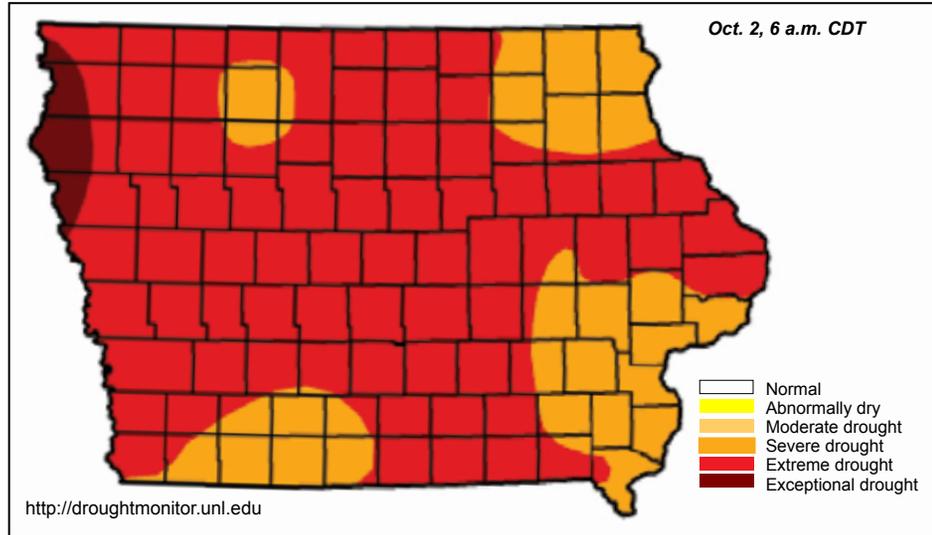


WATER SUMMARY UPDATE

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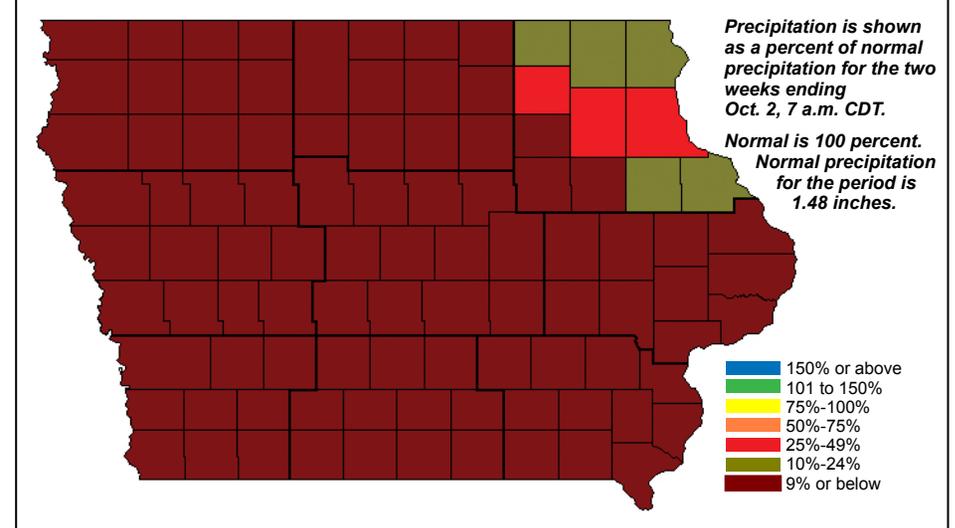
Drought Monitor

National Drought Mitigation Center and partners



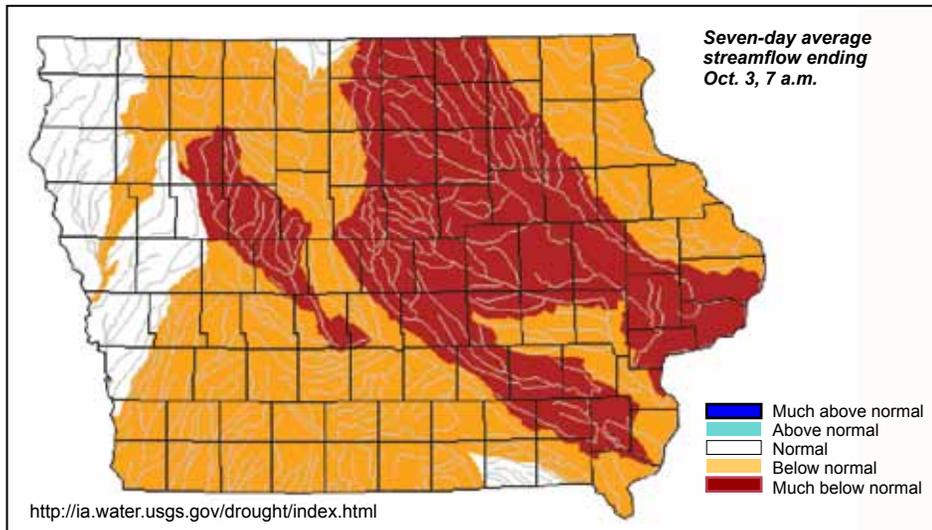
Precipitation

State Climatologist



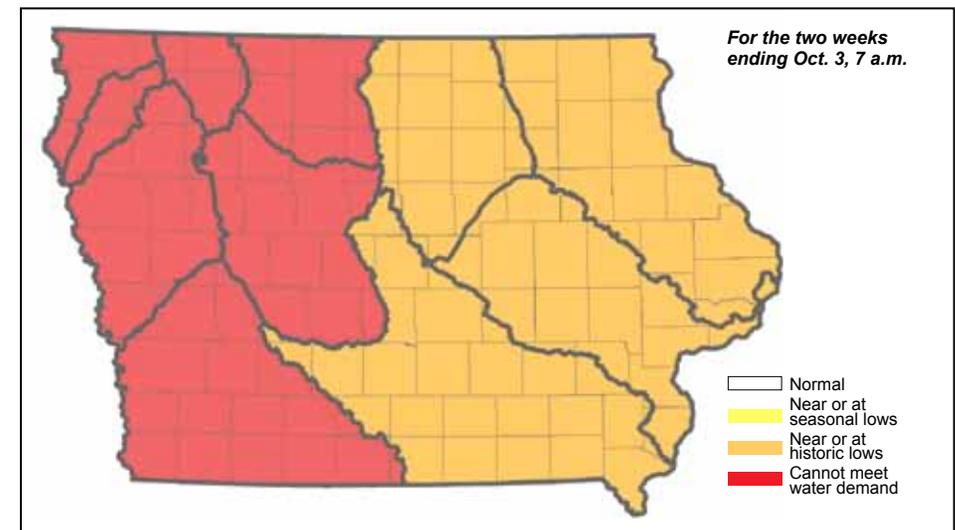
Streamflow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

Overall Conditions

The 0.04 inches of rain that fell statewide was the lowest two-week rainfall amount in a year. The persistent dry weather has pushed the statewide average precipitation deficit for the year to nearly nine inches. The year-to-date precipitation total is the lowest since 1988 and eighth lowest among 140 years of records. As a result of continued below normal precipitation, streamflow remains very low in much of the state and some water utilities are still struggling to meet demand.

The Iowa Crops and Weather Report released Oct. 1 indicates that over 90 percent of topsoil and subsoil moisture levels are rated short or very short — echoing the significant dry conditions that are seen in precipitation, streamflow and groundwater resources.

The season's first widespread freeze occurred the morning of Sept. 23 when temperatures fell as low as 22 degrees at Spencer and Sheldon with 70 percent of the state reporting temperatures of 32 or lower.

Shallow Groundwater

There has been very little change in shallow groundwater conditions across most of Iowa. Shallow groundwater levels throughout Iowa continue to be at or near historic lows. Shallow groundwater conditions continue to worsen along the west fork of the Des Moines, Ocheyedan and Upper Little Sioux rivers. Many water utilities in southwest and northwest Iowa are under mandatory and voluntary water restrictions. The city of Yale in Guthrie County is also experiencing water supply concerns. Pumping water levels are at or slightly above pump settings in many locations in western Iowa.

Drought Monitor

The Drought Monitor for October 2 shows continued deterioration in statewide conditions. Although the area designated as exceptional drought (D4) has not changed, the area of the state designated as extreme drought (D3) has increased. Over 75 percent of the state is now designated as exceptional or extreme drought, and the remaining 25 percent is designated as severe drought (D2). On a regional level, drought designations in the High Plains Region (states west of Iowa) have deteriorated slightly over the past two weeks, and the closest area to Iowa that is designated as normal is a two-county area in south central Illinois.

Streamflow

Although streamflows are normally low at this time of year, current streamflow conditions are below even those normal flows for the majority of the state. The lowest streamflows are found within Iowa River, Skunk River, Raccoon River, Wapsipinicon River, and Cedar River basins which have less than 10 percent of their normal flows. Streamflow conditions in the southwestern portion of the state since last the Water Summary Update have moved to below normal conditions. Streamflow conditions have improved to normal streamflow conditions in some rivers in the western portion of the state. The extreme northwestern corner of the state remains in the normal streamflow condition.

Notable Events for the Period

DNR field office staff continue to hear from some water system operators that static levels in wells are lower than normal, but not to an "action" level. Water supplies using surface water are faced with similar conditions — lake levels are low, but not at a level that requires conservation.

There have been a few cases of shallow private wells going dry.

In northwest Iowa water levels remain very low. Water and wastewater utilities are concerned about the increased number of water main and sewer main breaks that are occurring and what this may mean as we move into the winter months.

In an area along the Raccoon River in central Iowa, a residential development's two wells are beginning to look like they are not going to be able to meet demand. Notices have been sent out asking residents to minimize irrigation.

The next Water Summary Update will be published November 1. Biweekly publication will resume in spring 2013.

Precipitation

The past two weeks were very dry across Iowa with a statewide average precipitation of only 0.04 inches while normal for the period is 1.48 inches. This was Iowa's driest two-week period since Oct. 2010. Most of central and western Iowa recorded no rainfall during the period, while Guttenberg reported the most with 0.58 inches. At Rock Rapids in far northwest Iowa no rain has been recorded since September 12. Meanwhile, the persistent dry weather has pushed the statewide average precipitation deficit for the year to nearly nine inches. The year-to-date precipitation total is the lowest since 1988 and eighth lowest among 140 years of records. The dryness has been particularly acute in recent months with the four months of June, July, August and September bringing the third lowest precipitation total for those months of historical record, behind only 1976 and 1894.

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