

# Hydrologic and Climate Assessment

January 17, 2018



**Aaron B. Wilson**

**STATE CLIMATE OFFICE OF OHIO (SCOO)**

DEPARTMENT OF EXTENSION - CFAES

BYRD POLAR & CLIMATE RESEARCH CENTER

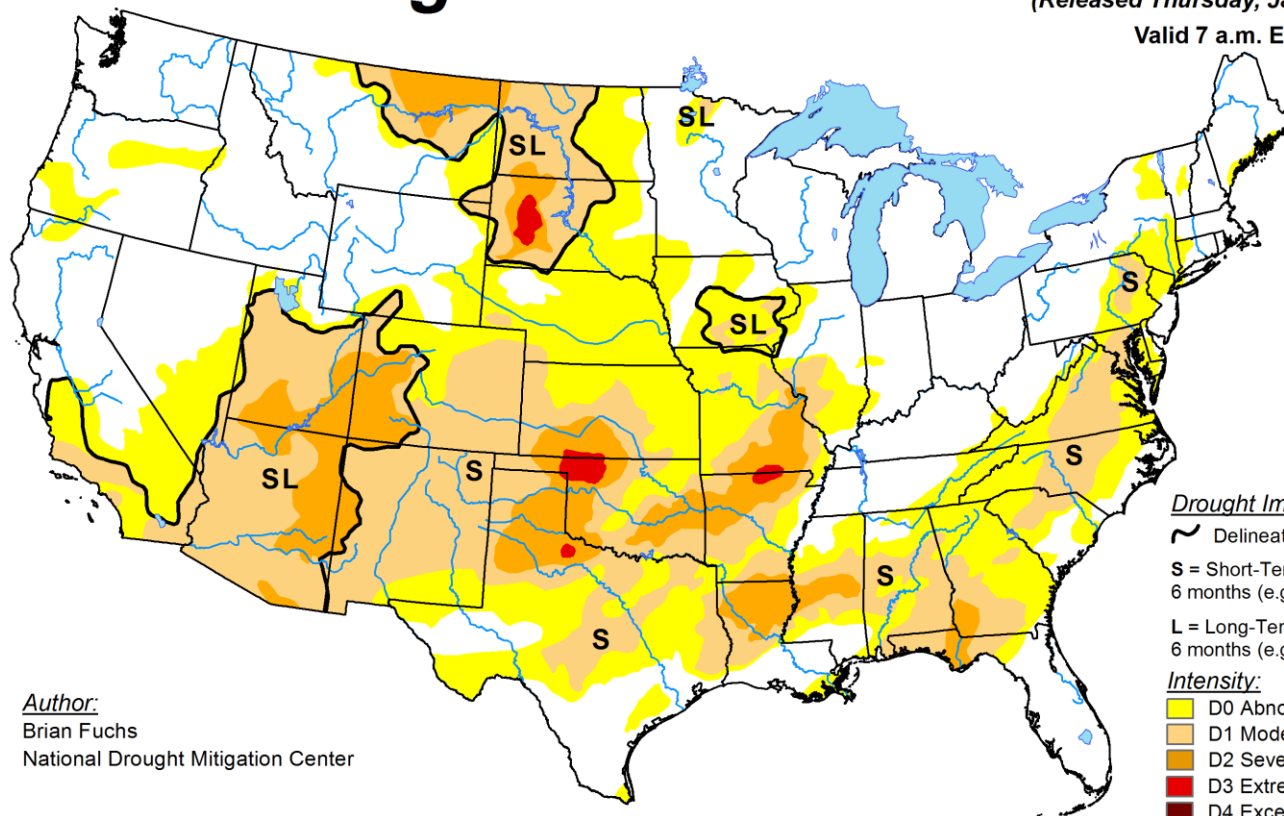
DEPARTMENT OF GEOGRAPHY



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# U.S. Drought Monitor

January 9, 2018  
 (Released Thursday, Jan. 11, 2018)  
 Valid 7 a.m. EST



Author:  
 Brian Fuchs  
 National Drought Mitigation Center

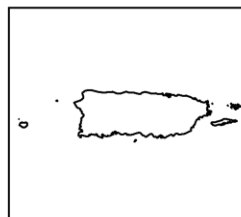
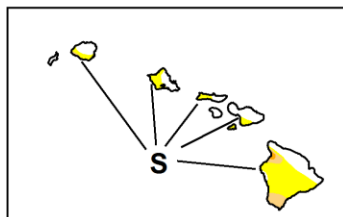
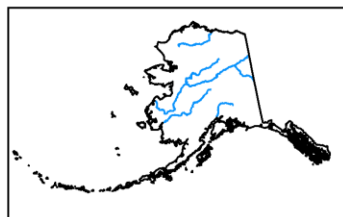
Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

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

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



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

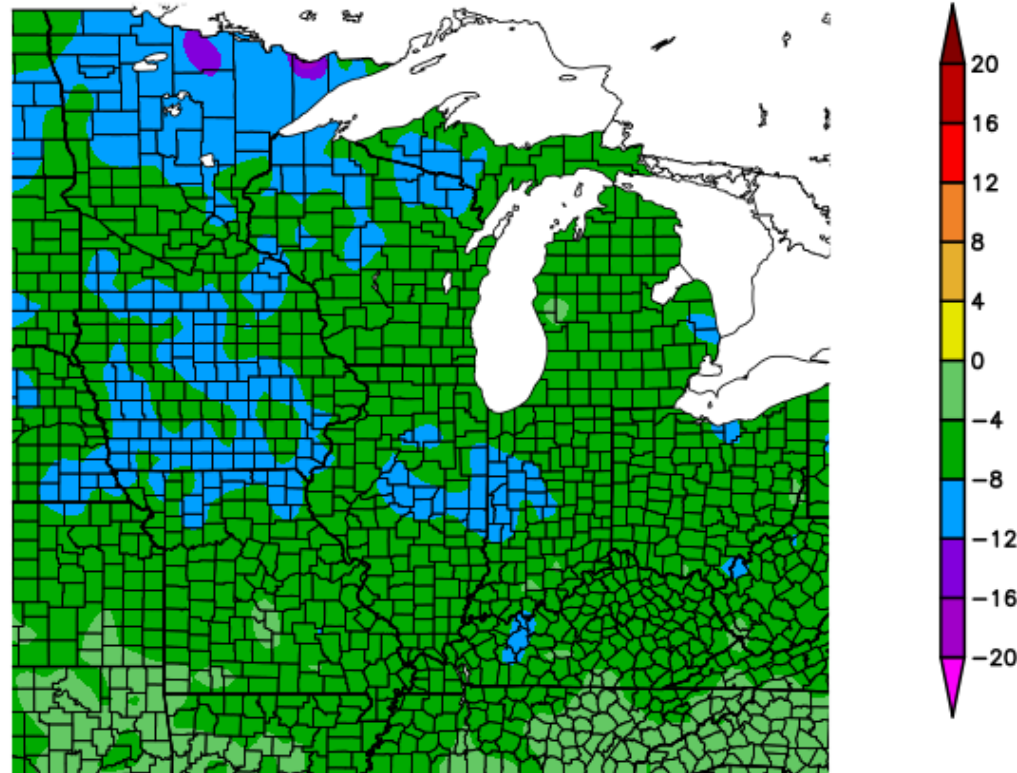


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# Previous 30-Day Temperature Difference Compared to Average (1981-2010)

Departure from Normal Temperature (F)  
12/18/2017 – 1/16/2018



NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM  
**NIDIS** Drought.gov  
U.S. Drought Portal

Generated 1/17/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

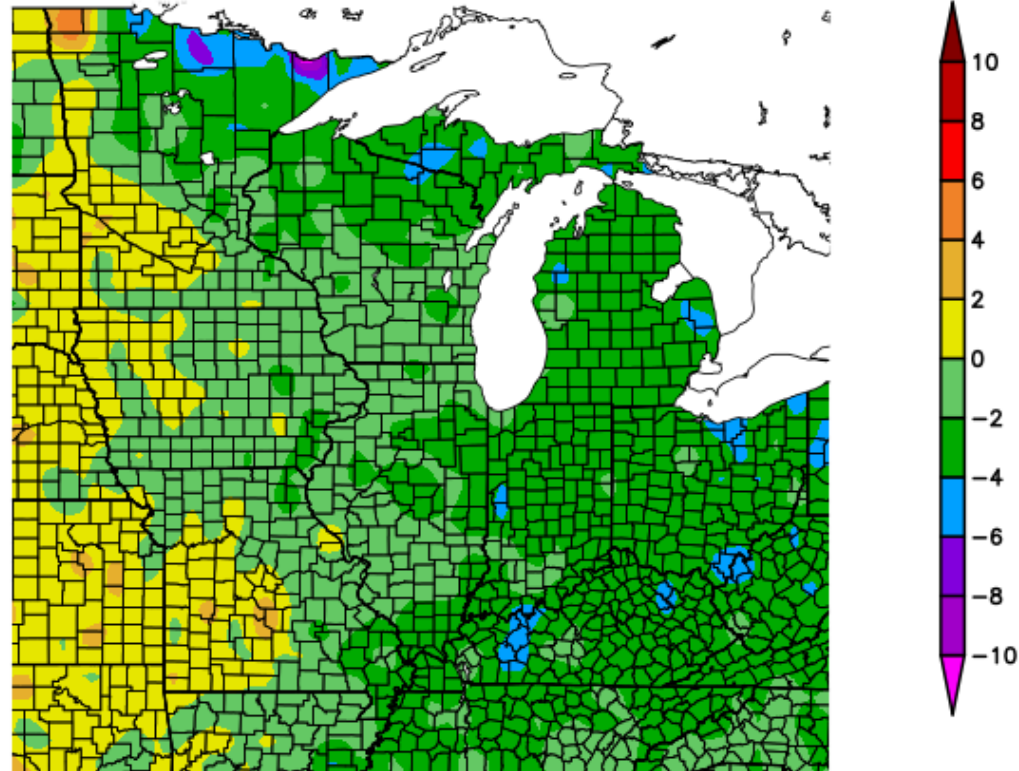


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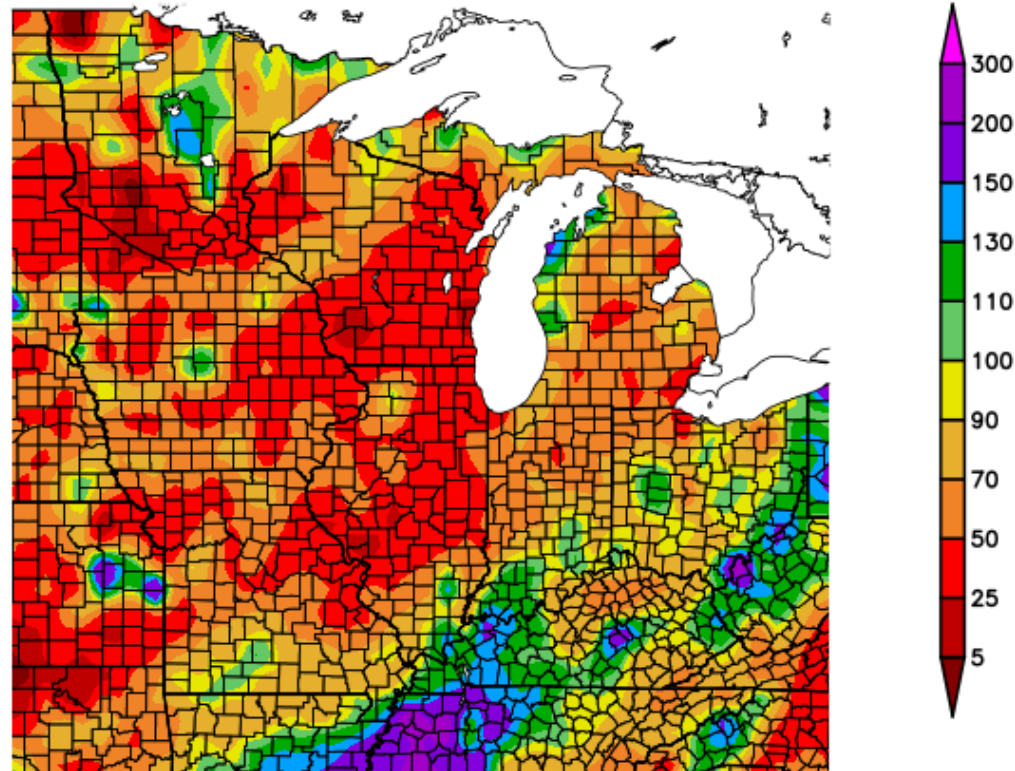


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# Previous 30-Day Precipitation Difference Compared to Average (1981-2010)

Percent of Normal Precipitation (%)  
12/18/2017 - 1/16/2018



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U.S. Drought Portal

Generated 1/17/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

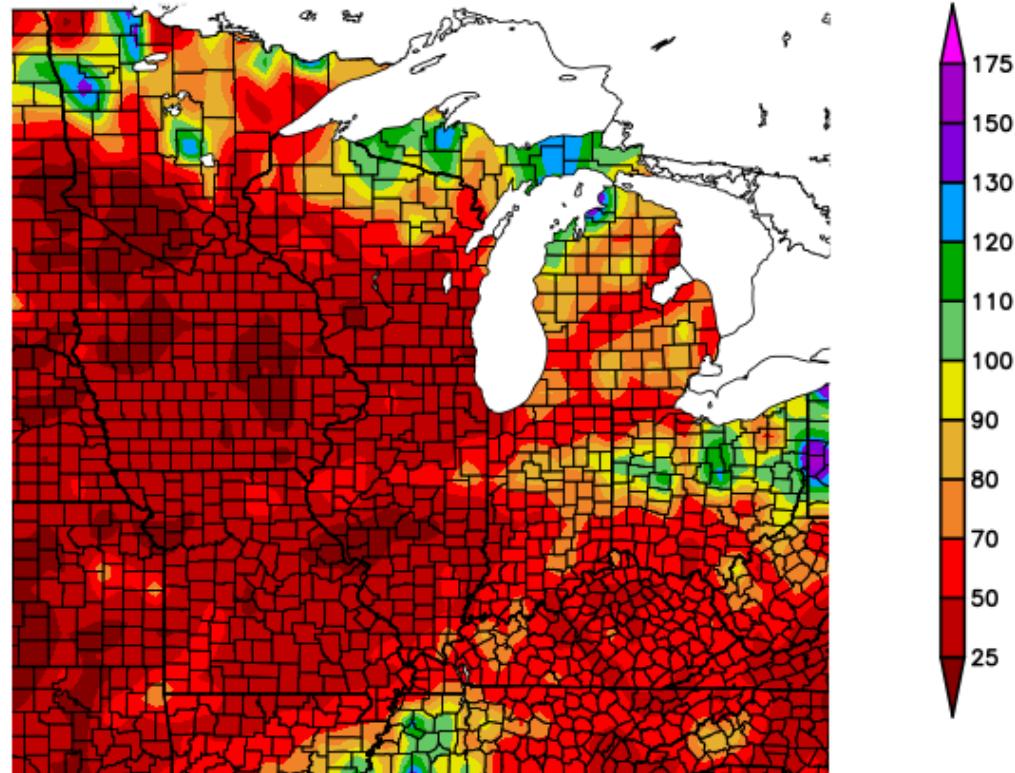


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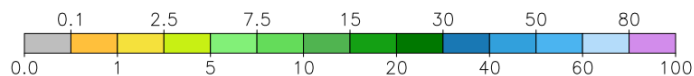
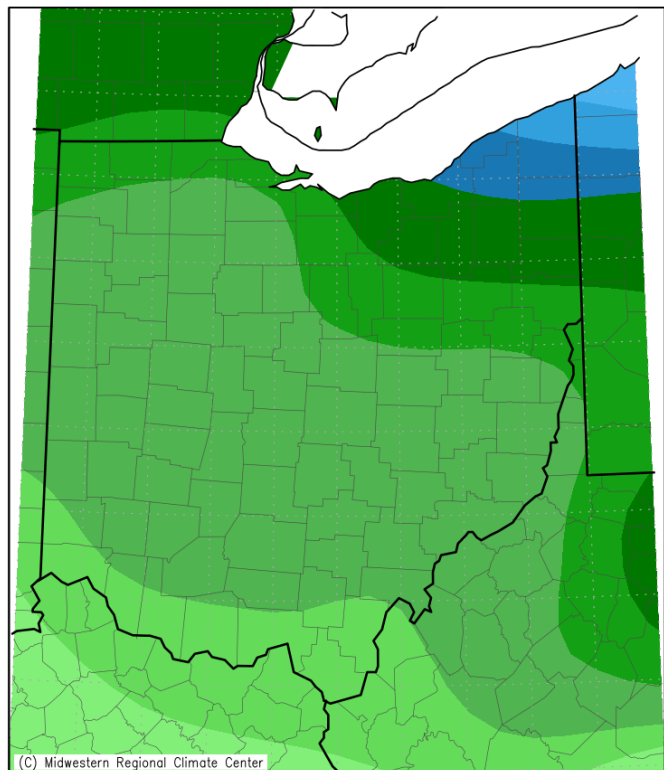


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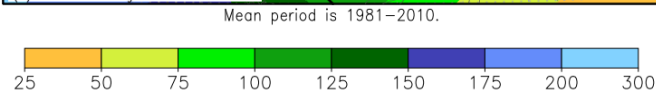
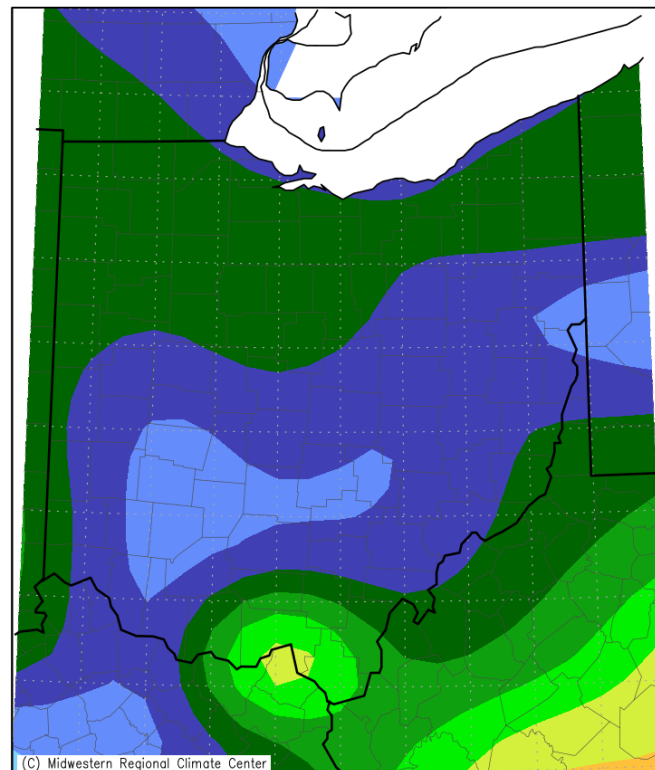
# Winter Snowfall

Accumulated Snowfall (in)  
December 1, 2017 to January 17, 2018



Midwestern Regional Climate Center  
cli-MATE: MRCC Application Tools Environment  
Generated at: 1/17/2018 10:41:21 AM CST

Accumulated Snowfall: Percent of Mean  
December 1, 2017 to January 17, 2018

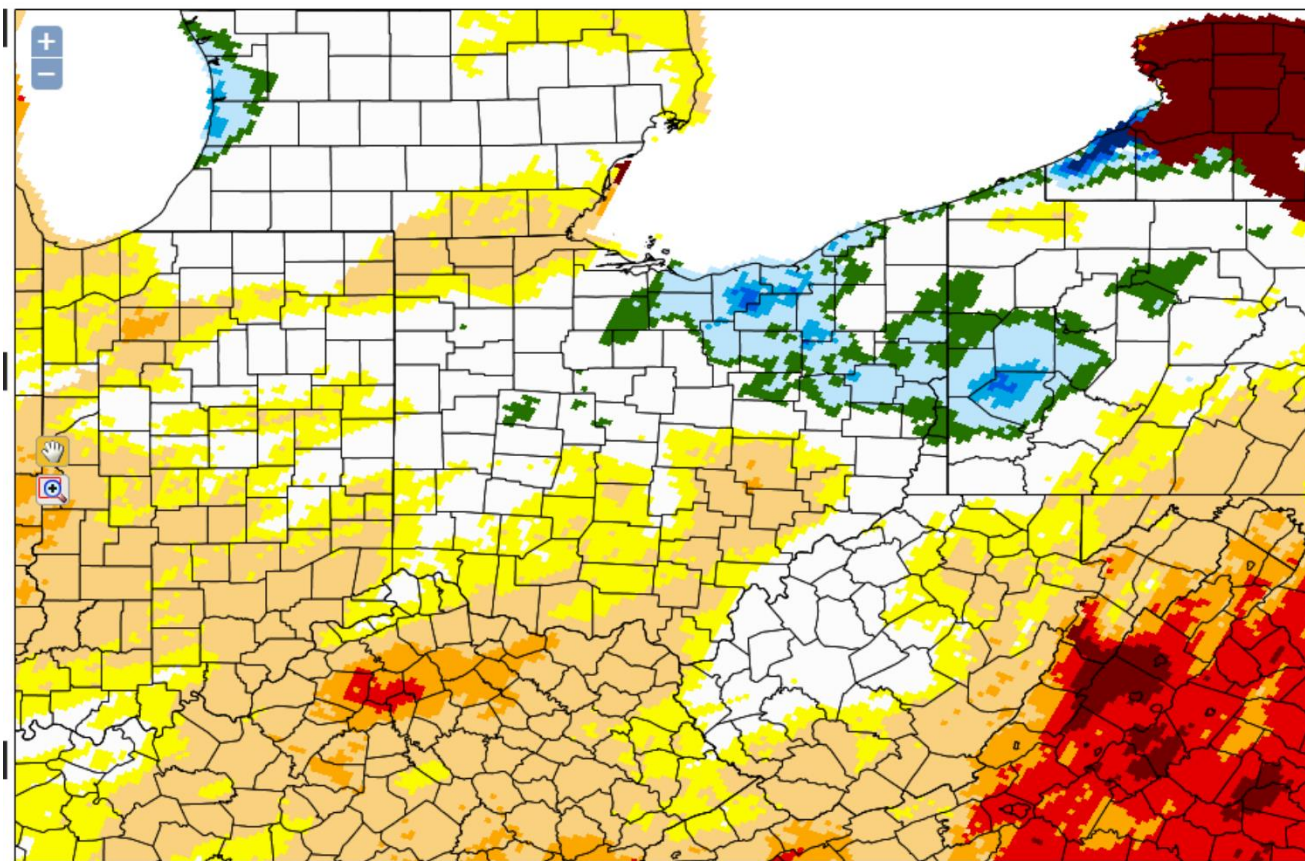


Midwestern Regional Climate Center  
cli-MATE: MRCC Application Tools Environment  
Generated at: 1/17/2018 10:42:57 AM CST



# Standard Precipitation Index (SPI)

60-Day



Transparency:

DOWNLOAD  
GEO TIFF

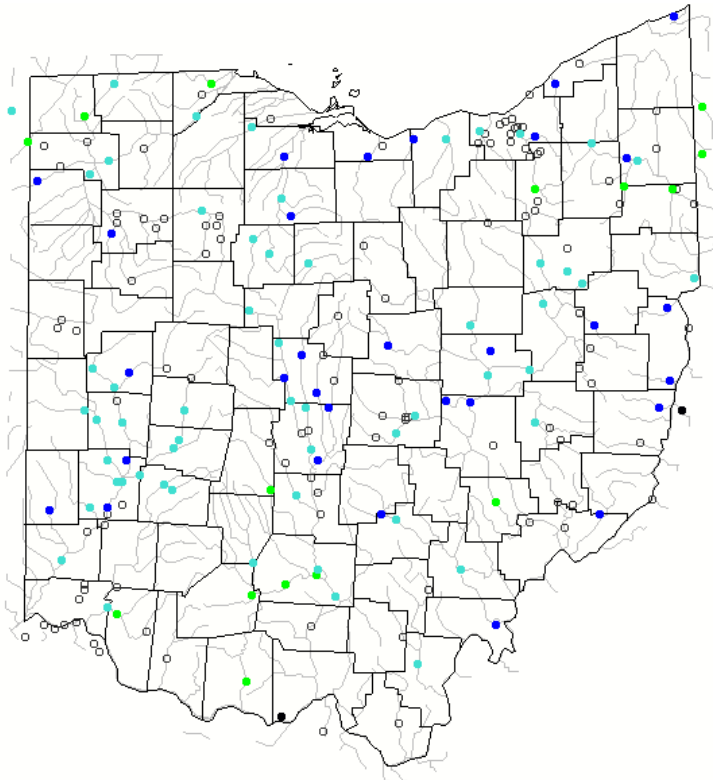


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7-DAY



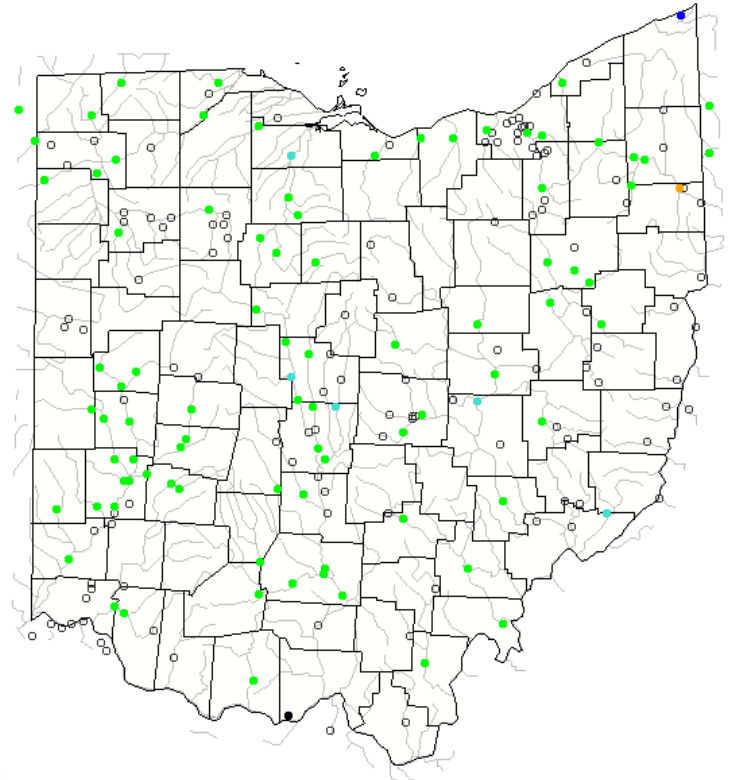
Explanation - Percentile classes

Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

Average streamflow compared to historical streamflow for the day of the year

# USGS Streamflow

28-DAY



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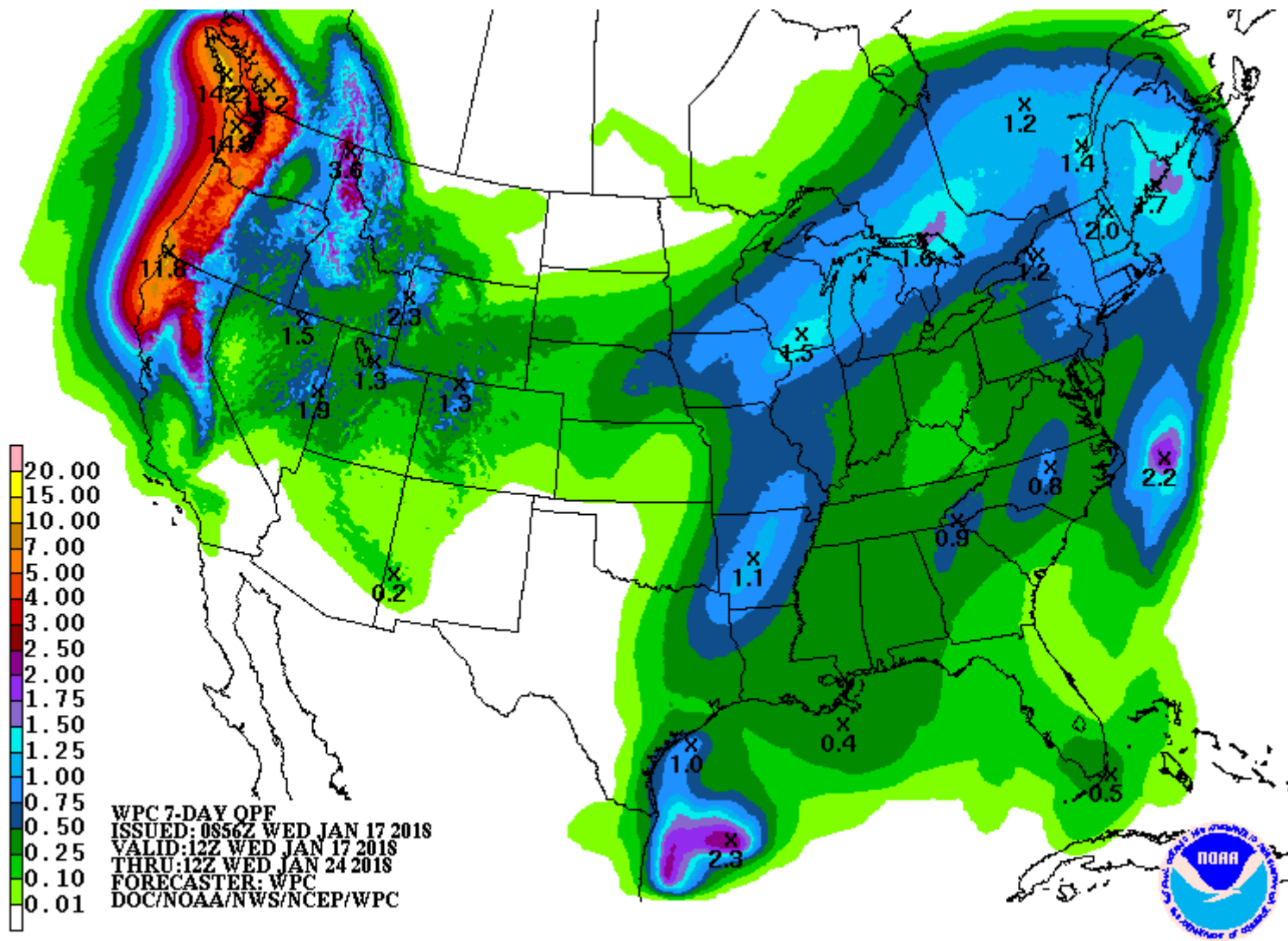
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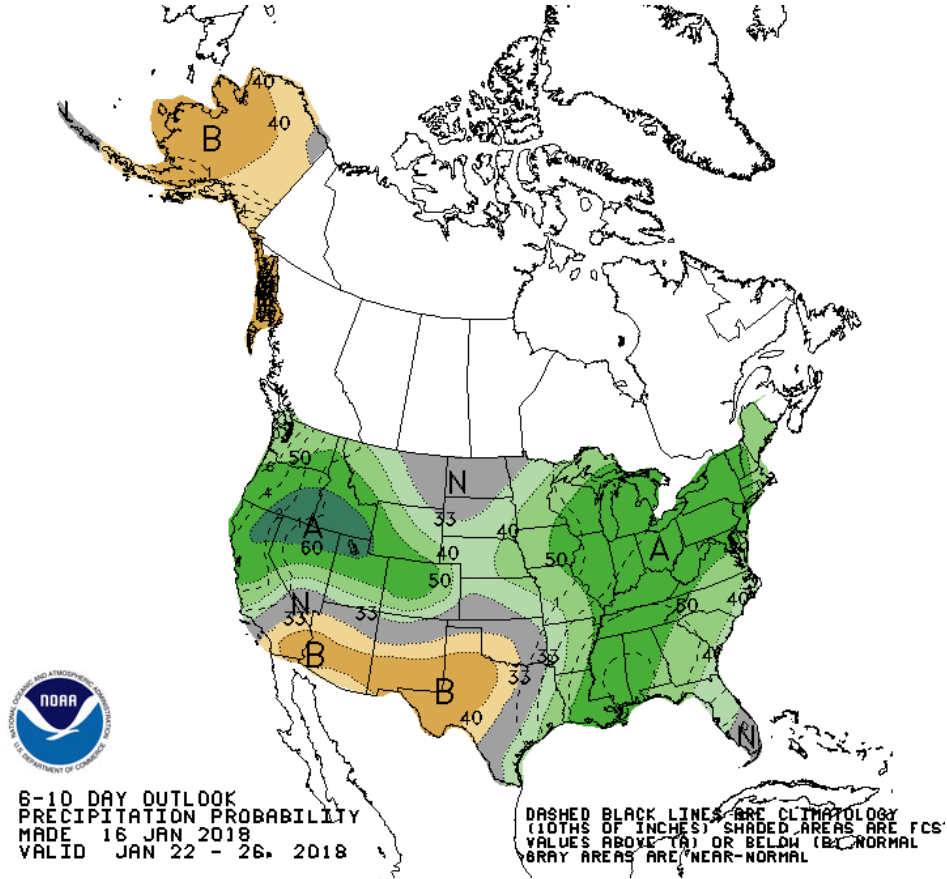
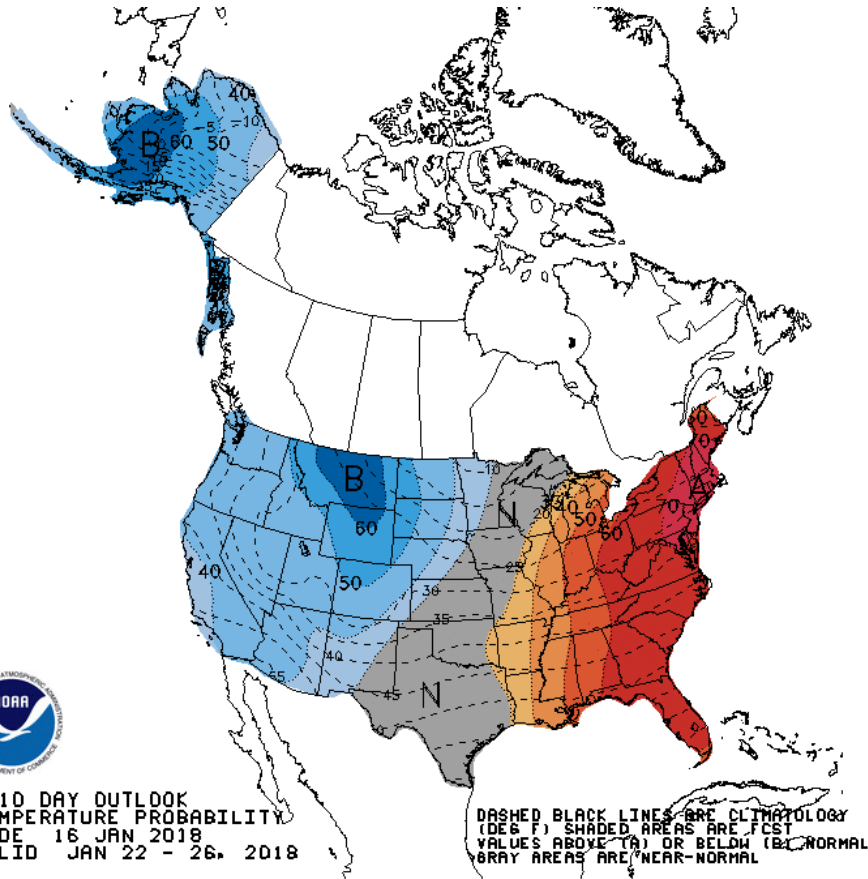
# Weather for the Week Ahead



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# 6-10 Day Outlook



Highs: 30-40    Lows: 18-24

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# Summary of Conditions



**Drought Monitor:** No Drought

**30-Day and 60-Day:** A tad on the dry side – no concerns

**The week ahead:** Warmer weather ahead. Melting snow. Elevated Rivers and Streams.

Front/Back Photos: Courtesy of  
Kat Bledsoe



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