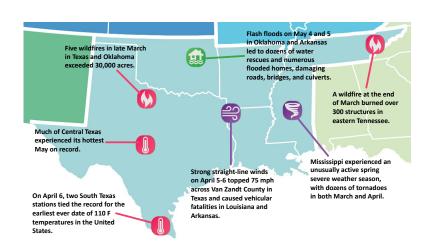
June 2022

## Southern Region Significant Events — Spring 2022



This spring's severe weather season was a quiet one for the traditional Tornado Alley, with most of North Texas and Oklahoma in the grips of a drought for most of the spring. In contrast, frequent severe weather affected the lower Mississippi River area. Fortunately, there were few fatalities.

#### **Overview**

This spring concluded the second cool season in a row with La Niña conditions in the tropical Pacific. Weather held fairly true to form, with generally warmer than normal conditions.

March temperatures were near normal. It was a relatively dry month in Texas and Tennessee, while other states were a bit wetter than normal. Wildfires were a major problem in March.

April was warmer and drier than normal in western parts of the region, cooler and wetter than normal toward the east. Drought conditions intensified in Texas and Oklahoma.

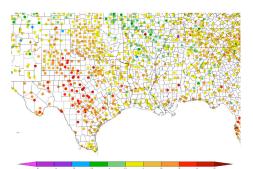
May temperatures were well above normal throughout the region. Oklahoma and Arkansas were both wet, but Texas remained dry. Oklahoma experienced a substantial improvement in drought conditions during May, with extreme drought declining from about 40% of the state to less than 20% by the end of the month.

# Regional Climate Overview — Spring 2022

## **Temperature and Precipitation**

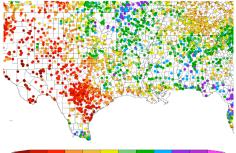
## **Departure from Normal** Temperature °F

3/1/2022 - 5/31/2022



Except for Arkansas, temperatures were well above normal during Spring 2022. The greatest departures from normal were in central Texas, with temperatures 3°F above normal common from Abilene to San Antonio. Elsewhere, temperatures were generally 0-2°F above normal.

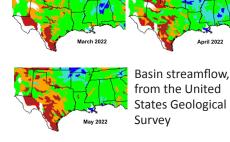
### **Percent of Normal** Precipitation (%) 3/1/2022 - 5/31/2022



It was a wetter than normal Spring from central and eastern Oklahoma to east-central Mississippi, with especially wet conditions near the Ozarks. In contrast, dry weather gripped Texas. The majority of the state received less than 50% of normal rainfall, with zero precipitation at a few stations.

#### Surface Water

**Monthly Average** Streamflow



Stream flow was well above normal in Arkansas and eastern Oklahoma during Spring 2022, but unusually low across most of Texas and western Oklahoma. Tennessee, Mississippi, and Louisiana experienced generally near normal stream flow conditions.

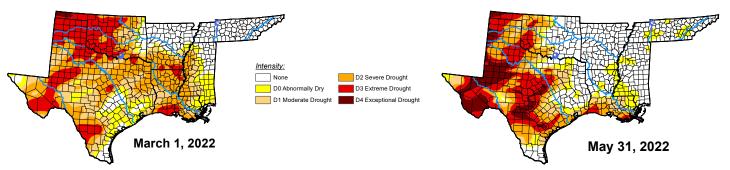


## **Southern Regional Impacts**

## **Drought, Agriculture, and Water Supply**

Spring 2022 saw a transition from widespread moderate to severe drought across the southern United States to a more intense drought confined to western Oklahoma, Texas, and southern Louisiana. Tennessee was nearly drought-free the entire time, while Arkansas became drought-free on May 10. Mississippi, Louisiana, and Oklahoma saw the most dramatic improvement. Mississippi drought coverage declined from 57% on March 8 to less than 5% on April 19, Oklahoma improved from 87% drought to 35% drought over the course of the spring, and Louisiana drought coverage, initially 100%, declined to less than 50% on April 19. Texas began the spring with zero exceptional drought. Exceptional drought in Texas peaked at 29% coverage on May 17 before declining to 18% by the end of the month.

The primary impacts, initially wildfire and winter wheat crop damage, became more widespread agriculturally as it affected spring crops in Texas, Oklahoma, and southern Louisiana. While many crops in drought-affected areas are capable of recovering, the recent heat and unfavorable outlooks do not bode well. Water use restrictions are becoming increasingly common in parts of Texas.



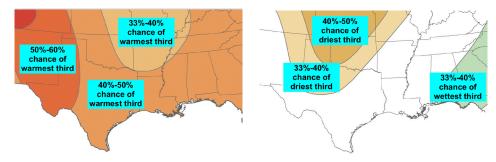
US Drought Monitor depiction of the Southern Region. The US Drought Monitor is produced by the National Drought Mitigation Center, the USDA, and NOAA.

#### Seasonal Outlook

#### **Temperature**

#### **Precipitation**

#### Outlook for July-September 2022



The seasonal temperature outlook from NOAA's Climate Prediction Center calls for enhanced chances of above-normal temperatures throughout the Southern Region for July-September, with the greatest likelihood in western Texas of temperatures ranking among the warmest third of 1991-2020 historical values. Warm Gulf waters and long-term temperature trends favor warmth.

Summertime precipitation in the southern United States is not strongly affected by long-term ocean temperature patterns. The outlook calls for enhanced chances of above-normal precipitation in extreme eastern areas and below-normal precipitation in Oklahoma and northern Texas.

### **Hurricane Outlook**

NOAA's Climate Prediction Center predicts a 65% chance of an abovenormal season, a 25% chance of a near-normal season, and a 10% chance of a below-normal season.

La Niña conditions, warm Atlantic temperatures, and wet weather in west Africa all favor enhanced activity.

## Southern Partners

NOAA/NWS Climate Prediction Center (cpc.ncep.noaa.gov)

NOAA National Centers for Coastal Ocean Science (coastalscience.noaa.gov)

NOAA Gulf of Mexico Collaboration Team (regions.noaa.gov/gulf-mexico)

NOAA/NESDIS National Centers for Environmental Information (ncei.noaa.gov)

NOAA/NWS Southern Region (weather.gov/srh)

**Southern Climate Impacts Planning Program** (southernclimate.org)

Southern Regional Climate Center (srcc.tamu.edu)

