IOWA DNR
DEPARTMENT OF NATURAL RESOURCES

WATER SUMMARY UPDATE

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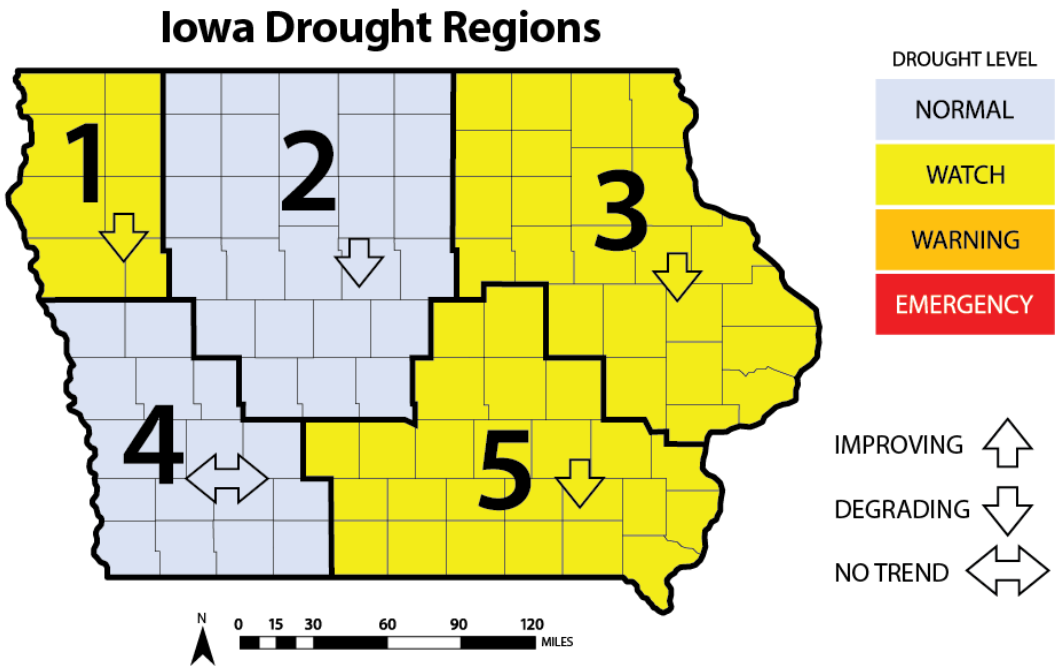
A snapshot of water resource trends for November 2025

IOWA DROUGHT CONDITIONS



CONDITION SUMMARY - NORTHEAST IOWA SEES NOVEMBER DECLINE

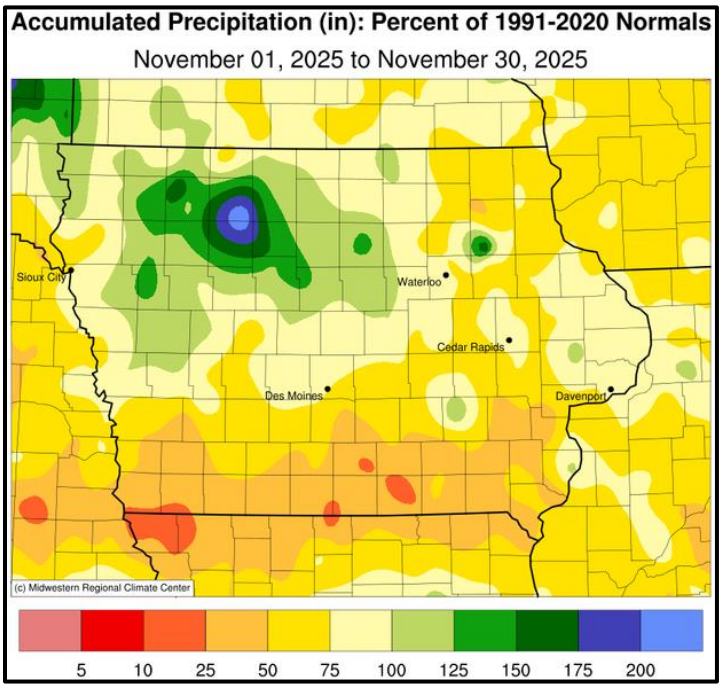
Continued below-normal precipitation throughout November and the autumn months led to a primary degradation of conditions in northeast Iowa, prompting a drought watch for Drought Region 1, Drought Region 3, and Drought Region 5. Currently, two-thirds of the state is classified as D0 - Abnormally Dry, particularly in the northwest and southeast. As the state enters the driest time of the year, soil moisture is trending drier statewide, especially across eastern Iowa, and streamflow has dropped to below-normal levels in the southeast. Looking ahead, the Climate Prediction Center's (CPC) Seasonal Drought Outlook suggests current drought areas will likely persist through February, though relief may be possible in the southeast. For December, while the southwestern half of the state is projected to have below-normal chances for precipitation, the entire state is expected to experience colder-than-normal temperatures.

November Precipitation and Temperature

Iowa's statewide preliminary average precipitation totaled 1.57 inches, or 0.25 inches below normal. Monthly precipitation totals ranged from 0.14 inch at Rathbun Dam to 3.91 inches in Oelwein. The preliminary statewide average snowfall was 8.6 inches, 5.9 inches above average, currently ranking at the 5th snowiest November in 138 years of statewide records. An observer in Fort Dodge reported the highest monthly snowfall at 19.0 inches.

The preliminary statewide average temperature was 39.7 degrees, 2.8 degrees above normal. Several stations reported the month's high temperature of 76 degrees on the 14th, on average 27 degrees above normal. Spencer Municipal Airport reported the month's low temperature of -6 degrees on the 30th, 25 degrees below normal.

Preliminary temperatures over the three autumn months (September-October-November) averaged 54.5 degrees or 4.0 degrees above normal, while precipitation totaled 5.30 inches, 2.69 inches 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 November (comparing September, October, and November precipitation) range from -1.0 to -0.6, with all values below zero. Drought Region 1 180-day SPI value decreased slightly, and all others increased slightly, though all values remain above zero.

Drought Region	3-month SPI	6-month SPI	IDP Classification ↑ = improving ↓ = degrading ↔ = no trend
1	-1.0	0.8	Watch ↓
2	-0.6	1.5	Normal ↓
3	-1.0	0.9	Watch ↓
4	-0.6	0.7	Normal ↔
5	-1.0	0.5	Watch ↓

Standardized Streamflow Index (SSI) and Streamflow

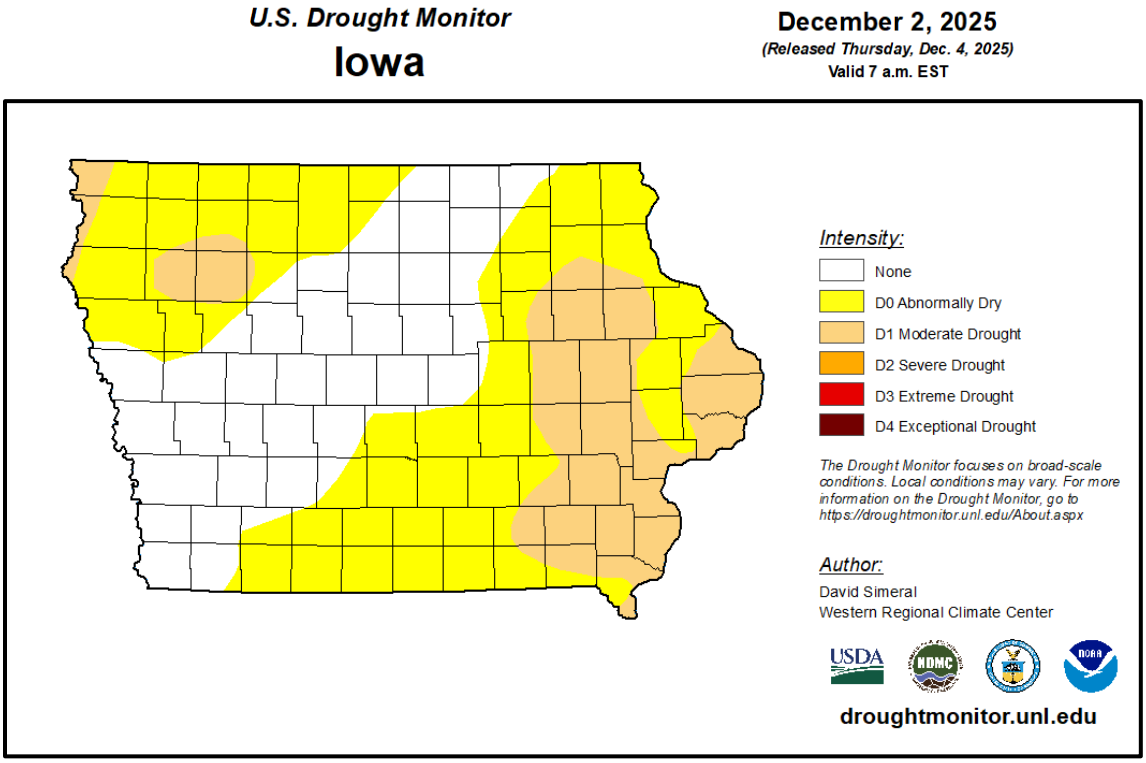
SSI is a metric that compares current streamflow against the historical record to determine how far away the current streamflow value is from the river’s historical mean observed on the same date. SSI values in four of the five drought regions have decreased, with Drought Region 4 having the largest 30-day SSI decrease in November compared to October. Drought Region 1 saw the only increase in 30-day SSI values relative to the previous month.

According to the US Geological Survey, in November, streamflow levels in the Winnebago and Boyer Rivers were observed to be in above-normal conditions. The Chariton, Fox, and Skunk Rivers experienced below normal streamflow

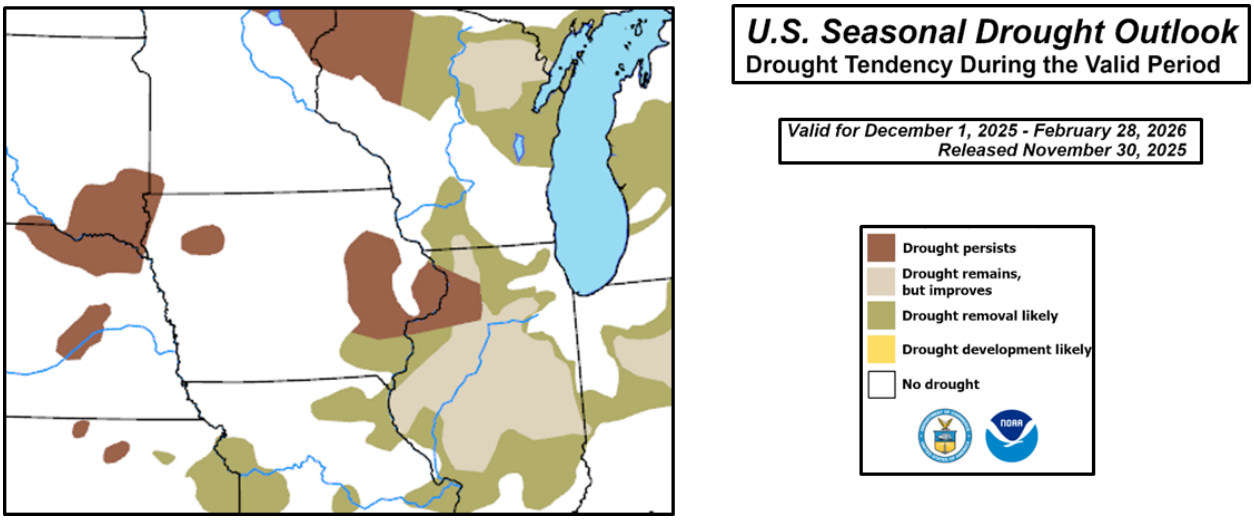
conditions. The majority of the state was in normal streamflow conditions.

US Drought Monitor and Drought Conditions

The latest US Drought Monitor (USDM), released on December 4, confirms the expansion of abnormally dry conditions and drought in northeast 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 northeast region. Compared to the end of October, conditions in west central Iowa have improved.



The Seasonal Drought Outlook, released on November 30, 2025, by the CPC, is valid through February 28, 2026, and indicates the potential for drought to ease in southeastern Iowa, but remain in northwestern and eastern Iowa. The Seasonal Precipitation Outlook offers no clear signal for precipitation in western Iowa, while the eastern half of the state could have the potential to see above-normal precipitation. The Seasonal Temperature Outlook indicates that below-normal temperatures are likely across the state. The Seasonal Drought Outlook considers the impacts of recent precipitation as well as seasonal precipitation outlooks.



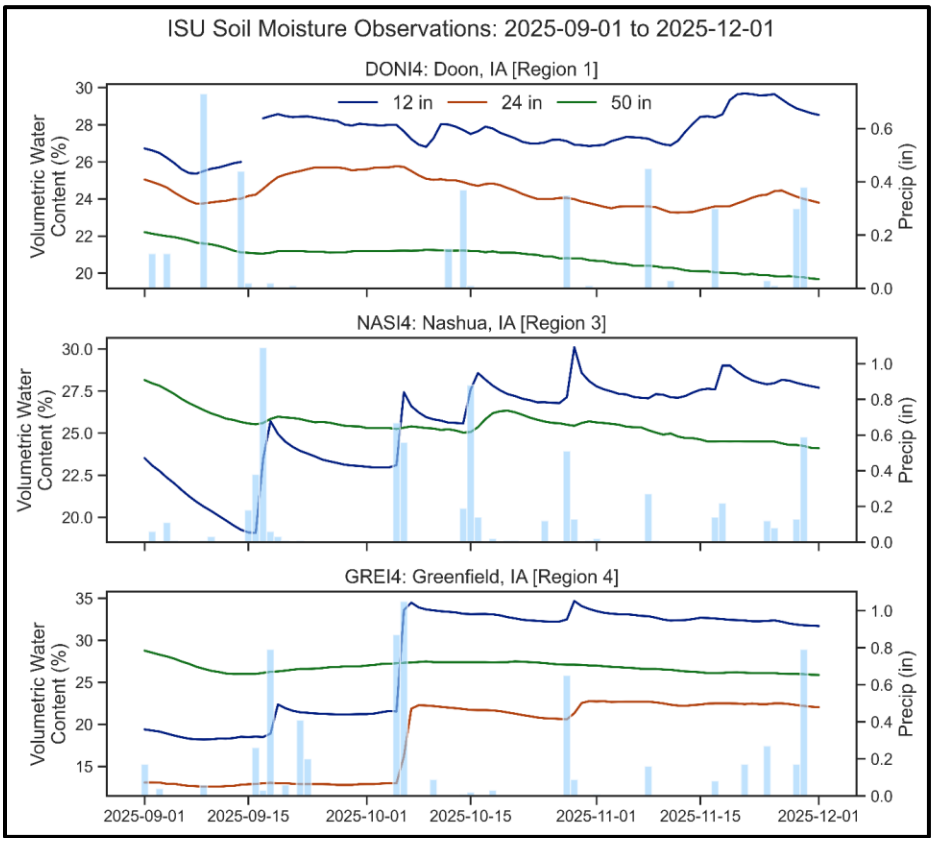
Other Water Resource Information

Border River Conditions

In their monthly update of Missouri River conditions dated December 4, 2025, the Army Corps of Engineers (USACE) indicates that the volume of water stored in the system of reservoirs is 50.1 Million Acre-Feet (MAF), which is the same volume as last month. The updated annual runoff forecast for the upper Missouri River Basin above Sioux City is 19.6 MAF or 76% of the average annual runoff. The mountain snowpack in the upper Missouri River Basin is currently accumulating at below-average levels, having typically reached about 25% of its total accumulation - which normally peaks in mid-April - by December 1. “Releases from Gavins Point Dam are being reduced to the 12,000 cubic feet per second winter release rate by mid-December,” said John Remus, Chief of the Missouri River Water Management Division. “We will closely monitor river conditions, and releases will be adjusted to the extent practical to lessen the impacts of river ice formation on stages in the lower river.”

November Soil Moisture

The absence of precipitation during November has reduced soil moisture in the surface layer to average saturation levels below 30% in eastern Iowa and 50% in central Iowa. Conditions at deeper soil range from 40% to 60%, with some areas around 70%.



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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