WATER SUMMARY UPDATE

No. 32

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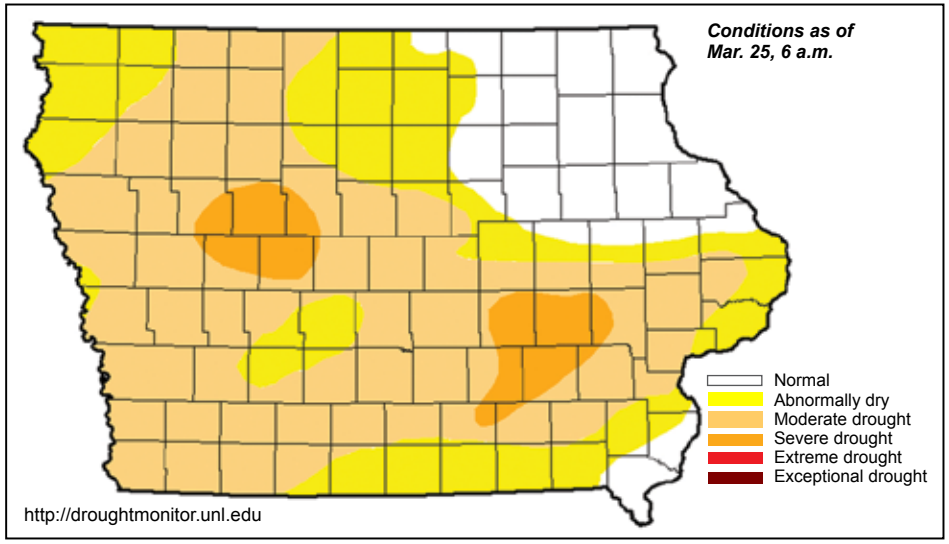
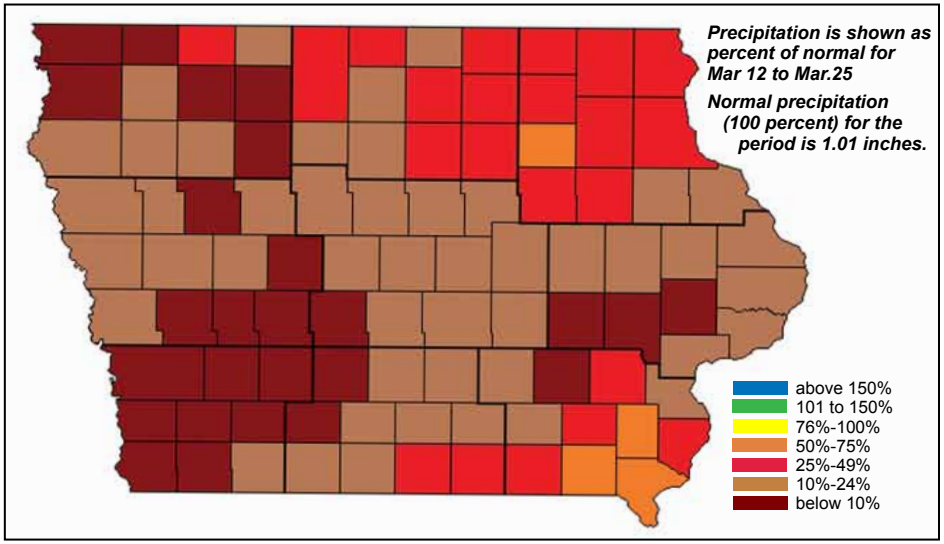
Drought Monitor

National Drought Mitigation Center and partners



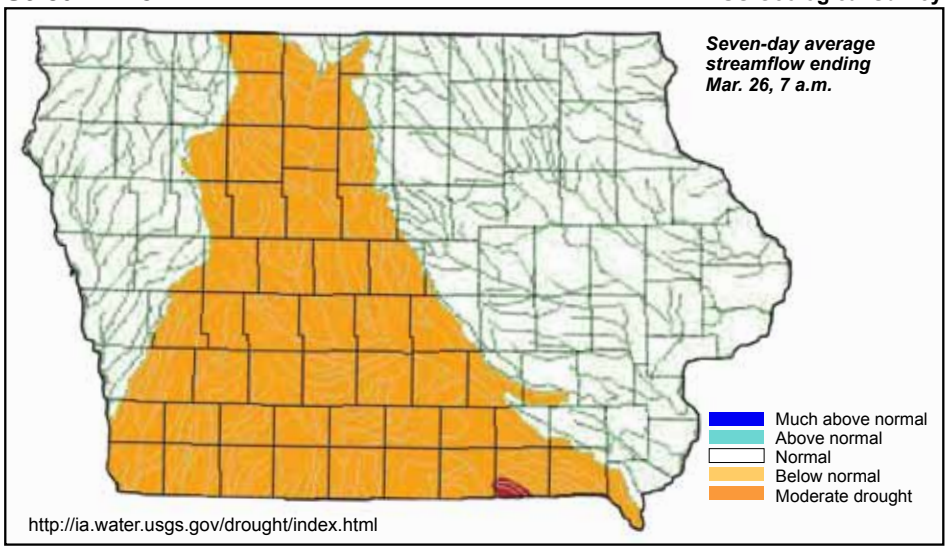
Precipitation

State Climatologist



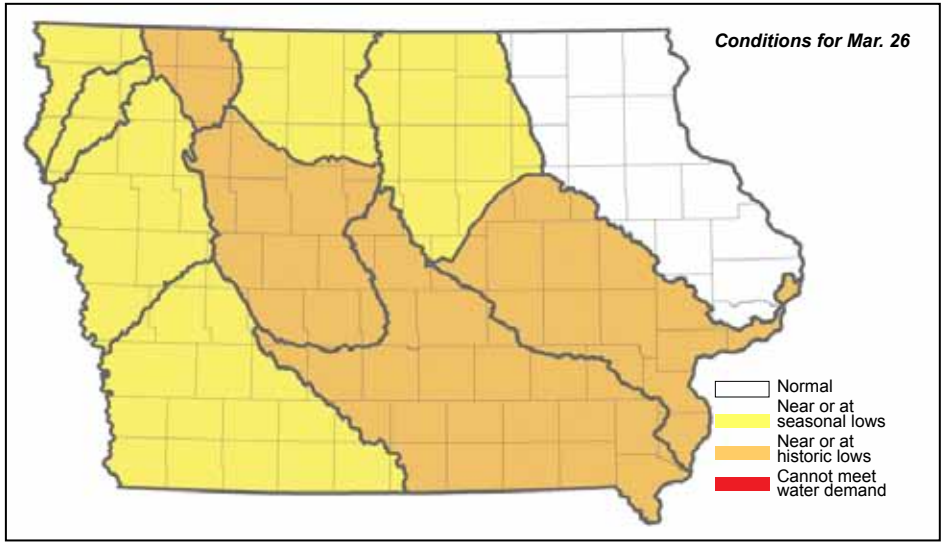
Stream Flow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

Overall Conditions

While the two weeks ending March 25 have been dry, current rains are a good sign. Overall conditions are stable in Iowa, with some signs indicating improvement, and some indicating deterioration. However, the National Oceanic and Atmospheric Administration (NOAA) predicts drought removal for nearly all of Iowa by mid-June. We are now headed into our critical months for rainfall — April, May and June — and the hope is for continued slow, steady rainfall.

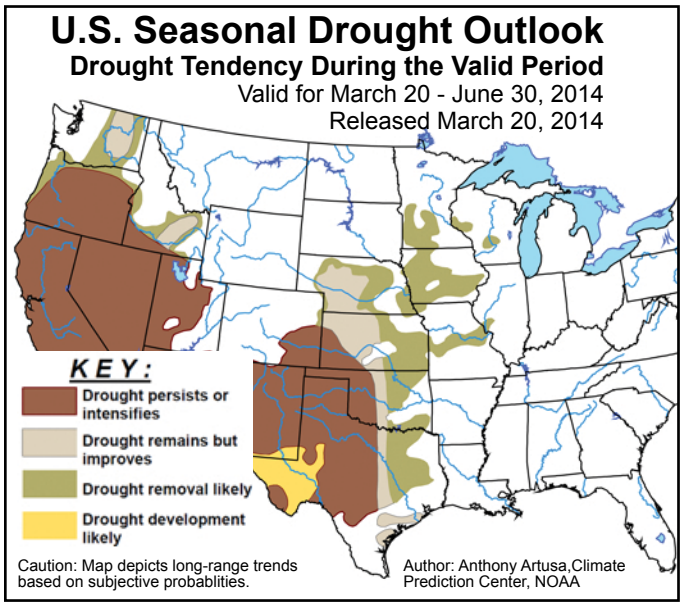
Groundwater conditions continue to hold steady, and in some cases show improvement. Stream flow is fairly low across much of the state, but that can change quickly with rainfall events.

Drought Monitor

Over the past two weeks there has been no change in Iowa conditions as shown on the National Drought Monitor. About 7 percent of the state remains in severe drought, while about half the state is rated in moderate drought. The remainder of the state is rated as either normal or abnormally dry. This is much improved over a year ago, and the most recent seasonal drought outlook predicts that by June 20 drought removal is likely for nearly all of Iowa.

Precipitation

The past two weeks have been unusually dry across most of Iowa. Precipitation totals have varied from only traces in some locations to over an inch near Salem in Henry County in southeast Iowa. The statewide average precipitation was 0.19 inches while normal for the period is 1.01 inches. The substantial snow cover that has existed this winter over north central and northeast Iowa has largely melted and is mainly confined to sheltered areas. Temperatures are now well above mid-winter levels, but have averaged 3.1 degrees below seasonal normals over the past two weeks. Soils remain frozen to depths of one to two and one-half feet across most of the state. However, thawing of the top soil has been occurring and should accelerate with a forecast of warmer weather and rain.



Shallow Groundwater

Shallow groundwater levels have been mostly stable over the past two weeks. Across western and southern Iowa, levels are either unchanged or slightly lower. Snow melt across parts of northeast and north central Iowa have caused the shallow groundwater levels to rise from one-half foot in Marshall County to over six feet in Fayette County. Adequate spring rainfall will be critical across most of Iowa to recharge the aluvial and shallow bedrock aquifers, and prevent drought conditions from reoccurring or deteriorating prior to peak summer water usage.

Stream Flow

The streamflow map displays the average flow over the past seven days compared to historical stream flow levels. Stream flow conditions across the state are at the normal condition or below normal condition level. Iowa's lowest streamflow conditions are in the Des Moines, Skunk, Nishnabotna, Chariton, Nodaway and Thompson watersheds, which are rated below normal. U.S. Geological Survey Field crews are reporting river levels lower than what is usual for this time of year, and south of I-80 ice is almost completely out.

Noteable Events in this Period

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

• The USGS streamflow index shows that average stream flow in Iowa has been dropping over the past month, but recent rains are reflected in the index upturn over the past few days.

• There is currently only one stream in Iowa below protected flow. Irrigation for general and specialty crops and for recreational uses can legally begin April 1, although the typical irrigation season does not start until late May or early June.

• DNR fisheries biologists continue to monitor oxygen levels in many areas and have seen some slight improvements in some cases. Considerable areas of ice remain in northern Iowa.

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 Department.

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