# Summer 2012 Drought Update

According to the U.S. Drought Monitor released today, moderate (D1) to exceptional (D4) drought covers 63.9% of the contiguous U.S. This compares to 63.5% last week. For the history of the U.S



Drought Monitor, which began in 1999, this is largest spatial extent of drought. The U.S. Drought Monitor is a partnership between NOAA, the U.S. Department of Agriculture, and the National Drought Mitigation Center and represents an assessment of drought conditions drawn from hundreds of indicators and peer-reviewed by experts in the field.

According to weekly Palmer Drought severity indices, which is a single

-3.00 to

-3.00 to

Palmer Drought Index Long-Term (Meteorological) Conditions

July 2012: through July 23, 2012\*

for which we have a long history, drought conditions currently cover 59.6% of the U.S. For the Palmer Drought Severity Index, which has data back to 1895, droughts in 1934, 1939, and 1954 had a larger spatial drought extent at 79.9%, 62.1%, and 60.4% respectively.

### Comparison to droughts of 1930s and 1950s

In most places in the United States, drought conditions began this summer, with low rainfall exacerbated by high temperatures. Analyses comparing the current drought with the droughts of the 1930s are ongoing; however, across much of central the U.S., the current drought onset is similar to the drought of summer 1988.

#### La Niña and El Niño

La Niña is largely responsible for drought conditions in the Southern Plains. In 2011, the worst one-year drought on record in Texas occurred during a La Niña event that began in the previous year and ended by summer. A second La

July, 1934 +3.00 to

-1.99 to

+2.00 to +2.99

Palmer Drought Severity Index

Niña in late 2011 and early 2012 brought lingering drought conditions to the Southern Plains. The return to the current neutral ocean conditions in the equatorial Pacific and the prediction of potential El Niño development later this year, as reported by NOAA's Climate Prediction Center, generally mean we







expect above normal precipitation across much of the southern tier of the U.S. Additionally, we expect drier conditions in the Ohio Valley.

### **Drought Outlook**

The NOAA Climate Prediction Center's <u>U.S. Drought</u> <u>Outlook</u> issued last week points to drought conditions lingering or intensifying over most of the United States. Exceptions include the Southwest and Southeast, where limited improvement is suggested.

# **Drought Impacts**

<u>USDA's Economic Research Service</u>, as of July 24, showed almost 40% of the country's agricultural land in severe or



worse drought, making the 2012 drought more extensive than any since the 1950s. It is affecting 62% of farms, approximately 88% of the corn crop, and 73% of cattle areas. A July 23 USDA report puts 74% of the nation's corn crop in very poor to fair condition, and only 31% of the soybean crop in good or excellent condition. The <u>U.S. Drought Impact Reporter</u> found many accounts in July of drought causing water supply and quality issues for municipal utilities, dying trees, grasshopper and other insect infestations, and curtailed barge traffic on the Ohio and Mississippi rivers.

# **Droughts and Climate Change**

Certain weather and climate extremes, such as more frequent or severe floods and droughts, are predicted to be more likely with climate change. However, the role of climate change in this drought is uncertain. Conditions have been as bad, or worse, than the current drought numerous times in our instrumental record, maintained by NOAA. According to the recent IPCC (2012) report on extreme events and disasters, there is medium confidence that some regions of the world have witnessed more intense and longer droughts, but in some regions including central North America, droughts have become less frequent, less intense, or shorter in duration since about 1950. Conditions over the Great Plains and Midwest have been as bad, or worse, than the current drought numerous times in our instrumental record.

### Sources for more information

The U.S. Drought Portal	http://www.drought.gov
The National Drought Mitigation Center	http://drought.unl.edu
NOAA Climate Prediction Center	http://www.cpc.ncep.noaa.gov
The National Climatic Data Center	http://www.ncdc.noaa.gov





