Quarterly Climate Impacts and Outlook

Southern Region

June 2024

Southern Region Significant Events — Spring 2024



Precipitation was abundant during spring in the eastern portion of the Region, while contributing to improvement in drought conditions in affected areas, but also leading to widespread flooding. Drought persisted in the west of the Region and degraded over the season. Above normal temperatures were common across the Southern Region, with 2024 being the 3rd warmest on record.

Overview

Spring began with above normal temperatures and a mix of precipitation across the Region, Drought conditions improved across the east of the Region while holding steady in the west. The largest wildfire in Texas history impacted the Texas Panhandle and Western Oklahoma.

April saw above normal temperatures continue across the Southern Region, with most stations running two to four degrees F above normal. Well above normal precipitation continued across East Texas, Louisiana, Mississippi, and Arkansas.

May rounded out spring with above normal temperatures and above normal precipitation, except for South and West Texas where ongoing drought continued. Over the period from April 28th to May 7th areas of San Jacinto, Walker, Polk, and Trinity counties in Texas received over 25 inches of precipitation, leading to devastating river flooding.

Regional Climate Overview — Spring 2024

Temperature and Precipitation

3/1/2024 - 5/31/2024

Departure from Normal

Temperature °F

Spring 2024 temperatures were above normal for most of the Southern Region. Temperatures in isolated portions of Far West Texas and the Texas Panhandle ranged from 1F below to 1F above normal, while the ranged from 2F to 5F above normal for spring. Spring 2024 ranked 3rd warmest out of 130 years of data. Percent of Normal Precipitation (%) 3/1/2024 - 5/31/2024



Precipitation was between 150 percent and 300 percent of normal across East Texas, Louisiana, Southern Arkansas, and isolated areas of Mississippi. Precipitation in South Texas, Far West Texas, the Texas and Oklahoma Panhandles ranged from 5 percent to 70 percent of normal. The remainder of the region ranged from 70 percent to 130 percent of normal precipitation. **Drought Overall Change** 3/5/2024 - 5/28/2024



Portions of Central Texas, Louisiana, Northern Mississippi, Tennessee, Eastern Oklahoma, and western Arkansas saw improvements in drought conditions, due to above normal precipitation during the spring. As many as 3 classes of improvement, according to the US Drought Monitor, were observed in Central Texas, northwestern Mississippi, and southcentral Tennessee. Degradations of up to 3 classes in drought conditions were observed in Texas and Oklahoma Panhandles and South Texas.



Southern Regional Impacts

Drought, Agriculture, and Water Supply

Spring 2024 saw the total amount of area experiencing drought in the Southern Region, remain relatively steady from Winter 2023-2024. As of May 28th, 15 percent of the Region was in some level of drought, down from 17 percent as of March 5th. The spatial nature of drought shifted during spring, with large improvements over the eastern portions of the Region and widespread degradation in the western portions of the Region. Drought conditions remained steady across much of Far West Texas, the west central Texas Panhandle, and Bandera County, Texas (a majority of which has been at Moderate Drought or worse since 1/11/2021). As of May 28th there is no Exceptional Drought in the Southern Region and 0.96 percent is in Extreme Drought.

With substantial spring rains across East Texas, Louisiana, Mississippi, portions of Arkansas, and Tennessee flooding was a constant companion for the Region during spring. Over the period from April 28th to May 7th areas of San Jacinto, Walker, Polk, and Trinity counties in Texas received over 25 inches of precipitation, leading to devastating river flooding in the area and downstream towards Houston.



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



Temperature

raturePrecipitationOutlook for July-September 2024



The seasonal temperature outlook from NOAA's Climate Prediction Center calls for enhanced probabilities of above average temperatures for the entire Southern Region. The highest probabilities, a 60-70 percent chance of above normal temperatures, are along the Gulf Coast and Far West Texas. The mid-section of the Region shows a 50 to 60 percent change of above normal temperatures. Much of the northern tier of the Region has slightly lower probabilities of above normal temperatures, 33-40 percent.

The precipitation outlook for July through September calls for enhanced probabilities of above normal precipitation, 50 to 60 percent, across southeastern Louisiana and Southern Mississippi. As one moves northeast chances decrease to 33-40 percent of above normal precipitation, transitioning to equal chances by Central Texas, Eastern Oklahoma, and southern Arkansas. Toward the west the outlook transitions to a 33 to 40 percent chance in West Texas, the Texas Panhandle, and Central Oklahoma.

ENSO Outlook

The current El Niño event is waning in intensity, with La Niña conditions expected to emerge by mid-Summer 2024 and persist through Winter 2024-2025. With developing La Niña conditions and above normal ocean temperatures in the Gulf of Mexico, above normal tropical activity is expected.

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)

