

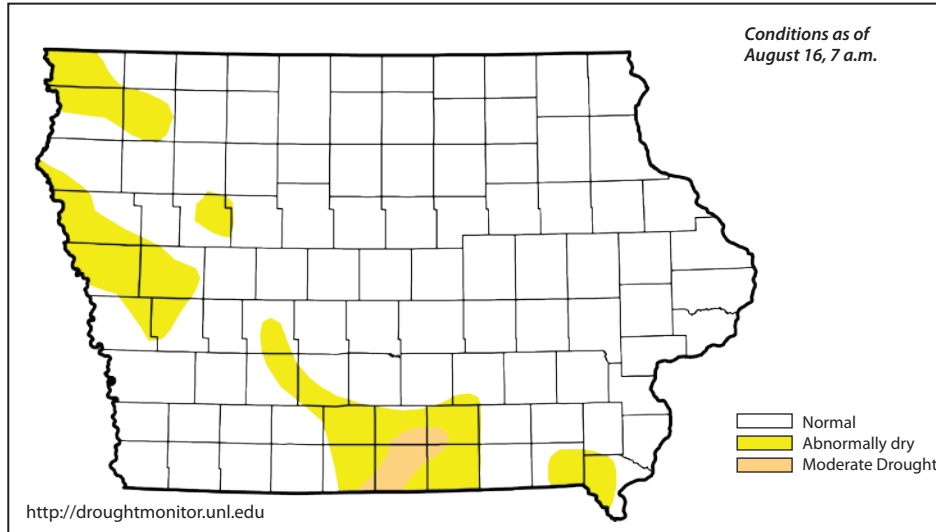
# WATER SUMMARY UPDATE

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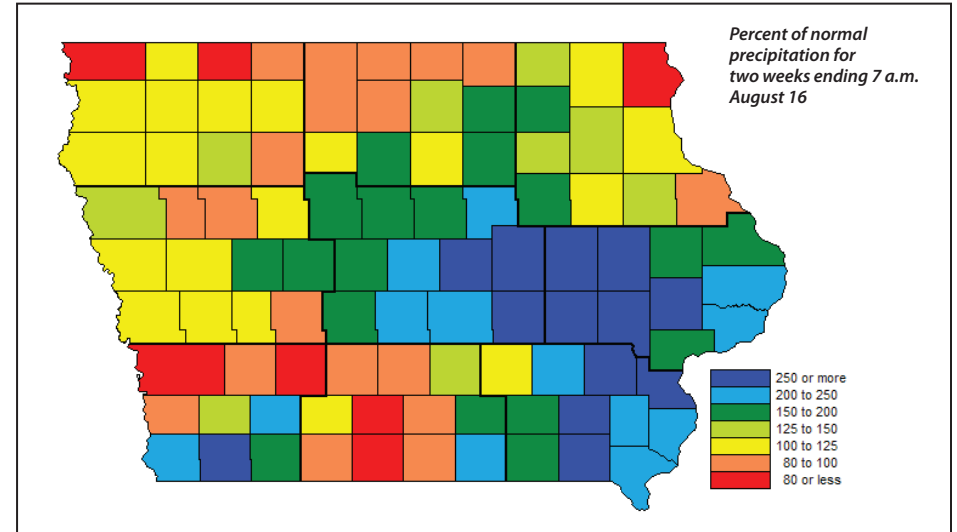
## Drought Monitor

National Drought Mitigation Center and partners



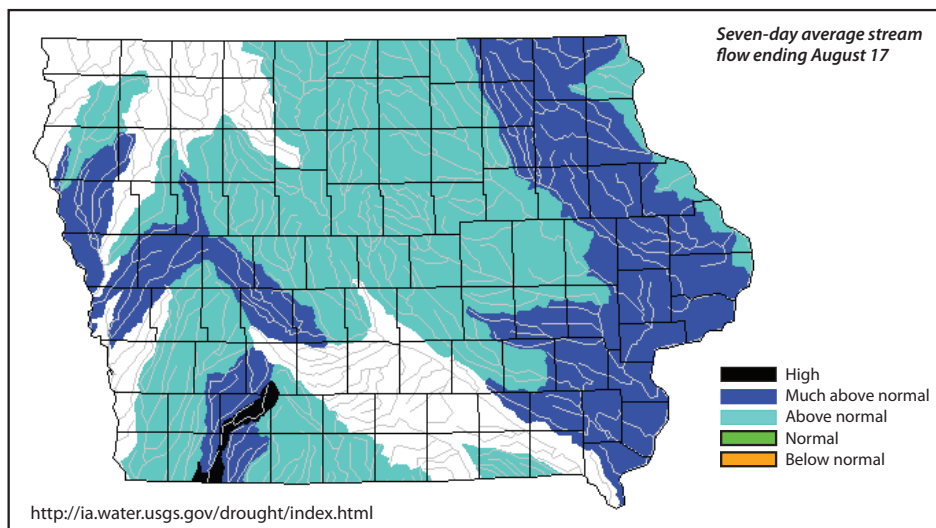
## Precipitation

State Climatologist



## Stream Flow

US Geological Survey



## Shallow Groundwater

Iowa DNR and IHR-Hydroscience and Engineering



# Recent Developments and Changes

## Summary:

Continued rains in early August have resulted in hydrologic conditions remaining positive for most of the state. The overall hydrologic condition of the state is good, and normal rainfall should help maintain favorable conditions. There remains a small pocket of moderate drought in and around Wayne County. The Iowa Streamflow Index is in the “wet” range, indicating that average stream flow around the state is higher than normal for this time of the year.

In his comments on the Iowa Crops and Weather report released by the USDA National Agricultural Statistical Service, Iowa Secretary of Agriculture, Bill Northey, said “recent storms caused some isolated damage, but also brought some needed moisture during this critical time of the growing season for soybeans.” About 90 percent of topsoil and subsoil moisture levels are rated as adequate or surplus.

## Drought Monitor:

Continued above normal rains have resulted in continued improvement in the USDM for Iowa. Over the last two weeks the area of the state in some form of dryness or drought has been reduced by about one half. The area rated as D0 or D1 – Abnormally Dry or Moderate Drought – has been reduced from 29 percent to about 14 percent. The only area of the state in moderate drought is an area in and around Wayne County. In the upper Midwest, the only remaining area of concern northeast Wyoming and western South Dakota, where a small pocket of D3 – Extreme Drought exists.

## Precipitation and Temperature:

Rainfall across Iowa since the last WSU was issued two weeks ago averaged 3.02 inches, more than 50% above the normal 1.94 inches for the period. Overall, rainfall has been well above normal for four of the past six weeks in the state. About two-thirds of the rain over this past two week period fell on August 11 and 12, with two to four inch amounts common over a large area of central and east central Iowa. The highest reported total from that rain event was 7.11 inches at Swisher in Johnson County. The bulk of the remainder of the rain over the past two weeks fell on August 4. Rainfall totals during this early August event were in the one to two inch range over much of the eastern one-third of Iowa while the western one-third of the state was mostly dry.

Overall, rain totals during the two weeks ending 7 a.m. CDT, Tuesday, August 16 varied from 0.70 inches at Mondamin in Harrison County to 8.31 inches at Swisher. Meanwhile, temperatures over the period were mostly on the warm side, averaging 1.4 degrees above normal. The hottest weather came on August 4, 10 and 11 when heat indices reached 110° or higher in a few southern areas of the state and actual temperatures topped out at 97°. The outlook for the remainder of August is for unseasonably cool temperatures to prevail with rainfall expected to average a little greater than normal.

## Shallow Groundwater:

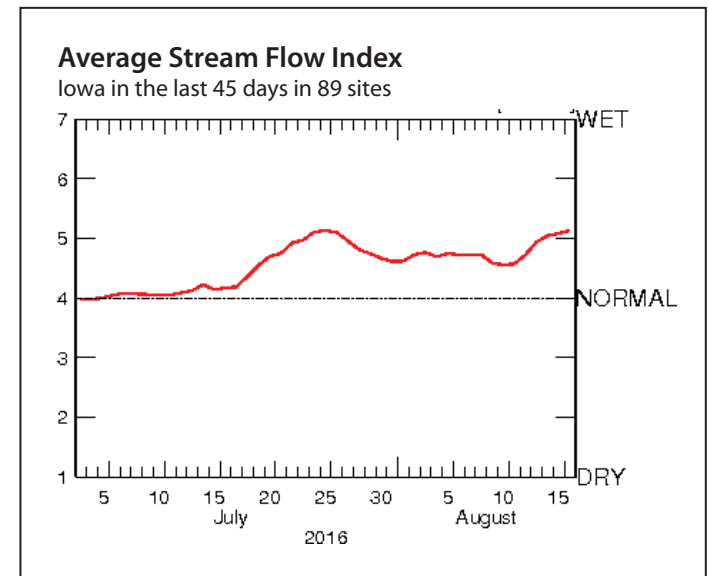
Heavy rainfall occurred across most of Iowa on August 11th and 12th, and produced flooding in many locations, but served to improve groundwater conditions. Shallow groundwater levels in most of Iowa continue to be at or above normal. These levels are a welcome change from the sometimes low groundwater levels that can emerge during the summer months, particularly in areas that rely on shallow groundwater sources.

## Current Stream Flow:

Streamflow conditions are above normal for the majority of the state. Since the last water summary update, streamflow conditions across the most of the state remained in the above normal conditions. Streams in the northeast, east and southeast portion of the state have moved into the much above normal condition. USGS crews have been making additional streamflow

measurements as a result of rain events in order to validate real-time values, especially on August 12 due to heavy rain event on August 11 in eastern Iowa.

Since dipping below the normal line on July 4, the Iowa Streamflow Index has risen into the “wet” range, and continued rains have kept it in that range.



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