IOWA DEPARTMENT OF NATURAL RESOURCES

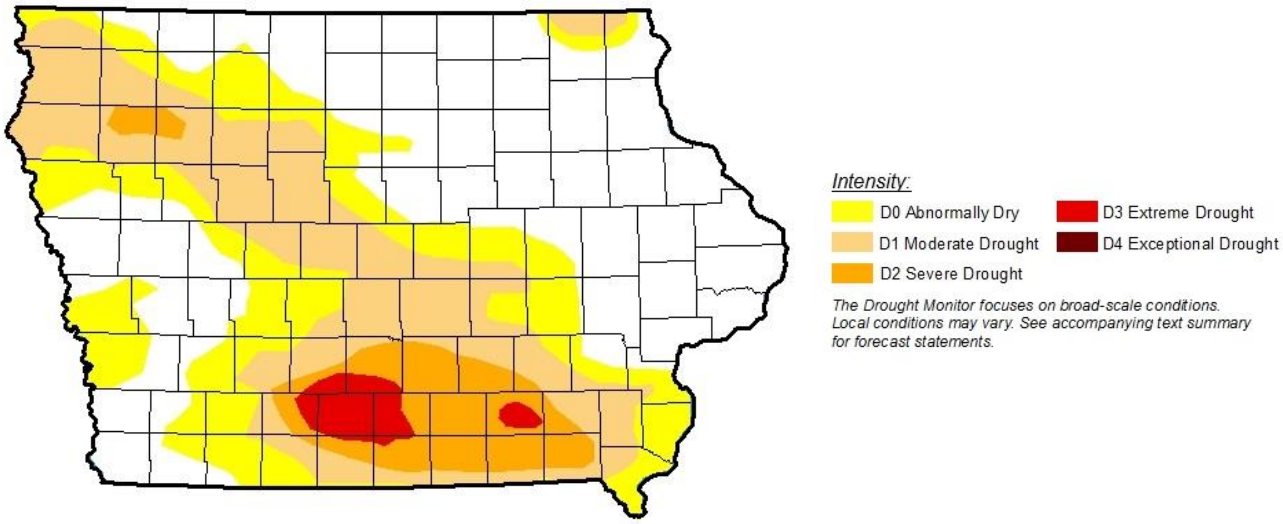
WATER SUMMARY UPDATE

Published Date August 24, 2017 | Issue 78

A snapshot of water resource trends from August, 2017

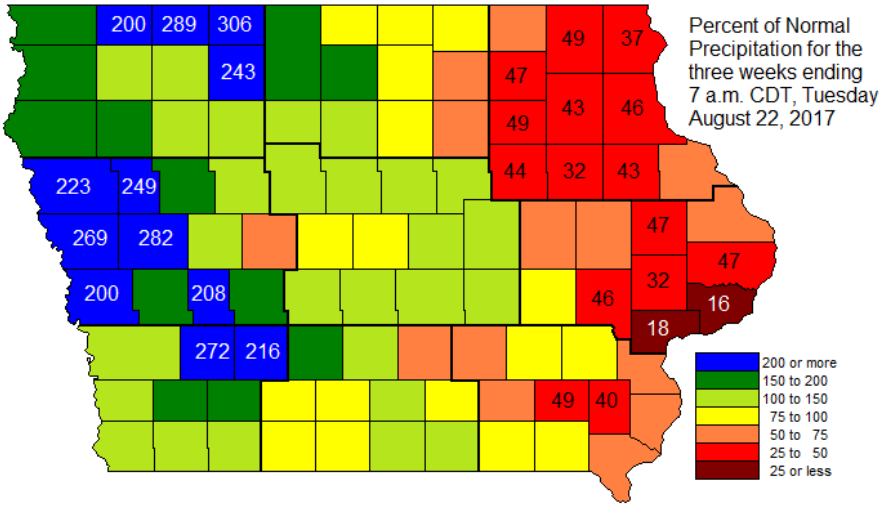
Drought Monitor - Conditions as of August 22, 7 a.m.

National Drought Mitigation Center and partners



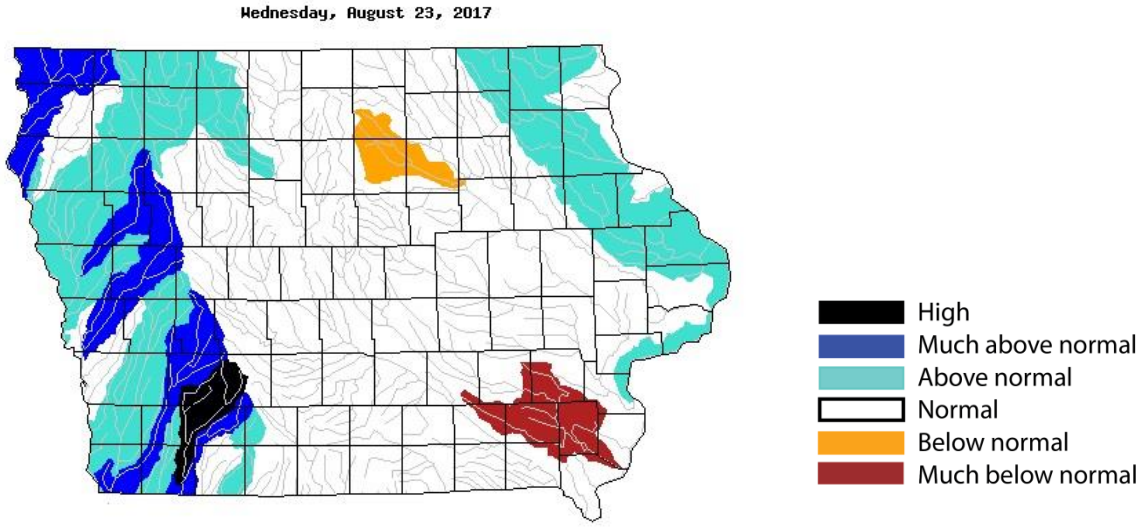
Precipitation - Percent of normal precipitation for August 1-22, 2017.

State Climatologist



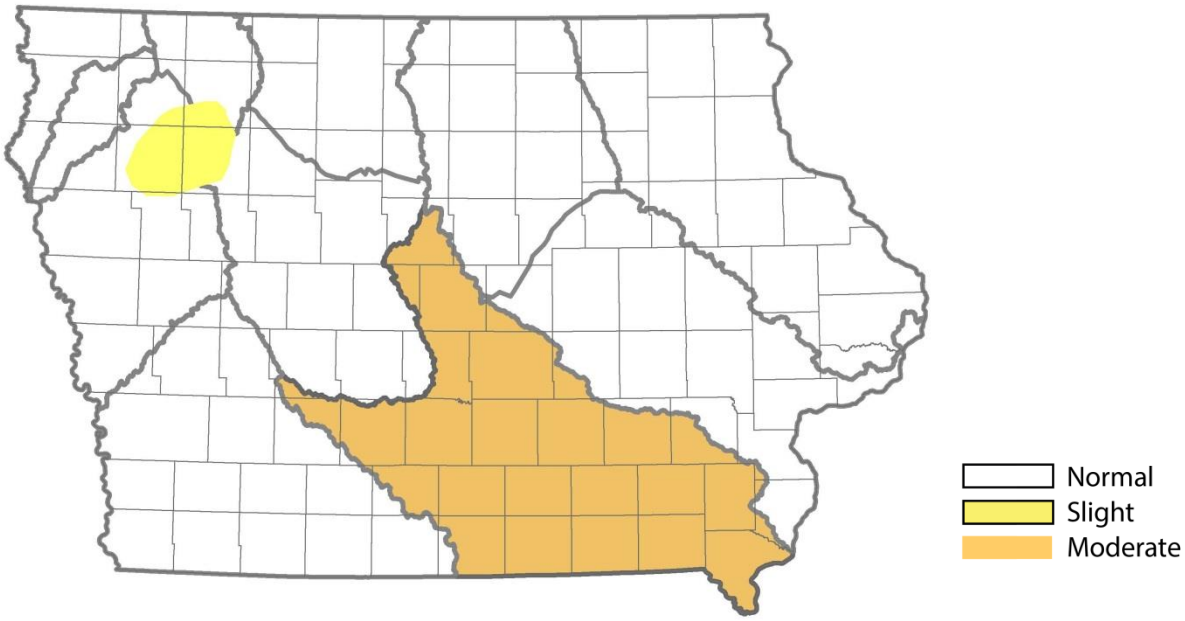
Stream Flow - Seven-day average stream flow ending August 23, 2017.

US Geological Survey



Shallow Groundwater - Conditions for August 2017

Iowa DNR and IIHR-Hydroscience and Engineering



Recent Developments and Changes

SUMMARY

Although August started out very dry, the last week has seen conditions begin to turn wetter in many of the areas that have been in need of rain. Through the first three weeks of August rain totals were as high as 9.51 inches at Guthrie Center, with totals of six inches or more widespread over much of northwest, west central and southwest Iowa. Stream flows and shallow groundwater conditions have also improved. However, 2.2 percent of the state is still rated as being in D3-Extreme Drought. The largest area of these drought conditions is centered over Clarke County, with a smaller area in Wapello County.

DROUGHT MONITOR

The recent rains across much of the state have improved conditions. While last week's drought monitor saw the first areas of D3–Extreme Drought in Iowa in nearly four years, the overall area of the state that is classified in some form of drought or dryness has diminished from over 70 percent in early August to about 55 percent this week. Over the last week some areas in the northwest third of Iowa saw a one class improvement (for example, D1 to D0), and there are some smaller areas that saw a two class improvement (D2 to D0). The benefits seen in northwest Iowa from the recent rains have not been realized in south-central Iowa, where there are still areas of D2 and D3 Drought. Conditions remain extremely dry in North Dakotas and Montana, with a large area of D4-Exceptional Drought – the worst category of drought in eastern Montana and western North Dakota. Conditions in those areas are the worst in the entire United States at this time.

CURRENT STREAM FLOW

Since the last water summary update, streamflow conditions across the western portion of the state have moved into above normal, much above normal, and high conditions in many watersheds. At the same time, flows in portions of the Skunk, and West Fork Cedar River basins are rated as below normal and much below normal. Streamflow conditions continue to be above normal in the northeast corner of the state. The majority of the state shows normal flows, with portions of the Des Moines, Skunk, and Chariton River basins improving from below normal flow to normal flow.

AUGUST PRECIPITATION

The very dry weather pattern that began across western, central and southern Iowa in late May continued into mid-August. However, rains became heavier and more frequent over the western one-half of the state between August 14 and 22. Month-to-date rain totals (through August 22) have reached as high as 9.51 inches at Guthrie Center with totals of six inches or more widespread over much of northwest, west central and southwest Iowa. Rains in the worst drought areas of south central and southeast Iowa have been much greater than earlier in the summer but still fall well short of normal for August. Meanwhile, northeast and east central Iowa, which had been wet in June and July, has turned much drier in August with month-to- date rain totals as low as 0.24 inches at Davenport.

Temperatures have been unseasonably mild for most of August averaging three to four degrees lower than normal. These lower temperatures have reduced evaporation rates and slowed the rate of deterioration of crops in the drier areas of the state. This has been the coolest start to the month of August since 2004.

SHALLOW GROUNDWATER

Substantial rainfall in the southwestern two-thirds of Iowa over the last two weeks have improved shallow groundwater conditions in northwest, central, and parts of southeast Iowa. Shallow groundwater conditions in the Skunk and lower Des Moines River watersheds are still in a moderate drought classification, and parts of Buena Vista, Clay, O'Brien, and Cherokee counties are still in a slight drought classification.

ADDITIONAL INFORMATION

For additional information on the information in this Water Summary Update please contact any of the following:

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