

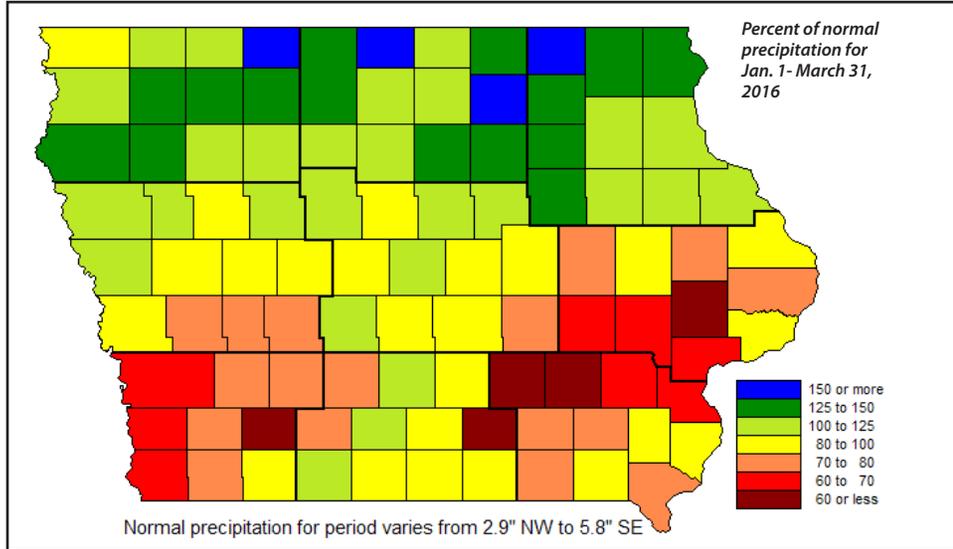
# WATER SUMMARY UPDATE

No. 62

Published Date  
April 21, 2016

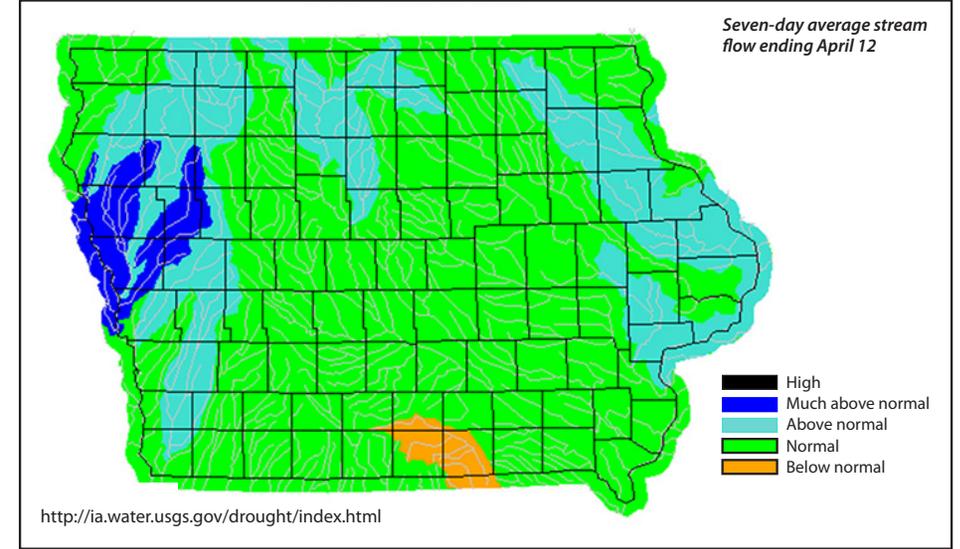
## Precipitation

State Climatologist



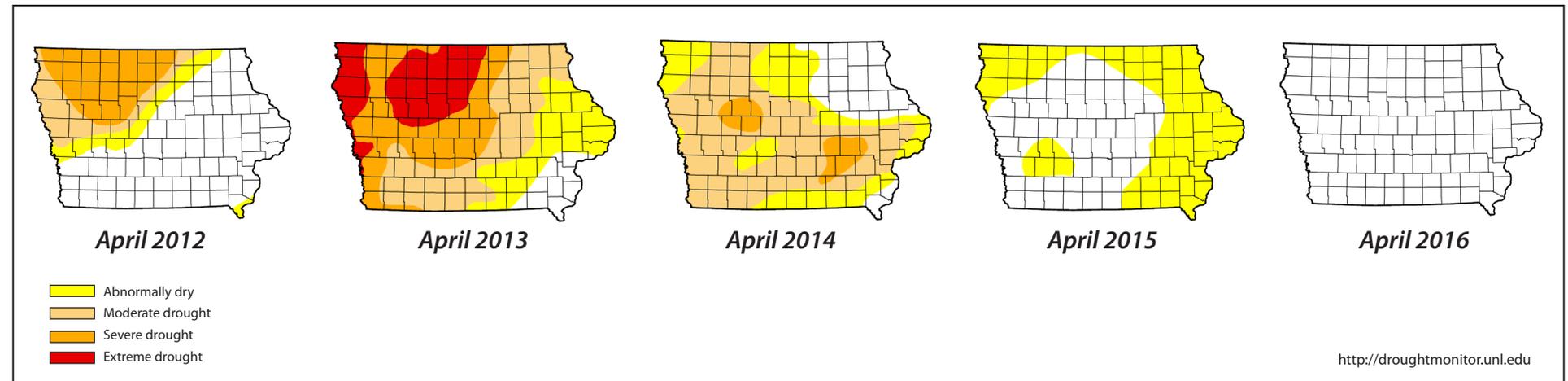
## Stream Flow

US Geological Survey



## U.S. Drought Monitor

National Drought Mitigation Center and partners



# Recent Developments and Changes

## Summary:

After a wet fall, a slightly dry winter and an early spring, conditions are largely normal across the state. Average statewide streamflow has returned to near normal levels, and the state is free from drought conditions. Groundwater levels are generally good across the state, and soil moisture remains high. May, June and July typically see the highest rainfall in the state, so Iowa should be entering its wettest time of year.

## Drought Monitor

The National Drought Monitor continues to show all of Iowa drought free. The last time Iowa was drought free in early April was 2010, and in 2013 at this same time of the year, more than 90 percent of the state was in some state of drought, including more than 20 percent of the state categorized in extreme drought. This year, conditions look good going into the spring growing season. There are areas of moderate drought to our northwest and southwest, and those areas will continue to be monitored.

The latest USDA Agricultural Statistics report indicates that 97 percent of the state has topsoil that is rated adequate or surplus, with 99 percent of Iowa's subsoil similarly rated. The northwest and southeast corners of the state were rated the wettest for soil moisture while the west central and southwest were the driest (but remain wetter than usual for this time of year).

## Current Stream Flow

Streamflow conditions are normal for the majority of the state. Since the last water summary update, streamflow conditions across the state have decreased from much above normal and above normal conditions across the majority of the state, to normal conditions. The streamflow index shows that since the beginning of the Water Year (October 2015), stream flows across the state increased during the wet fall. Since then, they have steadily fallen into a range that is close to normal.

## February Precipitation

Precipitation across Iowa during the first quarter of 2016 averaged 3.97 inches, which is 0.15 inches below normal. Precipitation amounts generally were above normal across the northern one-third of the state and well below normal over east central, southeast and southwest Iowa. January was the driest of the three months over most of Iowa, while March accounted for 61 percent of the first quarter precipitation. Overall, the first quarter of 2016, while averaging slightly drier than the 30-year normal, was significantly wetter than in 2014 or 2015 owing to a much wetter March this year. Temperatures were near normal during January, while February was 4.1 degrees warmer than usual and March was 6.1 degrees above the 30-year average. This was Iowa's warmest first-quarter since 2012.

## Shallow Groundwater

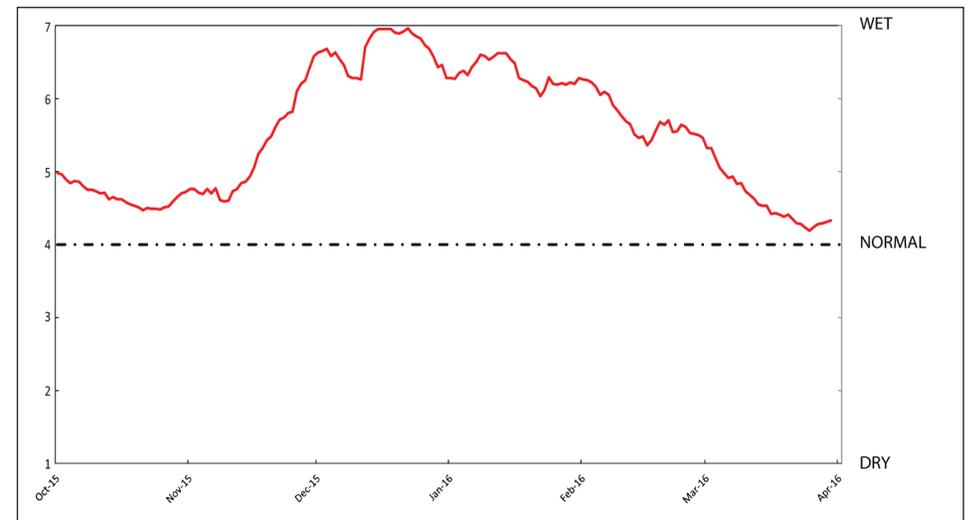
Shallow groundwater conditions were normal to slightly above normal across Iowa for March. The first two weeks of April have seen below normal precipitation. Shallow groundwater levels have dropped slightly, but are still in the normal range.

## Missouri River Basin

Conditions in the Missouri River Basin continue to be drier than normal, with the U.S. Army Corps of Engineers indicating that runoff in the Missouri River Basin above Sioux City was 1.8 million acre feet (MAF) during March, or only 60 percent of average. Conditions in most of the upper basin during March were dry and warm. The runoff forecast for all of 2016 is 21.7 MAF, or 86 percent of average. As of April 1, the mountain snowpack was 95 percent of average in the reach above Fort Peck and 89 percent of average in the reach from Fort Peck to Garrison, and appears to have peaked for the year.

Iowa Stream Index Oct. 2015-March 2016

USGS



## Contacts

- General Information ..... Tim.Hall@dnr.iowa.gov 515-725-8298
- Drought Monitor..... Harry.Hillaker@iowaagriculture.gov 515-281-8981
- Precipitation..... Harry.Hillaker@iowaagriculture.gov 515-281-8981
- Stream Flow ..... Daniel Christiansen, dechrist@usgs.gov 319-358-3639
- Stream Flow ..... Michael.Anderson@dnr.iowa.gov 515-725-0336
- Shallow Groundwater ..... Mike-Gannon@uiowa.edu 319-335-1581