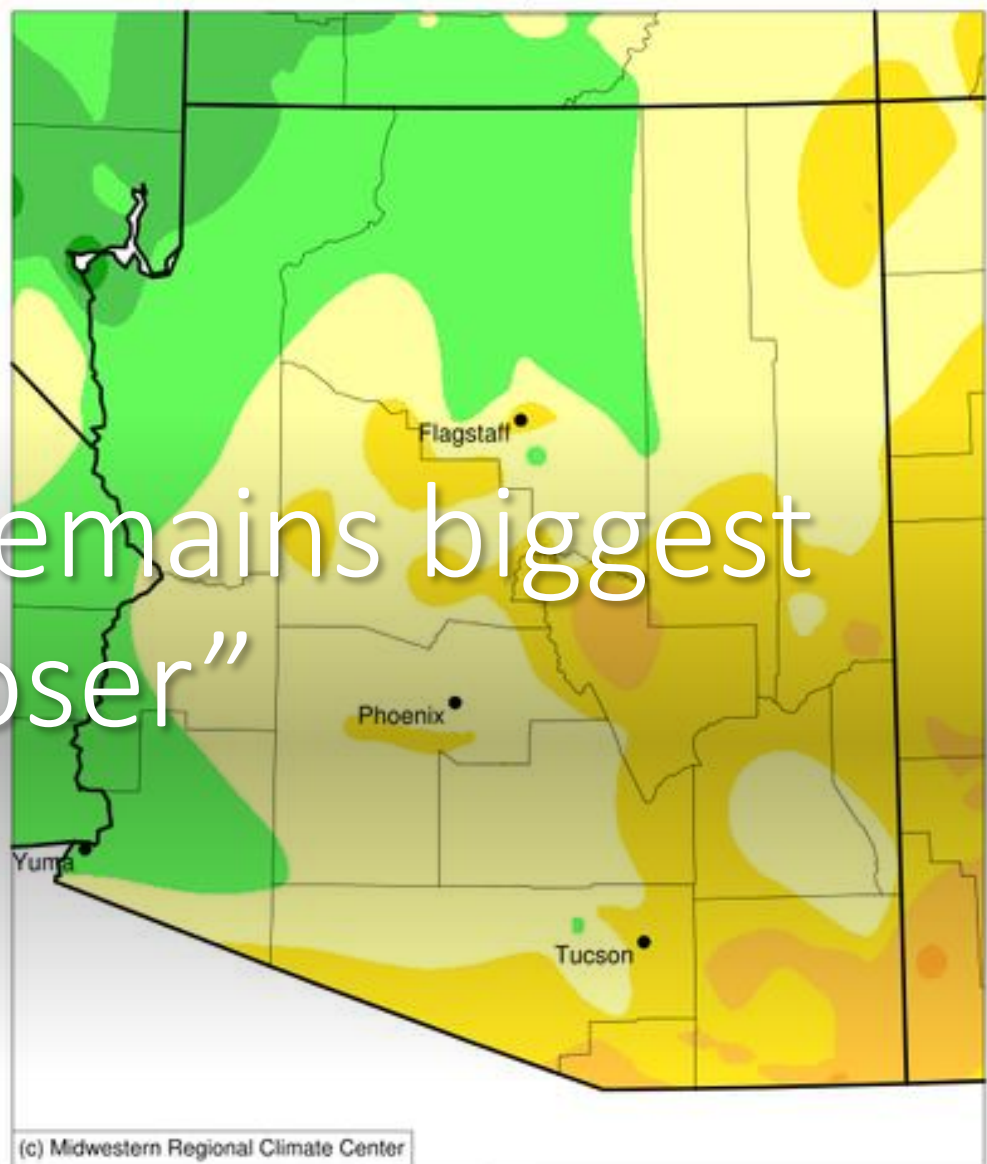
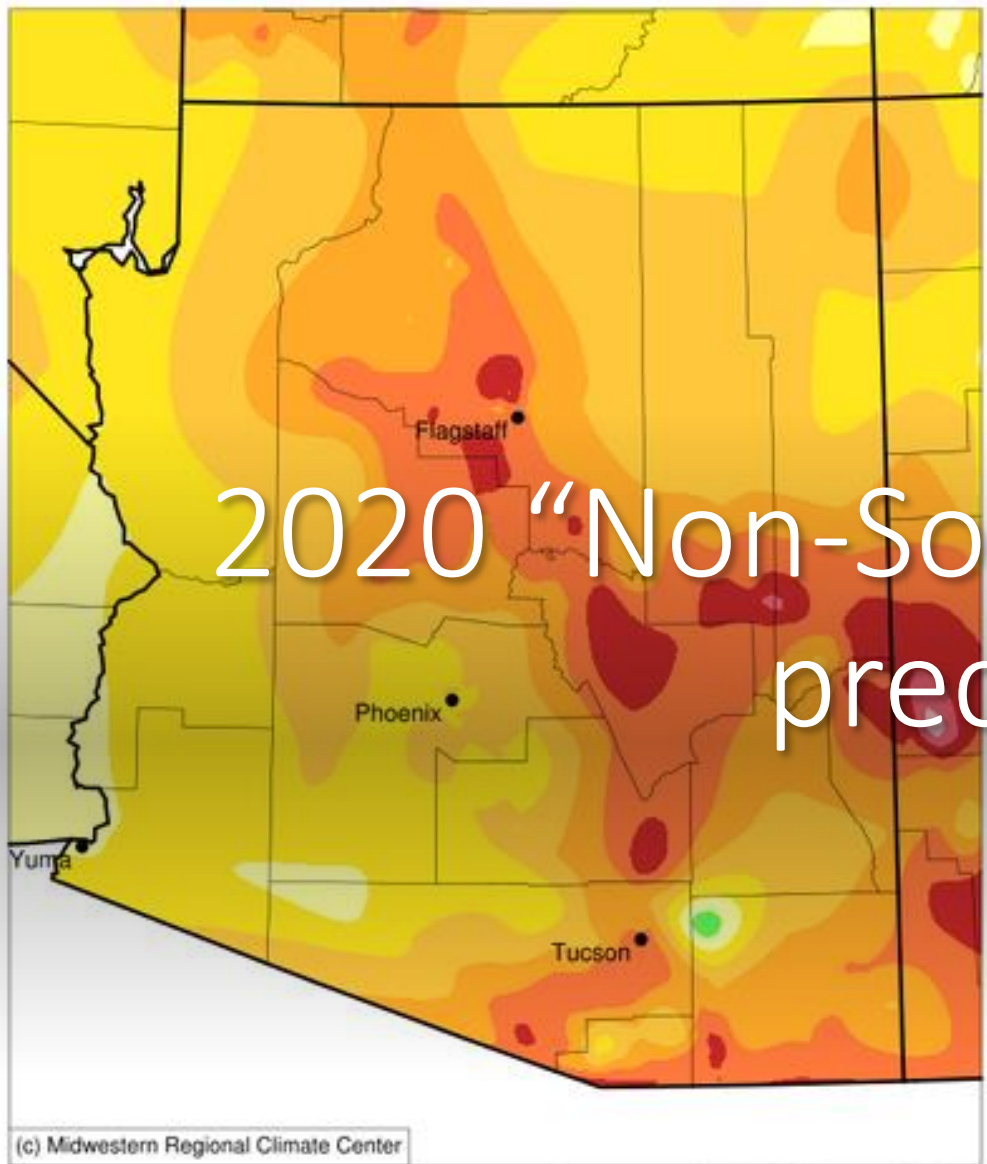


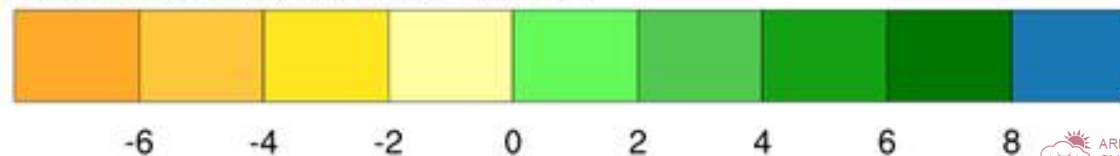
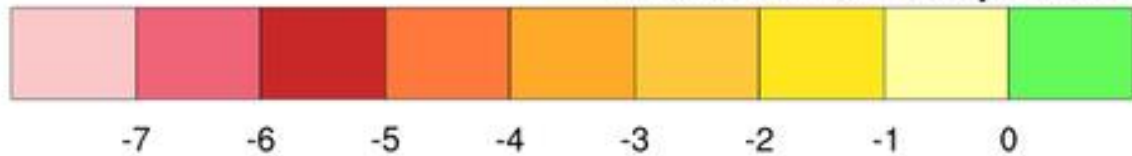
June 15, 2020 to September 19, 2020

June 15, 2023 to September 19, 2023



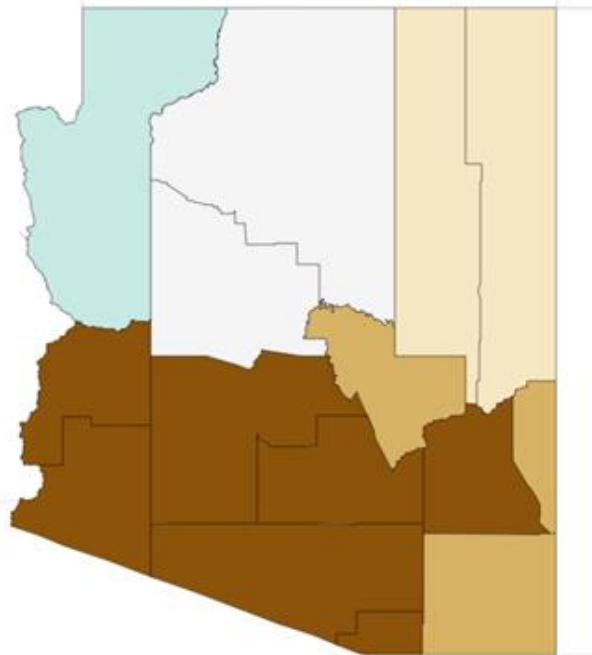
2020 “Non-Soon” remains biggest precip “loser”

Accumulated Precipitation (in): Departure from 1991-2020 Normals



# June had record dry conditions

June 2023



Driest ← 1% 1% Near Normal 1% 1% Wettest

July 2023



Driest ← 1% 1% Near Normal 1% 1% Wettest

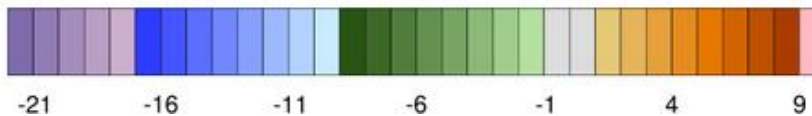
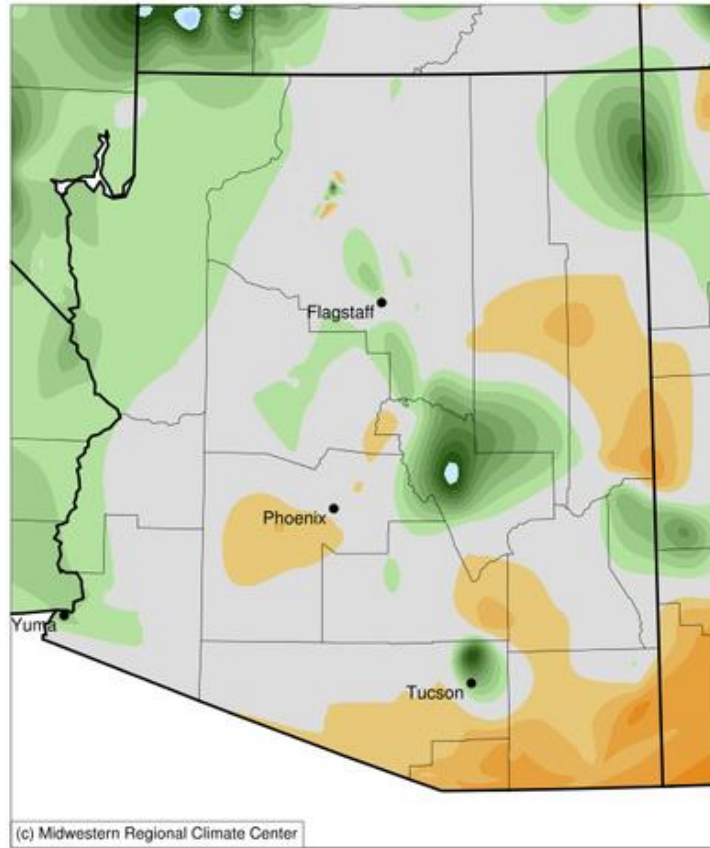
August 2023



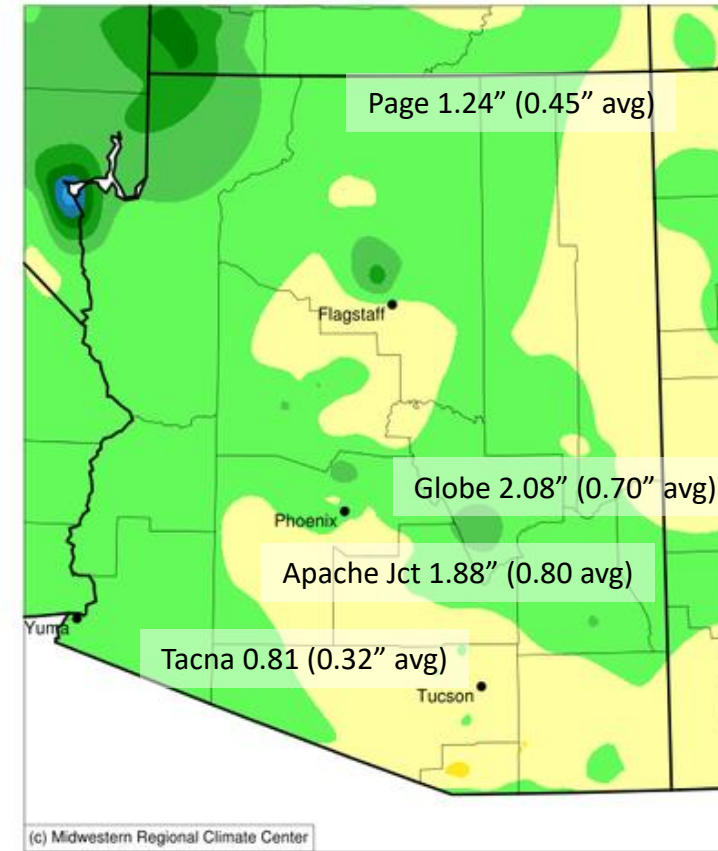
Driest ← 1% 1% Near Normal 1% 1% Wettest

# September seems “average” so far

Average Temperature (°F): Departure from 1991-2020 Normals  
September 01, 2023 to September 20, 2023

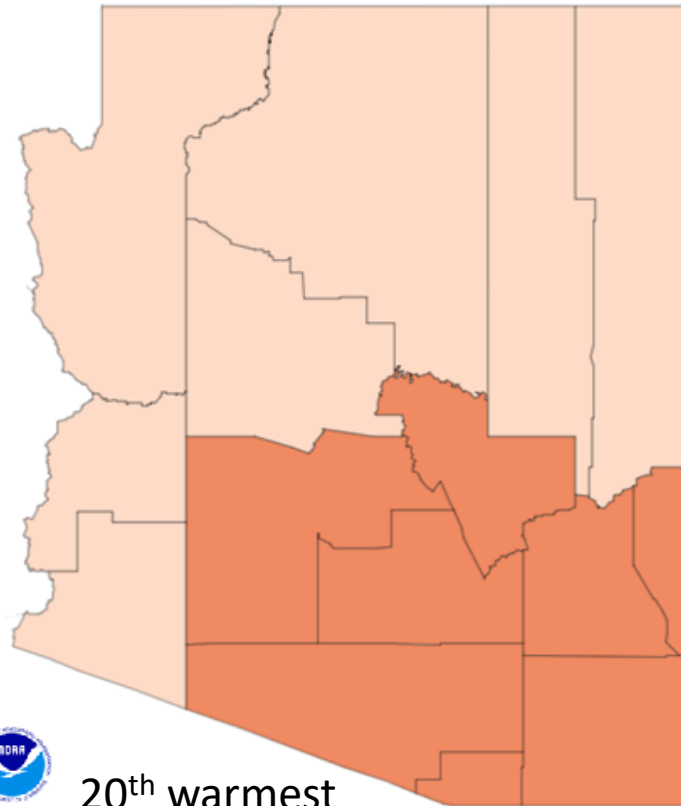


Accumulated Precipitation (in): Departure from 1991-2020 Normals  
September 01, 2023 to September 20, 2023



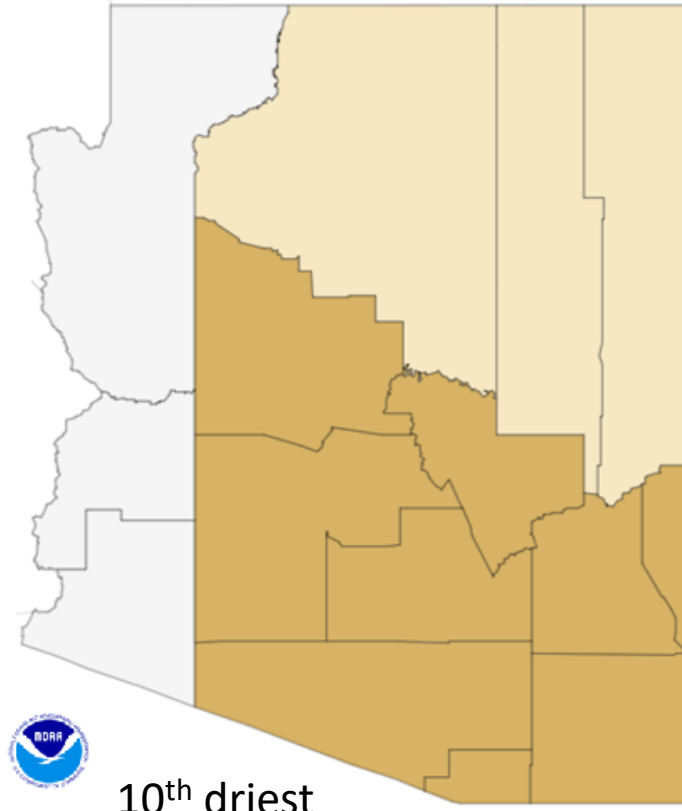
# Monsoon 2023 status: very hot and dry (through August)

Average statewide temperature 79.4°F  
June-August 2023



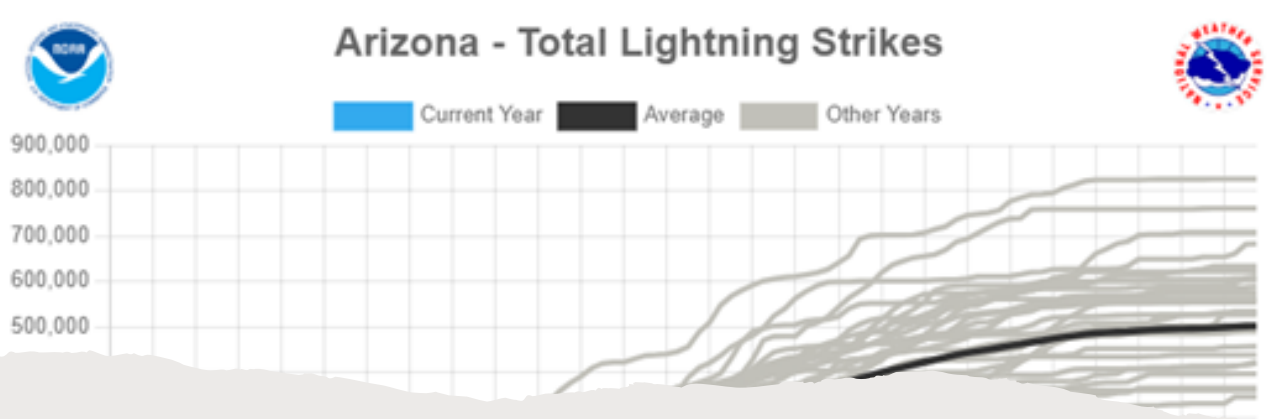
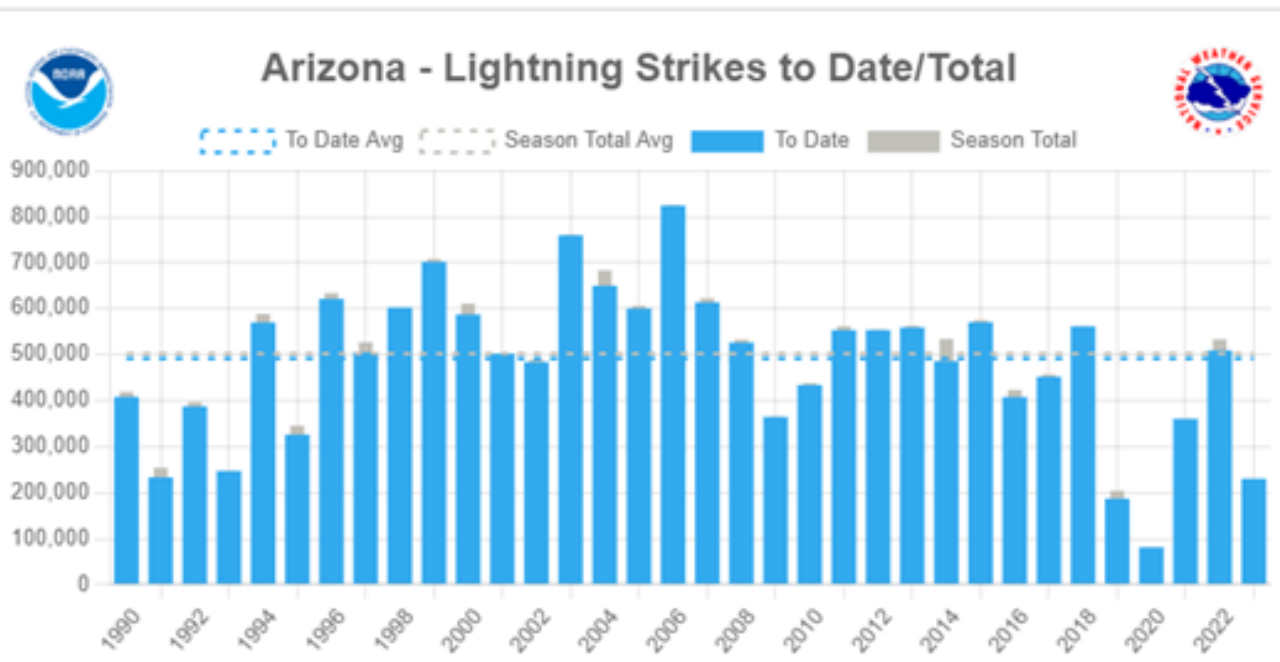
Coldest ◀ ↓ 1/10 ↓ 1/3 Near Normal ↑ 1/3 ↑ 1/10 ▶ Warmest

Average statewide precipitation 2.47"  
June-August 2023



Driest ◀ ↓ 1/10 ↓ 1/3 Near Normal ↑ 1/3 ↑ 1/10 ▶ Wettest



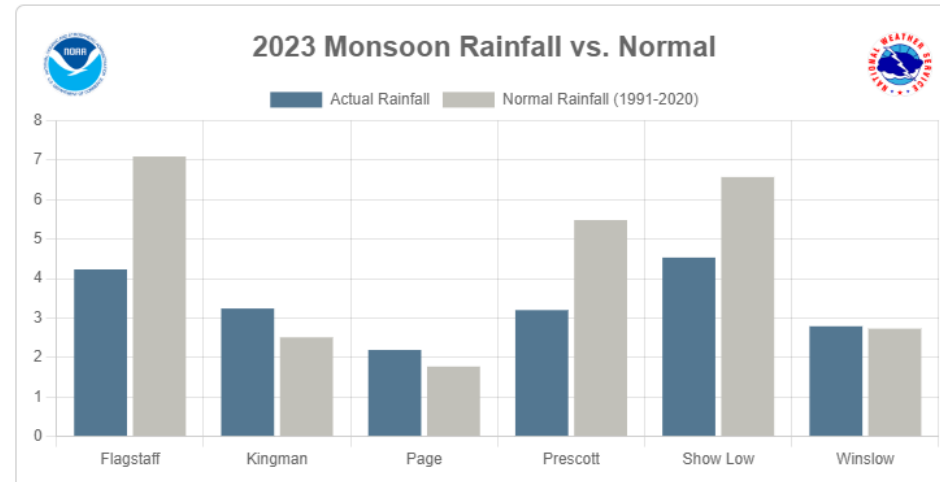
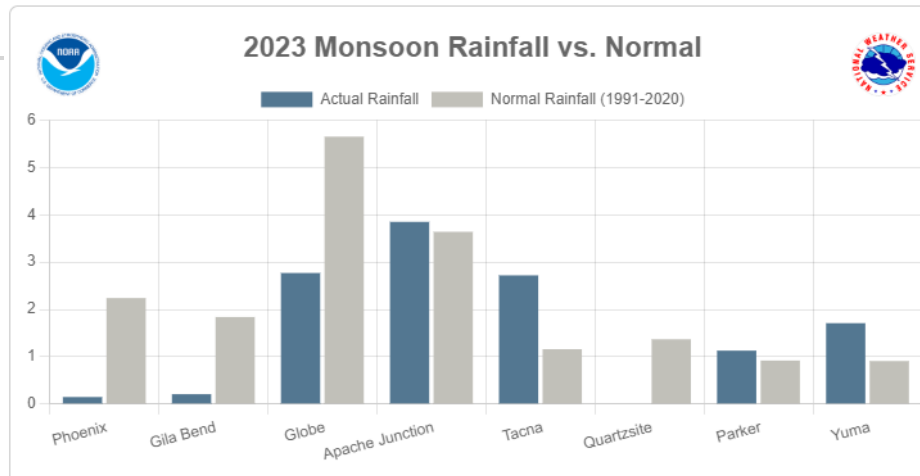
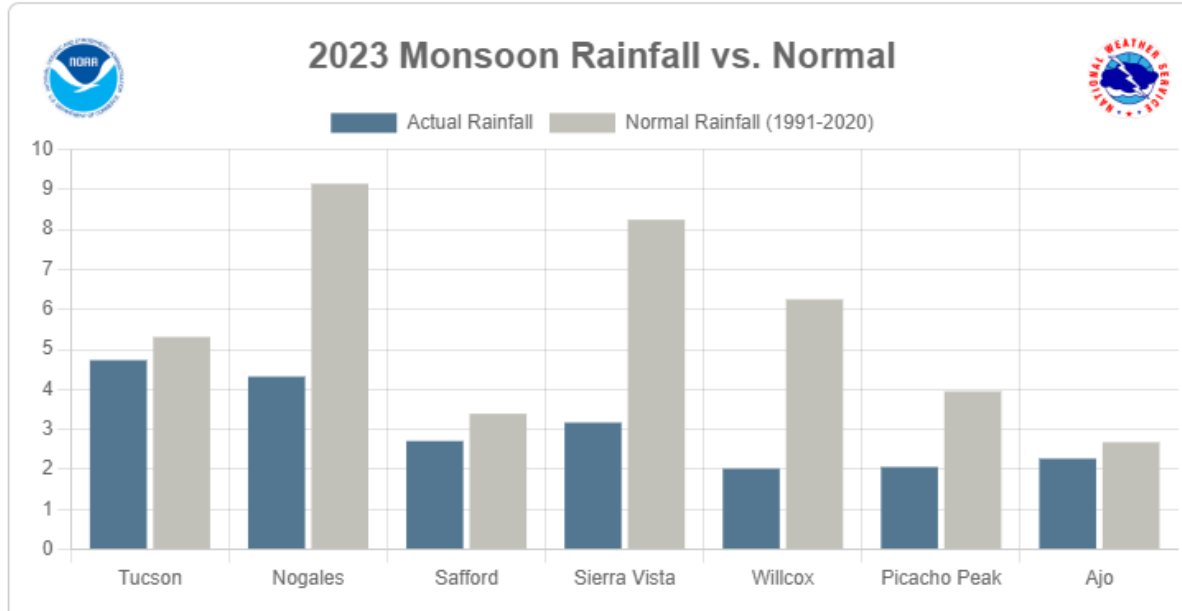


Below average thunderstorm activity 2023

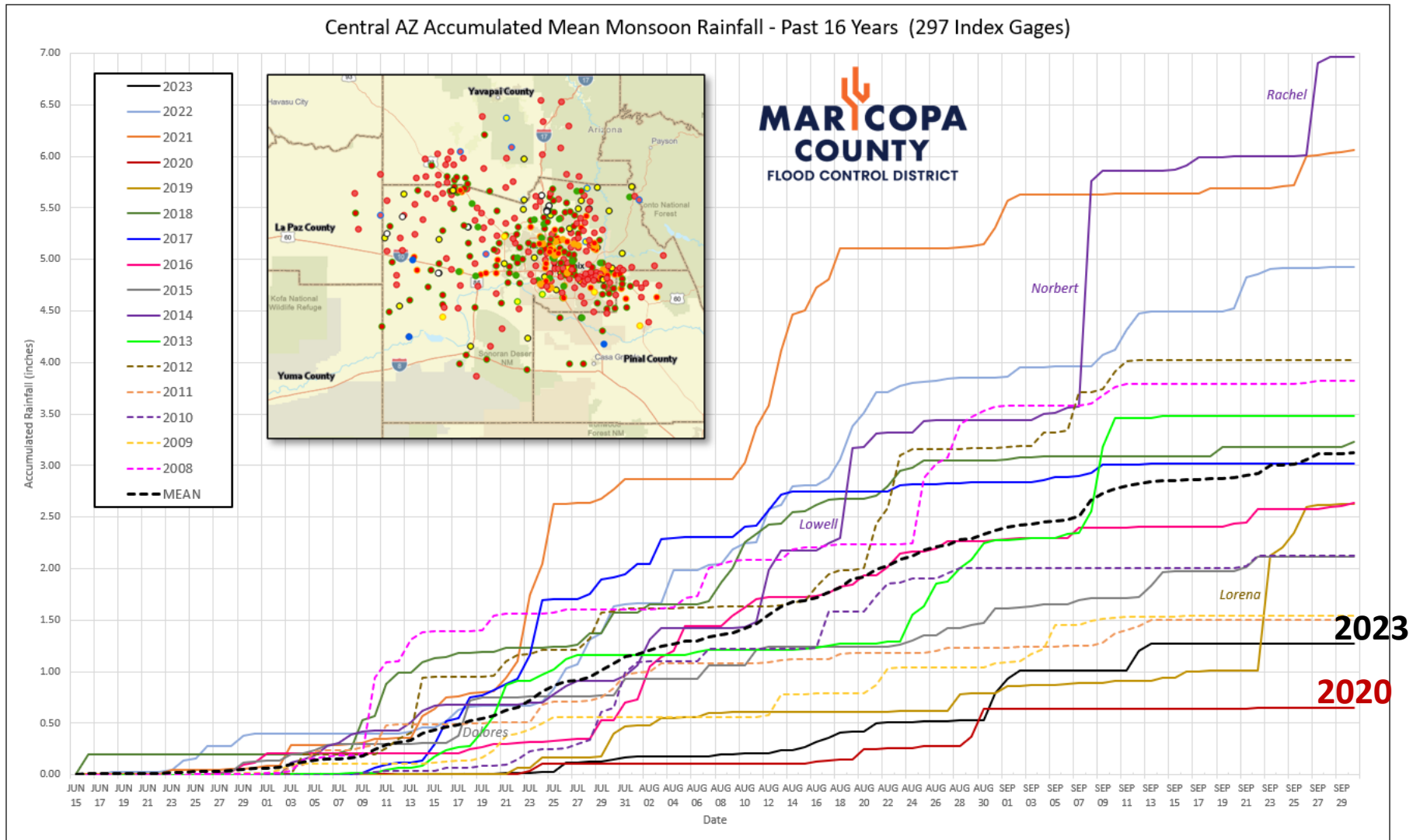
Coconino County #1

Pima County #2

Monsoon precip  
“winners”:  
Yuma, Mohave,  
Coconino  
counties

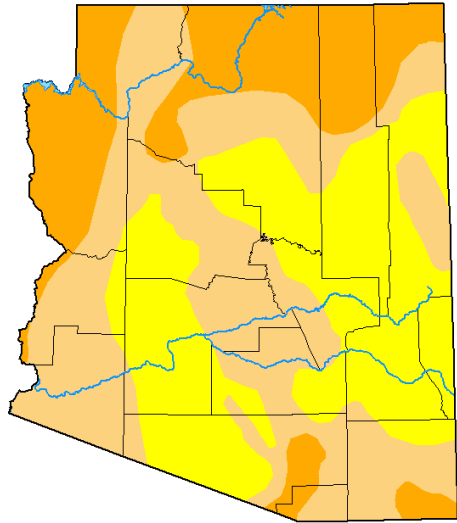


# Maricopa County 2<sup>nd</sup> driest (past 16 years)



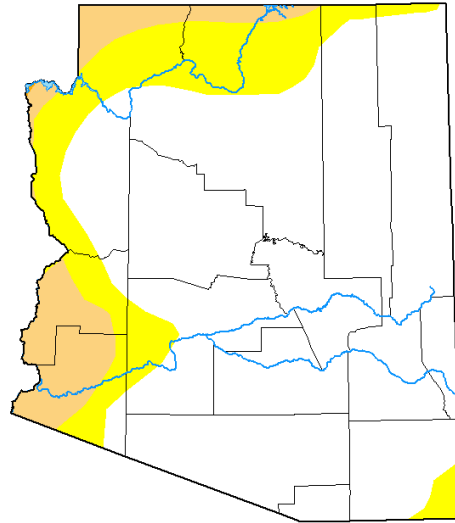
# Short-term drought expanding

U.S. Drought Monitor  
Arizona



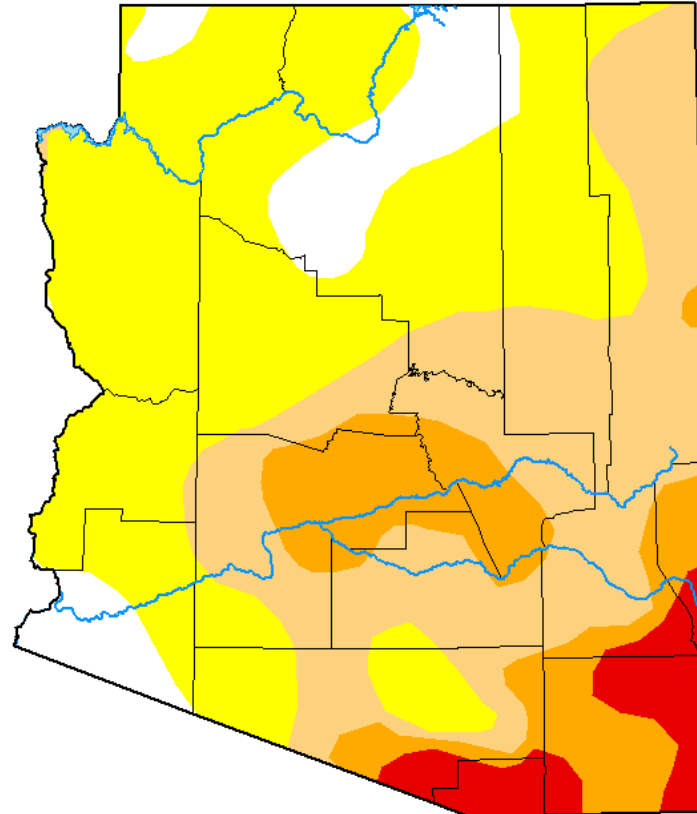
September 20, 2022

U.S. Drought Monitor  
Arizona



March 21, 2023

U.S. Drought Monitor  
Arizona



September 19, 2023  
(Released Thursday, Sep. 21, 2023)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	9.08	90.92	47.06	18.18	5.34	0.00
<b>Last Week</b> 09-12-2023	9.08	90.92	47.06	18.18	0.00	0.00
<b>3 Months Ago</b> 06-20-2023	83.41	16.59	1.46	0.00	0.00	0.00
<b>Start of Calendar Year</b> 01-03-2023	12.40	87.60	38.94	7.85	0.00	0.00
<b>Start of Water Year</b> 09-27-2022	0.00	100.00	56.72	18.47	0.00	0.00
<b>One Year Ago</b> 09-20-2022	0.00	100.00	63.81	23.00	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:

Richard Heim  
NCEI/NOAA



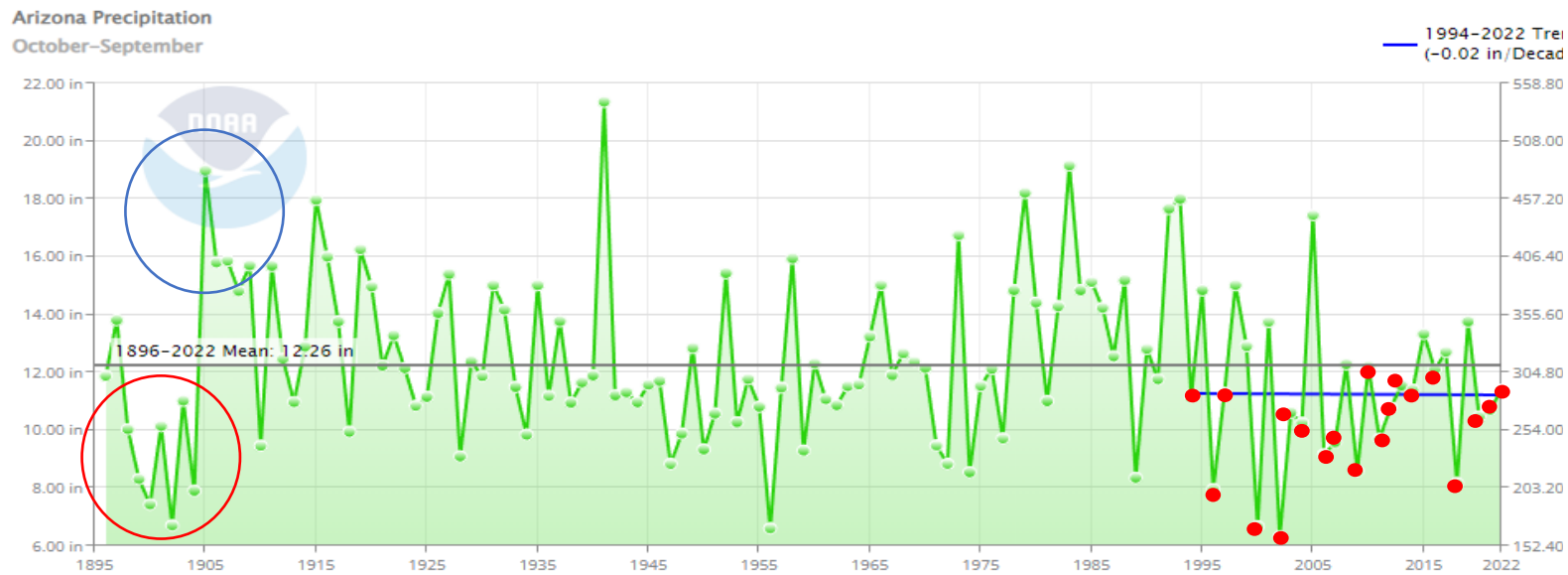
[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



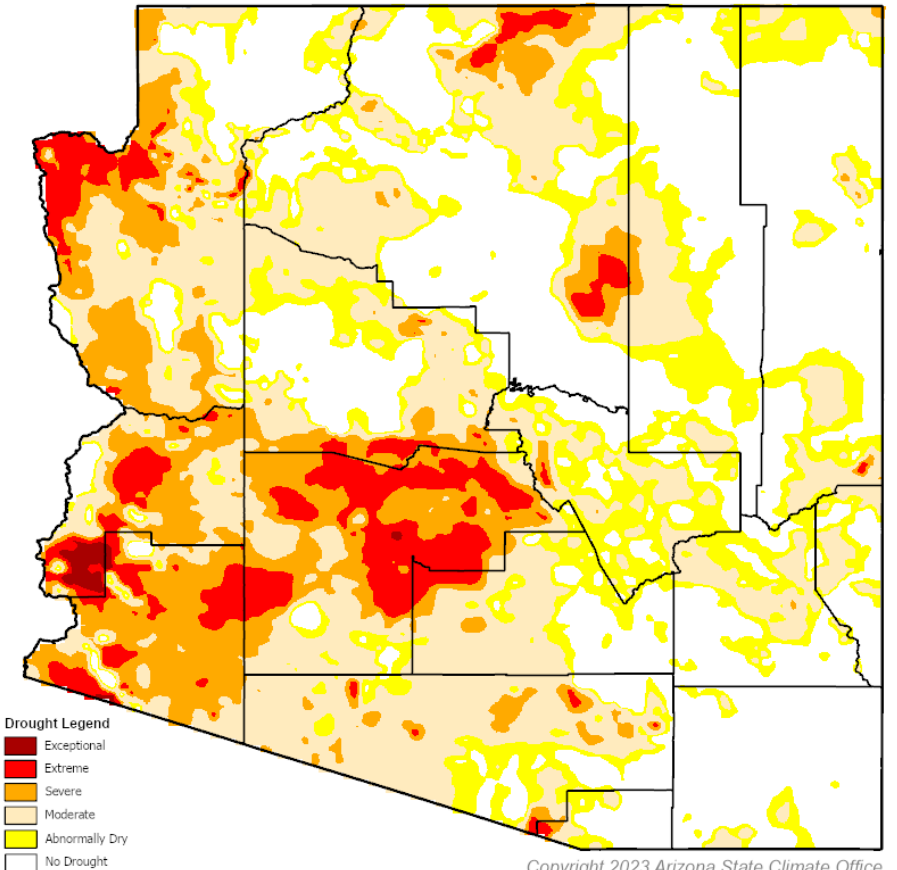
# Long-term drought persists

## Arizona Long-Term Drought

August 2023



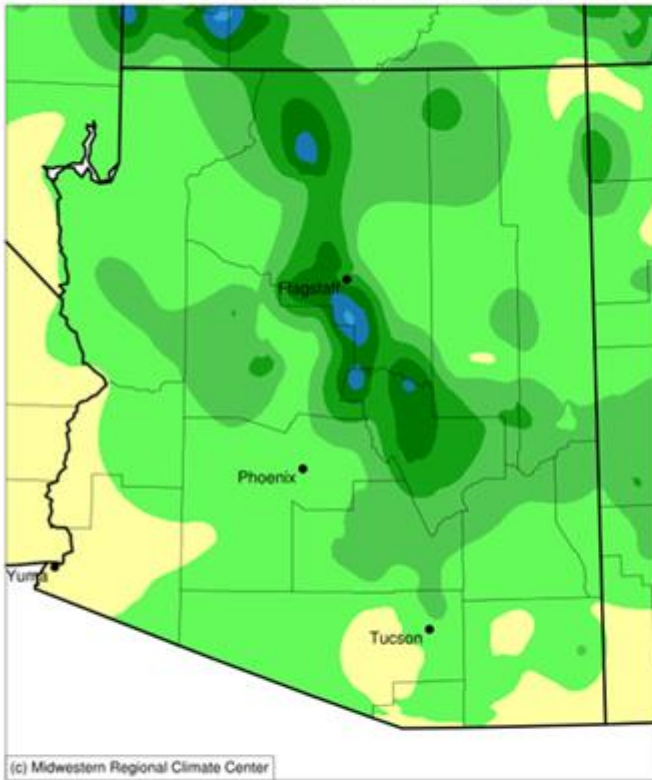
Long-term average 12.26"  
1994–2022 average 11.25"



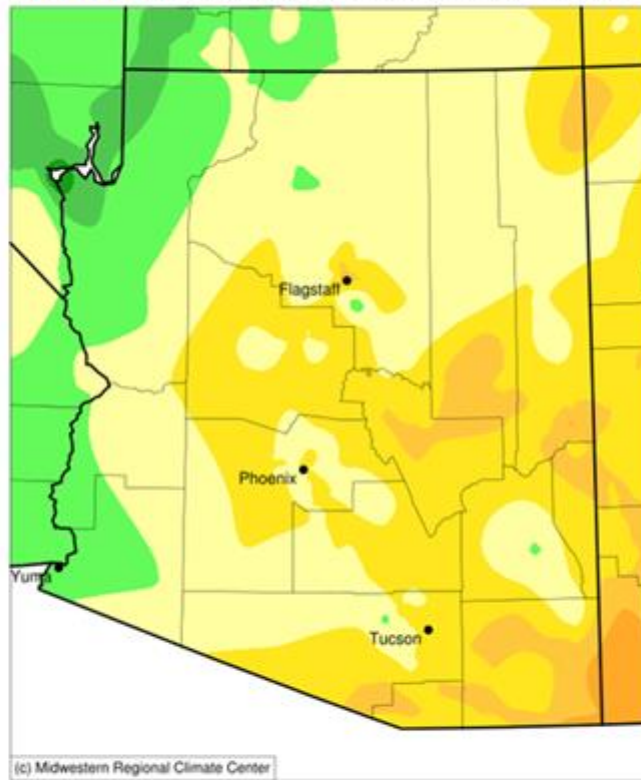
Copyright 2023 Arizona State Climate Office

# Water year may end “average”

Winter October 01, 2022 to March 31, 2023

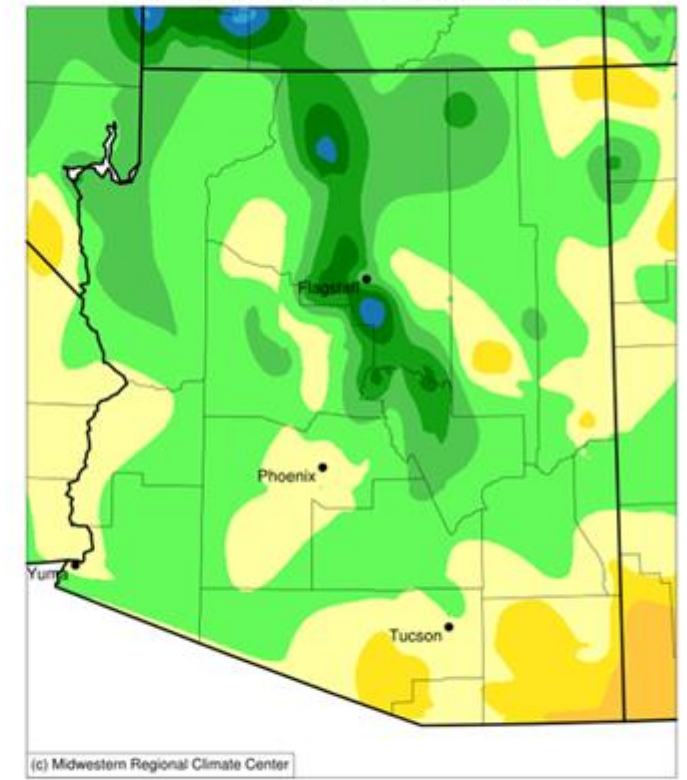


Summer April 01, 2023 to September 14, 2023

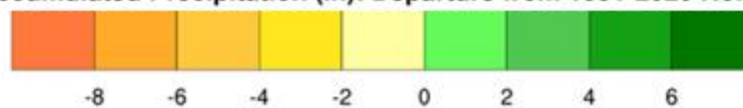
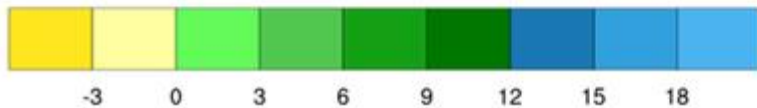


Water Year 2023 to date

October 1, 2022 to September 14, 2023



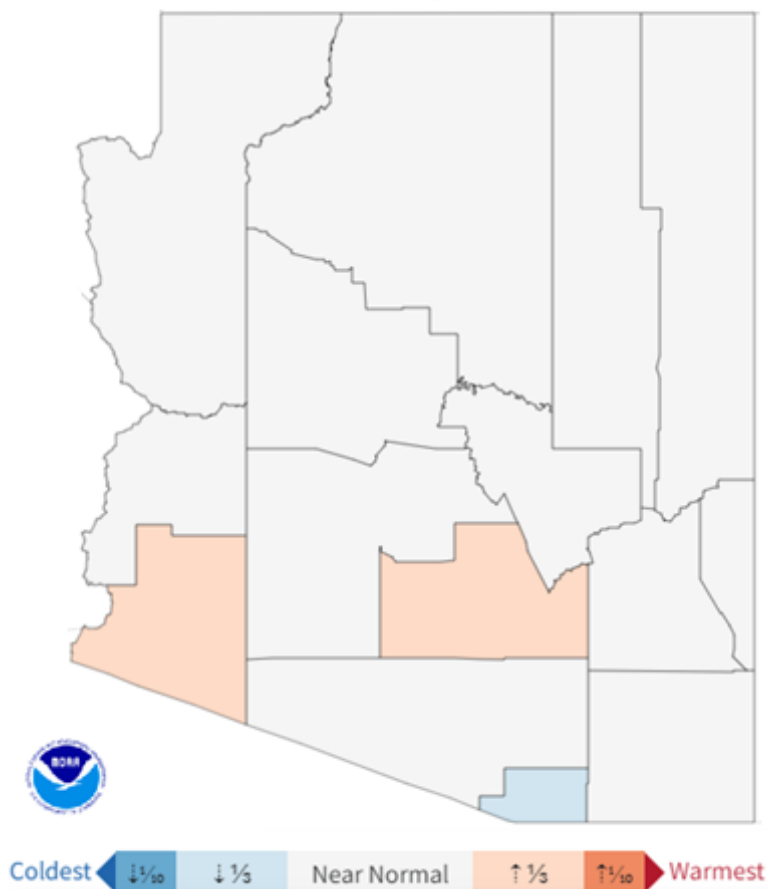
Accumulated Precipitation (in): Departure from 1991-2020 Normals



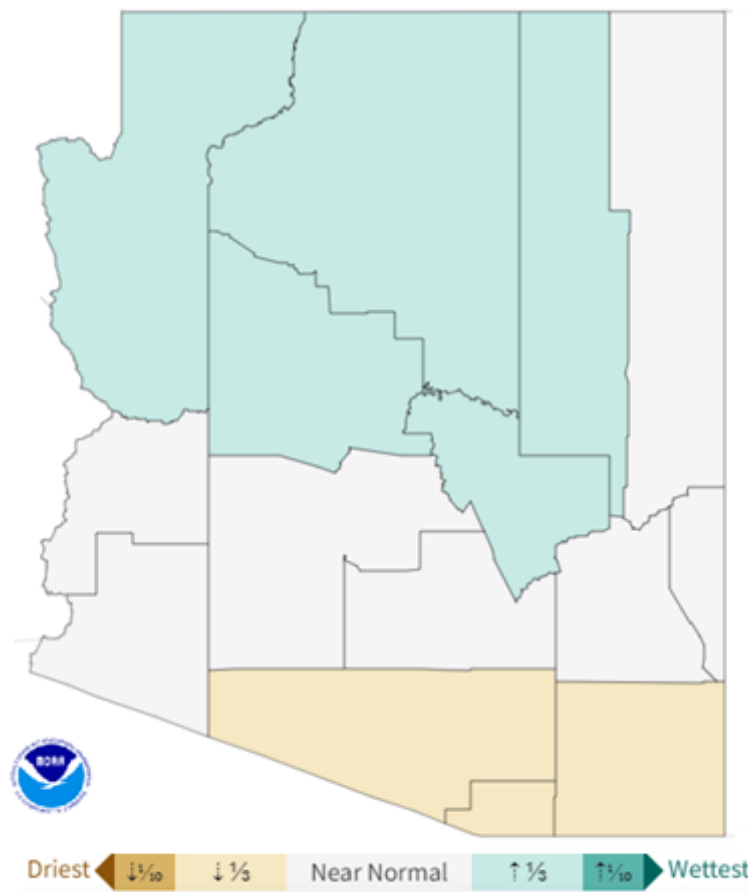
# Already beating the 1994-2022 “drought” avg!

October 2022-August 2023

58.4°F avg temp (+0.2F)



11.43" precip (+0.01")



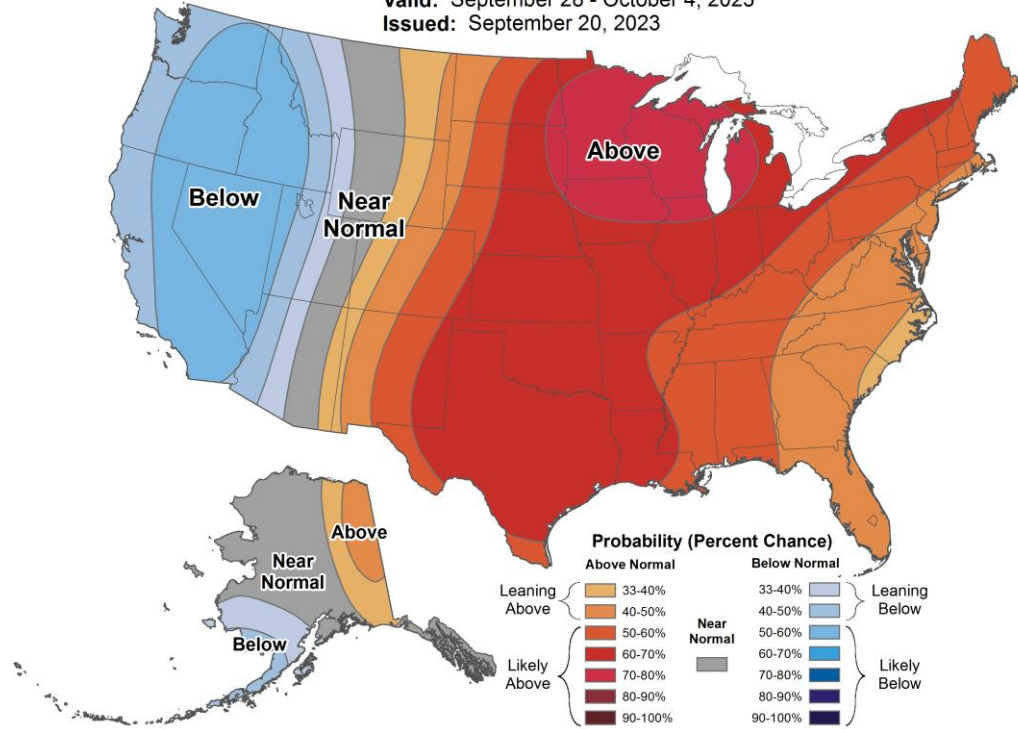
1.18" avg statewide Sept precip



# 8-14 Day Temperature Outlook



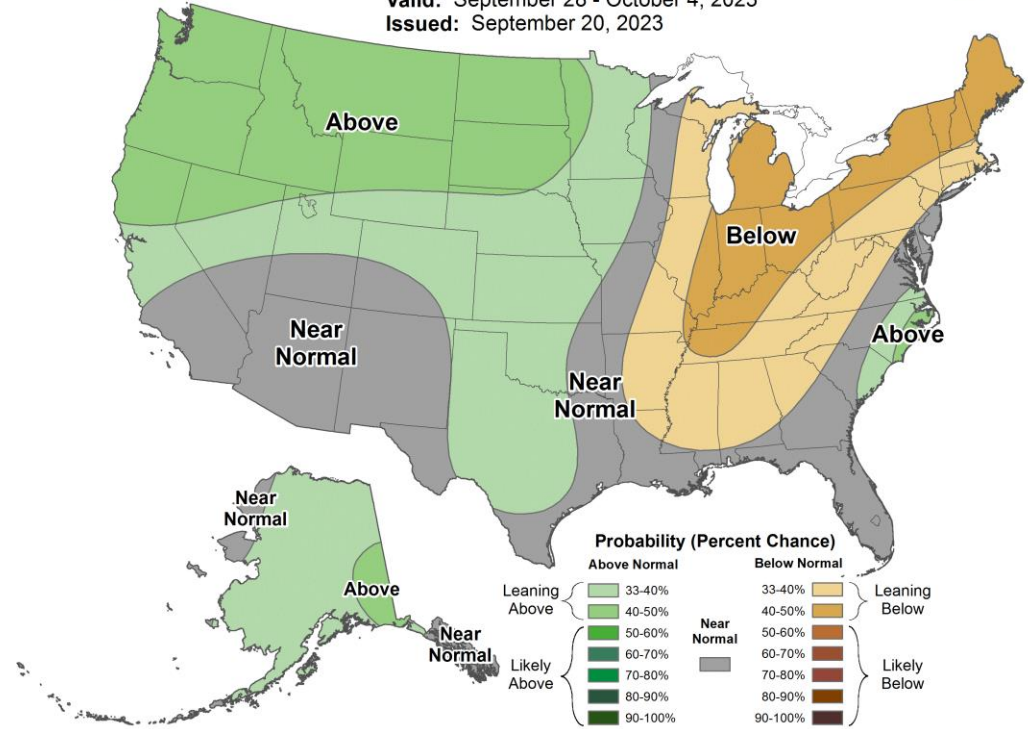
Valid: September 28 - October 4, 2023  
Issued: September 20, 2023



# 8-14 Day Precipitation Outlook



Valid: September 28 - October 4, 2023  
Issued: September 20, 2023



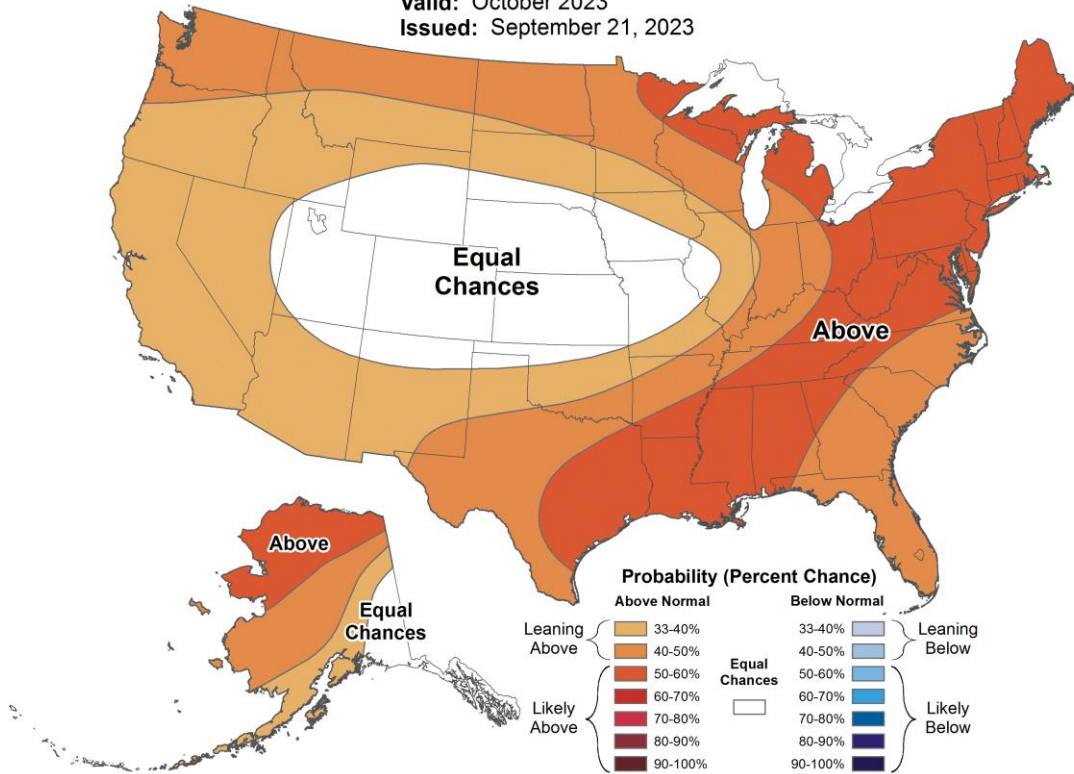




# Monthly Temperature Outlook



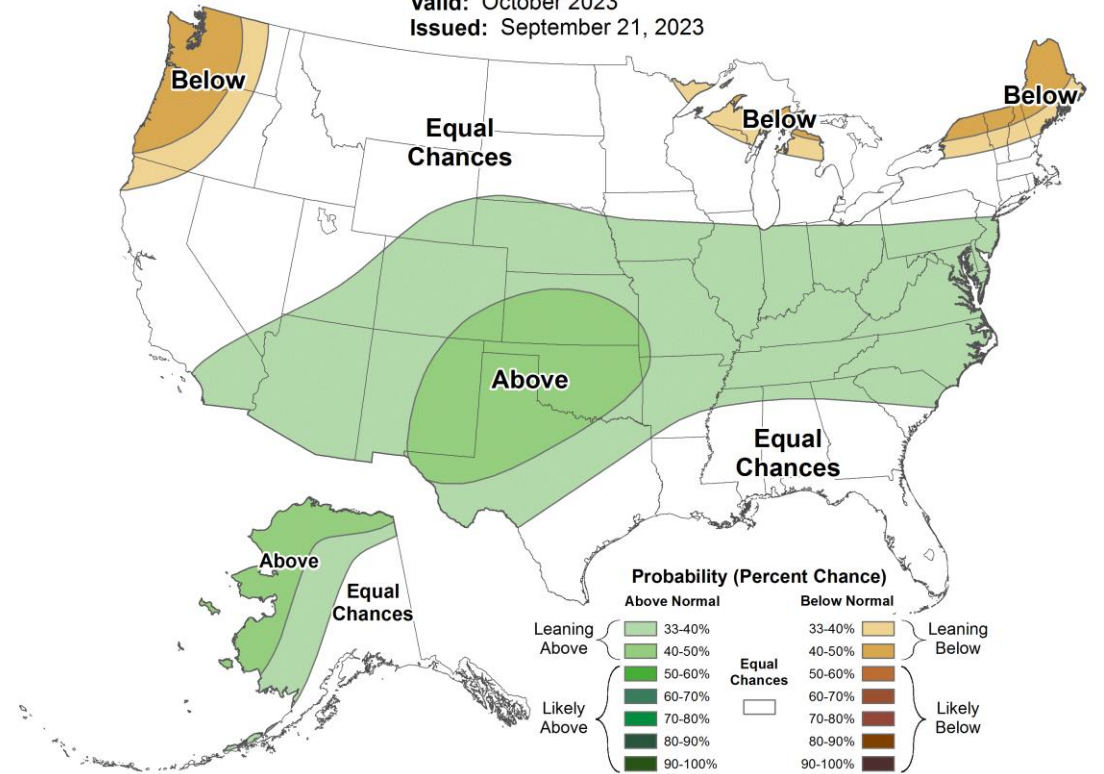
Valid: October 2023  
Issued: September 21, 2023



# Monthly Precipitation Outlook



Valid: October 2023  
Issued: September 21, 2023

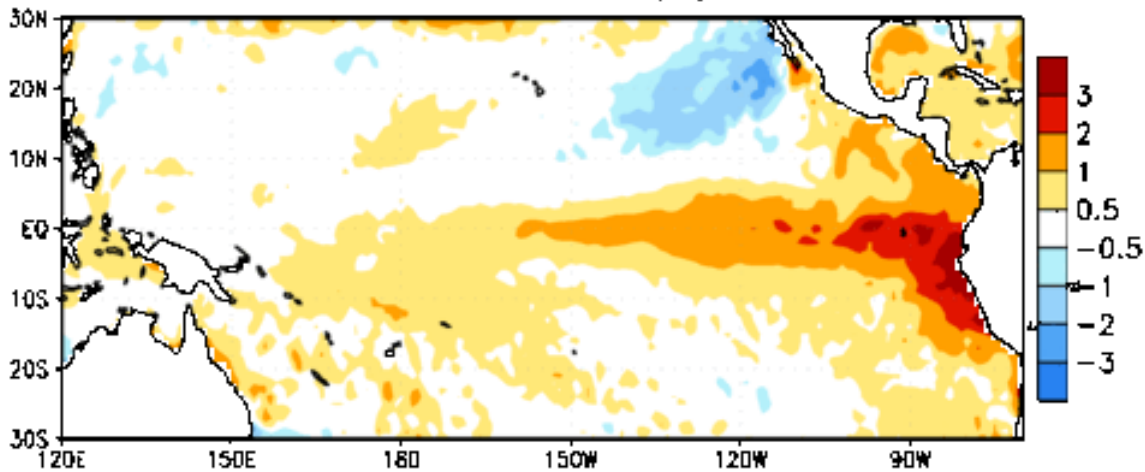


Possible tropical activity?



# El Nino statistically brings wetter winter in AZ

Week centered on 28 JUN 2023  
SST Anomalies (°C)

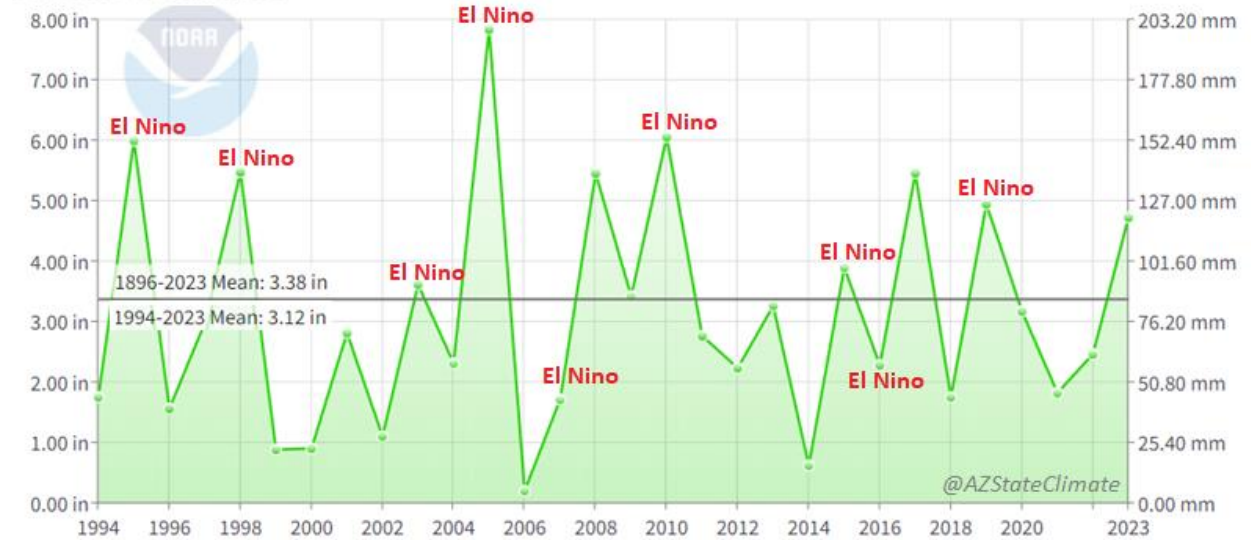


El Nino on track to persist through winter 2023-24

Arizona Precipitation

December-February

El Nino data from cpc.ncep.noaa



7 out of 9 El Nino winters wet