

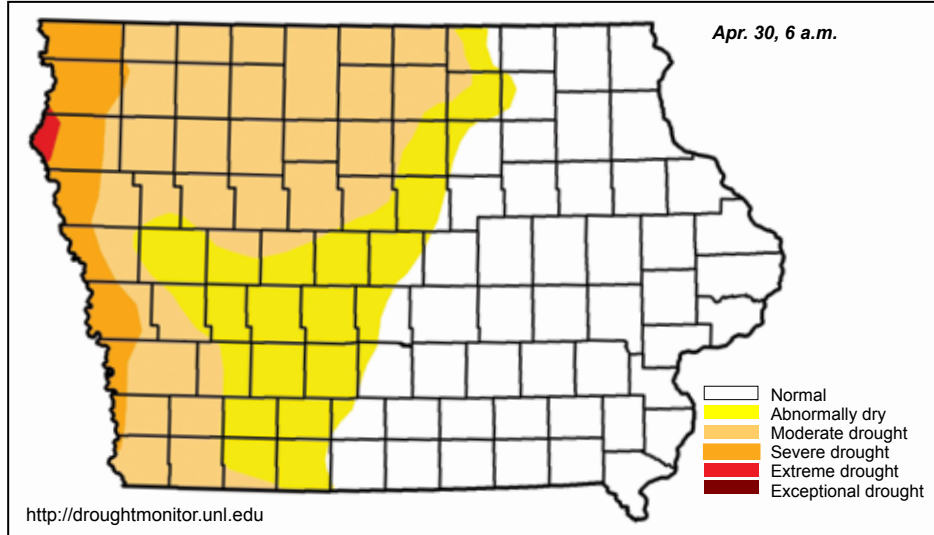
WATER SUMMARY UPDATE

No. 23

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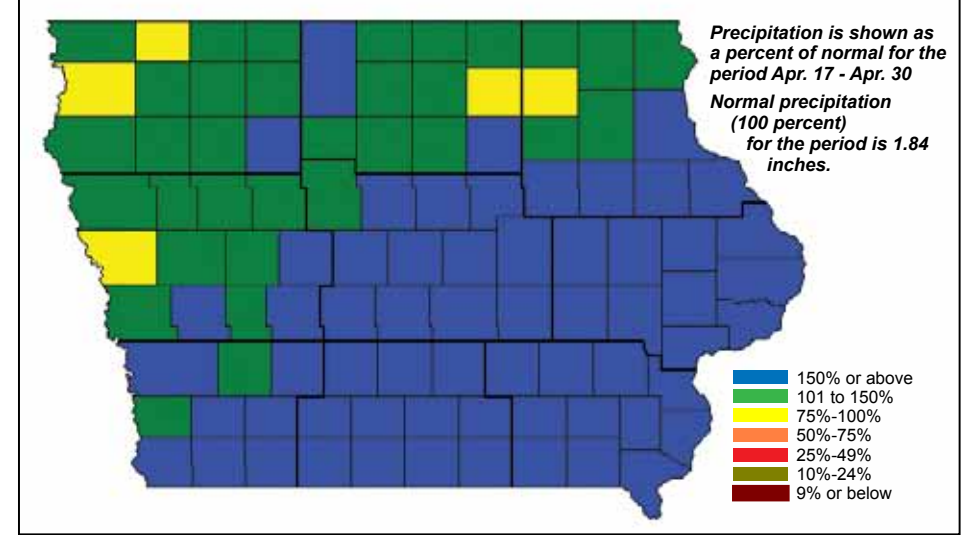
Drought Monitor

National Drought Mitigation Center and partners



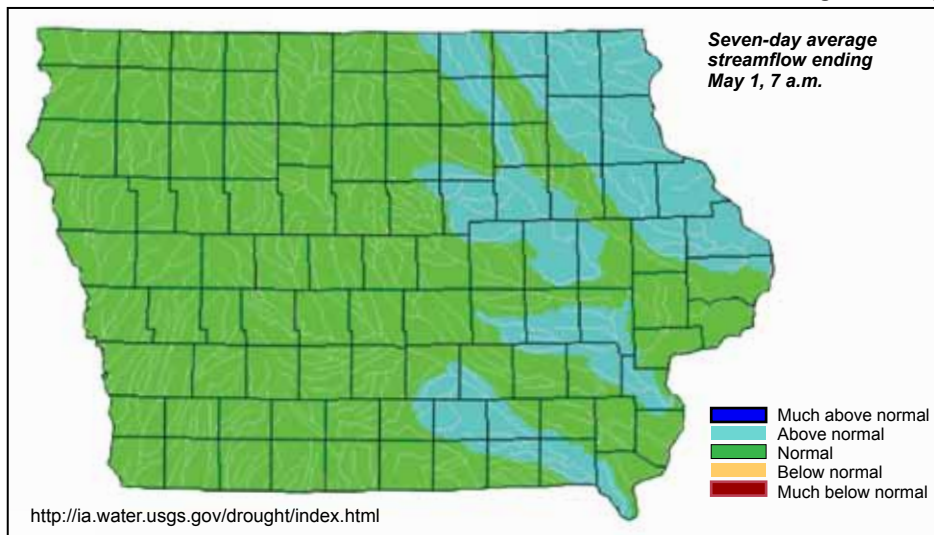
Precipitation

State Climatologist



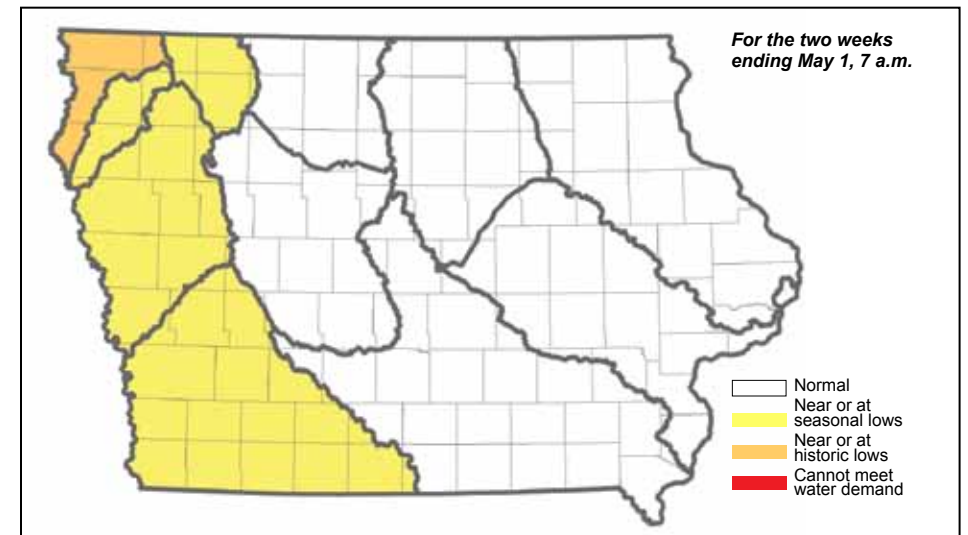
Streamflow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

Overall Conditions

For the second time in a row, as this Water Summary Update is finalized, Iowa is receiving significant rain. Despite this storm not factored in the Drought Monitor, there has been good improvement in conditions, with more improvement expected over the next week or two. Nearly the entire eastern half of Iowa is no longer shown in drought. The remainder of the state has seen a lessening of the severity of drought conditions. Streamflows are at normal levels for most of the state, with a small number of streams above normal flow. Rainfall for the past two weeks through April 29 – before the current storm – was 3.35 inches, nearly double the average for those two weeks.

Drought Monitor

The cut-off date for this week's National Drought Monitor came before the current storm. While the rain and snow that is currently falling across most of the state is not factored into this week's Drought Monitor, the rain storm of April 17 - April 18 is. As a result, there is improvement in the Drought Monitor over the past two weeks. Almost half of the state is no longer in drought, and the severity of the drought, where it is still present, is reduced. The rainfall that is falling May 2 is located in the parts of the state that are in some form of drought, so the Drought Monitor should continue to show improvement for Iowa in the weeks ahead.

Shallow Groundwater

Shallow groundwater levels in northwest, southwest, and north central Iowa improved over the last 2 weeks. Water levels in Denison rose approximately two feet. Water levels in Osceola, Clay, Palo Alto and eastern Sioux counties have risen 0.5 to 2.4 feet. Shallow groundwater levels continue to be near historic lows in western Sioux County along the Rock River. Shallow groundwater levels in Montgomery and Lucas counties are 0.3 to 1.0 foot lower than April 18, but are seven to eight feet higher than the 12-month lows.

Streamflow

Streamflows have remained at similar levels or decreased slightly since the last Water Update Summary as streams recede from the heavy mid-April rains. The majority of the state's streamflows are normal, with some areas in eastern Iowa above normal. The highest streamflows are in portions of the Iowa, Cedar and Des Moines Rivers and in the northeastern corner of the state.

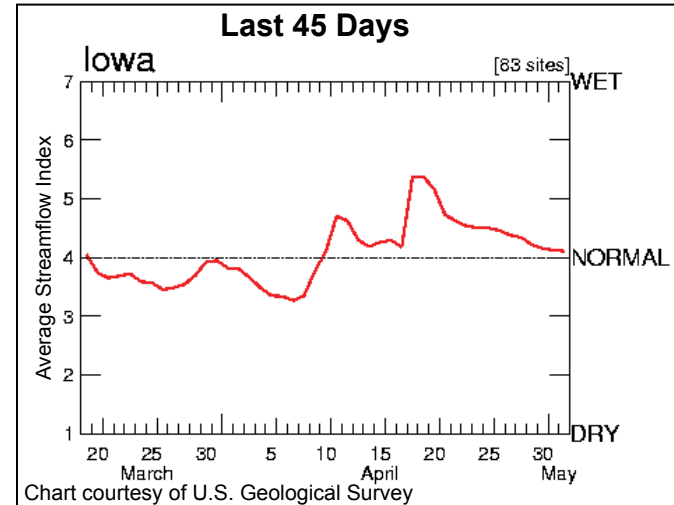
Notable Events for the Period

Many of the marshes and shallow lakes have filled near crest in the northwest corner of the state. The Iowa Great Lakes are just below crest level.

Some lakes have seen significant water quality problems associated with excess runoff.

There are some dry streams and dry tile lines in western Sioux County. Those in eastern Sioux County are starting see some flow, but not normal spring levels.

Some lake levels in deeper lakes in northwest Iowa have not increased over the past week and at least one had levels fall due to the warm, windy, dry weather early in the week.



Next Water Summary Update will be published May 16, 2013

◀ This figure shows the average streamflow for all 83 rivers and streams in Iowa – compared to the historical normal flow for those same rivers and streams. While this index has been in the dry range for much of the past year, it is now above normal as a result of recent rains across the state.

Precipitation

For the second consecutive reporting period, most of Iowa recorded an abundance of rain. The statewide average precipitation for the two weeks ending at 7 a.m. April 30 was 3.35 inches while normal for the period is 1.84 inches. A large storm system on April 17-18 accounted for much of the two week total, with heavy rain falling over southeastern Iowa. Two week totals varied from just over one inch at Sioux Center to nearly seven inches at Centerville.

Two significant rainfall events helped set a record for statewide average precipitation during April. The April 2013 total was 6.52 inches, besting the old record of 6.25 inches set in 1999 - compared to the normal April amount of 3.51 inches.

While monthly totals were above normal at all reporting points, a few locations in the far northwest and southwest corners of the state had totals that were only slightly above monthly norms. April temperatures were unusually low, despite a brief turn to much warmer weather over the last three days of the month. This was Iowa's coldest April since 1983 and the coldest March-April combination since 1960. Iowa has now recorded five consecutive months of above normal precipitation; however, rainfall has persistently been much greater in eastern sections than in the west where year-to-date totals have been only near normal so far this year.

Prepared by the Iowa DNR in collaboration with the Iowa Department of Agriculture and Land Stewardship, the U.S. Geological Survey, and The Iowa Homeland Security and Emergency Management Division.

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