



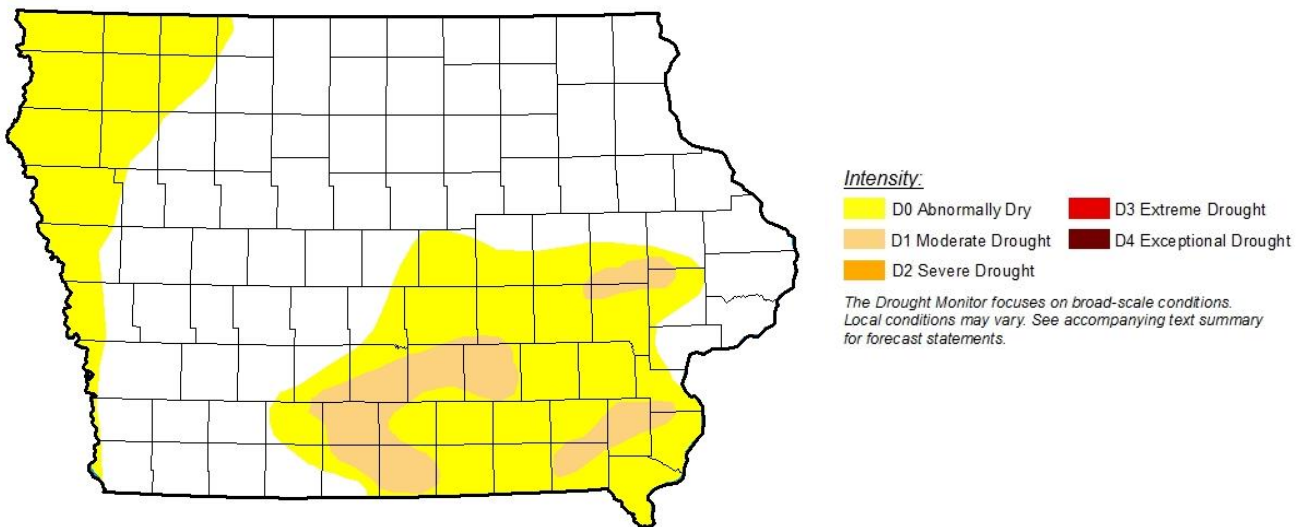
WATER SUMMARY UPDATE

Published Date December 11, 2017 | Issue 81

A snapshot of water resource trends from November 2017

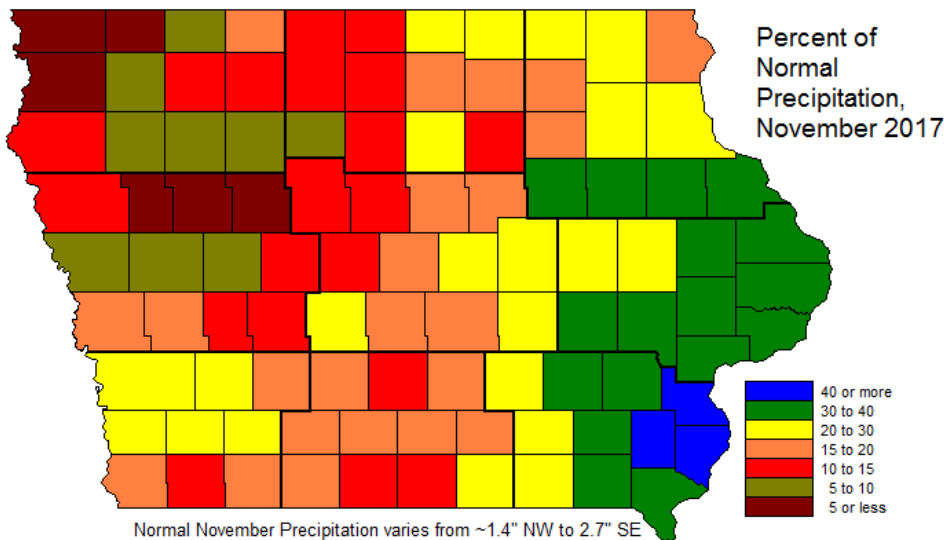
Drought Monitor - Conditions as of December 5, 7 a.m.

National Drought Mitigation Center and partners



Precipitation - Percent of normal precipitation for November 2017.

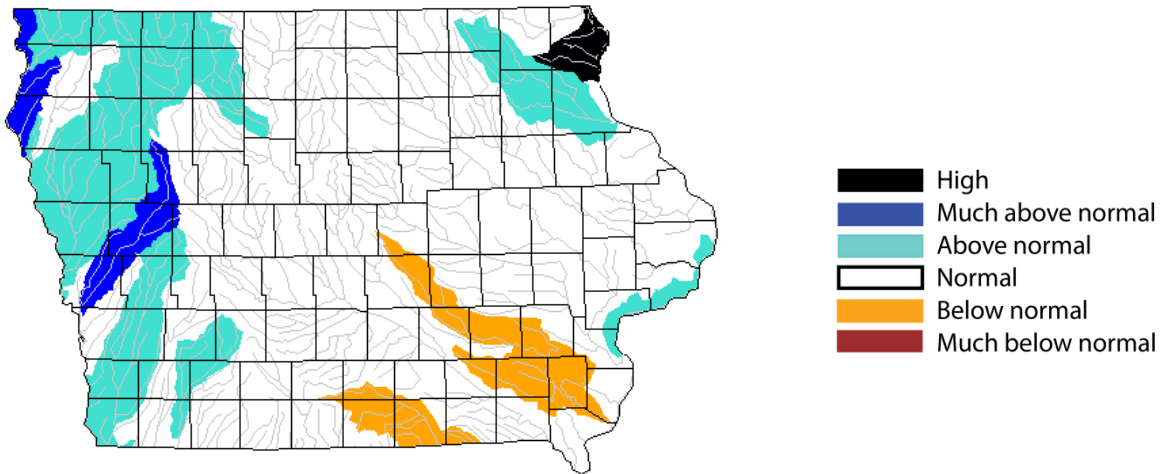
State Climatologist



Stream Flow - Seven-day average stream flow ending December 6, 2017.

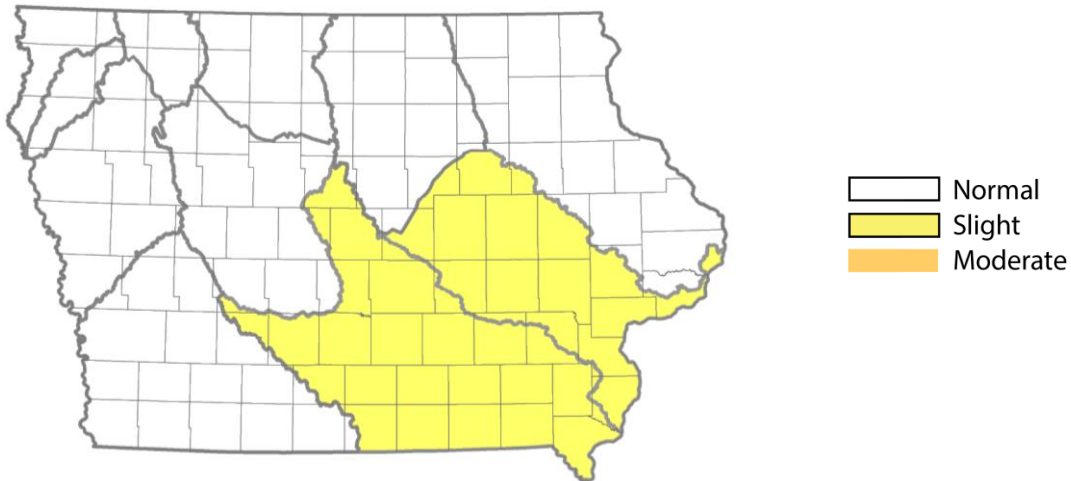
US Geological Survey

Wednesday, December 06, 2017



Shallow Groundwater - Conditions for November 2017

Iowa DNR and IIHR-Hydroscience and Engineering



Recent Developments and Changes

SUMMARY

The Month of November was very dry in Iowa, leading to the National Drought Monitor showing abnormally dry conditions in Northwest Iowa for the first time since September. The state received only 0.43 inches of precipitation for the month, much below the normal of 2.05 inches. November precipitation leaves the state about 1.25 inches below normal for the year. Streamflow levels are running at close to normal across much of Iowa, while groundwater conditions remain good in most locations, with the exception of southeastern Iowa, where levels are rated in a slight drought conditions.

DROUGHT MONITOR

Over the last month conditions across the state have been relatively stable across the southeast part of Iowa, but the northwest corner of the state has now been classified as D0 (Abnormally Dry). The area in northwest Iowa covers large portions of 11 counties. In southeast Iowa conditions remain generally unchanged over the last month, with about one third of the southeastern area of Iowa rated as abnormally dry, with almost seven percent of the state rated as D1 (Moderate Drought). There remains a large area of significant dryness and drought in Montana and the Dakotas, and a large area of drought intensifying over much of Missouri and all of Arkansas, as well as major portions of Oklahoma, Texas, Louisiana, and Mississippi.

CURRENT STREAM FLOW

Since the last water summary update, streamflow conditions in much of the state have decreased to the normal condition. A portion of the Skunk and Chariton River basins moved to the below normal conditions. Streamflow conditions are above normal for several basins in the across the western portion of the state. The Yellow River basin has moved into the high range.

NOVEMBER PRECIPITATION

The dry weather that prevailed across Iowa in mid-October persisted statewide through all of November. During a normal November Iowa receives 2.05 inches of precipitation – but November 2017 saw just 0.43 inches on average across the state. Precipitation totals varied from only a trace (less than 0.01 inch) at Washta in Cherokee County and at Holstein in Ida County to 1.51 inches at Lost Nation in Clinton County. This ranks as the 15th lowest November total among 145 years of records and the lowest calendar month total for any month since November 2007. Meanwhile an unseasonably cold first one-half of November was nearly cancelled out by a very mild second one-half of the month. Temperatures for the month as a whole averaged 36.2° or 0.4° below normal with readings across eastern Iowa averaging a degree or two below normal while the west and northwest was a similar amount above normal. The last USDA Crops and Weather report of the season on November 26 indicated that sub soil moisture levels were 72% short to very short across south central Iowa with 61% of southeast Iowa in the same condition. These are the lowest soil moisture levels recorded at this time of year since 2013 and reflect the impact of two consecutive unusually dry growing seasons in these areas of the state. Subsoil moisture levels elsewhere across the state are mostly near, or slightly above, seasonal norms. Contrary to typical seasonal trends during the fall months, areas of drought have expanded and intensified over much of the southern one- half of the U.S., particularly across the southern plains and lower Mississippi Valley.

SHALLOW GROUNDWATER

Dry conditions prevailed across most of Iowa during the month of November. Shallow groundwater conditions in south central and southeast Iowa remain in a slight drought classification.

ADDITIONAL INFORMATION

For additional information on the information in this Water Summary Update please contact any of the following:

General Information Tim.Hall@dnr.iowa.gov 515-725-8298
Drought Monitor. Harry.Hillaker@iowaagriculture.gov 515-281-8981
Precipitation. Harry.Hillaker@iowaagriculture.gov 515-281-8981
Stream Flow. Daniel Christiansen, dechrist@usgs.gov 319-358-3639
Stream Flow. Michael.Anderson@dnr.iowa.gov 515-725-0336

Shallow Groundwater.....Michael.Anderson@dnr.iowa.gov 515-725-0336