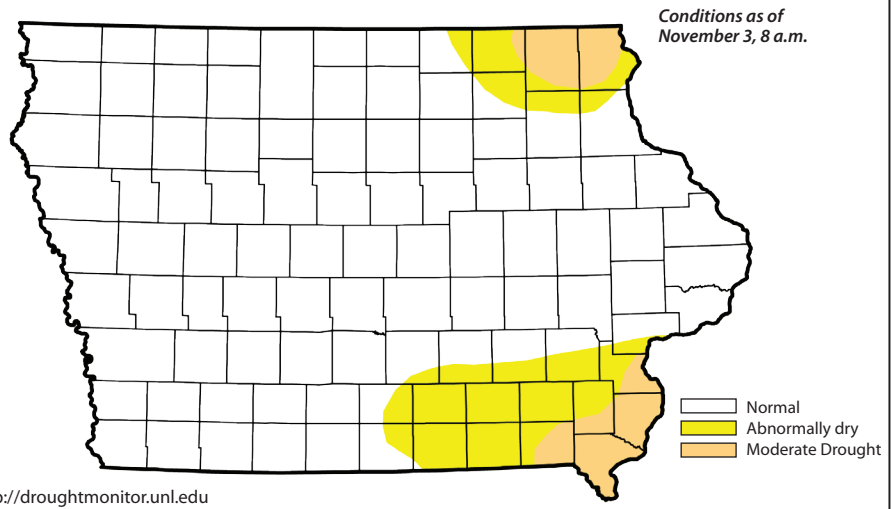
WATER SUMMARY UPDATE

No. 58

Published Date
November 10, 2015

Drought Monitor

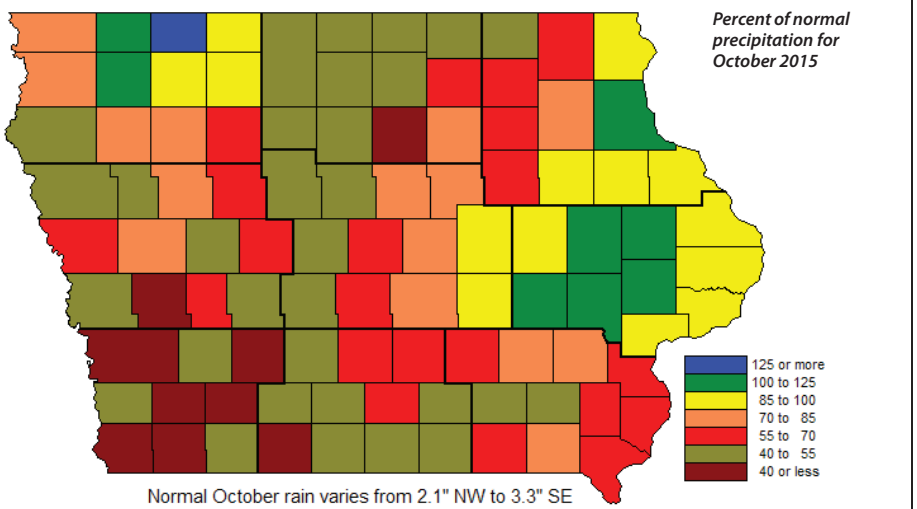
National Drought Mitigation Center and partners



http://droughtmonitor.unl.edu

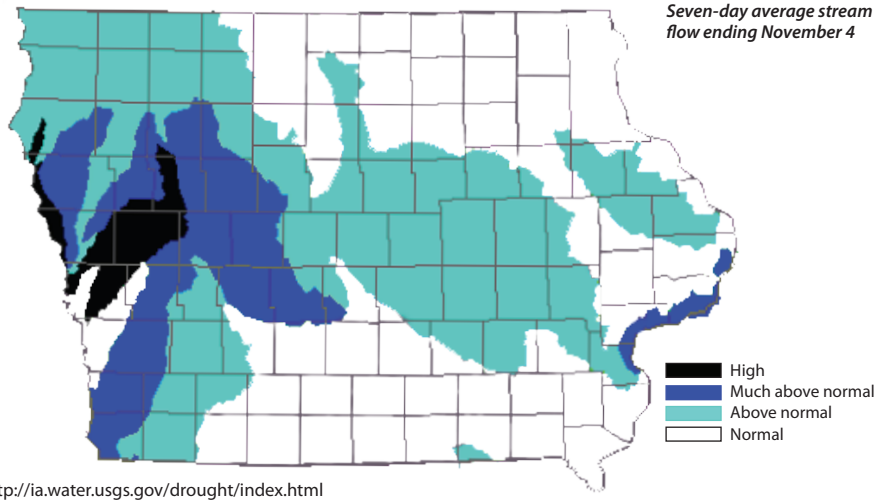
Precipitation

State Climatologist



Stream Flow

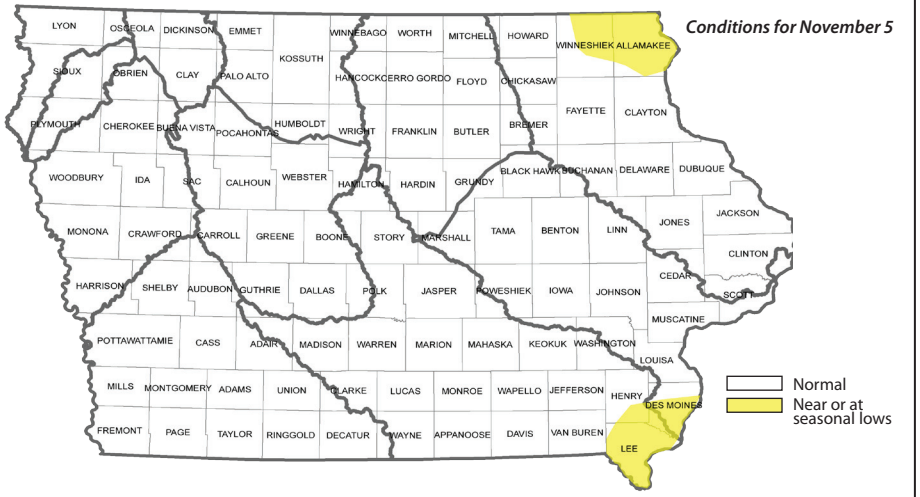
US Geological Survey



http://ia.water.usgs.gov/drought/index.html

Shallow Groundwater

Iowa DNR and IIHR-Hydroscience and Engineering



Recent Developments and Changes

Summary:
Overall conditions in Iowa continue to trend fairly normal as the state moves from fall into winter conditions. Precipitation for 2015 is slightly wetter than normal, with northeast Iowa much dryer than normal and western and southwestern Iowa much wetter than normal. Streamflow reflects these rainfall patterns, with streams in western Iowa much above average, while northeastern Iowa streams are near normal flows. The next four months are traditionally the driest and coldest of the year, so hydrologic conditions should remain stable – barring any significant rainfall events.

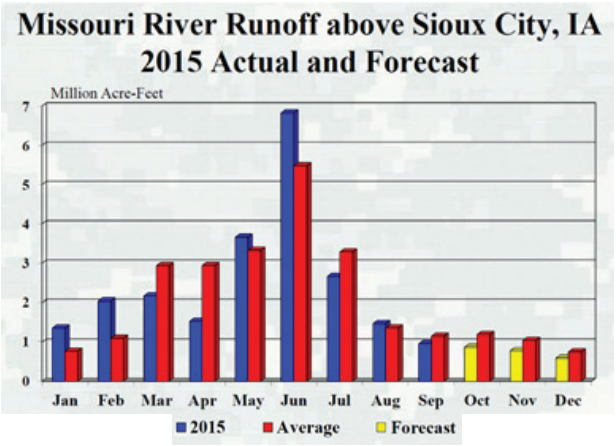
Precipitation:
October 2015 was warmer and drier than normal over most of Iowa – especially the first 19 days of the month when only a trace of rain fell. The first widespread hard freeze of the season occurred on October 17 over the northeast one-half of the state, plus portions of northwest Iowa. Nearly all of the rain for the month fell over the final 11 days of October, and totaled 1.74 inches, which is 0.87 inches below normal for the state. October rain totals varied from 0.61 inches at Glenwood to 4.07 inches in Cedar Rapids. The relatively warm and dry October weather was nearly ideal for harvest. Recent dry weather is not particularly concerning due to the very wet weather that prevailed from May through September which ranked as the sixth wettest such period among 143 years of records.

Groundwater:
Parts of Northeast and Southeast Iowa continue to have below normal precipitation and remain in a slight drought category. Precipitation across parts of Northwest Iowa has improved shallow groundwater conditions, with shallow groundwater there being now reclassified as normal.

Streamflow:
Streamflow conditions were above or much above normal for approximately half of the state. Since the last water summary update, streamflow conditions across the state have decreased from much above normal conditions, and above normal conditions across the majority of the state, to normal conditions across half the state. The Boyer and Soldier Rivers remain in the high streamflow condition.

Drought Monitor:
Although most of the state remains free from dryness and drought, conditions are becoming less favorable in the northeast and southeast portions of Iowa. This week's National Drought Monitor indicates that about ten percent of Iowa is abnormally dry, and another five percent is classified as being in moderate drought. These numbers have been slowly increasing over the past few weeks, but should remain stable as drought conditions generally change little over the winter months.

Missouri River Basin – Fall Corps of Engineers' Outlook:
The US Army Corps of Engineers (COE) presented its Fall 2015 Summary and Outlook in Council Bluffs on October 29. During that meeting, Summary COE staff reviewed 2015 runoff in the river basin, and provided outlooks for the rest of 2015 and into 2016. Key information from the COE includes the fact that all flood storage space will be available to start 2016 runoff season, all reservoirs should have near normal releases and levels, river basin runoff should end the year near its median level, and that good service is anticipated for all COE authorized purposes.



The COE figure shows 2015 basin cycles of wetter than normal in January and February, then dryer than normal in March and April, then much wetter than normal in May and June. This variability should result in 2015 basin flow being right at normal for the Missouri River.

Contacts

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 ..... Mike-Gannon@uiowa.edu 319-335-1581

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