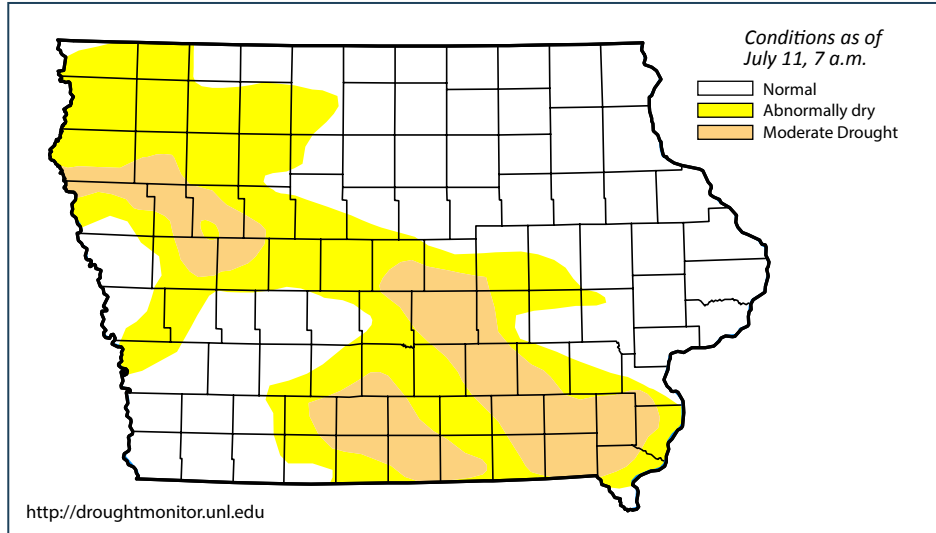


WATER SUMMARY UPDATE

PUBLISHED DATE
JULY 12, 2017

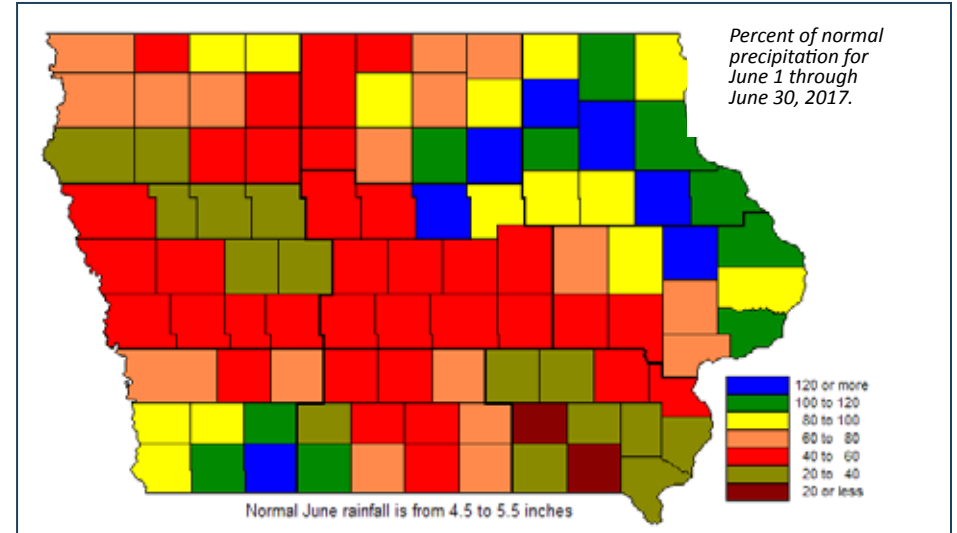
Drought Monitor

National Drought Mitigation Center and partners



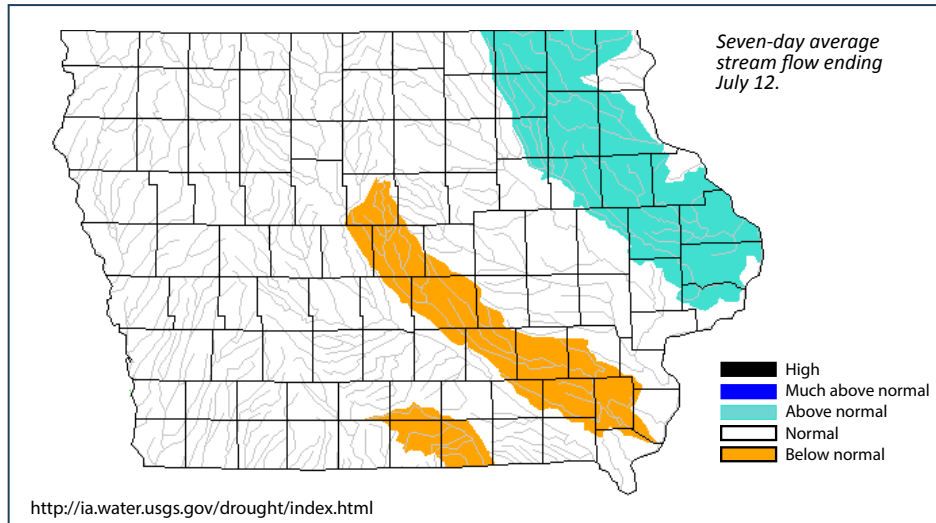
Precipitation

State Climatologist



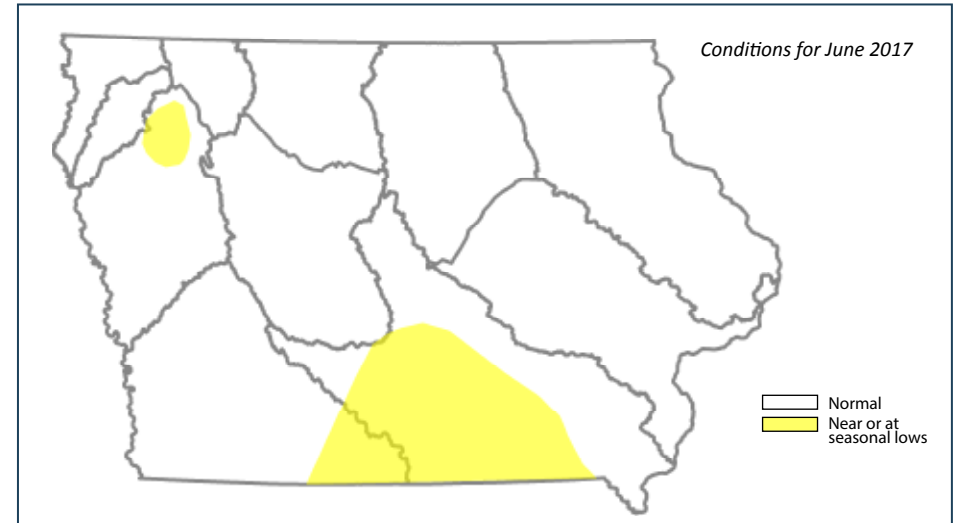
Stream Flow

US Geological Survey



Shallow Groundwater

Iowa DNR and IHR-Hydroscience and Engineering



RECENT DEVELOPMENTS AND CHANGES

SUMMARY

The small area of dryness that existed in early June has been expanded to cover nearly half of the state – including significant areas of D1-Moderate Drought. Lack of rain in early June gave way to more normal rains later in the month, but the average precipitation in Iowa for the month of June was nearly 1.5 inches below normal. The rain that did fall was not distributed evenly, which has resulted in a large portions of Northwest and Southeast Iowa being classified as abnormally dry or moderate drought, while northeastern Iowa has experienced localized flooding. Regional dryness is reflected in the stream flow and groundwater conditions in Iowa.

DROUGHT MONITOR

The small area of dryness that was present in Iowa in early June has grown to cover almost half of the state. These conditions are similar to those that existed about one year ago. More than 16 percent of Iowa is now rated as being in D1-Moderate Drought, covering portions of Southeast and Northwest Iowa. Northeast and Southwest Iowa remain drought free. In the Dakotas and Montana the area of D3-Extreme Drought continues to grow, now covering 22 percent of the total areas of the Dakotas, and a large area of eastern Montana.

CURRENT STREAM FLOW

Streamflow conditions are above normal in the northeast corner of the state, and below normal on the Chariton and Skunk Rivers. Over the last month streamflow conditions across the majority of the state moved to the normal condition, including the western third of the state moving from above normal to normal flow.

JUNE PRECIPITATION

Iowa June temperatures averaged 1.5° warmer than normal, while precipitation totaled 3.53 inches or 1.49 inches less than normal. The first half of June was very dry, with an average of only 0.09 inches of rain falling statewide (compared to the normal 2.5 inches for that period.) Rain fell almost daily somewhere in the state for the remainder of June but rain amounts and areal coverage were frequently limited. Lowest totals were over the far southeast where Donnellson (0.87 inches), Fairfield (0.88) and Ottumwa Airport (0.97) recorded under an inch of rain in what is usually the most reliable month of the year for rainfall. At Ottumwa and Donnellson this was the third driest June on record, and at Fairfield it is the fifth lowest June recorded. On the other extreme, very wet conditions prevailed over portions of north central and northeast Iowa.

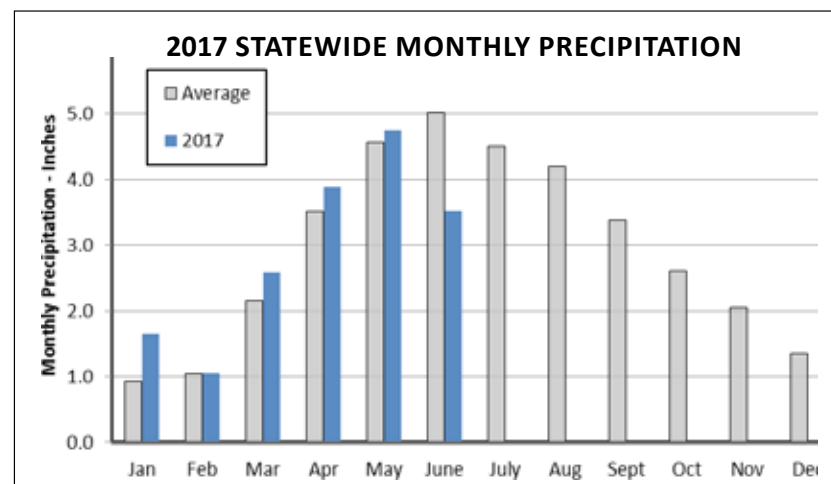
July has started off dry and warm. The statewide average rainfall has been about an inch below normal, but eastern Iowa has seen wet conditions. Temperatures have averaged 1.3 degrees above normal. An intense rain event in southeastern Clayton County brought more than 5 inches of rain to some locations - the heaviest rains seen so far this year in Iowa.

SHALLOW GROUNDWATER

Shallow groundwater conditions in the first week of July have deteriorated in parts of southeast, south central, and northwest Iowa. Parts of southcentral, southeast, and northwest Iowa have been placed in a slight drought classification. Additional precipitation is needed in the month of July to prevent more regions of Iowa from falling into a slight drought category.

ANNUAL RAINFALL UPDATE

Up until June, precipitation had been at or above normal each month of this year. Despite the June total of 1.49 inches below normal, the overall rainfall for all of 2017 is still just above normal. For the water year, which began on October 1, 2016, the state is about 0.8 inches below normal.



SUMMER WATER USE

As conditions continue to be dryer than normal in Northwest Iowa, the hot and humid weather has resulted in an increase in water usage in that part of the state. As the supply of water (rainfall and stream flow) goes down and the demand for water goes up, local and state officials are carefully monitoring the situation. Some local water utilities may implement voluntary water conservation as the summer continues.

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