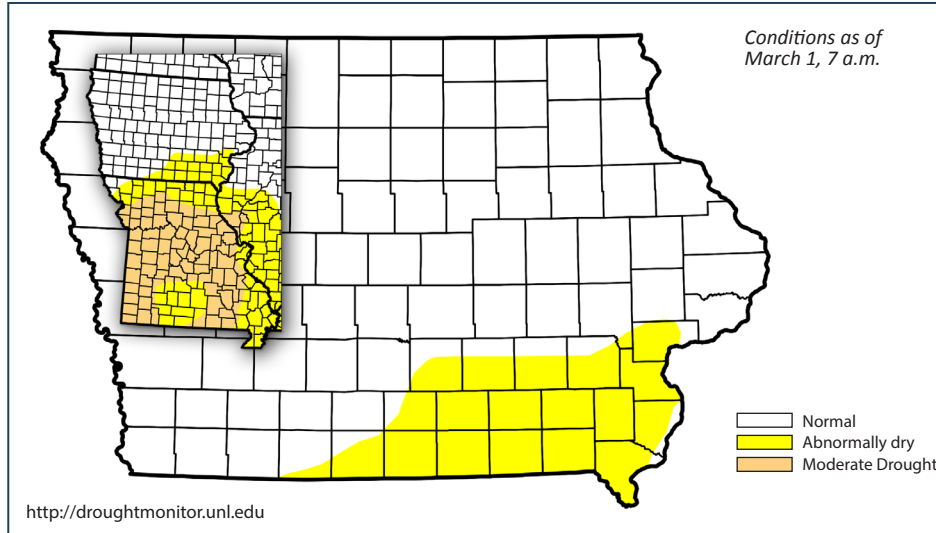


WATER SUMMARY UPDATE

PUBLISHED DATE
MARCH 7, 2017

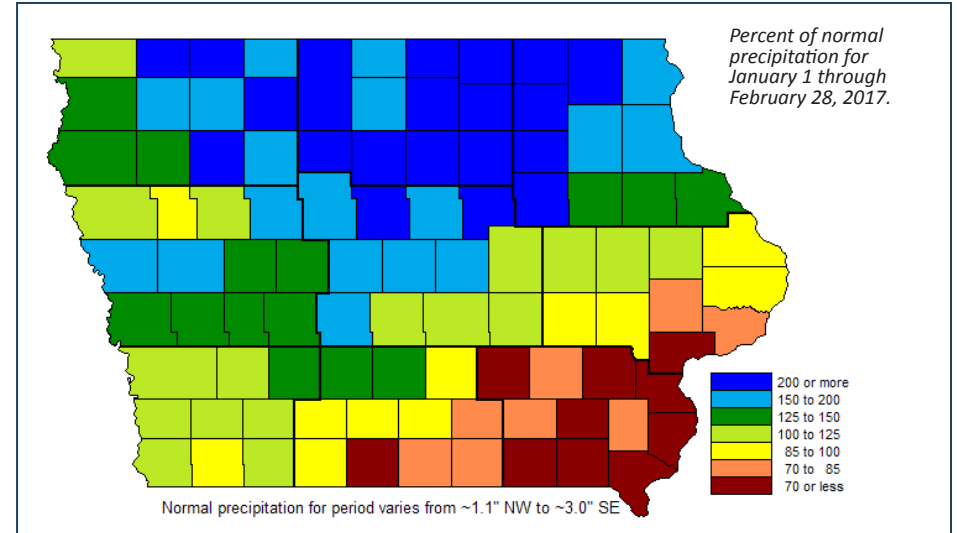
Drought Monitor

National Drought Mitigation Center and partners



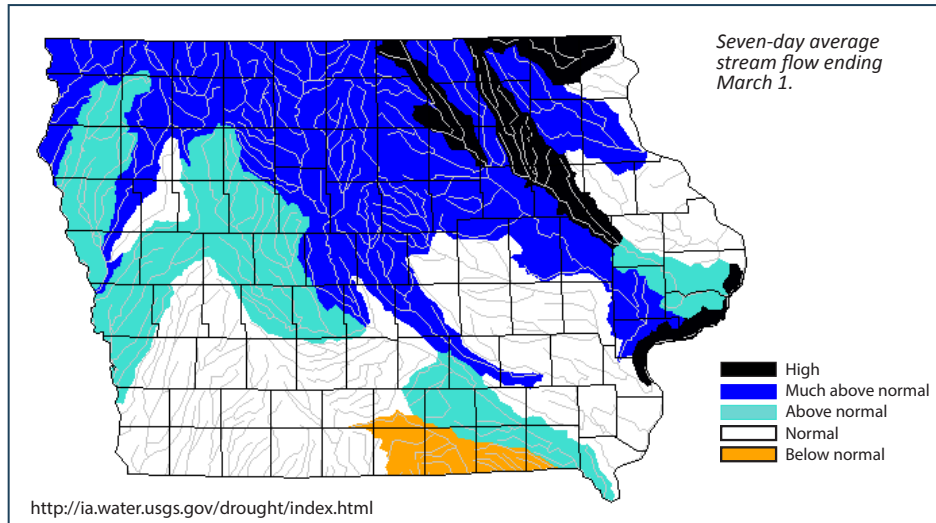
Precipitation

State Climatologist



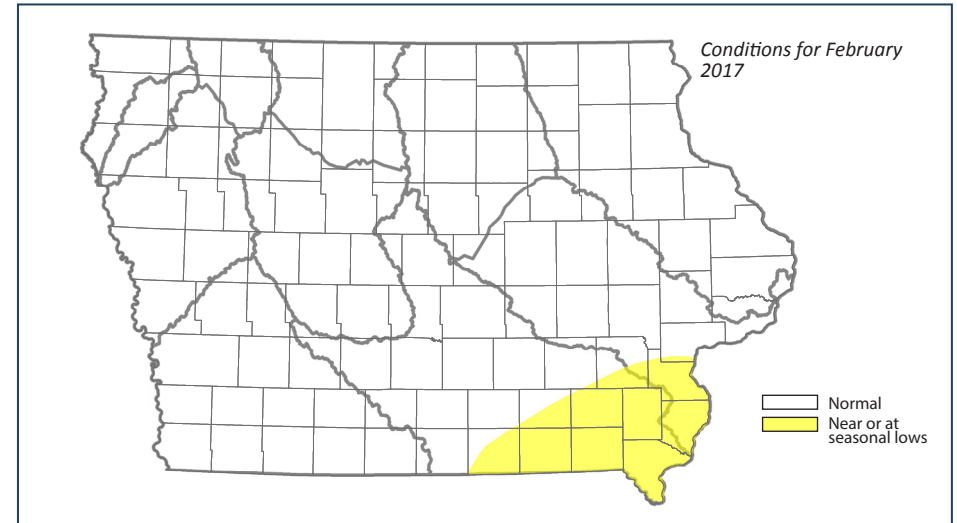
Stream Flow

US Geological Survey



Shallow Groundwater

Iowa DNR and IHR-Hydroscience and Engineering



RECENT DEVELOPMENTS AND CHANGES

SUMMARY

There continues to exist a sharp contrast in the hydrologic conditions from north to south across the State of Iowa. The pattern of wetness to the north and dryness to the south has changed very little over the winter – with the southeast quarter of Iowa remaining the driest part of the state. This is an extension of the wider dryness and drought that covers nearly the entire state of Missouri to our south.

DROUGHT MONITOR

The National Drought Monitor has remained virtually unchanged since the start of 2017. There is an area that includes part or all of 19 counties in southeast Iowa that are rated as being abnormally dry. To the south of Iowa there is a large area of dryness and drought that covers much of Missouri, Arkansas, Kansas, and Oklahoma.

CURRENT STREAM FLOW

Streamflow conditions are above normal for the majority of the state. Since the last water summary update, streamflow conditions across the majority of the southern half of the state have decreased to normal conditions, with the northern portion of the state increasing into above normal conditions. Most streams in Iowa are no longer ice covered and USGS crews continue to make streamflow measurements to verify real-time values.

FEBRUARY PRECIPITATION

January and February are typically Iowa's driest months of the year. So far in 2017 precipitation has been about double the normal amounts over far northern Iowa and below normal over about the southeast one-third of the state. This pattern of wet north and dry southeast is very similar to the precipitation pattern seen across Iowa in 2016. Soils are estimated to be drier than normal over much of south central and southeast Iowa and exceptionally wet over north central and northeast Iowa. Parts of south central and southeast Iowa, centered upon Monroe and Wapello counties, and locations immediately to their south, are in great need

for precipitation to replenish depleted soil moisture before the growing season. February 2017 warmth was exceeded only in 1954 among the past 145 years of Iowa records. The warm start to the year is prompting vegetation to come out of dormancy sooner than usual and could exacerbate the dry conditions prevailing across south central and southeast Iowa owing to an earlier than usual start of evapotranspiration.

SHALLOW GROUNDWATER

Shallow groundwater conditions vary considerably across Iowa after the first two months of 2017. Most of the state has normal to above normal shallow groundwater levels. The one exception is south central and southeast Iowa, where dry conditions persist. Parts of central Iowa are starting to observe falling shallow groundwater levels. Adequate spring rainfall in 2017 will be critical across parts of south central and southeast Iowa to recharge the shallow aquifers.

FROST

Very mild late February weather has eliminated frost from the ground over the southern two-thirds of the state with only minimal frost remaining at depth over parts of the north. With mild weather expected to predominate over the next couple of weeks any precipitation that does fall should be able to soak into the ground unhindered by frozen soil.

FLOODING OUTLOOK

The National Weather Service (NWS) indicates that the risk of minor, moderate and major river flooding is generally near normal at all locations. Beginning in early April the NWS will result issuing monthly flooding outlooks that will cover each month. The NWS reminds Iowans that it is important to monitoring weather and river conditions--as well as future outlooks--for any changes to the flood threat. Any future precipitation--as well as changes to river or other weather conditions--may increase or decrease the risk of flooding.

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