



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

NWS Austin/San Antonio, TX

Prepared by: Chris Morris

October 15, 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

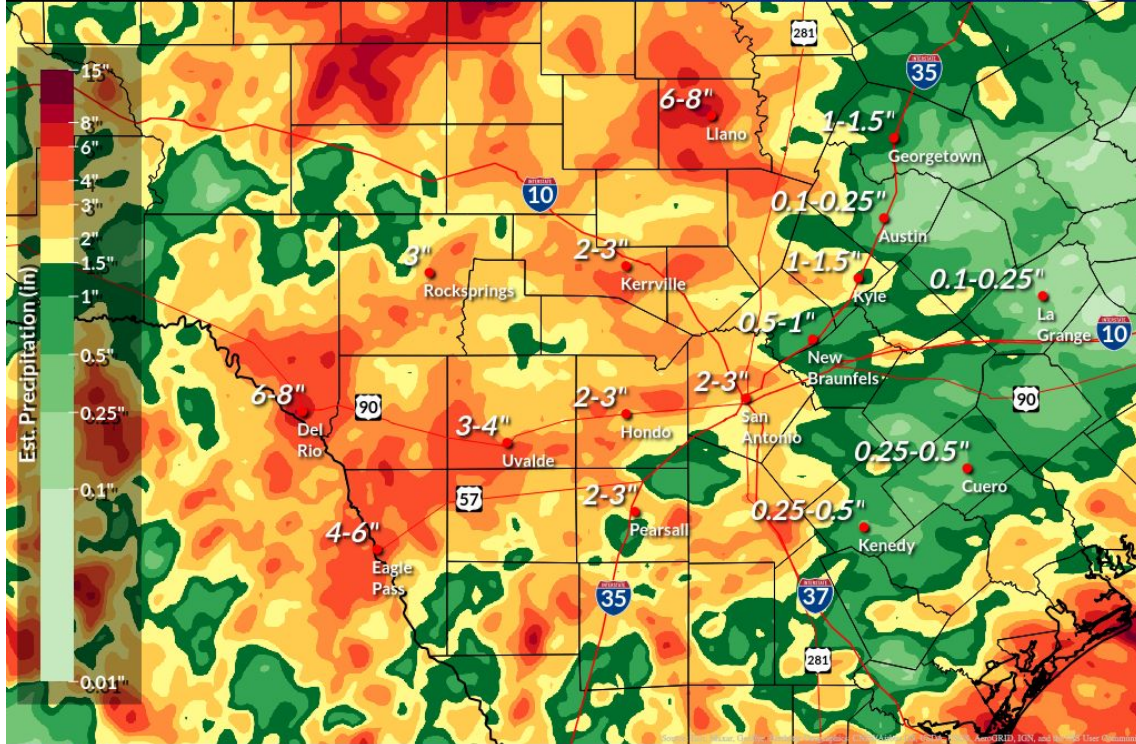
- September started off in the middle of a prolonged rainfall event.
 - A pair of forecast points reached flood stage in response to this rainfall.
- Outside of isolated showers, little additional rainfall occurred from the 9th through the end of the month.
- Given the lack of widespread rainfall, storage reservoirs in the central portion of the service area saw a decrease in storage while a few saw slight improvements.
- Monthly and seasonal outlooks continue to advertise both below normal rainfall and above normal temperatures through the end of the year.

7-Day Estimated Rainfall

Valid: 09/01/2024 07:00 AM - 09/08/2024 07:00 AM CDT

Weather Forecast Office
Austin/San Antonio, TX

Issued Sep 08, 2024 9:46 AM CDT



[f](#) [t](#) [v](#) [NWSSanAntonio](#)

weather.gov/ewx



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

National Weather Service
Austin/San Antonio, TX



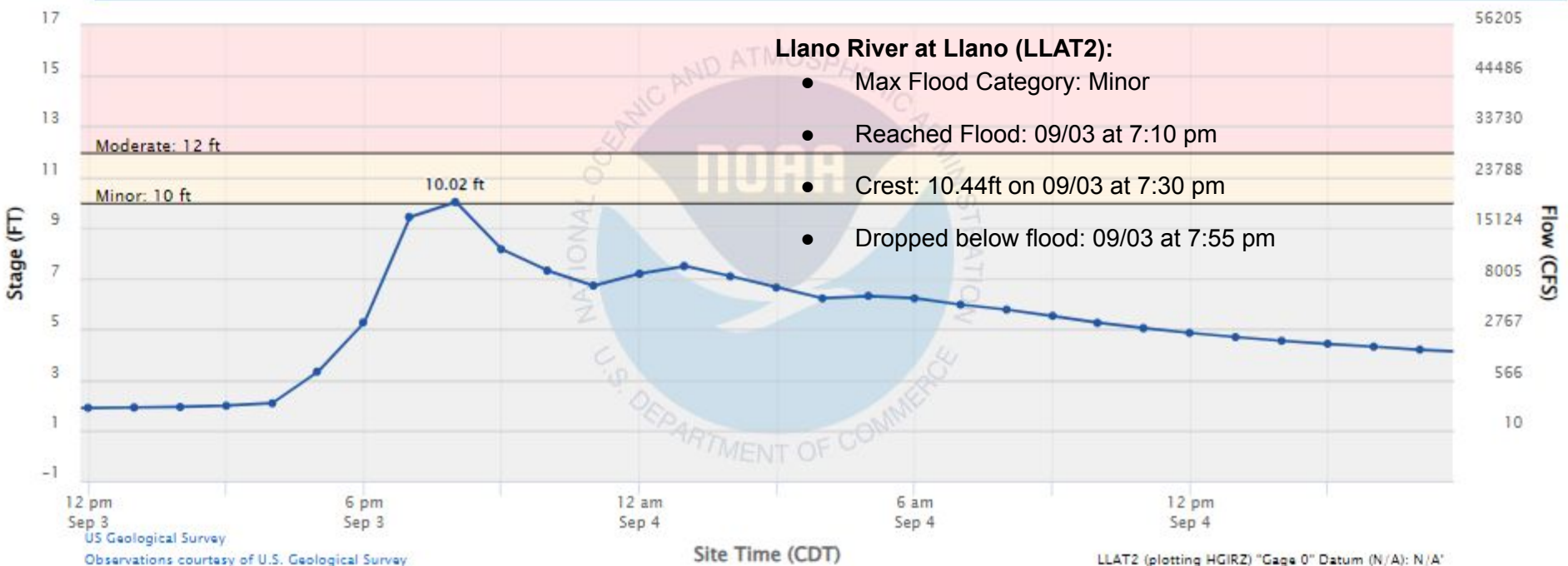
Flood Stage Report (E3)

River Flood Summary (Forecast Points)

Latest observed value: 2.31 ft
10:00 AM CDT 5-Sep-2024
Flood Stage is 10 ft

Llano River at Llano

NWSLI: LLAT2, Reach ID: 5771725



U.S. Geological Survey
Observations courtesy of U.S. Geological Survey

LLAT2 (plotting HIGIRZ) "Cage 0" Datum (N/A): N/A'





Flood Stage Report (E3)

River Flood Summary (Forecast Points)

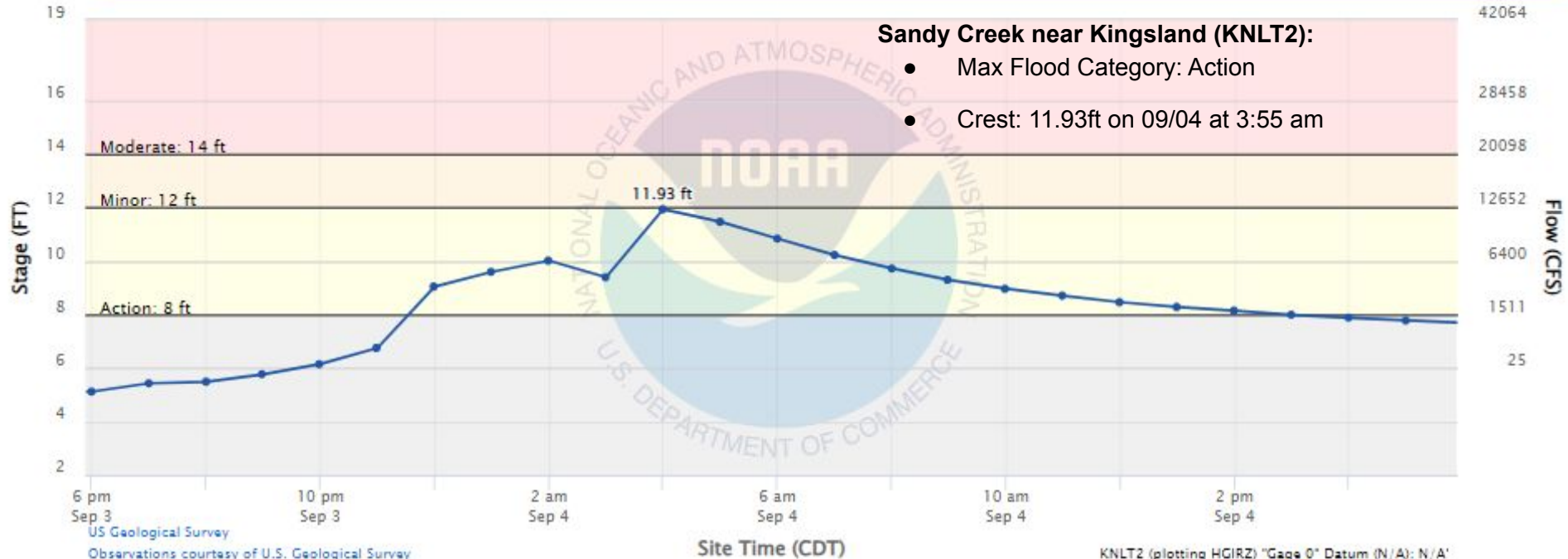
Latest observed value: 6.35 ft

10:00 AM CDT 9-Sep-2024

Flood Stage is 12 ft

Sandy Creek near Kingsland

NWSLI: KNLT2, Reach ID: 5757354

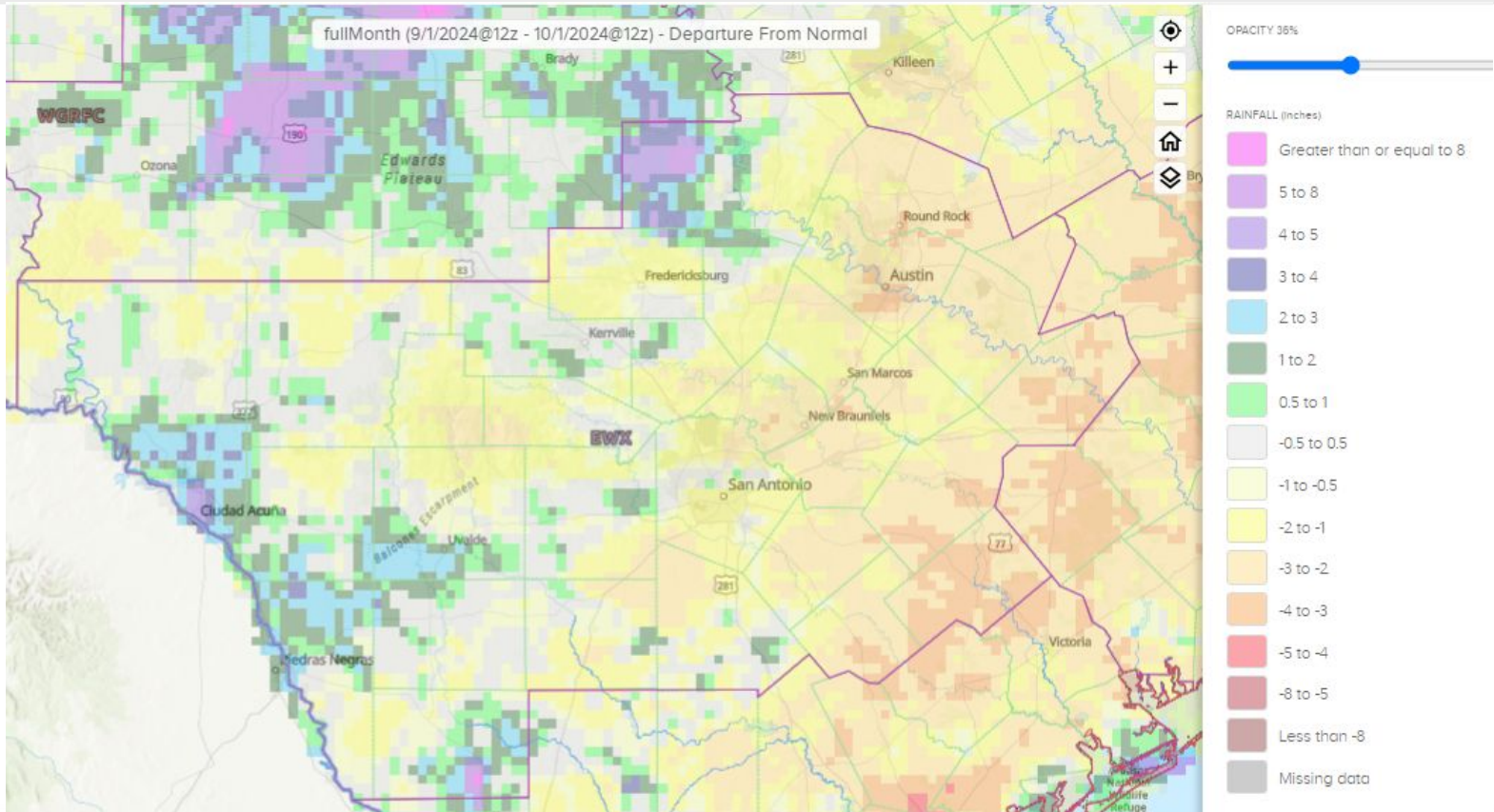


Graph Created: (10:55 AM CDT Sep 9 2024) - Forecast Issued (07:55 PM CDT Sep 4 2024)



Monthly Rainfall

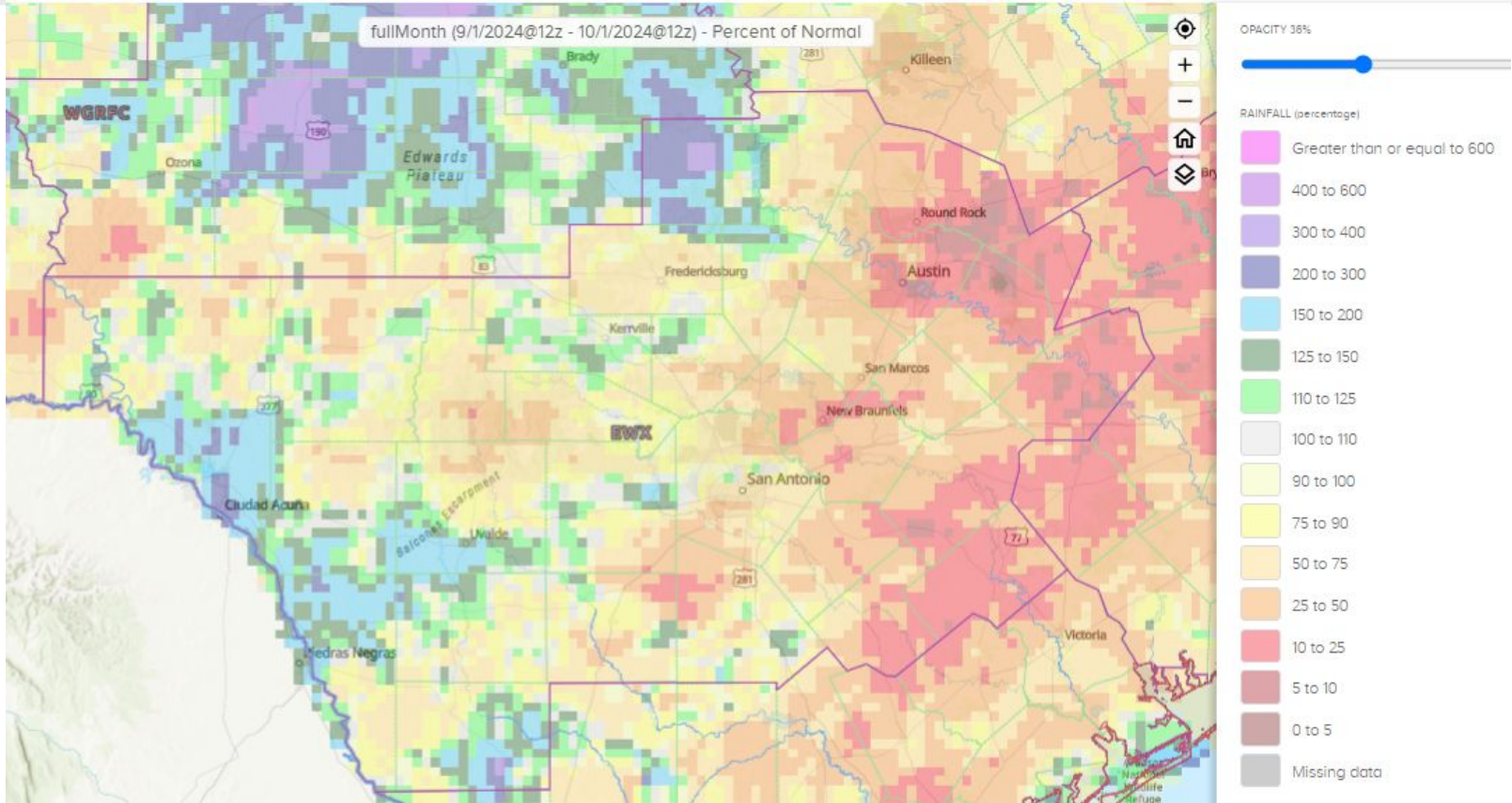
Departure from Normal Rainfall (Inches)





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	0.08”	3.03”	26.72”	26.03”	103%
Austin – Mabry	0.37”	3.45”	24.42”	26.70”	91%
Del Rio	6.68”	2.63”	10.14”	16.12”	63%
San Antonio	1.46”	3.88”	21.29”	24.55”	87%

*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	0.73"	3.50"	39.94"	29.80"	134%
Corpus Christi	6.50"	5.42"	26.04"	24.65"	106%
Laredo	1.82"	3.64"	8.28"	17.49"	47%
San Angelo	5.04"	2.51"	13.01"	16.46"	79%
Victoria	2.36"	4.53"	33.21"	31.17"	107%
Waco	1.17"	2.87"	29.84"	26.41"	113%

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



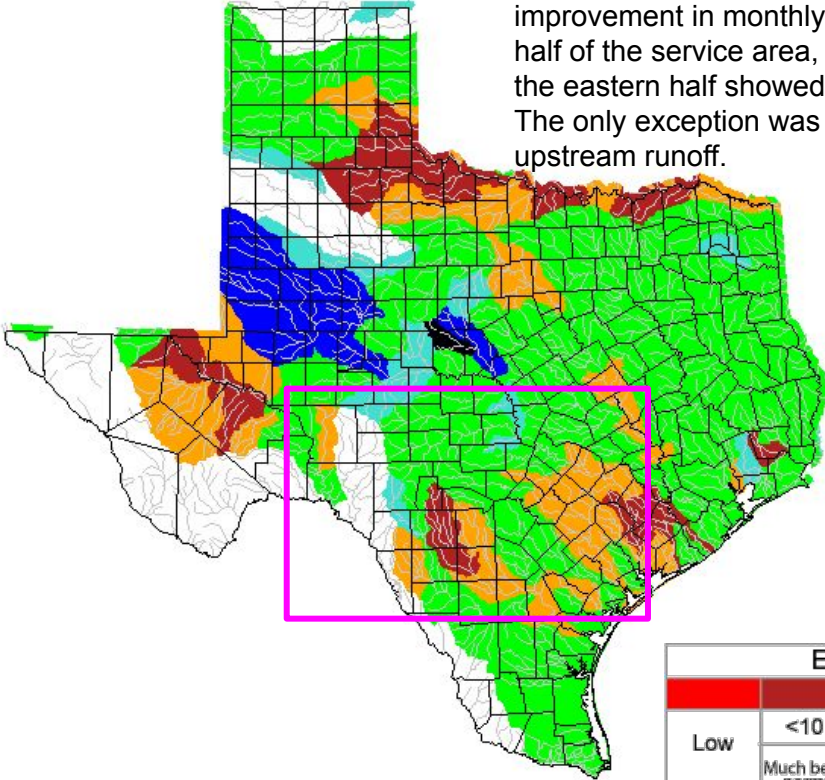


Monthly Historical Streamflow Comparison

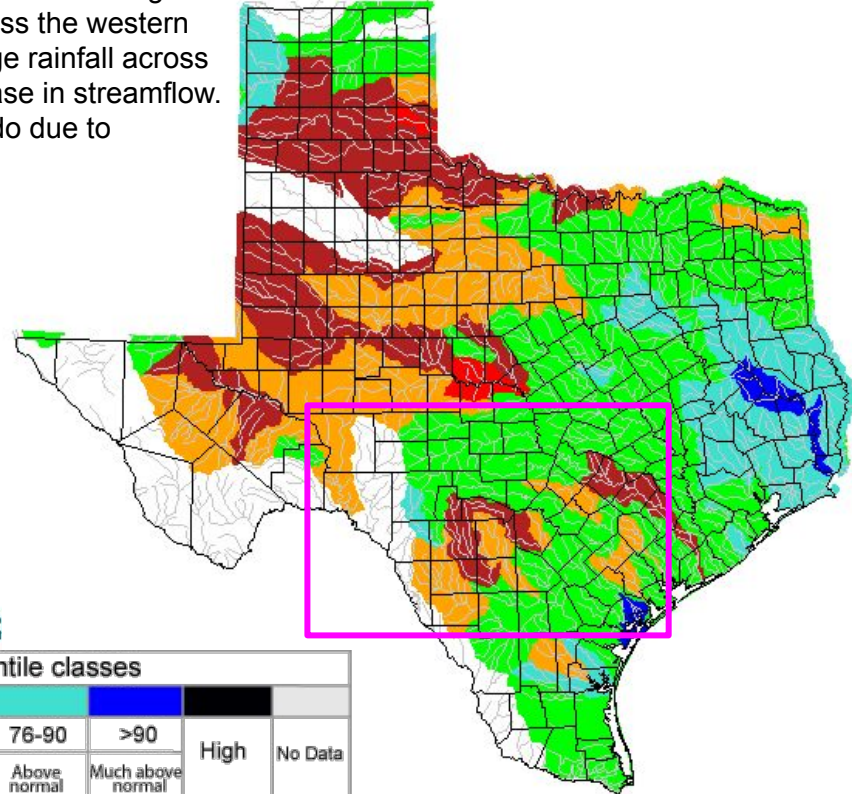
Streamflow Comparison

September 2024

While the the early month rainfall was sufficient for slight improvement in monthly streamflows across the western half of the service area, the lack of average rainfall across the eastern half showed an overall decrease in streamflow. The only exception was along the Colorado due to upstream runoff.



August 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	1005.49	0.15
Lake Travis	681	640.22	-0.55
Canyon Lake	909	883.77 New record low	-0.94
Medina Lake	1064.2	973.67	-0.96
Lake Amistad	1117	1051.43	2.74





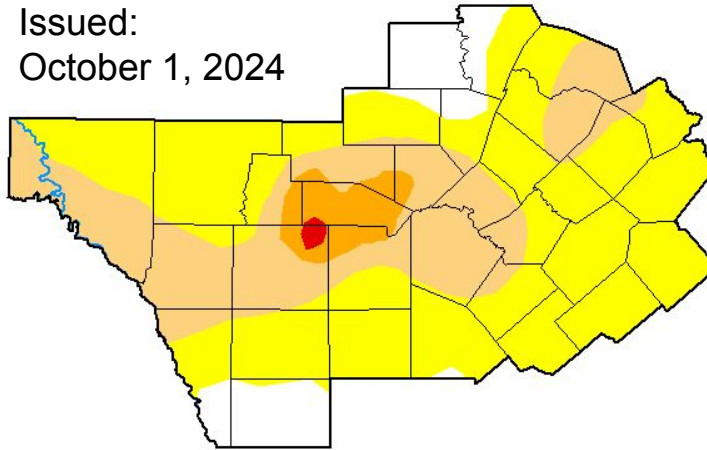
Drought Conditions

Monthly Drought Monitor Comparison

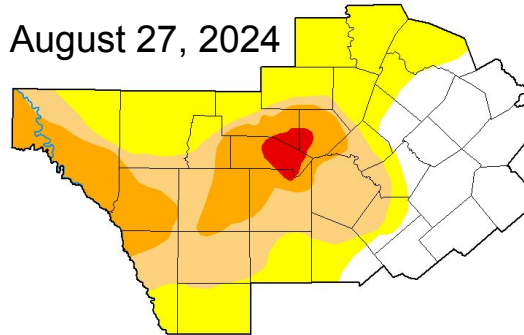
Drought conditions over the month of September were a mixed bag. The western areas saw improvement from the early month rainfall while the lack of appreciable rainfall for the rest of the month caused drought conditions worsen across the east.

- D3 drought encompasses 0.33% of the CWA
- Drought doesn't affect 66% of the CWA

Issued:
October 1, 2024



Issued: August 27, 2024



October 1, 2024

(Released Thursday, Oct. 3, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	9.75	56.59	28.92	4.42	0.33	0.00
Last Week <i>09-24-2024</i>	37.68	37.68	19.90	4.42	0.33	0.00
3 Months Ago <i>07-02-2024</i>	33.59	14.43	20.90	21.36	9.72	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>09-26-2023</i>	7.30	10.81	13.65	8.95	22.09	37.20
One Year Ago <i>10-03-2023</i>	7.30	10.81	14.54	8.29	21.87	37.20

Intensity





One Month Outlook

The most recent Monthly Outlook

- The Precipitation Outlook for the month of October shows a strong leaning towards below normal rainfall across the entire forecast area
- Like many months prior, the Temperature Outlook continues to advertise above normal temperatures for the entire service area for October

[Click for latest graphics](#)

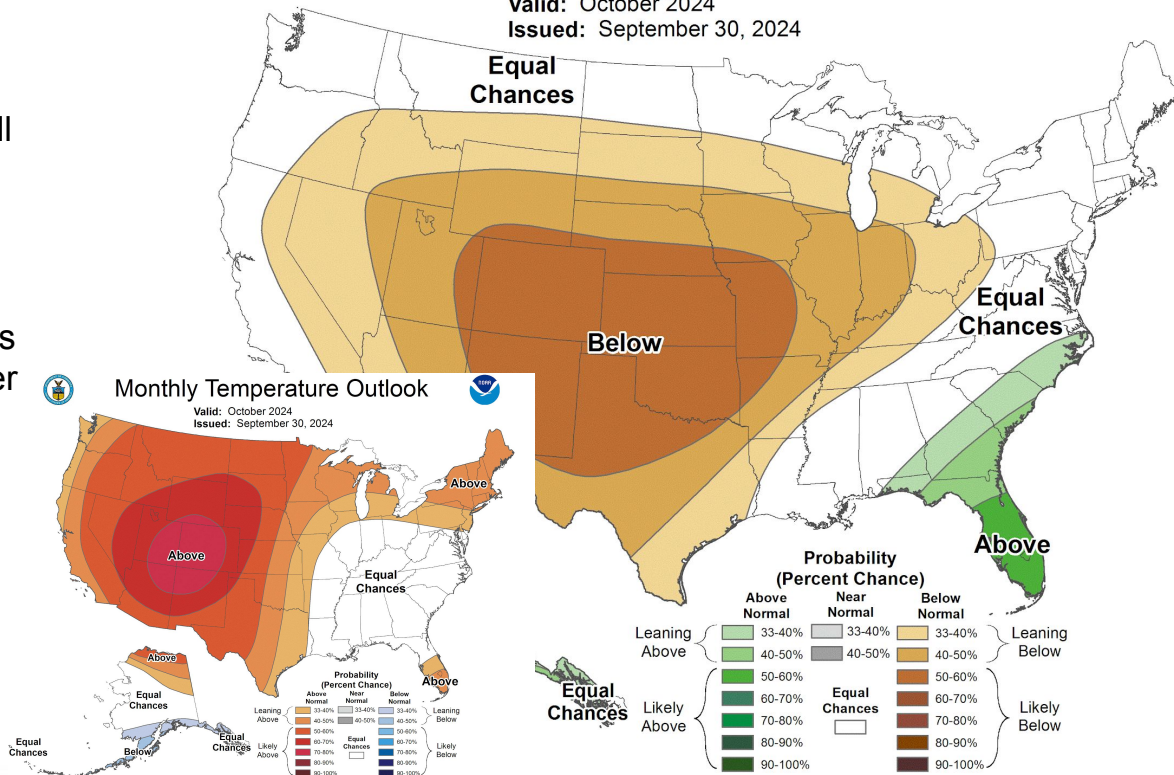


Monthly Precipitation Outlook



Valid: October 2024

Issued: September 30, 2024





Three Month Outlook

Looking at the Seasonal Outlooks

- The Precipitation Outlook for the late fall/winter 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.

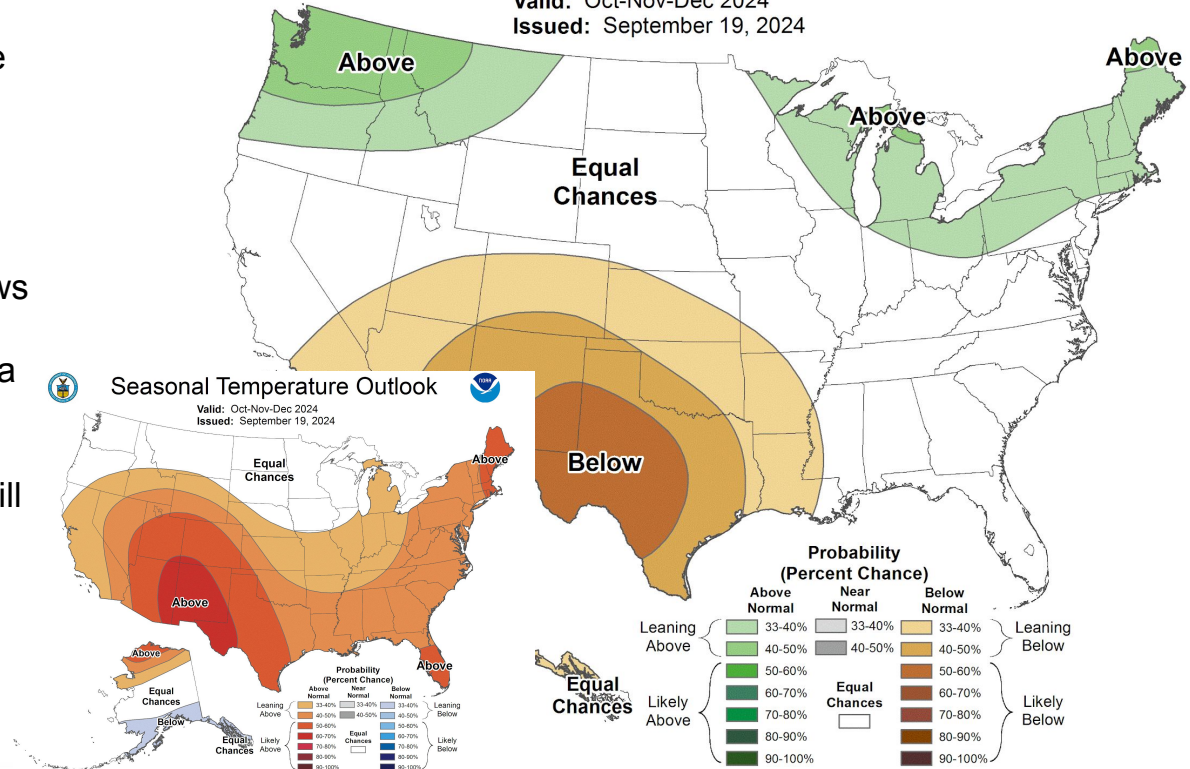
[Click for latest graphics](#)



Seasonal Precipitation Outlook



Valid: Oct-Nov-Dec 2024
Issued: September 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/>

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/>