

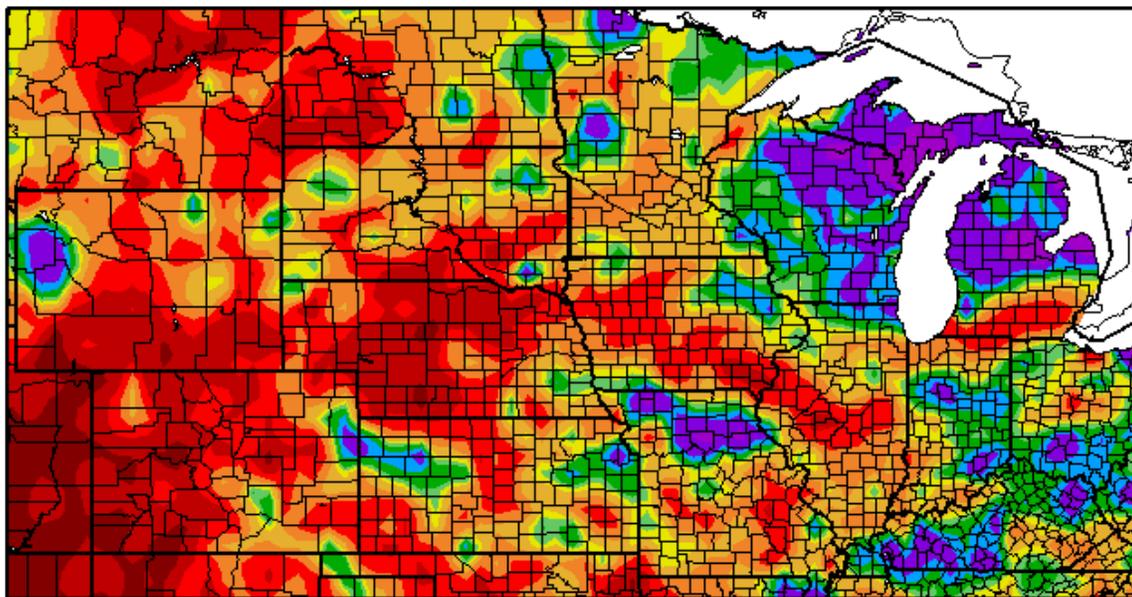
Midwest Ag-Focus Climate Update
Updated 5 July 2017

Current Conditions

As of late June/early July the Midwest has some dry conditions across much of the Corn Belt and some areas of excess wetness still in Indiana. Much of the attention is focused on the Northern Plains where drought conditions have ramped up quickly in the last 6 weeks.

The last 30 days have created some winners and losers in the Corn Belt. Central Iowa to central Illinois and parts of Missouri received less than half average precipitation with some areas below 25%. Much of the Northern Plains was similar or worse during this time. In contrast large parts of Wisconsin, Michigan and Indiana received around 150% of average precipitation or more.

Percent of Normal Precipitation (%)
6/1/2017 – 6/30/2017

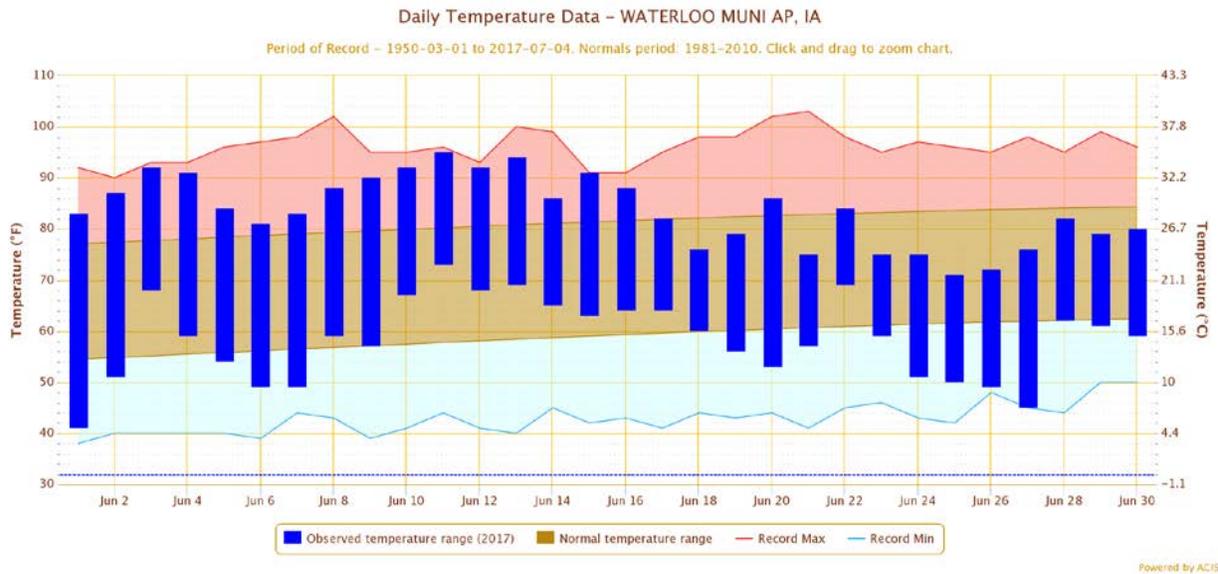


Generated 7/2/2017 at HPRCC using provisional data.

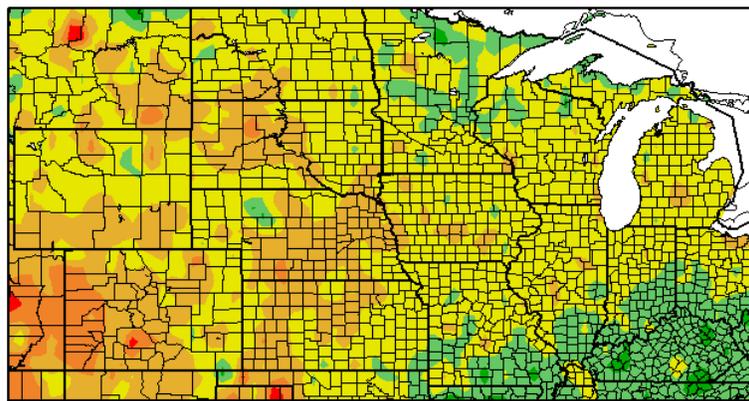
Regional Climate Centers

June also ended warmer than average throughout nearly all the middle of the country. The magnitude of the warmth helps to explain current conditions. Most of the central and eastern part of the Corn Belt was up to 2°F above average. The Northern Plains was warmer at 2-4°F and pockets over 4°F. Combined with the precipitation, this deficit adds to the drought conditions.

The other contrast was with temperatures throughout the month. Early June was dominated by largely warmer-than-average conditions while the latter part of the month was cooler than average (see image for Waterloo, IA below).



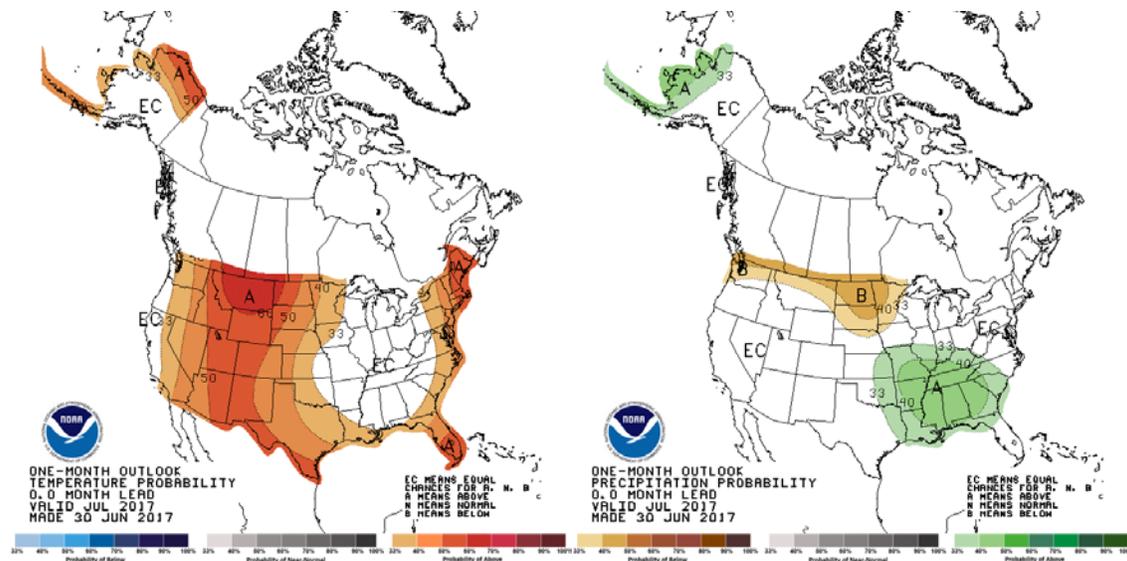
Departure from Normal Temperature (F)
 6/1/2017 – 6/30/2017



-10 -8 -6 -4 -2 0 2 4 6 8 10
 Generated 7/5/2017 at HPRCC using provisional data. Regional Climate Centers

Outlook

The 30 day outlook for July has warm and dry conditions likely to continue in the Northern Plains. Wetter-than-average conditions are more likely in the southern Midwest from Missouri to southern Indiana. More recent computer models also generally agree with this situation for July.



This outcome would lead to additional problems in the Dakotas where current drought conditions are likely to continue or worsen more into the summer. Other locations in the Midwest have less of a concern entering the prime corn time during the critical reproductive period beginning in early July and likely to continue through the middle of the month. Less of a chance of excessive heat and chances for precipitation will reduce the potential stress on the crop. The only potential problems will be already wet areas in parts of the eastern Corn Belt where additional rainfall would not be helpful to yields at this point.

Looking Ahead to the Rest of the Growing Season

Signals seem a bit mixed for the rest of the growing season. I do not have a great deal of confidence in the outlooks beyond the 30 day period this year. Thus, I will not be relying on them much for the rest of the growing season. Currently, we are not in an El Niño or La Niña leading to additional uncertainty in outlooks.

The known issues are delayed planted or replanted crops which are always a concern for delayed development. At this point the summer seems to have been warm enough to account for delays. Note that you can check on your own location here: <http://mrcc.isws.illinois.edu/U2U/gdd/>. This tool provides current conditions as well as projections to reach the end of the growing season.

Dry areas in the Corn Belt have been developing and will need to be watched throughout the season, especially for potential impact on soybean. Currently there are no concerns about larger scale drought in the Corn Belt, but the current dry pockets will provide for some minor yield loss likely.

Damage in the northern plains has already been done to rangeland and wheat/small grains crops due to heat and precipitation shortages during critical growth times. Additional damage is likely to corn and bean crops though the main drought area has been just west of the main corn/soy areas up to this point.