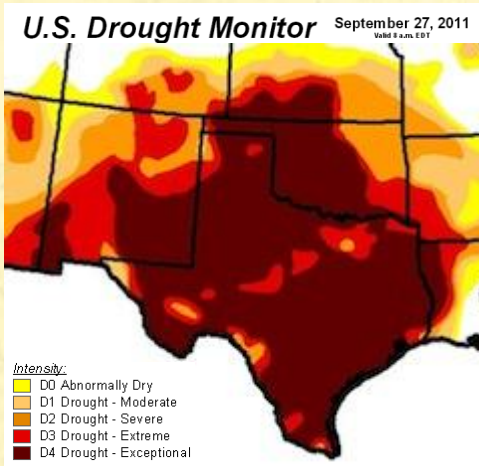


MANAGING DROUGHT

IN THE SOUTHERN PLAINS

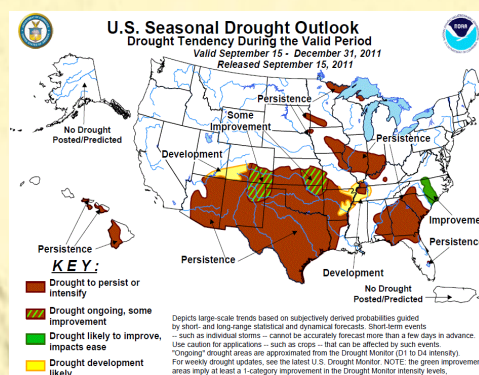
Focus Topic: Historical Context and Evolution of the Drought September 29, 2011



Regional Drought Summary

Exceptional drought, or D4, remains entrenched across much of Texas, Oklahoma and New Mexico and parts of surrounding states. D4 is the most severe drought category on the U.S. Drought Monitor's scale and is defined as a drought that occurs, on average, once in every 50 years. The drought developed in the fall of 2010 in east Texas in part as a result of the atmospheric changes associated with La Niña and has gradually spread and intensified.

This drought is not the largest since the Drought Monitor was launched in 2000, but it is the most intense. Approximately 25 percent of the United States is included in a drought designation (D1 to D4), very near the average for any given year. However, nearly 10 percent of the U.S. is depicted as exceptional drought. Prior to the current event, no more than 7 percent of the U.S. had been in exceptional drought at the same time. Consequently, while the extent of the drought area is not unusual, where there is drought it is unusually intense.



Outlooks over the next several weeks to 3 months indicate little chance for drought improvement. There will be chances for precipitation, but these will likely be interspersed with lengthy periods of dry weather and are not likely to be widespread. Above-normal temperatures and below-normal precipitation is expected across the region through at least December. Concerns are that this dry pattern will extend through at least next Spring, due largely to a developing La Niña pattern, similar to 2010. La Niña is typically associated with warm, dry winters across the Southern Plains.

For temperature and precipitation outlooks, visit the Climate Prediction Center: <http://www.cpc.ncep.noaa.gov/>

Is drought properly classified in your region? If not, let us know by:

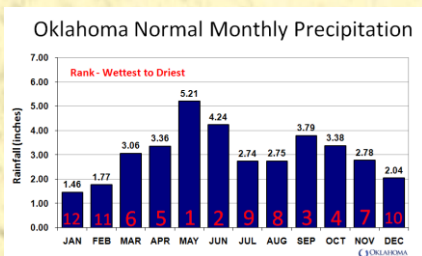
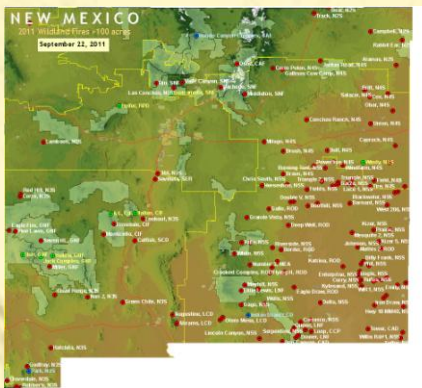
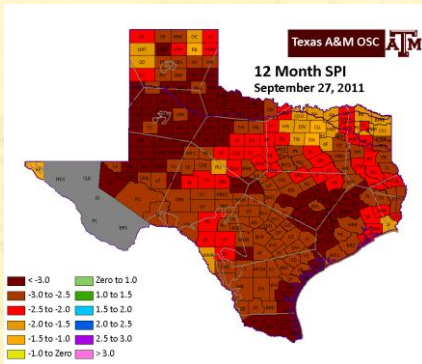
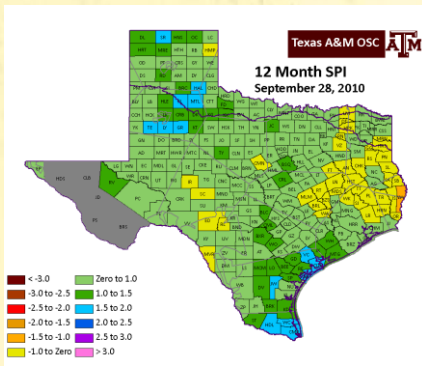
- Adding to the [Impact Reporter](#)
- Contacting your State Climatologist
- E-mailing the Drought Monitor Authors at: droughtmonitor@unl.edu

U.S. Drought Monitor Tip

You can view and retrieve all USDM state and/or county level data and maps, which began in 2000, at: <http://droughtmonitor.unl.edu/archive.html>

The archive enables:

- comparing national, regional, or state maps from different weeks, back to 2000
- downloading county-level excel spreadsheets or GIS shape files



Texas

The past 12 months (October-September) has been the driest 12-month precipitation total on record. Because of the drought, the sun's energy went into heating the air instead of evaporating water, leading to a hot, dry summer. The dryness and heat of 2011 exceeded anything previously experienced since 1895 with an average summer temperature more than 2 degrees higher than the previous record.

One year ago, the state looked pretty wet, with some dryness in East Texas. One year later the entire state shows record dryness, with a little less impact around the Dallas-Fort Worth area. The most severe precipitation deficits in the last two months are concentrated in an area from Austin to Houston, with enhanced wildfire danger.

New Mexico

All areas are below normal for the year-to-date with the most severely impacted area in the southeast, which has only 21% of normal precipitation for the calendar year-to-date

Like Texas, all areas of the state were at or above normal in summer 2010. Summer 2011 monsoon rainfall has been spotty, with all areas below normal and central mountains, eastern and southeastern regions driest.

Wildfires were the largest on record since 1990 with 1,050,153 acres burned (as of September 22), compared to only 120,055 burned all of last year.

Oklahoma

Oklahoma's second rainy season a dud for most of the state so far. Northeastern Oklahoma has gotten some relief in recent weeks, but with a few exceptions the monthly rainfall totals are still below normal. Without rainfall in September-October, Oklahoma will entire its driest months with little chance of relief

Year-to-date rainfall may set new record lows. Oklahoma Mesonet stations in western Oklahoma and the Panhandle have recorded less than 10 inches of precipitation in the last 365 days.

Resources

U.S. Drought Portal
<http://www.drought.gov>

Drought Impact Reporter
<http://droughtreporter.unl.edu>

State Climatologists
<http://www.stateclimate.org>

Past webinars, summaries, and Federal/State Assistance
http://www.drought.gov/portal/server.pt/community/southern_plains

National Drought Mitigation Center
<http://drought.unl.edu>

Southern Climate Impacts Planning Program (SCIPP)
<http://www.southernclimate.org>

Climate Assessment for the Southwest (CLIMAS)
<http://www.climas.arizona.edu>