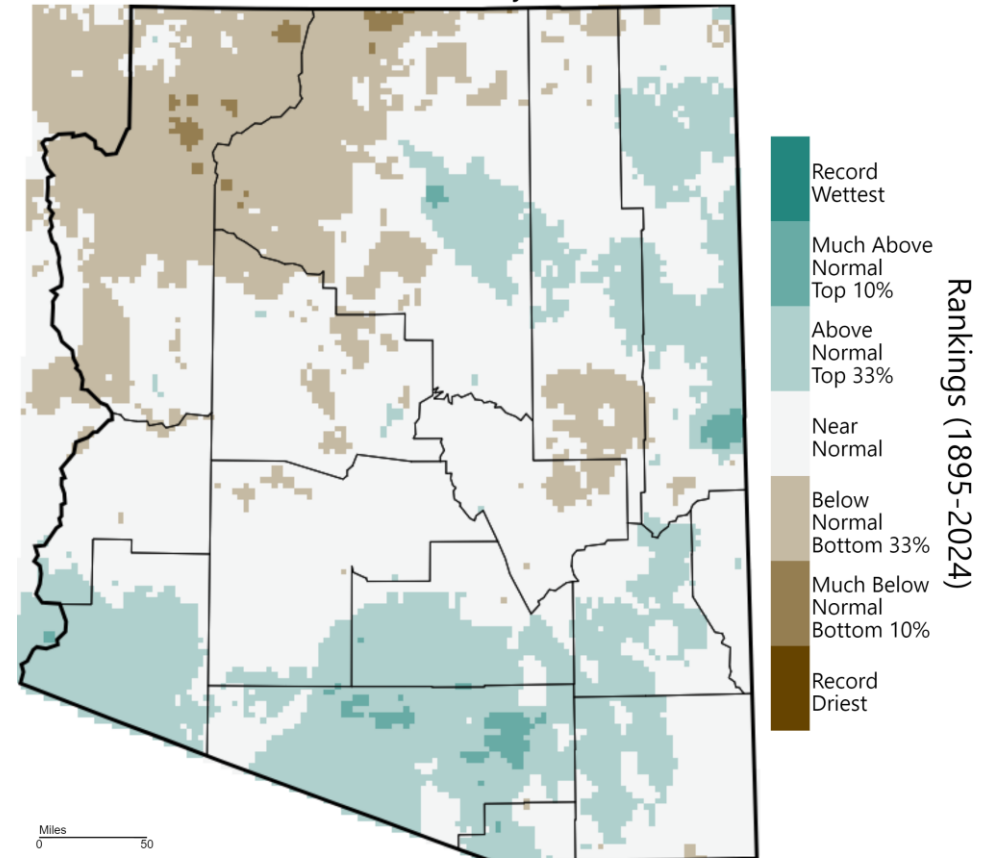
# Water Year: still hot, some wet, some dry

**Arizona - Mean Temperature**  
October 2023 - July 2024, Percentile



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Aug 2024

**Arizona - Precipitation**  
October 2023 - July 2024, Percentile

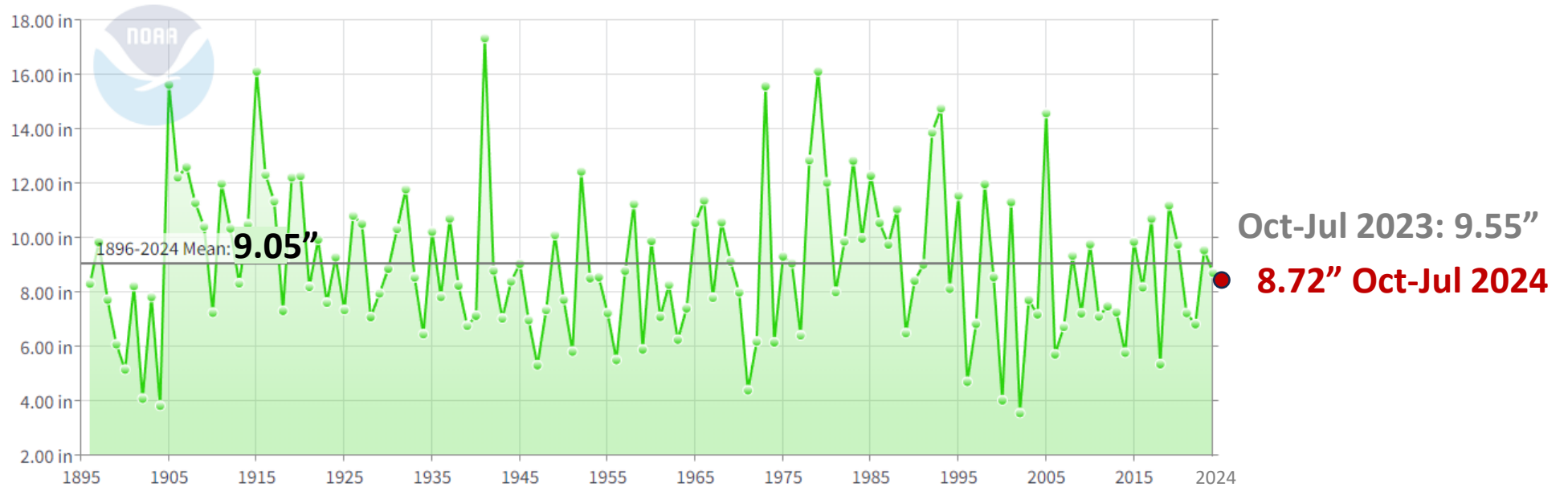


WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Aug 2024

# WY2024: dropping below average

## Arizona Precipitation

October-July

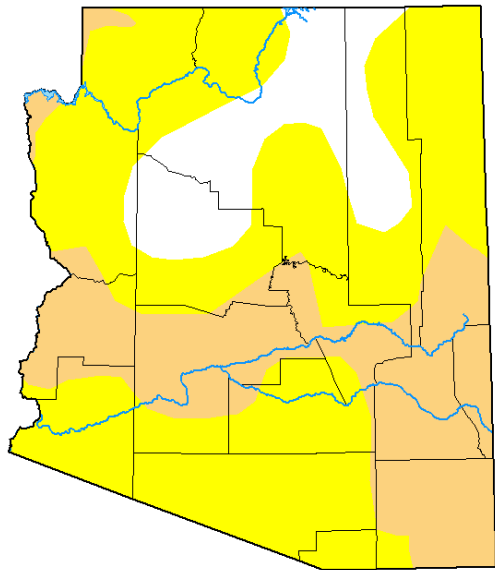


*20 of last 30 water years have been below long-term average*

*Long-term WY average 12.27"*  
*1994-2023 WY average 11.29"*

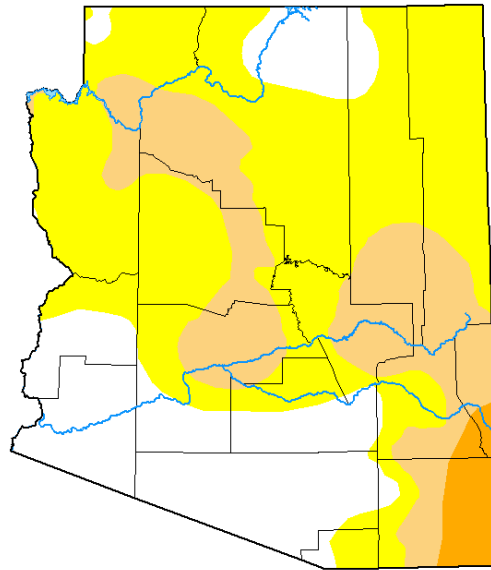
# Dry areas now impacting short-term drought

1 year ago: August 15, 2023



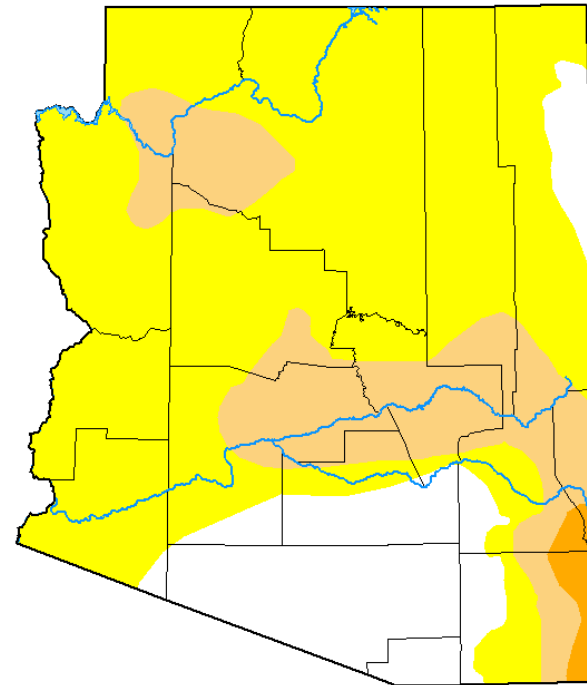
Winter 2023 was very wet  
Monsoon 2023 was very dry

3 months ago: May 14, 2024



Winter 2024 was slightly wet

## U.S. Drought Monitor Arizona



**August 13, 2024**  
(Released Thursday, Aug. 15, 2024)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	17.24	82.76	20.84	1.92	0.00	0.00
<b>Last Week</b> 08-06-2024	17.20	82.80	20.84	1.92	0.00	0.00
<b>3 Months Ago</b> 05-14-2024	25.79	74.21	25.31	3.15	0.00	0.00
<b>Start of Calendar Year</b> 01-02-2024	5.62	94.38	53.37	33.54	5.75	0.00
<b>Start of Water Year</b> 09-26-2023	8.12	91.88	47.06	22.74	5.34	0.00
<b>One Year Ago</b> 08-15-2023	14.67	85.33	28.80	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme 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>

Author:

Curtis Riganti  
National Drought Mitigation Center



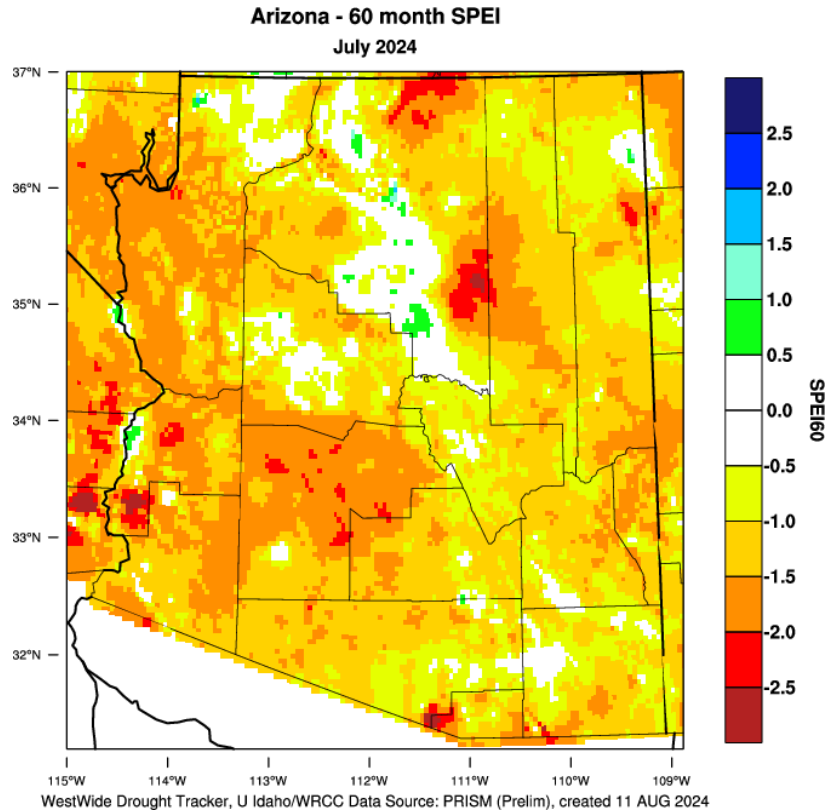
[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



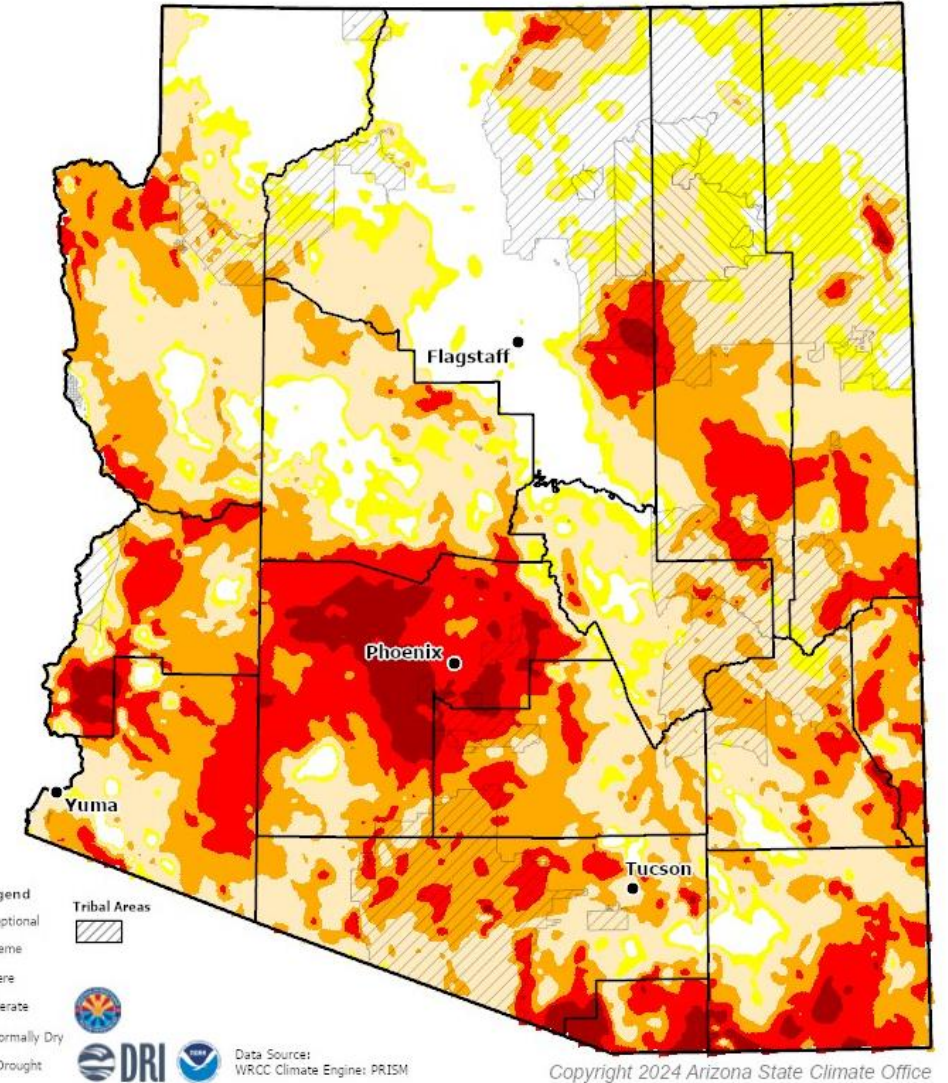
# Long-term drought continues

## Arizona Long-Term Drought

Published August, 2024



SPEI: Standardized Precipitation Evapotranspiration Index

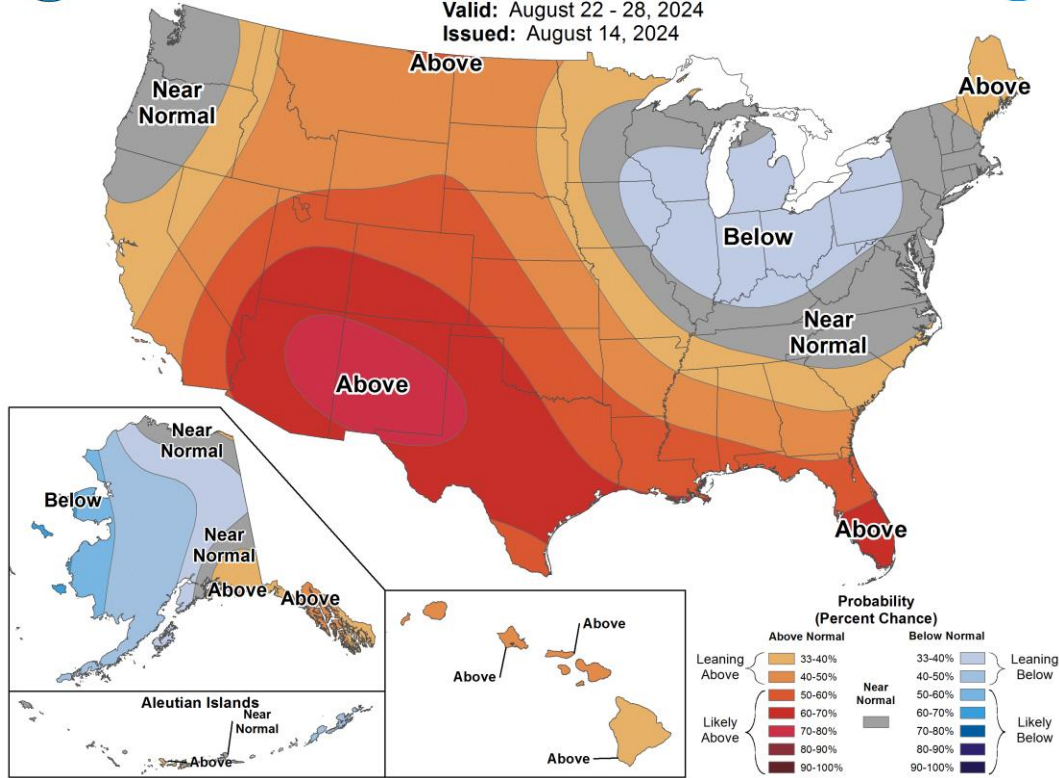




# 8-14 Day Temperature Outlook



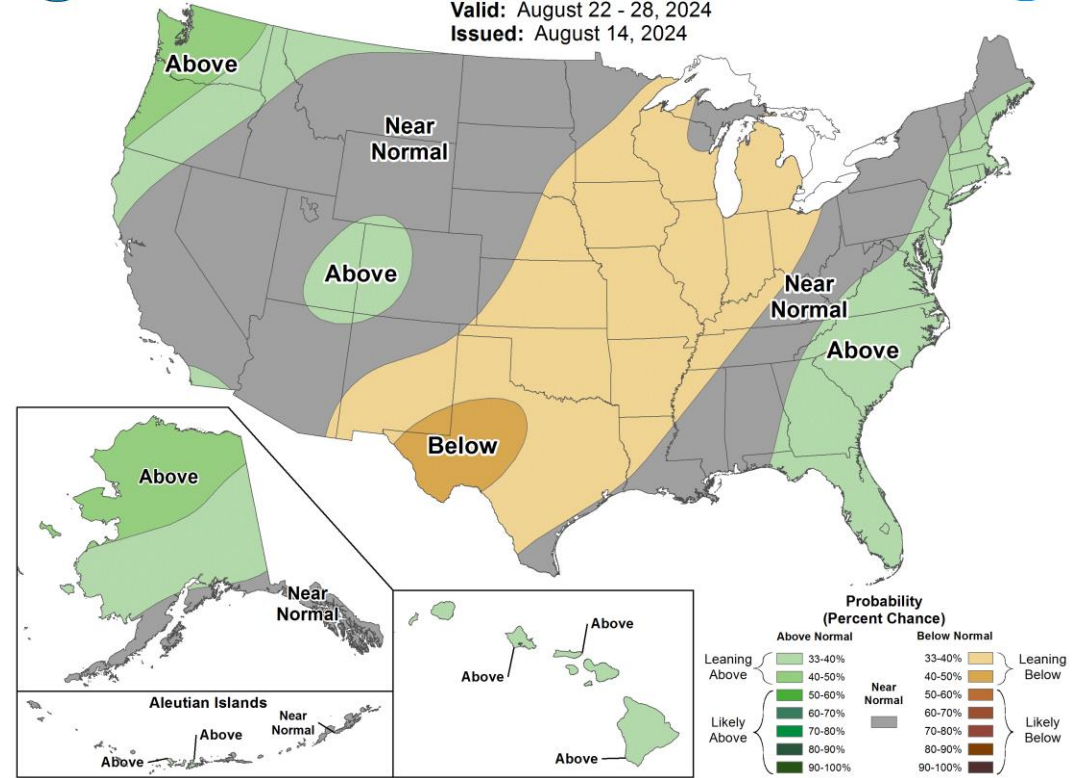
Valid: August 22 - 28, 2024  
Issued: August 14, 2024



# 8-14 Day Precipitation Outlook



Valid: August 22 - 28, 2024  
Issued: August 14, 2024



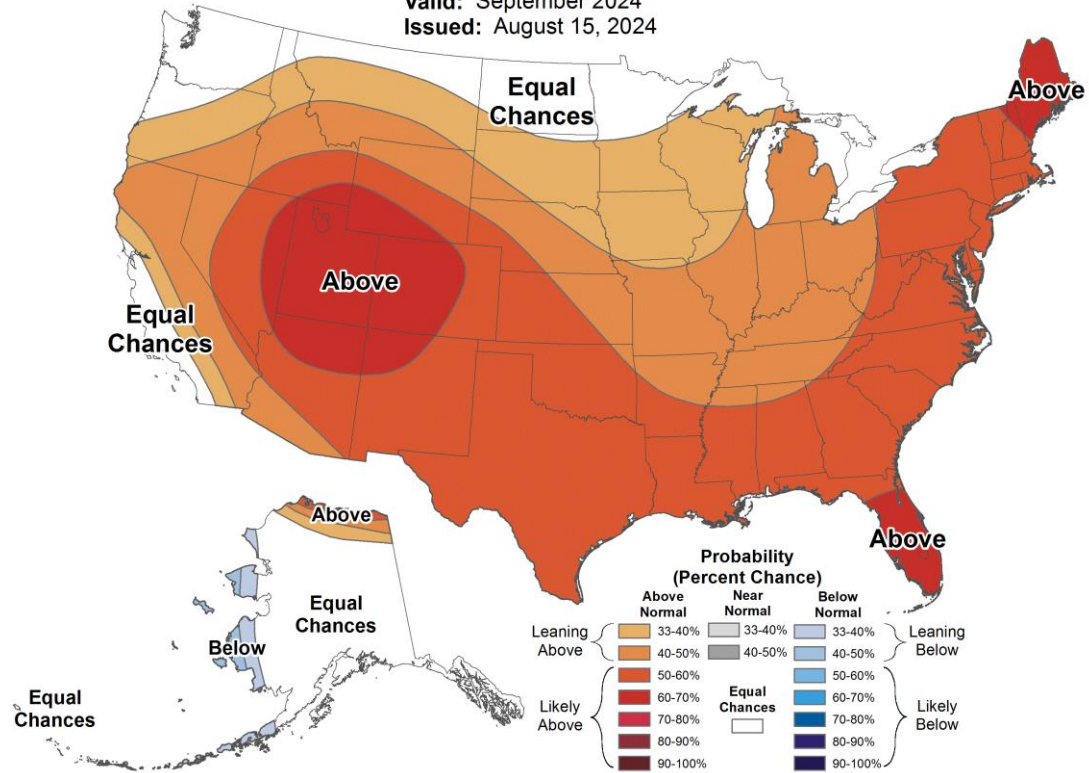




# Monthly Temperature Outlook



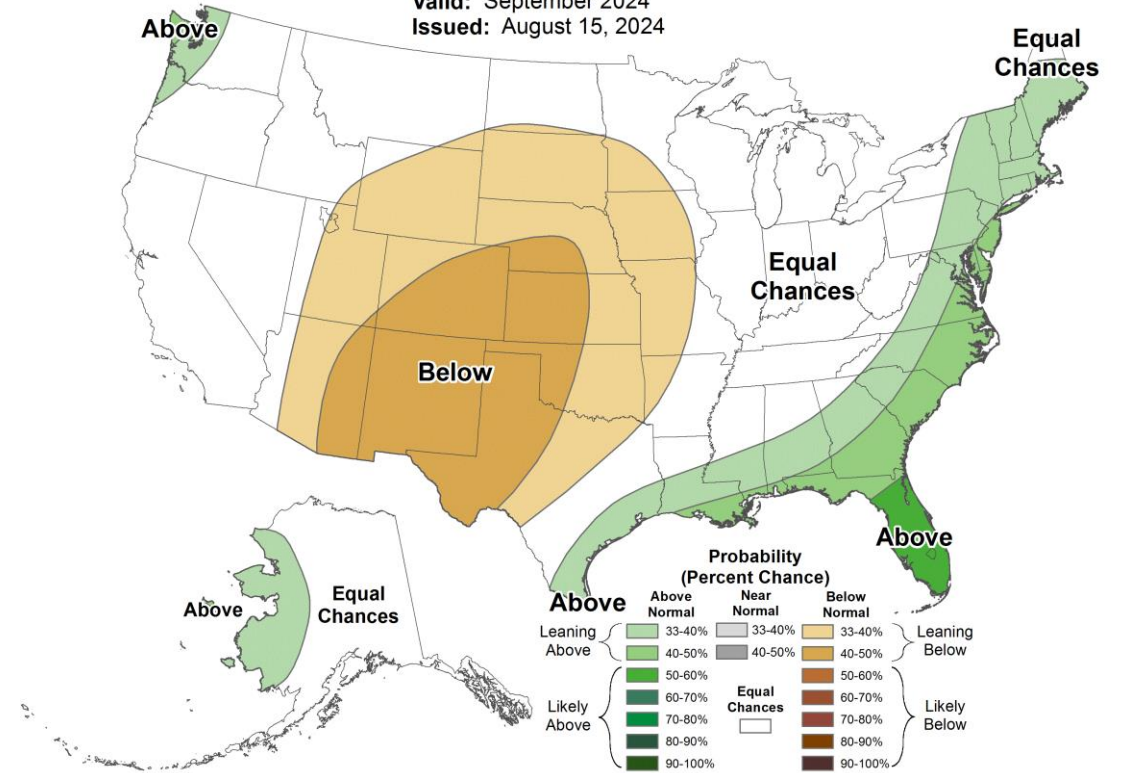
Valid: September 2024  
Issued: August 15, 2024



# Monthly Precipitation Outlook



Valid: September 2024  
Issued: August 15, 2024



# ENSO neutral conditions are present

## La Nina 66% chance develop Sep-Nov and persist through winter

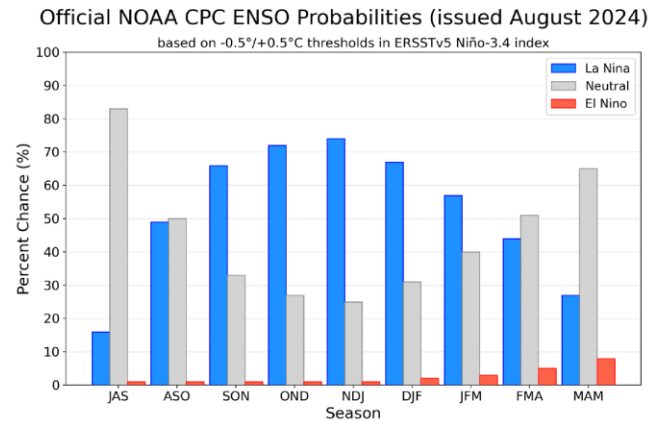


Figure 7. Official ENSO probabilities for the Niño 3.4 sea surface temperature index (5°N-5°S, 120°W-170°W). Figure updated 8 August 2024.

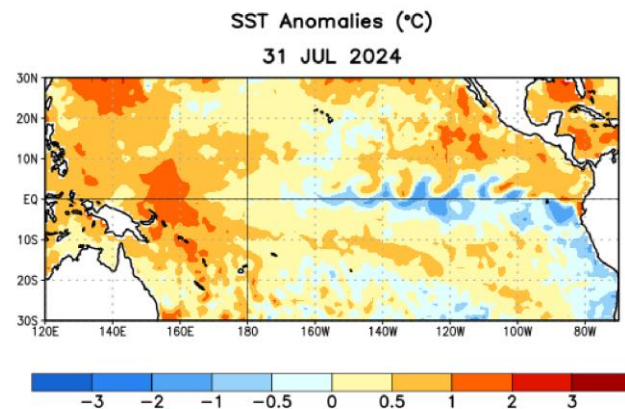


Figure 1. Average sea surface temperature (SST) anomalies (°C) for the week centered on 31 July 2024. Anomalies are computed with respect to the 1991-2020 base period weekly means.

<https://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/enso.shtml>

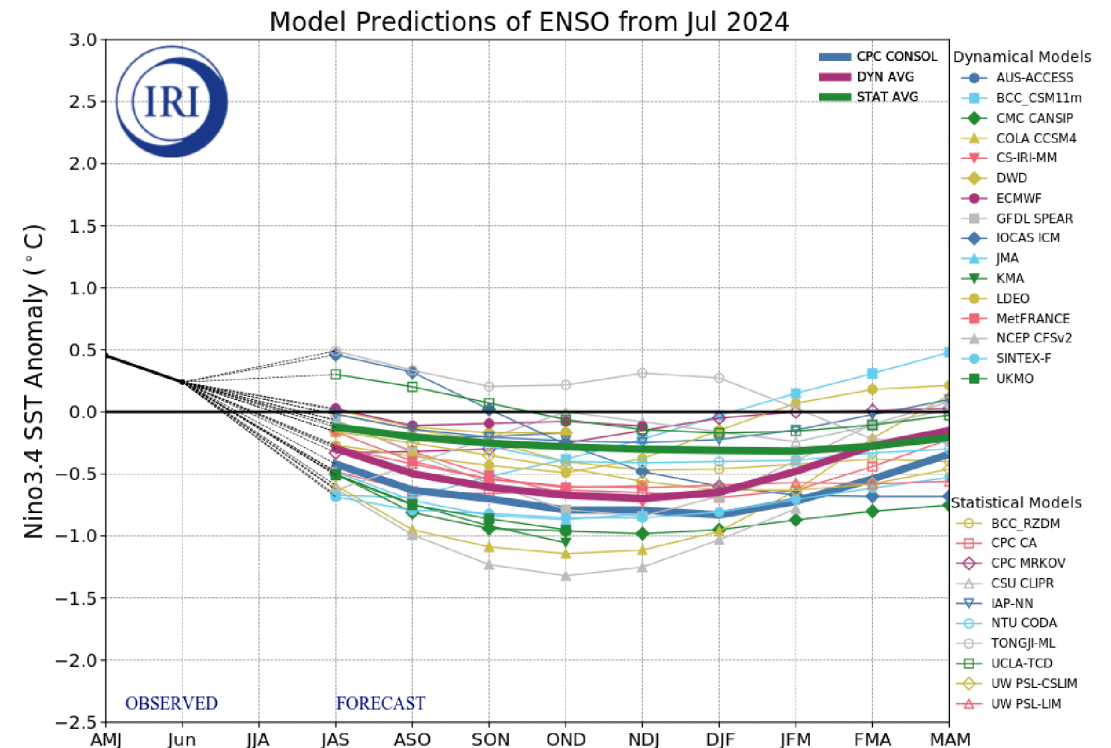


Figure 6. Forecasts of sea surface temperature (SST) anomalies for the Niño 3.4 region (5°N-5°S, 120°W-170°W). Figure updated 19 July 2024 by the International Research Institute (IRI) for Climate and Society.



# Welcome AMS Student Club Leaders at ASU!

President: Amanda Gibbons

Vice President: Kayla McDonald

