

Drought Update May 11, 2018

Current status

After a record cold April, May has started with much warmer than normal temperatures. The statewide average temperature for the week ending on May 8th was 65.7 °F. That is 6 degrees warmer than normal. The East Central Division had the largest departure with an average of 68.9 °F which was 8.3 degrees warmer than normal. The Northwest Division was closest to normal with an average of 57.0 °F, which was just 0.9 degrees warmer than normal. As might be expected with the transition there was a wide range in temperatures. In the Northwest, the temperatures ranged from a high of 90 °F at Atwood on the 8th to a low of 20 °F at Brewster 4W on the 2nd. The warmest temperature reported in the state was 93 °F reported at Dodge City WFO, Ford County, on the 7th. The coldest temperature was the 20 °F at Brewster 4W on the 2nd.

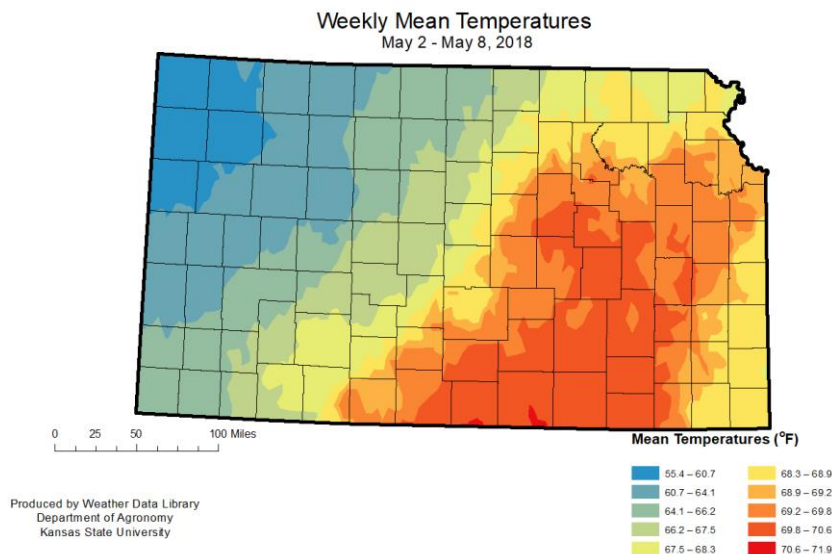


Figure 1. Weekly mean temperatures for Kansas during the week of May 2nd – May 8th via Cooperative Observer (COOP) and Kansas Mesonet.

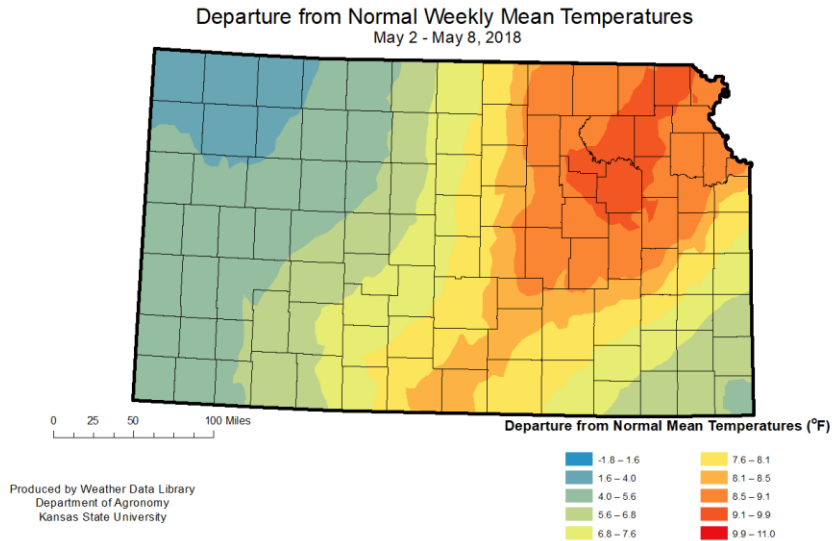


Figure 2. Departures of weekly mean temperatures from normal for Kansas during the week of May 2nd – May 8th via Cooperative Observer (COOP) and Kansas Mesonet.

The statewide average precipitation was just 0.70 inches or 75 percent of normal. Unfortunately, the western divisions saw very little, with amounts averaging just 0.02 inches in the Northwest Division to 0.18 inches in the West Central Division. The Northeast Division had the largest average precipitation at 1.84 inches or 180 percent of normal. The North Central Division came in as a close second with an average of 1.51 inches or 170 percent of normal. The greatest total for the week at a National Weather Service Cooperative station was 3.69 inches at Clay Center, Clay County. For the Community Collaborative Rain Hail and Snow network, the greatest weekly total was 4.90 inches at Hunter 2.1 NNW, Mitchell County. Among the Kansas Mesonet stations the greatest weekly amount reported was 3.26 inches at the Clay County site, north of Clay Center.

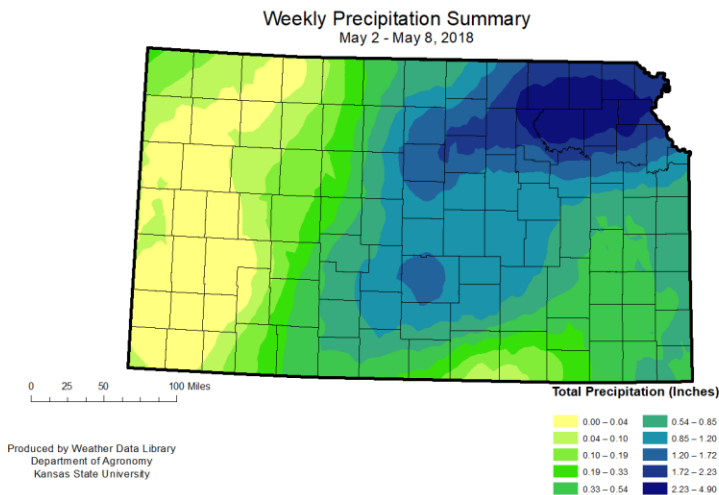


Figure 3. Weekly precipitation summary for Kansas during the week of May 2nd – May 8th via Cooperative Observer (COOP), Community Collaborative Rain Hail Snow (CoCoRaHS) and Kansas Mesonet.

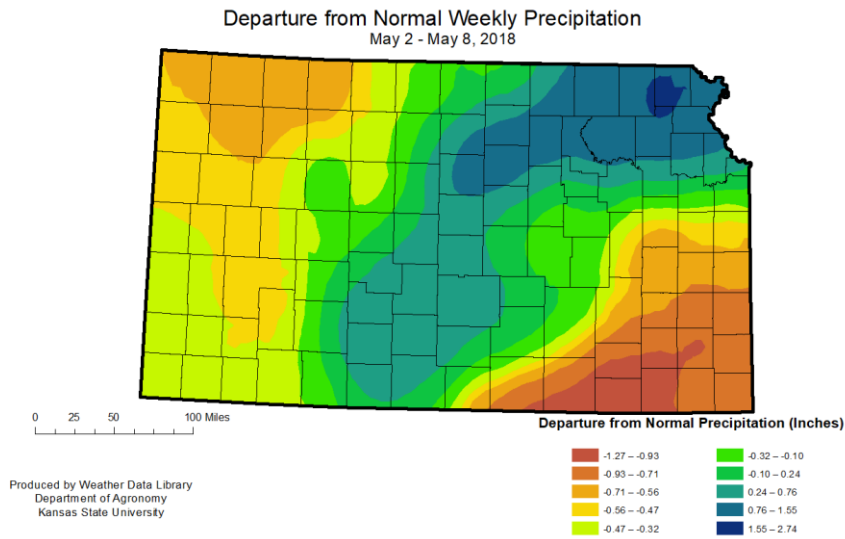


Figure 4. Departures from normal of weekly precipitation for Kansas during the week of May 2nd – May 8th via Cooperative Observer (COOP), Community Collaborative Rain Hail Snow (CoCoRaHS) and Kansas Mesonet.

Despite the moisture, drought persists across most of the state. (Figure 5). The change in drought categories (Figure 6) shows how little the moisture received changed the overall deficit. There was a slight improvement on the western edge of Northeastern KS, where precipitation was heaviest.

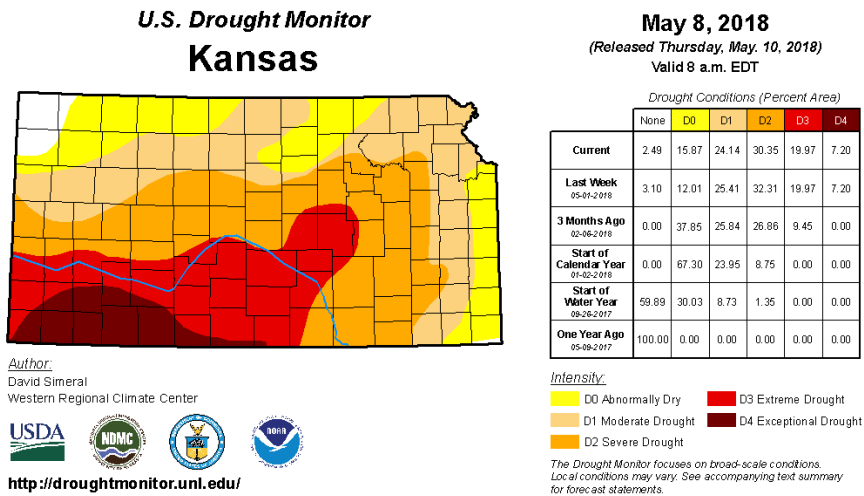


Figure 5. U.S. Drought Monitor for Kansas (US Drought Monitor).

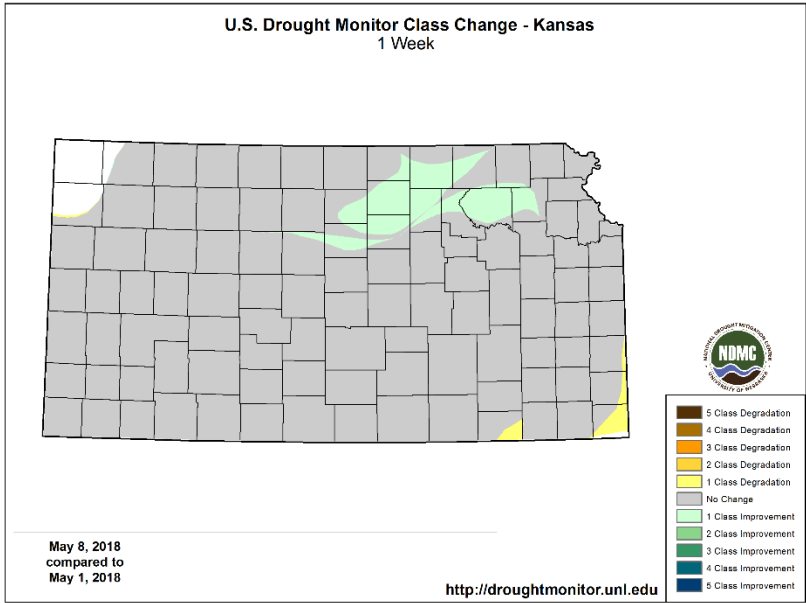


Figure 6. Difference in drought categories (US Drought Monitor).

The quantitative precipitation forecast for the 7-day period, ending on May 17th favors moisture across the state. The areas with highest expected amounts are in the eastern third of the state, (Figure 7). The areas with heaviest amounts may see up to two inches. However, amounts drop sharply across the rest of the state, with less than a quarter of an inch expected in extreme Southwestern KS. The 8 to 14-day precipitation outlook (Figure 8) indicates a slightly increased chance of above normal precipitation across the state. The temperature outlook is for warmer-than-normal conditions across the state, which will result in increased evapotranspiration rates.

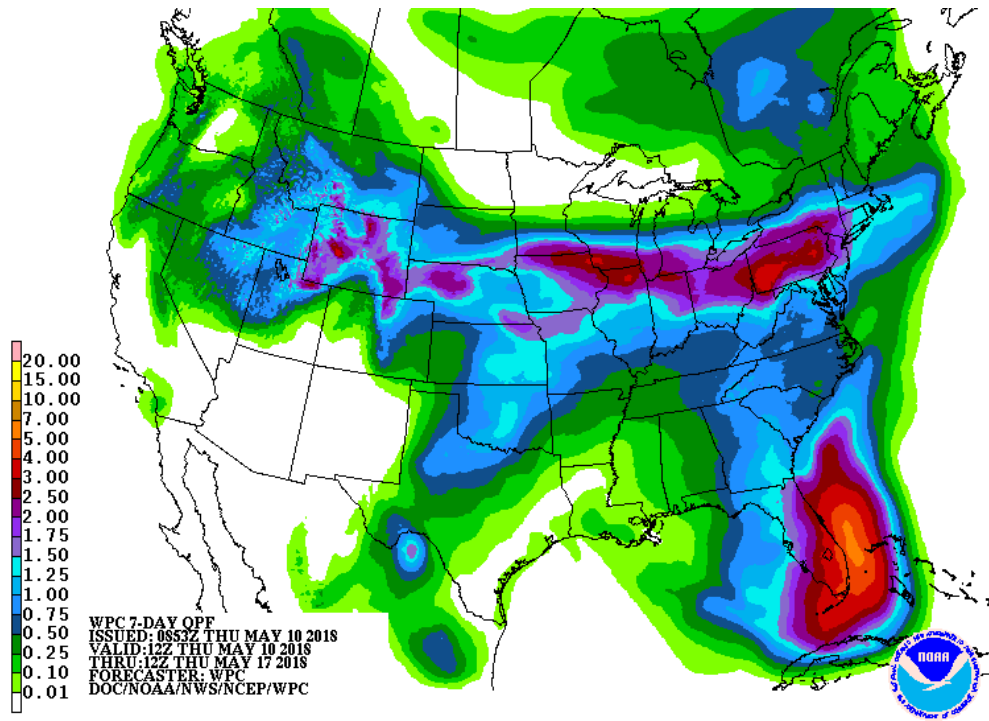


Figure 7. Quantitative Precipitation Forecast the 7-day period ending 17-May-2018

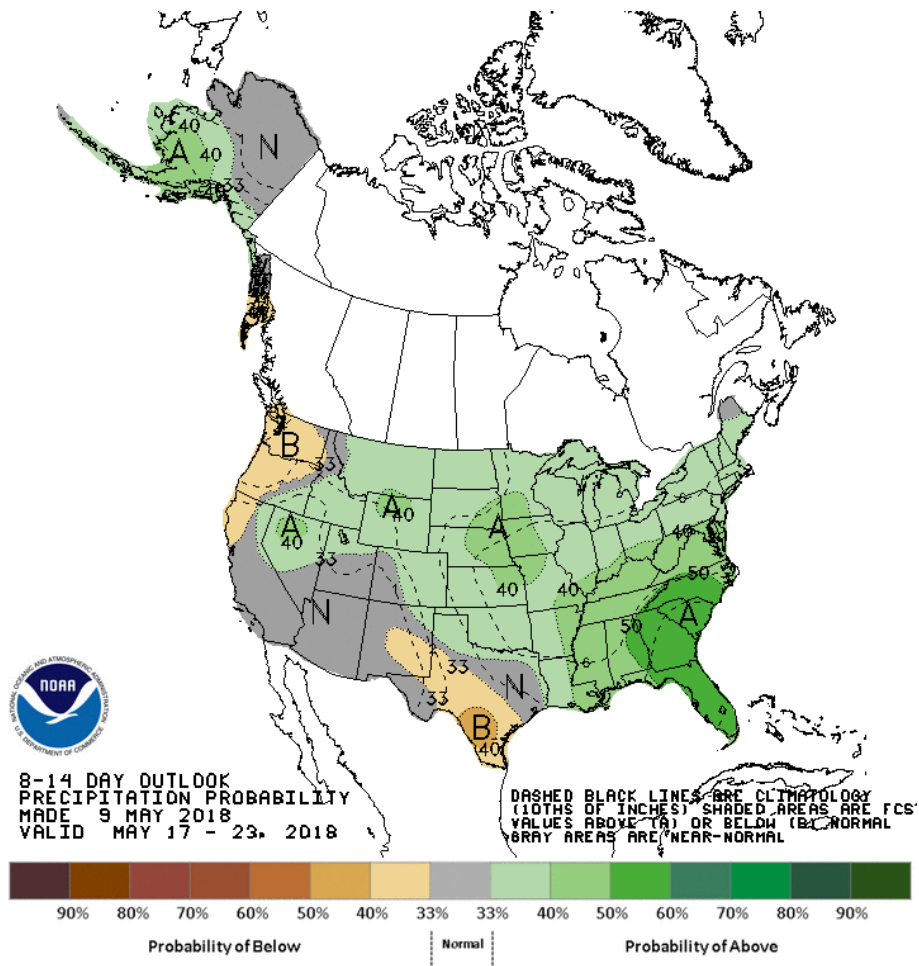


Figure 8. 8-10 day Precipitation Outlook for period ending 23-May-2018 (CPC)

Additional information can be found in the latest Agronomy eUpdate at https://webapp.agron.ksu.edu/agr_social/eu.throck

Or on the Kansas Climate website under weekly maps or drought reports <http://climate.k-state.edu/maps/weekly> and <http://climate.k-state.edu/reports/weekly/2018/>

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