

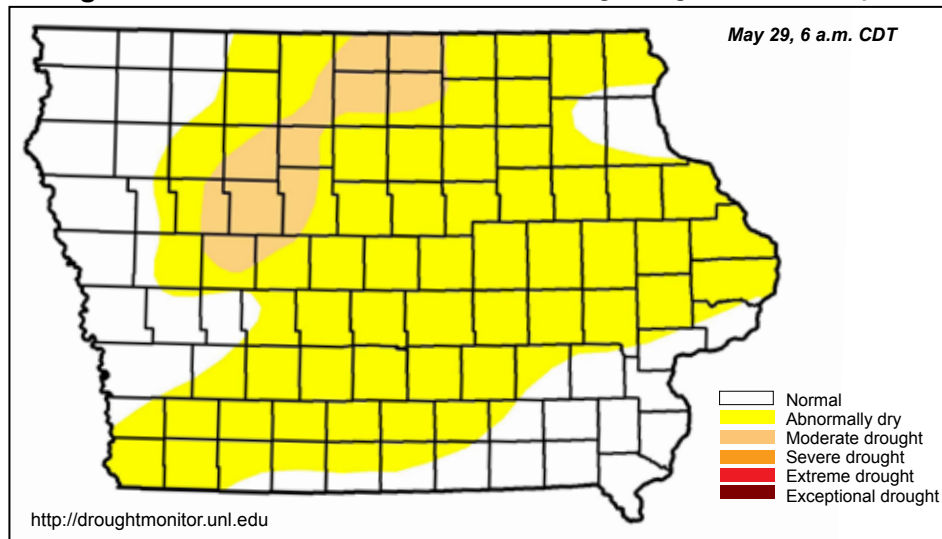
WATER SUMMARY UPDATE

No. 5

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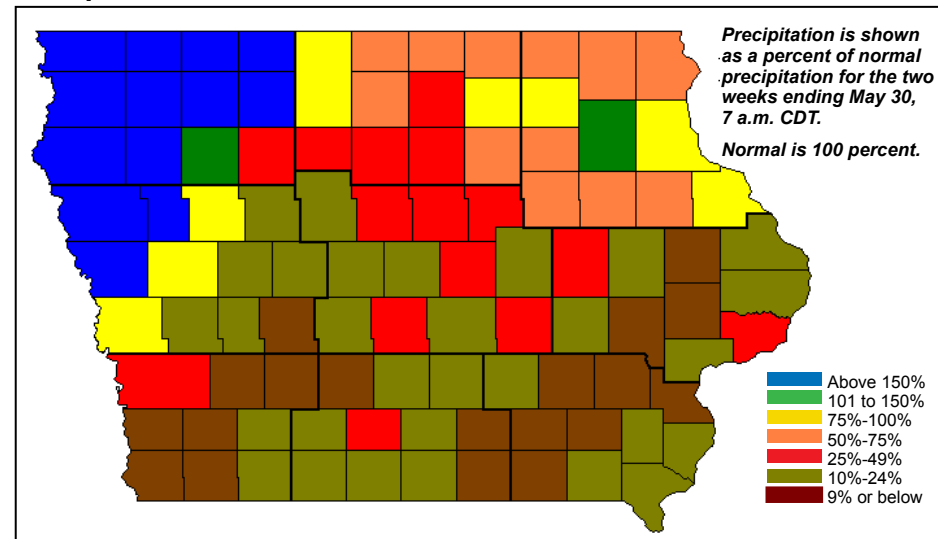
Drought Monitor

National Drought Mitigation Center and partners



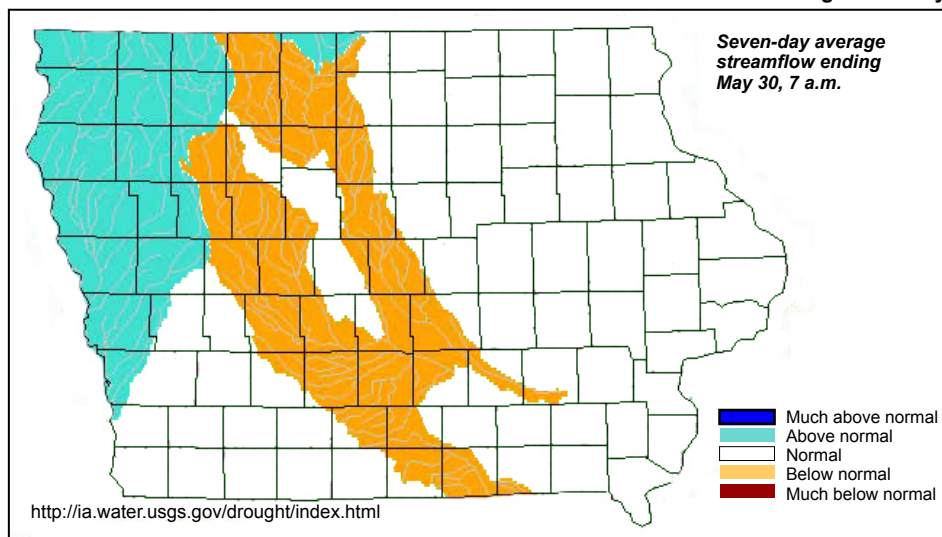
Precipitation

State Climatologist



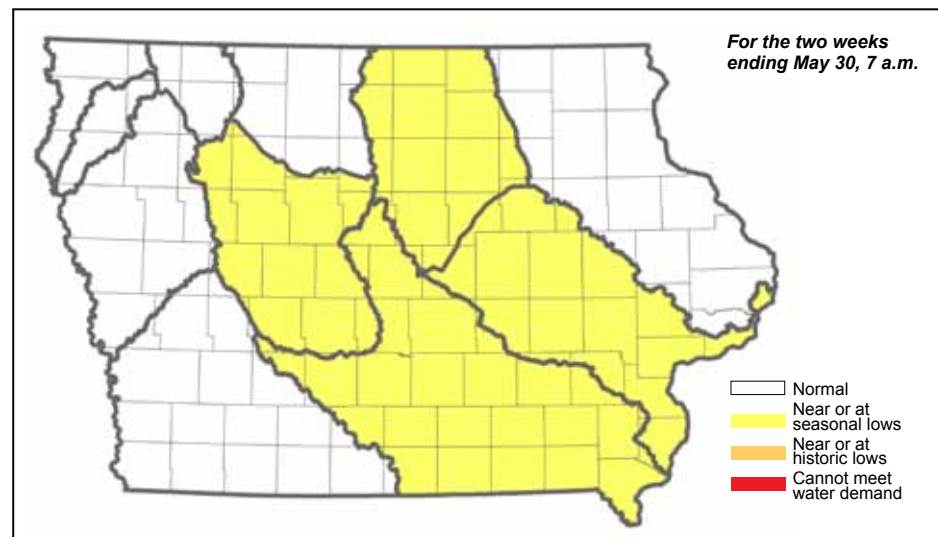
Streamflow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

Overall Conditions

Today's Water Summary Update is a mixed message. While good precipitation in northwest Iowa has helped that region improve dramatically, other areas of the state have continued to be quite dry. The extreme northwest part of Iowa is no longer shown in any drought condition, and stream flow and groundwater levels are also much improved there. Through most of the middle of Iowa precipitation has been extremely low, and streams and groundwater are reflective of that. The US Drought Monitor indicates that much of Iowa, other than the northwest and southeast corners, is abnormally dry. Stream levels are below normal, and groundwater levels are also quite low. Continued rains are needed to make improvement, especially with the dry summer months approaching. As vegetation continues to grow rapidly in the warm weather, shallow soil moisture could be quickly depleted.

After a brief period of wetter and much cooler conditions across Iowa for the last two days of May much warmer and drier weather is expected to make a fairly rapid return to the state this weekend. National Weather Service outlooks favor drier than normal conditions for Iowa during the first week to ten days of June with a high probability of above normal temperatures through the period.

Drought Monitor

The US Drought Monitor has changed significantly over the past two weeks. Not only are there no areas in Iowa rated in the "severe drought" category, but extreme northwest Iowa is now shown as normal. However, nearly all of the middle part of the state rated as "abnormally dry." The total portion of the state rated as at least "abnormally dry" has expanded from 45% to 70% - but of that area, the portion rated as "moderate drought" or worse has been reduced from 29% down to 8%.

Precipitation

For the past two weeks the precipitation totals varied from only sprinkles at Mount Pleasant to 5.76 inches at Holly Springs (Woodbury County). The statewide average precipitation was 1.19 inches while normal for the period is 2.10 inches. Temperatures once again averaged well above normal, thus resulting in greater than usual evaporation. Substantial precipitation has not occurred over most of the southern two-thirds of Iowa since May 6. Topsoil moisture is very low in these recently dry areas and is causing problems in crop emergence and development. Pasture conditions are also declining. The exception has been across the northwest one-quarter of the state where widespread rain fell on May 19th, 23rd-24th and 27th-28th.

Notable Events for the Period

The following observations were made by Iowa DNR and other agency technical and field staff:

Water managers in Sioux and Lyon counties are reporting that some groundwater levels are still low.

Soil moisture levels are low across much of Iowa, but recent rain should help.

Areas of northwest Iowa remain dry, and tiles are not running in parts of Buena Vista and Sac Counties in areas that area missed the heavy rainfall that fell farther to the north.

There is now some agricultural lowland flooding from the Little Sioux River, which is normal for this time of year. There is also some ponding in fields throughout the northwest Iowa region.

Streamflow

Streamflow conditions over the last seven days varied across the state as compared to the historical streamflow conditions. Observed streamflows were the lowest compared to normal in the Racoon, Des Moines, South Skunk and Chariton Rivers, which were less than 25 percent of normal streamflow conditions. Streamflow conditions in the northwest and north central part of the state the last seven days were above normal, while streamflow conditions in the eastern half of the state were normal.

Shallow Groundwater

Shallow groundwater levels in south central, north central and central Iowa are at or below the seasonal lows due to abnormally dry conditions during the period of May 16th to 30th. Spotty rainfall improved shallow groundwater levels in some locations of southeast Iowa, but most of the region is abnormally dry. Shallow groundwater levels near major rivers and streams in northwest Iowa continue to improve following recent rainfall.

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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, and The Iowa Homeland Security and Emergency Management Division.