



January 2024

Monthly Hydrologic and Flood

Stage Report (E5/E3)

NWS Austin/San Antonio, TX

Prepared by: Chris Morris

February 8, 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

- El Nino made its presence felt over the course of January
- The Coastal Plains and I-35 Corridor saw well above normal rainfall for the month
 - The Hill Country, southern Edwards Plateau, and much of the Rio Grande Plains saw below normal rainfall for the month
- 5 forecast/non-forecast points exceeded flood stage, 16 forecast/non-forecast points exceeded action stage
- Thanks to the above normal rainfall, drought conditions greatly improved in the Coastal Plains, and I-35 Corridor while drought conditions persisted or slightly worsened across the remainder for the service area
- Rainfall outlooks show chances for above normal rainfall in the short term before trending to equal chances as we move into Spring of 24





Monthly Summary

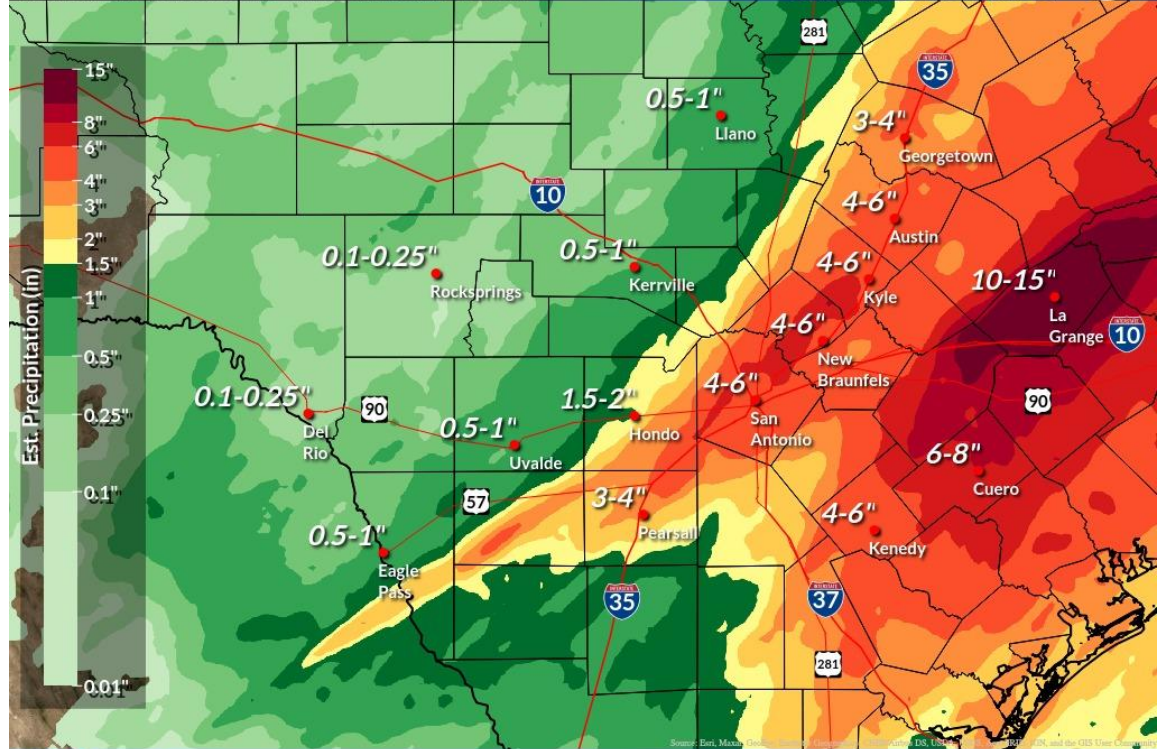
January 21-25th Flooding

- Towards the later half of the month a broad wave brought several days of rainfall, periodically heavy, to much of the Coastal Plains and I-35 Corridor
 - Storm total amounts across Fayette County exceeded a foot of rain
 - Widespread flooding and flash flooding was experienced with this rainfall
 - A few rivers exceeded flood stage while several more rose into action stage.
 - A more detailed overview of this event is viewable in this [storymap](#)

5-Day Estimated Rainfall

Valid: 01/20/2024 06:00 AM - 01/25/2024 06:00 AM CST

Weather Forecast Office
Austin/San Antonio, TX
Issued Jan 25, 2024 8:16 AM CST



f t v NWSanAntonio

weather.gov/ewx



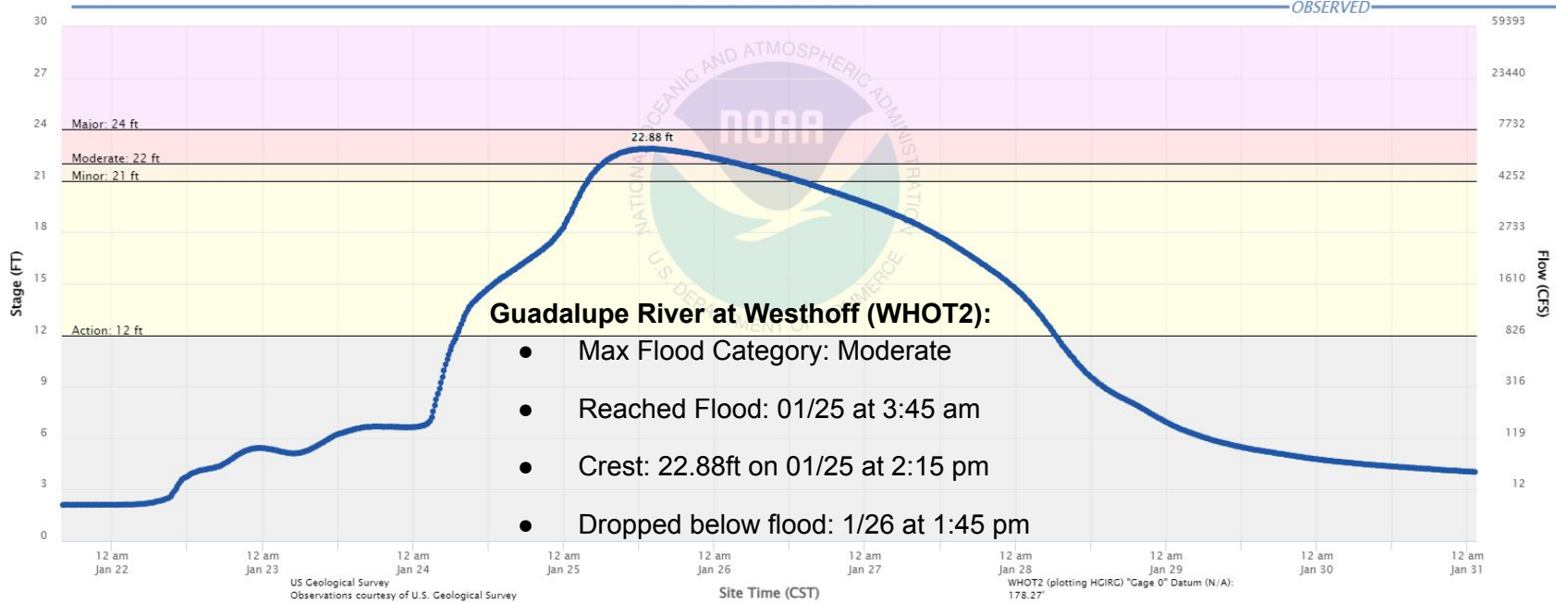


Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 6.52 ft
11:00 AM CST 7-Feb-2024
Flood Stage is 21 ft

Sandies Creek near Westhoff
NWSLI: WHOT2, Reach ID: 1623207



Zoom 1d 2d 7d 14d All

Jan 21, 2024 - Jan 31, 2024





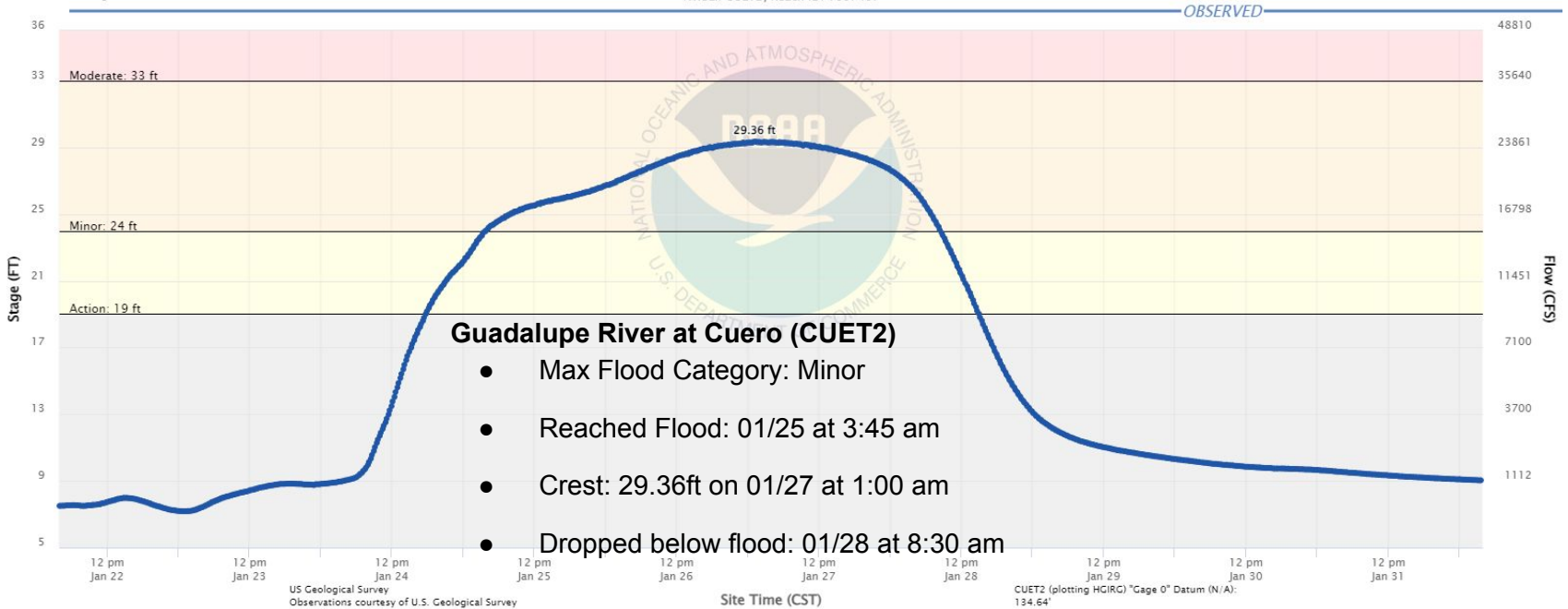
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 10.03 ft
11:30 AM CST 7-Feb-2024
Flood Stage is 24 ft

Guadalupe River near Cuero

NWSLI: CUET2, Reach ID: 1637437



Zoom 1d 2d 7d 14d All

Jan 22, 2024 - Feb 1, 2024





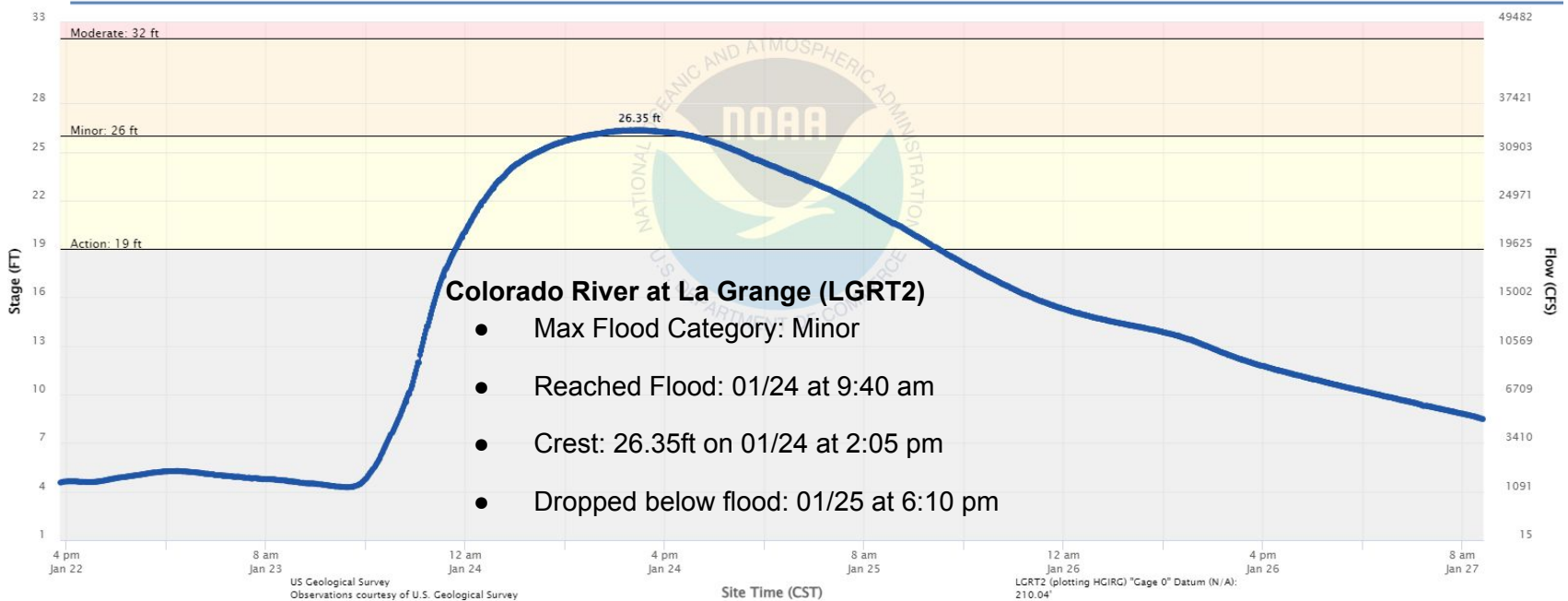
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 3.66 ft
11:25 AM CST 7-Feb-2024
Flood Stage is 26 ft

Colorado River (TX) above La Grange

NWSLI: LGRT2, Reach ID: 5791848



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

Site Time (CST)

LGRT2 (plotting HGIRG) "Gage 0" Datum (N/A):
210.04'

Graph Created: (12:17 PM CST Feb 7 2024) - Forecast Issued (08:37 AM CST Feb 7 2024)



Zoom 1d 2d 7d 14d All

Jan 22, 2024 - Jan 27, 2024



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

National Weather Service
Austin/San Antonio, TX

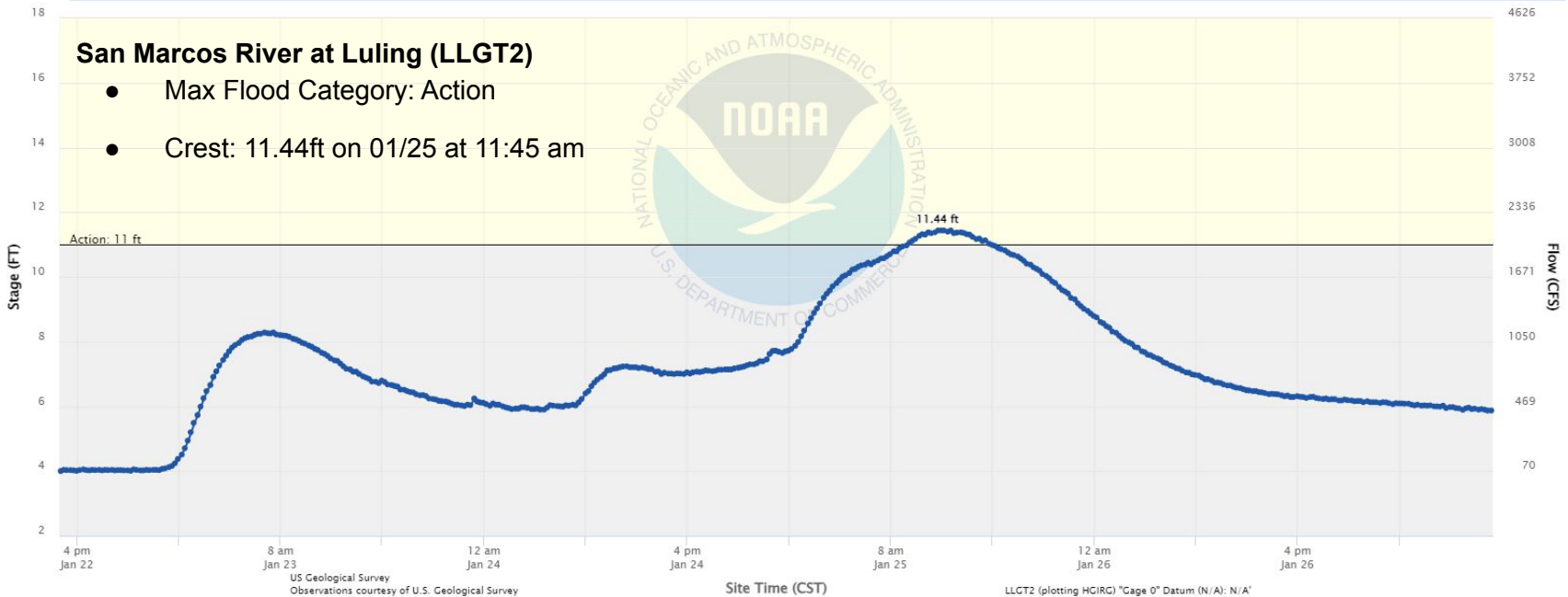


Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 4.55 ft
11:45 AM CST 7-Feb-2024
Flood Stage is 20 ft

San Marcos River at Luling
NWSLI: LLGT2, Reach ID: 1631387



Zoom 1d 2d 7d 14d All

Jan 22, 2024 -- Jan 27, 2024





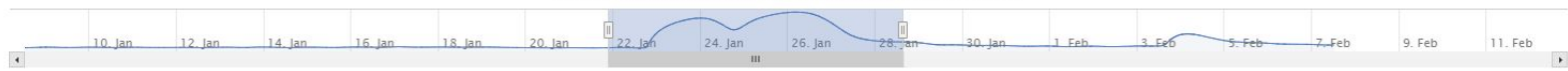
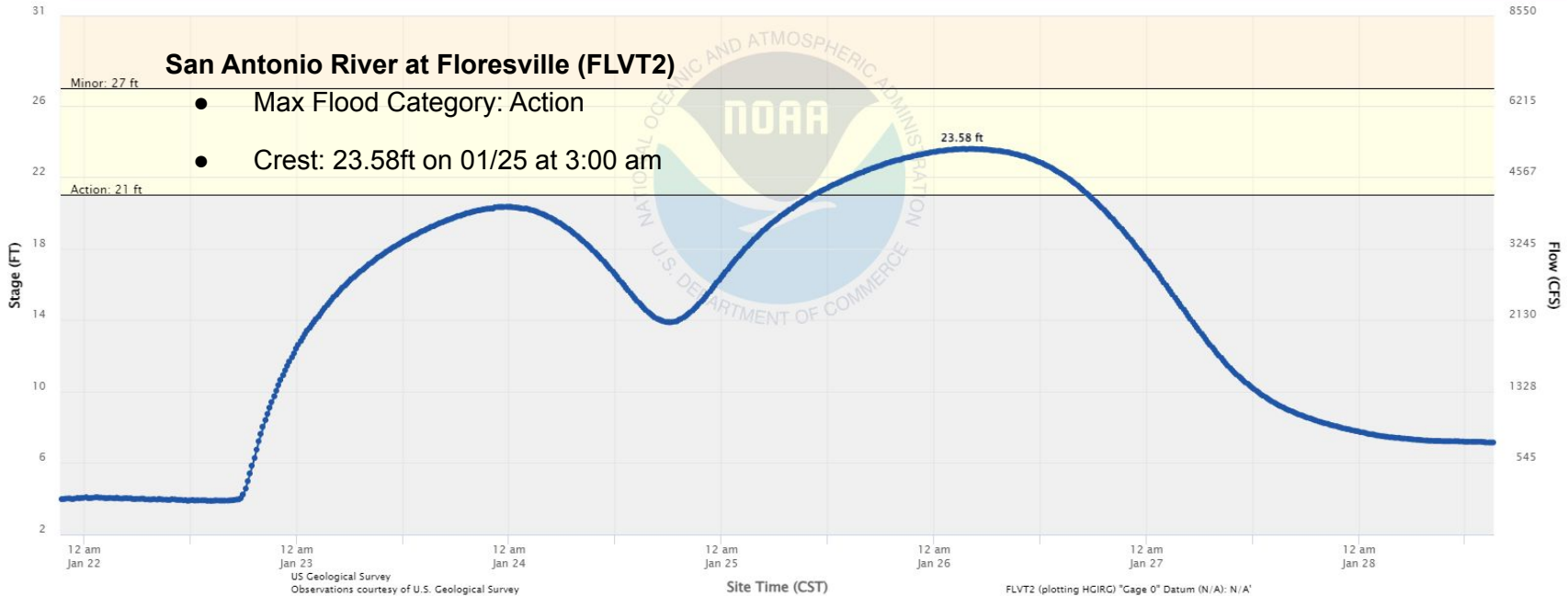
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 5.51 ft
12:00 PM CST 7-Feb-2024
Flood Stage is 27 ft

San Antonio River near Floresville

NWSLI: FLVT2, Reach ID: 3836053



Zoom 1d 2d 7d 14d All

Jan 21, 2024 -- Jan 28, 2024



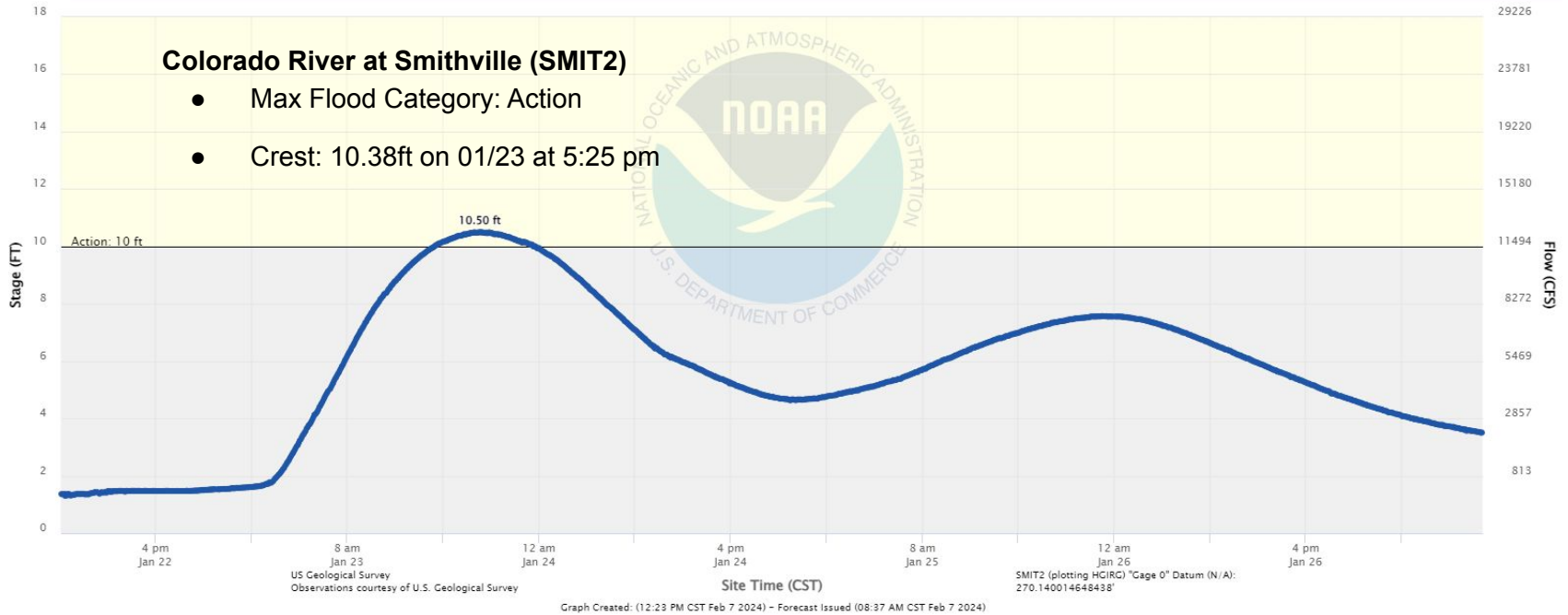
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 1.7 ft
11:10 AM CST 7-Feb-2024
Flood Stage is 20 ft

Colorado River (TX) near Smithville

NWSLI: SMIT2, Reach ID: 5790058



Zoom 1d 2d 7d 14d All

Jan 22, 2024 - Jan 27, 2024



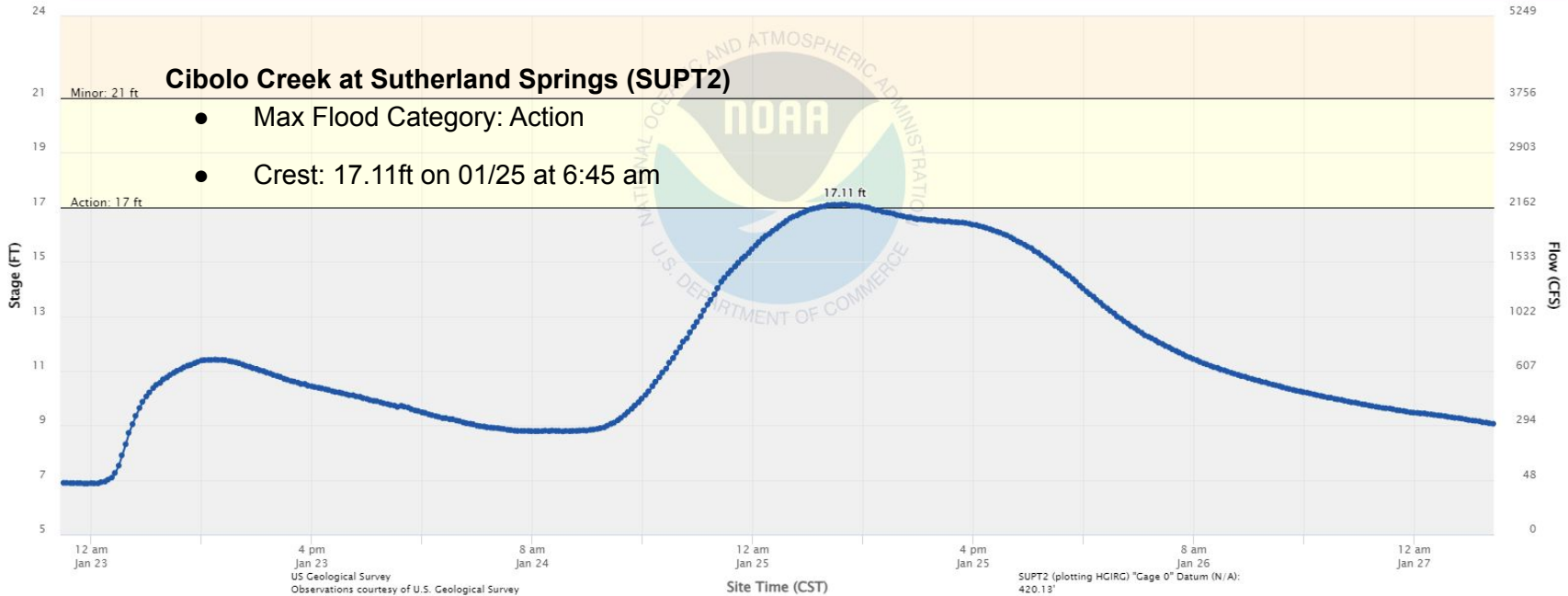
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 6.79 ft
11:15 AM CST 7-Feb-2024
Flood Stage is 21 ft

Cibolo Creek at Sutherland Springs

NWSLI: SUPT2, Reach ID: 7851771



Zoom 1d 2d 7d 14d All

Jan 22, 2024 -- Jan 27, 2024



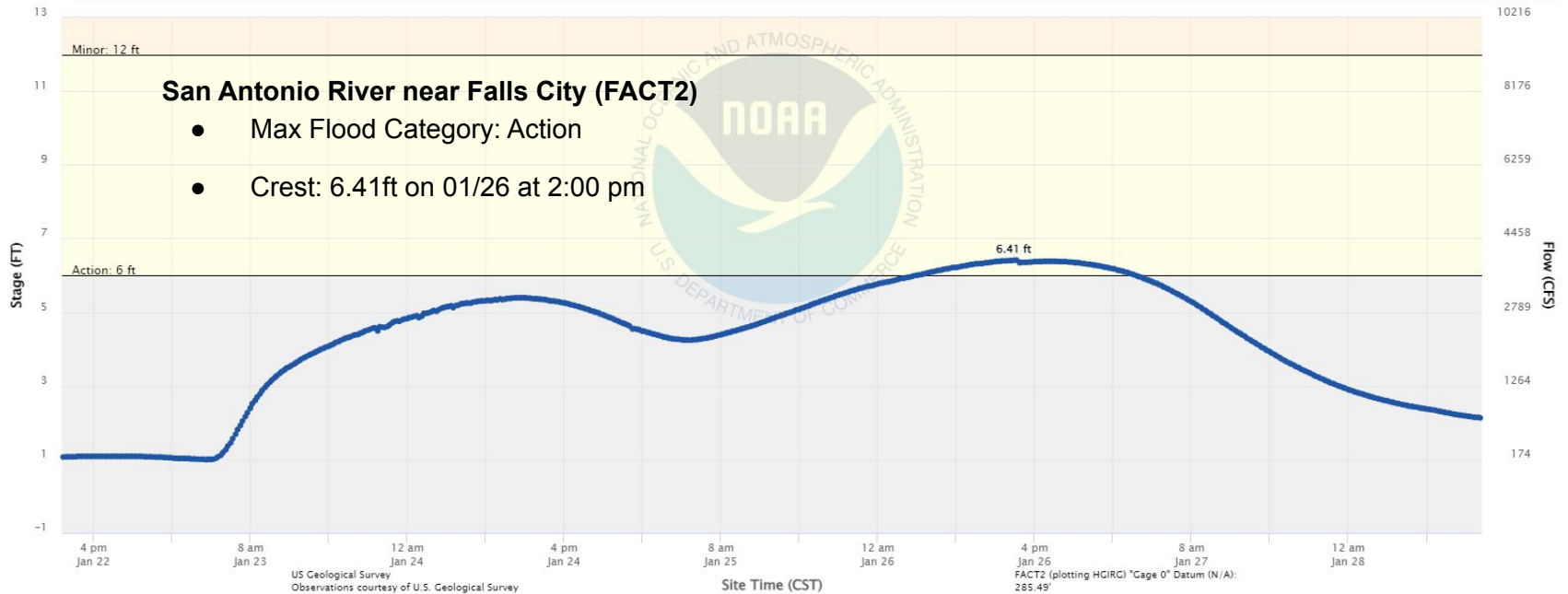
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 1.52 ft
11:15 AM CST 7-Feb-2024
Flood Stage is 12 ft

San Antonio River near Falls City

NWSLI: FACT2, Reach ID: 3838221



Zoom 1d 2d 7d 14d All

Jan 22, 2024 → Jan 28, 2024



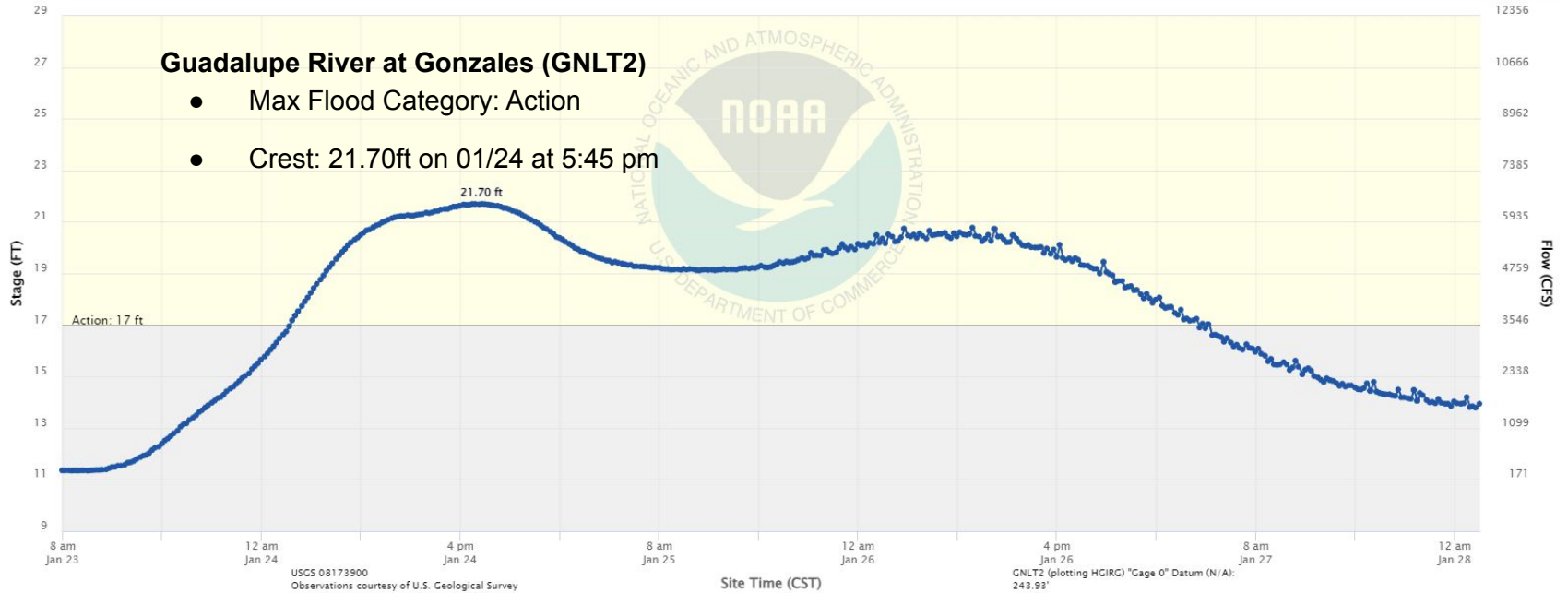
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 12.1 ft
11:45 AM CST 7-Feb-2024
Flood Stage is 31 ft

Guadalupe River at Gonzales

NWSLI: GNLT2, Reach ID: 1622713



Zoom 1d 2d 7d 14d All

Jan 23, 2024 - Jan 28, 2024





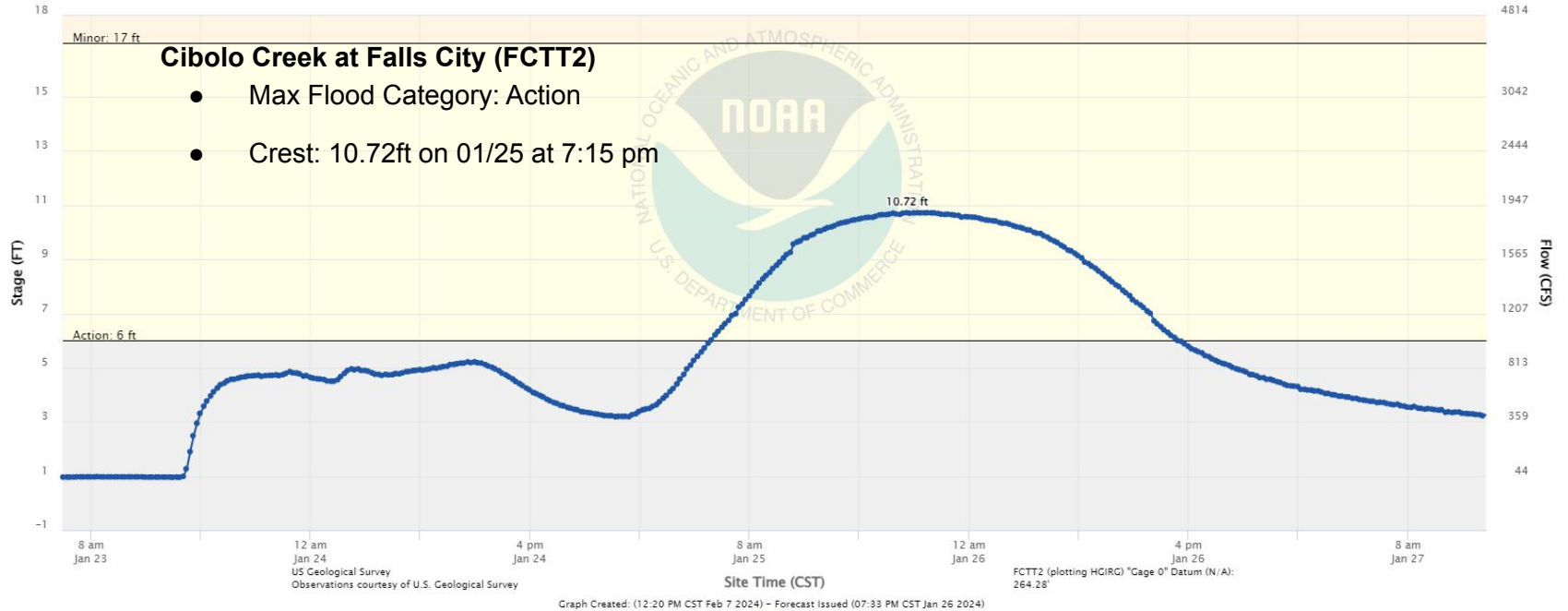
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 1.2 ft
11:15 AM CST 7-Feb-2024
Flood Stage is 17 ft

Cibolo Creek near Falls City

NWSLI: FCTT2, Reach ID: 7852265



Zoom 1d 2d 7d 14d All

Jan 23, 2024 - Jan 27, 2024





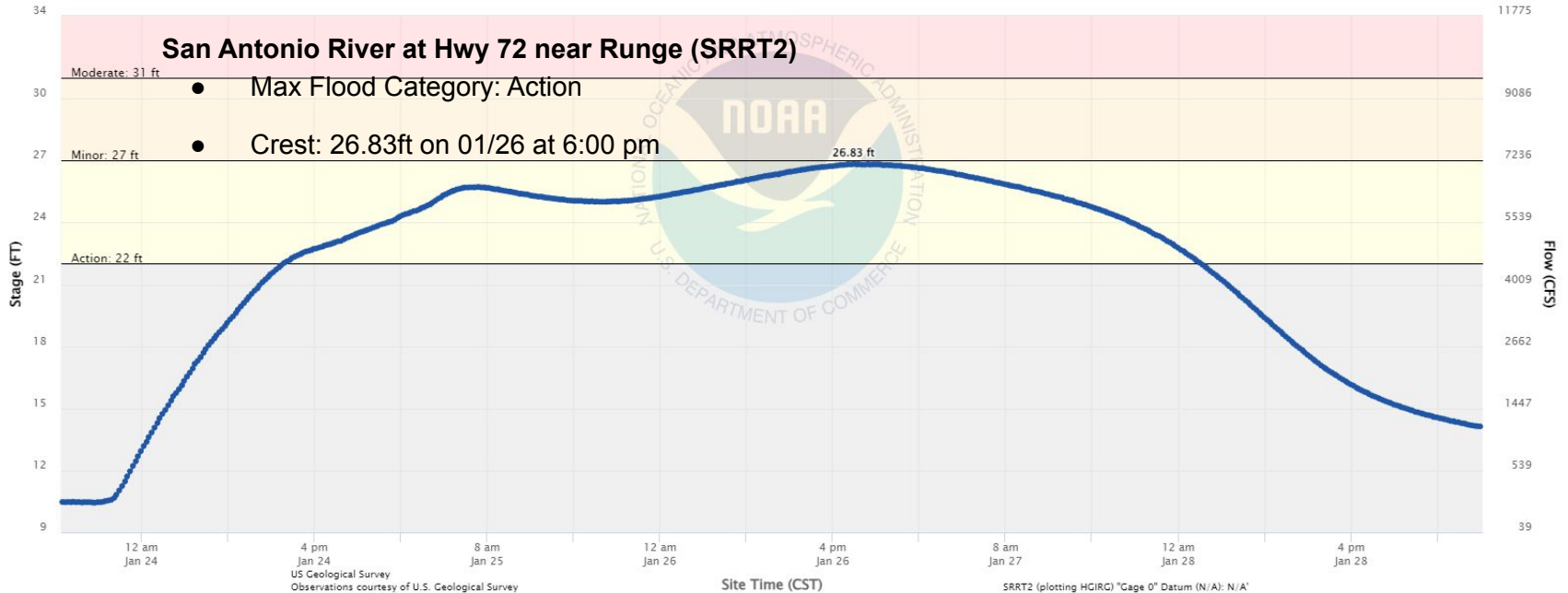
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 12.46 ft
11:15 AM CST 7-Feb-2024
Flood Stage is 27 ft

San Antonio River at SH 72 near Runge

NWSLI: SRRT2, Reach ID: 3839167



Zoom 1d 2d 7d 14d All

Jan 23, 2024 - Jan 29, 2024



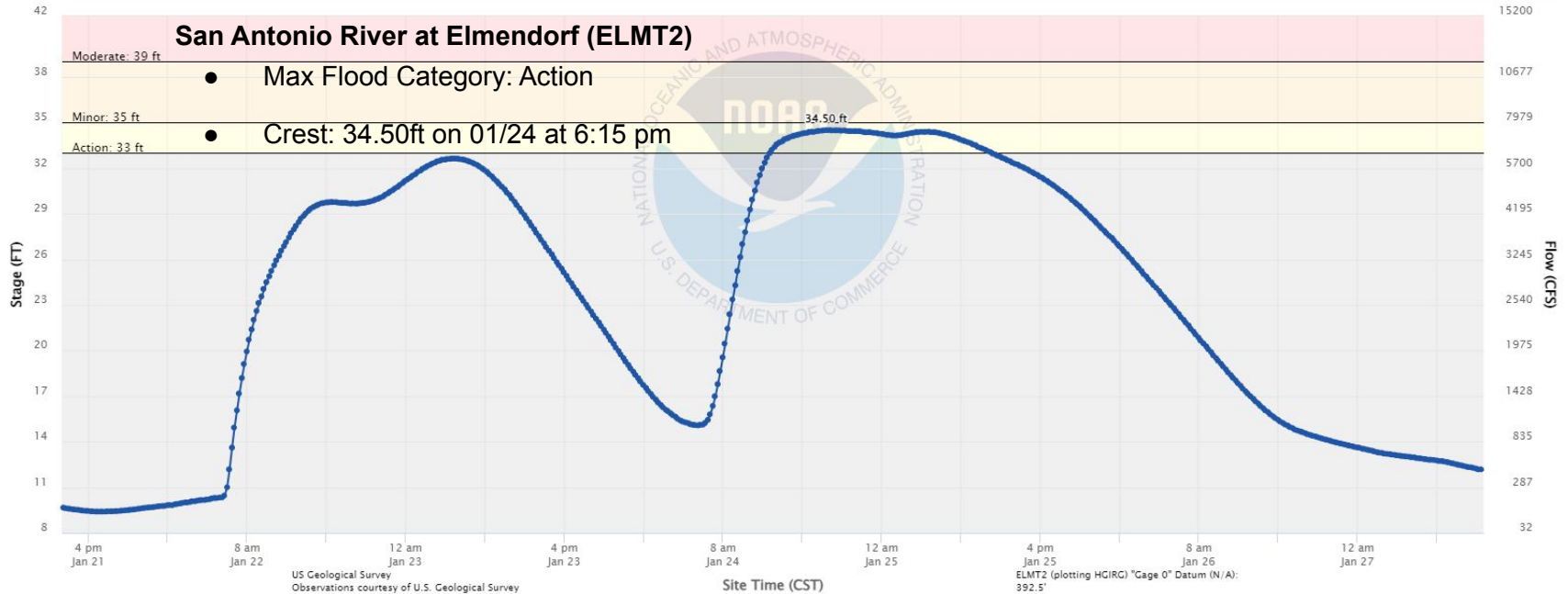
Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 10.82 ft
11:30 AM CST 7-Feb-2024
Flood Stage is 35 ft

San Antonio River at Elmendorf

NWSLI: ELMT2, Reach ID: 10840572



Zoom 1d 2d 7d 14d All

Jan 21, 2024 - Jan 27, 2024

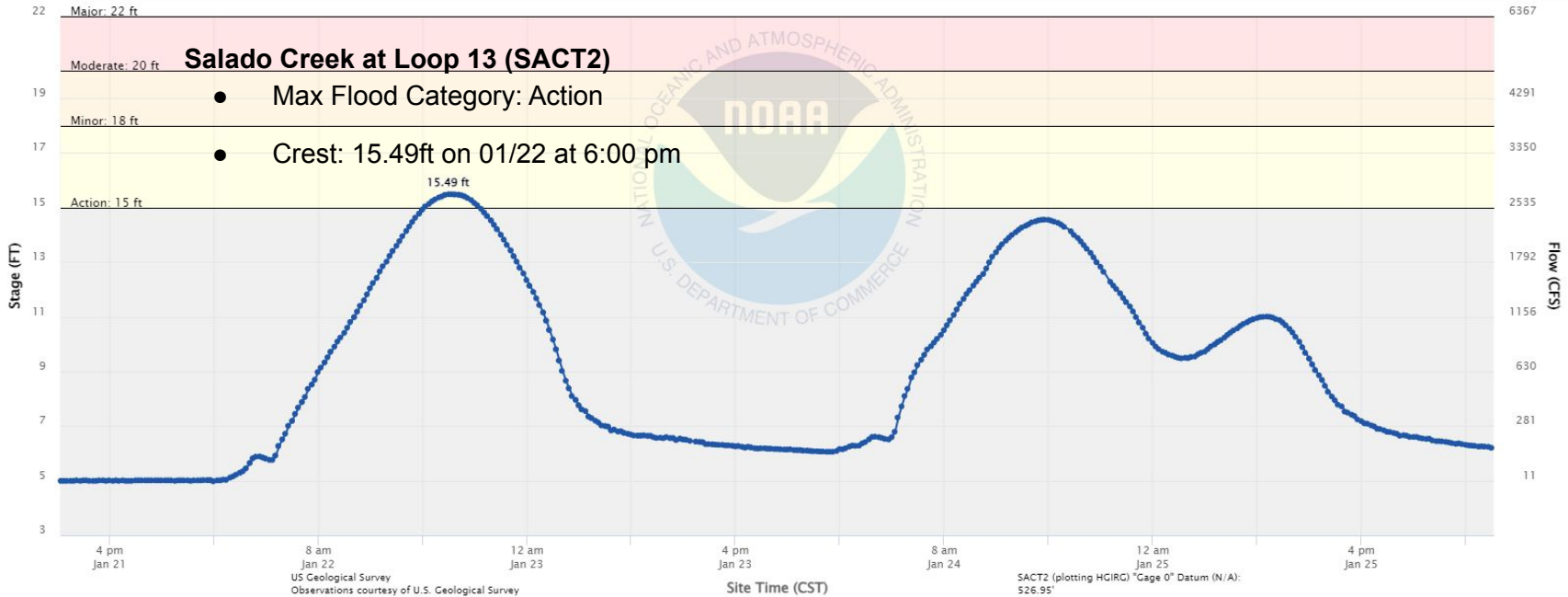


Flood Stage Report

River Flood Summary (Forecast Points)

Latest observed value: 5.18 ft
11:15 AM CST 7-Feb-2024
Flood Stage is 18 ft

Salado Creek at Loop 13
NWSLI: SACT2, Reach ID: 10840488



Zoom 1d 2d 7d 14d All

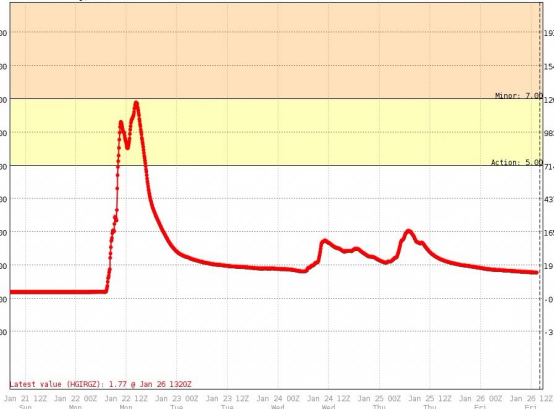
Jan 21, 2024 - Jan 26, 2024



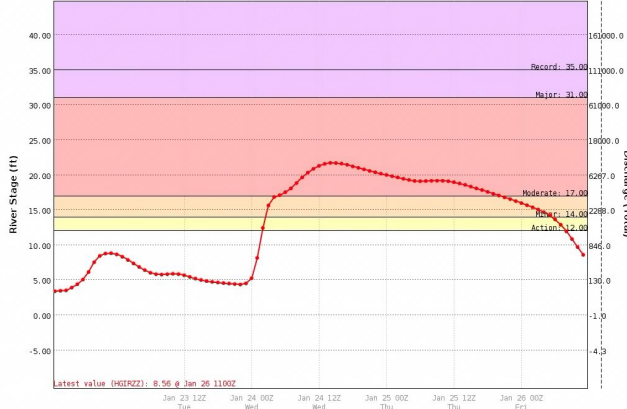
Flood Stage Report

River Flood Summary (Non-Forecast Points)

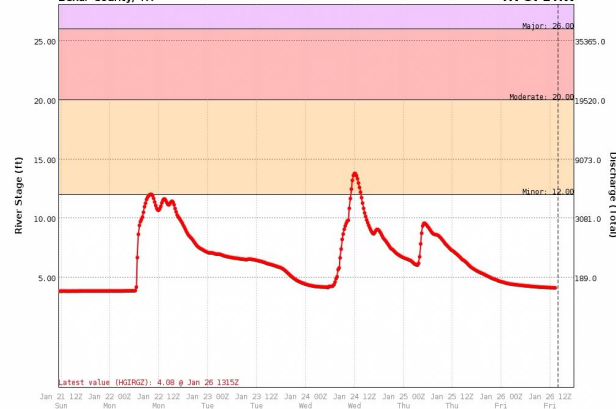
AHOT2 : Shoal Creek - at West 12th Street
Travis County, TX



MLDT2 : Buckners Creek - Muldoon
Fayette County, TX



SNPT2 : San Antonio River - San Antonio Loop 410
Bexar County, TX



Summary:

- Crest: 6.89ft on 01/22 at 8:15 am

Summary:

- Crest: 21.71 on 01/24 at 8:25am
- Reached flood: 01/23 at 8:00pm
- Dropped below flood: 01/25 at 11:15pm

Summary:

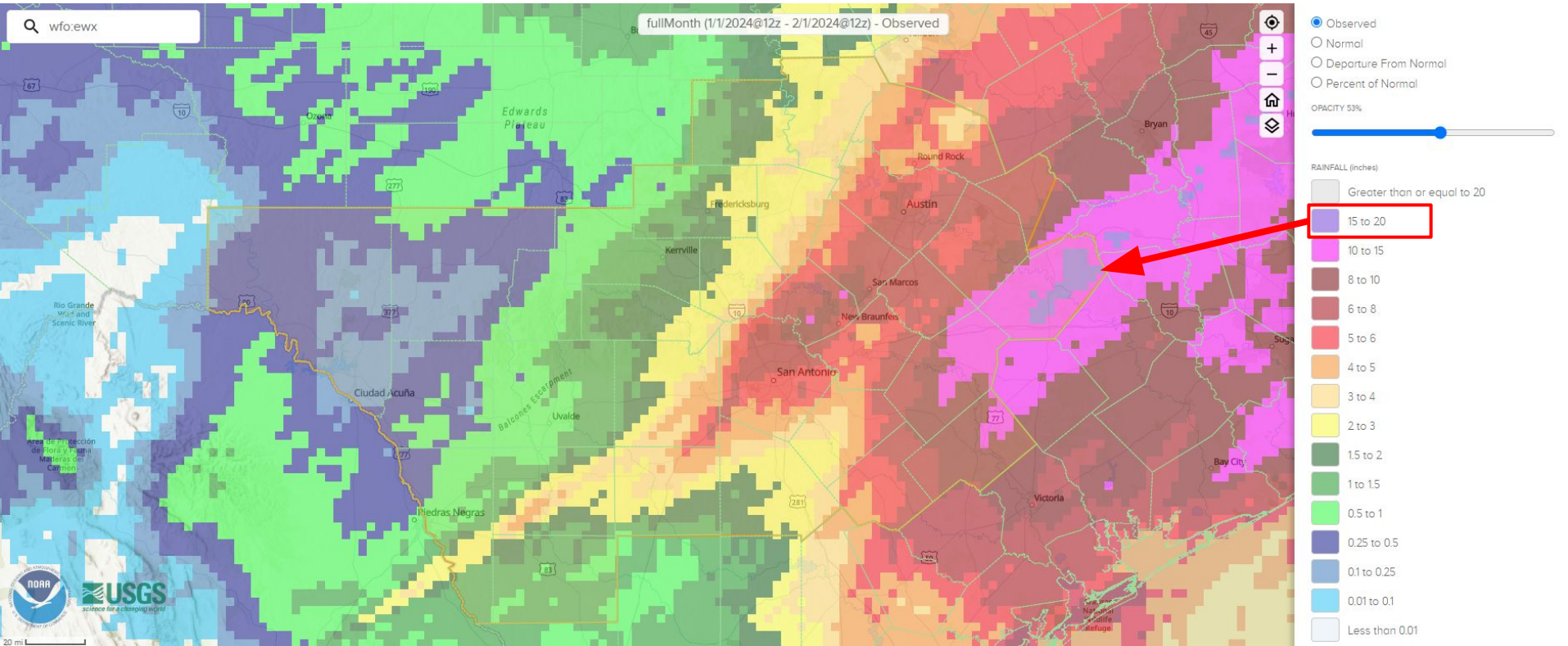
- Crests: 12.00 on 01/22 at 4:00 am; 13.77ft on 01/24 at 6:00 am
- Reached flood: 01/22 at 3:45 am; 01/24 at 5:30 am
- Dropped below flood: 01/22 at 4:15 am; 01/24 at 7:30 am





January 2024 Rainfall

Observed Rainfall (Inches)



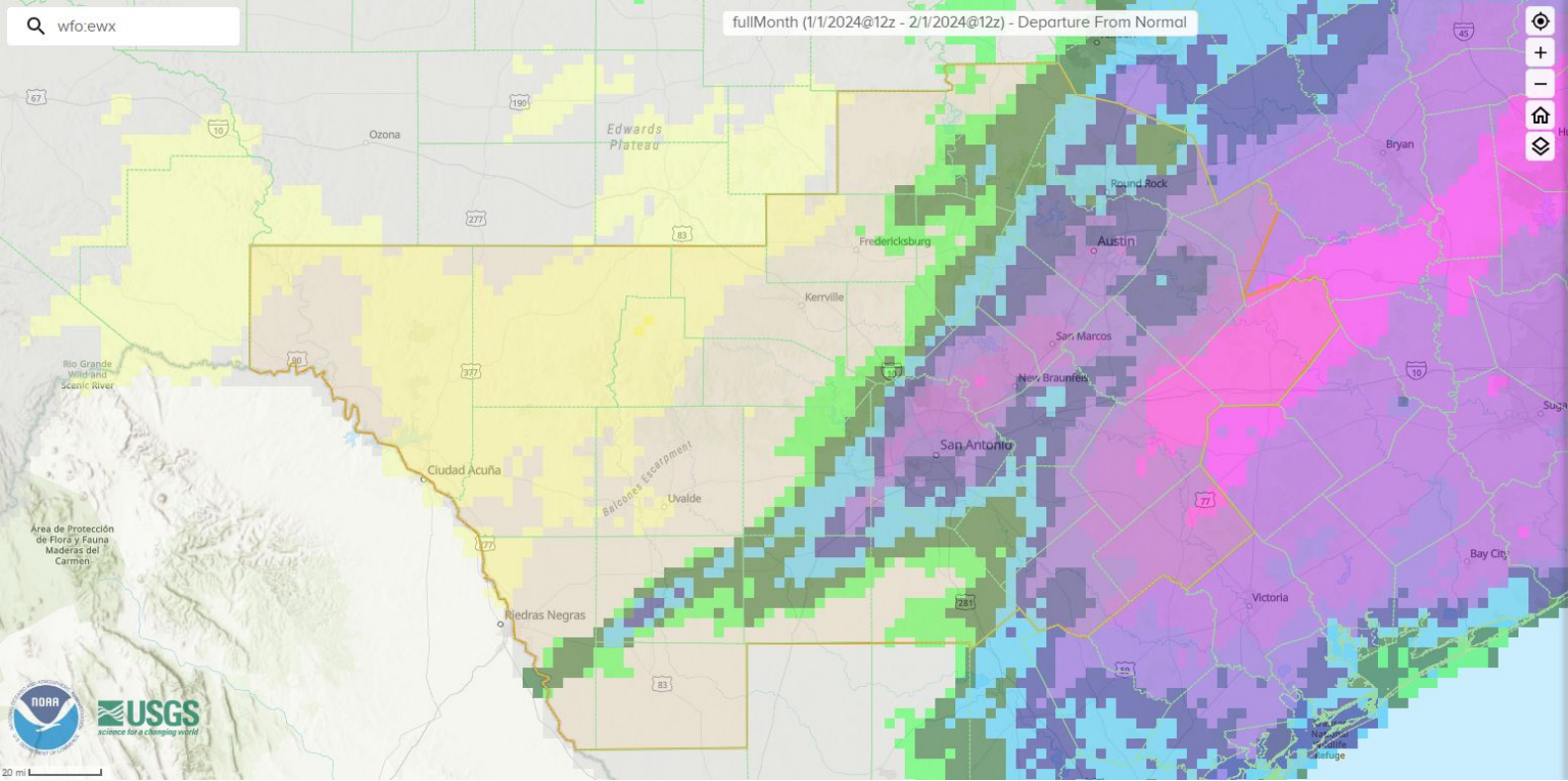


January 2024 Rainfall

Departure from Normal Rainfall (Inches)

wfo.ewx

fullMonth (1/1/2024@12z - 2/1/2024@12z) - Departure From Normal



- Observed
- Normal
- Departure From Normal
- Percent of Normal

OPACITY 53%

RAINFALL (inches)

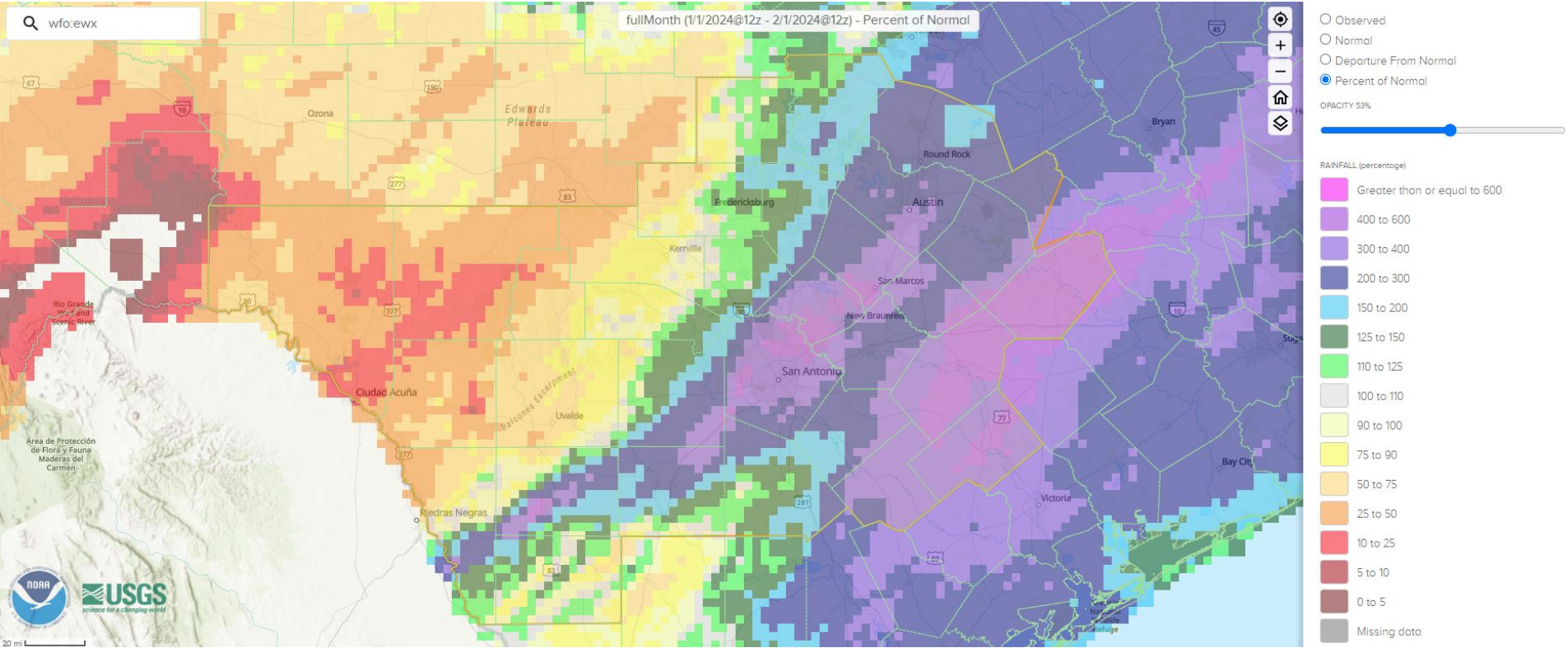
- Greater than or equal to 8
- 5 to 8
- 4 to 5
- 3 to 4
- 2 to 3
- 1 to 2
- 0.5 to 1
- -0.5 to 0.5
- -1 to -0.5
- -2 to -1
- -3 to -2
- -4 to -3
- -5 to -4
- -8 to -5
- Less than -8
- Missing data





January 2024 Rainfall

Percent of Normal Rainfall (%)





January 2024 - Historical Streamflow Comparison

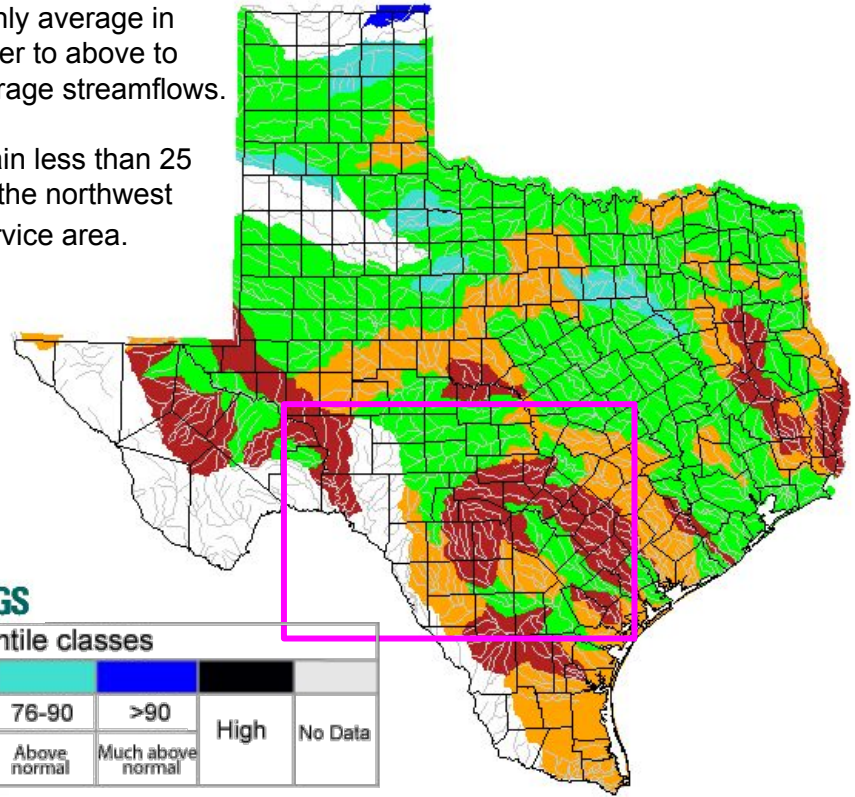
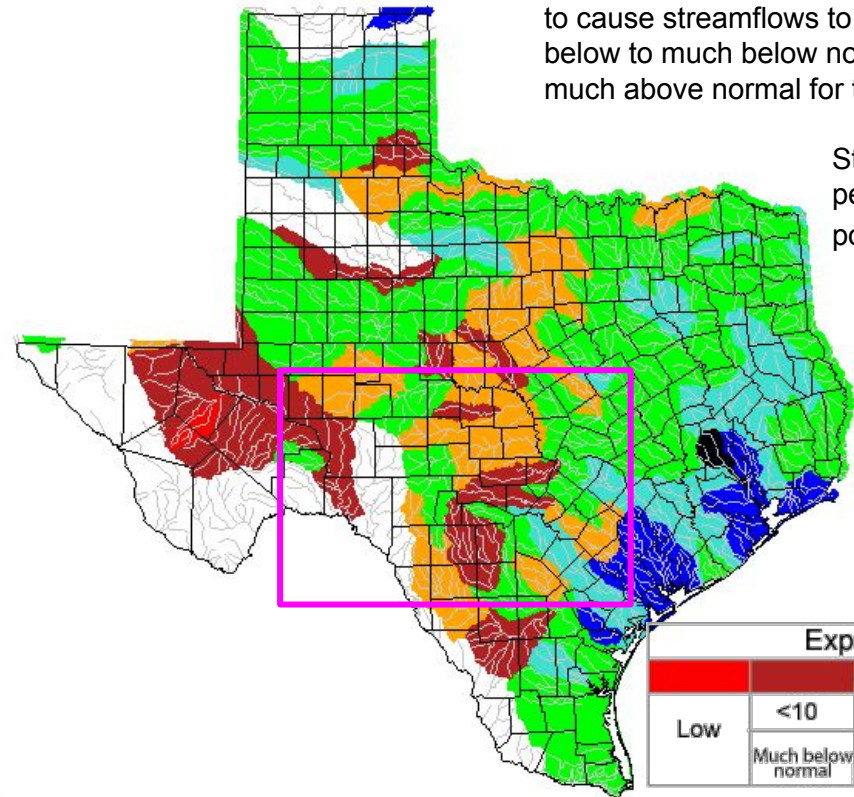
Streamflow Comparison

January 2024

The heavy rainfall across the Coastal Plains was sufficient to cause streamflows to go from a monthly average in below to much below normal in December to above to much above normal for the January average streamflows.

December 2023

Streamflows remain less than 25 percentile across the northwest portions of the service area.



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	2024 Rainfall Through Month	1991-2020 Normal Through Month	2024 Percent of Normal
Austin – Bergstrom	6.77”	2.82”	6.77”	2.82”	240%
Austin – Mabry	6.07”	2.64”	6.07”	2.64”	230%
Del Rio	0.17”	0.61”	0.17”	0.61”	28%
San Antonio	6.72”	1.96”	6.72”	1.96”	343%

*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	7.78"	3.43"	7.78"	3.43"	227%
Corpus Christi	3.41"	1.39"	3.41"	1.39"	245%
Laredo	0.44"	0.90"	0.44"	0.90"	49%
San Angelo	0.51"	0.92"	0.51"	0.92"	55%
Victoria	7.67"	2.67"	7.67"	2.67"	287%
Waco	4.55"	2.59"	4.55"	2.59"	176%

*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	994.42	0.18
Lake Travis	681	631.46	-0.40
Canyon Lake	909	887.67	0.03
Medina Lake	1064.2	974.63	-0.26
Lake Amistad	1117	1058.99	-2.80





Hydrologic Products Issued for the Month

Product Issued	Number Issued	Additional Comments
River Flood Warning/Area Flood Warning (FLW)	5	
River Flood Statement/Area Flood Advisory (FLS)	70	19 new issuances, 51 continuations, extensions, or cancelation issuances.
Flood Watch (FFA)	1	
Flash Flood Warning (FFW)	4	
Flash Flood Statement (FFS)	9	
Hydrologic Outlook (ESF)	6	AHPS probabilistic forecasts for the Brazos, Colorado, Guadalupe, San Antonio, Pecos, and Nueces Rivers



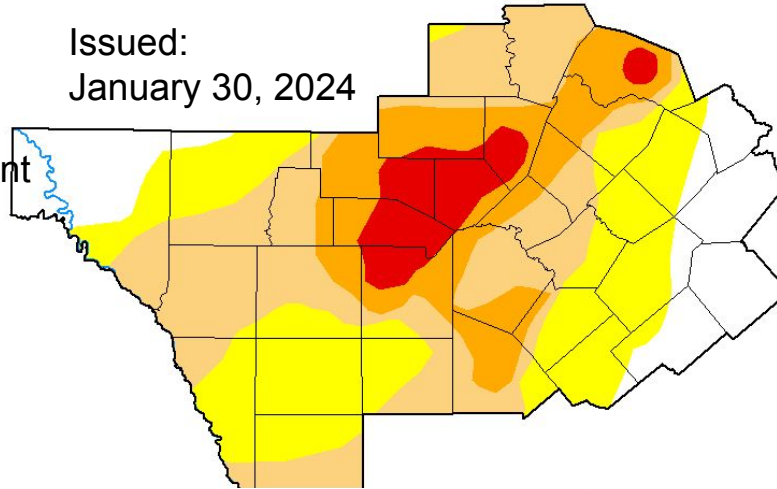
Drought Conditions

Monthly Drought Monitor Comparison

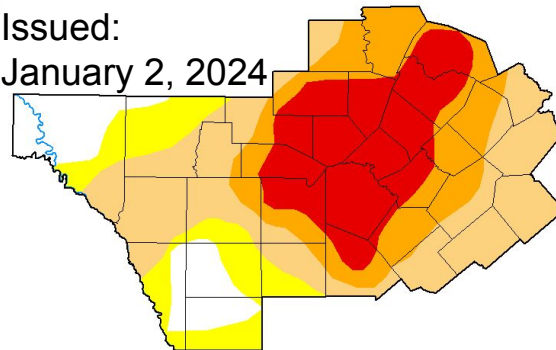
The above normal precipitation that occurred across the Coastal Plains, and I-35 Corridor allowed for significant improvement in drought conditions over the month of January. However, continued below normal precipitation prolongs drought conditions across portions of the Hill Country, southern Edwards Plateau, and Rio Grande Plains.

- D3 drought encompasses 7% of the CWA
- Drought doesn't affect 46% of the CWA

Issued:
January 30, 2024



Issued:
January 2, 2024



January 30, 2024

(Released Thursday, Feb. 1, 2024)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	16.32	29.78	30.82	16.30	6.78	0.00
Last Week <i>01-23-2024</i>	10.14	20.84	40.02	17.37	11.63	0.00
3 Months Ago <i>10-31-2023</i>	6.10	5.39	25.12	32.07	29.41	1.91
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>01-31-2023</i>	1.99	21.45	29.59	26.66	10.16	10.15

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought





One Month Outlook

The most recent Monthly Outlook

- The Precipitation Outlook for the month of February leans towards above normal rainfall across the entire service area.
- The Temperature Outlook for February shows equal chances for at, below, or near normal values.

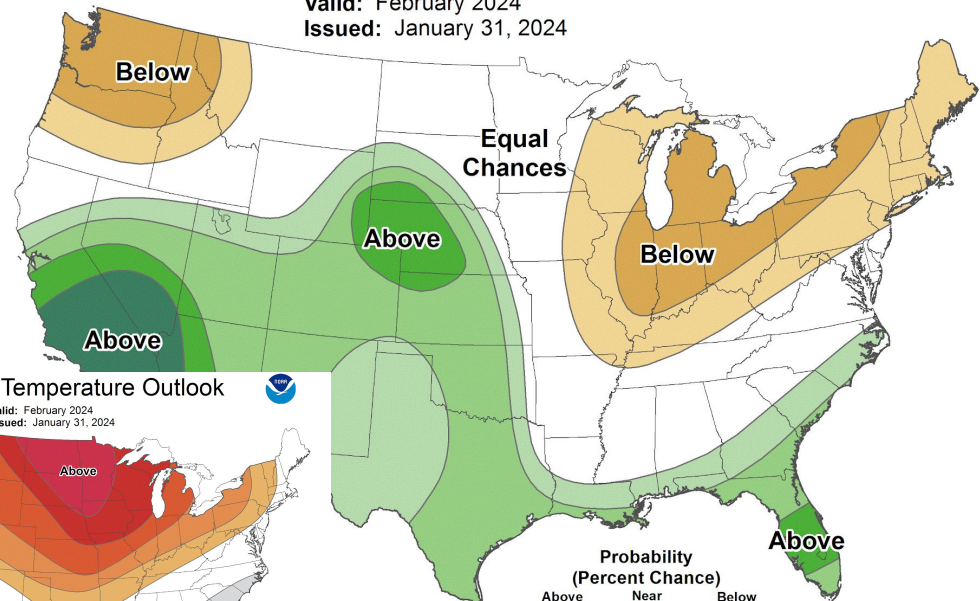
[Click for latest graphics](#)



Monthly Precipitation Outlook

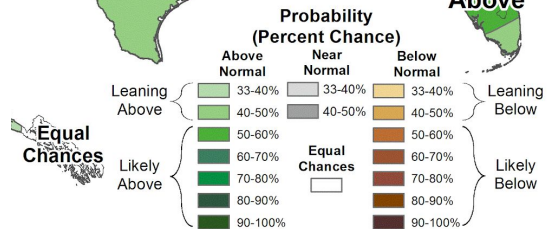
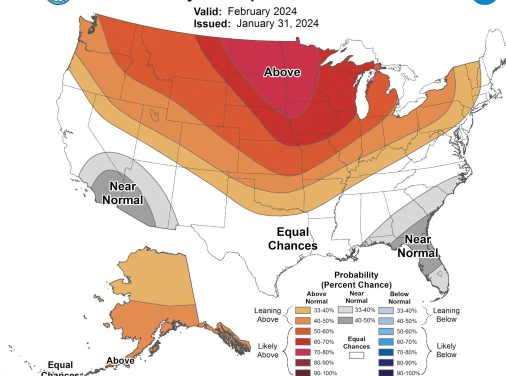


Valid: February 2024
Issued: January 31, 2024



Monthly Temperature Outlook

Valid: February 2024
Issued: January 31, 2024





Three Month Outlook

Looking at the Seasonal Outlooks

- The Precipitation Outlook shows equal chances of above, below, or near normal precipitation for the majority of the service area.
 - However, the far eastern portions of the I-35 corridor and coastal Plains chances lean towards above normal.
- The Temperature Outlook shows equal chances for either above, below, or near normal for much of the service area.
 - However, for portions of the southern Edwards Plateau, Hill Country, and Rio Grande Plains chances lean towards below normal values.

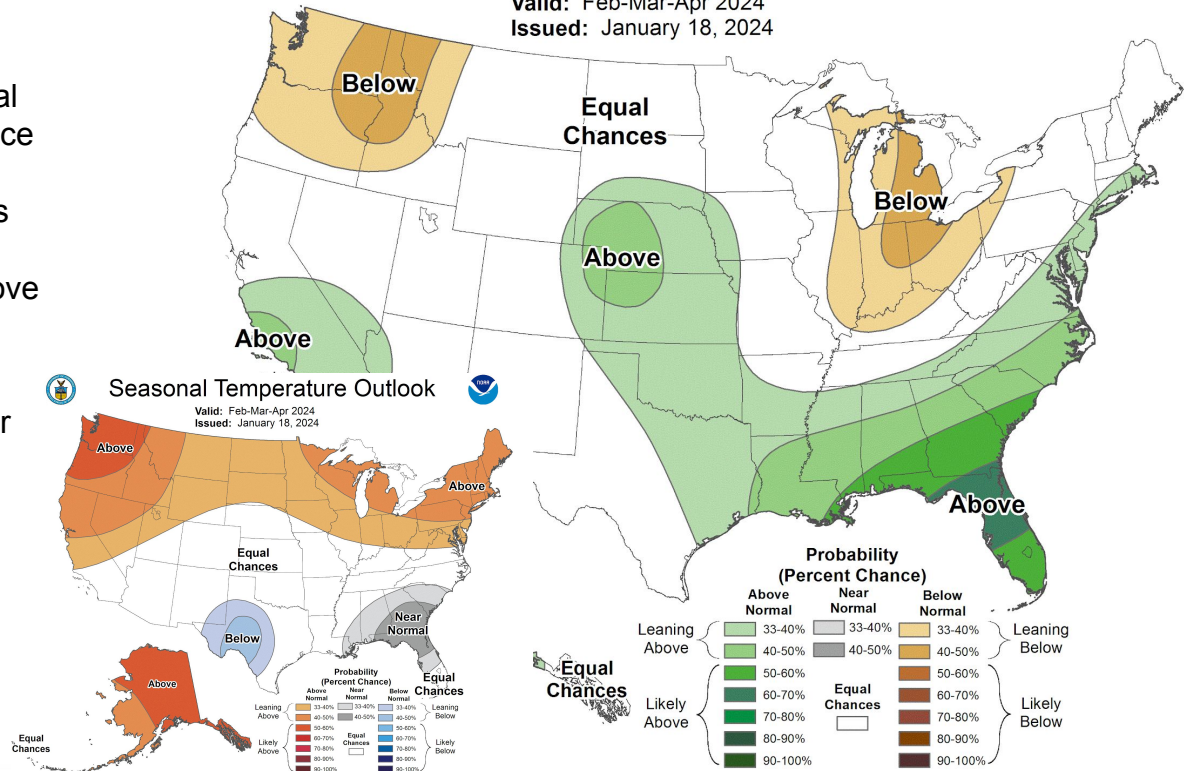
[Click for latest graphics](#)



Seasonal Precipitation Outlook



Valid: Feb-Mar-Apr 2024
Issued: January 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/>