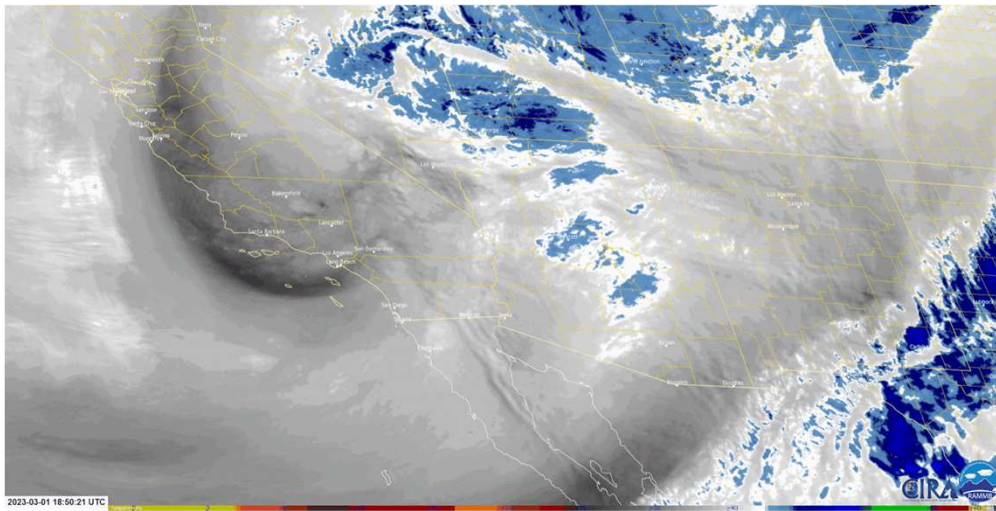
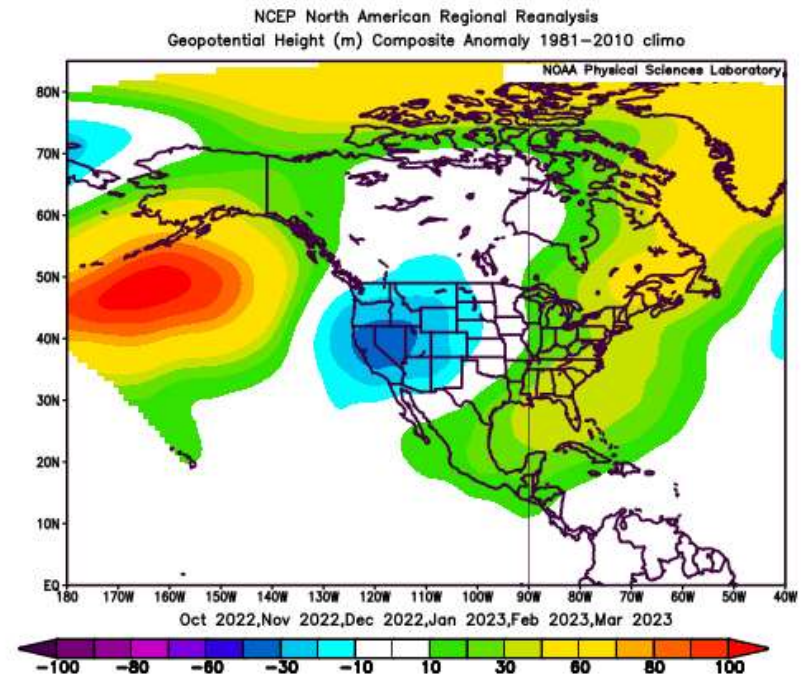


Winter: cold and wet!



<https://www.weather.gov/psr/March1-2WinterStorm>
7 events through March



*Multiple atmospheric rivers
Anomalous troughing*

Winter: cold and wet!

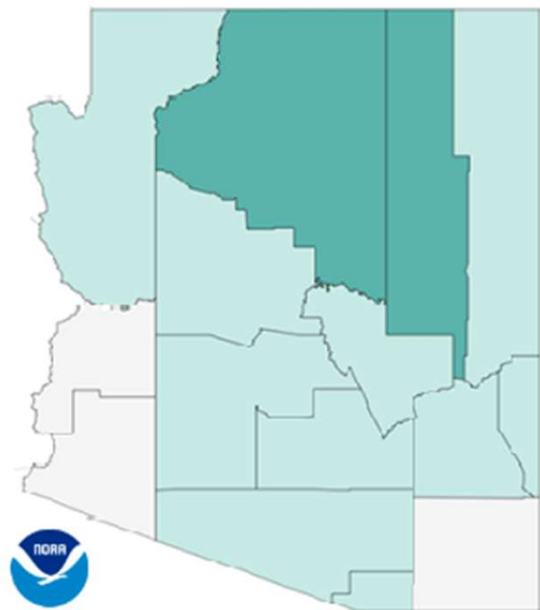
23rd coldest



Coldest ← ↓ 1/2 Near Normal ↑ 1/2 ↑ 1/2 Warmest

October to March

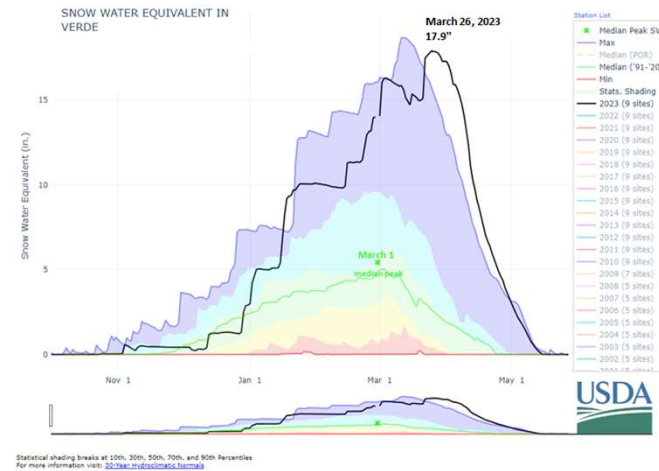
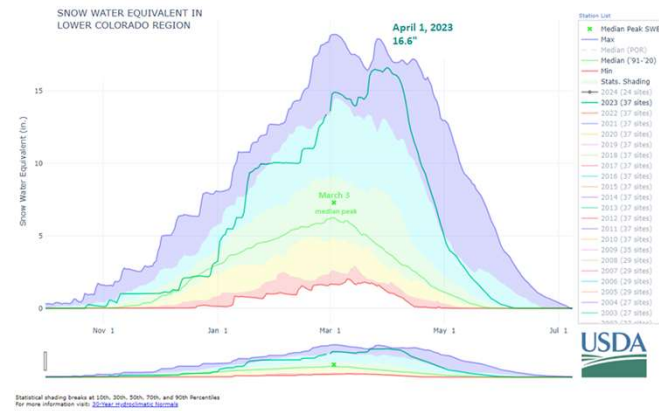
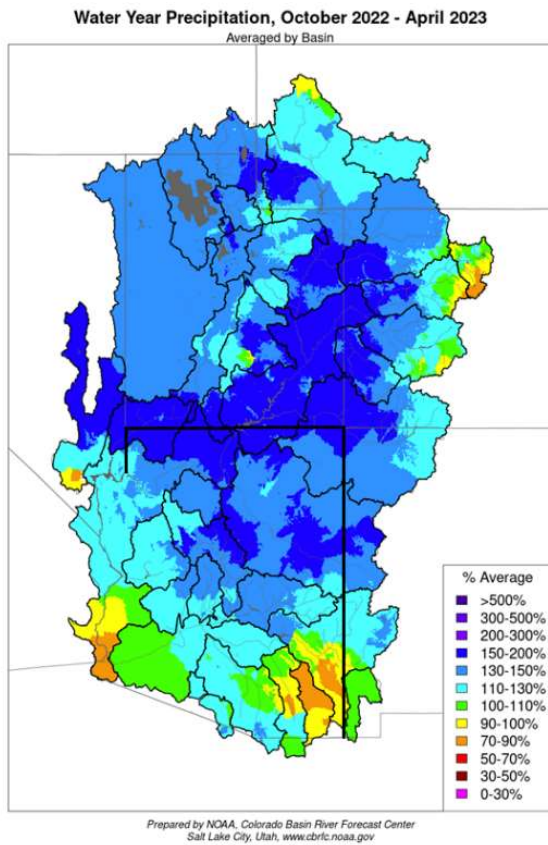
22nd wettest



Driest ← ↓ 1/2 ↓ 1/2 Near Normal ↑ 1/2 ↑ 1/2 Wettest

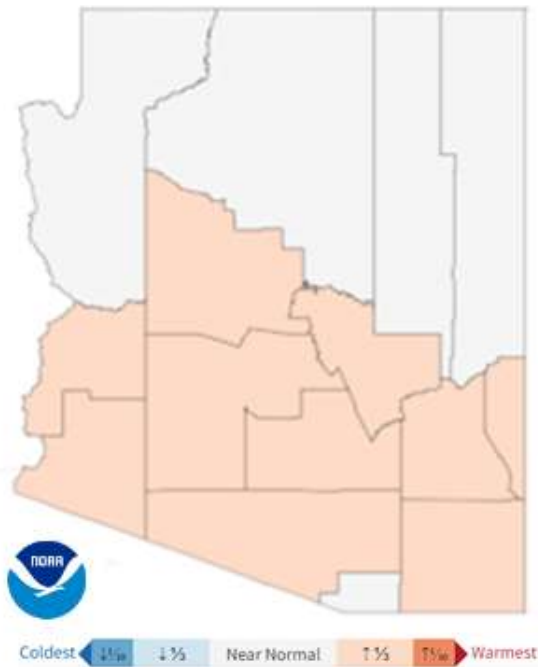
October to March

Snow melt was delayed



April 2023 was very dry

April 2023: 43rd warmest April



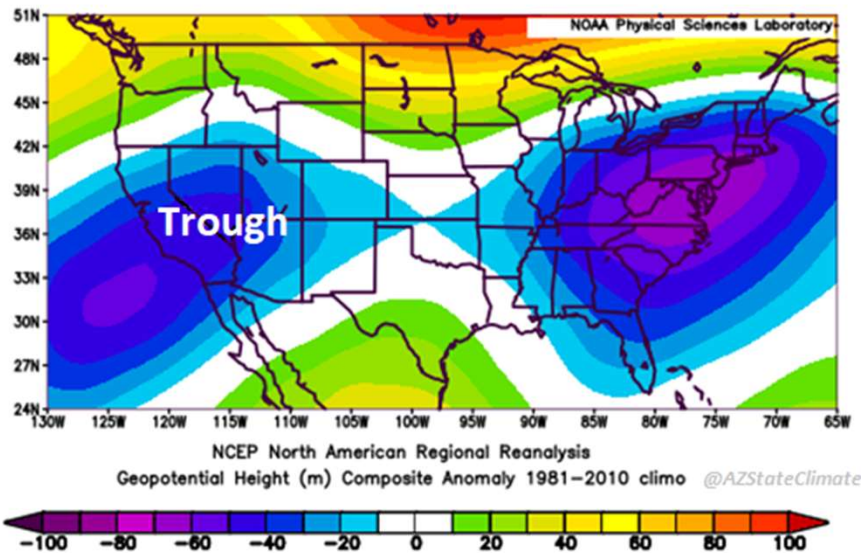
April 2023: 3rd driest April



Last measurable precipitation at Phoenix Sky Harbor was March 22 and lasted until August 17
First time no measurable precipitation April-July at Phoenix Sky Harbor

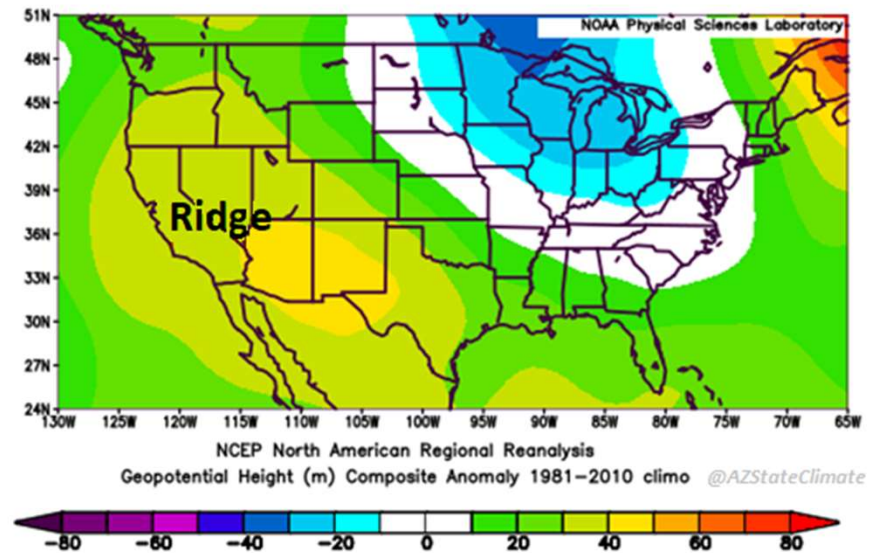
Summer: hot and dry!

June 2023



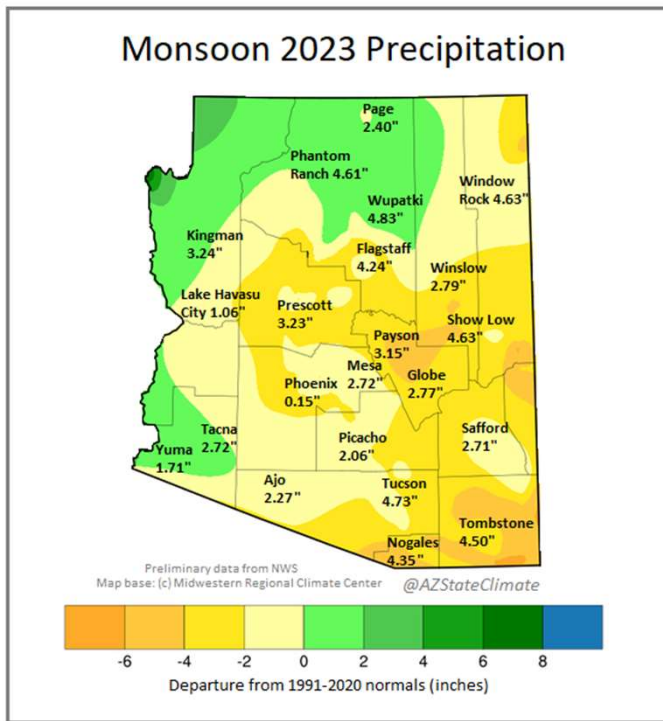
*18th coldest June
39th driest June*

July 2023

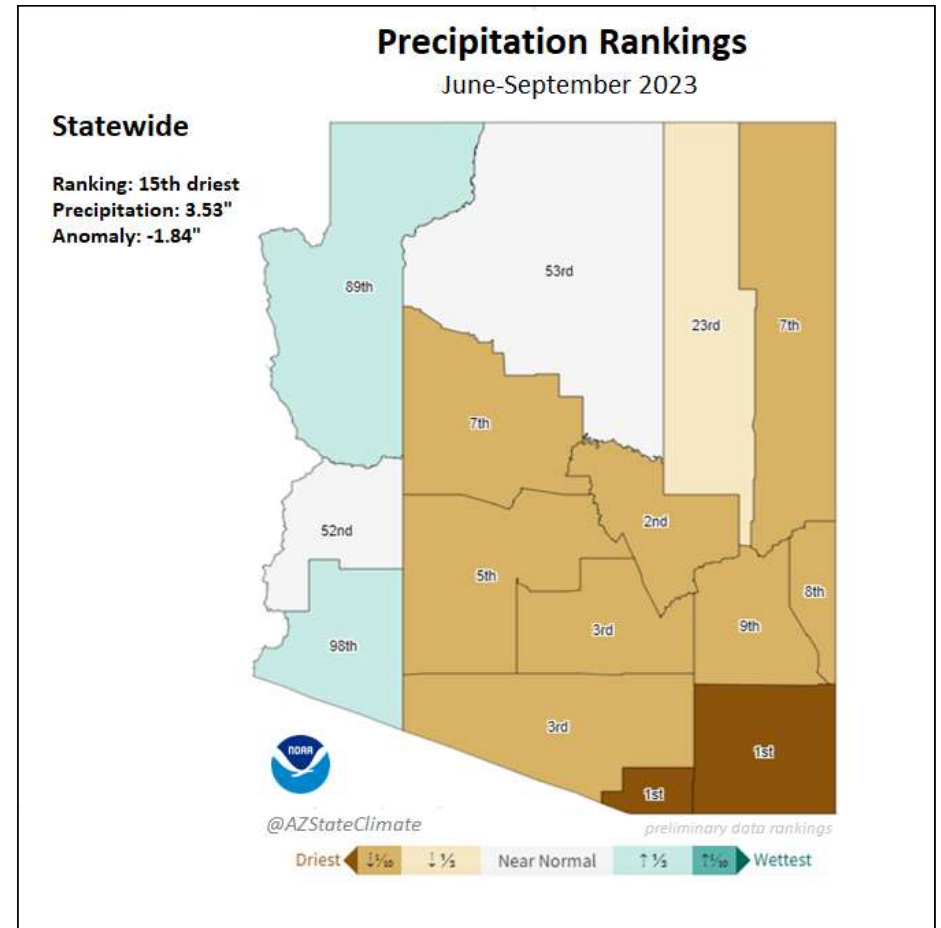


*Warmest July (and warmest month)
2nd driest July*

Monsoon2023



2 stations had driest monsoon:
Phoenix Sky Harbor and Willcox

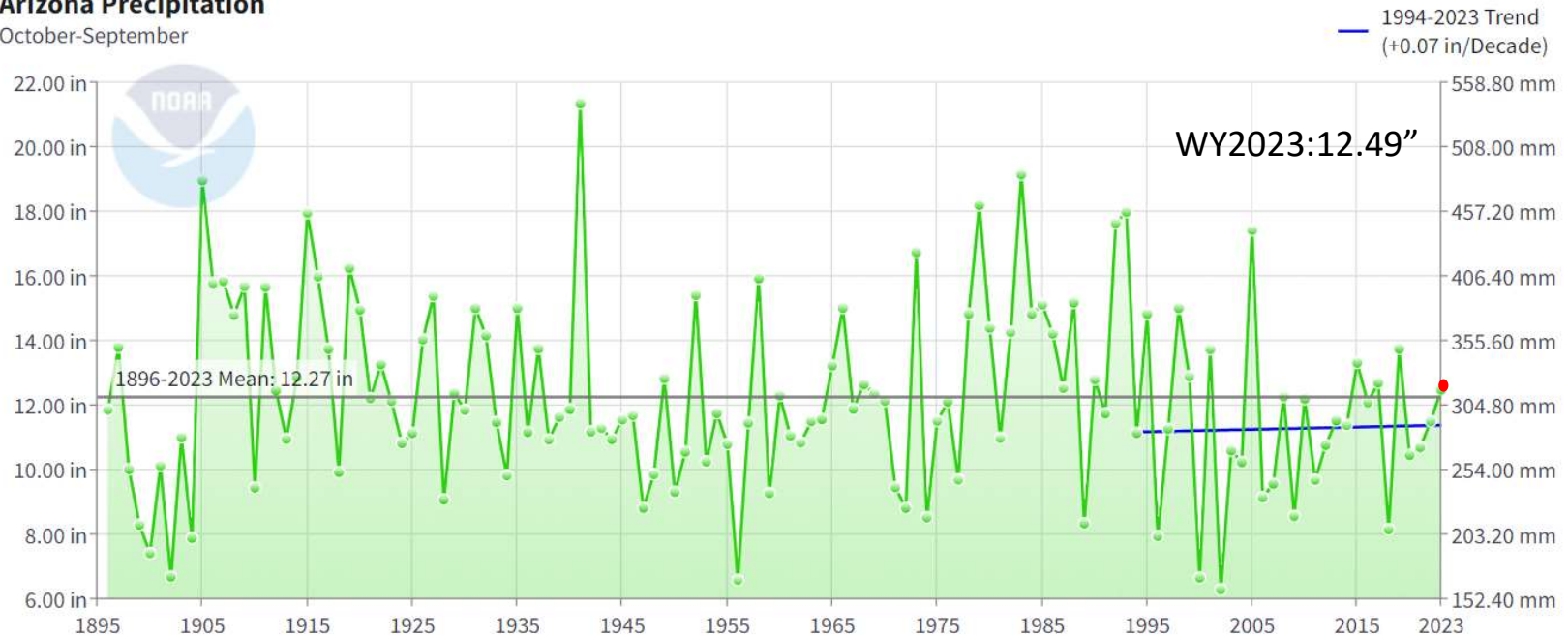


Last summer was wettest for Cochise County

This was Arizona's 30th year in drought

Arizona Precipitation

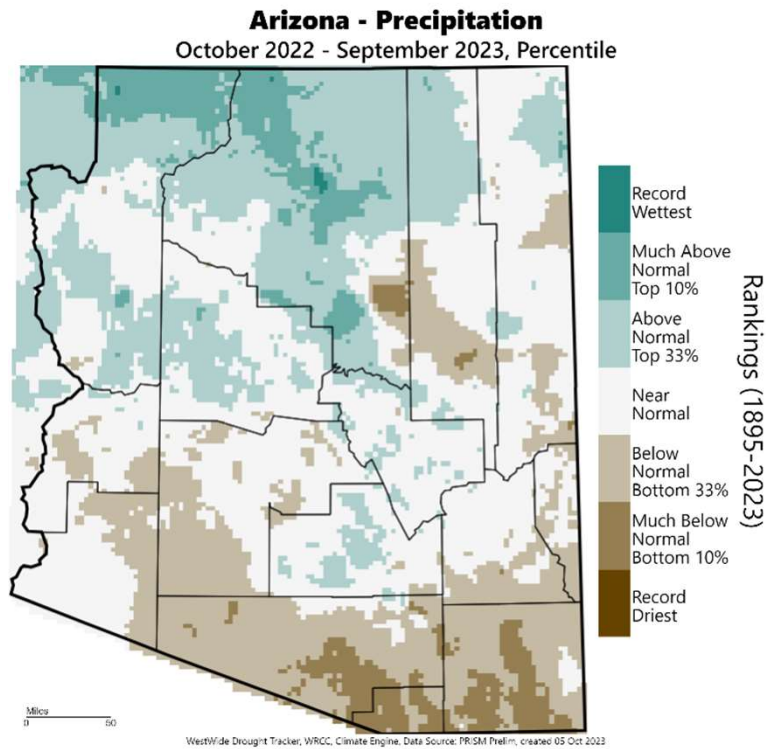
October-September



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

Long-term average 12.27"
Drought average 11.29"

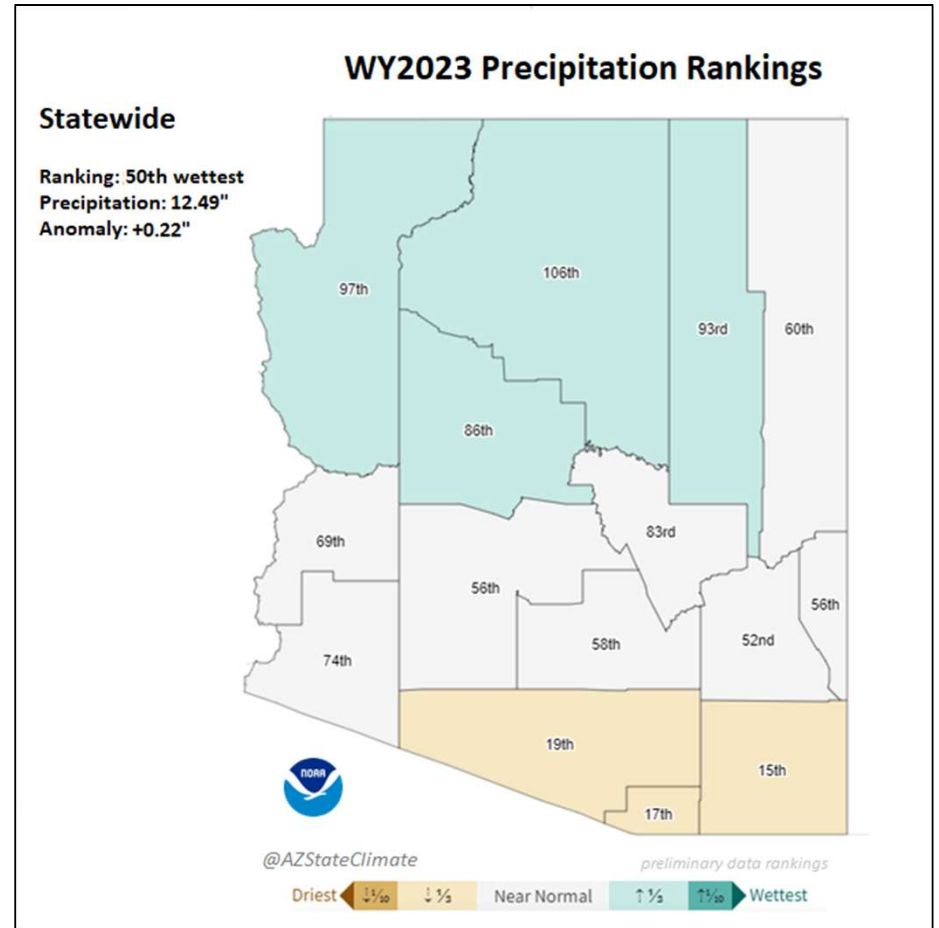
WY2023 Precipitation



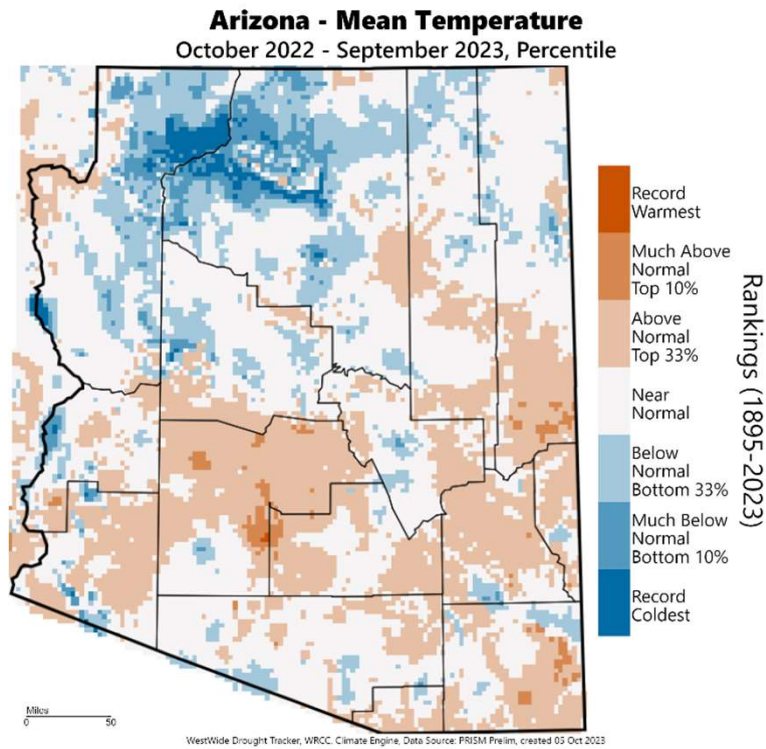
Oct-Mar 22nd wettest

Apr-July 2nd driest

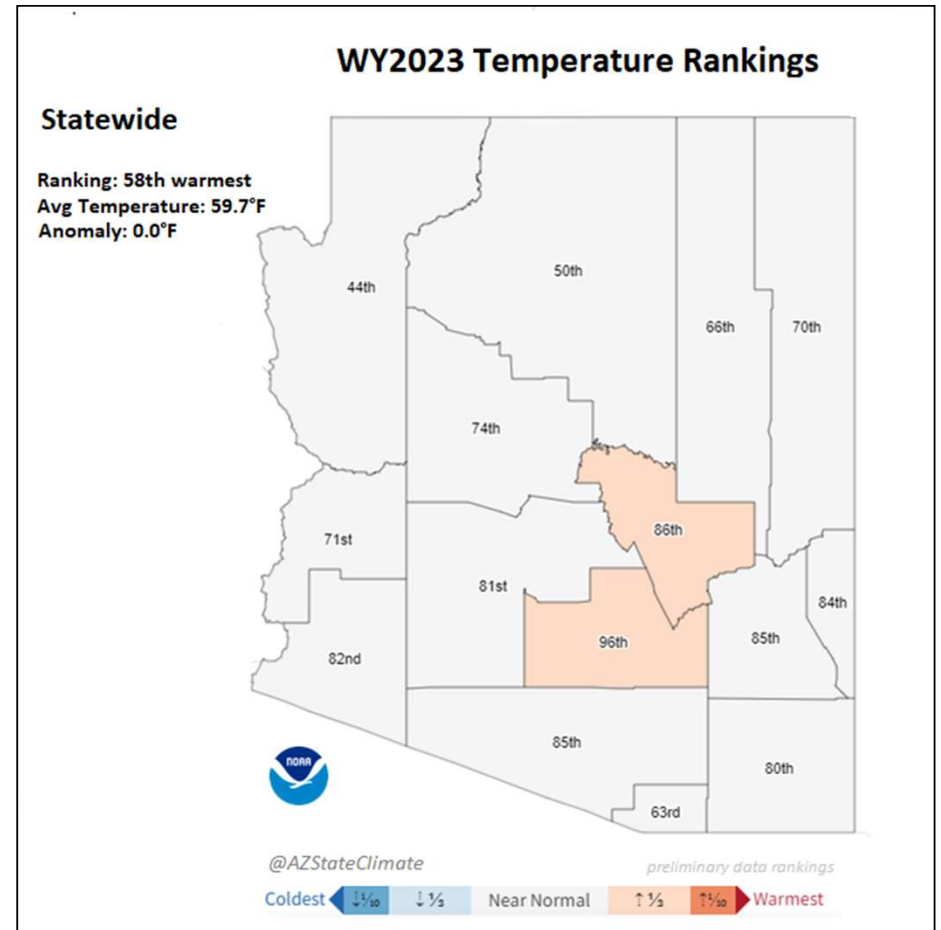
Aug-Sep about average (55th driest)



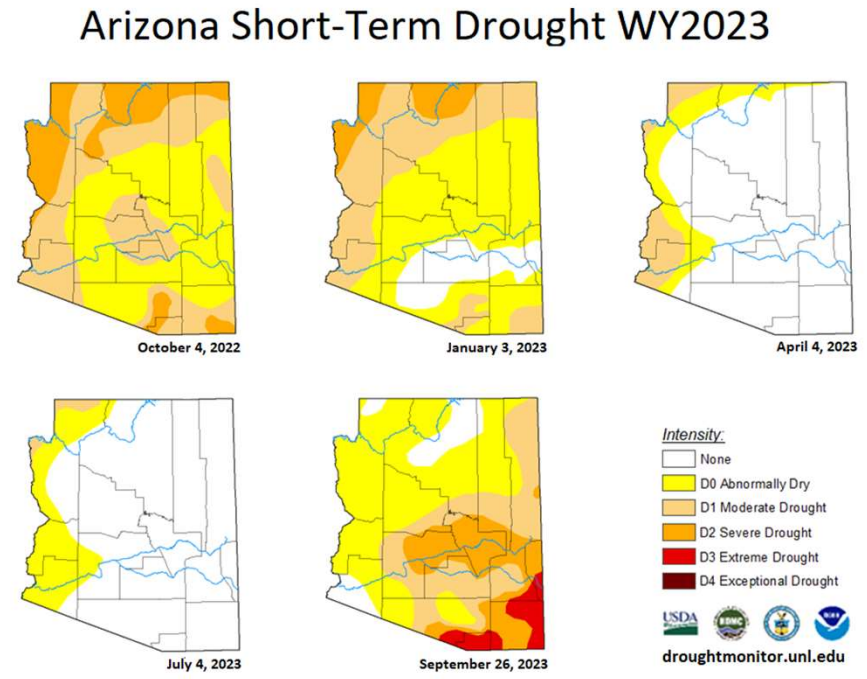
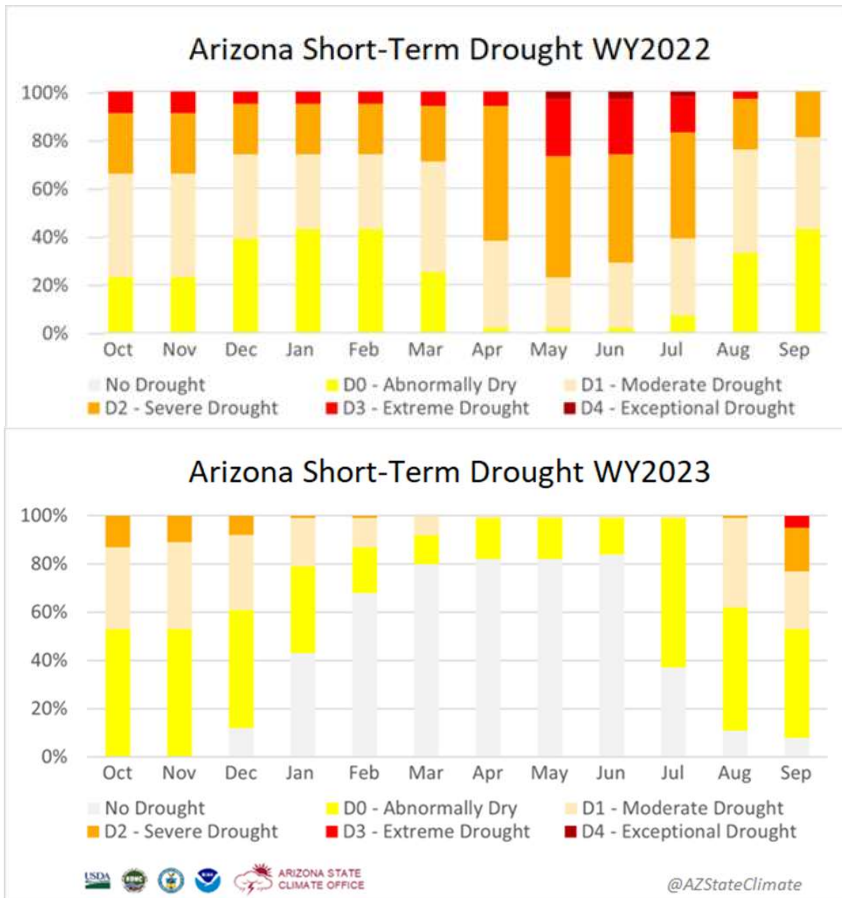
WY2023 Temperature



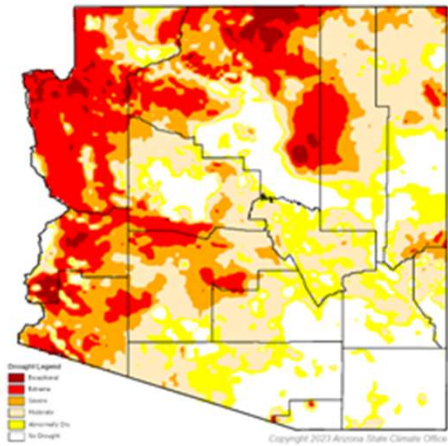
Oct-Jun 33rd coldest
July-Sept 2nd warmest



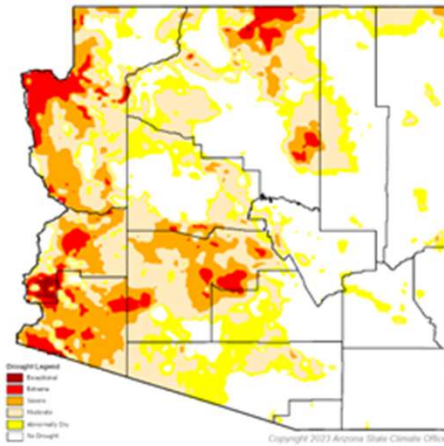
Short-term drought starting to degrade



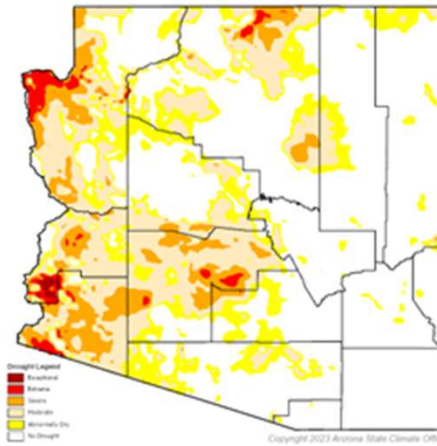
Long-term drought persists



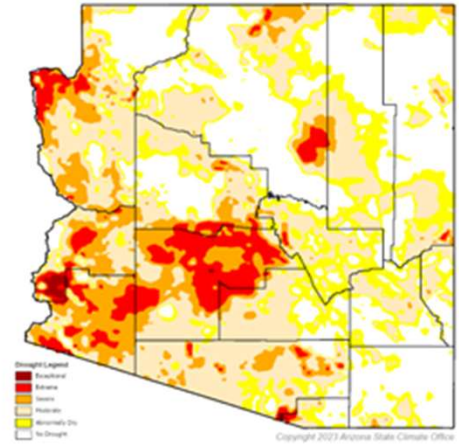
October to December 2022



January to March 2023



April to June 2023



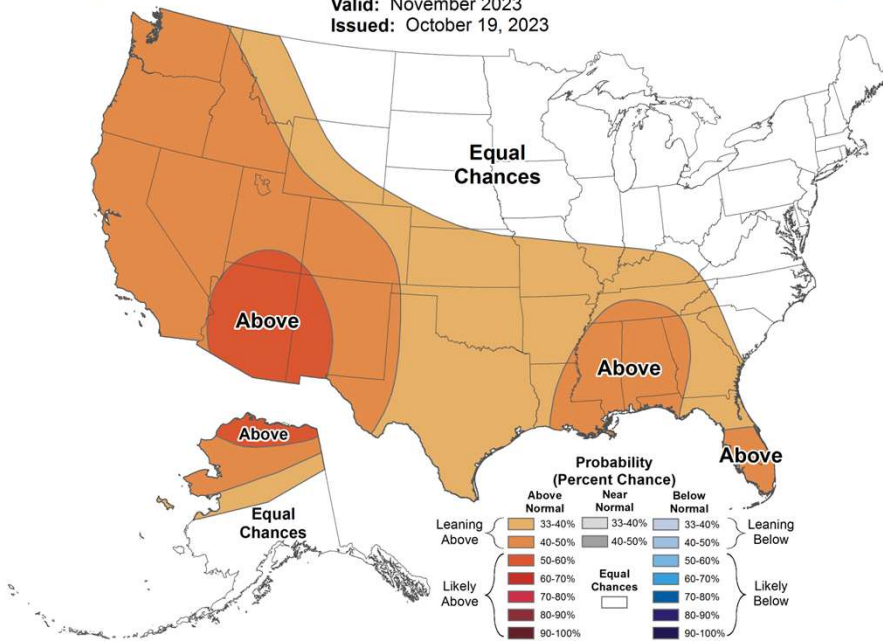
July to September 2023



Monthly Temperature Outlook



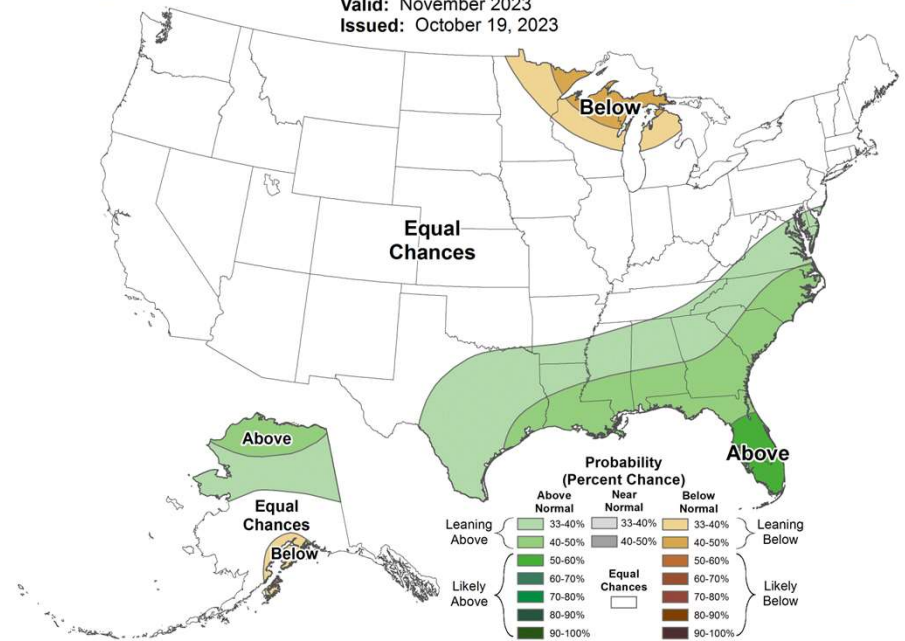
Valid: November 2023
Issued: October 19, 2023



Monthly Precipitation Outlook

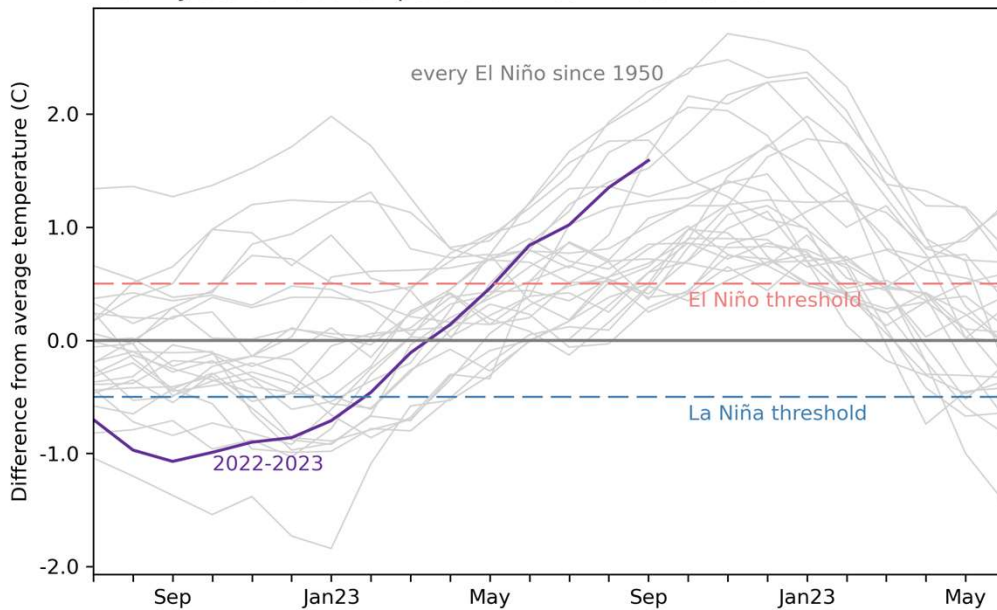


Valid: November 2023
Issued: October 19, 2023



El Nino statistically brings wetter winter in AZ

Monthly sea surface temperature Niño3.4 Index values

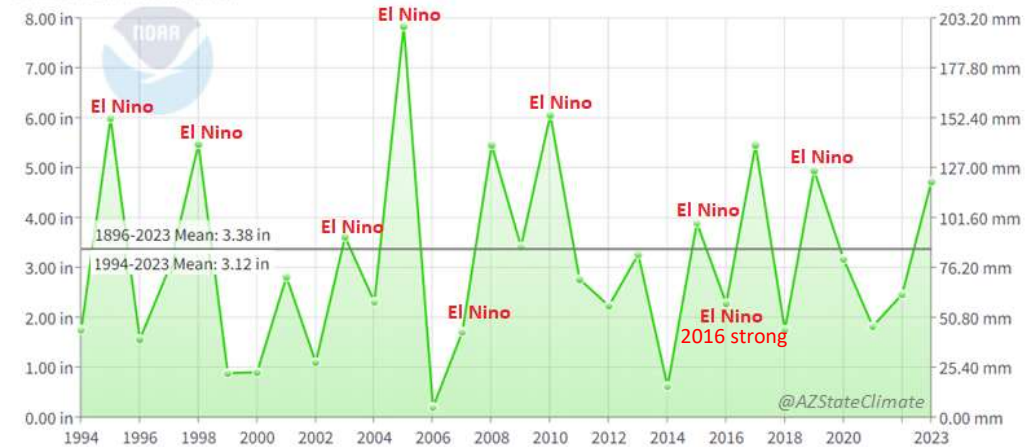


El Nino on track to continue into Spring 2024

Arizona Precipitation

December-February

El Nino data from cpc.ncep.noaa



7 out of 9 El Nino winters wet

Wettest Jan statewide (1993) was Neutral

Join us
November 16
webinar:
El Nino report!



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CW3E Welcomes Paul Iñiguez

August 2, 2023

Paul Iñiguez joined CW3E as a Forecast Verification Analyst on August 1, 2023. Paul brings a wealth of operational forecasting experience to the center, gained through over 20 years with the NOAA National Weather Service (NWS). Paul is a native Minnesotan and earned his BS in Meteorology from St. Cloud State University. The early years of his NWS career took Paul to Weather Forecast Offices (WFOs) in Little Rock, AR and Phoenix, AZ, where he also earned an MA in Geography from Arizona State University (thesis: urban/anthropogenic effects on precipitation patterns across the Phoenix metropolitan area). Paul joined WFO Hanford, CA as the Science & Operations Officer (SOO) in 2012, which provided him with extensive experience with California's unique climates (including the extreme drought of the early/mid 2010s). While there he managed the office's science integration and training programs and led the operational forecast unit. In 2015, Paul returned to WFO Phoenix as the SOO, also leading that office's science integration and training programs and being deeply involved in the day-to-day forecast operations. This included extreme precipitation events both from intense short duration rainfall from monsoonal thunderstorms and occasional deep, energetic winter storms with atmospheric rivers. Paul



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