Summer Outlook Favors Warmer and Drier Conditions Across Much of the Central Plains, with Continued or Worsening Drought Conditions Expected

Summer Outlook: Temperature and Precipitation

The long-range summer outlook strongly favors increased chances for warmer than normal conditions across the Central Plains and High Plains. Warmer than normal conditions also are favored across the mid-Mississippi Valley, Ohio Valley, and the Great Lakes. Only across the far northern part of the Northern Plains are there equal chances for above, below, or near normal temperatures through the summer season. As for precipitation, increased chances for drier than normal conditions are favored across much of the High Plains and slightly favored in the eastern Central Plains. Equal chances for above, below, or near normal precipitation are favored across much of the upper and mid-Mississippi Valley, the Ohio Valley, and Great Lakes region.

2022 Precipitation Overview & Drought Outlook

Much of North Dakota, northeast South Dakota, and northern Minnesota have experienced a wet start to the year with above normal rainfall and snowfall. Additional areas that have seen slightly above normal precipitation so far this year include portions of Missouri into the Ohio Valley and Great Lakes regions. This precipitation, combined with the summer precipitation outlook, suggests that drought conditions generally are not favored for much of this area through the summer.

In contrast, much of the High Plains and parts of the Central Plains have experienced drier than normal conditions so far in 2022. When combined with the summer precipitation outlook, the drought outlook favors continued drought conditions in these areas with possible drought development into Iowa through the summer.
Drought Conditions

The mid-May U.S. Drought Monitor update notes that about a third of the north central U.S. is experiencing some degree of drought conditions (compared to 65% of the region experiencing drought conditions back in mid Feb. 2022), with about 12% of the region currently experiencing severe, extreme, or exceptional drought.

Drought, Fire Weather, and Heat Impacts

River levels across the central High Plains are much below normal for this time of year due to ongoing dry conditions. The combination of long-term dryness, drier air in place leading to higher evapotranspiration, and very dry soils will likely contribute to limited availability of water for growing crops. Additional hazards this summer, particularly across the High Plains and portions of the Central Plains, include the potential for stretches of excessive heat. Any stretches of excessive heat could further exacerbate widespread dryness and keep soils very dry. The anticipation of warmer and drier conditions also may contribute to a potentially active fire weather season through the summer months across many areas in the High Plains and Central Plains.

2022 Moisture Deficits

<table>
<thead>
<tr>
<th>Location</th>
<th>Norfolk</th>
<th>Omaha</th>
<th>Lincoln</th>
<th>Falls City</th>
<th>Clarinda</th>
<th>Albion</th>
<th>Beatrice</th>
</tr>
</thead>
<tbody>
<tr>
<td>YTD Precip (5/20)</td>
<td>5.01”</td>
<td>7.91”</td>
<td>8.55”</td>
<td>7.69”</td>
<td>9.14”</td>
<td>4.54”</td>
<td>8.48”</td>
</tr>
<tr>
<td>YTD Departure (5/20)</td>
<td>-3.00”</td>
<td>-1.70”</td>
<td>-0.45”</td>
<td>-2.43”</td>
<td>-1.87”</td>
<td>-3.63”</td>
<td>-0.90”</td>
</tr>
</tbody>
</table>

Areas impacted by persistent or worsening drought conditions may experience this summer:

- Larger and more frequent wildfires
- Less livestock forage and water
- Increased crop stress and livestock heat-stress
- Reduced rural water supply & quality
- Reduced or adapted outdoor recreation and tourism
- Decreased air quality
- Increased production of harmful algae blooms and other ecological impacts due to reduced water levels

For more information visit:

- Local Forecast – weather.gov/omaha
- Long-Range Outlooks – cpc.ncep.noaa.gov
- Fire Outlook – nifc.gov/nicc
- Drought Information – drought.gov
- Agricultural Outlook – usda.gov/oce/ag-outlook-forum