



April 2024

Monthly Hydrologic and Flood

Stage Report (E5/E3)

NWS Austin/San Antonio, TX

Prepared by: Chris Morris

May 8, 2024

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



Monthly Summary

Key Messages

- April saw a series of disturbances which brought rainfall, heavy at times, to portions of the service area.
- The rainfall was focused primarily to the eastern parts of the Hill Country, I-35 corridor and Coastal Plains.
 - The exception to this was a portion of the Winter Garden which saw above normal rainfall which occurred on the 9th and 10th.
- While the heavy rainfall did bring urbanized flooding, no river flooding occurred
- Improvement in streamflows was fairly limited with only portions of the Colorado and San Gabriel Basins while the remainder of the basins remained in the below to much below normal for the month of April
- Drought conditions worsened across much of the area with a notable reduction in areas considered not in drought.
- Monthly and Seasonal Precipitation Outlooks show equal chances for above, below, and near normal chances





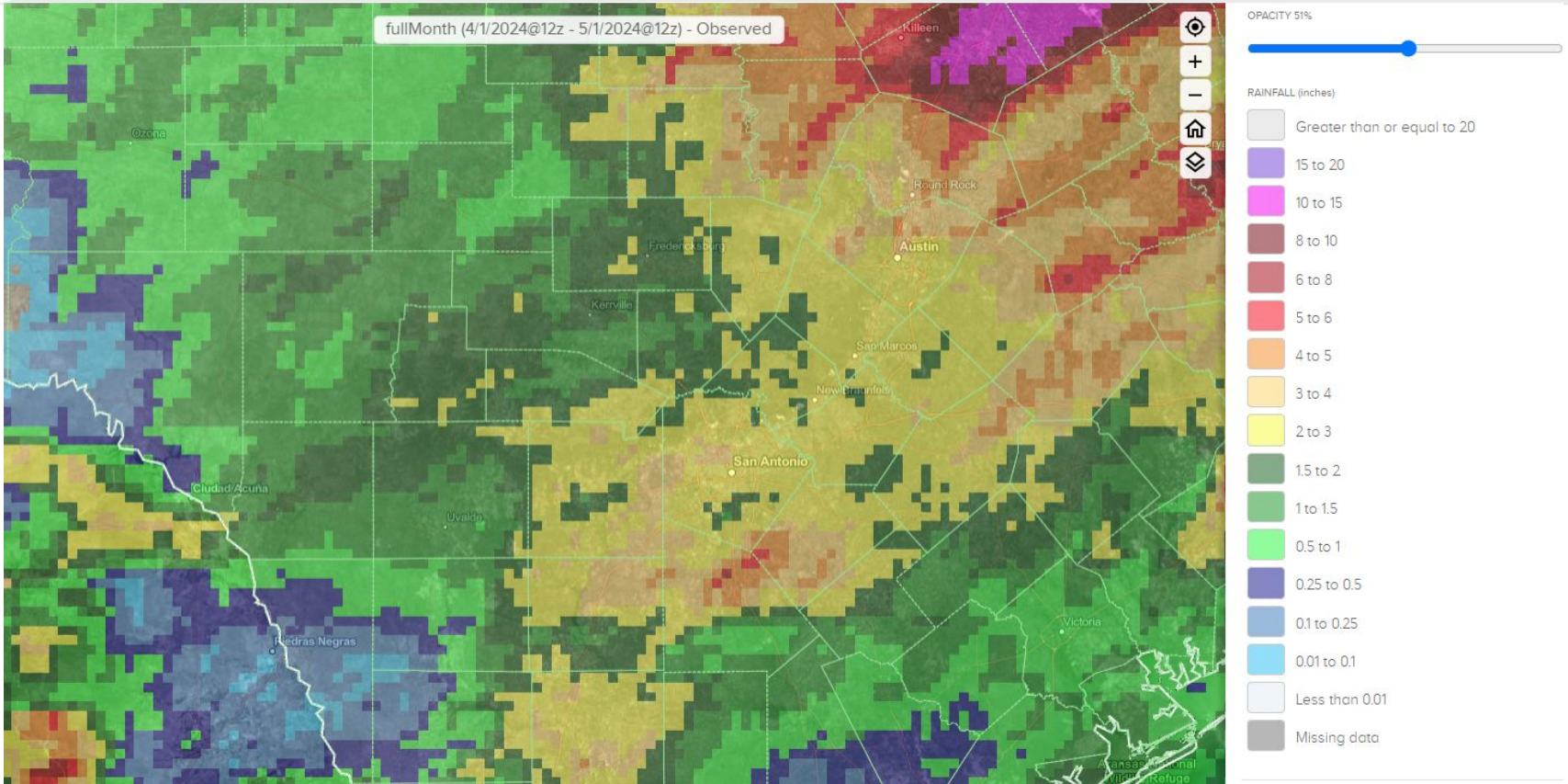
Hydrologic Products Issued for the Month

Product Issued	Number Issued	Additional Comments
River Flood Warning/Area Flood Warning (FLW)	0	
River Flood Statement/Area Flood Advisory (FLS)	12	12 Areal Flood Advisories
Flood Watch (FFA)	0	
Flash Flood Warning (FFW)	0	
Flash Flood Statement (FFS)	0	
Hydrologic Outlook (ESF)	6	AHPS probabilistic forecasts for the Brazos, Colorado, Guadalupe, San Antonio, Pecos, and Nueces Rivers



April 2024 Rainfall

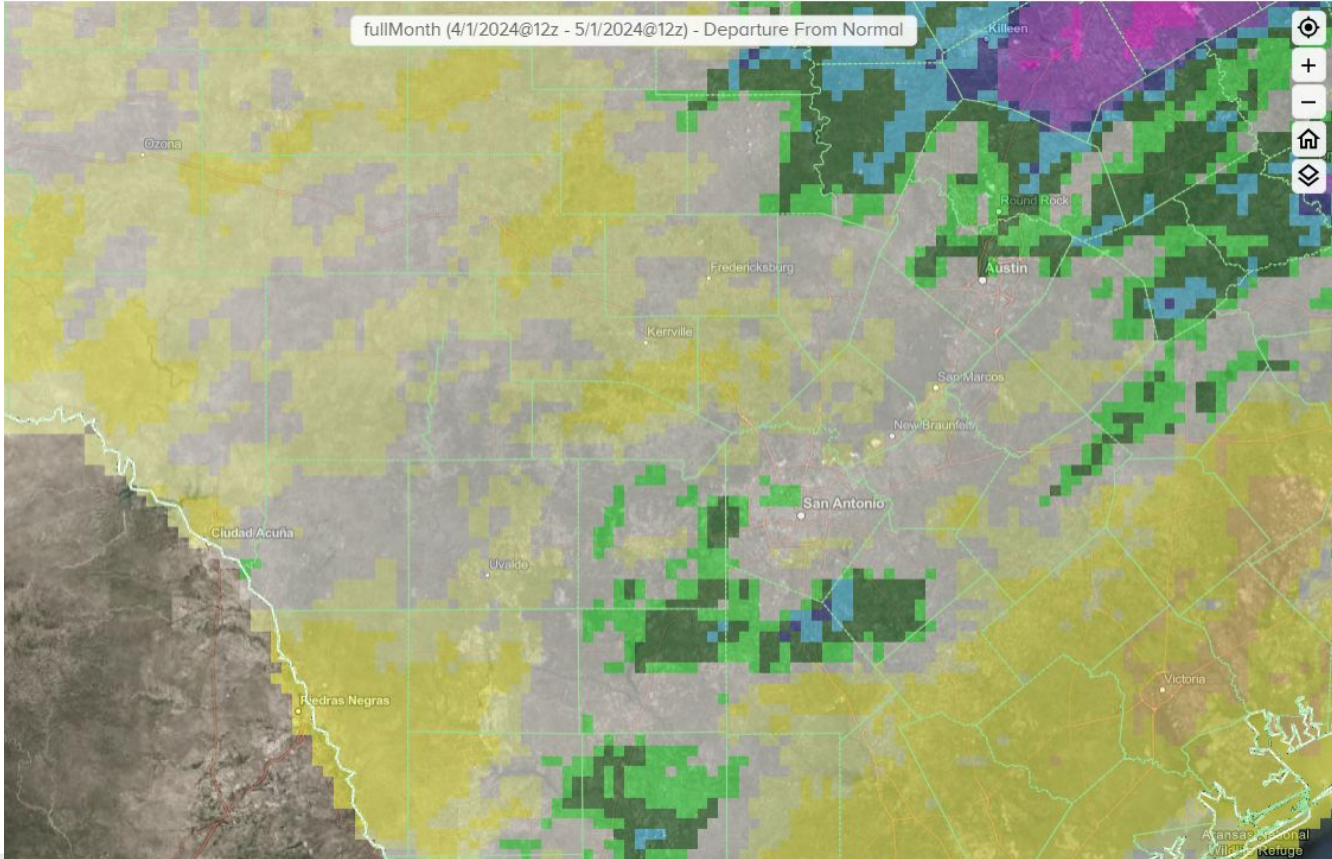
Observed Rainfall (Inches)





April 2024 Rainfall

Departure from Normal Rainfall (Inches)



● Departure From Normal
○ Percent of Normal

OPACITY 51%

RAINFALL (inches)

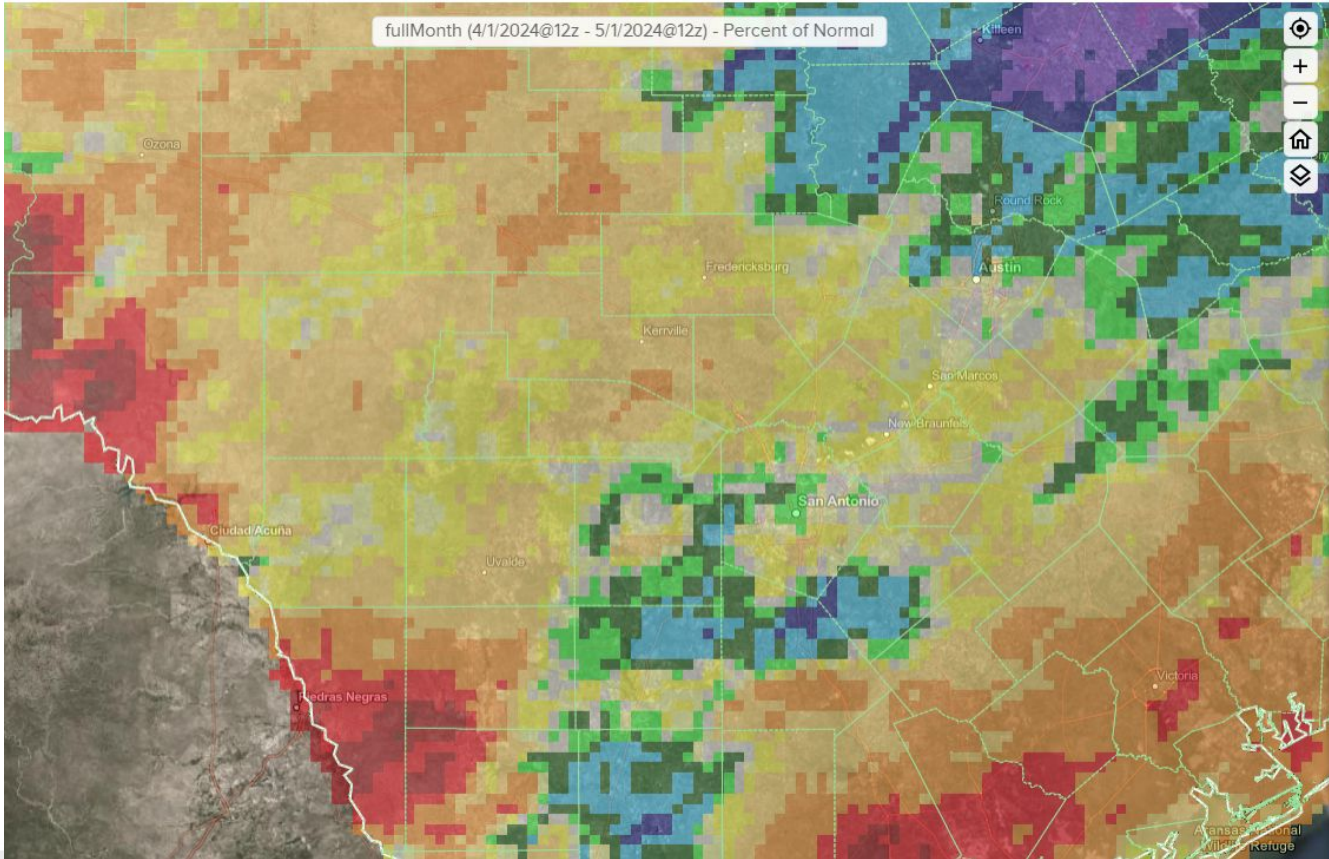
- Greater than or equal to 8
- 5 to 8
- 4 to 5
- 3 to 4
- 2 to 3
- 1 to 2
- 0.5 to 1
- 0.5 to 0.5
- 1 to -0.5
- 2 to -1
- 3 to -2
- 4 to -3
- 5 to -4
- 8 to -5
- Less than -8
- Missing data





April 2024 Rainfall

Percent of Normal Rainfall (%)



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

National Weather Service
Austin/San Antonio, TX



Climate Station Rainfall Data For the Month

Austin/San Antonio Area

	Monthly Rainfall	Monthly Average	2024 Rainfall Through Month	1991-2020 Normal Through Month	2024 Percent of Normal
Austin – Bergstrom	2.57”	2.39”	13.82”	10.00”	138%
Austin – Mabry	3.48”	2.42”	11.52”	9.83”	117%
Del Rio	0.18”	1.50”	0.82”	3.92”	21%
San Antonio	3.07”	2.42”	11.54”	8.43”	137%

*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	2024 Rainfall Through Month	1991-2020 Normal Through Month	2024 Percent of Normal
College Station	9.33"	2.87"	21.82"	12.61"	173%
Corpus Christi	0.43"	2.04"	5.79"	7.00"	83%
Laredo	0.34"	1.47"	1.22"	4.80"	25%
San Angelo	1.35"	1.47"	2.89"	5.07"	57%
Victoria	0.74"	3.01"	13.50"	10.63"	127%
Waco	4.35"	3.30"	10.50"	11.88"	88%

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



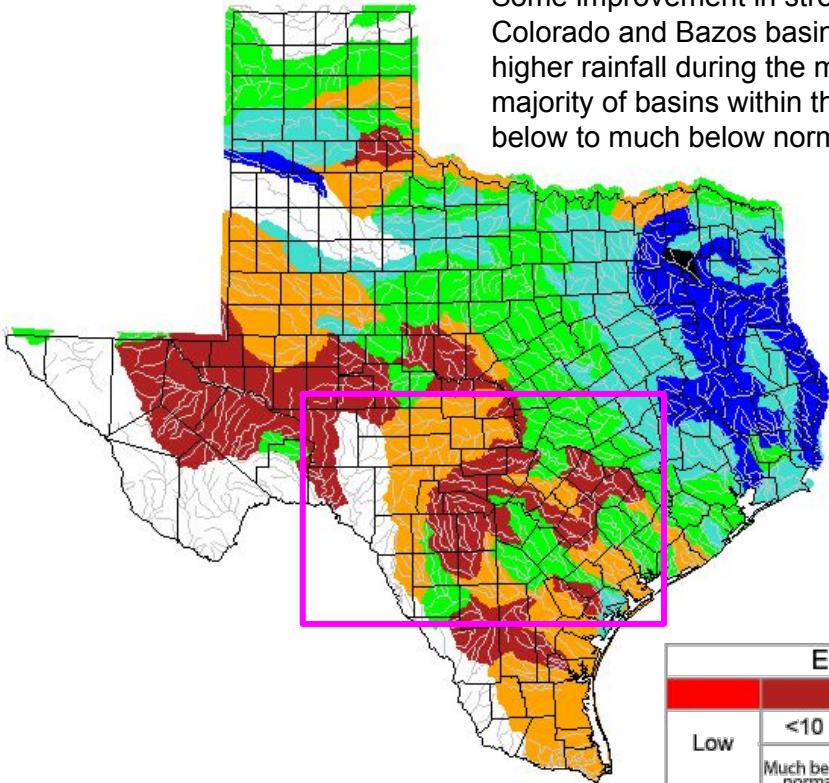


March 2024 - Historical Streamflow Comparison

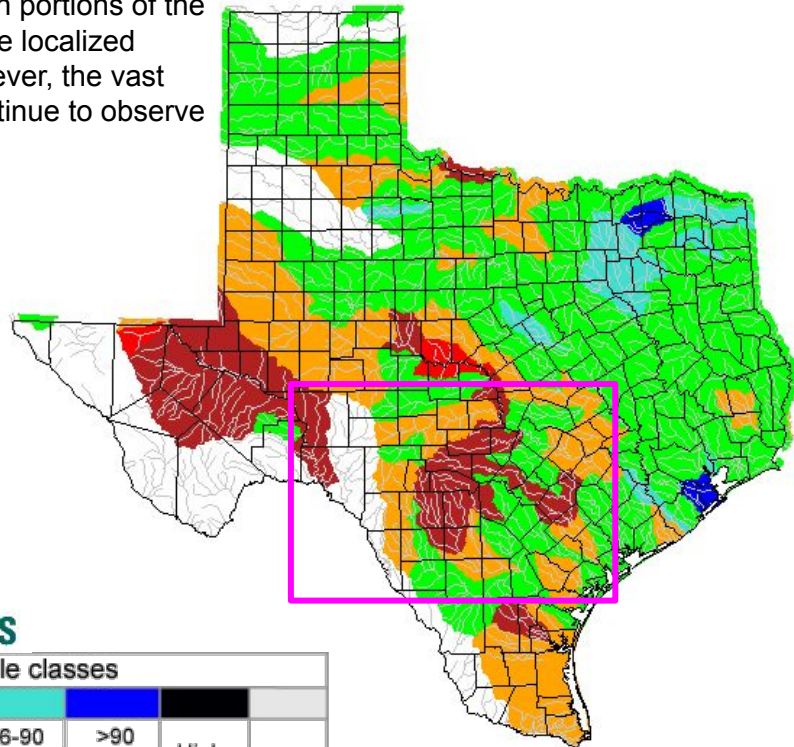
Streamflow Comparison

April 2024

Some improvement in streamflow was seen in portions of the Colorado and Bazos basins in response to the localized higher rainfall during the month of April. However, the vast majority of basins within the service area continue to observe below to much below normal streamflow.



March 2024



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		





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	995.46	0.40
Lake Travis	681	630.29	-0.61
Canyon Lake	909	886.58	-0.66
Medina Lake	1064.2	972.55	-0.64
Lake Amistad	1117	1050.74	-0.17



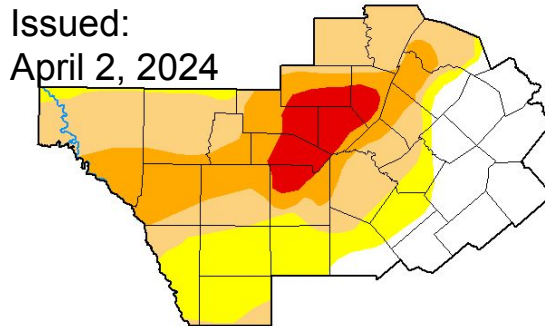
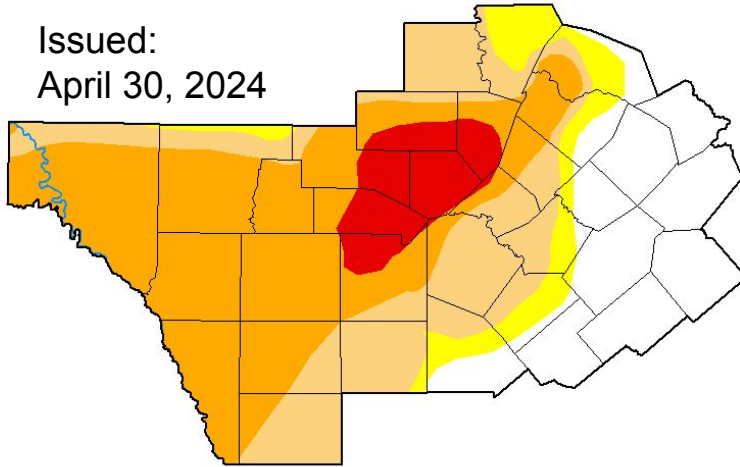


Drought Conditions

Monthly Drought Monitor Comparison

The trend over the past few months continued during the month of April. Drought conditions have worsened west of I-35 while localized improvements were seen across the Hill Country and I-35 corridor.

- D3 drought encompasses 8% of the CWA
- Drought doesn't affect 30% of the CWA



April 30, 2024
(Released Thursday, May 2, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	22.48	7.49	24.01	38.25	7.77	0.00
Last Week 04-23-2024	21.86	6.29	25.83	38.25	7.77	0.00
3 Months Ago 01-30-2024	16.32	29.78	30.82	16.30	6.78	0.00
Start of Calendar Year 01-01-2024	11.10	12.65	31.67	20.39	24.19	0.00
Start of Water Year 09-26-2023	7.30	10.81	13.65	8.95	22.09	37.20
One Year Ago 05-02-2023	20.79	4.93	11.88	26.49	23.87	12.05

Intensity





One Month Outlook



Monthly Precipitation Outlook

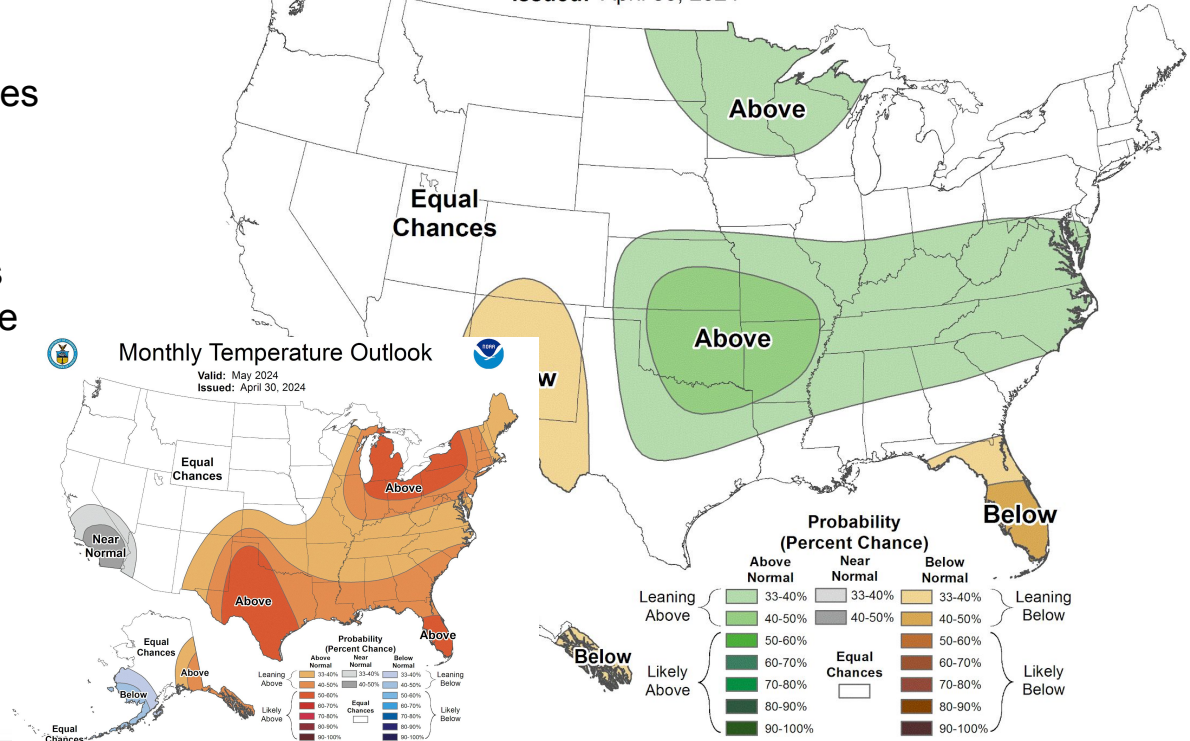


The most recent Monthly Outlook

- The Precipitation Outlook for the month of May shows equal chances for above, below, or near normal rainfall across the service area.
- The Temperature Outlooks shows above normal temperatures for the month of May.

[Click for latest graphics](#)

Valid: May 2024
Issued: April 30, 2024





Three Month Outlook

Looking at the Seasonal Outlooks

- The Precipitation Outlook shows equal chances of above, below, or near normal precipitation for much of the service area
 - However, portions of the southern Edwards Plateau lean towards below normal precipitation chances
- The Temperature Outlook leans towards above normal temperatures across the service area.

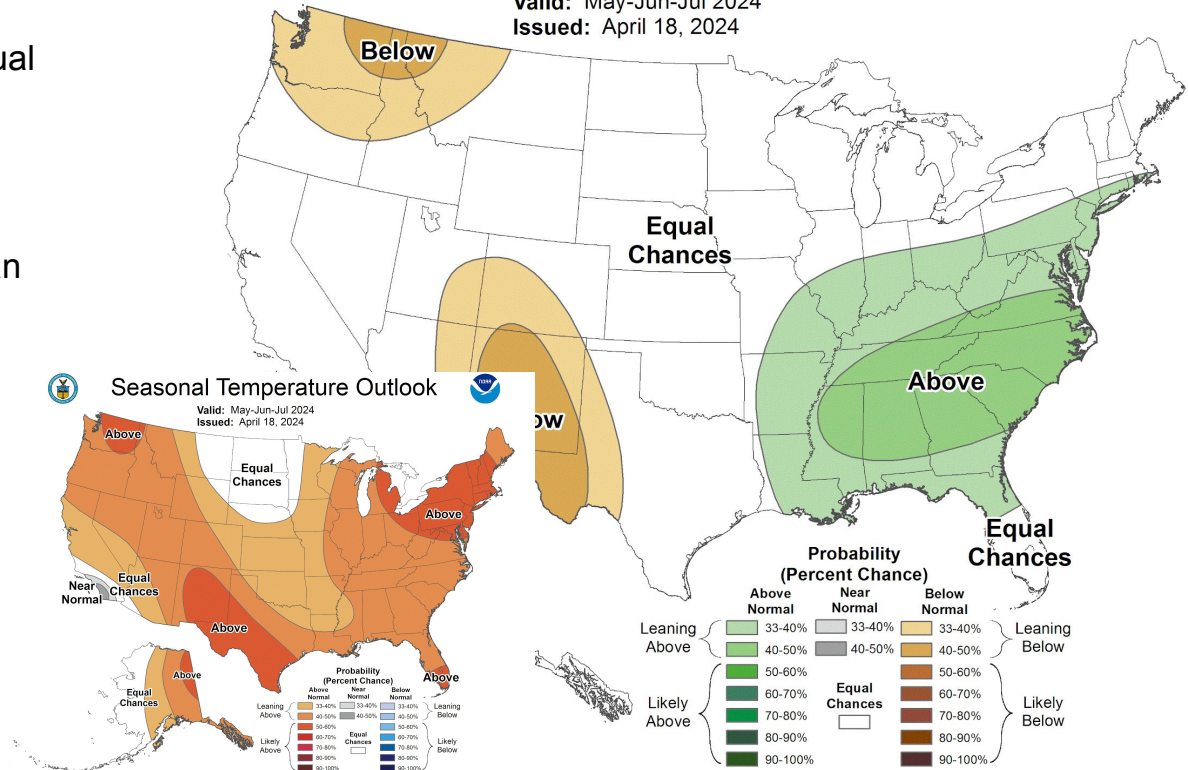
[Click for latest graphics](#)



Seasonal Precipitation Outlook



Valid: May-Jun-Jul 2024
Issued: April 18, 2024





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/>