Drought Continues to Expand Across the Region

Synopsis:
- Drought conditions have continued to expand across parts of eastern Nebraska and western Iowa.
- 60-day precipitation deficits are still several inches below normal, which is 25 to 50 percent less than expected.
- Recent heavy rains in the last couple of days will help.
Two Week Comparison:

June 22\textsuperscript{nd}, 2021

Increase of about 30\% areal coverage from the previous week.

June 15\textsuperscript{th}, 2021

US Drought Monitor

Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought
Local & State Actions:

USDA has designated parts of northwest Iowa natural disaster areas due to drought. Emergency loans may be available.

Additional information concerning the drought can be obtained via the
Additional information at Department of National Resources: [https://dnr.nebraska.gov/index](https://dnr.nebraska.gov/index)
Additional information about federal disaster declarations due to the drought and drought assistance information can be found at the farm service agency web site at: [www.fsa.usda.gov](http://www.fsa.usda.gov)

Soil Moisture Conditions:

**Calculated Soil Moisture Anomaly (mm)**

**JUN 23, 2021**

**Nebraska** - *Topsoil* moisture was rated as 33% short and 8% very short. *Subsoil* moisture was rated as 34% short and 9% very short.

**Iowa** - *Topsoil* moisture was rated as 39% short and 25% very short. *Subsoil* moisture was rated as 46% short and 23% very short.

More info at NWS Climate Prediction Center (CPC):
**Agricultural Impacts:**  (Total percent of crop condition rated poor or very poor)

**Nebraska** - As of June 20
- Corn: 2%
- Soybean: 3%
- Sorghum: 0%
- Winter wheat: 10%
- Oats: 7%
- Pasture: 12%

**Iowa** - as of June 21
- Corn: 8%
- Soybean: 9%
- Hay: 15%
- Oats: 8%
- Pasture and Range: 25%


**Water Restrictions:**

Some water restrictions have been implemented for rural Lancaster county in southeast Nebraska. And water restrictions are also in place for some residents in Harrison, Shelby, and Pottawattamie counties in southwest Iowa.

**Fire Danger:**

<table>
<thead>
<tr>
<th>KBDI Value</th>
<th>Description of Fire Potential</th>
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<tbody>
<tr>
<td>0-200</td>
<td>Low - Wet with little danger of fire initiation</td>
</tr>
<tr>
<td>201-300</td>
<td>Moderate - Drying occurring with some fire danger</td>
</tr>
<tr>
<td>301-400</td>
<td>High - Ground cover dry and will burn readily</td>
</tr>
<tr>
<td>401-500</td>
<td>Extreme - Dead and live fuels will burn readily</td>
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<td>&gt;501</td>
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[Keetch-Byram Drought Index: 24-Jun-21]

[Fire Danger Map Image]
River and Streamflow Conditions:

Hourly and forecast river stages out to 90 days can be found at the National Weather Service’s (NWS) Advanced Hydrologic Prediction Service (AHPS) web page: https://water.weather.gov/ahps2/index.php?wfo=oax

Additional Current stream and river stages may be viewed at the following USGS Web Site: http://waterwatch.usgs.gov/

- Most of the river gauges across eastern Nebraska were normal or even above normal due to recent heavy rainfall. Streamflow conditions across western Iowa were mostly normal or below normal. Missouri River levels at Omaha and Nebraska City were were below normal.
Local Climatology:

60 Day Rainfall Departure from Normal

- Still widespread departures of 2-6” below normal. Due to recent heavy rains, pockets of 1-2” above normal exist.

6 Month Rainfall Departure from Normal

- The six month departure still reveals several inches above normal for many areas. Extreme northeast NE still shows several inches below normal.
June’s outlook continues to suggest dry and warm conditions when compared to monthly norms. The longer range outlooks improve a bit with no clear signal present for precip outlooks for the remainder of the summer.

Overall, you can expect warmer than normal temperatures this summer.
Questions and/or Comments:

If you have any questions or comments about the information in this document please contact:

Dave Pearson, Taylor Nicolaisen, or Van DeWald, Drought Co-Focal Points
National Weather Service – Omaha/Valley
Taylor.Nicolaisen@noaa.gov
Van.DeWald@noaa.gov
David.Pearson@noaa.gov
(402)-359-5166

Other Contacts:

Nebraska State Climatologist:
Martha Shulski, Ph.D.
Tel: 402-472-6711
nsco.unl.edu/

Iowa State Climatologist:
Justin Glisan, Ph.D.
Iowa Department of Agriculture and Land Stewardship
Tel: 515-281-8981

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Related Websites:
NWS - weather.gov/oax
CPC -
cpc.ncep.noaa.gov/products/Drought/

Drought Monitor:
droughtmonitor.unl.edu/
drought.gov/drought/
USGS - water.usgs.gov/
COE - www.nwo.usace.army.mil/