

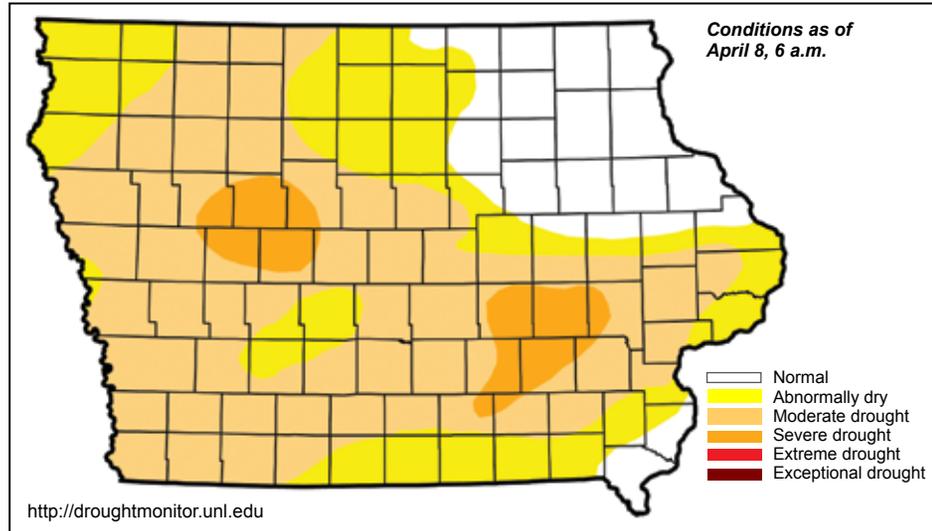
WATER SUMMARY UPDATE

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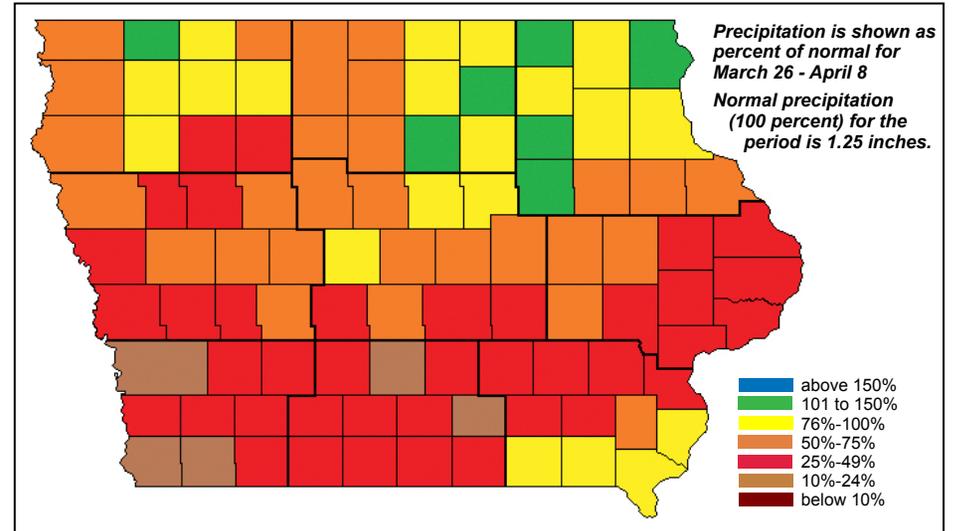
Drought Monitor

National Drought Mitigation Center and partners



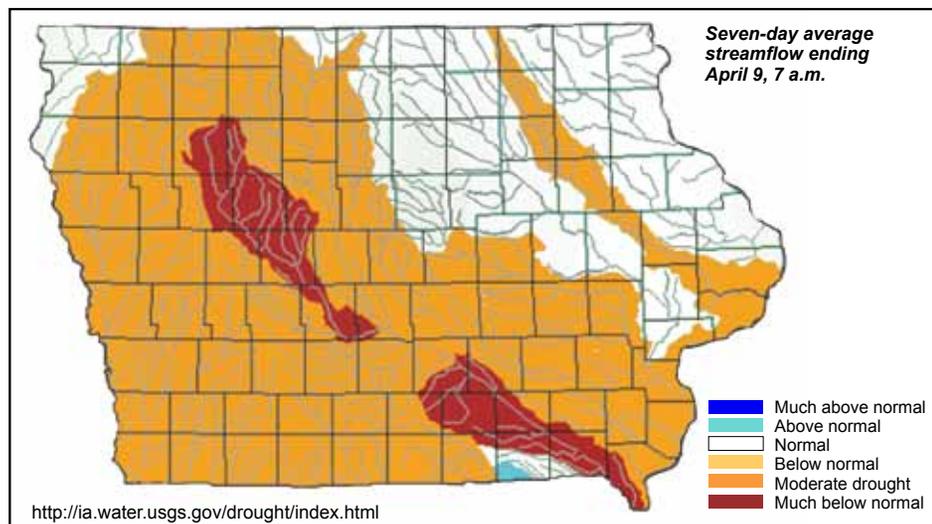
Precipitation

State Climatologist



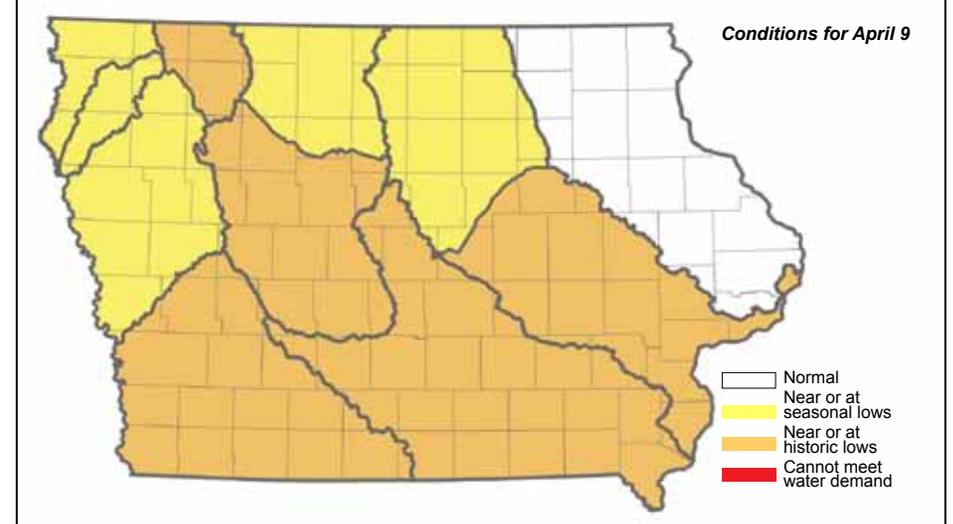
Stream Flow

US Geological Survey



Shallow Groundwater

Iowa DNR



Recent Developments and Changes

Overall Conditions

The state continues to see the overall dry conditions that have persisted since the fall of last year. Precipitation was below normal for the past two weeks, and USGS field crews have noted very low stream flows in much of the state. The National Drought Monitor remains steady, with half of Iowa continuing to be in moderate drought. Normal spring rains are needed.

Drought Monitor

The National Drought Monitor shows conditions in Iowa as generally dry. About half of the state is rated Moderate Drought and another quarter is rated Abnormally Dry. There are two small areas of the state that continue to be rated as Severe Drought. Conditions across the state have not changed for the past two months, and have been following the same general pattern of drought conditions since last fall. The last major steady improvement in drought conditions began in April 2013, so hopefully normal spring rains will lead to overall improvement this year.

Precipitation

Only a handful of northern Iowa locations had above normal amounts of precipitation the past two weeks. Showers and thunderstorms brought some rain across the state March 27, with amounts varying from just sprinkles in the far southwest to around an inch over portions of the northeast. An April 3 event brought snow to the northwest half of Iowa and rain to the remainder of the state. Four to eight inches of snow was common over the far northwest while a few locations in the extreme southeast saw about an inch of rain from this second storm. The statewide average precipitation over the period was 0.76 inch or 0.50 inches less than normal. Totals varied from 0.11 inch at Sidney to 2.13 inches at Nora Springs.

Water Year Precipitation: The Water Year began in October, and through March, the state received less than eight inches of rain, compared to the normal of over 10 inches.

Temperatures averaged 3.9 degrees below normal, with extremes varying from a low of 7 degrees at Cresco March 26 to 79 degrees at Clarinda March 31. Iowa has endured 12 consecutive two-week periods of below normal temperatures.

Topsoils have thawed statewide; however, considerable subsoil frost remains over portions of northern Iowa.

Shallow Groundwater

Shallow groundwater levels in April 2014 are largely unchanged from the previous month. Water levels are up to 1.5 feet higher in O'Brien, Marshall, Hancock, and Fayette counties, and as much as 0.2 feet lower in Crawford, Montgomery, and Lucas counties. In general, dryness appears to have intensified in southwest, west central, and south central Iowa.

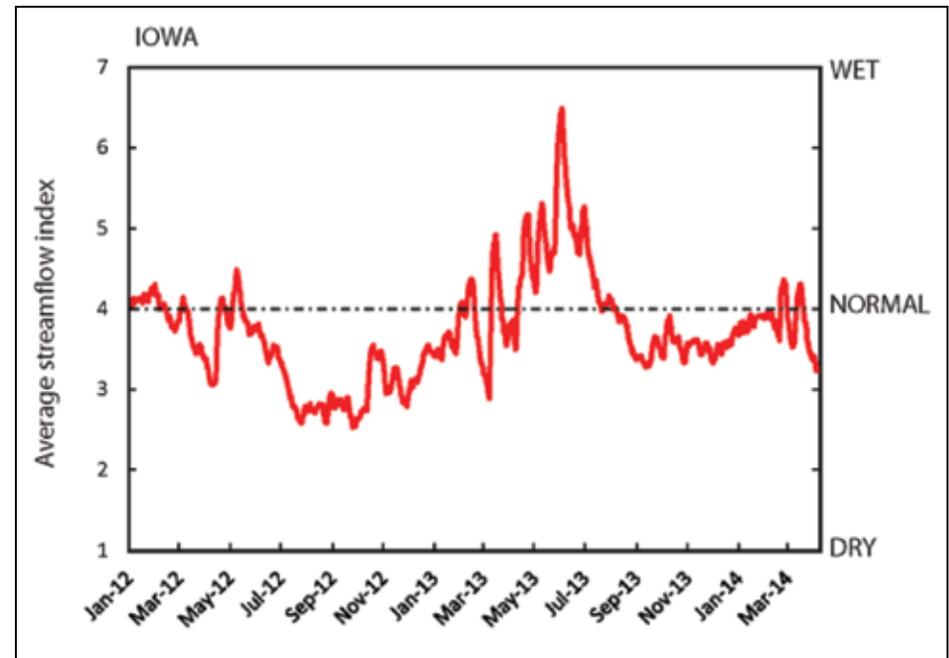
Adequate spring rainfall will be critical to recharge the alluvial and shallow bedrock aquifers, and prevent drought conditions from reoccurring or deteriorating prior to the increase in water use that occurs as the weather gets warmer.

Prepared by the Iowa DNR in collaboration with the Iowa Department of Agriculture and Land Stewardship, the U.S. Geological Survey, IHR-Hydroscience and Engineering and The Iowa Homeland Security and Emergency Management Department.

Stream Flow

Overall stream flows have decreased the last two weeks and are below normal for most of the state. The lowest stream flow conditions are in the Raccoon and Des Moines River basins, which have less than 10 percent of normal stream flow.

Streams across the northeastern portion of the state are at normal levels, with the exception of the Wapsipinicon River which has below normal flow.



Streamflow Index: The USGS streamflow index for Iowa over the past 15 months shows that average stream flows have generally been below normal since last fall, with average flows approaching the low flows of a year ago.

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