



June 2023

Monthly Hydrologic Report (E5)

NWS Austin/San Antonio, TX

Prepared by: Chris Morris

July 14, 2023

X An X inside this box indicates that no flooding occurred within this hydrologic service area.



Monthly Summary

Recap

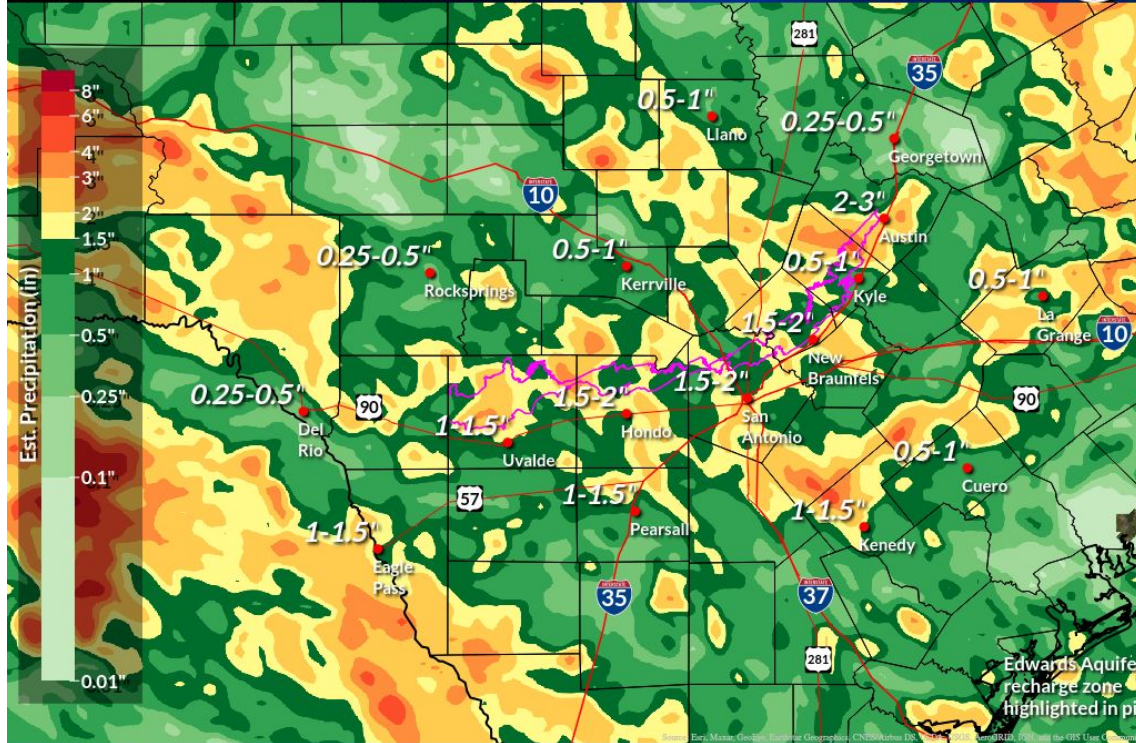
- The majority of the month's rainfall occurred over the course of the first 10 days of June.
- While there was isolated urban and rural flooding/flash flooding, river levels stayed below minor flood stage across the area given initial low streamflows.

10-Day Estimated Rainfall

Valid: 06/01/2023 07:00 AM - 06/11/2023 07:00 AM CDT

Weather Forecast Office
Austin/San Antonio, TX

Issued Jun 11, 2023 9:45 AM CDT



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weather.gov/ewx



National Oceanic and
Atmospheric Administration

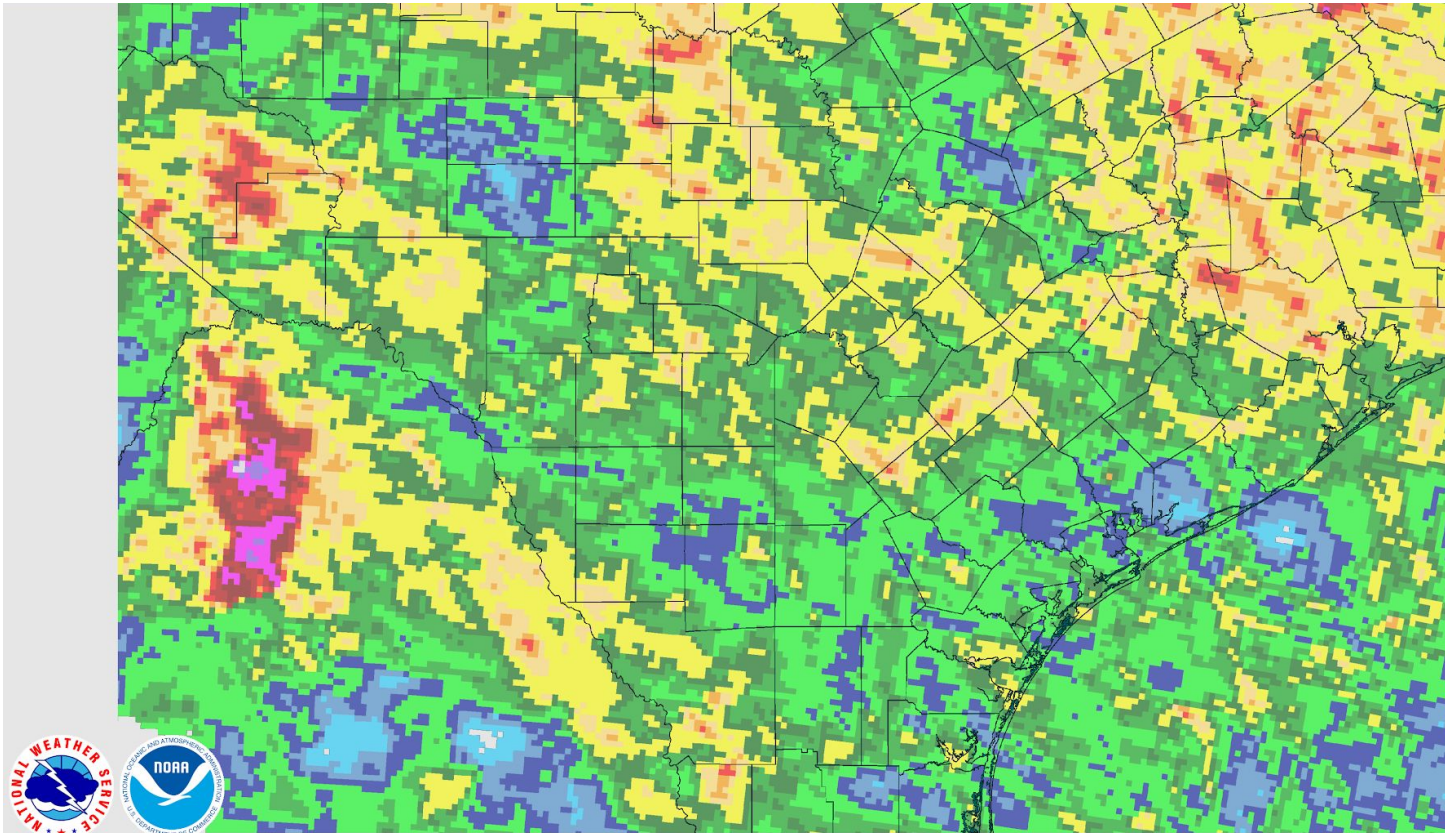
U.S. Department of Commerce

National Weather Service
Austin/San Antonio, TX



June 2023 Rainfall

Observed Rainfall (Inches)



National Oceanic and Atmospheric Administration

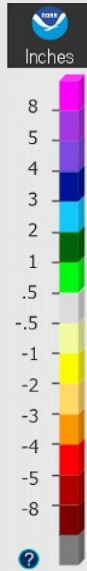
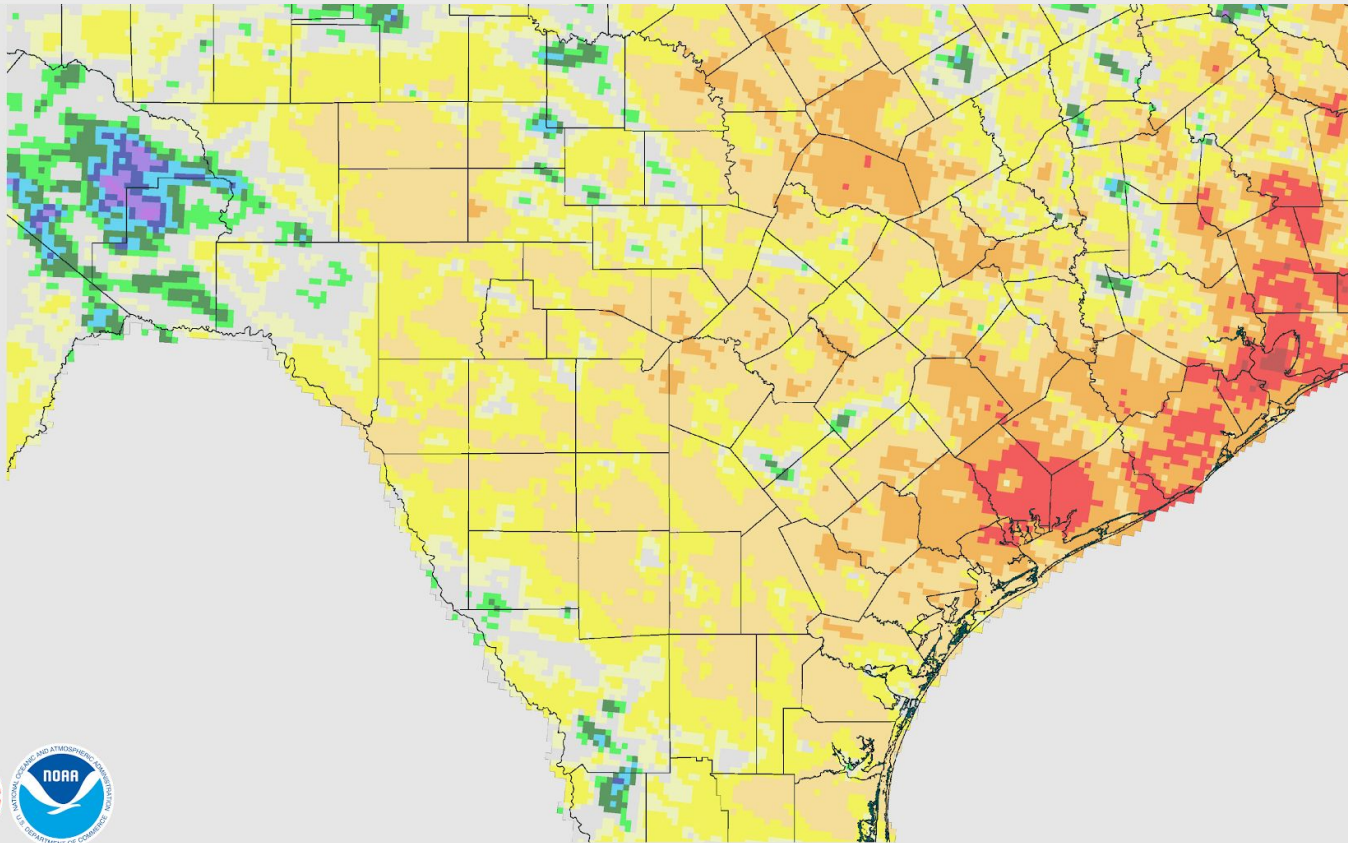
U.S. Department of Commerce

National Weather Service
Austin/San Antonio, TX



June 2023 Rainfall

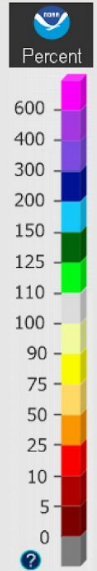
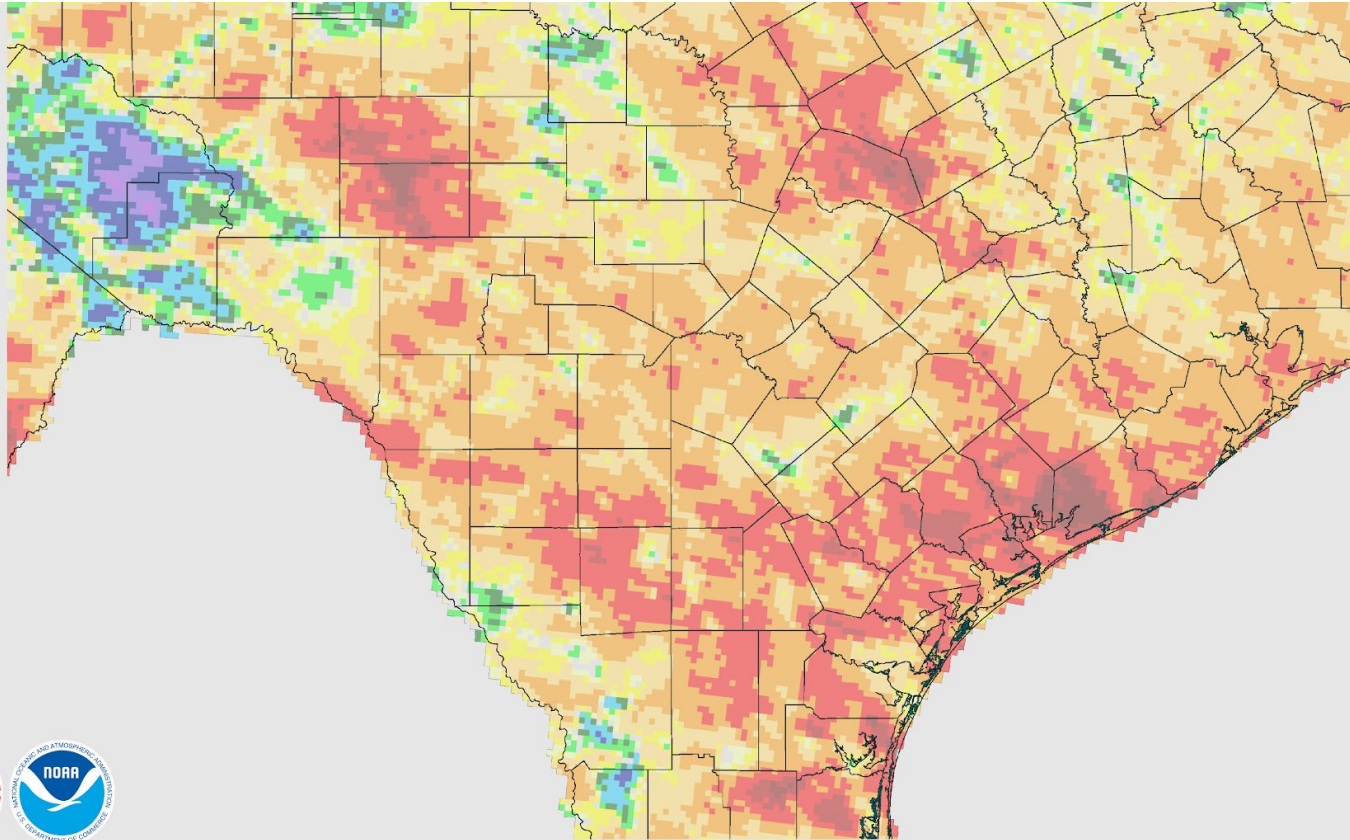
Departure from Normal Rainfall (Inches)





June 2023 Rainfall

Percent of Normal Rainfall (%)



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

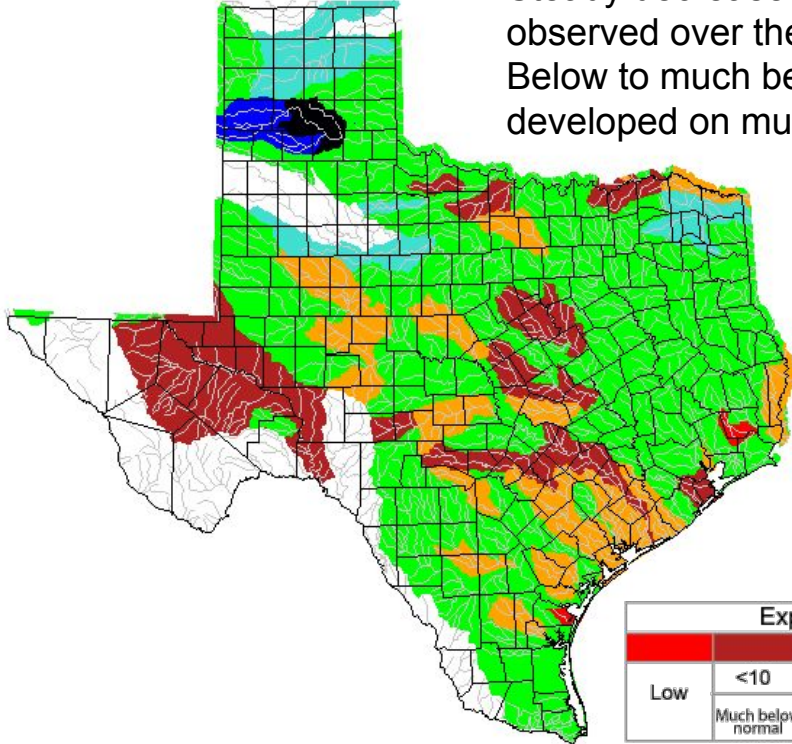
National Weather Service
Austin/San Antonio, TX



June 2023 - Historical Streamflow Comparison

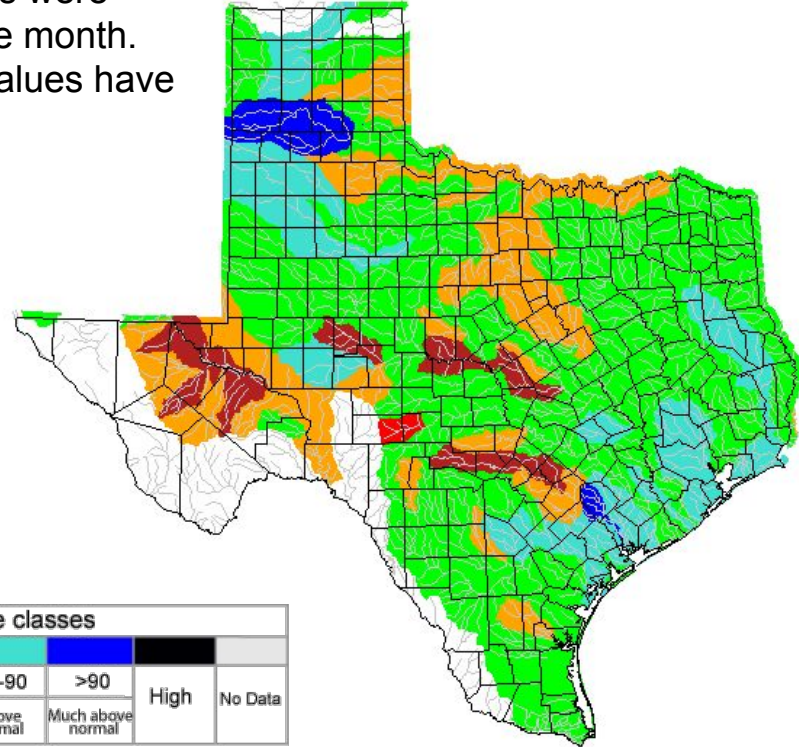
Streamflow Comparison

June 2023



Steady decrease in streamflows were observed over the course of the month. Below to much below normal values have developed on multiple rivers.

May 2023



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		





Climate Station Rainfall Data For the Month

Austin/San Antonio Area

	Monthly Rainfall	Monthly Average	2023 Rainfall Through Month	1991-2020 Normal Through Month	Percent of Normal
Austin – Bergstrom	2.22”	3.37”	15.68”	18.37”	85%
Austin – Mabry	1.16”	3.68”	13.80”	18.55”	74%
Del Rio	0.10”	2.32”	8.36”	9.30”	90%
San Antonio	1.18”	3.28”	13.02”	16.11”	81%

*The monthly averages and normal values are for the period 1991-2020





Climate Station Rainfall Data For the Month

Nearby Offices:

	Monthly Rainfall	Monthly Average	2023 Rainfall Through Month	1991-2020 Normal Through Month	Percent of Normal
College Station	1.87"	4.01"	20.82"	21.22"	98%
Corpus Christi	0.80"	3.56"	13.25"	13.94"	95%
Laredo	0.45"	2.50"	8.08"	10.06"	80%
San Angelo	1.67"	2.31"	8.09"	10.43"	78%
Victoria	1.52"	4.21"	18.85"	20.07"	94%
Waco	0.40"	3.35"	15.66"	19.67"	80%

*The monthly averages and normal values are for the period 1991-2020





Reservoir Data For the Month

Data from the TWDB Water Data For Texas Dashboard

Reservoir	Conservation Elevation (feet)	End of Month Elevation (feet)	Monthly Change (Feet)
Lake Buchanan	1020	1002.50	+1.38
Lake Travis	681	639.25	+2.05
Canyon Lake	909	896.96	+1.21
Medina Lake	1064.2	981.24	-0.72
Lake Amistad	1117	1068.70	+0.54





Hydrologic Products Issued for the Month

Product Issued	Number Issued	Additional Comments
River Flood Warning (FLW)	0	
River Flood Statement/Area Flood Advisory (FLS)	28	
Flash Flood Watch (FFA)	0	
Flash Flood Warning (FFW)	4	
Flash Flood Statement (FFS)	6	
Hydrologic Outlook (ESF)	6	AHPS probabilistic forecasts for the Brazos, Colorado, Guadalupe, San Antonio, Pecos, and Nueces Rivers



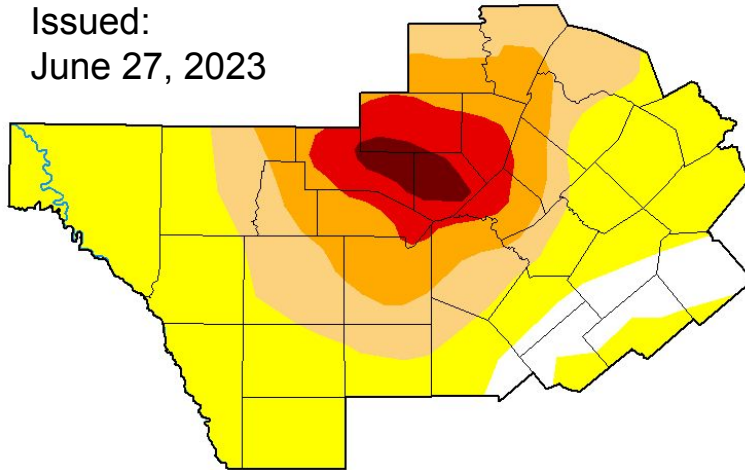
Drought Conditions

Monthly Drought Monitor Comparison

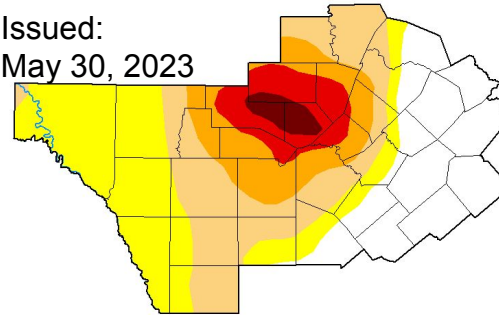
While May saw far reaching drought improvement in drought conditions for the Coastal Plains and portions of the the I-35 corridor, the lack of additional rainfall from the middle of the month onward has allowed for drought conditions to once again spread south-eastwards.

- D3/D4 drought encompasses 10% of the CWA
- Drought doesn't affect 56% of the CWA

Issued:
June 27, 2023



Issued:
May 30, 2023



June 27, 2023

(Released Thursday, Jun. 29, 2023)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	7.27	49.14	19.37	14.31	7.74	2.16
Last Week 06-20-2023	15.07	42.16	20.61	12.26	7.74	2.16
3 Months Ago 03-28-2023	0.00	0.96	16.92	41.83	21.98	18.32
Start of Calendar Year 01-03-2023	6.21	14.33	40.02	19.13	11.66	8.65
Start of Water Year 09-27-2022	1.55	13.06	33.69	29.92	16.79	4.98
One Year Ago 06-28-2022	0.00	0.00	10.96	15.48	37.68	35.88

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>





One Month Outlook

Looking at the Monthly Outlook for July

- The Precipitation Outlook shows equal chances for at, below, or near normal rainfall for the month of July across the area.
- The Temperature Outlook strongly leans towards above normal temperatures for the month.

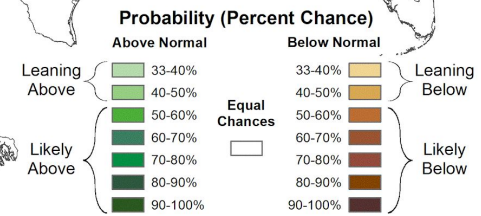
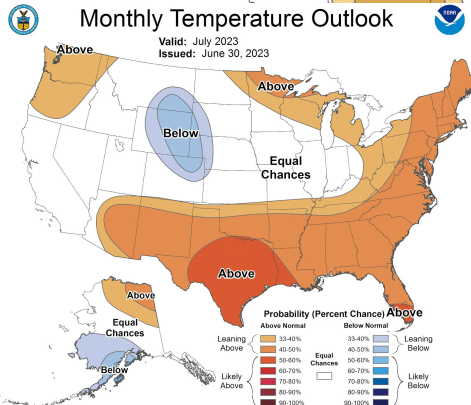
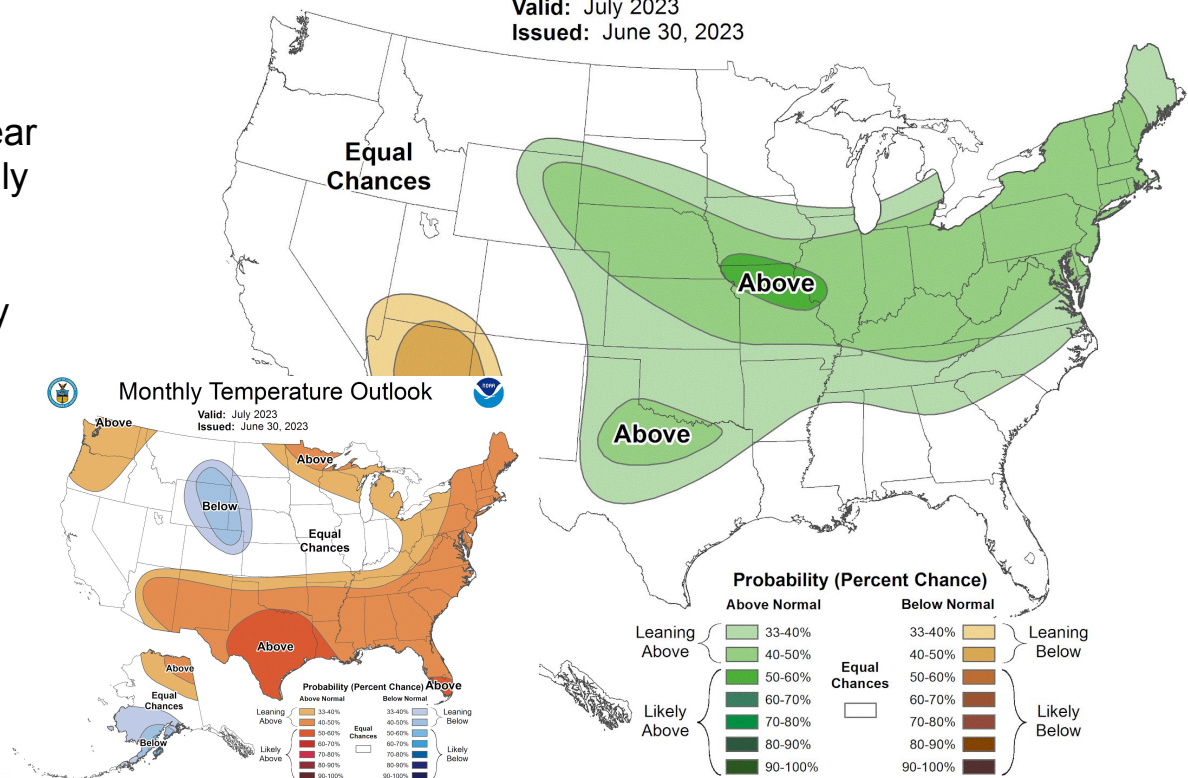
[Click for latest graphics](#)



Monthly Precipitation Outlook



Valid: July 2023
Issued: June 30, 2023





Three Month Outlook

Looking at the Seasonal Outlooks

- The Precipitation Outlook continues to show equal chances for above, below, normal amounts.
- The Temperature Outlook continues to show above normal for the entire area into the Fall.

[Click for latest graphics](#)

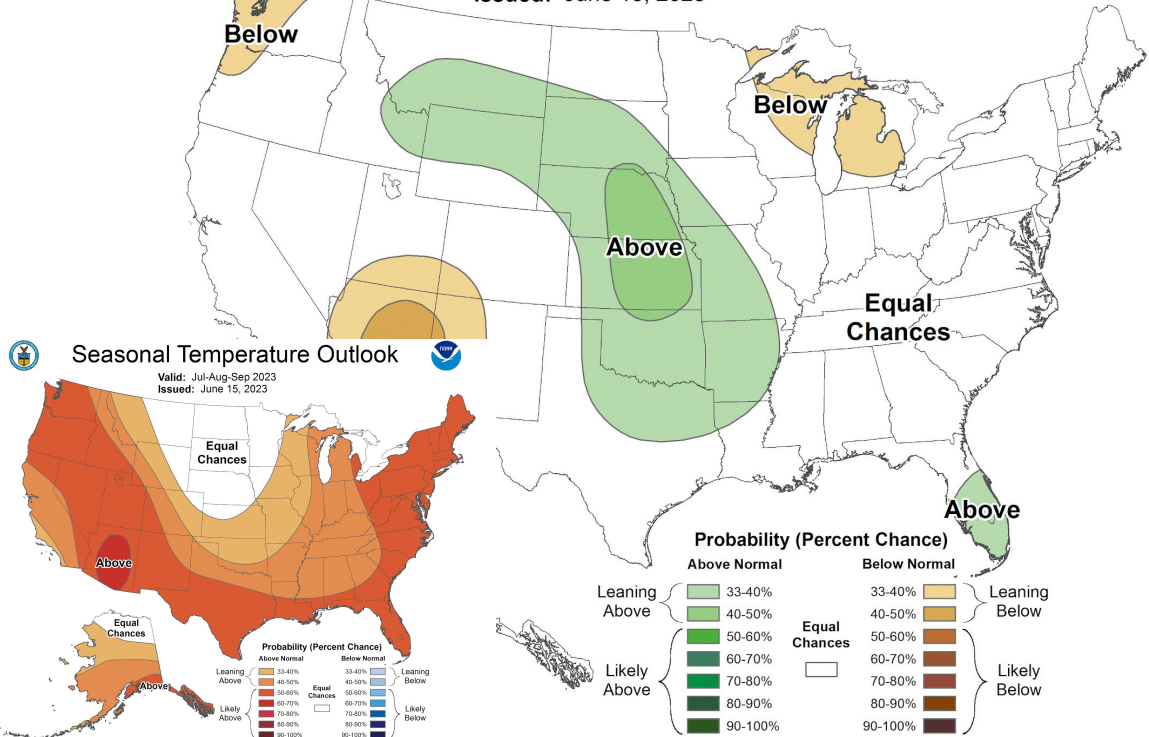


Seasonal Precipitation Outlook



Valid: Jul-Aug-Sep 2023

Issued: June 15, 2023





For additional rainfall, stream, soil moisture, or drought information please refer to the links provided below.

Daily, Monthly and Yearly summaries of precipitation and departure from normal are available from the West Gulf River Forecast Center at: <http://www.weather.gov/wgrfc/>

Or from the Precipitation Analysis page at: <http://water.weather.gov/precip/>

Streamflow conditions are available from the United States Geological survey at:
<http://waterdata.usgs.gov/tx/nwis/rt>

Soil moisture conditions are available from the Climate Prediction Center at:
http://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml

National Integrated Drought Information System: <http://www.drought.gov/>