IOWA DNR
DEPARTMENT OF NATURAL RESOURCES

WATER SUMMARY UPDATE

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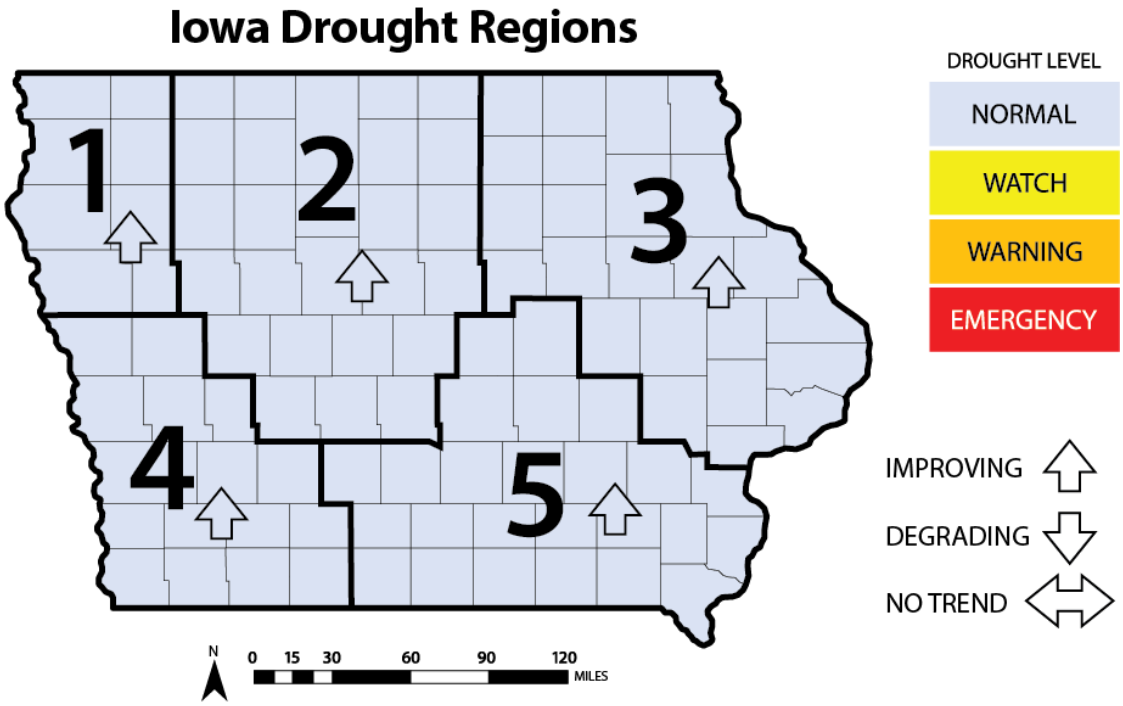
A snapshot of water resource trends for July 2025

IOWA DROUGHT CONDITIONS



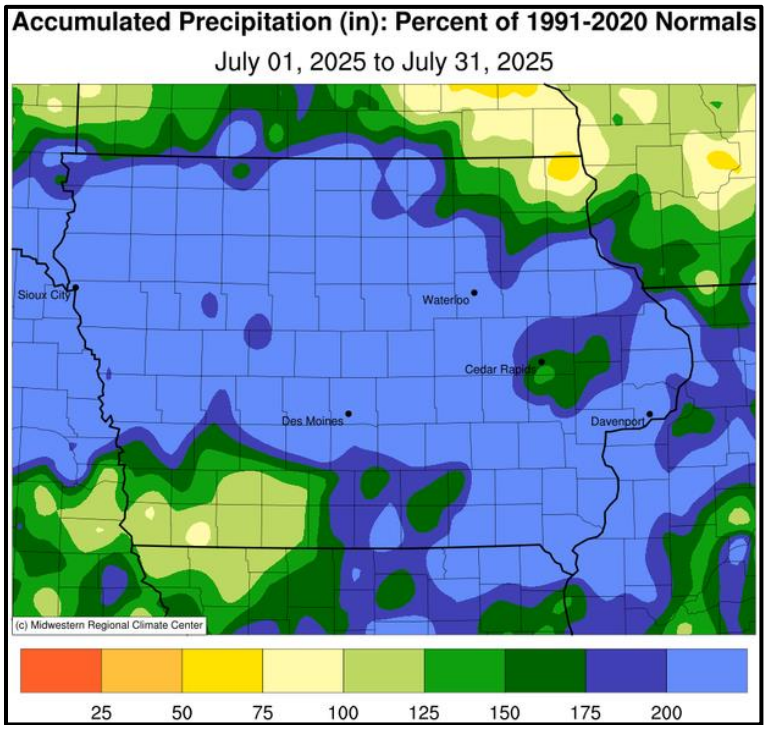
CONDITION SUMMARY – NEARLY DROUGHT-FREE BY THE END OF JULY

Unusually high precipitation totals throughout July have brought significant drought relief to Iowa. The state recorded its second-highest average statewide precipitation for the month, more than double the normal amount. As a result, drought and dryness improved dramatically, leading to drought-free conditions in the state by early August. The only remaining area of concern is a small pocket of abnormally dry conditions near the Missouri River in southwest Iowa. Consequently, all previous drought watch designations have been lifted. Soil moisture and stream flows are now largely considered normal, a notable recovery from some deterioration earlier in the spring. The National Weather Service's Climate Prediction Center, however, indicates an uncertain outlook for August, with no clear signal for precipitation or temperature trends.

July Precipitation and Temperature

Iowa's statewide preliminary precipitation totaled 9.20 inches, or 4.83 inches above-normal. With more than double the expected precipitation, July 2025 ranks as the second wettest in 153 years of records, behind July 1993. A majority of the state's National Weather Service co-op and Community Collaborative Rain, Hail and Snow (CoCoRaHS) stations reported above-average rainfall with widespread positive departures in the four-to-eight-inch range. Stations in central to eastern Iowa registered 300-400 percent of normal through July. Monthly precipitation totals ranged from 2.40" in Lansing to 16.55" in Winthrop.

The statewide preliminary average temperature was 75.4 degrees, 2.0 degrees above normal. Statewide average temperatures in July were near-normal in pockets of north-central, and western Iowa; the warmest conditions were found in eastern Iowa, where departures approached four degrees above normal. Carroll reported the month's high temperature of 99 degrees on the 29th, 15 degrees above normal. Fayette reported the month's low temperature of 50 degrees on the 18th, ten degrees below normal.



Standardized Precipitation Index (SPI)
The SPI is an index based on accumulated precipitation for various time scales. SPI is the most commonly used indicator worldwide for detecting and characterizing meteorological droughts. The SPI indicator measures precipitation differences based on a comparison of observed total precipitation amounts over the period of interest with the long-term historical precipitation record for that period. Droughts are characterized by negative SPI values, while positive SPI values indicate wet periods. The range of SPI values is between -3 and +3, denoting "extremely dry" to "extremely wet".

90-day SPI values for all Drought Regions in July (comparing May, June, and July precipitation) range from 0.6 to 1.8, with all values above zero. All 180-day SPI values are positive, with Drought Regions 2 and 3 having the most significant increasing trend.

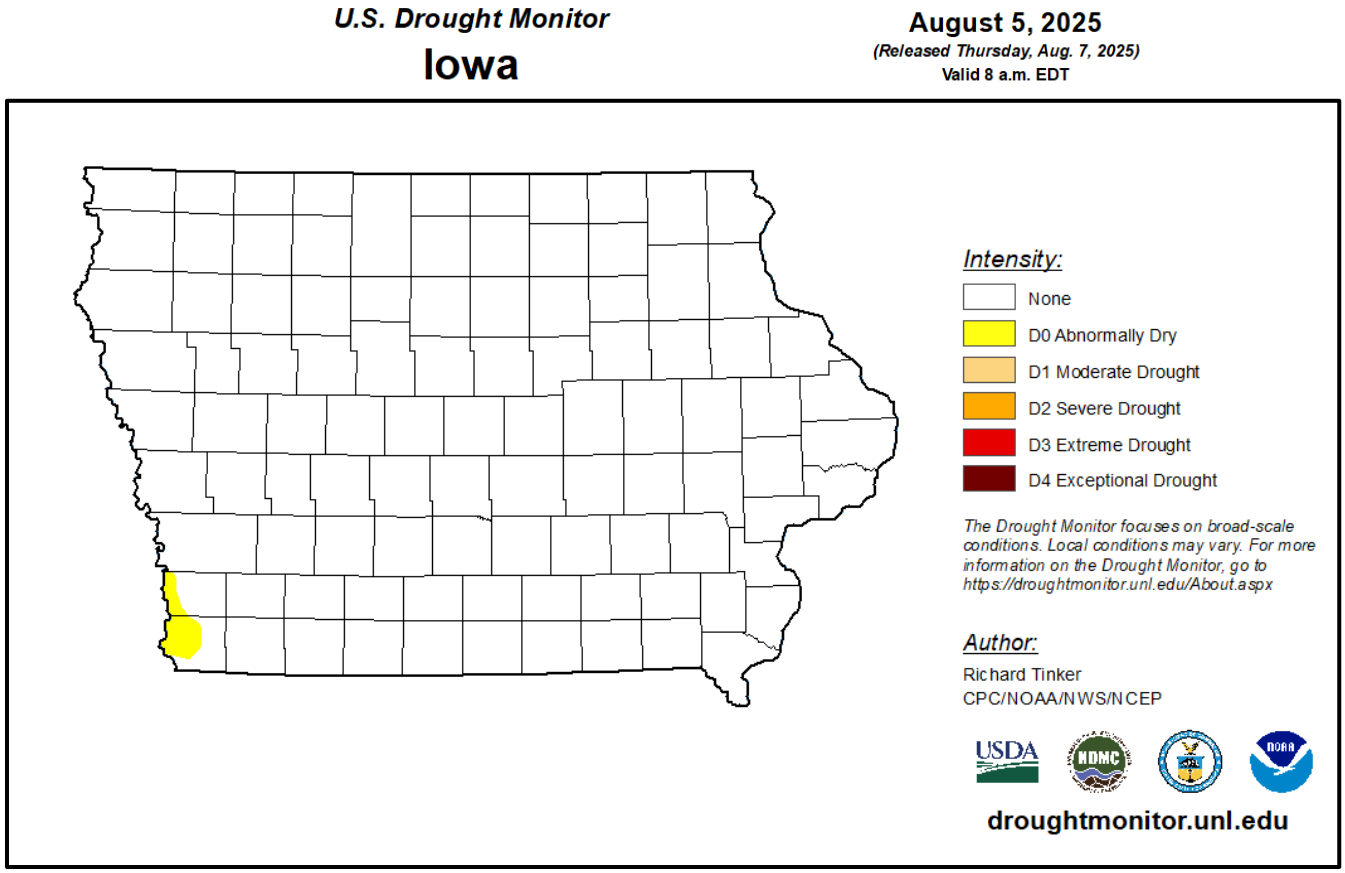
Drought Region	3-month SPI	6-month SPI	IDP Classification ↑ = improving ↓ = degrading ↔ = no trend
1	1.3	1.0	Normal ↑
2	1.8	1.7	Normal ↑
3	1.0	1.1	Normal ↑
4	0.6	0.4	Normal ↑
5	1.1	0.7	Normal ↑

Standardized Streamflow Index (SSI) and Streamflow
SSI is a metric that compares current streamflow against the historical record to determine how far away the current streamflow value is from the river's historical mean observed on the same date. SSI values in all five drought regions have increased, with Drought Region 5 with the largest 30-day SSI increase in July compared to June.

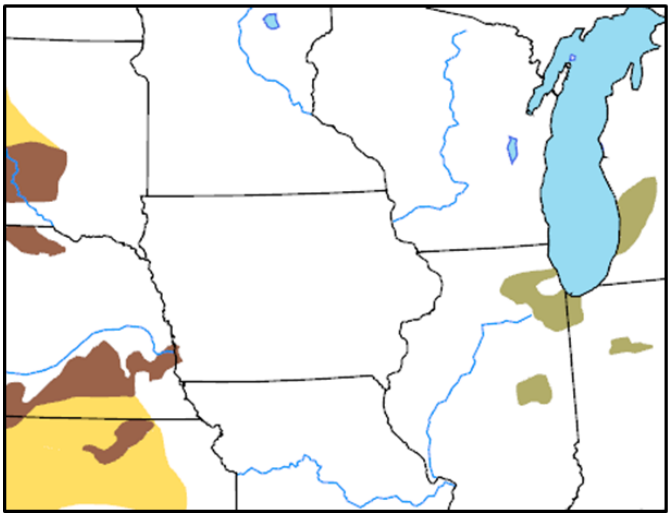
According to the US Geological Survey, in July, streamflow levels increased to normal conditions in the Keg and Waubonsie Creeks, Rock, West Nishnabotna, and East Nishnabotna Rivers. The Boyer, Middle Raccoon, South Raccoon, Thompson, North, Middle, South, Upper Iowa, Turkey, Volga, and English Rivers and White Breast Creek increased to above normal conditions. The Floyd, Maple, East Fork Des Moines, Boone, North Raccoon, Little Cedar, Cedar, Maquoketa, Wapsipinicon, Iowa, North Skunk, and South Skunk Rivers increased to much above normal conditions. The Yellow River remained in below-normal conditions. The majority of the state is in above or much above normal conditions.

US Drought Monitor and Drought Conditions

The current US Drought Monitor (USDM) indicates most areas, particularly in the western and southern parts of the state, saw drought removal or improvement. By the end of July, the area experiencing D0 (abnormally dry) conditions dropped by more than 41 percent, shrinking to just two percent of the state. Additionally, over four percent of areas previously in D1 (moderate drought) were upgraded. As a result, nearly all of Iowa is now rated as free from drought and dryness. The most recent USDM, released on August 5, confirms this substantial statewide improvement.



The Seasonal Drought Outlook released on July 31, 2025 by the CPC, valid through October 31, 2025, indicates the potential for drought persistence along the Missouri River in southwestern Iowa. Drought expansion is not expected in Iowa, despite the Seasonal Precipitation Outlook indicating the potential for below normal precipitation in northern, western, and central Iowa. The Seasonal Drought Outlook considers the impacts of recent precipitation as well as seasonal precipitation outlooks.



U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for August 1 - October 31, 2025
Released July 31, 2025

- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought

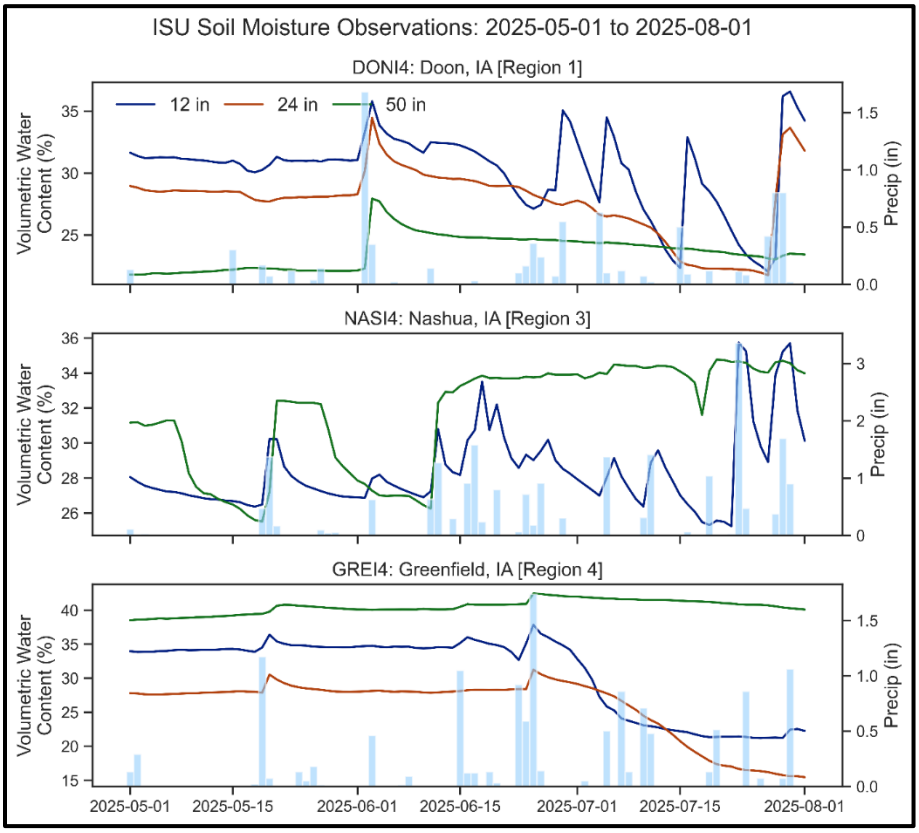
OTHER WATER RESOURCE INFORMATION

Border River Conditions

In their monthly update of Missouri River conditions dated August 7, 2025, the Army Corps of Engineers (USACE) indicates that the volume of water stored in the system of reservoirs is 51.7 Million Acre-Feet (MAF), which is about the same volume as last month. The annual runoff forecast updated on August 6, 2025, for the upper Missouri River Basin above Sioux City has been raised slightly to 19.2 Million Acre Feet (MAF) or 75% of the average annual runoff. “Above-normal precipitation occurred in much of the basin, though areas of western Montana and Wyoming continue to be very dry,” said John Remus, chief of the U.S. Army Corps of Engineers’ Missouri River Basin Water Management Division.

July Soil Moisture

Intense precipitation during July increased soil saturation at the surface and deeper layers of soil. The map of deep soil saturation shows that areas near the Mississippi and south-central Iowa held average soil moisture above 80 % along the entire month.



ADDITIONAL INFORMATION

This edition of the Water Summary Update continues to reflect use of the 2023 Iowa Drought Plan (IDP), which was developed as a collaborative effort between the Department of Natural Resources, the Department of Agriculture and Land Stewardship, and the Department of Homeland Security and Emergency Management. The IDP can be seen in its entirety on the DNR's website: The Iowa Drought Plan.

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

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