General Information

* Providing climate services to the Central Region
  * Collaboration with Brian Fuchs (National Drought Mitigation Center), Dennis Tody (South Dakota State Climatologist), Doug Kluck and John Eise (NOAA), State Climatologists and the Midwest Regional Climate Center, High Plains Regional Climate Center, NOAA's Climate Prediction Center, Iowa State University,

* Next Climate/Drought Outlook Webinar: **August 15, 2013**
* Access to past Climate/Drought Webinars and information
  * [http://mrcc.isws.illinois.edu/webinars.htm](http://mrcc.isws.illinois.edu/webinars.htm)
  * [http://www.hprcc.unl.edu/webinars.php](http://www.hprcc.unl.edu/webinars.php)
* Operator Assistance for questions at the end
* To sign up for the next webinar, please visit: [http://drought.gov/drought/content/regional-programs/regional-drought-webinars](http://drought.gov/drought/content/regional-programs/regional-drought-webinars)
Agenda

- Current Conditions
- Agricultural Update
- Impacts
- Outlooks
- Questions/Comments
June Data

June 2013 Statewide Ranks
National Climatic Data Center/NESDIS/NOAA

Temperature
1 = Coldest
119 = Warmest

Precipitation
1 = Driest
119 = Wettest

Map showing temperature and precipitation ranks across the United States.
Calendar Year to date Rankings

January-June 2013 Statewide Ranks
National Climatic Data Center/NESDIS/NOAA

Temperature
1 = Coldest
119 = Warmest

Precipitation
1 = Driest
119 = Wettest

Record Coldest
Much Below Normal
Below Normal
Near Normal
Above Normal
Much Above Normal
Record Warmest

Record Driest
Much Below Normal
Below Normal
Near Normal
Above Normal
Much Above Normal
Record Wettest
Calendar Year to Date Rankings

January-June 2013 Statewide Ranks
National Climatic Data Center/NESDIS/NOAA

January-June 2012 Statewide Ranks
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Temperature
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Record Coldest
Much Below Normal
Below Normal
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Record Coldest
Much Below Normal
Below Normal
Near Normal
Above Normal
Much Above Normal
Record Warmest
Significant Events for June 2013

The western U.S. was dry during 2013 to date. CA had a record dry Jan-Jun with 31% of average precipitation. UT record dry for June.

IA, IL, MI, and WI had a record wet first half of the year. Drought was eradicated east of the Mississippi River.

Wildfires burned over 1.2 million acres. CO had its most destructive wildfire on record — 500 homes destroyed.

As of July 2, 44% of the contiguous U.S. was in drought, the same as early June.

Tropical Storm Andrea made landfall on June 6 in FL with winds of 65mph. Impacts included minor storm surge, heavy rainfall, and tornadoes.

Alaska had its 3rd warmest June, with a temperature 4°F above average.

Most locations in HI were drier than average during June. Drought intensified on the Big Island.

The average U.S. temperature during June was 70.4°F, 2.0°F above average. The June U.S. precipitation total of 3.43 inches was 0.54 inch above average.
2013 Growing Season Conditions

http://www.hprcc.unl.edu/maps/current/

Percent of Normal Precipitation (%)
4/1/2013 – 7/16/2013

[Map showing precipitation conditions]
Year to Date Precipitation

Percent of Normal Precipitation (%)
1/1/2013 - 7/16/2013

Generated 7/17/2013 at HPRCC using provisional data.
Current Soil Moisture

http://www.emc.ncep.noaa.gov/mmb/nldas/drought/
46.13% of the U.S. in Drought
### U.S. Drought Monitor

#### NWS Central Region

**July 16, 2013**  
(Released Thursday, Jul. 18, 2013)  
Valid 7 a.m. EST

#### Drought Conditions (Percent Area)

<table>
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<tr>
<th></th>
<th>None</th>
<th>D0-D4</th>
<th>D1-D4</th>
<th>D2-D4</th>
<th>D3-D4</th>
<th>D4</th>
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<tbody>
<tr>
<td>Current</td>
<td>58.09</td>
<td>41.91</td>
<td>31.97</td>
<td>22.00</td>
<td>10.28</td>
<td>3.47</td>
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<tr>
<td>Last Week</td>
<td>61.29</td>
<td>38.71</td>
<td>31.37</td>
<td>21.80</td>
<td>10.70</td>
<td>3.54</td>
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<tr>
<td>3 Months Ago</td>
<td>39.07</td>
<td>60.93</td>
<td>51.22</td>
<td>37.29</td>
<td>19.89</td>
<td>2.99</td>
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<tr>
<td>Start of Calendar Year 1/1/2013</td>
<td>19.52</td>
<td>80.48</td>
<td>69.04</td>
<td>53.41</td>
<td>30.85</td>
<td>11.96</td>
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<tr>
<td>Start of Water Year 5/22/2012</td>
<td>6.17</td>
<td>93.83</td>
<td>80.70</td>
<td>58.61</td>
<td>33.97</td>
<td>10.86</td>
</tr>
<tr>
<td>One Year Ago 7/17/2012</td>
<td>14.09</td>
<td>85.91</td>
<td>72.70</td>
<td>48.12</td>
<td>11.89</td>
<td>0.84</td>
</tr>
</tbody>
</table>

#### Intensity

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

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

**Author:**
Richard Heim  
NCDC/NOAA

[http://droughtmonitor.unl.edu/](http://droughtmonitor.unl.edu/)
U.S. Corn Areas Experiencing Drought

Reflects July 16, 2013
U.S. Drought Monitor data

Approximately 17% of the corn grown in the U.S. is within an area experiencing drought, based on historical NASS crop production data.

- Major areas combined account for 75% of the total national production annually.
- Major and minor areas combined account for 99% of the total national production annually.

Major and minor agricultural areas are derived from NASS county-level crop production data from 2006 to 2010. Additional information on these agricultural data can be found at: http://www.nass.usda.gov/

Mapped drought areas are derived from the U.S. Drought Monitor product and do not depict the intensity of drought in any particular location. More information on the Drought Monitor can be found at: http://droughtmonitor.unl.edu/
Approximately 9% of the soybeans grown in the U.S. is within an area experiencing drought, based on historical NASS crop production data.

- Major areas combined account for 75% of the total national production annually.
- Major and minor areas combined account for 99% of the total national production annually.
Approximately 35% of the domestic hay acreage is within an area experiencing drought, based on NASS 2007 Census of Agriculture data.

- Major areas combined account for 75% of the total national acreage.
- Major and minor areas combined account for 99% of the total national acreage.
Approximately 48% of the domestic cattle inventory is within an area experiencing drought, based on NASS 2007 Census of Agriculture data.

- Major areas combined account for 75% of the total national inventory.
- Major and minor areas combined account for 99% of the total national inventory.
U.S. Winter Wheat Areas Experiencing Drought

Reflects July 16, 2013
U.S. Drought Monitor data

Approximately 48% of the winter wheat grown in the U.S. is within an area experiencing drought, based on historical NASS crop production data.

- Major areas combined account for 75% of the total national production annually.
- Major and minor areas combined account for 99% of the total national production annually.

Major and minor agricultural areas are derived from NASS county-level crop production data from 2006 to 2010. Additional information on these agricultural data can be found at: http://www.nass.usda.gov/

Mapped drought areas are derived from the U.S. Drought Monitor product and do not depict the intensity of drought in any particular location. More information on the Drought Monitor can be found at: http://droughtmonitor.unl.edu/.

USDA Agricultural Weather Assessments
World Agricultural Outlook Board
Regional Climatic Impacts
Significant Wildland Fire Potential Outlook
August 2013

Above normal significant wildland fire potential indicates a higher than usual likelihood that wildland fires will occur and/or become significant events. Wildland fires are still expected to occur during forecasted normal conditions as would usually be expected.

Welcome to Colorado's Drought Response Portal

Many communities throughout Colorado are currently experiencing below normal precipitation and below average reservoir storage; which can impact water supplies, our natural environments, and society. As a result of persistent dry conditions Governor Hickenlooper has activated the State's Drought Response and Mitigation Plan to ensure that the state is doing everything possible to address drought related impacts.

Many local communities have also implemented drought response measures. For more information on the measures and restrictions in place in your specific community please enter your zip code below.

This website serves to provide information to the citizens of Colorado regarding the 2013 statewide drought response.

Search Water Restrictions

by city, county, or zipcode
July 9, 2013: A catastrophic loss of cattle on feed here in the Platte Valley area centering around Columbus. It was heat related. Specifically the death loss area seems to be a narrow band from 1 to 9 miles wide going from about Stromsburg – to the NE to about 10 miles ENE of Columbus. Estimated losses is something higher than 3000 head. The animals started suffering at about noon – with most of the death loss from 2 p.m. to 6:00 p.m. that day. It was hot with little or no air movement. It was humid.
Illinois: Impact from too much rain

- **Spring rain washes debris into Lake Springfield:** The rain has washed an inordinate amount of limbs and even whole trees into the lake that could pose a danger to boaters or swimmers. Read more: [http://www.sj-r.com/top-stories/x946745746/Spring-rains-wash-debris-into-Lake-Springfield#ixzz2ZJrnpMVX](http://www.sj-r.com/top-stories/x946745746/Spring-rains-wash-debris-into-Lake-Springfield#ixzz2ZJrnpMVX)

- Delays in planting/crop development:

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**Corn Crop Emerges Behind Normal in 2013**

**Silking Delayed Following Slow Planting**
Regional Corn Delays

14 Jul 2013 USDA Percentage of Corn Silking
Percentage Points Departure from 1980-2012 Average for 10-17 July
Missouri Thistle Problems

Musk and bull thistles have proliferated around Galena after drought in 2012 stressed and thinned out grasses. An agronomy specialist with University of Missouri Extension reported, “Many tracts of land in southwest Missouri are inundated with heavy populations of musk and bull thistles.”
Wisconsin Hay Problems

Drought in 2012 and too much rain in 2013 have forced some livestock producers and dairy farmers to sell their herds as the producers run out of hay. Cattle sales at the Equity Cooperative Livestock Sales Association in Stratford have been even higher this year than it was last year during drought, stated one of its managers.

Lacrosse Tribune (Wis.), July 8, 2013
HPC 5-Day Temperature Outlook & 7-Day Precipitation Outlook

http://www.cpc.ncep.noaa.gov/products/forecasts/
U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for July 18 - October 31, 2013
Released July 18, 2013

KEY:
- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.

NOTE: The Green and Brown hatched areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The Green areas imply drought removal by the end of the period (D0 or none).
U.S. Monthly Drought Outlook
Drought Tendency During the Valid Period
Valid for July, 2013
Released June 30, 2013

KEY:
- Drought persists or intensifies
- Drought remains but improves
- Drought removal likely
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.

NOTE: The Green and Brown hatched areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The Green areas imply drought removal by the end of the period (D0 or none).
Summary

- After a wet spring and early start to summer, many areas in the region have dried out.
- Planting delays due to excessive moisture have also impacted the progression of crops in the region.
- Due to limited root development on plants in areas that were very wet this spring/early summer, stress may become a concern as temperatures increase and these areas dry out.
- Temperatures in 2013 are in stark contrast to the record setting heat in 2012.
Further Information

Today’s Recorded Presentation:

- [http://mrcc.isws.illinois.edu/webinars.htm](http://mrcc.isws.illinois.edu/webinars.htm)
- [http://www.hprcc.unl.edu](http://www.hprcc.unl.edu)

- NOAA’s National Climatic Data Center: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)

- NOAA’s Climate Prediction Center: [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

- Climate Portal: [www.climate.gov](http://www.climate.gov)

- U.S. Drought Monitor: [www.droughtmonitor.unl.edu](http://www.droughtmonitor.unl.edu)

- National Drought Mitigation Center: [www.drought.unl.edu](http://www.drought.unl.edu)

- Drought Impact Reporter: [www.droughtreporter.unl.edu](http://www.droughtreporter.unl.edu)

- NIDIS Drought Portal: [www.drought.gov](http://www.drought.gov)

- State climatologists
  - [http://www.stateclimate.org](http://www.stateclimate.org)

- Regional climate centers
  - [http://mrcc.isws.illinois.edu](http://mrcc.isws.illinois.edu)
  - [http://www.hprcc.unl.edu](http://www.hprcc.unl.edu)
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