



DROUGHT INFORMATION STATEMENT

SOUTH CENTRAL TEXAS

WFO AUSTIN/SAN ANTONIO, TX

ISSUED: MARCH 8, 2012



Summary

Long term Drought impacts continue to plague the region. February was the third month in a row with most locations receiving above average rainfall. Longer range outlooks are trending towards above average rainfall for the next two weeks. This rainfall on a more frequent basis has helped to greatly reduce if not eliminate the short term impacts of the drought. As we get additional rainfall more improvements are likely. Most lakes saw rises of one to four feet in February. There were still a few that saw only minor rises of less than one foot. With the drought over one year in length...much more rainfall will be needed to alleviate the long term drought impacts such as the filling of lakes, rivers and reservoirs.

Figure 3, the [U.S. Drought Monitor](#) valid March 6th and issued on March 8th through the [National Drought Mitigation Center](#), shows that drought conditions continue to improve across all of South Central Texas. There is still a portion of the Rio Grande Plains and Hill country that remain in Extreme Drought (D3). The remainder of the region is now in Moderate (D1) to Severe (D2) Drought status. Currently 42 percent of the state is experiencing D3 to D4 drought status and 21 percent of the state is in Exceptional Drought (D4) status.

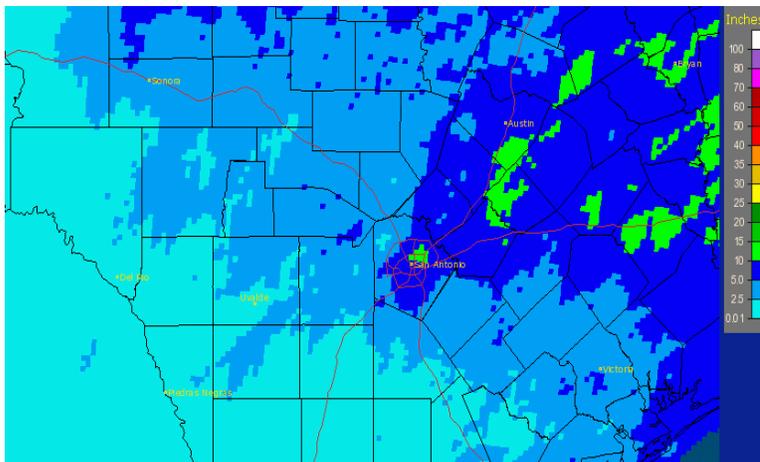


Figure 1 - Total Observed Rainfall January 1, 2012 to March 7, 2012

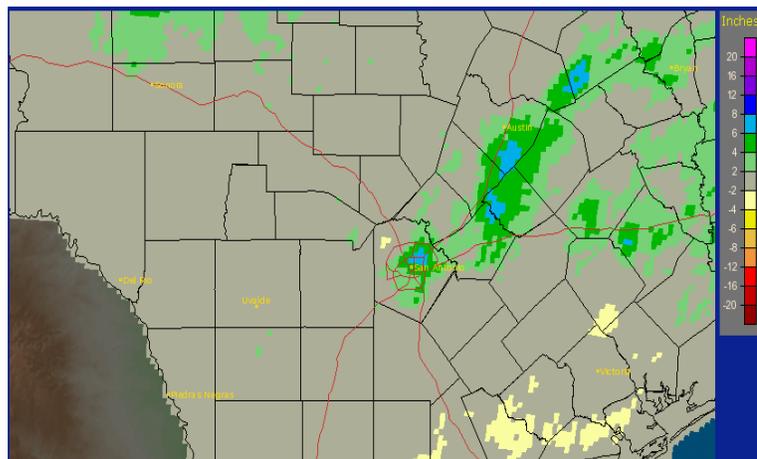
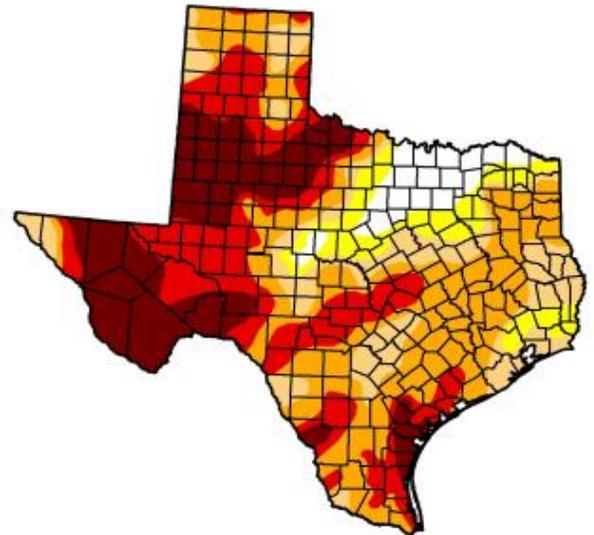


Figure 2 – Departure from Normal Rainfall January 1, 2012 to March 7, 2012



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional



Released Thursday, March 8, 2012
Michael Brewer, National Climatic Data Center, NOAA

Figure 3 – March 1st 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 7 AM Tuesday.

Hydrologic Impacts

According to the [USGS Water Watch](#), most of the rivers across South Central Texas are reporting below to much below normal 7-day average flows across the west and normal to below normal 7-day average flows across the east.

Reservoir conditions as of March 8th, 2012 are presented in the following table.

Reservoir	Pool Elevation (ft)	Current Elevation (ft)
Amistad	1117.00	1097.80
Medina Lake	1064.2	1010.80
Canyon Lake	909.00	899.57
Granger Lake	504.00	502.92
Georgetown Lake	791.00	777.85
Lake Buchanan	1020.00	993.57
Lake LBJ	825.00	824.65
Lake Marble Falls	738.00	736.44
Lake Travis	681.00	631.31
Lake Austin	492.90	492.01

According to Texas Commission on Environmental Quality (TCEQ), there are 1009 public water supply systems with voluntary or mandatory water use restrictions across the entire Texas. Figure 4 shows the locations of affected systems across Texas. This assessment is normally updated at least monthly.

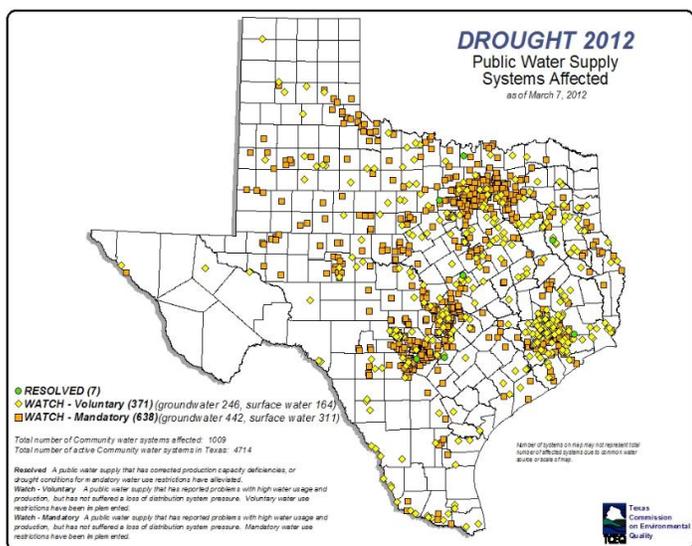


Figure 4 – Water Systems Under Water Use Restrictions March 7, 2012.

Fire Danger Impacts

As of March 8th, 11 counties in South Central Texas have county wide outdoor burn bans. These burn bans are established by county officials.

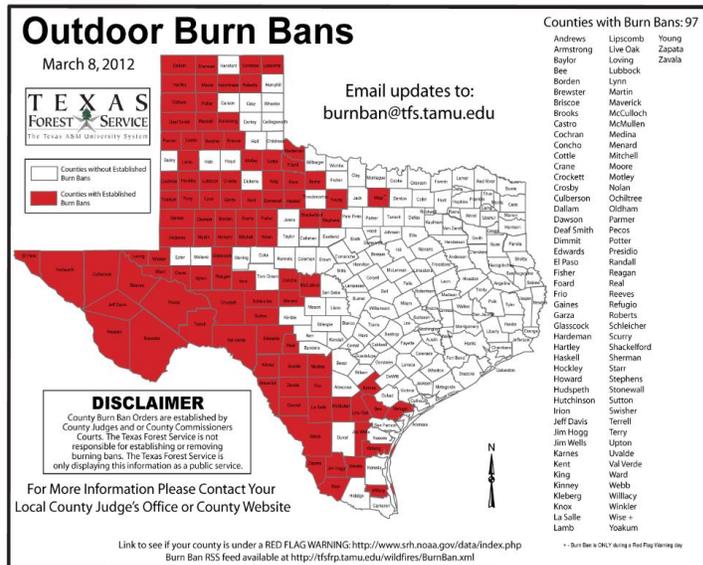


Figure 5 - Burn Bans Currently in Effect

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 rain, 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 below, the March 8th issuance of the KBDI showed values ranged from zero to 400 across most of the region. Values of 400 to 600 were noted across the Rio Grande Plains.

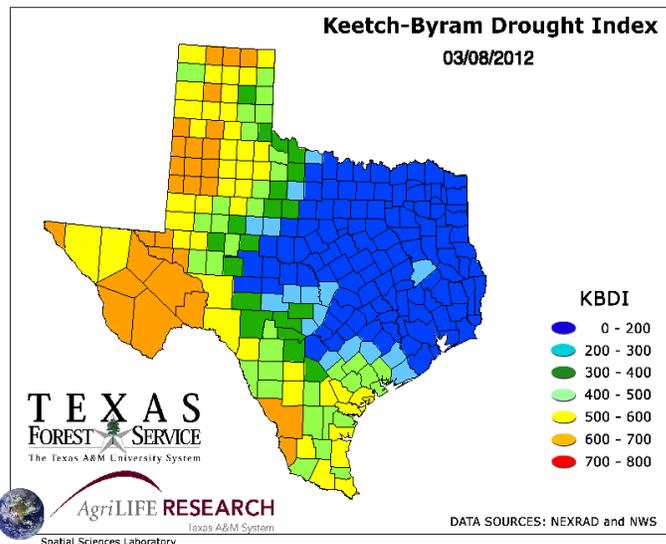


Figure 6 – KBDI Map

Agricultural Impacts

Each week, the [Climate Prediction Center \(CPC\)](#) analyzes the percent of available soil moisture as compared to normal. As of March 7th the available soil moisture is 5 to 30 percent of normal across South Central Texas.

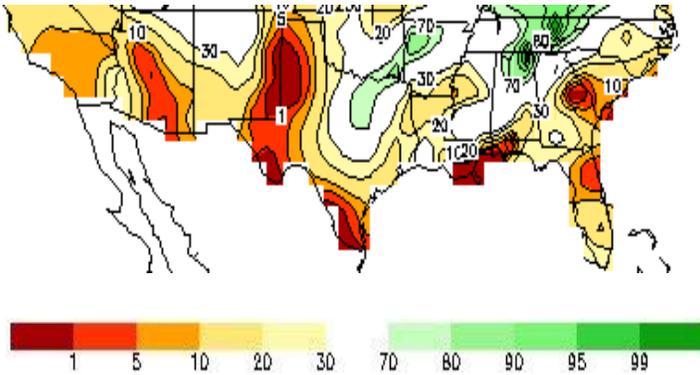
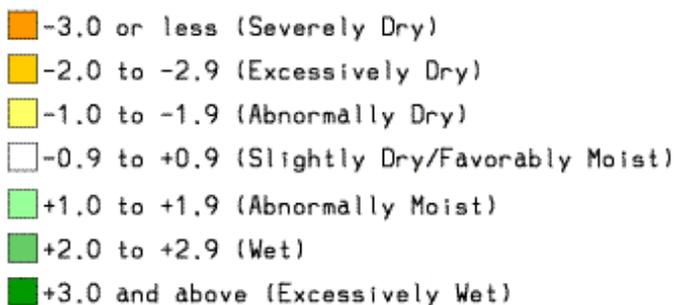
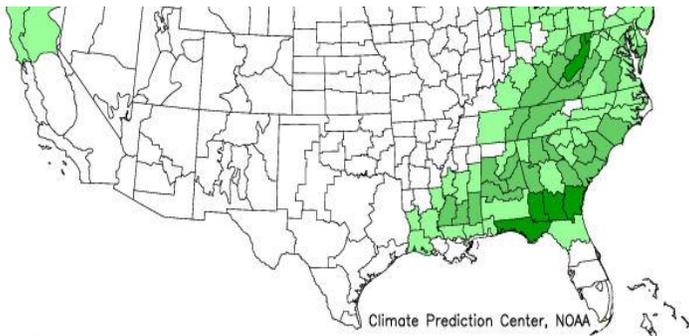


Figure 7 – Percent Available Soil Moisture

The Crop Moisture Index monitors short term need compared to available water across major crop producing regions. This index is *not* used to monitor long term drought conditions. The latest Crop Moisture Index issued by the CPC on March 3rd indicated that short term moisture conditions are Slightly Dry/Favorable Moist across all of South Central Texas.

Crop Moisture Index by Division Weekly Value for Period Ending MAR 3, 2012

Short Term Need vs. Available Water in a Shallow Soil Profile



Outlook

The CPC Outlook for April through June indicates a trend towards above normal temperatures across South Central Texas (figure 8). The outlook shows no clear trends towards below normal, above normal or normal rainfall through June across the region (figure 9). The next three-month outlooks are scheduled to be available on March 15th 2012.

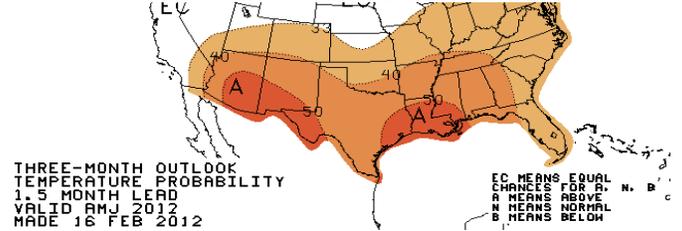


Figure 8 – Temperature Outlook

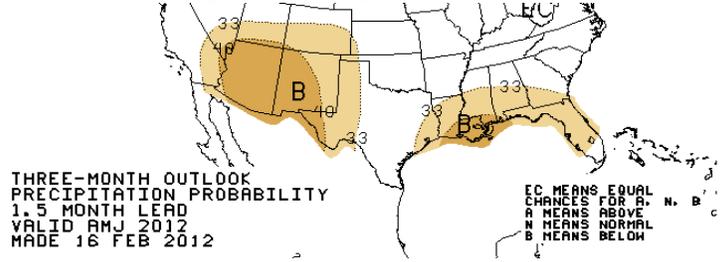


Figure 9 – Precipitation Outlook

As shown in figure 10, the latest U.S. Seasonal Drought Outlook indicates drought persisting through May 2012.

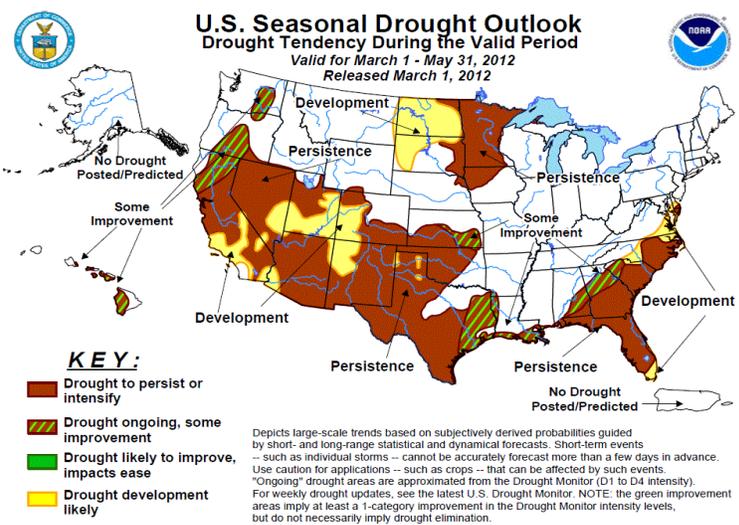


Figure 10 – U.S. Seasonal Drought Outlook Map

Contact Information:

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 2090 Airport Road
 New Braunfels, TX 78130
 830.606.3617

Website: <http://www.weather.gov/austin/>
 Email: sr-ewx.webmaster@noaa.gov

Drought Related Links:

Precipitation Data:

<http://water.weather.gov/precip/>

The U.S. Drought Monitor:

<http://droughtmonitor.unl.edu/>

The USGS Water Watch:

http://waterwatch.usgs.gov/?m=pa07d_nwc&r=tx&w=map

TCEQ Map of Water Systems under Water Use Restriction

http://www.tceq.state.tx.us/permitting/water_supply/pdw/trot/location.html

The Texas Counties Burn Ban Map:

<http://txforestservicetamu.edu/main/popup.aspx?id=1991>

The KDBI County Average Map:

<http://txforestservicetamu.edu/main/popup.aspx?id=1991>

CPC Soil Moisture:

http://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml

Texas AgNews:

<http://agnews.tamu.edu/>

CPC Outlook Maps:

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

CPC U.S. Seasonal Drought Outlook:

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