IOWA DEPARTMENT OF NATURAL RESOURCES

WATER SUMMARY UPDATE

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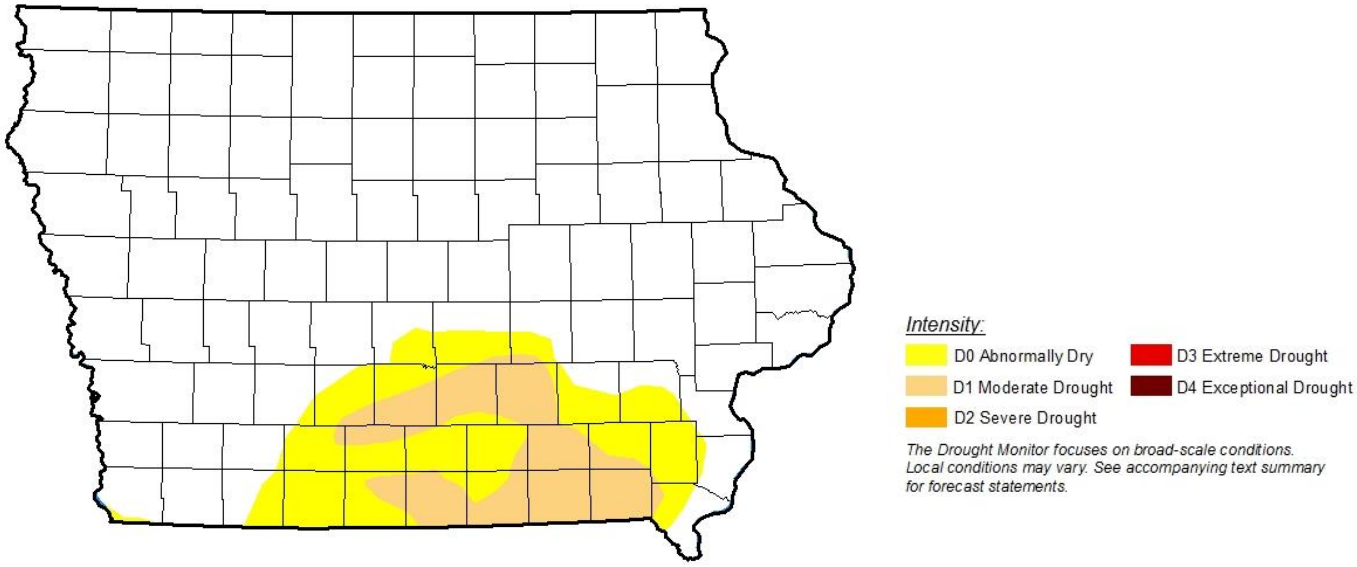
A snapshot of water resource trends for March 2018

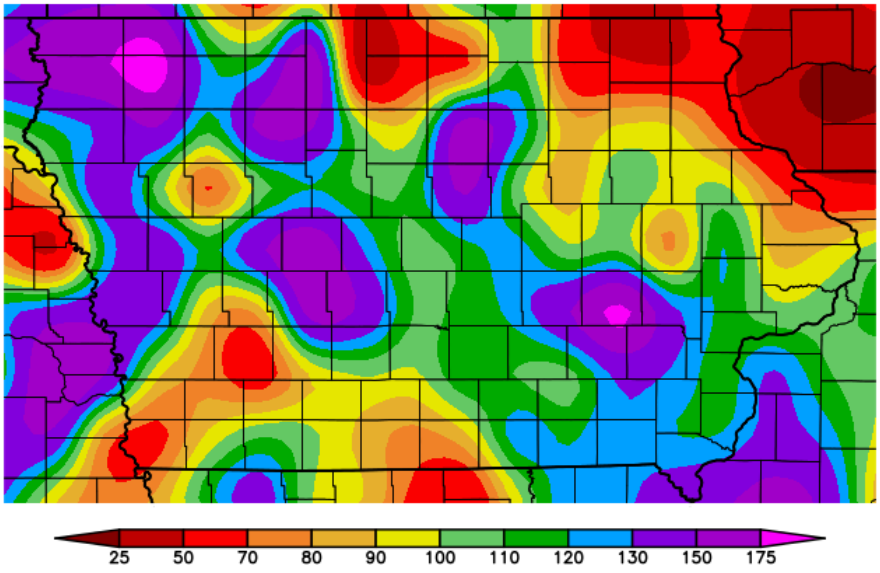
Drought Monitor - Conditions as of April 3, 2018.

National Drought Mitigation Center and partners



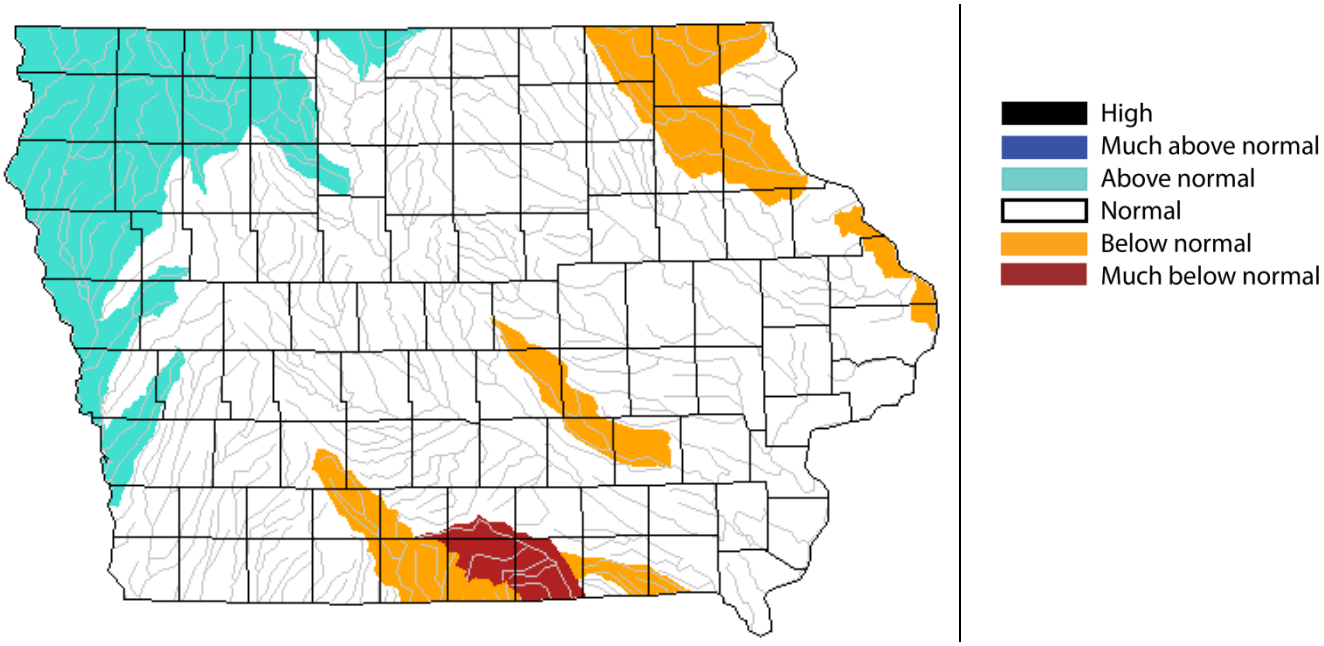
Precipitation - Percent of normal precipitation for March 2018.

High Plains Regional Climate Center



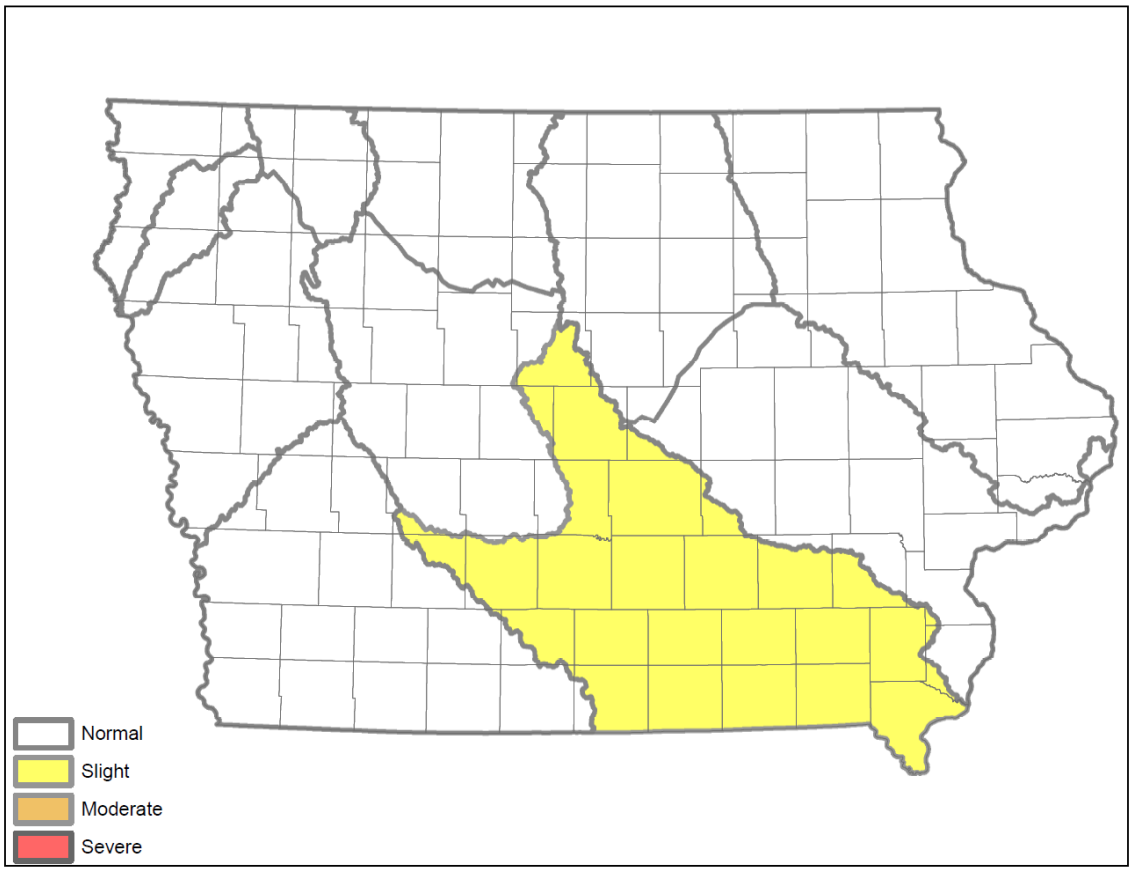
Stream Flow - Seven-day average stream flow for March 2018.

US Geological Survey



Shallow Groundwater - Conditions for March 2018.

Iowa DNR and IIHR-Hydroscience and Engineering



Recent Developments and Changes

SUMMARY

The month of March normally begins the increase in monthly precipitation in Iowa, and this year was no exception. February's statewide average precipitation of 1.6 inches was followed by March precipitation of 2.5 inches. As a result of the wetter than normal conditions across much of the state, streamflow in some areas is running above normal. In southeast Iowa an area of persistent dryness remains, despite some welcome precipitation. For the next several months normal rainfall increases month over month until reaching the wettest month of the year in the state, the month of June.

DROUGHT MONITOR

Over the last month conditions across the state have seen no appreciable change. Areas of southeast Iowa continue to be of concern, with almost 20 percent of the state in some form of dryness or drought. Some or all of ten counties continue to be rated in D1- Moderate Drought; a total of nearly eight percent of Iowa. This is an improvement over the conditions that existed on October 1 of last year when over 30 percent of the state was rated in D1 and six percent of the state was rated in D2 – Severe Drought. Regionally, large areas to the south and west of Iowa, including Kansas, Oklahoma, and northern Texas are classified in Exceptional Drought (D4), and areas to the north and west of Iowa, including much of the Dakotas, are now in Moderate and Severe Drought.

CURRENT STREAM FLOW

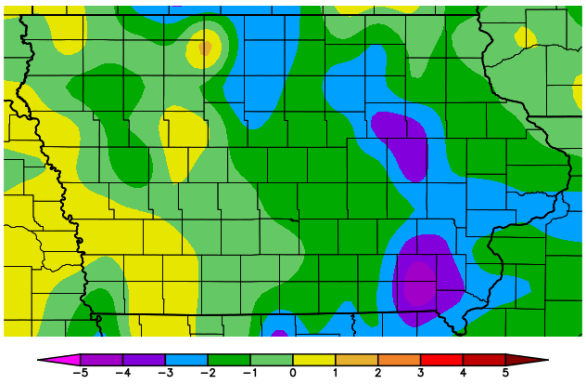
Streamflow conditions in much of the state remain in the normal range. Northeast Iowa moved from above normal flows in January to below normal flows in March. A portion of the Thompson and Chariton River basins have remained in the below normal and much below normal ranges for the past two months. The Fox and Skunk River basins have moved into below normal flow since February. Streamflow conditions in the Northwest portion of the state moved from normal to above normal flow since February.

MARCH PRECIPITATION

Precipitation in March is normally just over two inches. This past March was a bit wetter than normal, with 2.5 inches of rain on average falling over the state. This continues a pattern of three straight months of above normal rainfall. During the month of March the above normal rainfall was seen across the state from northwest to southeast, with some areas getting more than 150% of normal rainfall for the month.

Temperatures across Iowa were generally cooler than normal, especially in eastern and southeastern Iowa, where temperatures were, on average, four to five degrees cooler than normal. These cooler temperatures have slowed vegetative growth, helping to maintain soil moisture levels for the upcoming growing season.

Departure from Normal Temperature (F)
3/1/2018 – 3/31/2018



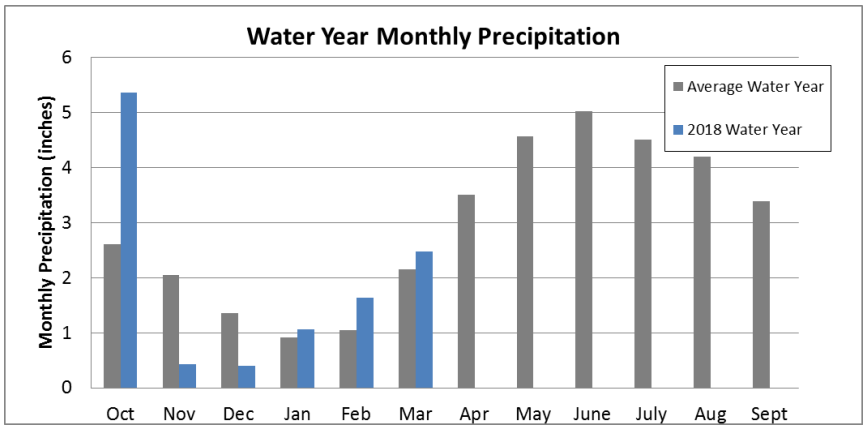
SHALLOW GROUNDWATER

Shallow groundwater conditions have improved over most of Iowa during the month of March. Shallow groundwater conditions in parts of south central Iowa remain in a slight drought classification. Shallow groundwater conditions in the rest of Iowa are normal for early spring.

WATER YEAR UPDATE

The Water Year runs from October 1 to September 30 of each year, since most precipitation that falls after October 1, especially as snowfall, is available for the following growing season. Hydrologists and climatologists often use the "Water Year" calendar for tracking water resources. The following graph shows the normal monthly precipitation in Iowa by month, starting in October. The lowest three precipitation months are December, January, and February, and precipitation amounts increase rapidly from March through June.

October 2017 was very wet in Iowa, while November and December were very dry. The past three months have all produce above normal precipitation in the state, and for the Water Year to date, Iowa is running about 1.2 inches wetter than normal.



ADDITIONAL INFORMATION

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

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