

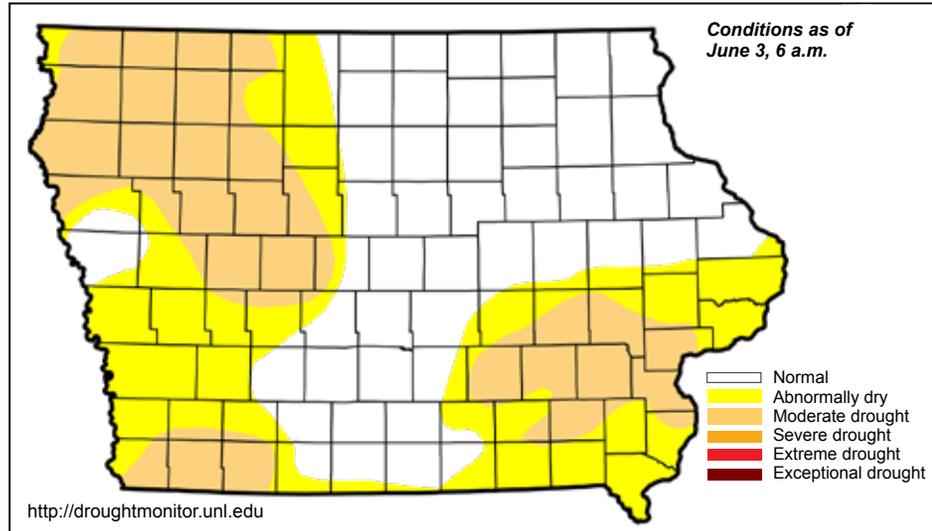
WATER SUMMARY UPDATE

No. 38

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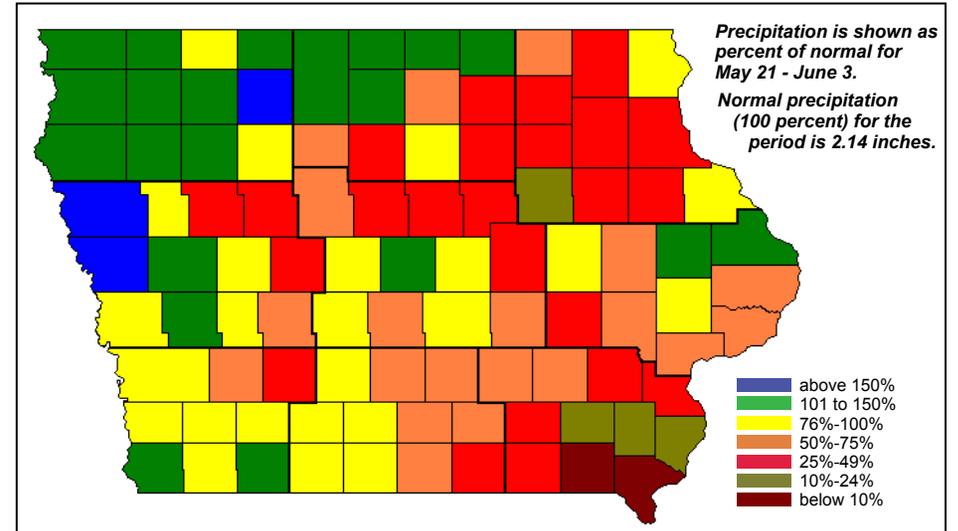
Drought Monitor

National Drought Mitigation Center and partners



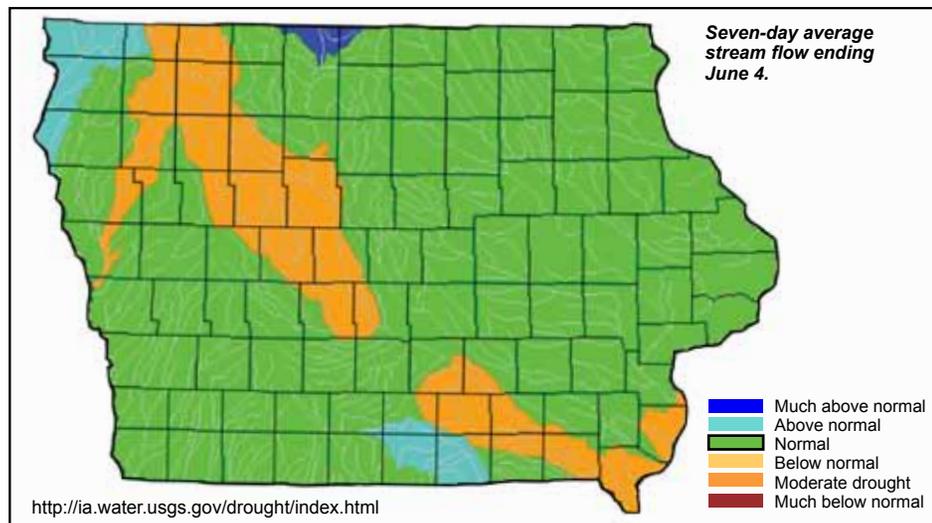
Precipitation

State Climatologist



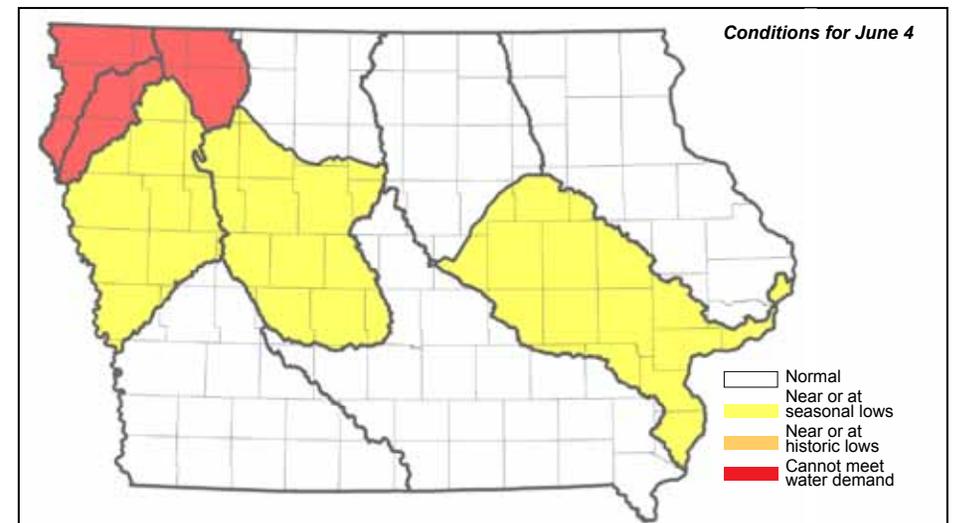
Stream Flow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

Overall Conditions

The trend of improved conditions in Iowa continues. The Drought Monitor shows over 44 percent of the state completely free from drought, with almost another 28 percent of the state rated as only abnormally dry. Rainfall for the two-week period was below average, but substantial rainfall came after the Monday morning cutoff for Drought Monitor reporting.

Most of the state has normal streamflow, with small areas of both above normal and below normal flow. Northwest Iowa continues to be an area of concern, but recent rainfall has improved conditions.

Drought Monitor

The area of the state rated as experiencing moderate drought has changed very little over the past two weeks, but the impact of the recent rains should be reflected in the weeks to come. The Seasonal Drought Outlook through August 3 from National Oceanic Atmospheric Administration predicts removal of drought conditions in Iowa. The current rainfall patterns should continue to move us in that direction.

Precipitation

Precipitation for the past two weeks ending at 7 a.m., June 3, averaged 1.62 inches across Iowa. The normal for the period is 2.14 inches. Heaviest rains fell across western Iowa, and lowest totals across the southeast. Specific totals varied from just a trace at Keosauqua to 6 inches near Castana. As is typical for this time of year, rain fell somewhere in Iowa almost every day during this two weeks. However, the bulk of the precipitation fell in two periods, May 25-27 and May 31-June 2. The past two-week period was very warm with temperatures averaging 6.6 degrees. Only May 22 averaged cooler than normal. The heat was not extreme, however, with highest temperatures reaching 92 degrees at Little Sioux (Harrison County) June 1.

Very heavy rain of three to five inches, along with large hail and high winds, occurred across southwestern Iowa on the night of June 3, but came after the cut-off for consideration in this week's US Drought Monitor. That rain will be reflected in next week's drought monitor.

Shallow Groundwater

Substantial rainfall across much of Iowa has allowed shallow groundwater levels to recover over the last two weeks. Heavy precipitation and flooding have improved the drought conditions in southwest Iowa, and parts of the Rock River watershed in northwest Iowa. Shallow groundwater levels have risen approximately 3 to 4 feet in southwest Iowa, 2 feet in south central Iowa, and up to 1 foot in parts of central Iowa.

Parts of northwest and north central Iowa received some much needed rainfall June 1 and June 3, and shallow groundwater near streams and rivers rose 0.5 to 1.5 feet. From a groundwater perspective, the drought is not over in northwest Iowa and continued rainfall is needed to provide long term improvement.

Stream Flow

Stream flow levels are now normal for the majority of the state. The lowest stream flow conditions across the state are in the Little Sioux and Des Moines river basins, while the highest flows are in northwest Iowa with above normal conditions.

The most significant improvement in streamflow is the northwest corner of the state, and the majority of the state has moved into normal flow conditions.

In response to the exceptionally heavy rains in southwest Iowa this week, USGS field crews are out making flood measurements at eight sites across southwest Iowa, including the West Nishnabotna River near Riverton, IA and Keg Creek, both near record levels.

Notable Events This Period

These observations are from the northwest corner of Iowa:

- Concern remains for deeper subsurface moisture. Increase of temperatures could increase water demand and cause stress on some systems.
- There are reports of some field tiles starting to flow following the additional rain that fell late Tuesday.
- Water levels in some wells next to streams have increased slightly but most remain at or near historic lows.
- Water levels in lakes and ponds in the area remain low.

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