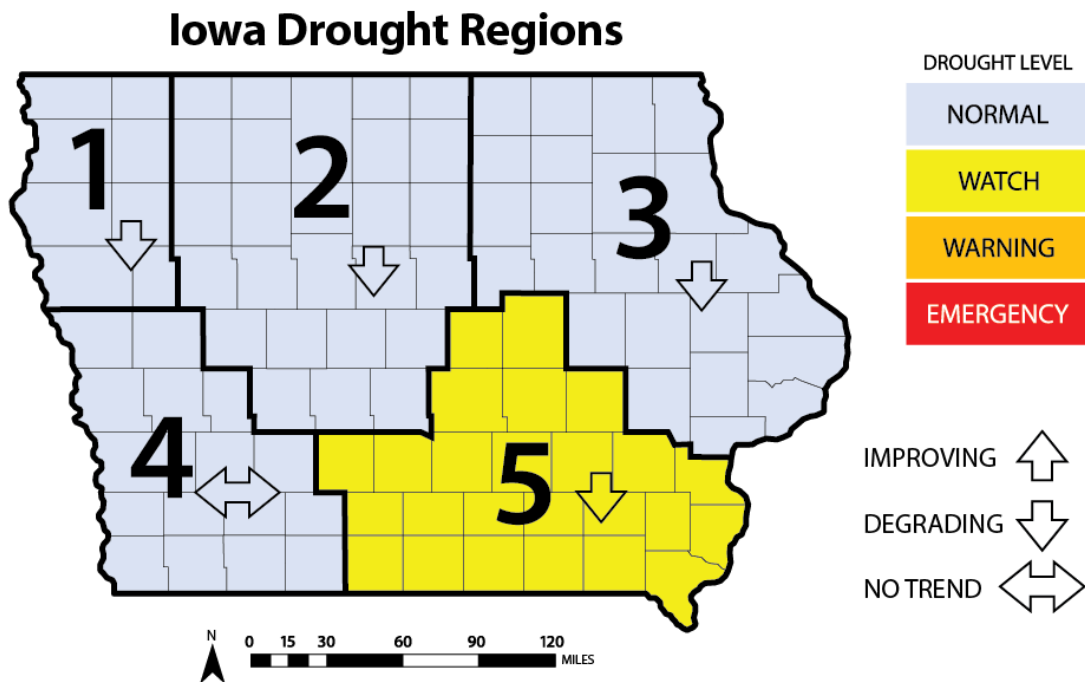


WATER SUMMARY UPDATE

Published Date November 6, 2025 | Issue 173

A snapshot of water resource trends for October 2025

IOWA DROUGHT CONDITIONS



CONDITION SUMMARY - OCTOBER CONDITIONS DEGRADE FURTHER

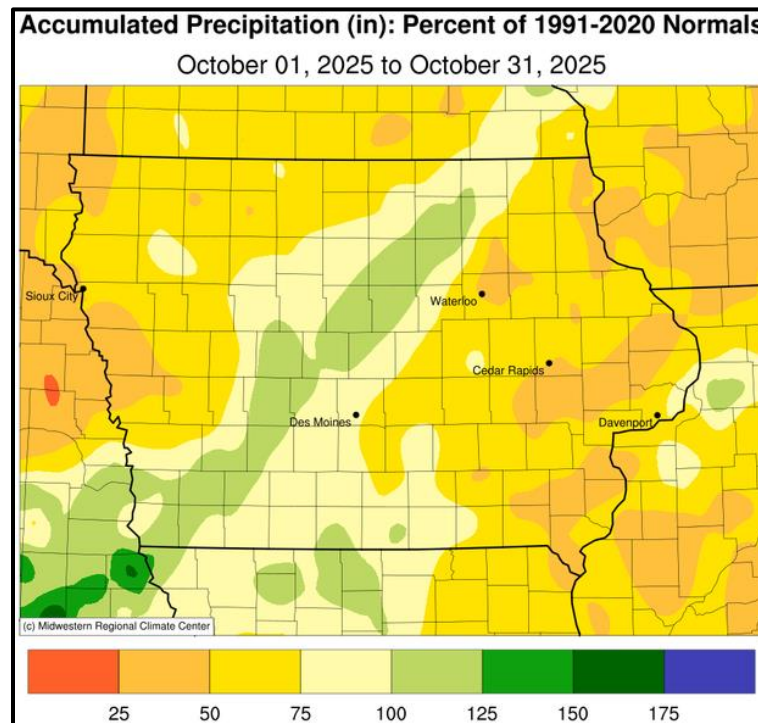
Below-normal precipitation over the last few months led to the return of drought in early October, and a drought watch is now in effect for Drought Region 5 in southeast Iowa. The impact is widespread: two-thirds of the state now falls under D0 - Abnormally Dry classification, mainly in the northwest and southeast. Within these areas, D1 - Moderate Drought has also re-emerged. Although streamflow largely remains normal as we enter the driest part of the year, soil moisture is trending drier across the state. The Climate Prediction Center's (CPC) Seasonal Drought Outlook suggests that current areas of drought will likely persist through January, with the expansion of drought in the southeast. For November specifically, the precipitation outlook is uncertain, but the entire state is expected to experience warmer-than-normal temperatures.

October Precipitation and Temperature

Iowa's statewide preliminary precipitation totaled 2.06 inches, or 0.63 inches below normal. Many stations in northwest and southeast Iowa reported precipitation deficits of 1.00 to 2.00 inches in October. However, a narrow band of above-normal rainfall ran southwest-to-northeast, effectively dividing the state into two halves. Monthly precipitation totals ranged from 0.64 inches at Spencer Municipal Airport to 4.00 inches in Madrid.

The preliminary statewide average temperature was 57.2 degrees, 6.2 degrees above normal; this ranks near the top 15th warmest October in 153 years of statewide records. Muscatine reported the month's high temperature of 93

degrees on the 3rd, 23 degrees above normal. Vinton recorded the month's low temperature of 21 degrees on the 24th, thirteen 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 October (comparing August, September, and October precipitation) range from -1.1 to -0.2, with all values below zero. Drought Region 1 180-day SPI value increased slightly, and all others decreased slightly, though all values remain above zero.

Drought Region	3-month SPI	6-month SPI	IDP Classification ↑ = improving ↓ = degrading ↔ = no trend
1	-0.9	0.7	Normal ↓
2	-0.4	1.2	Normal ↓
3	-0.5	0.6	Normal ↓
4	-0.2	0.4	Normal ↔
5	-1.1	0.3	Watch ↓

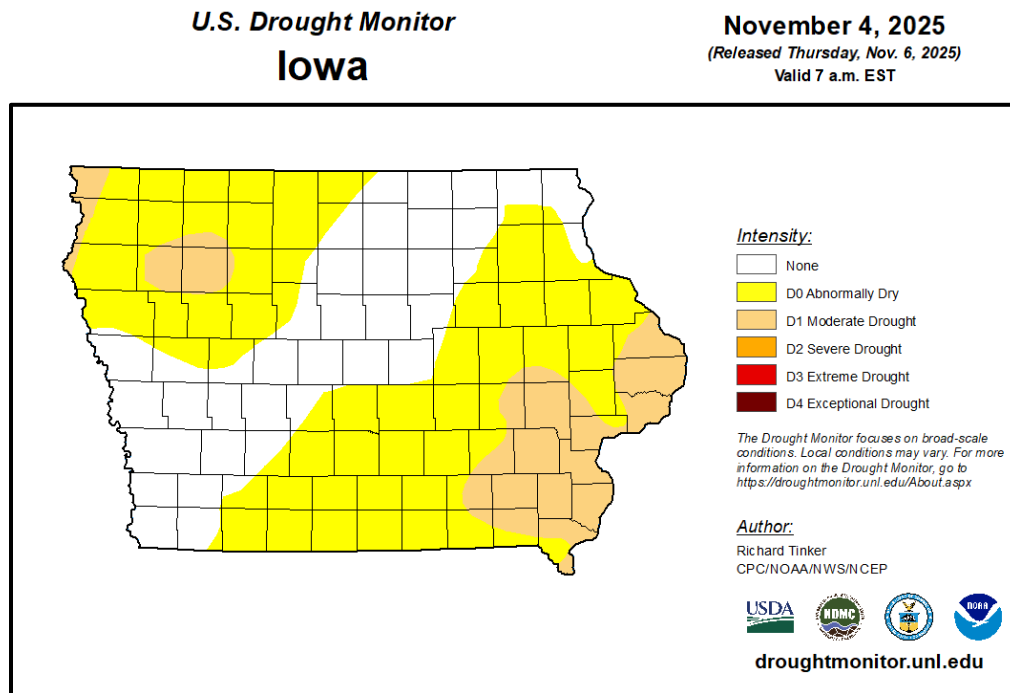
Standardized Streamflow Index (SSI) and Streamflow

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 four of the five drought regions have decreased, with Drought Region 3 with the largest 30-day SSI decrease in October compared to September. Drought Region 4 saw the only increase in 30-day SSI values relative to the previous month.

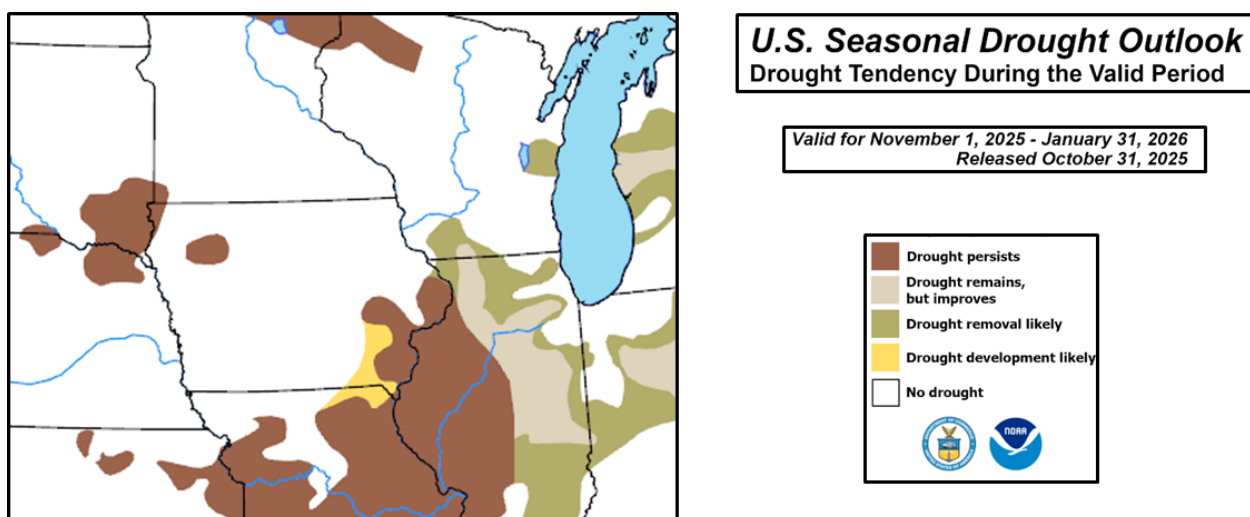
According to the US Geological Survey, in October, most of the state experienced normal and above-normal streamflow conditions. A stretch of western Iowa along the Missouri River experienced below normal flow conditions.

US DROUGHT MONITOR AND DROUGHT CONDITIONS

The latest US Drought Monitor (USDM), released on November 6, confirms the expansion of abnormally dry conditions and drought across Iowa. Drought, which reappeared in eastern Iowa in early October, has since spread south and has also appeared in northwest Iowa. Currently, two-thirds of the state is experiencing some level of dryness, with the map showing further expansion of D0 - Abnormally Dry and D1 - Moderate Drought, particularly in the southeastern and northwestern regions.



The Seasonal Drought Outlook, released on October 31, 2025, by the CPC, is valid through January 31, 2026, and indicates the potential for more drought to develop in southeastern Iowa, as well as continued drought in northwestern and southeastern Iowa. While the Seasonal Precipitation Outlook offers no clear signal for precipitation across most of the state, except for a small area along the Mississippi River could have the potential to see above normal precipitation. The Seasonal Temperature Outlook indicates that above-normal temperatures are likely across the southern half of the state. The Seasonal Drought Outlook considers the impacts of recent precipitation as well as seasonal precipitation outlooks.



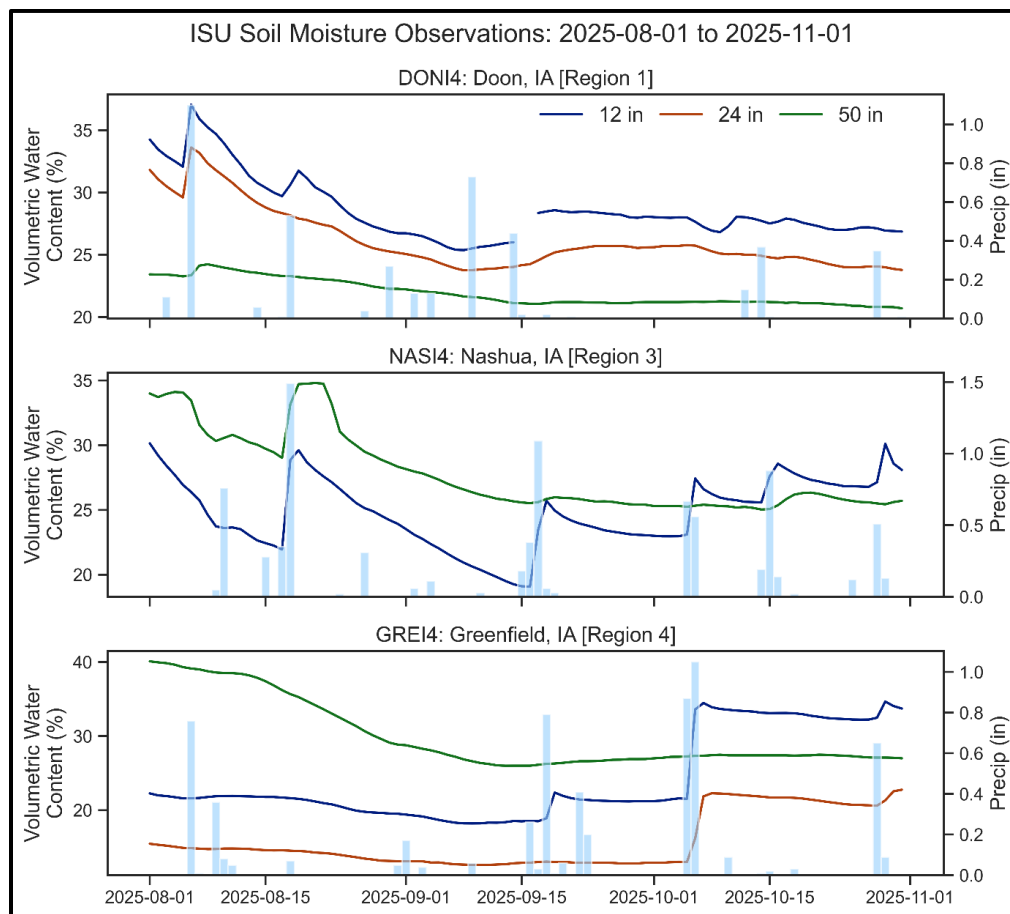
OTHER WATER RESOURCE INFORMATION

Border River Conditions

In their weekly update of Missouri River conditions dated November 4, 2025, the Army Corps of Engineers (USACE) indicates that the volume of water stored in the system of reservoirs is 49.5 Million Acre-Feet (MAF), which is slightly less volume than last month. US Army Corps of Engineers reports that total reservoir storage peaked for the year in the summer and is decreasing.

September Soil Moisture

Absence of precipitation during the month of October has reduced soil moisture in the surface to average saturation levels below 40%. Conditions at deeper soil layers follow a similar pattern, but average soil saturation values range from 40% to 60%.



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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