Quarterly Climate Impacts and Outlook

Gulf Coast Region

September 2024

Gulf Coast Region Significant Events — Summer 2024



Summer 2024 was well above normal in temperatures and mixed in precipitation totals. The entirety of the Gulf Coast was above normal for temperature. Precipitation was well above normal for much of East Texas, and South Florida. The remainder of the region was generally below normal, especially where flash drought conditions developed in the latter half of summer.

Overview

Summer started off in June with above normal temperatures for the entirety of the Gulf Coast Region, with most stations falling 1F to 2F above normal. Precipitation was mixed across the Region with exceptionally high totals in isolated areas.

Temperatures were below normal in July for the western portions of the Region. Departures were generally 1F to 4F above normal across Mississippi, Alabama, and Florida. Precipitation was above normal with a larger swath of East Texas receiving 200 to 400 percent of normal.

Temperatures remained 1F to 4F above normal across the Region in August. August was exceptionally dry across the Gulf Coast Region with most areas ranging from 5 to 50 percent of normal precipitation. Only the peninsula of Florida saw above normal totals, 130 to 300 percent of normal, with the passage of Hurricane Debby in early August.

Regional Climate Overview — Summer 2024

Temperature and Precipitation

Departure from Normal Temperature °F 6/1/2024 - 8/31/2024



Summer 2024 temperatures were above normal across the Gulf Coast Region with temperatures 1F to 4F above normal in most locations. The greatest departures were seen along the Mississippi and Florida Gulf Coasts where departures of 3F to 4F were common. The relative cool spot was along the central Texas Gulf Coast where temperatures were typically within a degree F of normal. Percent of Normal Precipitation (%) 6/1/2024 - 8/31/2024



Precipitation was mixed across the Region during Summer. Stations in South and East Texas generally recorded 150 to 200 percent of normal precipitation, primarily from tropical activity. The coastal regions of Louisiana, Mississippi, Alabama, and the Florida Panhandle generally reported 50 to 90 percent of normal precipitation. The South Florida Gulf Coast saw well above normal precipitation this summer. **Drought Overall Change** 6/4/2024 - 8/27/2024



Much of South Texas and South Florida saw substantial improvement in drought conditions over summer 2024. Soth Texas generally saw one class of improvement while South Florida had large areas of 2 and 3 class improvements. The central Gulf Coast Region, generally saw degradations of one to two classes, with most two class degradations being in Alabama and the Florida Panhandle.

Gulf Coast Regional Impacts

Drought, Agriculture, and Water Supply

Summer 2024 saw the percentage of the total area experiencing some level of drought in the Gulf Coast states increase from 19 percent on June 4th to 41 percent on August 27th. Much of this increase was across East and Central Texas, Louisiana, Mississippi, Alabama, and the Florida Panhandle. Improvements were notable in South Texas and South Florida due to rainfall from tropical systems throughout the summer. The total percentage of the Gulf Coast states experiencing moderate drought increase 10 percent to 26 percent. The area experiencing Severe Drought increased from 8 to 10 percent. The total area experiencing Extreme Drought increased from 1 to 3 percent and Exceptional Drought remerged to affect 1 percent of the Region.

The lack of recent rainfall in drought affected areas has led to the drawdown of soil moisture, and flash drought conditions have developed in previously unaffected areas. Despite widespread dryness elsewhere, tropical systems brought abundant rain to South Texas and South Florida.



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



The seasonal temperature outlook from NOAA's Climate Prediction Center calls for enhanced probabilities of above average temperatures for the entire Gulf Coast Region. The highest probabilities are in South Texas and South Florida where the outlook call for 50 to 60 percent probability for above normal temperatures. The remainder of the Region has 40 to 50 percent probability of above normal temperatures.

The seasonal precipitation outlook calls for below normal precipitation in the west of the Region and equal changes for above or below precipitation in the east. The highest probabilities for below normal precipitation are in Central Texas, at 50 to 60 percent, and taper to a 33 to 40 percent chance of drier than normal conditions across most of Louisiana.

ENSO Outlook

Currently, conditions in the Tropical Pacific suggest neutral conditions, however La Niña conditions are forecast to emerge within the next three months and persist through the winter season. La Niña winters across the Gulf Coast Region tend drier and warmer than normal.

Gulf Coast 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)

