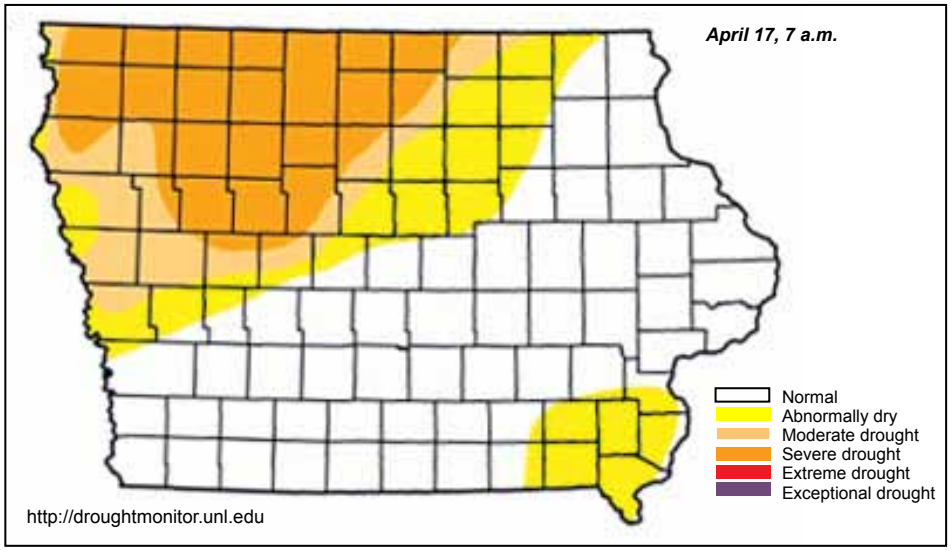
WATER SUMMARY UPDATE

April 19, 2012

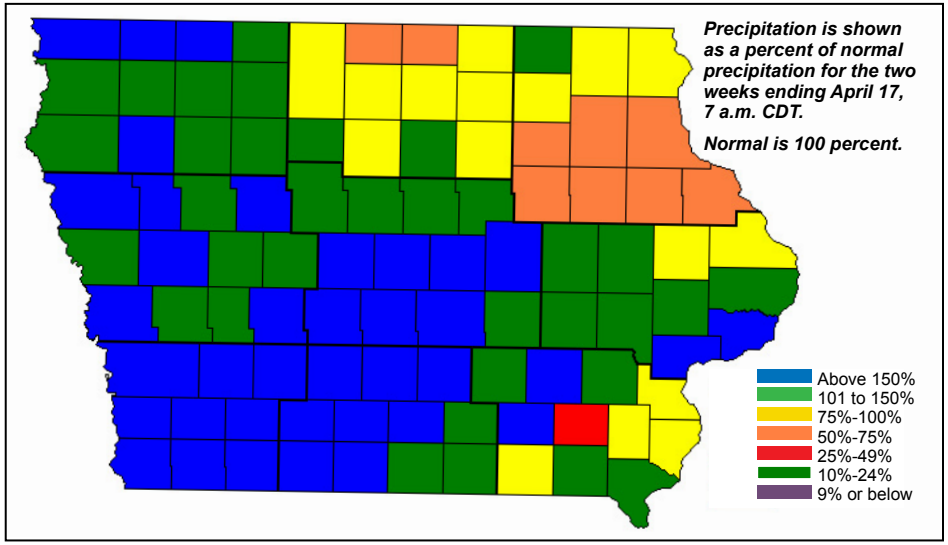
Drought Monitor

University of Nebraska



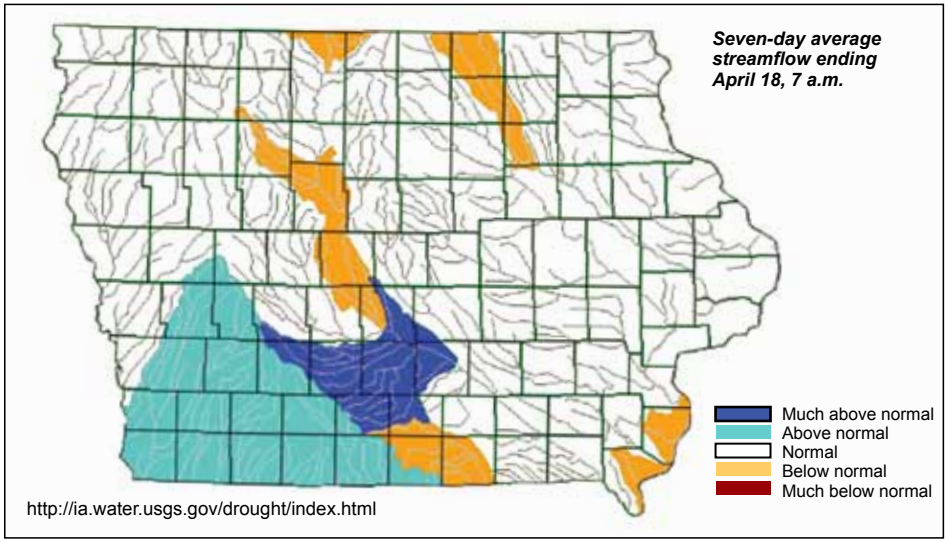
Precipitation

State Climatologist



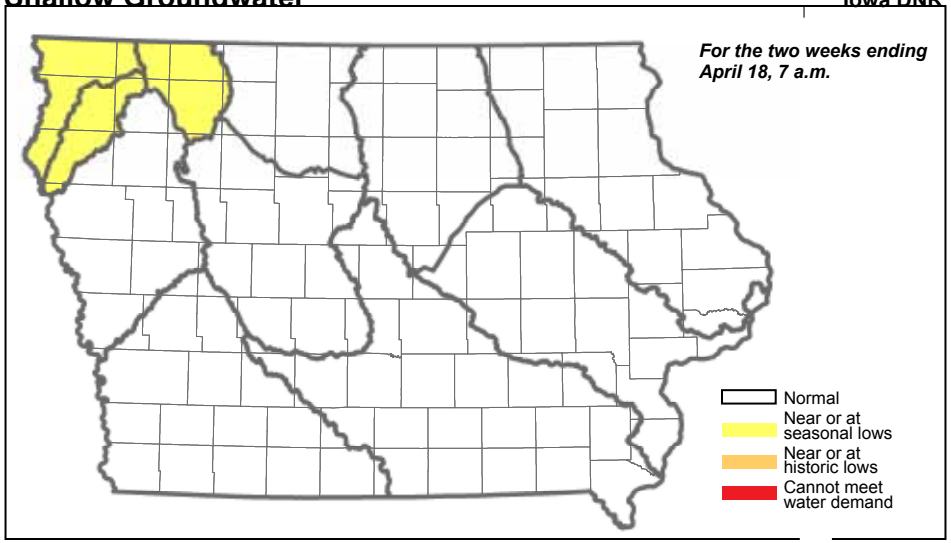
Streamflow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

Overall Conditions

Rain fell across much of Iowa last weekend, driven by a strong storm system that spawned severe weather over much of the central U.S. Statewide rainfall was above average during the past two weeks, and streamflows increased in response. However, the intense rate of rain meant that most of the water ran off the land surface rather than infiltrating into the groundwater. This, coupled with the existing long-term dry conditions in some areas, suggests the rains provided only temporary relief

As an example, the graph on the right shows stream water level for the South Raccoon River at Redfield. The intense rains increased the river level by six feet within a few hours, but river levels dropped to pre-storm levels within a few days. This indicates that only minor rises in the water table occurred, and more rains—particularly sustained, gentle rains—are needed to recharge the water table and provide sustained stream flows.

Drought Monitor

The drought monitor shows that 20 percent of Iowa is in a severe drought condition. This is a smaller area than last week, and smaller than the preceeding months. Severe drought conditions are mainly occurring in northwest and north-central Iowa.

Overall, 47 percent of the state is in some form of drought, which is a smaller area than last week but larger than two weeks ago. The area of abnormal dryness in southeast Iowa has expanded. It should be noted that the Drought Monitor describes broad-scale conditions. Local conditions may vary.

Precipitation

Much needed rain fell over all of Iowa April 12 - April 13 when some southwest locations picked up more than one inch. Much heavier rain came on April 14 when two to three inches were common over most of southwest and central Iowa. Unfortunately, the rains of the April 14 were accompanied by severe weather over parts of southern Iowa. Generally precipitation over the past two weeks was above normal over most of the southwest two-thirds of the state, with the exception of small portions of far southeast Iowa. Rain totals varied from 0.77 inch at Fairfield to 6.77 inches at Red Oak.

The statewide average precipitation for the period was 2.15 inches while normal is 1.52 inches. This was Iowa's wettest two weeks since the period ending Sept. 4, 2011.

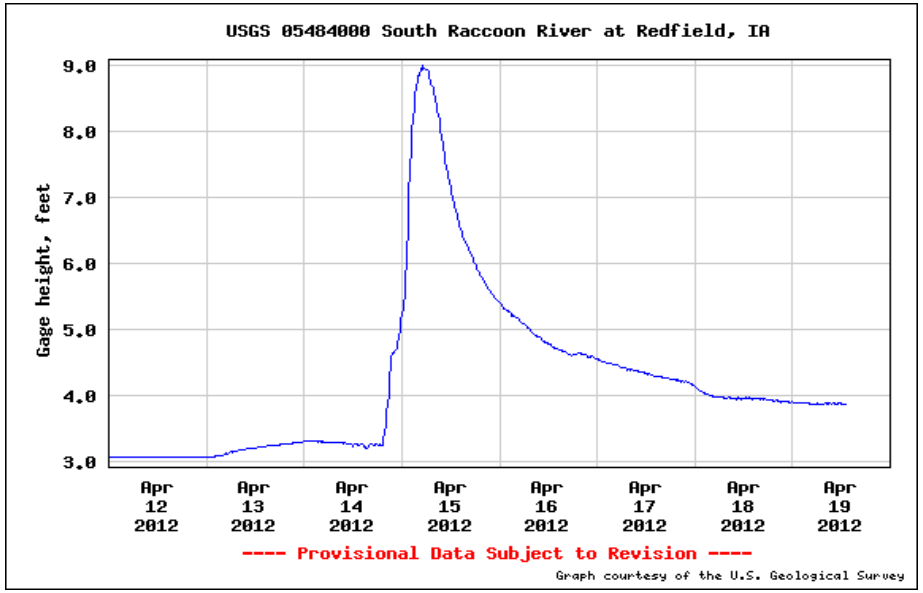
Streamflow

Streamflow conditions over the last seven days were normal for much of Iowa as compared to the historical streamflow conditions. Observed streamflows are the lowest in the upper portions of the Cedar River, and middle portions of the Des Moines River, which were less than 25 percent of normal streamflow conditions. Observed streamflow conditions in the southwest portions of Iowa are above normal, along with some much above normal conditions in central Iowa on the North, Middle, and South Rivers which drain to the Lower Des Moines River.

Shallow Groundwater

Shallow groundwater levels throughout Iowa benefited from the heavy rainfall that occurred between April 12 and April 15. Shallow groundwater levels recovered approximately 0.5 feet in the Floyd River watershed in northwest Iowa. Shallow groundwater levels are still near seasonal lows in the Rock River, Floyd River and Ocheyedan-Upper Little Sioux watersheds. Near normal shallow groundwater levels returned to southern and central Iowa, where 3 inches to 5 inches of rainfall fell April 14. Southeastern Iowa levels were stable.

Notable Events for the Period



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

DNR received reports that before April 12, 11 private wells in northwest Iowa were not providing water and the owners were having to find alternative sources. This typically would be either constructing a new well or connecting to a rural water system. After April 12 only one well was not providing water.

With the much needed rain, stream levels in the small streams are increasing slightly. Many of them had been dry or had isolated pools and are now flowing again. Most tile lines are still dry but a few have been observed with a small amount of flow.

The National Weather Service was quoted in the Des Moines Register as saying NW Iowa needs at least 6" to 9" above normal to get caught up.

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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.