IOWA DEPARTMENT OF NATURAL RESOURCES

WATER SUMMARY UPDATE

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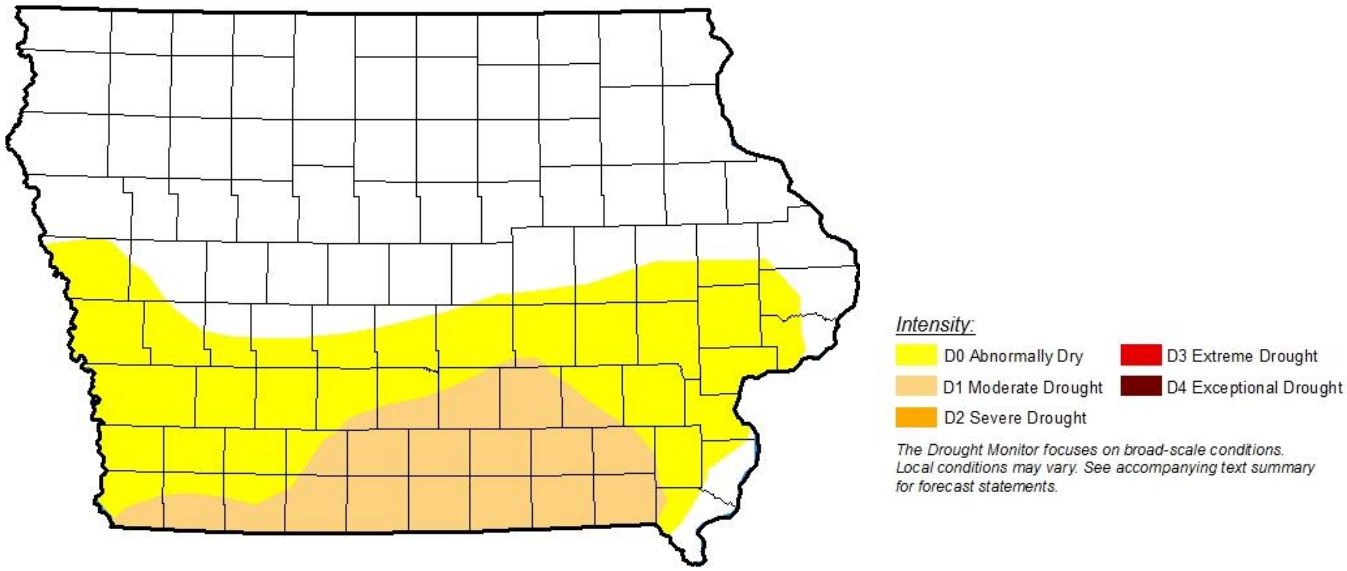
A snapshot of water resource trends for April 2018

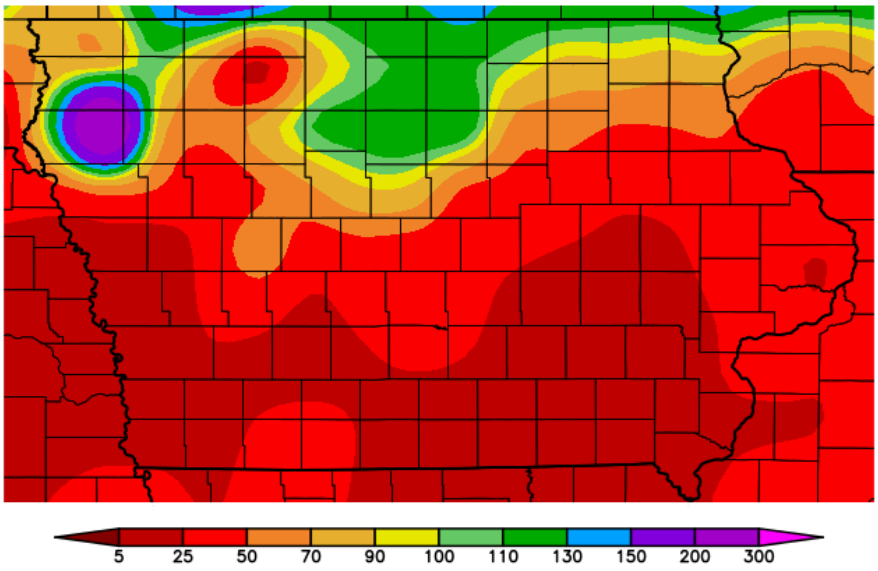
Drought Monitor - Conditions as of May 1, 2018.

National Drought Mitigation Center and partners



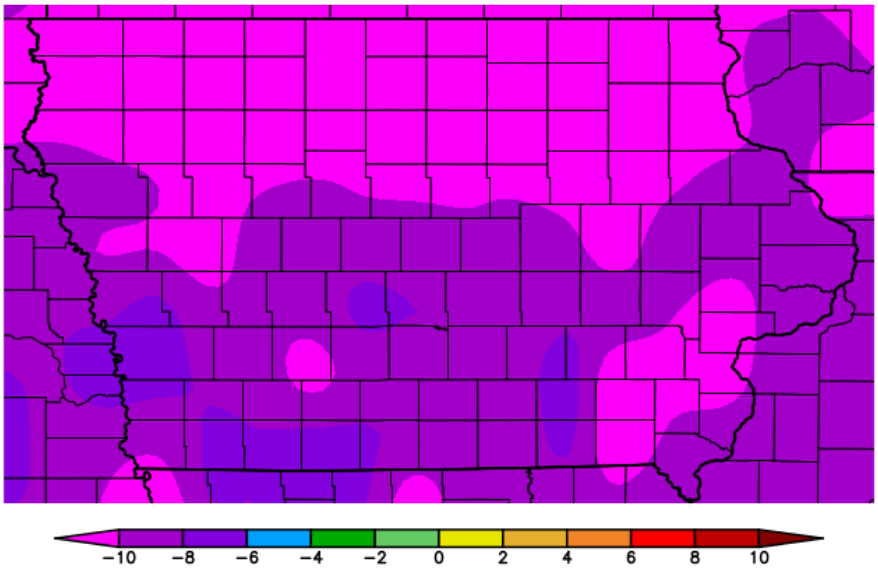
Precipitation - Percent of normal precipitation for April 2018.

High Plains Regional Climate Center



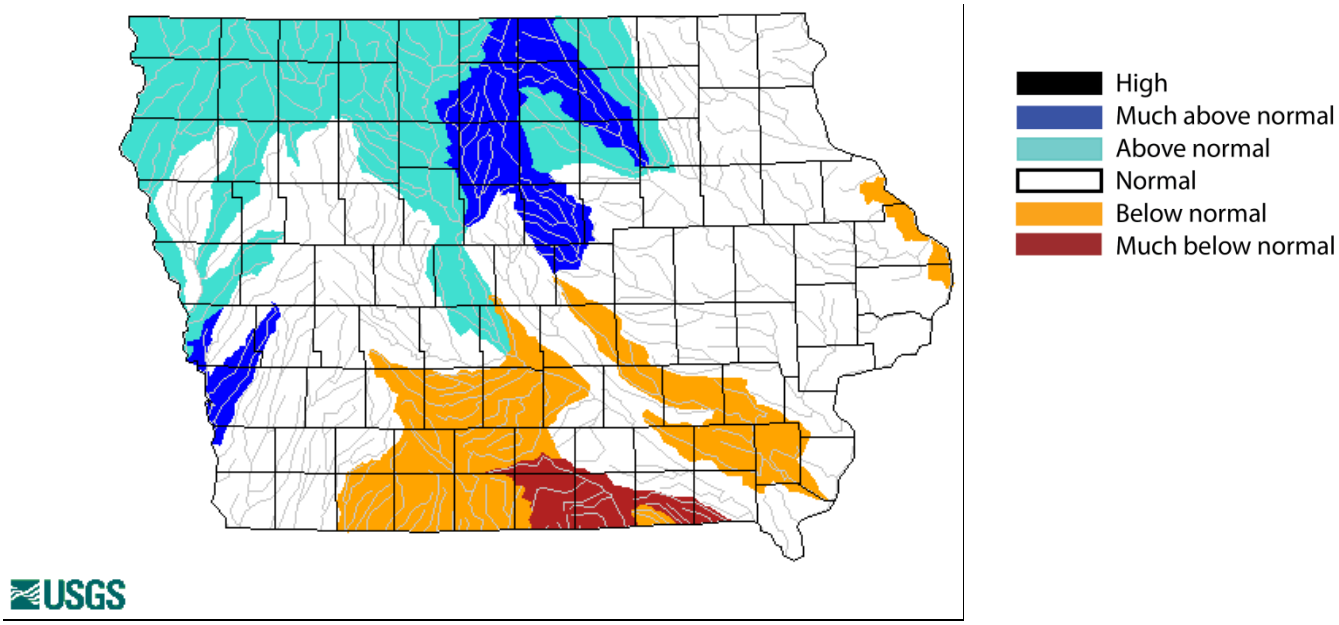
Temperature – Departure from normal temperature (°F) for April 2018.

High Plains Regional Climate Center



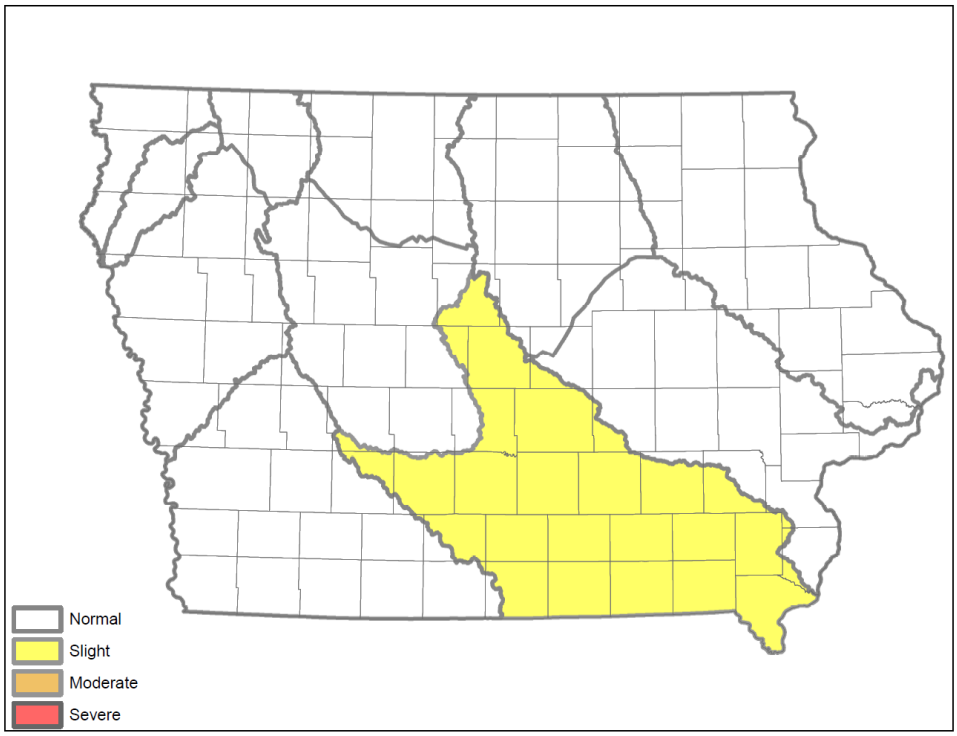
Stream Flow - Seven-day average stream flow for April 2018.

US Geological Survey



Shallow Groundwater - Conditions for April 2018.

Iowa DNR and IIHR-Hydroscience and Engineering



Recent Developments and Changes

SUMMARY

The month of April was exceptionally dry and cold compared with normal conditions. Averaged across the state, April was the 13th driest on record, and the coldest April on record. April's precipitation of 1.5 inches was about half the normal April precipitation. Previous wetter than normal months have offset this dry month, and the state is within an inch of normal rainfall for the year. Concerns remain for shallow groundwater conditions across southern Iowa, and this continued dryness is reflected in below normal stream flow in several watersheds in south central Iowa. The month of May begins a stretch of the normally wettest three months of the year in the state. Over the months of May, June, and July Iowa normally receives about 14 inches of rain, or about 40 percent of its annual rainfall. This contrasts with December, January, and February, when the state only receives an average of 3.3 inches of precipitation, or about nine percent of annual moisture.

DROUGHT MONITOR

The dry conditions in April resulted in an expansion of the drought conditions in Iowa. Over 40 percent of the state was classified as being exceptionally dry or in moderate drought. This represents nearly all of the area in Iowa south of Interstate 80. Recent significant rainfall in Iowa came after May 1, so the impact of that moisture will be reflected in the May 10, 2018 Drought Monitor. It is expected that noticeable improvement will occur in some areas. At the end of April, however, much of south-central Iowa is rated in D1 – Moderate Drought. To the south and west of Iowa, nearly all of the State of Kansas is in drought, with nearly 30 percent of that state in Severe or Exceptional Drought. Conditions further to the south and west of Kansas become progressively worse.

CURRENT STREAM FLOW

Streamflow conditions in much of the state remain normal. Northeast Iowa moved from the below normal flows in March to normal flows in April. A portion of the Thompson, Skunk, Fox, and Chariton River basins have below normal and much below normal flows. Streamflow conditions in the Northwest and North Central portion of the state moved from normal to above normal flows with portions of the Iowa, Boone, and Cedar River basins moving into the much above normal flows since March. Recent wet conditions have moved the statewide streamflow index into the "above normal" range.

APRIL PRECIPITATION AND TEMPERATURE

Precipitation in April is normally just over 3.5 inches. This past April, however, was the 13th driest on record. Statewide, only 1.5 inches of rain fell, which is only about half the long-term average. This was the driest April since 1980.

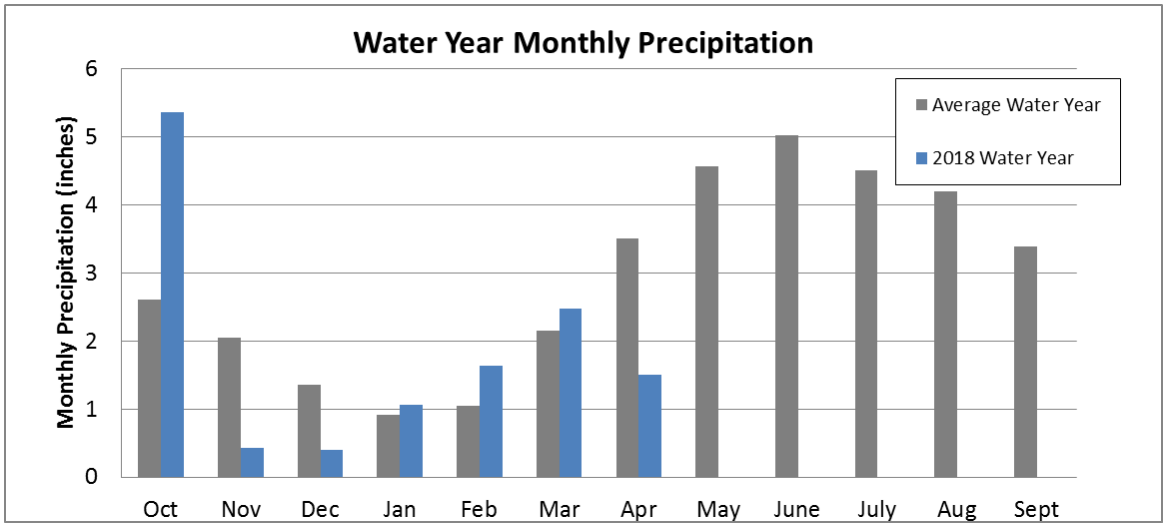
The average Iowa statewide temperature in April was the coldest ever recorded in 124 years of record. On average, Iowa was more than nine degrees colder than normal for April. All of the states surrounding Iowa recorded either their coldest or second coldest Aprils on record as well.

SHALLOW GROUNDWATER

Shallow groundwater conditions continue to be below normal in April for parts of southern and southeastern Iowa, and these areas remain in a slight drought classification. Shallow groundwater conditions in the rest of Iowa are normal or above normal for spring. Parts of north central and northwest Iowa had record snowfall for April. Graettinger recorded 46 inches of snow from April 1 to April 18. The melting of this snow has raised groundwater tables 2 to 3 feet in many alluvial aquifers.

2018 ANNUAL PRECIPITATION UPDATE

Despite the very dry April, the precipitation across the state is only about an inch below normal for the Water Year. Since this is a statewide number, it does not take into account the regional differences, especially the much drier conditions that have persisted across the southern portions of Iowa. The next three months (May, June, and July) are typically the wettest in Iowa, accounting for nearly 40 percent of the annual precipitation in the state. On the other end of the scale, the three driest months of the year (December, January, and February) account for less than 10 percent of the annual precipitation. This means that the current small statewide deficit in rainfall could easily be made up over the next three months.



ADDITIONAL INFORMATION

For additional information on the information in this Water Summary Update please contact any of the following:

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