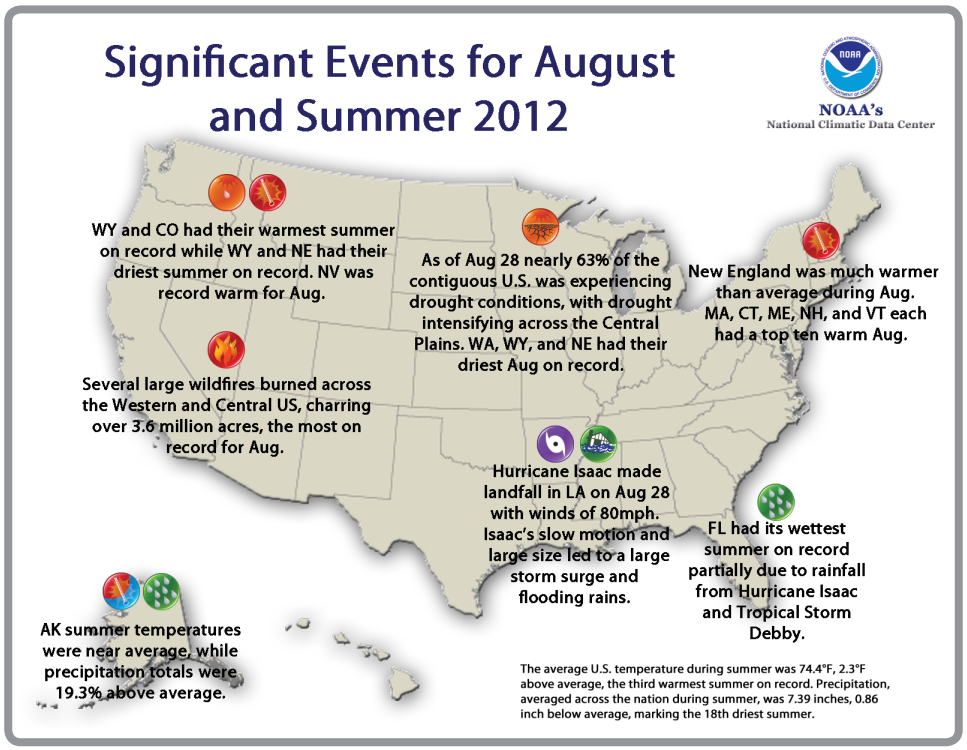
Quarterly Climate Impacts and Outlook

Central Region

September 2012

National - *Significant Events for June - August 2012*



Highlights for the Central Region

Summer 2012 ranks as the warmest on record for Wyoming and Colorado, and in the top ten warmest for nine other states in the region. 1,828 maximum temperature and high minimum temperature records were set during the course of the summer in the region at stations with 80 or more years of record.

Drought expanded and intensified through August. At the peak around August 21st, 77 percent of the Central Region was experiencing moderate to exceptional drought.

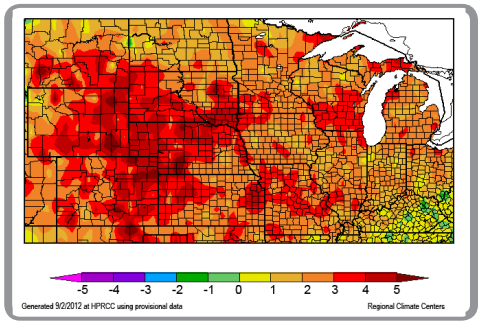
Hot, dry weather resulted in an active wildfire season throughout the region. At end of August there were 15 wildfires still active in Wyoming, Colorado, and North Dakota.

Six to ten inches of rain on June 19-20 caused catastrophic flooding in Duluth, MN. Damages to the city infrastructure alone are estimated at $50 to $80 million.

Regional - *Climate Overview for June - August 2012*

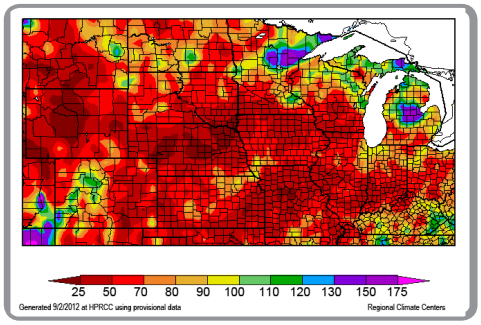
Temperature and Precipitation Anomalies

Departure from Normal Temperature (F)
6/1/2012 - 8/31/2012



Average daily temperatures ranged from 1°F to 3°F above normal in the eastern half of the region to 3°F to 5°F above normal in the western half. The very warm June-July period was tempered by near normal August temperatures across the region east of the Rockies.

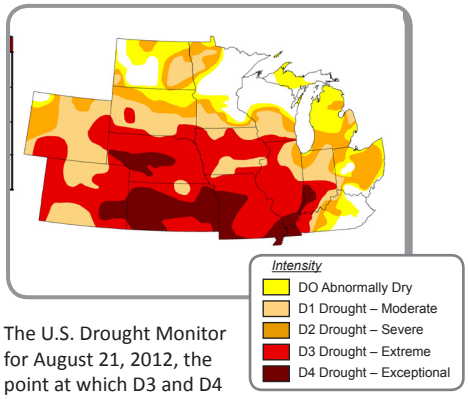
Percent of Normal Precipitation (%)
6/1/2012 - 8/31/2012



Precipitation during the summer period ranged from less than 10 percent of normal in central Wyoming to 125 percent or normal from northeastern Minnesota across northern Lower Michigan. August rainfall was well above normal in the eastern Midwest, but summer rainfall in the region was only about 50 percent of normal.

Drought

US Drought Monitor
8/21/2012



The U.S. Drought Monitor for August 21, 2012, the point at which D3 and D4 (reds) were at the largest extent in the region

Although August rainfall in the eastern half of the region brought improvement to drought conditions, it was generally too little, too late for agriculture.

Contact: Doug Kluck (doug.kluck@noaa.gov)

Regional - *for June - August 2012*

Agriculture

The drought and high heat severely impacted all sectors of agriculture throughout the region. USDA projects national corn production at 10.8 billion bushels, down 13% from 2011 and the lowest production since 2006. Soybean production is expected to be down 12 percent from 2011.

Water Resources

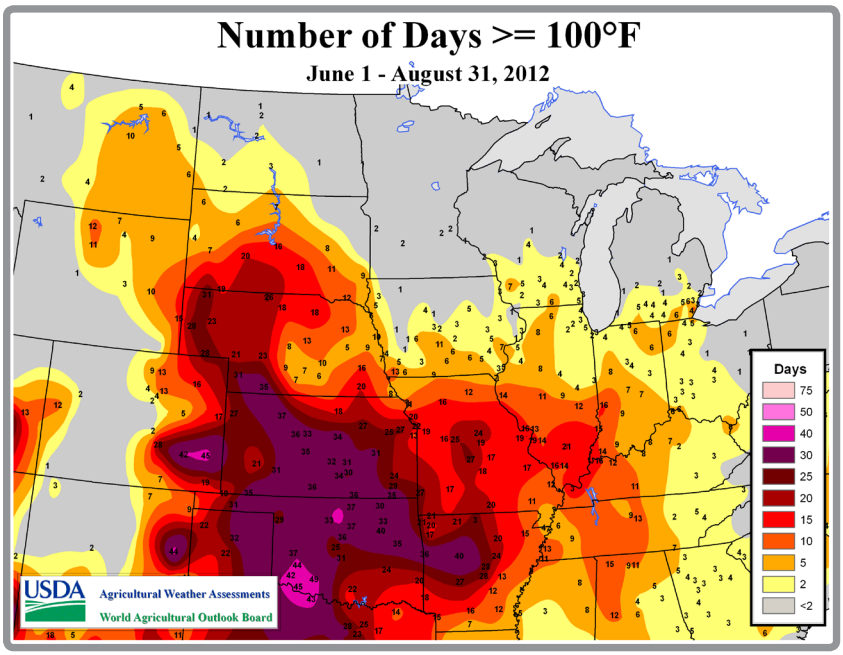
Low water levels in residential wells and dry farm ponds were common throughout the region. It was reported that 10 to 12 percent of the wells intended for fracking were on hold in Kansas due to lack of water. Surface water use for irrigation was stopped in Nebraska due to low river levels.

Wildfire

The Waldo Canyon fire near Colorado Springs destroyed 346 homes with insurance claims totaling $352.6 million. It is the most destructive fire in Colorado history, eclipsing the High Park fire near Fort Collins in June. As of August 31 the Waldo Canyon fire was still active but fully contained.

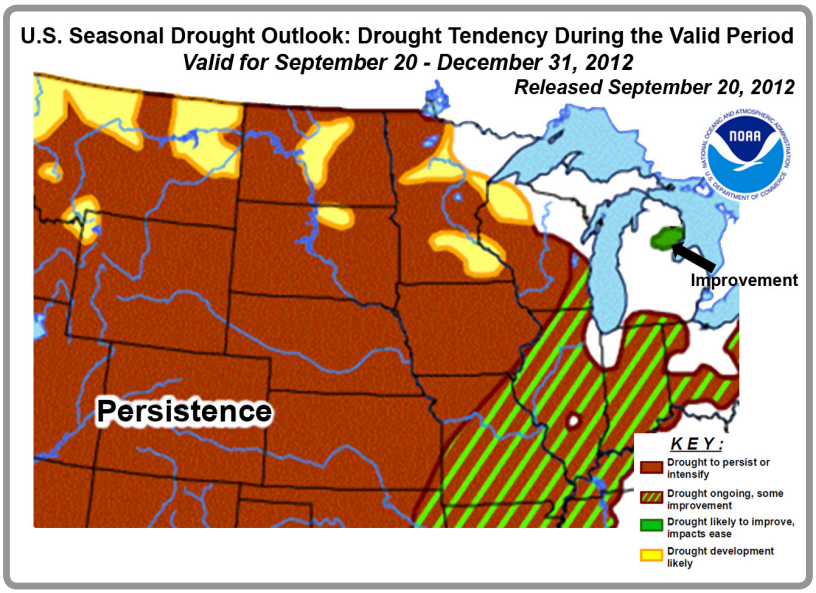
Transportation

Low water levels on middle and lower Mississippi River resulted in a backup of barge traffic up and down the river. There were dozens of reports of roads buckling across a number of states during the peak of the heat in July, posing a danger to drivers and adding to road maintenance costs.



This map shows the number of days at or above 100°F in the Central Region this summer. Source: USDA

Regional Outlook - *for Fall 2012*



Drought Expected to Persist in Western Third of Region

Drought is expected to persist in the Central Plains throughout the fall, while improvement is expected east of the Mississippi River and in the Northern Plains. While a dry fall will be favorable for harvest, a dry fall followed by a drier than normal winter will mean that there will be little recharge of soil mositure prior to the next growing season. Persistent dry weather in the Plains will also threaten the upcoming winter wheat crop.

NOAA Three Month Outlook

The temperature outlook for September through November indicates an increased probability of warmer than normal temperatures throughout the region, with the greatest chances across Minnesota and the Great Lakes. There is an equal chance for above, normal, or below normal precipitation for the entire region.

Central Region Partners

Midwestern Regional Climate Center
mrcc.isws.illinois.edu
High Plains regional Climate Center
www.hprcc.unl.edu
National Drought Mitigation Center
drought.unl.edu
National Integrated Drought Information System (NIDIS)
www.drought.gov
State Climatologists
www.stateclimate.org
National Weather Service Central Region
www.crh.noaa.gov/crh
North Central River Forecast Center
www.crh.noaa.gov/ncrfc
Missouri Basin River Forecast Center
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National Climatic Data Center
www.ncdc.noaa.gov
NWS Climate Prediction Center
www.cpc.ncep.noaa.gov
Climate Science Program, Iowa State University
climate.engineering.iastate.edu
WaterSMART Clearinghouse, U.S. Dept. of Interior
www.doi.gov/watersmart/html/index.php
Western Governors' Association
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