

MAC-T Monthly Call

Midwest Agriculture and Climate Team

January 31, 2019

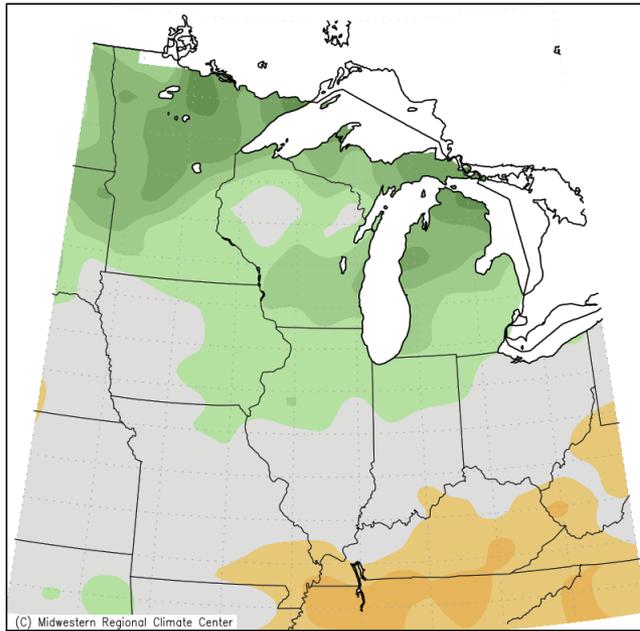
Contact for more information:

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Average Temperature (°F): Departure from Mean
January 1, 2019 to January 30, 2019



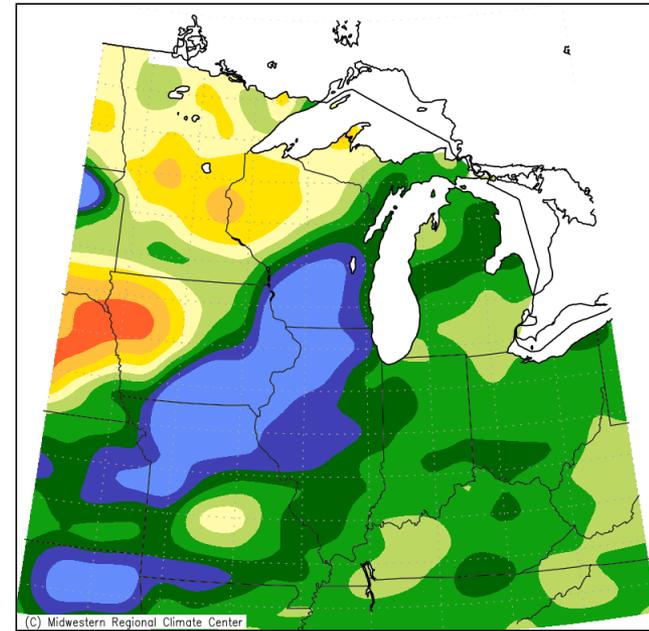
(C) Midwestern Regional Climate Center

Mean period is 1981–2010.



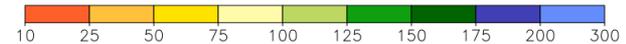
Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

Accumulated Precipitation: Percent of Mean
January 1, 2019 to January 30, 2019



(C) Midwestern Regional Climate Center

Mean period is 1981–2010.

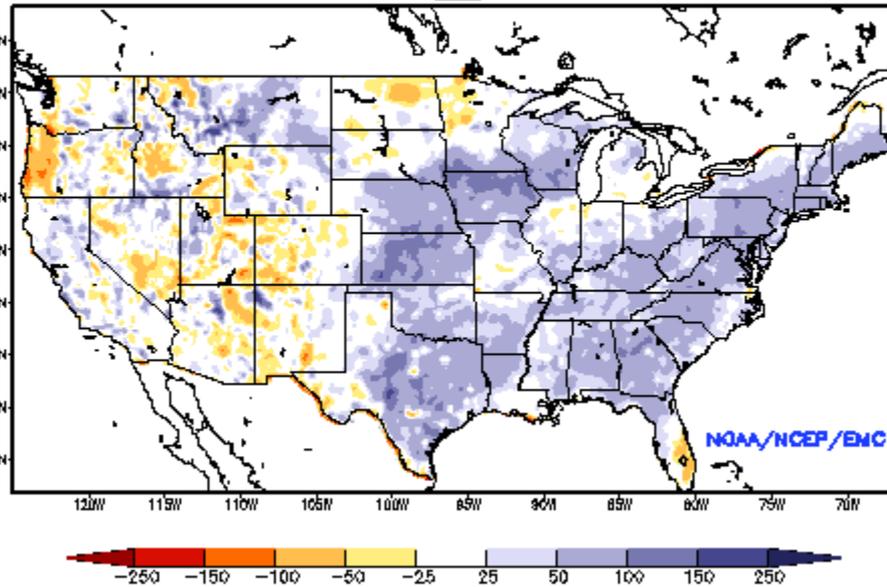


Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

- Extreme cold in late January only brought temperatures close to average except for far northern areas of the region
- Much wetter than average conditions reached from Kansas to Wisconsin
- Some drier areas in the west and north

Soil Moisture

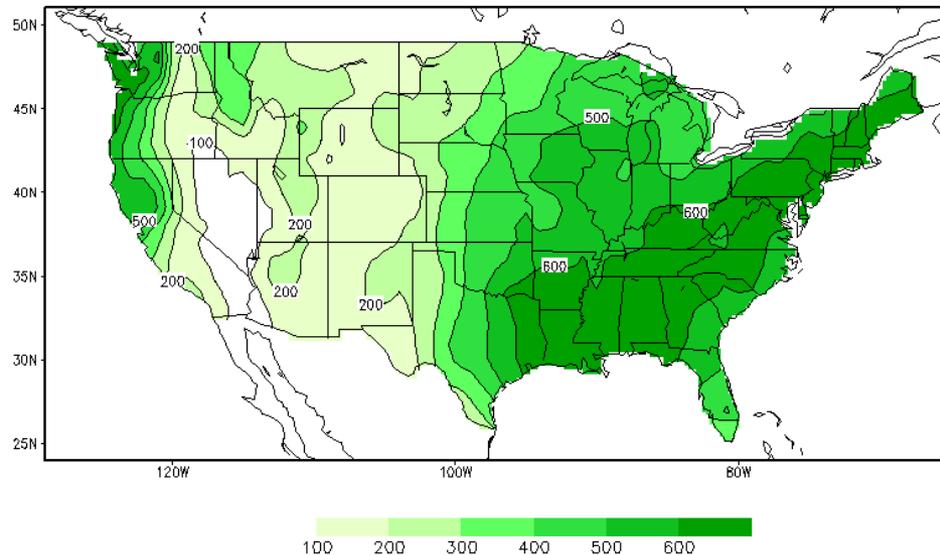
Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: JAN 27, 2019



<http://www.emc.ncep.noaa.gov/mmb/nldas/drought/>

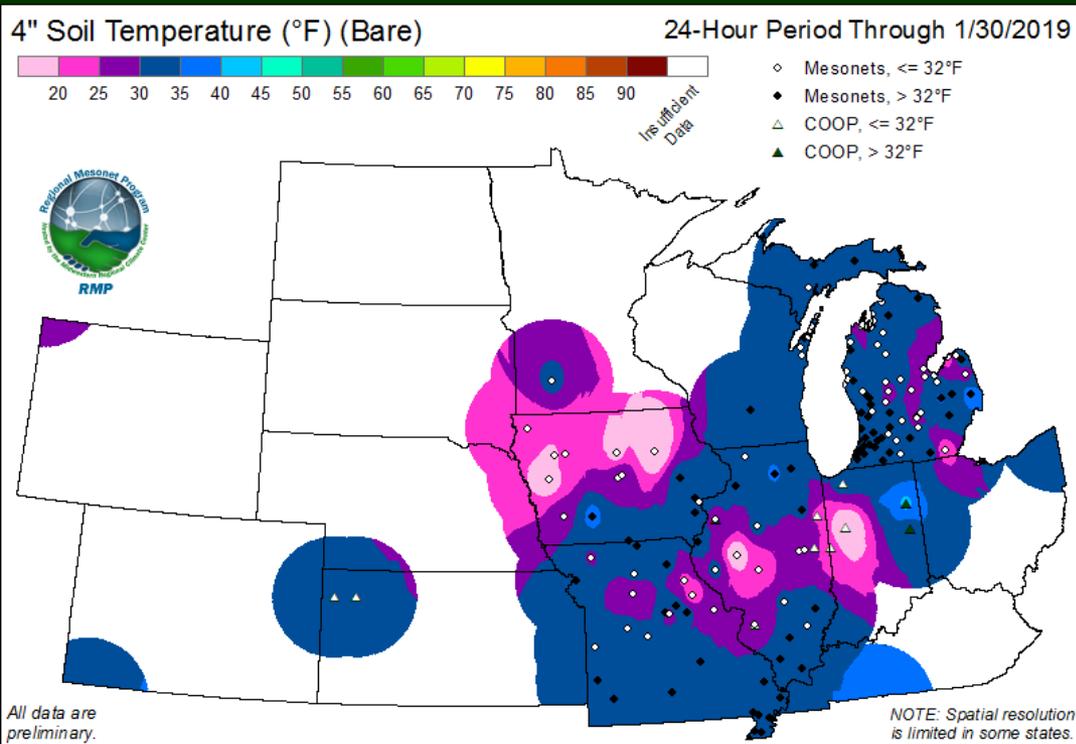
- Soils generally wetter than average across the region from the fall and early winter precipitation
- Wetter soils will be at risk for delayed spring field work

Calculated Soil Moisture (mm)
JAN 30, 2019



http://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml#

Soil Temperature

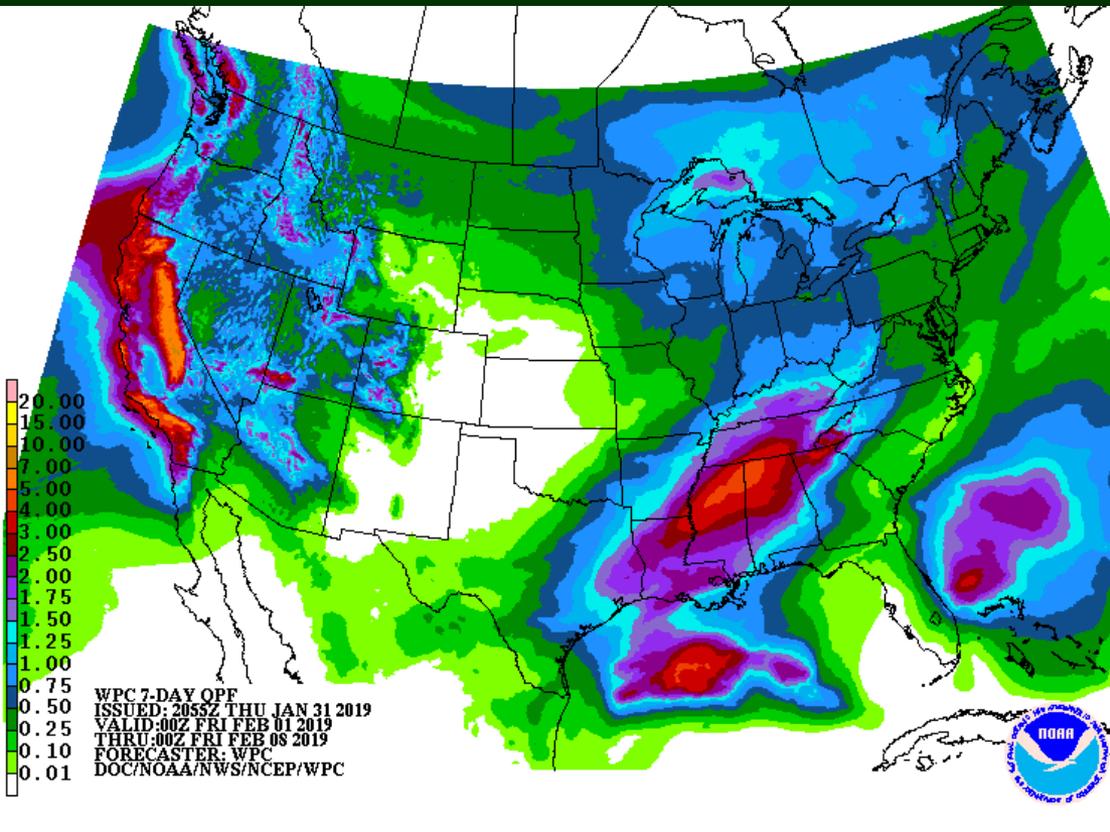


- Soil temperatures show an interesting feature
- Colder north and in central IL-IN
- Heavier snow pack has kept soils warmer – insulating from the colder temperatures and limiting the amount of freezing
- Colder soils are locations where less snow cover has allowed soils to freeze more

Assorted AG Issues

- Still reports of some unharvested corn and beans
- Cold temperatures likely had an impacts on agriculture with stress on livestock and operators
- Winter grains, fruit tress and other perennials likely sustained some damage - Full extent may not be known before spring
- Insects – tough call: Extreme cold likely killed off some. But the snow cover over many areas may have insulated from the cold.

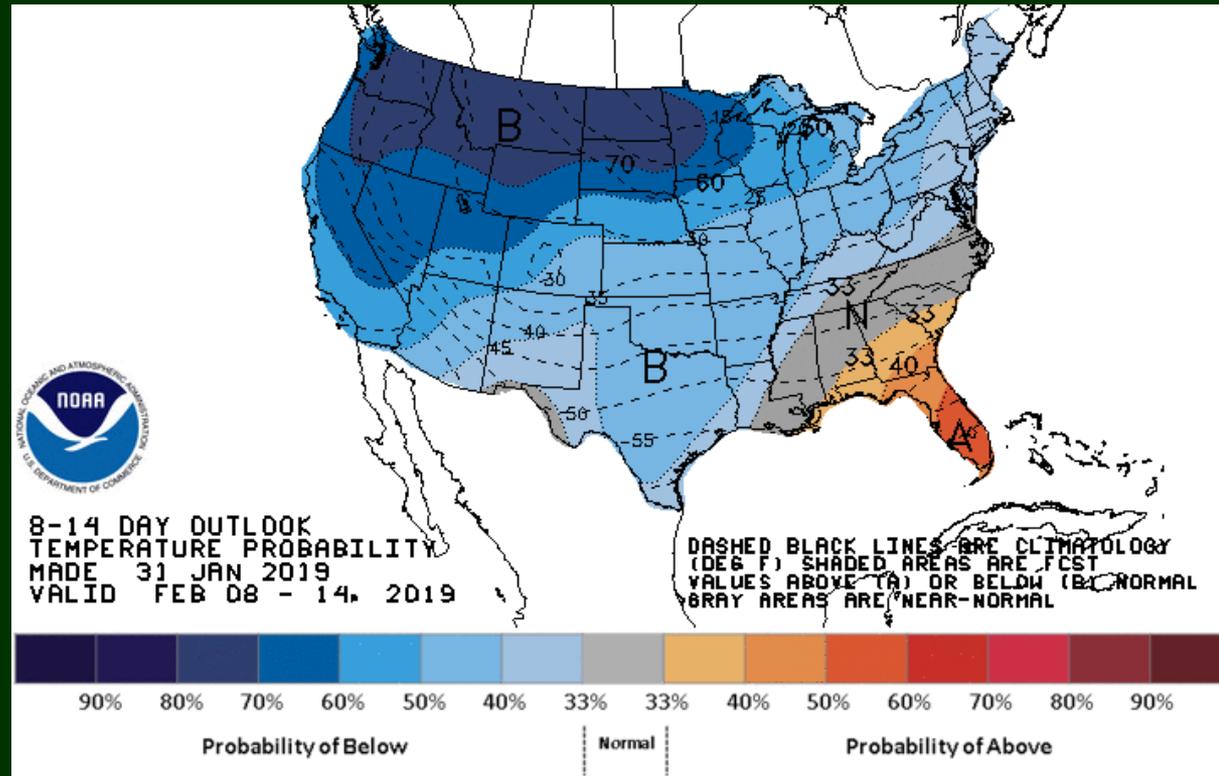
1-7 Day Precip



- Early part of a likely more active February
- Some of this precip likely to fall as liquid

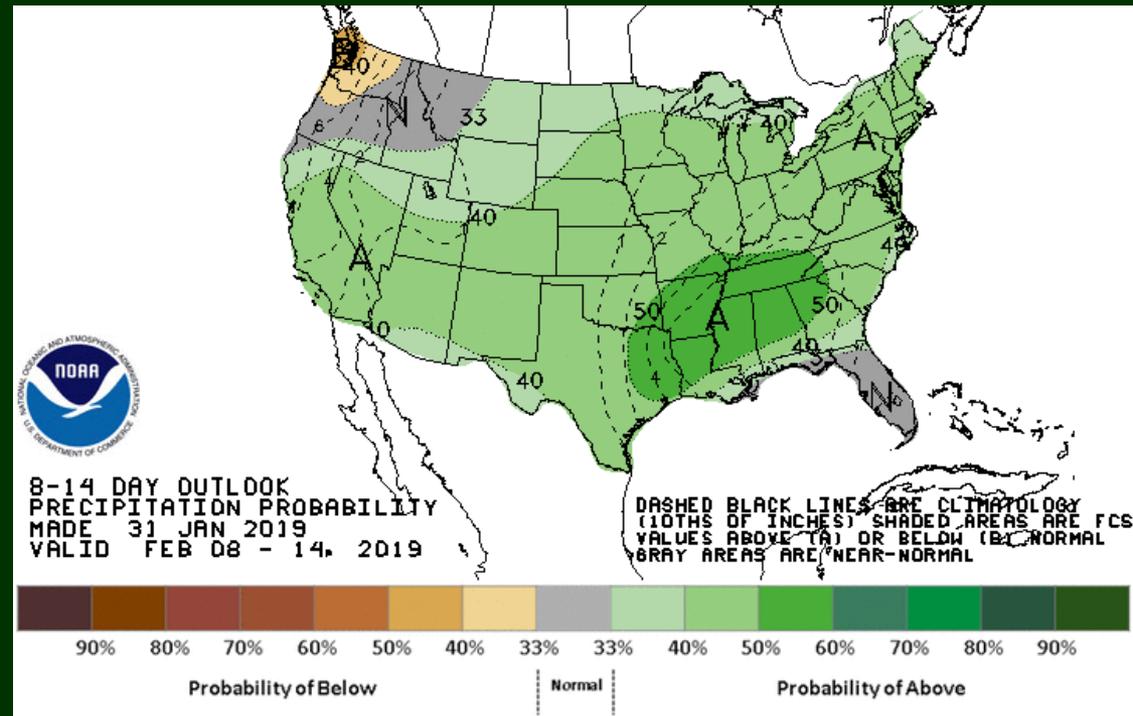
Temperature Outlook

- After few days of warmth, cold returns to the region.
- Temperatures will not be as extreme
- Higher likelihood of cold is more over the plains and NW US



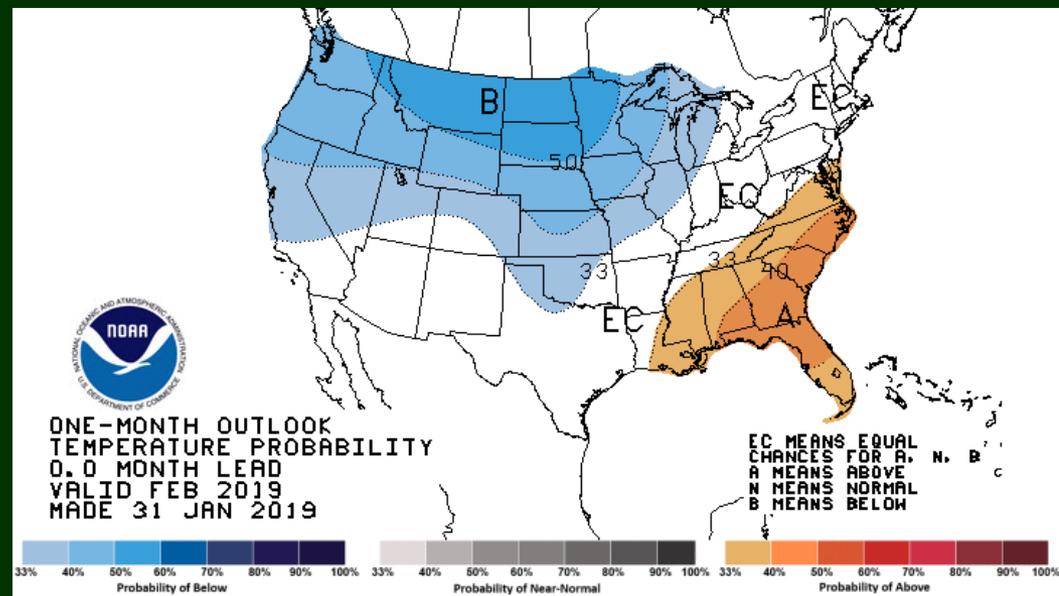
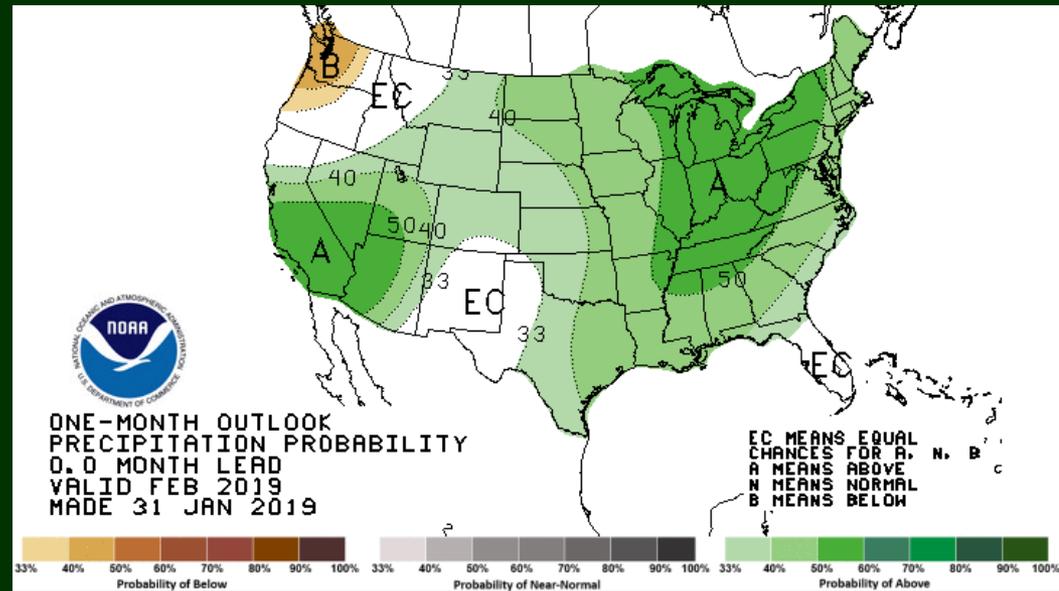
Precipitation Outlook

- A more active pattern seems likely in early February. With colder temperatures could very well mean more snow.



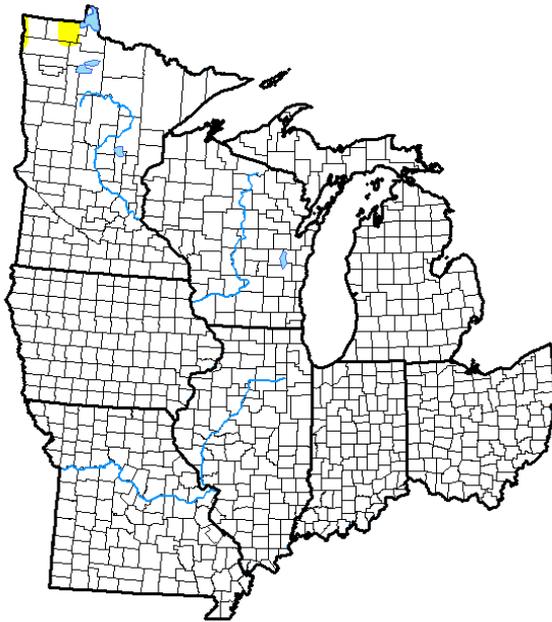
1-Month Outlook

- Similar to the 8-14 day colder and wetter seem more likely through most of the region.
- Higher likelihood of wetness over the Great Lakes and Ohio Valley (where soils are not as wet)
- Most of the corn belt will go into spring with wetter soils.



Drought in the Midwest

U.S. Drought Monitor USDA Midwest Climate Hub



January 29, 2019
(Released Thursday, Jan. 31, 2019)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	99.65	0.35	0.00	0.00	0.00	0.00
Last Week <i>01-22-2019</i>	99.65	0.35	0.00	0.00	0.00	0.00
3 Months Ago <i>10-30-2018</i>	93.91	6.09	0.16	0.00	0.00	0.00
Start of Calendar Year <i>01-01-2019</i>	99.21	0.79	0.00	0.00	0.00	0.00
Start of Water Year <i>09-25-2018</i>	79.61	20.39	9.31	1.86	0.40	0.01
One Year Ago <i>01-30-2018</i>	62.94	37.06	13.62	3.75	0.20	0.00

Intensity:

■ D0 Abnormally Dry ■ D3 Extreme Drought
■ D1 Moderate Drought ■ D4 Exceptional Drought
■ D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

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National Drought Mitigation Center



<http://droughtmonitor.unl.edu/>

Cold temperatures dominated the region. Areas of the upper Midwest were 15-20 degrees below normal for the week while southern areas were 5-10 degrees below normal. Ample precipitation was recorded over most of the region, with areas of Illinois, Indiana, and Ohio at over an inch above normal for the week. No drought issues are being observed in the region.

Summary

- Cold not done for the winter, though temperatures unlikely to be as extreme
- Decent snow cover and wet soils increase chances of soils being wet into spring
- Colder and wetter conditions indicate a more active February with snow still a likelihood

Next MAC-T Monthly Call

Calls through the winter will be on a 'as needed' basis. Monthly calls will resume in the Spring 2019.

****PowerPoints (like this one) will still be sent out once a month.**