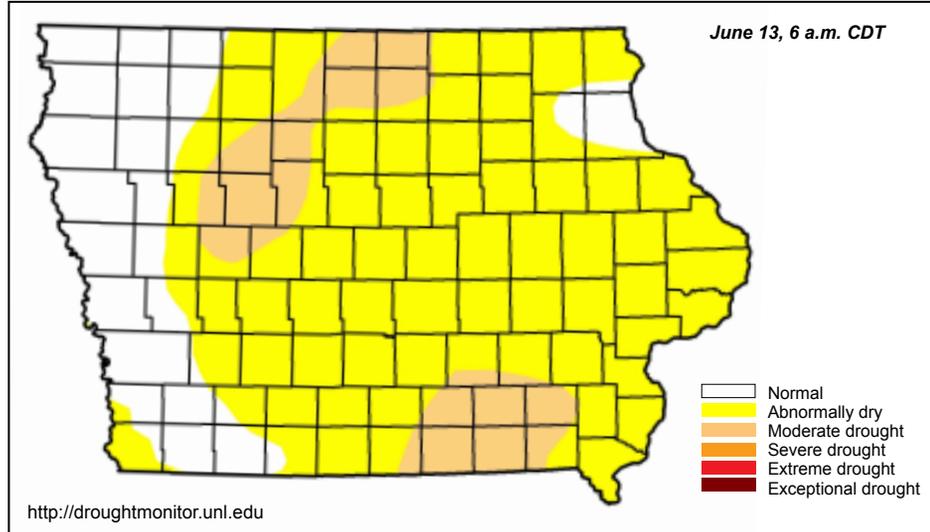


WATER SUMMARY UPDATE

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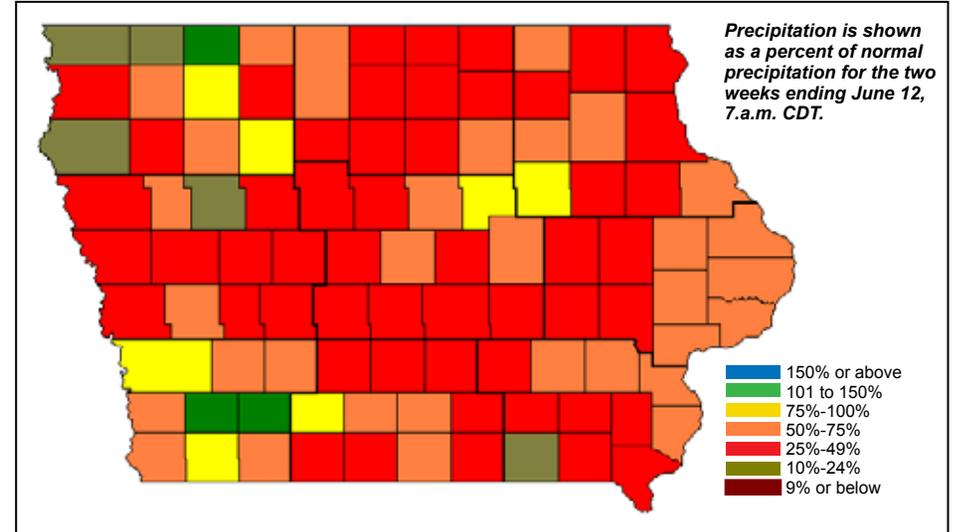
Drought Monitor

National Drought Mitigation Center and partners



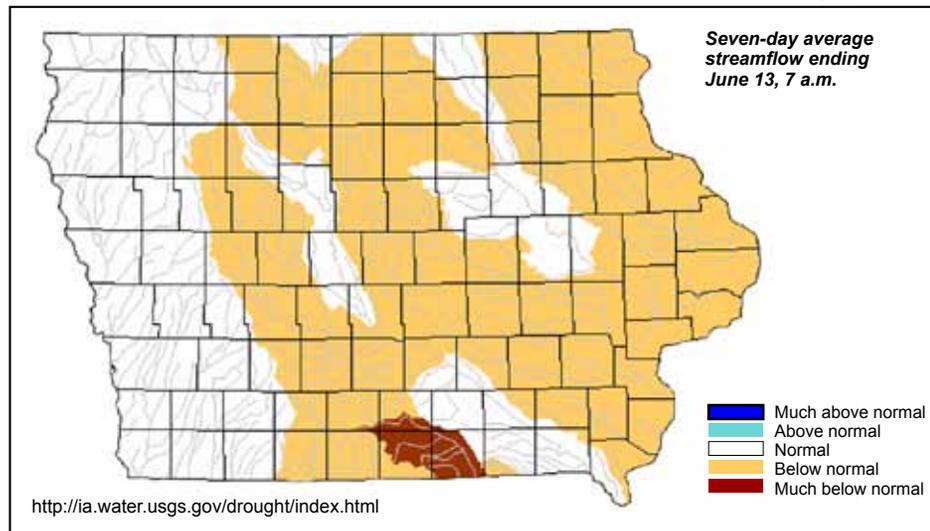
Precipitation

State Climatologist



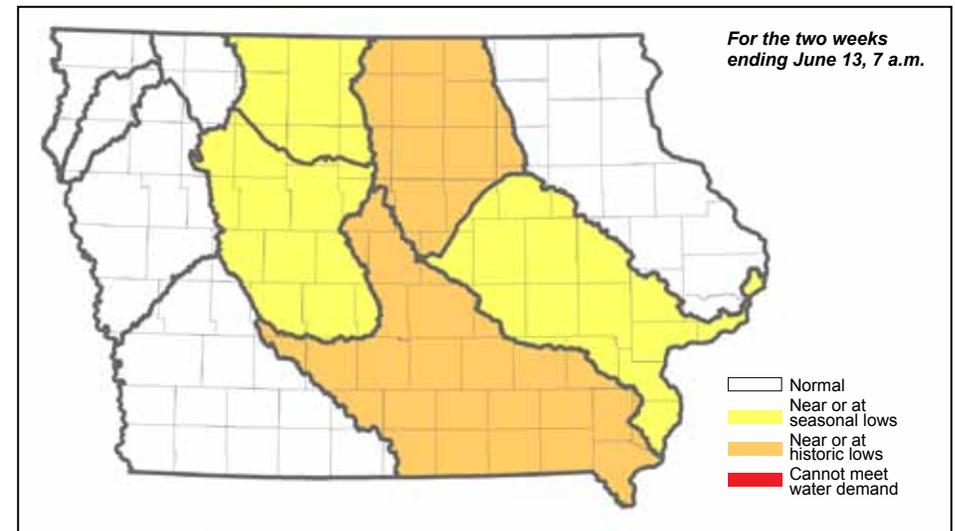
Streamflow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

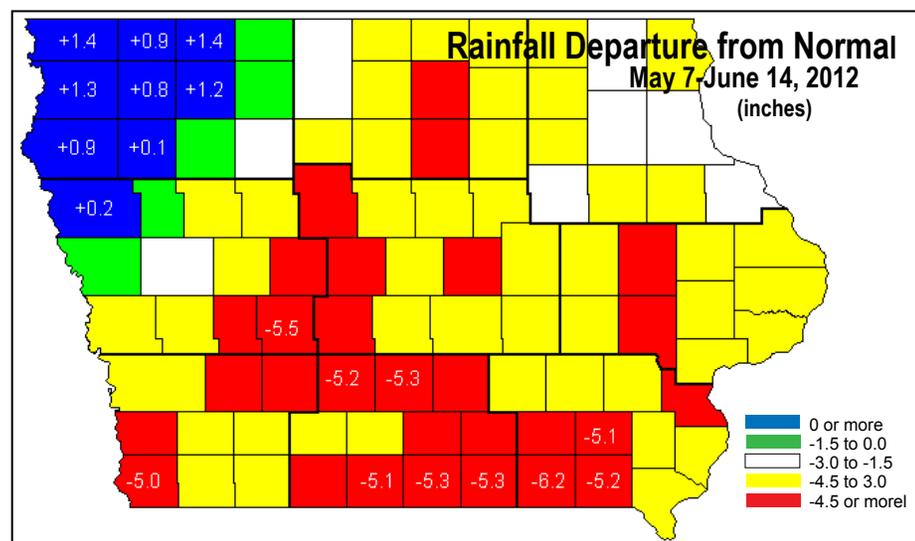
Overall Conditions

The state of Iowa continues to be very dry. Low stream flows and shallow groundwater levels reflect the spotty recent rains that have fallen in the state. The Drought Monitor identifies most of the state as being abnormally dry, with a small portion of north central and southeastern Iowa under moderate drought conditions. There is concern for near future conditions, as this has been Iowa's warmest spring (March-April-May) of the historical record and warmest year-to-date period (Jan. 1 to May 31). Spring temperatures averaged 56.1 degrees F, 7.8 degrees above normal and 0.8 degrees higher than the previous record warm spring set in 1977. Historical records seem to indicate that warm May temperatures proceed warmer than normal June and July months. This could result in the expansion of drought conditions in the months ahead.

Iowa Secretary of Agriculture Bill Northey commented on the weekly Iowa Crops and Weather report released by the USDA National Agricultural Statistical Service June 11: "The lack of significant rainfall for much of the state remains a concern. In general the crop remains in fairly good condition but will need more moisture as it continues to develop."

Precipitation

The past two weeks were relatively dry across Iowa. The statewide average precipitation was about half of the normal of 2.3 inches. Precipitation totals for the two weeks varied from 0.38 inches at Sibley to 3.55 inches at Red Oak. Temperatures averaged 0.2 degrees below normal, generally on the cool side for the first week and on the warm side of normal for the second week. The relatively lower temperatures brought some relief from high evaporation demand.



This map, prepared by the State Climatologist, shows rainfall in Iowa over the six weeks ending June 14—typically a total of 4.6 in the northwest to 6.6 inches in south central Iowa. The nine counties shaded in blue have had more rainfall than normal. All of the other 90 counties in Iowa have had less rainfall than normal. Some counties, in fact, are more than five inches short of rainfall over the past six weeks. The shortage of rain over much of the state has led to the shortage of soil moisture that we are experiencing now.

Drought Monitor

This week's drought monitor shows some deterioration from two weeks ago. The May 29 Drought Monitor showed about 70 percent of Iowa in some form of dry conditions, while the June 12 version shows an increase to about 78 percent. The area rated as "Moderate Drought" has increased from 8 percent to more than 13 percent, with most of the increase occurring in the southeastern part of Iowa.

Streamflow

The streamflow map shows the average flow over the past seven days compared to historical streamflow levels. Observed streamflows were below normal for much of the eastern two thirds of the state. In the Upper Chariton River in south central Iowa the flows over the past seven days are classified as "severe drought," which means that river flow is in the lowest observed 5 percent of flows. Streamflow conditions in the western part of Iowa and in other watersheds in rest of the state have normal flows.

Shallow Groundwater

Shallow groundwater levels in south central, north central and central Iowa are at or below seasonal lows due to abnormally dry conditions during the period of June 1-14. Many locations are reporting downward trends in water levels and are approaching historic lows. Spotty rainfall improved shallow groundwater levels in some locations in eastern Iowa, but most of the region is abnormally dry. Shallow groundwater levels near major rivers and streams in most of northwest and southwest Iowa are at or near normal levels.

Links to More Information on Iowa's Water Resource Trends

Temperature and Precipitation Maps

<http://www.iowaagriculture.gov/climatology/climateMaps.asp>

Crop Progress and Condition

http://www.nass.usda.gov/Statistics_by_State/Iowa/Publications/Crop_Progress_&Condition/index.asp

USGS Iowa Drought Watch

<http://ia.water.usgs.gov/drought/index.html>

Drought Q & A from the USGS

<http://ga.water.usgs.gov/edu/qadroughts.html>

Water Conservation Tips

<http://wateruseitwisely.com/100-ways-to-conserve/index.php>

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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.