

South Dakota Climate & Drought Summary

July 22, 2016

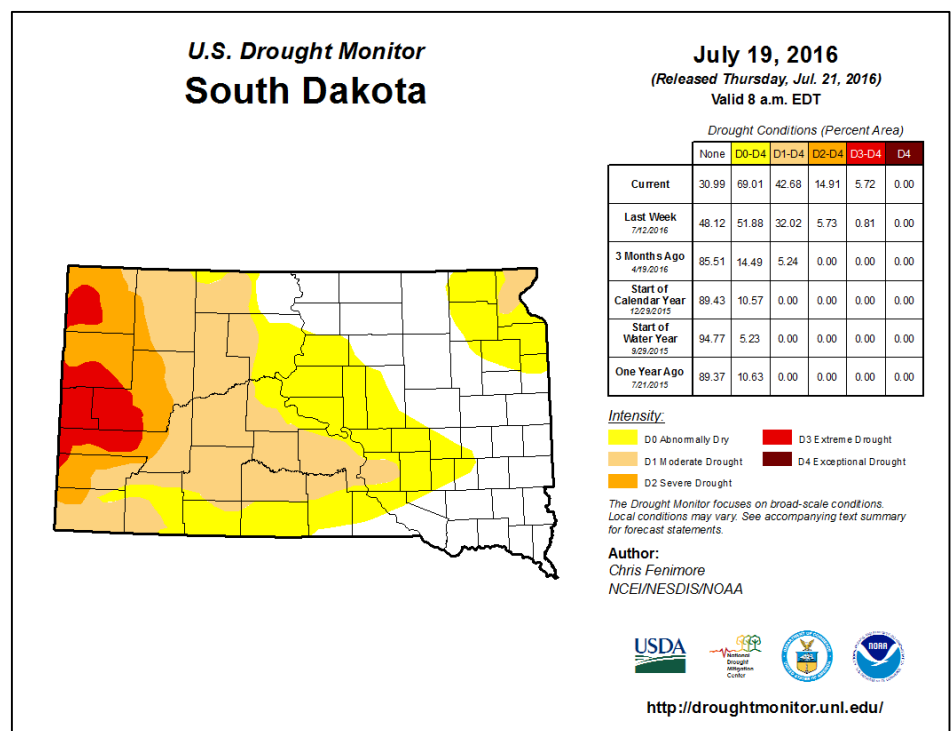
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U.S. Drought Monitor

As of July 21, 2016, the U.S. Drought Monitor shows over 42% of South Dakota in drought, defined as D1 (Moderate) or worse. About 9% of the state is in Severe (D2) drought, and almost 6% is in Extreme (D3) drought.

Over the last two weeks, drought conditions have eased in the far northeast and worsened in the West. There has been an expansion from three to six counties that have some of their area in the D3 category. In the last 4 weeks, Harding county has degraded 3 categories. The U.S. Drought Monitor map can be found at: <http://droughtmonitor.unl.edu>

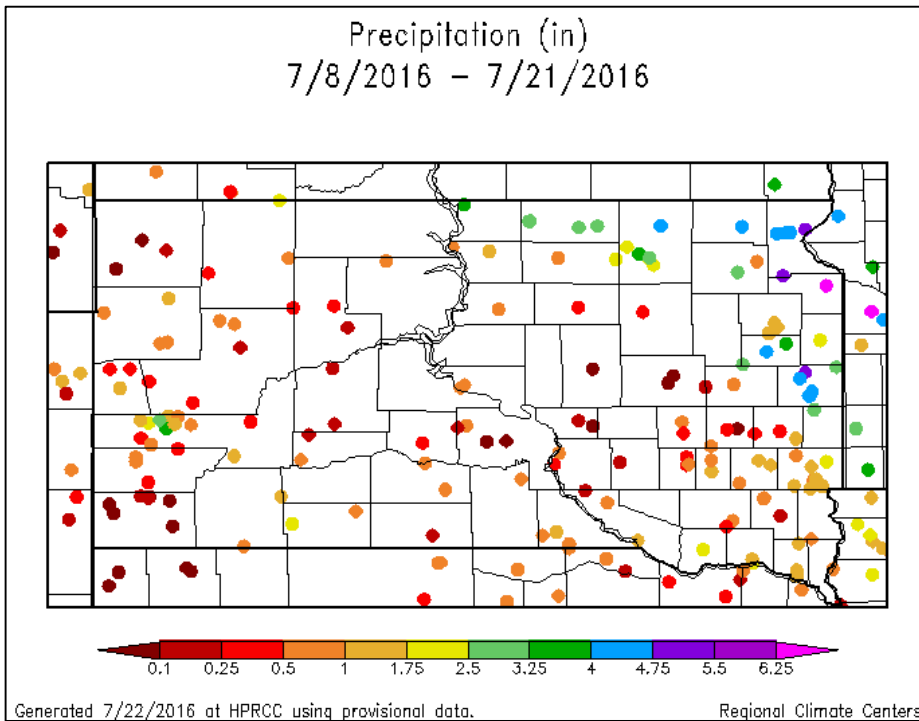


14-day Summary

Substantial rainfall has fallen in the northeast region of South Dakota, with totals of 3 inches or more from Brown county to Brookings county, and towards the North Dakota/Minnesota border. This area had largely been in D0 or worse on the US Drought Monitor. There was some local flooding in Roberts county and the surrounding area on/around July 11.

On Saturday, July 16, another series of storms affected the northeast corner and east central counties. Some hail damage occurred in agricultural areas. High winds in excess of 70 mph in

Brown county and the surrounding area caused some downed trees and damage to buildings. Localized thunderstorms in the Black Hills that same day brought some rain, especially in the northern Hills region.



Temperatures over the last two weeks have been a mixed bag. The week of July 11 was cooler than average across the state. The week of July 18 brought the most significant heat wave of the season, as temperatures soared to 110F or higher in central SD (near Pierre), and 100F at many other locations. Humidity raised heat indices to 110F or higher for 2-3 days as Excessive Heat Warnings were issued for the eastern 2/3 of the state this week.

Figure: 14-day rainfall totals for South Dakota. Source: High Plains Regional Climate Center,

<http://www.hprcc.unl.edu/maps.php?map=ACISClimateMaps>

Impacts

- Dry weather during the last week has caused some counties to implement burn bans in eastern SD.
- There has been an increase in awareness of vehicle and farm equipment fires due to the hot and dry conditions.
- Much of the corn crop is in tasseling and pollination stage. The high heat and dry conditions may affect the effectiveness of pollination at this water-intensive development stage. Yields may be lower due to drought stress. Some leaf curling and early drought stress has been observed. Near Pierre, corn in non-irrigated fields have been especially vulnerable and are in poor condition.
- Many total losses have been reported in Harding county and surrounding area for forage crops.
- Water quality continues to be a concern for livestock health in the western counties. Young cattle are experiencing illness due to poor water quality.

Forecast

An active weather pattern is forecast to return, which is more likely to bring rain to the eastern side of the state over the coming few days. One to two more systems are projected to cross South Dakota in the coming week, with some additional chances of rainfall. Weekly totals could be more than 1.5 to 2 or more inches in the next 7 days across the eastern half of the state. The wettest areas will likely be in the northern tier counties.

After the weekend's slight cool-down, temperatures are not likely to reach triple digits in the next week. Overall we will see more seasonal temperatures, highs primarily in the 80s and low 90s, with lows in the 60s.