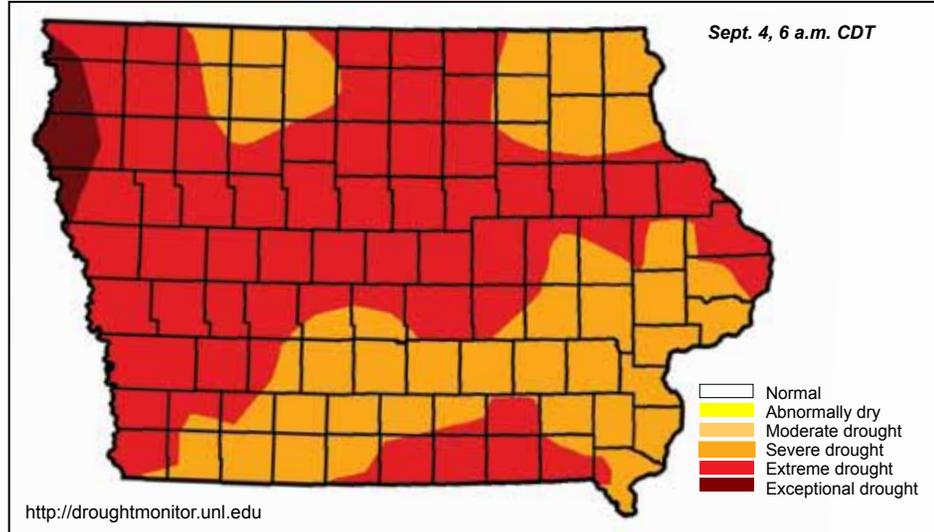


WATER SUMMARY UPDATE

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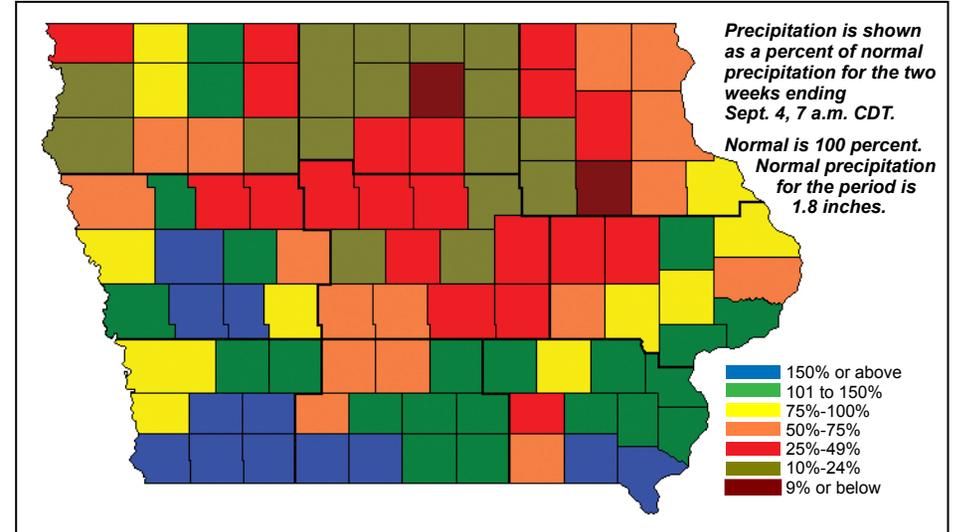
Drought Monitor

National Drought Mitigation Center and partners



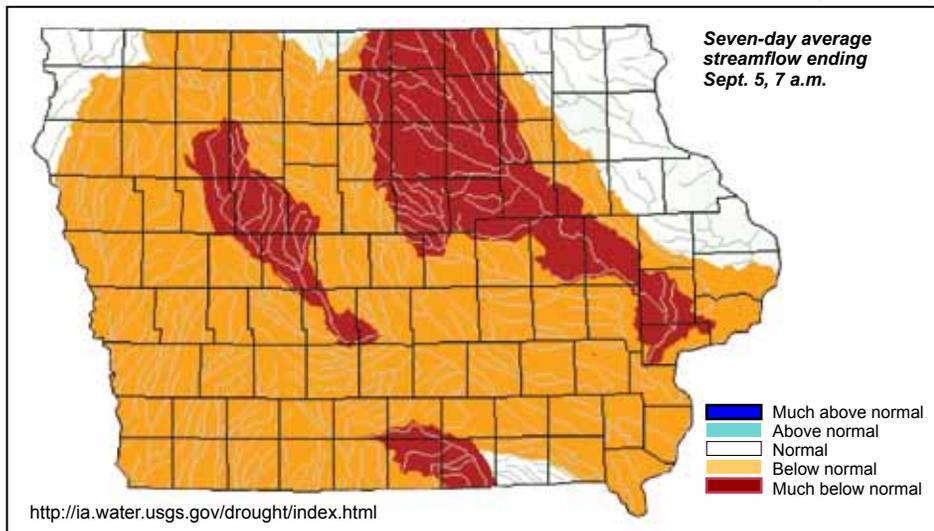
Precipitation

State Climatologist



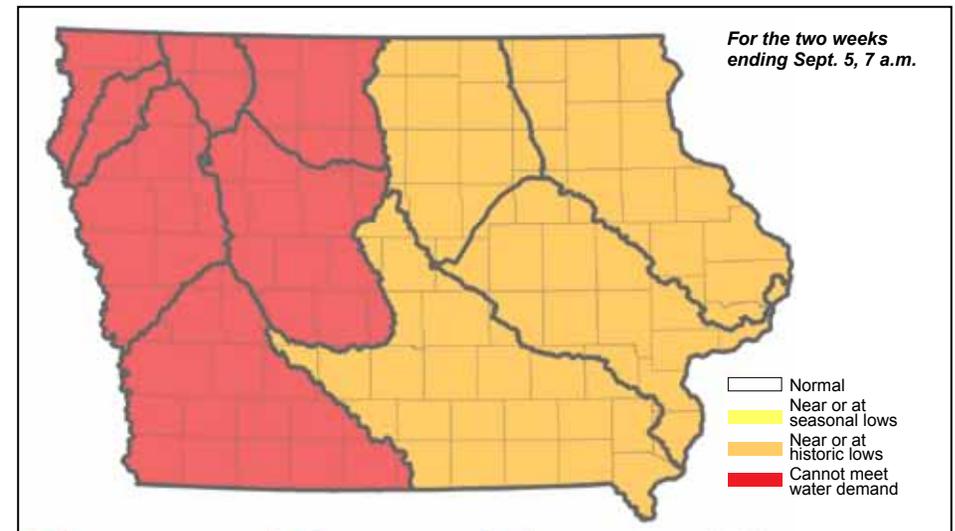
Streamflow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

Overall Conditions

The previous two weeks have seen some rain, but no real improvement in overall drought conditions in the state. The rainfall in Iowa was the highest two-week average since mid-June, but was still 0.4 inches less than normal, making our moisture deficit for the year even greater. Streamflows continue to be a major area of concern, with about the same number of rivers with levels below protected flow as there were two weeks ago. This week's National Drought Monitor shows a small area in northwest Iowa as the first D4 drought designation recorded in Iowa.

In his comments on the weekly Iowa Crops and Weather Report, Iowa Secretary of Agriculture Bill Northey said "Crops continue to mature rapidly and harvest is starting to get underway as farmer chop silage and are just beginning corn harvest. If the dry weather persists, widespread harvest is likely just a week or two away." The report indicated that nearly 85 percent of Iowa's topsoil moisture levels are rated as very short or short, while 95 percent of subsoil moisture is rated as very short or short.

Drought Monitor

The Drought Monitor for September 4 remains about the same as it has for the past two weeks. Over 60 percent of the state is rated as extreme drought (D3), which is slightly less than two weeks ago. However, continued heat and dryness has resulted in the area along the Iowa-South Dakota border downgraded to exceptional drought (D4) on the U.S. Drought Monitor. This is the first time any part of Iowa has been classified as D4, the worst drought category, since the US Drought Monitor was initiated in 2000.

Precipitation

Precipitation over the two weeks averaged 1.4 inches across Iowa, which is 0.4 inches less than normal. Precipitation, while continuing to be less than normal, was the highest two-week average since mid-June thanks to a large event from August 24 to 26, when rain fell statewide with heavy rain over portions of southwest Iowa. Rain totals over the past two weeks varied from only 0.04 inches at the Mason City Airport up to 8.2 inches at the Lamoni Airport. Additional significant precipitation fell over extreme southeast Iowa on September 1 from the remnants of Hurricane Isaac. The rain that fell over much of the northeastern two-thirds of Iowa on Tuesday night came after the cutoff for this summary and the US Drought Monitor, and will be reflected in the next editions of each. Locally heavy rain fell over Clayton County with this last event and brought a statewide average of 0.5 inches of rain.

Unfortunately, hot weather returned to Iowa with afternoon temperatures climbing into the nineties or higher everyday during the period except for August 26. This resulted in statewide temperatures averaging 4.8 degrees above normal for the past two weeks, and Hawarden reaching 104 degrees on August 30.

Shallow Groundwater

Shallow groundwater levels throughout Iowa continue to be at or near historic lows. Many water utilities in southwest and northwest Iowa are under mandatory and voluntary water restrictions. Pumping water levels are at or slightly above pump settings in many locations in western Iowa. Spotty rainfall has improved shallow groundwater levels in isolated areas of northeast, southeast and south central Iowa, but most areas remain extremely dry.

Notable Events for the Period

Water levels in the streams in northwest Iowa have dropped considerably — so much so that many are now dry. In areas of Buena Vista, Clay, Sioux, O'Brien and Cherokee Counties the only streams with flow are the major rivers — the Raccoon, Little Sioux, Rock, Floyd and Maple. Most other small streams are dry.

An area in Cherokee County had over 1.5" of rain last week, yet small streams remain dry.

Water demand from many of the small municipal systems is up, as many livestock producers are now hauling water for their livestock to drink.

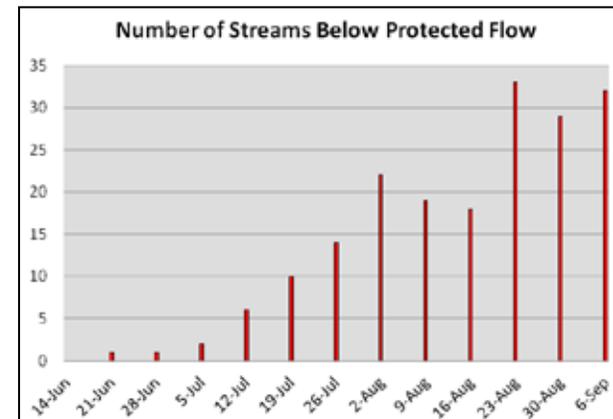
Some water utilities in Northwest Iowa have moved from voluntary to mandatory conservation as shallow groundwater levels continue to drop, and demand remains high.

Streamflow

Streamflow conditions remain below normal for the majority of the state. The lowest streamflow conditions are within the Des Moines River, Iowa River, and Cedar River basins which are less than 10 percent of normal streamflow. Streamflow conditions are nearly normal in the northeastern corner of the state and a small area in the southeast part of the state, thanks to rains that came in the last two weeks.

Some streams that were near protected flow levels fell into the protected flow classification this week.

As shown in the graph at right, 32 stream reaches are below protected flow this week, which is up from the 29 last week. This has resulted in several irrigators being prohibited from irrigating next week.



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Prepared by the Iowa DNR in collaboration with the Iowa Department of Agriculture and Land Stewardship, the U.S. Geological Survey, and The Iowa Homeland Security and Emergency Management Division.