

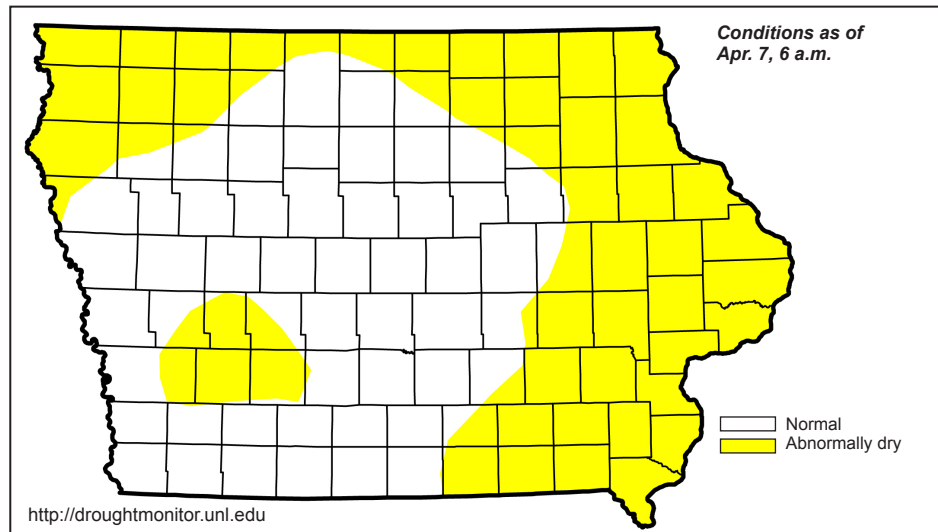
# WATER SUMMARY UPDATE

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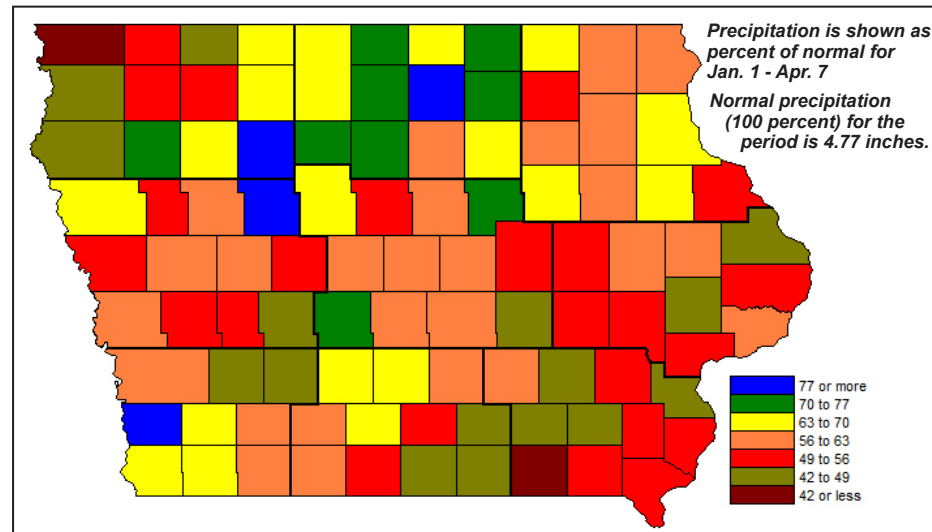
## Drought Monitor

National Drought Mitigation Center and partners



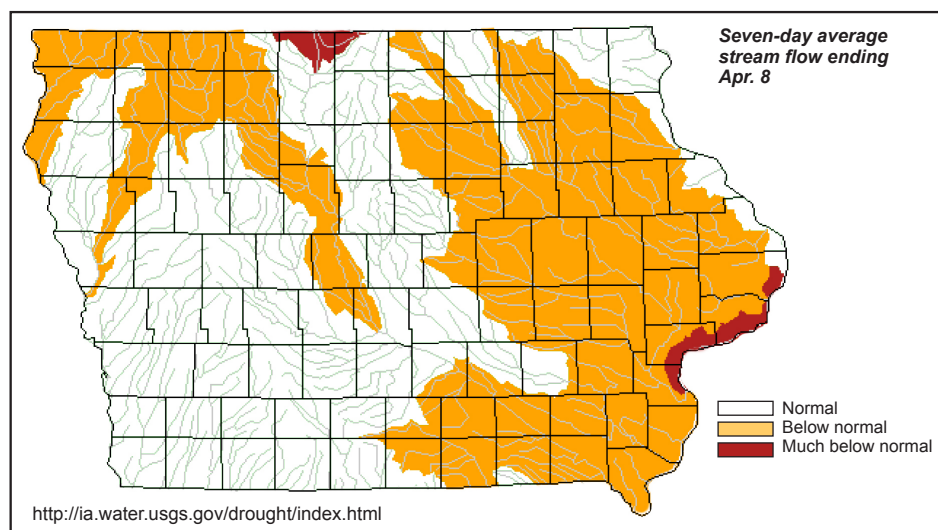
## Precipitation

State Climatologist



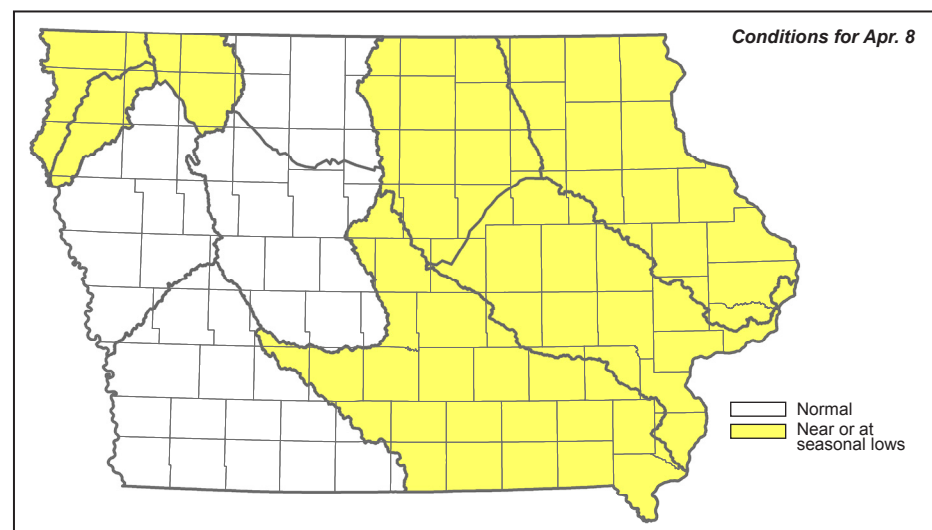
## Stream Flow

US Geological Survey



## Shallow Groundwater

Iowa DNR and IHR-Hydroscience and Engineering



## Recent Developments and Changes

### Overall Conditions

Conditions in Iowa as we transition from winter to spring have been trending drier. Recent rainfall has helped the situation, but the month of March was very dry, and that dryness is showing up in stream flows and groundwater, as well as in the National Drought Monitor. Current rainfall that is widespread across the state should help. Conditions will be tracked through Water Summary Updates issued every two weeks through the spring and summer.

### Drought Monitor

The drought monitor shows almost half of Iowa as abnormally dry. While this is a deterioration from the start of the year, it is much improved over one year ago when over half the state was classified as being in Moderate Drought. Across the region, nearly the entire state of Minnesota is classified in Moderate Drought, as well as large portions of the Dakotas, Nebraska, and Kansas. We will continue to monitor conditions in those states as the spring progresses.

### Stream Flow

Streamflow conditions are mix of normal to below normal conditions across the state. Over the past month, streamflow conditions across the eastern half and northwest portions of the state have moved into the below normal condition, while portions of the middle and southwest remain in normal condition. Small areas in north central and the eastern border of the state have moved into the much below normal condition.

### Precipitation

Precipitation since the beginning of the year has been below normal through all of Iowa, varying from about one inch less than usual across north central Iowa to about three inches below normal over the southeast. Overall the statewide average precipitation so far this year has been 2.76 inches while normal through April 7 is 4.77 inches. This is the driest start to the year in Iowa since 1994 (when the dryness was an extremely welcome development following the major flooding of 1993). This continues the relatively dry weather pattern that began in mid-October in central and southwestern Iowa and in July 2014 across much of northern/northeastern

Iowa. However, abundant precipitation immediately preceding this recent dryness, plus a cool growing season in 2014, has allowed soil moisture levels to remain greater than they were at the start of spring in the previous three years over most (but not all) of Iowa. The last of the frozen soils over northern Iowa thawed during the first few days of April. While slightly later than the typical frost-out date, this thaw comes about two weeks earlier than it did last spring.

### Shallow Groundwater

Shallow groundwater levels in April 2015 are normal to slightly below normal across most of Iowa. The driest regions are in northwest and eastern Iowa. Adequate spring rainfall will be critical across most of Iowa to prevent drought conditions from worsening.

### 2015 Flooding Outlook

In early March the National Weather Service (NWS) offices serving Iowa released an updated spring flood outlook. According to the NWS the risk of flooding through early June is near normal. Their outlook uses a combination of current hydrologic conditions as well as the assumption of near normal weather conditions through early June. If weather conditions deviate from near normal then the risks could change.

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

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