



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

NWS Austin/San Antonio, TX

Prepared by: Chris Morris

January 7, 2024

X 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

- Much of the month of December saw a lack of rainfall for the majority of the month
 - The majority of the rainfall for the month occurred within a 4 day period towards the end of the month
- Streamflows continued to see a decline during the month
 - Only exception was for locations that saw the heavier rainfall late in the month
- The combination of above normal temperatures, breezy days, and well below average rainfall resulted in widespread drought worsening
- Monthly and Seasonal outlooks advertise a continuation of the below normal precipitation and above normal temperature forecast for the first quarter of 2025





Monthly Summary

Recap: Late December Rainfall

A cold front brought showers and thunderstorms to the service area the night of the 24th. The slow moving thunderstorms produced a swath of 3 to 4 inches of rainfall across portions of the Coastal Plains.

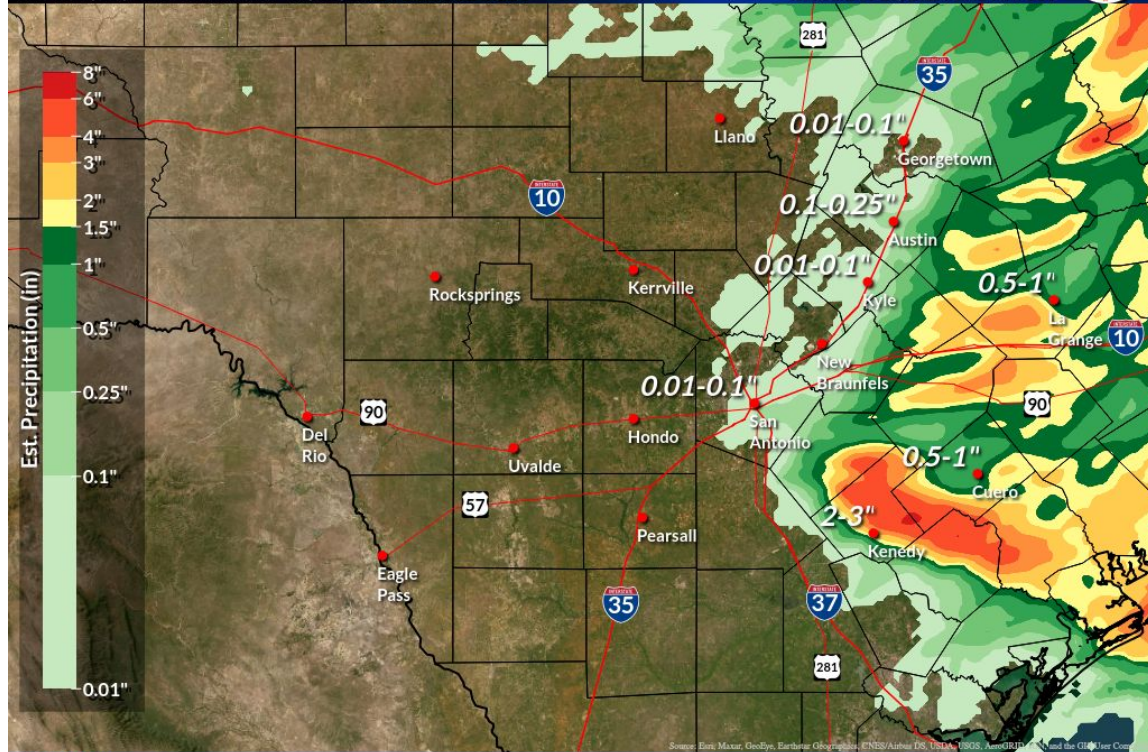
- The runoff from these storms resulted in localized flooding.
- Streamflows on the lower portions of the San Antonio and Guadalupe basin rose in response to the runoff from these storms however; rises did not result in any forecast points reaching flood stage

Additional showers and thunderstorms occurred on the 28th, but rainfall amounts were not sufficient for rises on streams.

3-Day Estimated Rainfall

Valid: 12/24/2024 06:00 AM - 12/27/2024 06:00 AM CST

Weather Forecast Office
Austin/San Antonio, TX
Issued Dec 27, 2024 8:45 AM CST



NWSSanAntonio

weather.gov/ewx



National Oceanic and
Atmospheric Administration
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National Weather Service
Austin/San Antonio, TX



Hydrologic Products Issued for the Month

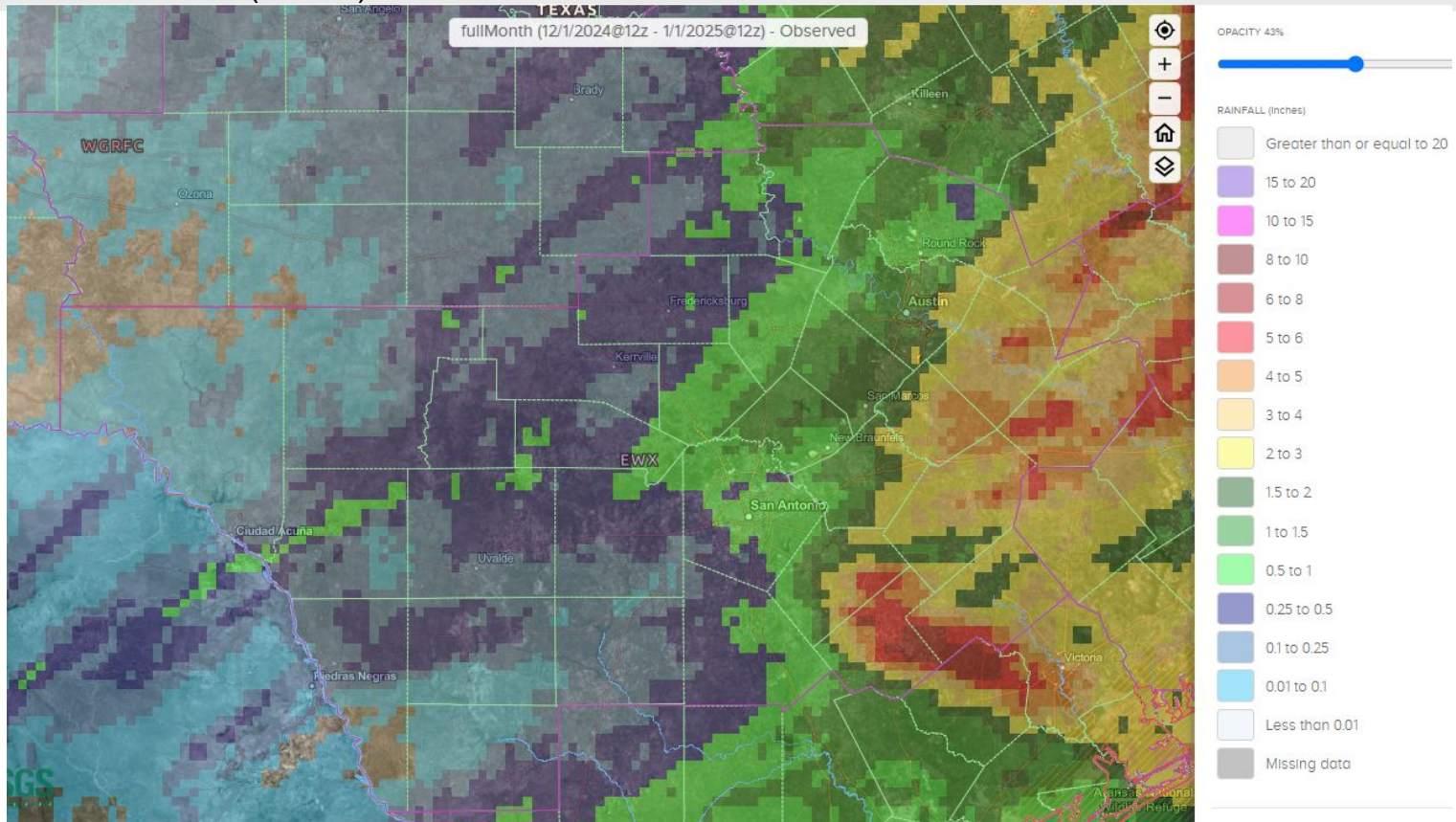
Product Issued	Number Issued	Additional Comments
River Flood Warning/Area Flood Warning (FLW)	0	
River Flood Statement/Area Flood Advisory (FLS)	8	
Flood Watch (FFA)	0	
Flash Flood Warning (FFW)	0	
Flash Flood Statement (FFS)	0	
Hydrologic Outlook (ESF)	0	NWPS probabilistic forecasts automatically posted for the Brazos, Colorado, Guadalupe, San Antonio, Pecos, and Nueces Rivers.





Monthly Rainfall

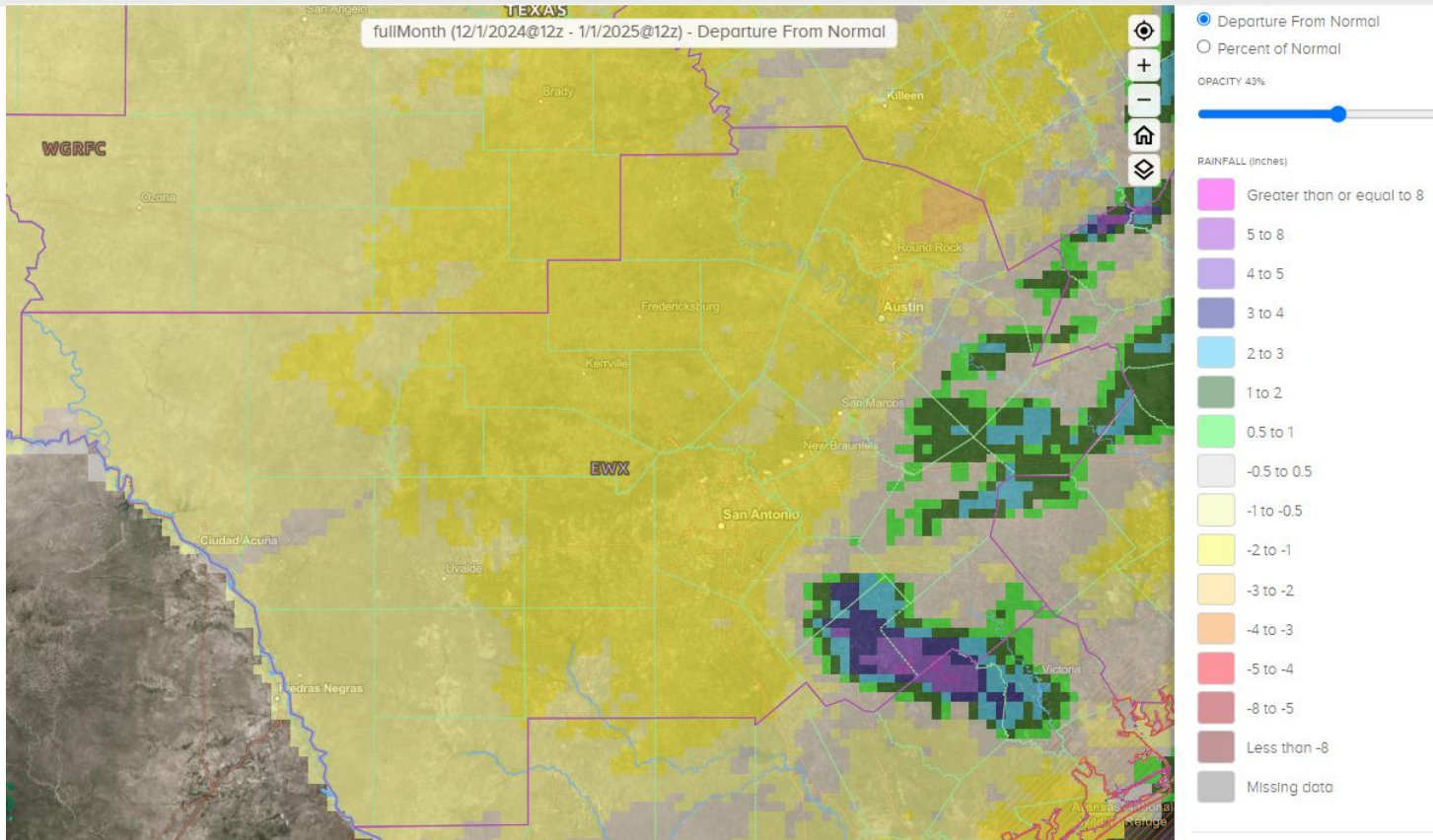
Observed Rainfall (Inches)





Monthly Rainfall

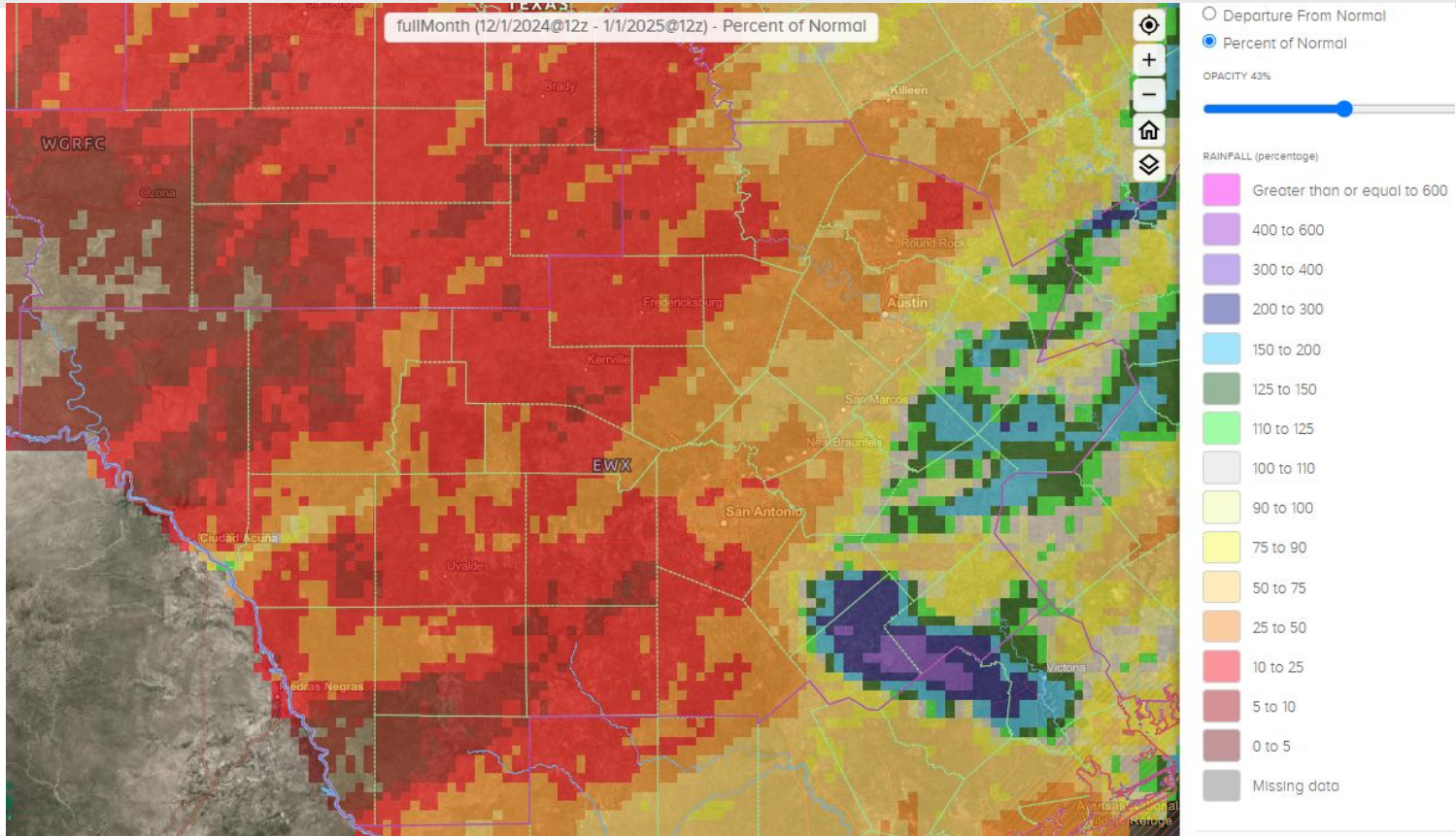
Departure from Normal Rainfall (Inches)





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	2.01”	2.61”	30.24”	35.57”	85%
Austin – Mabry	1.20”	2.72”	27.89”	36.25”	77%
Del Rio	0.18”	0.71”	10.56”	19.82”	53%
San Antonio	0.57”	2.00”	23.67”	32.38”	73%

*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	3.69"	3.71"	46.09"	41.21"	112%
Corpus Christi	0.55"	1.93"	26.77"	31.74"	84%
Laredo	0.13"	1.07"	8.49"	21.35"	40%
San Angelo	0.24"	0.89"	19.33"	20.93"	92%
Victoria	2.20"	2.34"	35.89"	40.41"	89%
Waco	2.23"	2.87"	34.68"	36.40"	95%

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



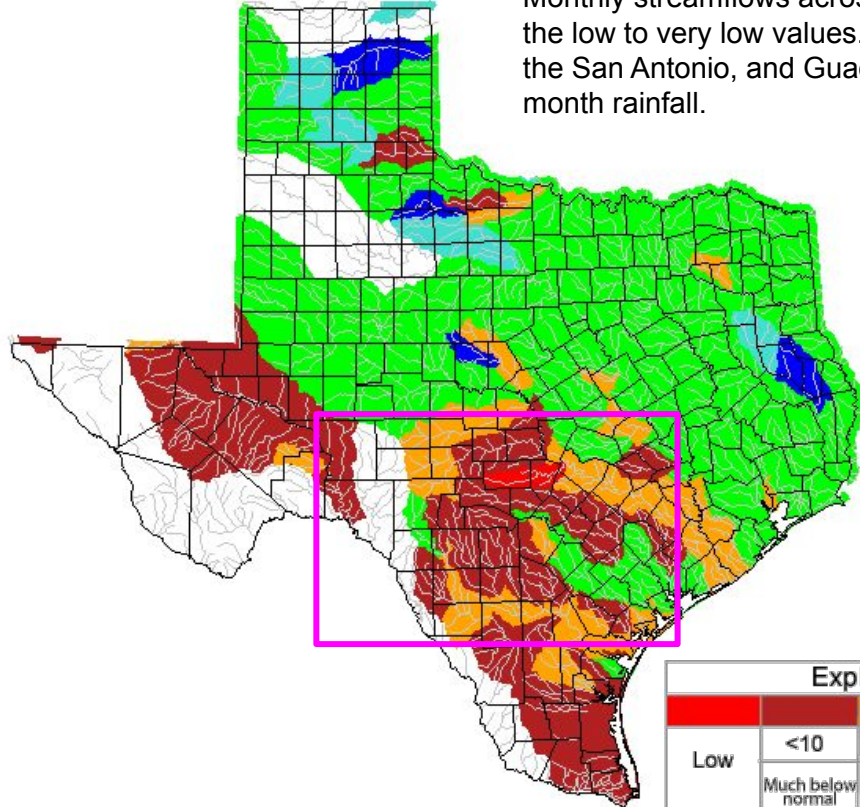


Monthly Historical Streamflow Comparison

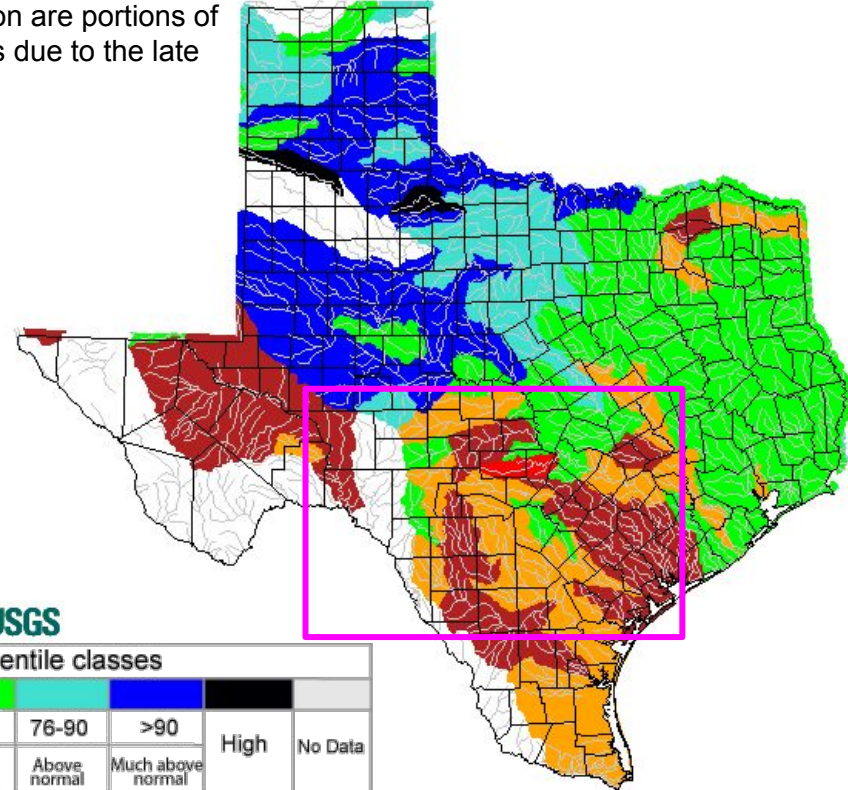
Streamflow Comparison

December 2024

Monthly streamflows across the service area remain in the low to very low values. The exception are portions of the San Antonio, and Guadalupe basins due to the late month rainfall.



November 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	1003.40	-1.01
Lake Travis	681	637.98	-0.22
Canyon Lake	909	880.72 New record low	-0.74
Medina Lake	1064.2	972.13	-0.62
Lake Amistad	1117	1051.19	0.08





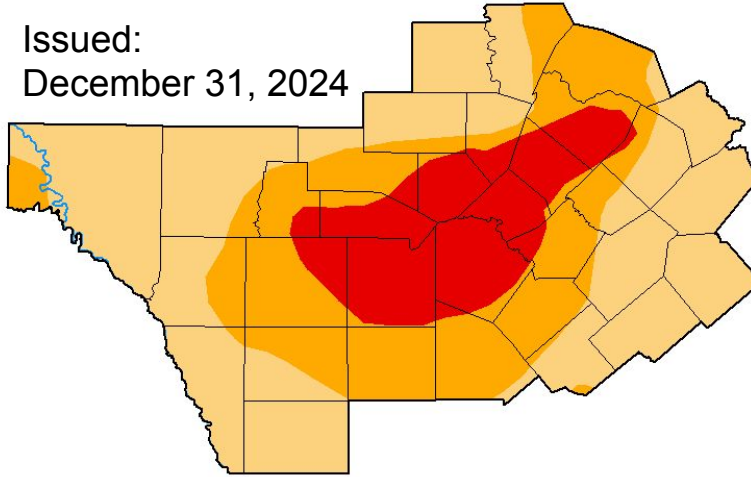
Drought Conditions

Monthly Drought Monitor Comparison

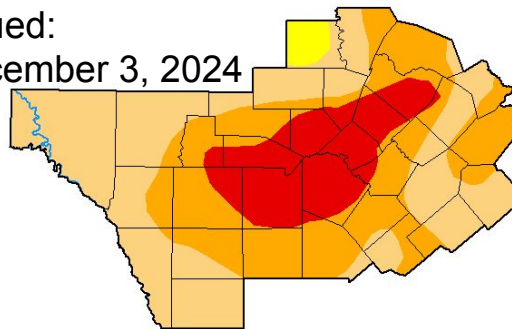
Lack of rainfall resulted in expansion of drought conditions across portions of the Hill Country compared to the start of the month. Some improvement was noted for areas that received beneficial rainfall towards the end of the month.

- D3 drought expanded to encompass 18% of the CWA
- D2 drought expanded to encompass 31.29% of the CWA
- D1 drought expanded to encompass 50.65% of the CWA

Issued:
December 31, 2024



Issued:
December 3, 2024



December 31, 2024

(Released Wednesday, Jan. 1, 2025)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	0.00	0.00	50.65	31.29	18.06	0.00
Last Week <i>12-24-2024</i>	0.00	0.00	38.60	43.34	18.06	0.00
3 Months Ago <i>10-01-2024</i>	9.75	56.59	28.92	4.42	0.33	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>01-02-2024</i>	11.10	12.65	31.67	20.39	24.19	0.00

Intensity:





One Month Outlook

The Monthly Outlook for January

- The Precipitation Outlook shows likely below normal for the entire service area
- The Temperature Outlook continues to lean towards above normal temperatures for the entire service area

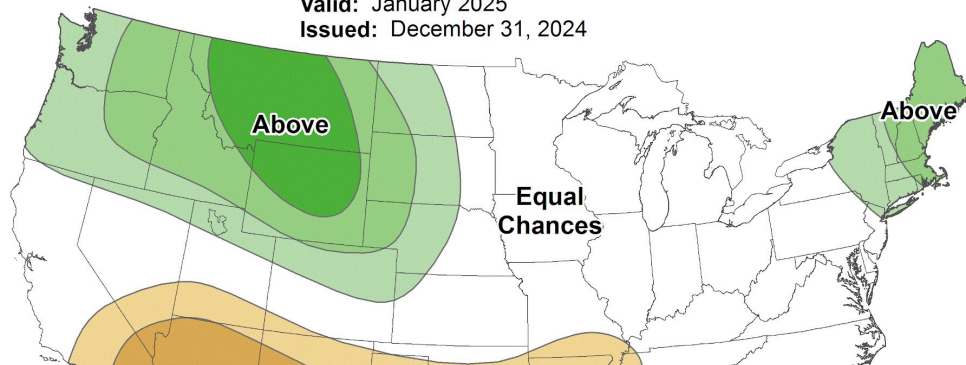
[Click for latest graphics](#)



Monthly Precipitation Outlook

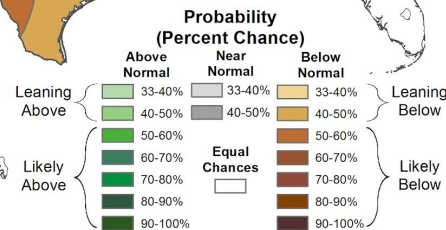
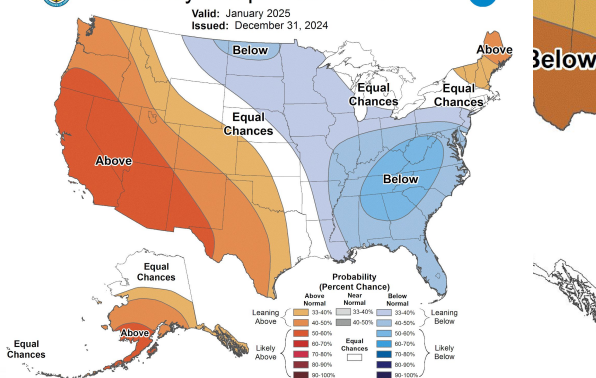


Valid: January 2025
Issued: December 31, 2024



Monthly Temperature Outlook

Valid: January 2025
Issued: December 31, 2024





Three Month Outlook

Looking at the Seasonal Outlook

- The Precipitation Outlook into early Spring shows the likelihood of below normal precipitation for the entire service area
- Much like the monthly outlook, the Temperature Outlook into the Spring shows the likelihood for above normal temperatures across the service area

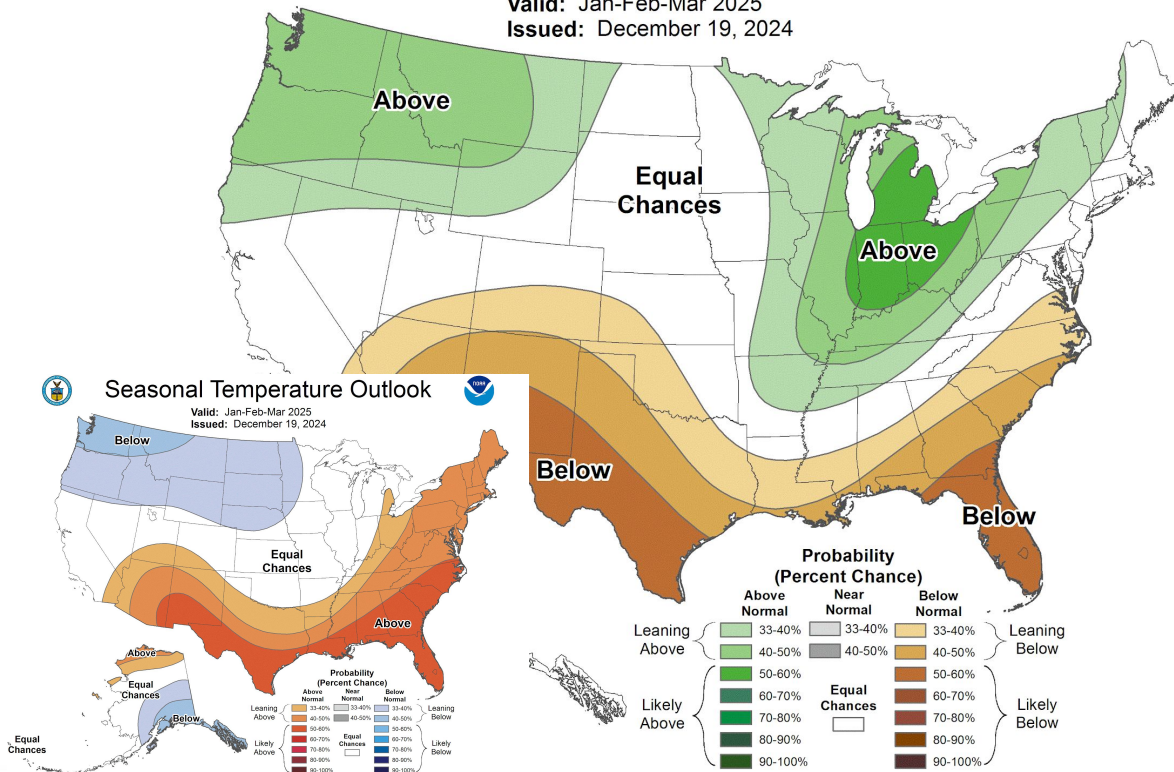
[Click for latest graphics](#)



Seasonal Precipitation Outlook



Valid: Jan-Feb-Mar 2025
Issued: December 19, 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/>