IOWA DNR
DEPARTMENT OF NATURAL RESOURCES

WATER SUMMARY UPDATE

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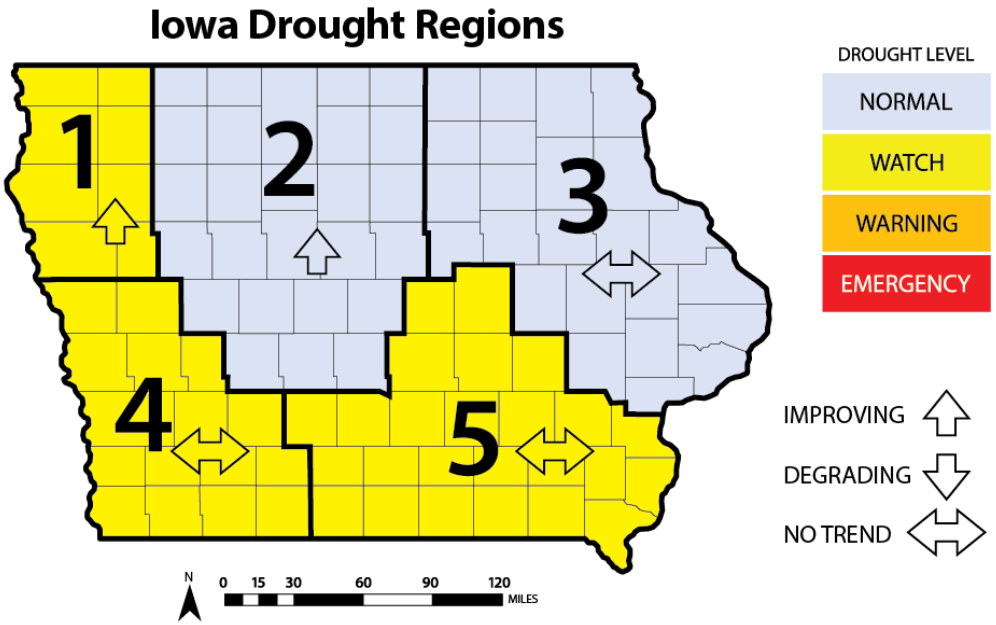
A snapshot of water resource trends for June 2025

IOWA DROUGHT CONDITIONS



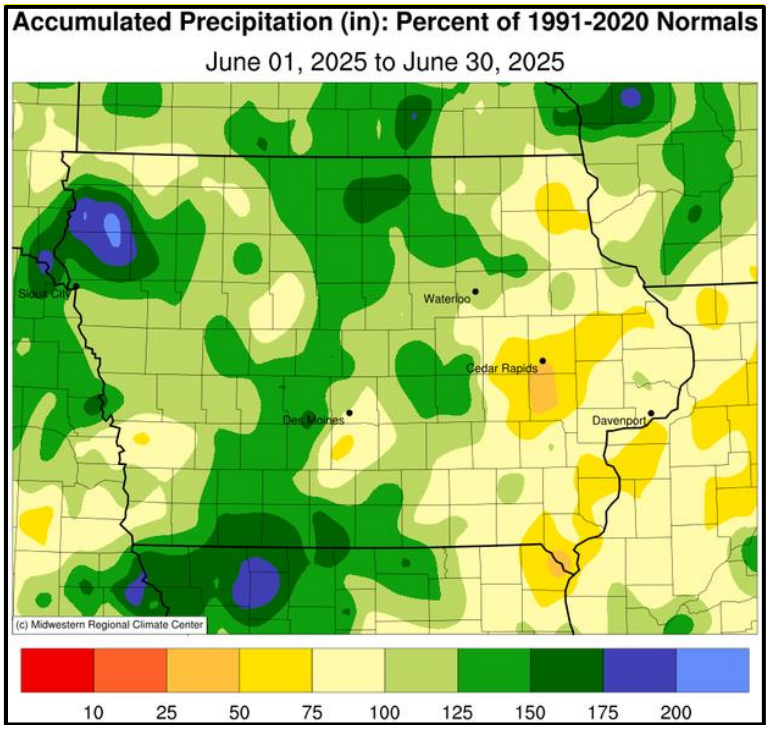
CONDITION SUMMARY – IMPROVED CONDITIONS IN LATE JUNE

Historically, May and June are the wettest months of the year for the state. While May was below average, June saw above-normal totals. Drought and dryness largely stayed the same across most of the state until the end of June and into early July, when the state saw most of its rain for the month and conditions improved. While areas in northwest, southwest, and southeast Iowa saw some improvement in D1 – Moderate Drought conditions, Drought Regions 1, 4, and 5 are under a drought watch due to these areas having longer-term precipitation and hydrological deficits. Soil moisture and stream flows are largely considered normal despite the seasonal temperature increases and some deterioration in May and the first half of June. The National Weather Service's Climate Prediction Center (CPC) July outlook indicates a higher chance for above-average temperatures. While most of the state could have more, less, or about the same precipitation than normal. However, southwestern Iowa has a higher chance of getting less rain than normal in July.

June Precipitation and Temperature

Iowa's statewide precipitation totaled 5.89 inches, or 0.63 inches above-normal. Overall, statewide precipitation through June was above-normal across much of the western two-thirds of the state. A large north-to-south swath across central Iowa saw 125-150% of normal precipitation in June. The wettest conditions were found along the Iowa-Missouri border and a pocket in northwest Iowa where 175-200% of normal was located. East-central Iowa experienced the driest conditions with 50-75% of normal. Monthly precipitation totals ranged from 1.90 inches in Swisher to 11.77 inches in Orange City.

The statewide average temperature was 72.2 degrees, 2.3 degrees above normal. Statewide temperatures were warmer than normal across Iowa, with the warmest conditions found in east-central Iowa. Pockets along the Iowa-Minnesota and Iowa-Missouri borders reported near-normal monthly temperatures. Little Sioux (Harrison County) reported the month's high temperature of 101 degrees on the 20th, 17 degrees above normal. Mount Ayr and Stanley reported the month's low temperature of 43 degrees on the 10th, on average 15 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 June (comparing April, May, and June precipitation) range from 0.0 to 0.7, with all values above or equal to zero. 180-day SPI values are mostly positive, with Drought Regions 2 and 4 having the most significant increasing trend.

Drought Region	3-month SPI	6-month SPI	IDP Classification ↑ = improving ↓ = degrading ↔ = no trend
1	0.1	0.1	Watch ↑
2	0.7	0.7	Normal ↑
3	0.2	0.1	Normal ↔
4	0.1	-0.1	Watch ↔
5	0.0	-0.2	Watch ↔

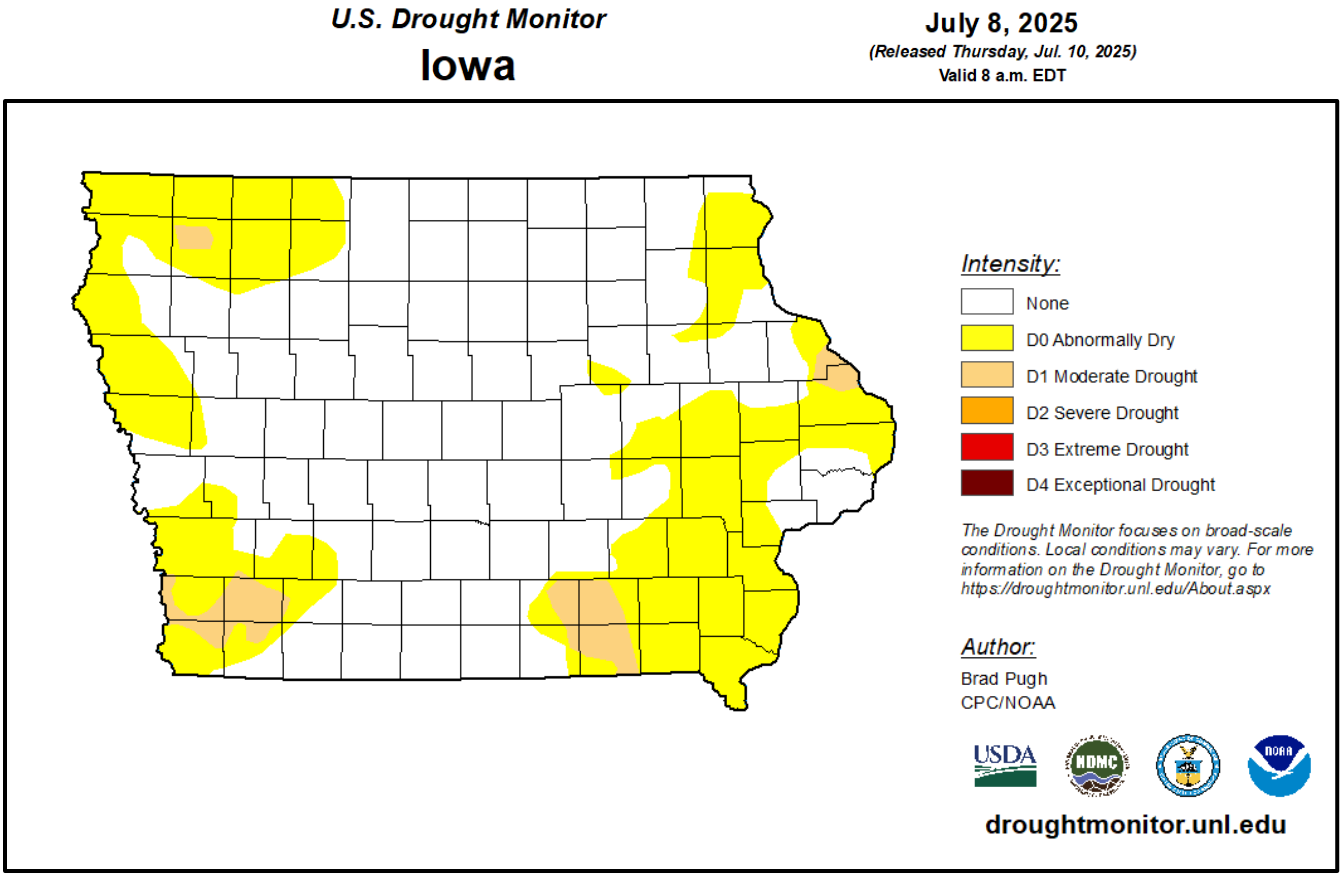
Standardized Streamflow Index (SSI) and Streamflow

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 all five drought regions have increased, with Drought Region 2 with the largest 30-day SSI increase in June compared to May.

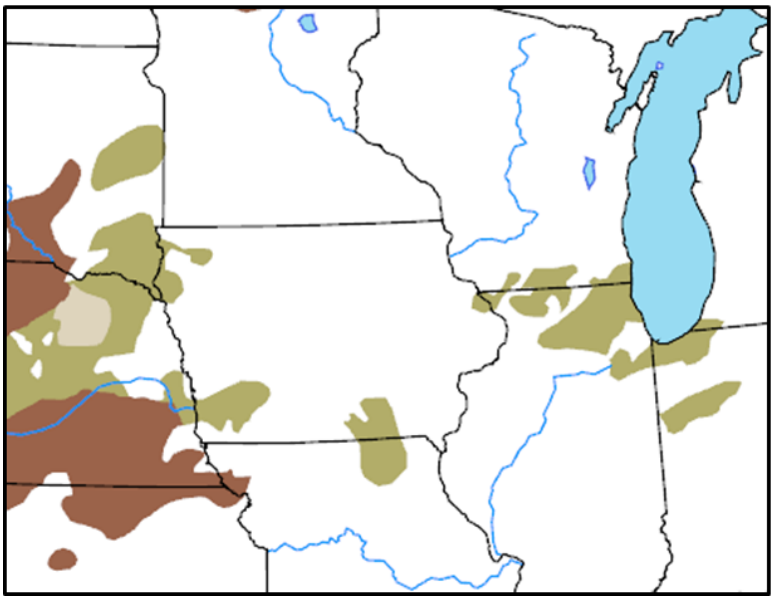
According to the US Geological Survey, in June, streamflow levels decreased in the Yellow River to below normal flow conditions. The Floyd, Middle Raccoon, South Raccoon, East Nishnabotna, Nodaway, Chariton, and Des Moines Rivers have increased to normal conditions. The Boone, Iowa (above Marshalltown), Little Cedar, Cedar, Wapsipinicon, Grand, and East Fork Grand River increased to above normal conditions. The Winnebago and Shell Rivers increased to much above normal conditions. The Keg and Waubonsie Creeks, East Nishnabotna, and Rock Rivers remained in below-normal conditions. The majority of the state remains in normal flow conditions.

US Drought Monitor and Drought Conditions

The current US Drought Monitor (USDM) indicates improved conditions in most areas of the state throughout June, with drought removal or upgrading in areas of western Iowa. By the end of June, the areas of D0 decreased to 43 percent, a more than 28 percent decrease. Additionally, over eight percent of D1-Moderate Drought areas have been upgraded to D0 – Abnormally Dry or no dryness. Nearly 57 percent of the state is rated as free from drought and dryness through the beginning of July, mostly concentrated in central Iowa. With wetter June conditions, drought and abnormal dryness improved. The most recent USDM, released on July 10, shows improvement across most of the state.



The Seasonal Drought Outlook released on June 30, 2025 by the CPC, valid through September 30, 2025, indicates the potential for drought removal in parts of northwestern, southern, and northeastern Iowa. Drought expansion is not expected in Iowa, despite the Seasonal Precipitation Outlook indicating the potential for below normal precipitation in northwest 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 July 1 - September 30, 2025
Released June 30, 2025

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

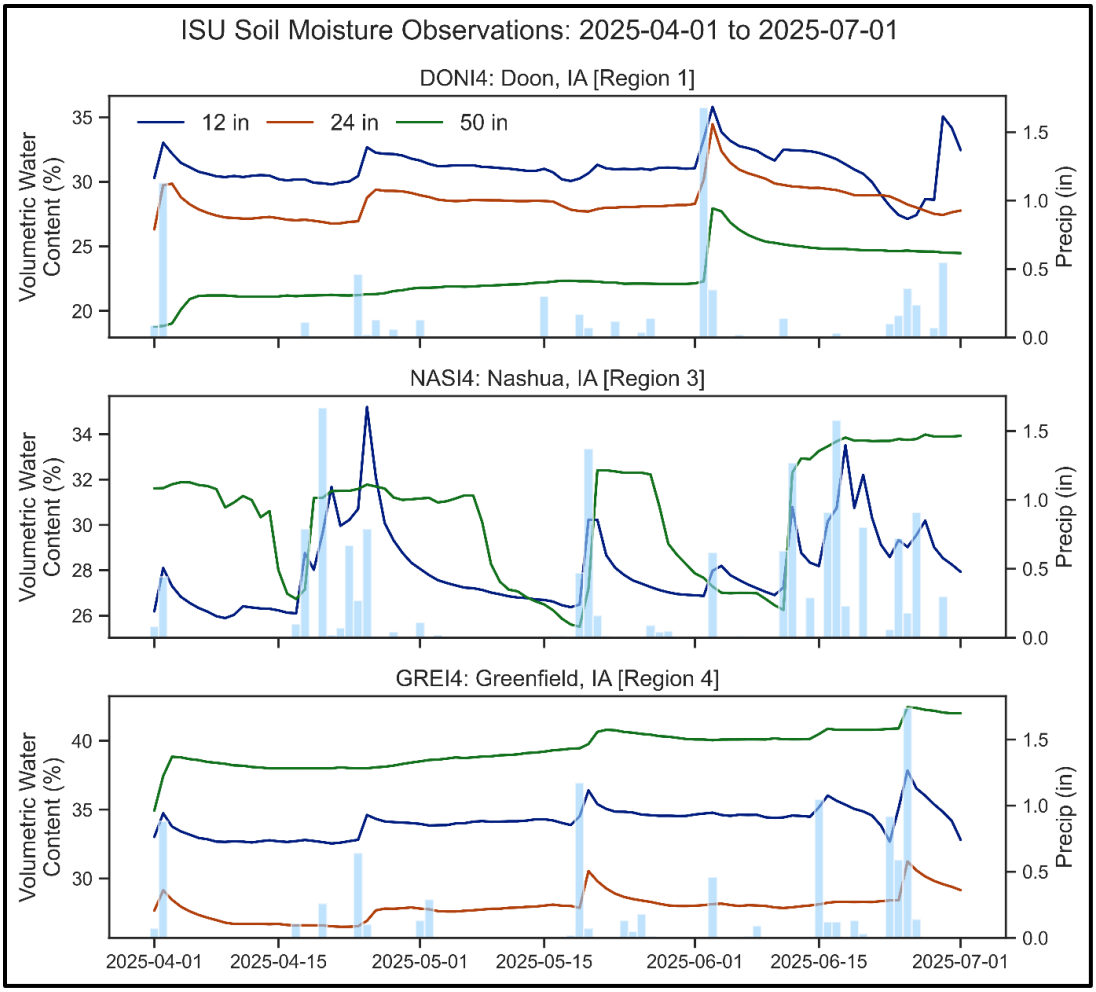
OTHER WATER RESOURCE INFORMATION

Border River Conditions

In their monthly update of Missouri River conditions dated July 9, 2025, the Army Corps of Engineers (USACE) indicates that the volume of water stored in the system of reservoirs is 52.1 Million Acre-Feet (MAF), which is about the same volume as last month. Unusually warm spring and early summer temperatures caused the mountain snowpack to melt rapidly. By June 25, all snow had disappeared from the reaches above Fort Peck and from Fort Peck to Garrison. The annual runoff forecast updated on June 2, 2025, for the upper Missouri River Basin above Sioux City has been raised to 19.1 Million Acre Feet (MAF) or 74% of the average annual runoff. "Mountain snowpack melted more rapidly than normal, and all reaches except the Sioux City reach experienced below normal precipitation during June," said John Remus, chief of the U.S. Army Corps of Engineers' Missouri River Basin Water Management Division. "As a result, June runoff was less than forecast. Dry conditions are expected to continue in July."

June Soil Moisture

The increase in temperature and evapotranspiration during June has reduced surface soil moisture saturation with respect to early spring, but sustained precipitation kept saturation around normal conditions, between 30 and 70 percent. Deeper soils less exposed to evapotranspiration hold more water, especially in southeastern Iowa.



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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