IOWA DNR
DEPARTMENT OF NATURAL RESOURCES

WATER SUMMARY UPDATE

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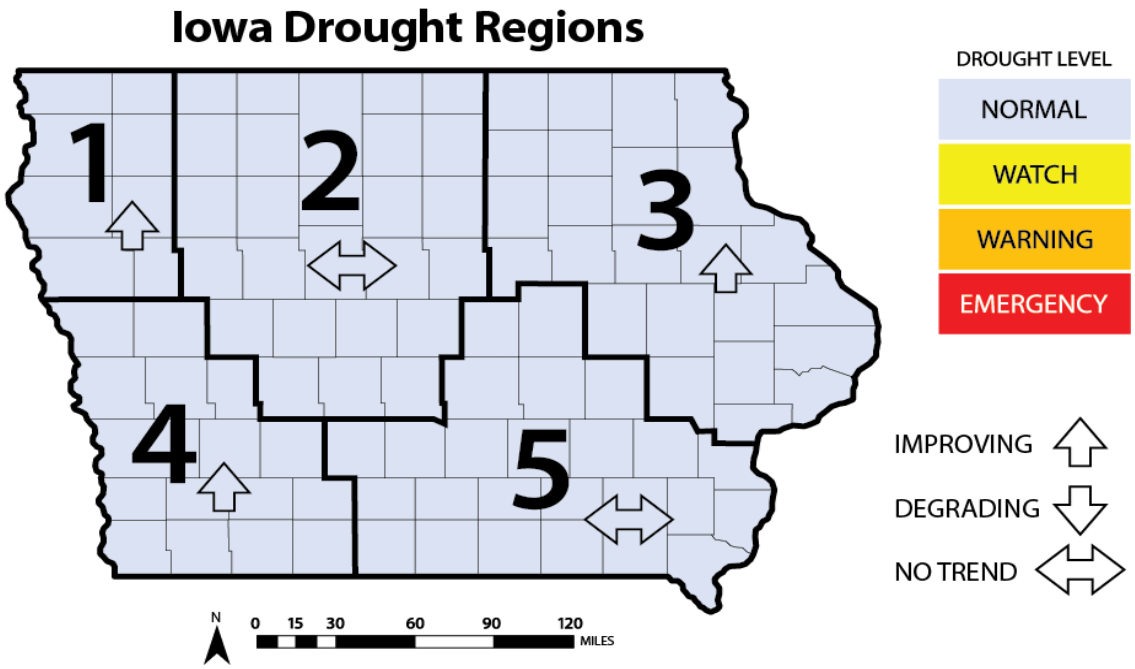
A snapshot of water resource trends for August 2025

IOWA DROUGHT CONDITIONS



CONDITION SUMMARY – DROUGHT-FREE AUGUST

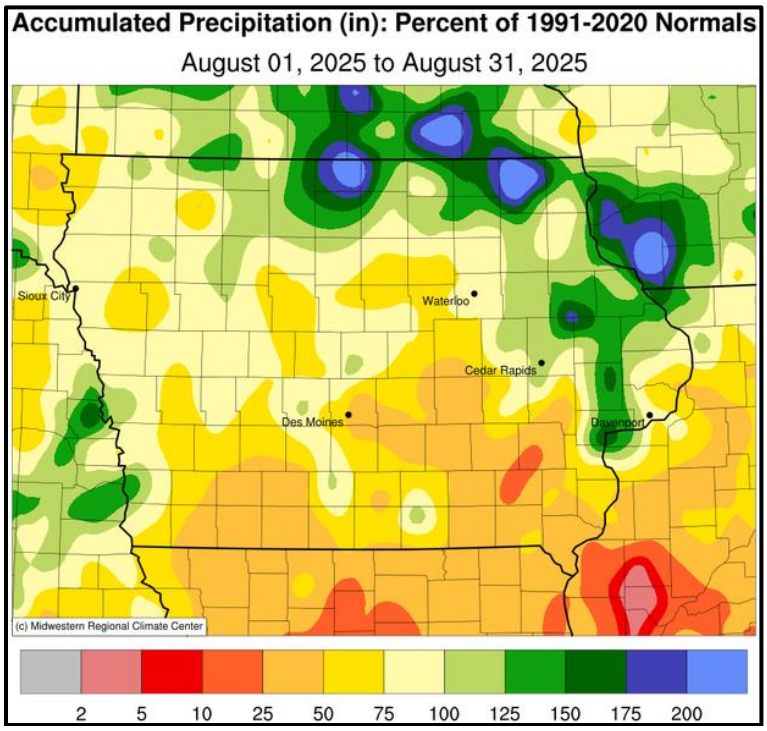
After the second wettest July on record, Iowa remained drought-free even as drier conditions were widespread through August. However, in the first week of September, some areas in southern Iowa are now showing signs of dryness and have been designated as D0 (Abnormally Dry). Stream flows remain largely normal, while soil moisture is trending slightly drier for half of the state. Currently, there are no drought watches or warnings in effect for any of the state's drought regions. Looking ahead, the Climate Prediction Center's (CPC) Seasonal Drought Outlook suggests that new drought conditions are likely to develop near the Mississippi River in southeastern Iowa. The CPC has issued a new outlook for September, indicating an uncertain precipitation outlook, with no clear signal. However, the entire state could trend warmer than normal.

August Precipitation and Temperature

Iowa's statewide preliminary precipitation totaled 3.40 inches, or 0.73 inches below normal. A majority of Iowa's National Weather Service co-op stations reported precipitation deficits with widespread one to two-inch departures; many southeastern Iowa stations had two to four-inch deficits. Stations in northern and western Iowa reported above-average totals. Monthly precipitation totals ranged from 0.41" in Washington to 13.61" in Decorah.

The statewide preliminary average temperature was 71.0 degrees, or equal to the 30-year climatological average. Guttenberg Lock and Dam reported the month's high temperature of 98 degrees on the 17th, 16 degrees above normal.

Spencer Municipal Airport and Chariton reported the week's lowest temperature of 40 degrees on the 25th and 26th, respectively, which was on average 17 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".

Ninety-day SPI values for all Drought Regions in August (comparing June, July, and August precipitation) range from 0.6 to 1.5, with all values above zero. All 180-day SPI values decreased slightly and remain above zero.

Drought Region	3-month SPI	6-month SPI	IDP Classification ↑ = improving ↓ = degrading ↔ = no trend
1	1.2	0.7	Normal ↔
2	1.5	1.2	Normal ↔
3	1.0	0.7	Normal ↔
4	0.6	0.1	Normal ↔
5	0.8	0.2	Normal ↔

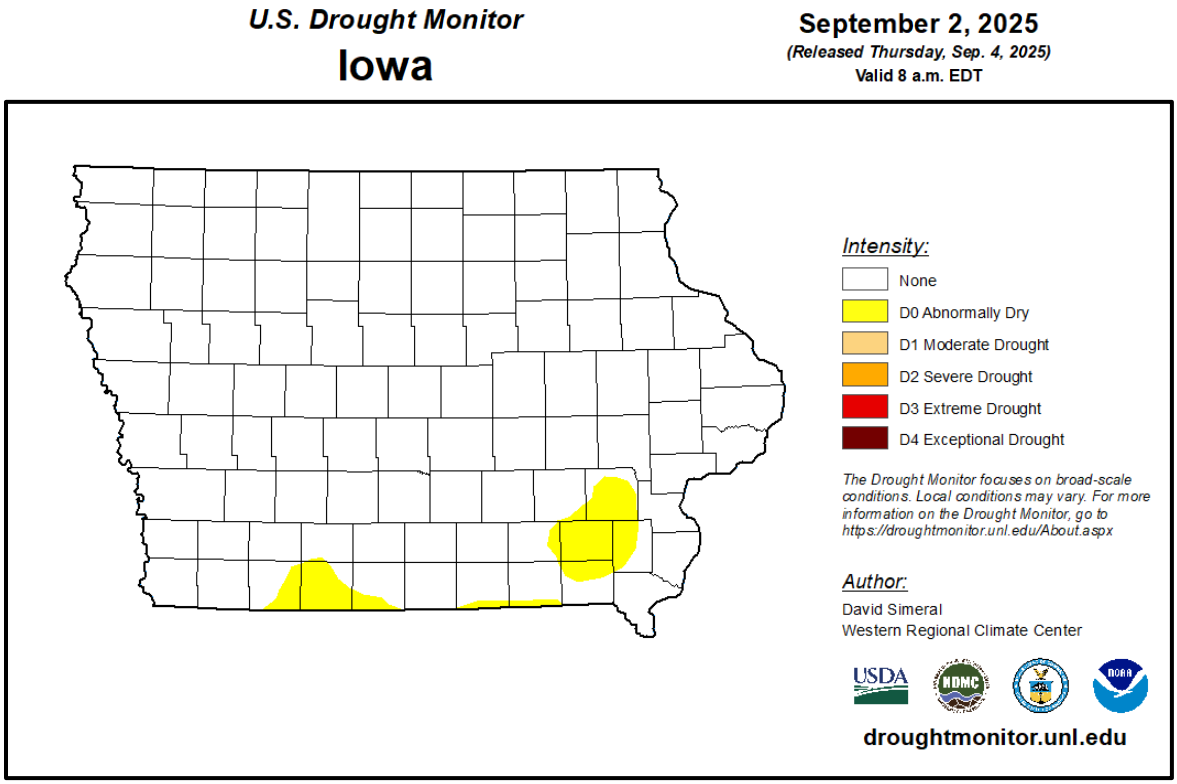
Standardized Streamflow Index (SSI) and Streamflow
SSI is a metric that compares current streamflow against the historical record to determine how far away the current streamflow value is from the river's historical mean observed on the same date. SSI values in all five drought regions have increased, with Drought Region 3 with the largest 30-day SSI increase in August compared to July.

According to the US Geological Survey, in August, streamflow levels increased to normal conditions in the Yellow River. The Rock, West Fork of the Des Moines, West Nishnabotna, Nodaway, Chariton Rivers increased to above normal conditions. The Little Sioux, Boyer, North, Middle, South, lower portion of the Des Moines, Upper Iowa, Turkey, Volga,

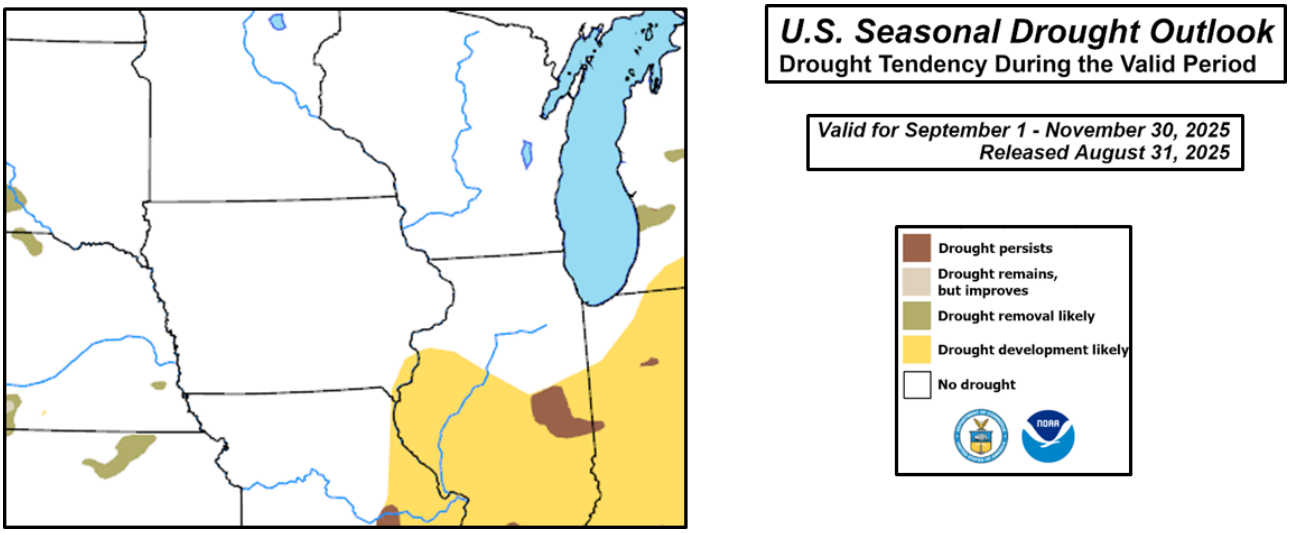
and lower portion of the Wapsipinicon Rivers increased to much above normal conditions. The Grand and East Fork Rivers decreased to normal conditions. The majority of the state is in much above normal flow conditions.

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 dry conditions return. By the end of August, the entire state was rated free from drought and dryness. However, the current map has three areas in southern Iowa totaling 4.12% that have been downgraded to D0 (Abnormally Dry). The most recent USDM, released on September 4, confirms the return of abnormally dry conditions.



The Seasonal Drought Outlook released on August 31, 2025, by the CPC, valid through November 30, 2025, indicates the potential for drought to develop along the Mississippi River in southeastern Iowa. While the Seasonal Precipitation Outlook offers no clear signal for precipitation, the Seasonal Temperature Outlook indicates that above-normal temperatures are likely across the state. The Seasonal Drought Outlook considers the impacts of recent precipitation as well as seasonal precipitation outlooks.



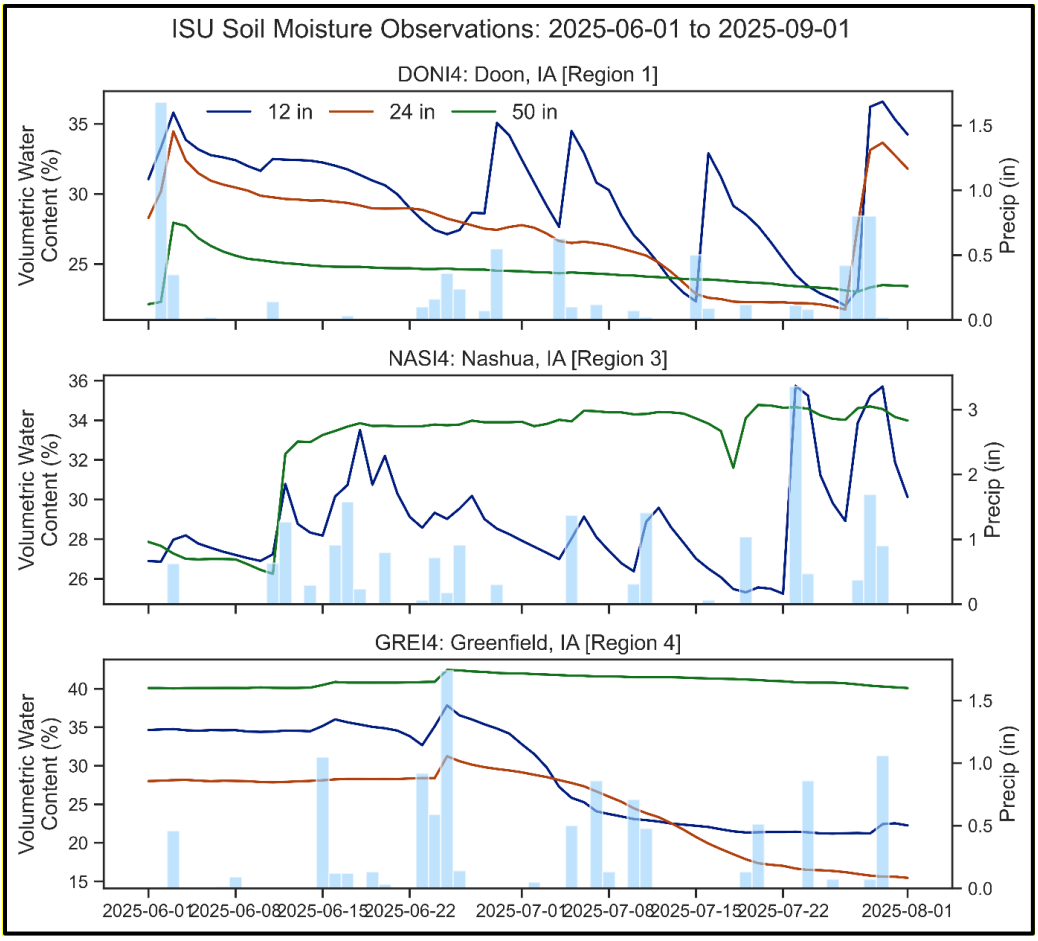
Other Water Resource Information

Border River Conditions

In their weekly update of Missouri River conditions dated August 26, 2025, the Army Corps of Engineers (USACE) indicates that the volume of water stored in the system of reservoirs is 51.2 Million Acre-Feet (MAF), which is slightly less volume than last month.

August Soil Moisture

Most of eastern and parts of southwestern Iowa show values of soil saturation below 50% at the surface of the soil. At deeper soil layers, soil saturation is above 60% at most of the state.



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.

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