



DROUGHT INFORMATION STATEMENT

SOUTH CENTRAL TEXAS

WFO AUSTIN/SAN ANTONIO, TX

ISSUED: AUGUST 22, 2008



Synopsis

The end of August brought more beneficial rain to South Central Texas. The western third of the region received the most rainfall, with some sites recording as much as over 8 inches since August 23rd. Less rainfall was recorded further east, with the middle of the region averaging 1 to 3 inches, and the eastern third of the region averaging 1.5 inches or less. Total observed rainfall from August 23rd through September 4th is shown in figure 1. Figure 2 shows the observed yearly rainfall for 2008.

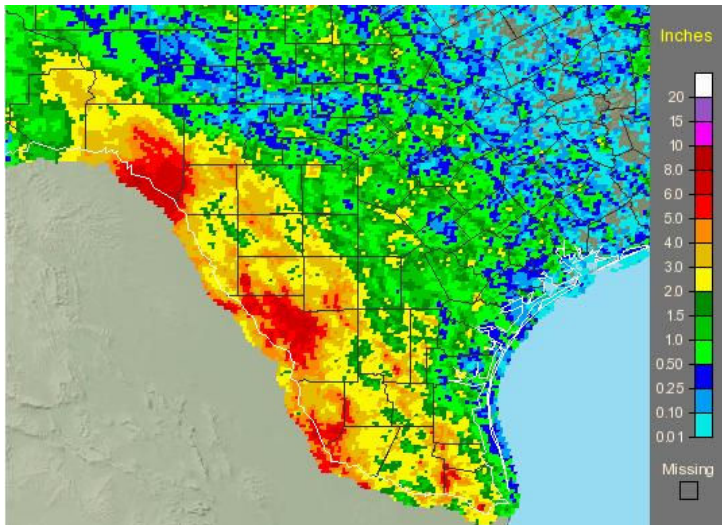


Figure 1 - Total Observed Rainfall August 23, 2008 through September 4, 2008.

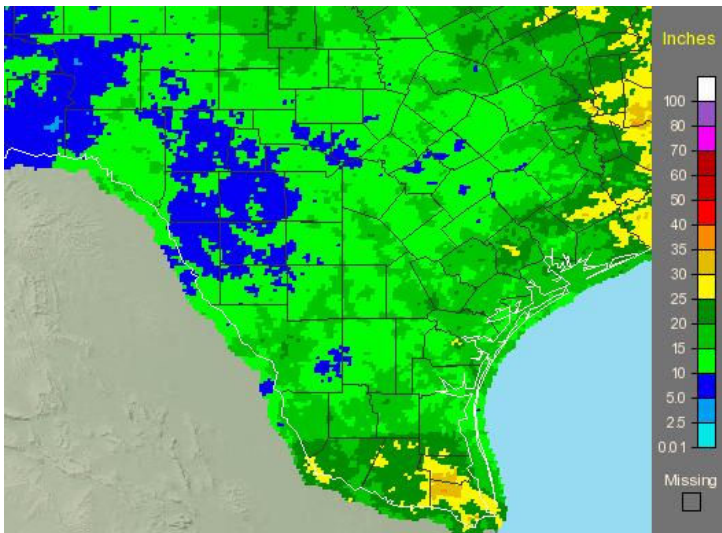
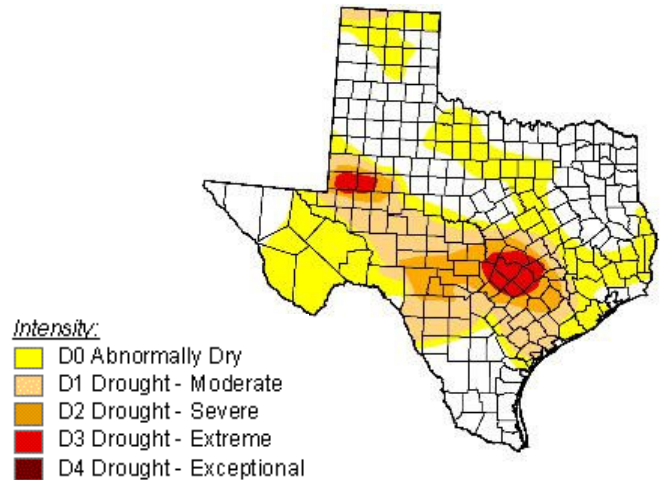


Figure 2 - Total Observed Yearly Rainfall January 1 through September 5, 2008

As shown in figure 3, the U.S. Drought Monitor, issued through the National Drought Mitigation Center on September 4th, shows the long term drought conditions generally ranging from abnormally dry to severe across the region. An embedded area of D4, extreme drought, expands across the Austin metropolitan area and adjacent counties. The recent rainfall over the last two weeks has helped improve drought conditions by as much as 2 categories across the western half of the region. Despite some short-term improvements, rainfall deficits for 2008 are still as high as over 12 inches across some areas of South Central Texas. Currently, the greatest impacts are hydrological. Water usage is usually higher during this time of the year, so area lake levels continue to fall at a steady pace. Rivers and aquifers are at or slightly above near normal levels due to recent rains.



USDA National Drought Mitigation Center
 Released Thursday, September 4, 2008
 Author: J. Lawrimore/L. Love-Brotak, NOAA/NESDIS/NCDC

Figure 3 - September 4th U.S. Drought Monitor County Level

The U.S. Drought Monitor is a comprehensive drought monitoring effort between government and academic partners. It is issued each Thursday morning and incorporates hydrometeorological data through 6 AM Tuesday.

Hydrologic Impacts

According to the USGS WaterWatch, most of the rivers across South Central Texas are reporting near normal flows for this time of the year.

Reservoir conditions as of September 5th, 2008 are presented in the following table.

Reservoir	Pool Elevation (ft)	Current Elevation (ft)
Amistad	1117.00	1102.45
Medina Lake	1064.2	1050.16
Canyon Lake	909.00	901.97
Granger Lake	504.00	502.10
Lake Georgetown	791.00	773.85
Lake Buchanan	1020.00	1011.53
Lake LBJ	825.00	824.57
Lake Marble Falls	738.00	736.29
Lake Travis	681.00	660.62
Lake Austin	492.90	492.15

According to Texas Commission on Environmental Quality (TCEQ), there are several public water supply systems suggesting voluntary water use restrictions across the Hill Country and south Central Texas. Figure 4 shows all locations of affected systems across Texas.

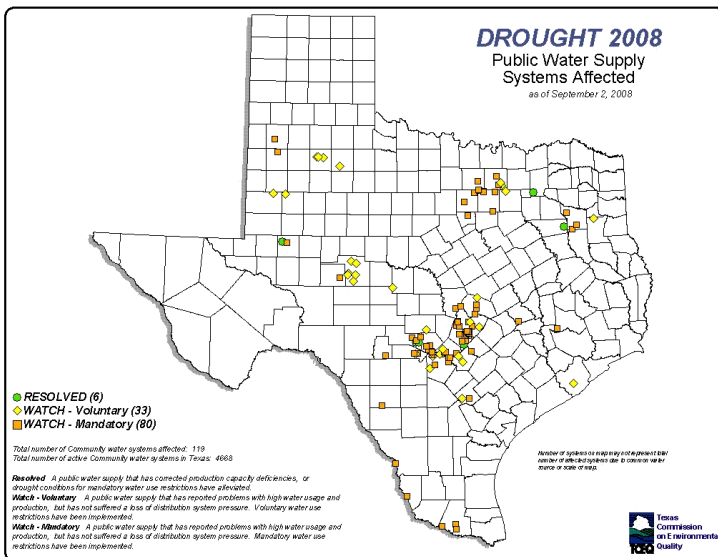


Figure 4 – Water Systems Under Water Use Restrictions as of September 2, 2008.

Fire Danger Impacts

As of September 5th, 17 South Central Texas counties currently have county wide outdoor burn bans. These burn bans will remain in place until significant wetting rainfall occurs.

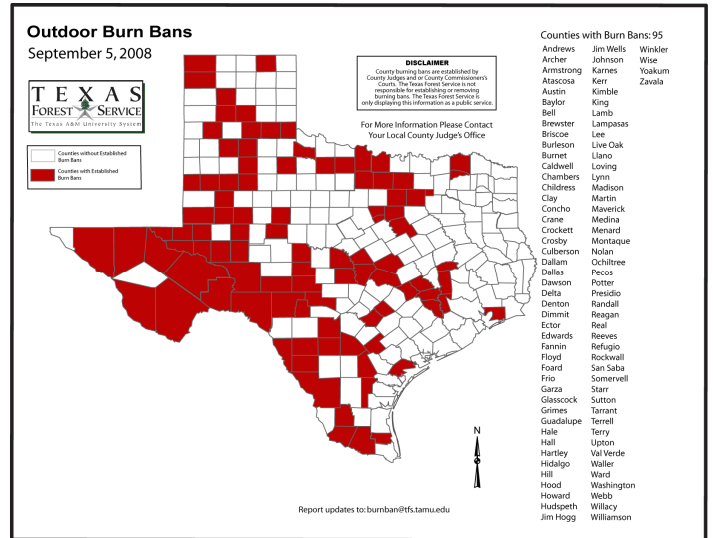


Figure 5 - Burn Bans Currently in Effect

The Texas Forest Service uses the Keetch-Byram Drought Index (KBDI) as a system for relating current and recent weather conditions to potential or expected fire behavior. It is a numerical index calculated daily for each county. Each number is an estimate of the amount of precipitation, in hundredths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil and 800 a completely dry soil. As shown in figure 6, the September 5th issuance of the KBDI shows that most of the region falls within the 300 to 700 range.

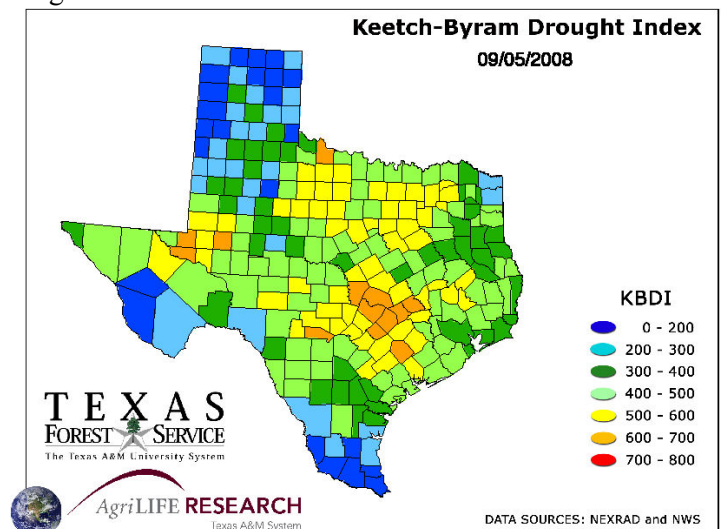


Figure 6 – KBDI Map

Agricultural Impacts

The Climate Prediction Center analyzes the percent of available soil moisture as compared to normal. As of September 4th, the available soil moisture ranges from 20 to 80 percent of normal across the South Central Texas, the Rio Grande Plains and the Hill Country. Figure 7 depicts available soil moisture percentiles.

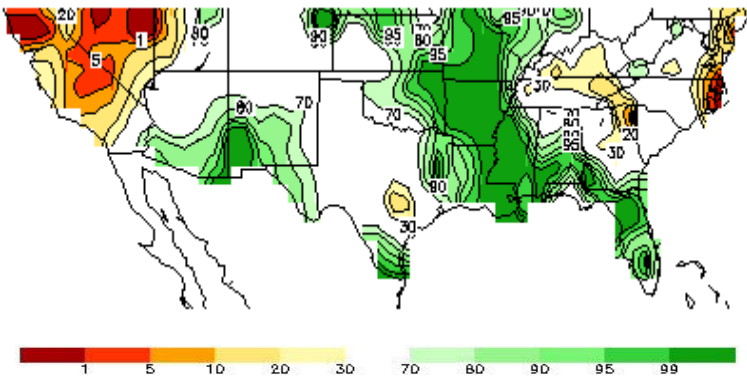


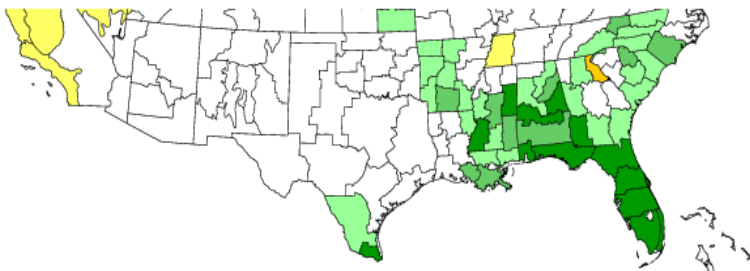
Figure 7 – Percent Available Soil Moisture

The Crop Moisture Index monitors short term moisture conditions across major crop producing regions. This index is not used to monitor long term drought conditions. The latest Crop Moisture Index issued by the Climate Prediction Center on August 30th, indicated that short term moisture conditions are slightly dry/favorably moist to abnormally moist across South Central Texas.

Crop Moisture Index by Division

Weekly Value for Period Ending AUG 30, 2008

Short Term Need vs. Available Water in 5 Ft Profile



- -3.0 or less (Severely Dry)
- -2.0 to -2.9 (Excessively Dry)
- -1.0 to -1.9 (Abnormally Dry)
- -0.9 to +0.9 (Slightly Dry/Favorably Moist)
- +1.0 to +1.9 (Abnormally Moist)
- +2.0 to +2.9 (Wet)
- +3.0 and above (Excessively Wet)

Outlook

The Climate Prediction Center Outlook for September through November indicates a higher likelihood for above normal temperatures across South Central Texas (figure 8). The outlook shows equal chances for above, below, and precipitation through November across much of the region. Slightly higher chances for above normal precipitation are predicted across the Coastal Plains and adjacent areas (figure 9).

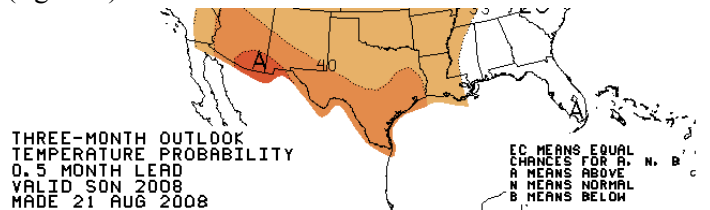


Figure 8 – Temperature Outlook

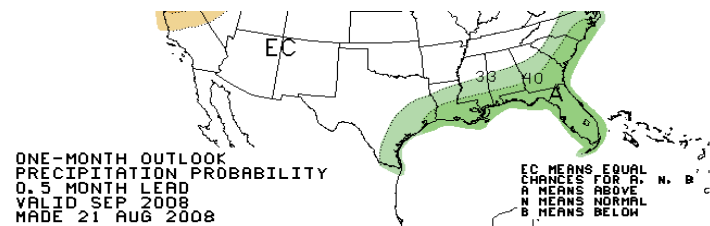


Figure 9 – Precipitation Outlook

As shown in figure 10, the latest U.S. Seasonal Drought Outlook shows that current drought conditions across south Central Texas are expected to improve through November.

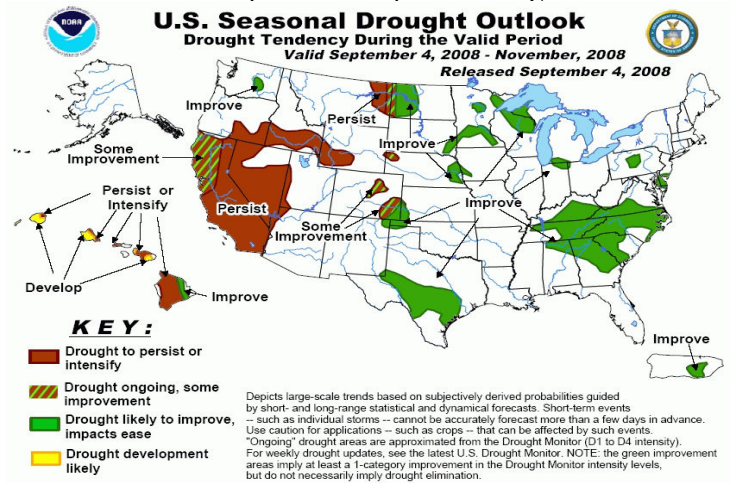


Figure 10 – U.S. Seasonal Drought Outlook Map

Contact Information:

Austin/San Antonio National Weather Service
 2090 Airport Road
 New Braunfels, TX 78130
 830.606.3617

Website: <http://www.srh.noaa.gov/ewx/>

Email: sr-ewx.webmaster@noaa.gov

Drought Related Links:

The U.S. Drought Monitor:

<http://www.drought.unl.edu/dm>

The USGS WaterWatch:

<http://water.usgs.gov/waterwatch>

TCEQ Map of Water Systems under Water Use Restriction

http://www.tceq.state.tx.us/nav/util_water/drought.html

The Texas Counties Burn Ban Map:

<http://www.tamu.edu/ticc/>

The KDBI County Average Map:

http://webgis.tamu.edu/tfs/kbdi_daily/kbdicounty.png

CPC Soil Moisture:

<http://www.cpc.ncep.noaa.gov/soilmst/w.shtml>

Texas AgNews:

<http://agnews.tamu.edu/dailynews/index.html>

CPC Outlook Maps:

<http://www.cpc.ncep.noaa.gov/products/forecasts/>

CPC U.S. Seasonal Drought Outlook:

http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html
