



October 2024 Monthly Hydrologic and Flood Stage Report (E5/E3)

NWS Austin/San Antonio, TX

Prepared by: Chris Morris

November 7, 2024

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



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce



Monthly Summary

Key Messages

- The month of October saw a minimum of rainfall.
 - October was the 2nd driest at Austin and San Antonio, and 5th driest Del Rio on record
- Streamflows drastically dropped compared to the previous month.
- The combination of above normal temperatures, breezy days, and well below average rainfall resulted in widespread drought worsening.
- The monthly outlook for November holds some hope as we see equal chances for above, below, or near normal rainfall while the temperature outlook continues to show above normal
- The seasonal outlook (Nov-Dec-Jan) continues to show the effect of La Nina as the area is forecast to see below normal precipitation with above normal temperatures into early 2025.





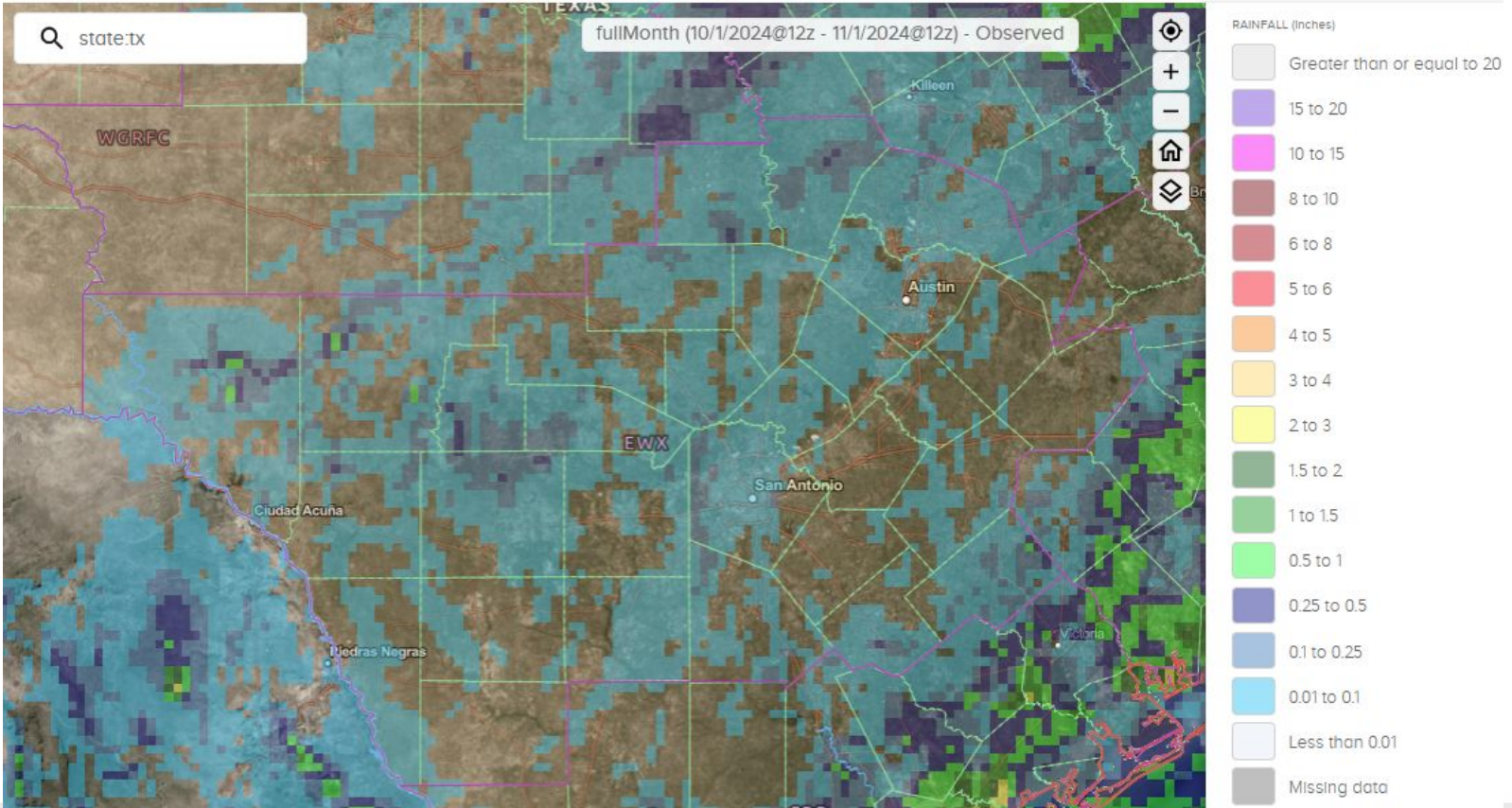
Hydrologic Products Issued for the Month

Product Issued	Number Issued	Additional Comments
River Flood Warning/Area Flood Warning (FLW)	0	
River Flood Statement/Area Flood Advisory (FLS)	0	
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



Monthly Rainfall

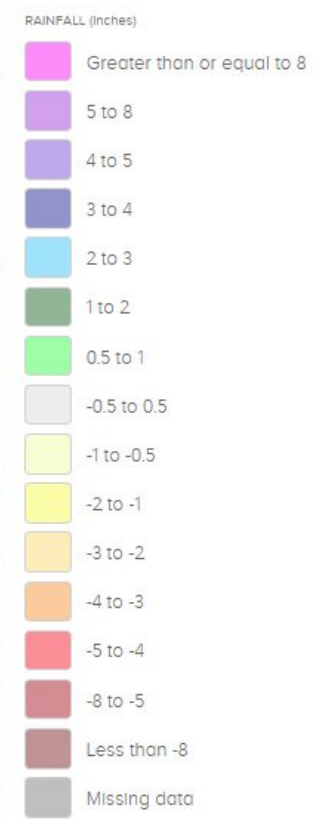
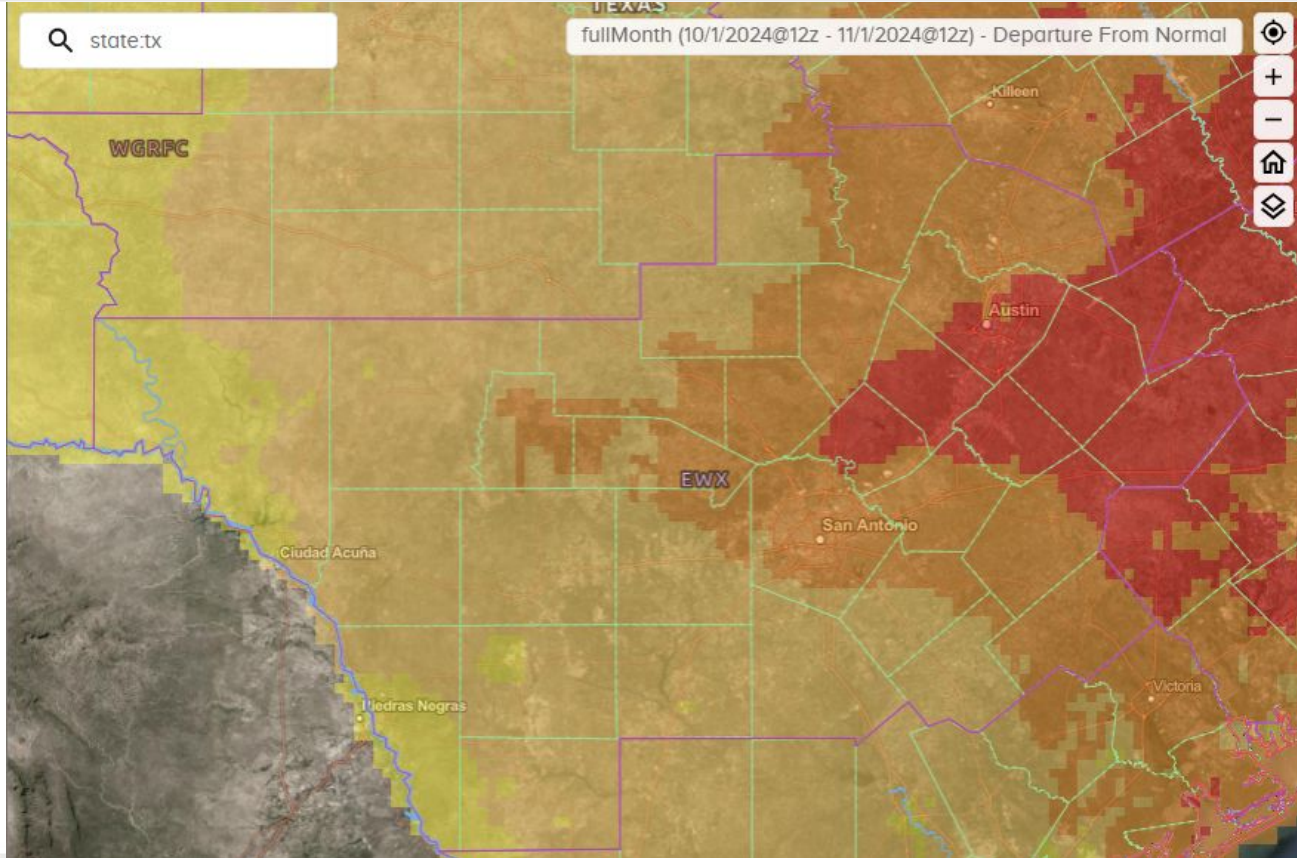
Observed Rainfall (Inches)





Monthly Rainfall

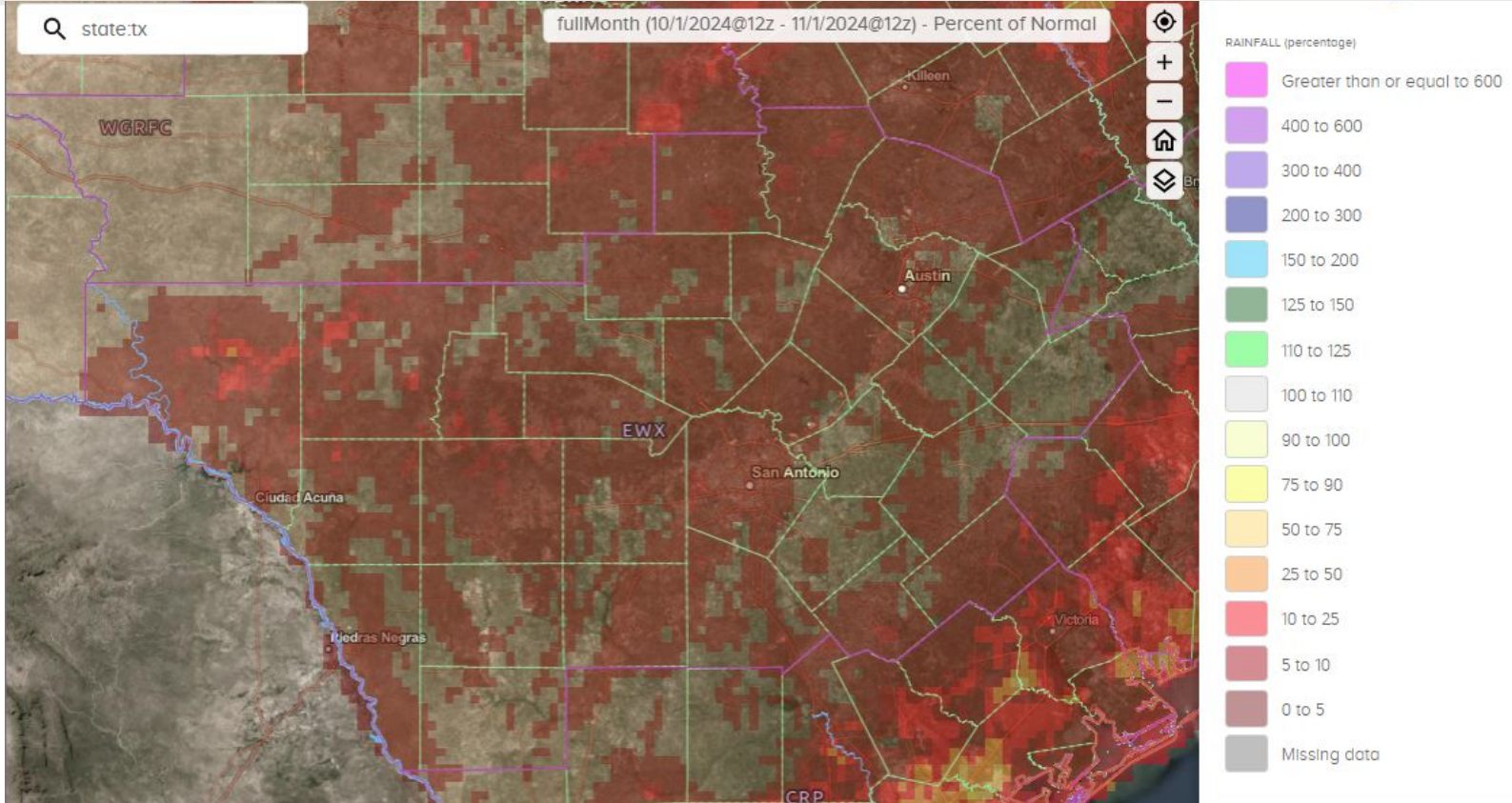
Departure from Normal Rainfall (Inches)





Monthly Rainfall

Percent of Normal Rainfall (%)





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	T	4.25”	26.72”	30.28”	88%
Austin – Mabry	0.01”	3.91”	24.43”	30.61”	80%
Del Rio	0.01”	2.08”	10.15”	18.20”	56%
San Antonio	0.01”	3.75”	21.30”	28.30”	75%

*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	0.00"	4.39"	39.94"	34.19"	117%
Corpus Christi	0.03"	3.13"	26.07"	27.78"	94%
Laredo	0.05"	1.75"	8.33"	19.24"	43%
San Angelo	T	2.42"	13.01"	18.88"	69%
Victoria	0.01"	3.97"	33.22"	35.14"	94%
Waco	0.72"	4.41"	30.56"	30.82"	99%

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





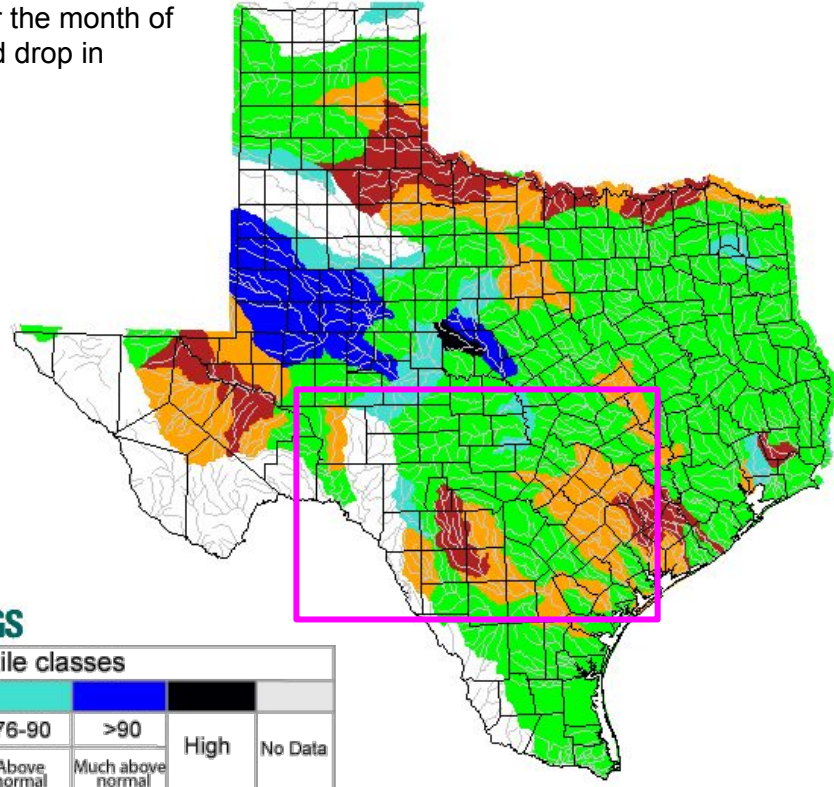
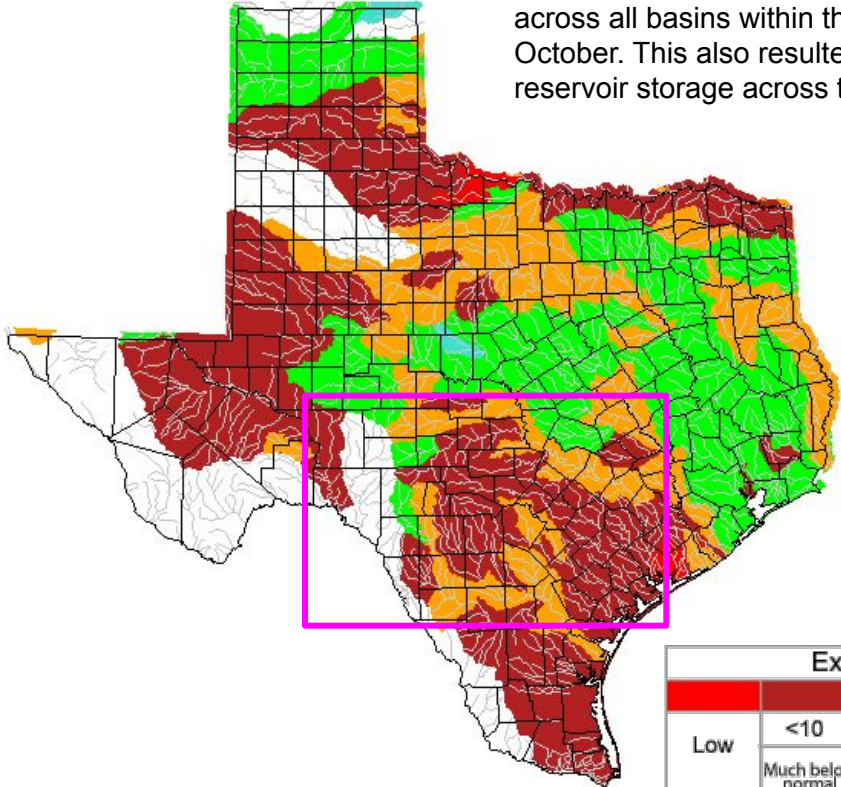
Monthly Historical Streamflow Comparison

Streamflow Comparison

October 2024

A drastic drop in average historical streamflow as seen across all basins within the service area for the month of October. This also resulted in the continued drop in reservoir storage across the service area.

September 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	1003.66	-1.83
Lake Travis	681	638.67	-1.55
Canyon Lake	909	882.25 New record low	-1.52
Medina Lake	1064.2	972.60	-1.07
Lake Amistad	1117	1051.26	-0.17



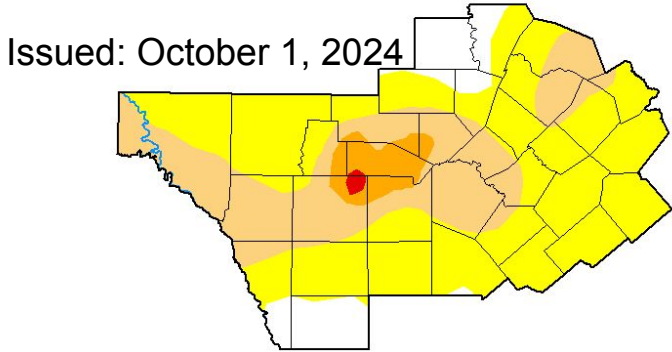
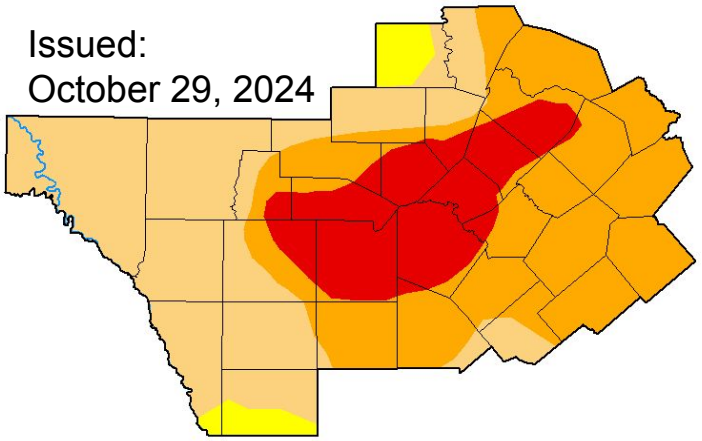


Drought Conditions

Monthly Drought Monitor Comparison

Almost night and day comparison of drought conditions from the start of October to the end of the month. The combination of well above normal temperatures and breezy days allowed for rapid evaporation while the lack of rainfall for the month prevented a resupply of moisture. The result is a 1-3 category increase in drought categories across the service area.

- D3 drought expanded to encompass 18% of the CWA
- Drought doesn't affect 3.55% of the CWA



October 29, 2024

(Released Thursday, Oct. 31, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	0.00	3.55	39.03	39.36	18.06	0.00
Last Week <i>10-22-2024</i>	0.00	6.83	51.73	27.31	14.13	0.00
3 Months Ago <i>07-30-2024</i>	42.99	14.53	23.30	17.49	1.70	0.00
Start of Calendar Year <i>01-02-2024</i>	11.10	12.65	31.67	20.39	24.19	0.00
Start of Water Year <i>10-01-2024</i>	9.75	56.59	28.92	4.42	0.33	0.00
One Year Ago <i>10-31-2023</i>	6.10	5.39	25.12	32.07	29.41	1.91

Intensity:

None
 D0 Abnormally Dry
 D2 Severe Drought
 D3 Extreme Drought
 D4 Exceptional Drought





One Month Outlook

The Monthly Outlook for November

- The Precipitation Outlook has shifted to show equal chances for above, below, or near normal rainfall across the entire forecast area
- Like a broken record, the Temperature Outlook continues to advertise above normal temperatures for the entire service area

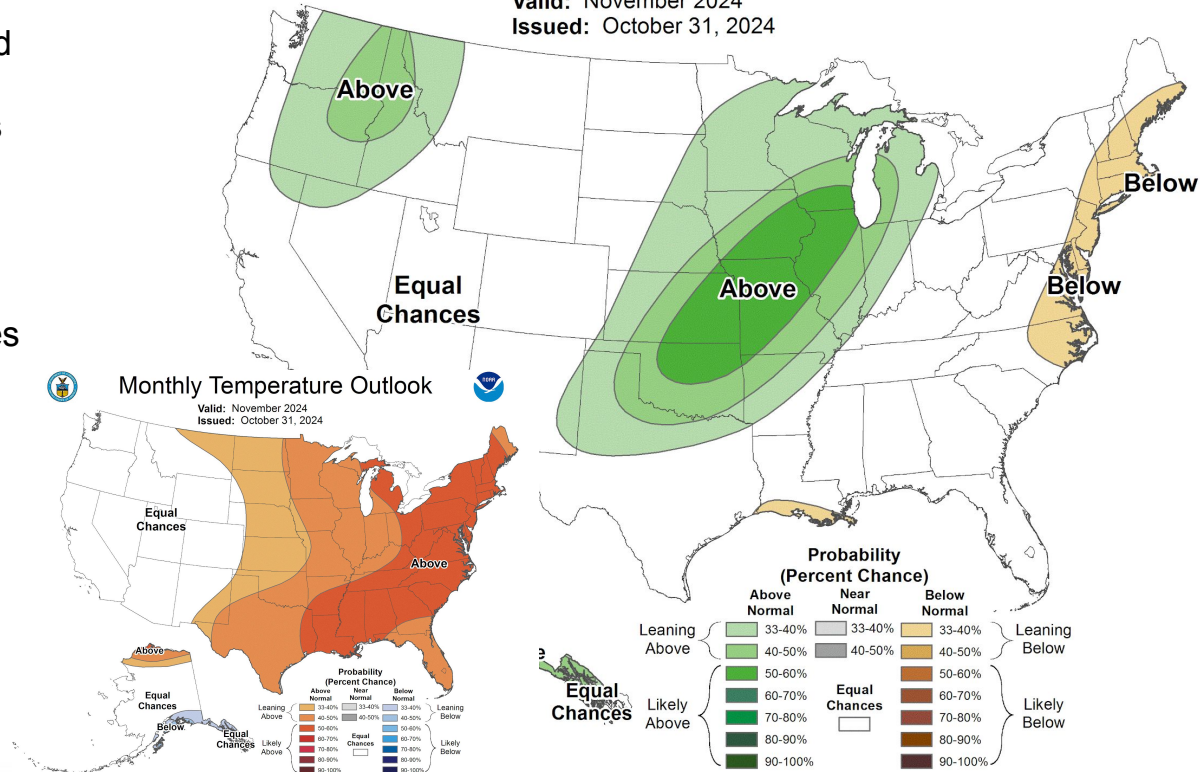
[Click for latest graphics](#)



Monthly Precipitation Outlook

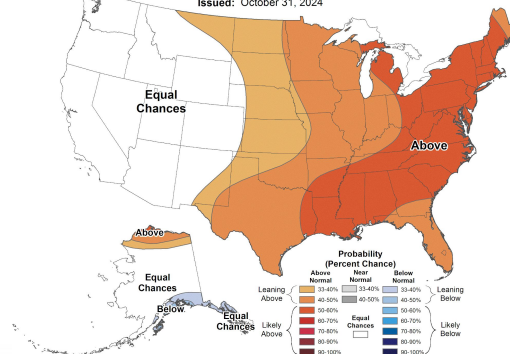


Valid: November 2024
Issued: October 31, 2024



Monthly Temperature Outlook

Valid: November 2024
Issued: October 31, 2024





Three Month Outlook

Looking at the Seasonal Outlook

- The Precipitation Outlook through the end of 2024 into early 2025 shows the likelihood for below normal precipitation for the entire service area
- Much like the monthly outlook, the Seasonal Temperature Outlook shows the likelihood for above normal temperatures across the service area
- Should this outlook verify, water resources across the service area will continue to see a decline.

[Click for latest graphics](#)

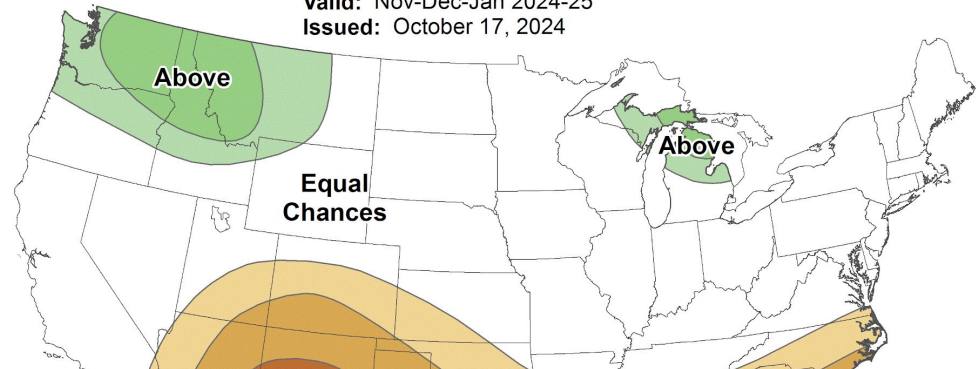


Seasonal Precipitation Outlook



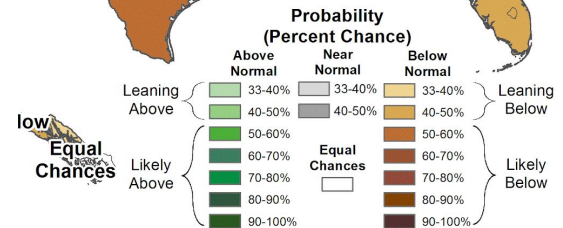
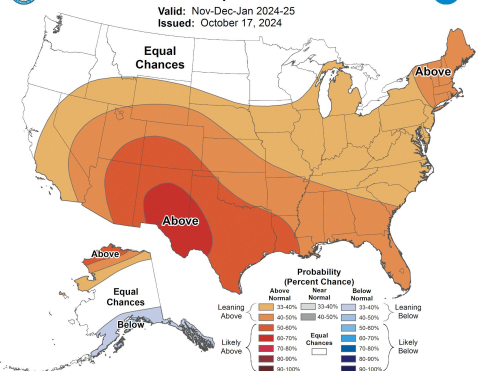
Valid: Nov-Dec-Jan 2024-25

Issued: October 17, 2024



Seasonal Temperature Outlook

Valid: Nov-Dec-Jan 2024-25
Issued: October 17, 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: <https://water.noaa.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/>