

# Hydrologic and Climate Assessment

October 20, 2017



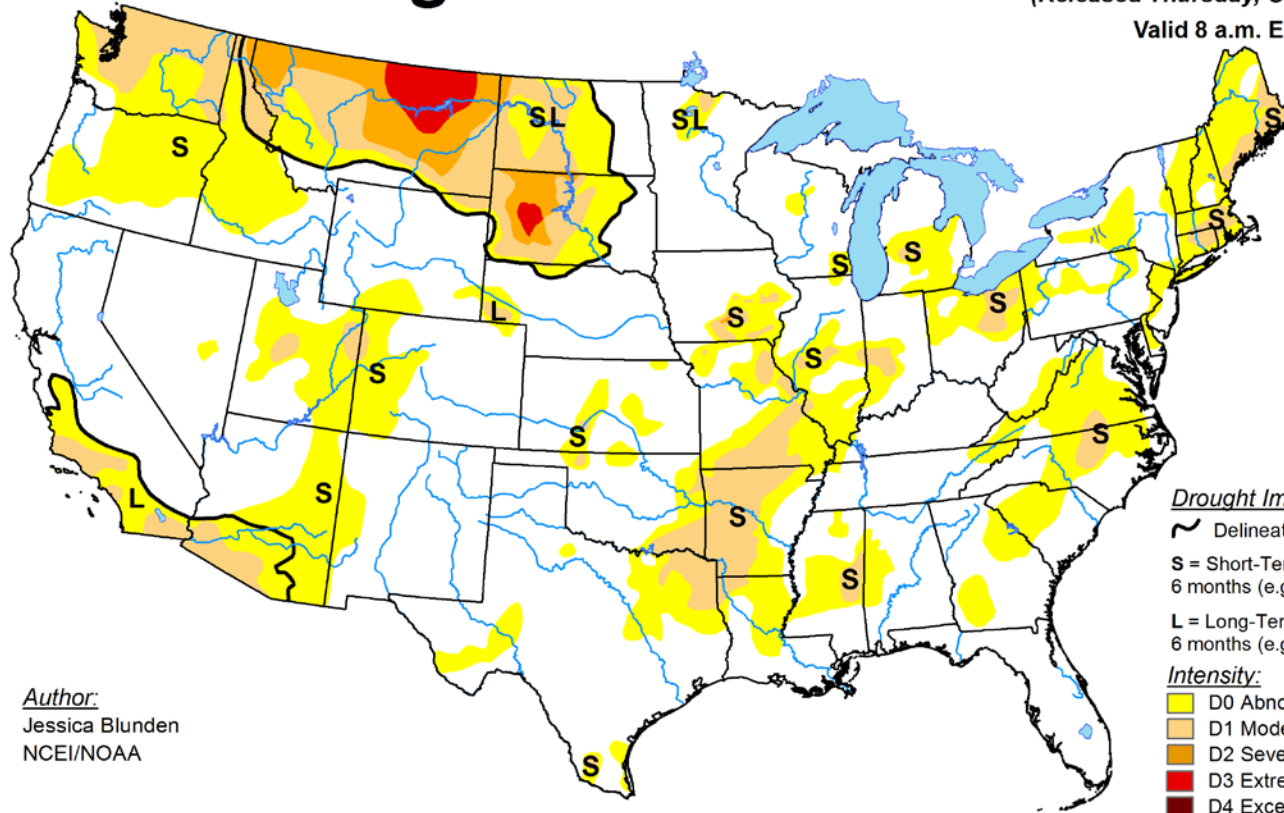
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DEPARTMENT OF EXTENSION  
BYRD POLAR & CLIMATE RESEARCH CENTER  
DEPARTMENT OF GEOGRAPHY

# U.S. Drought Monitor

October 17, 2017  
(Released Thursday, Oct. 19, 2017)

Valid 8 a.m. EDT



Author:  
Jessica Blunden  
NCEI/NOAA

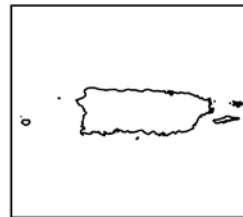
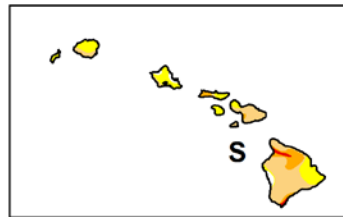
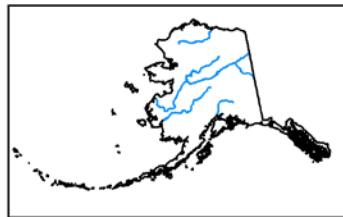
Drought Impact Types:

- ~ 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/>

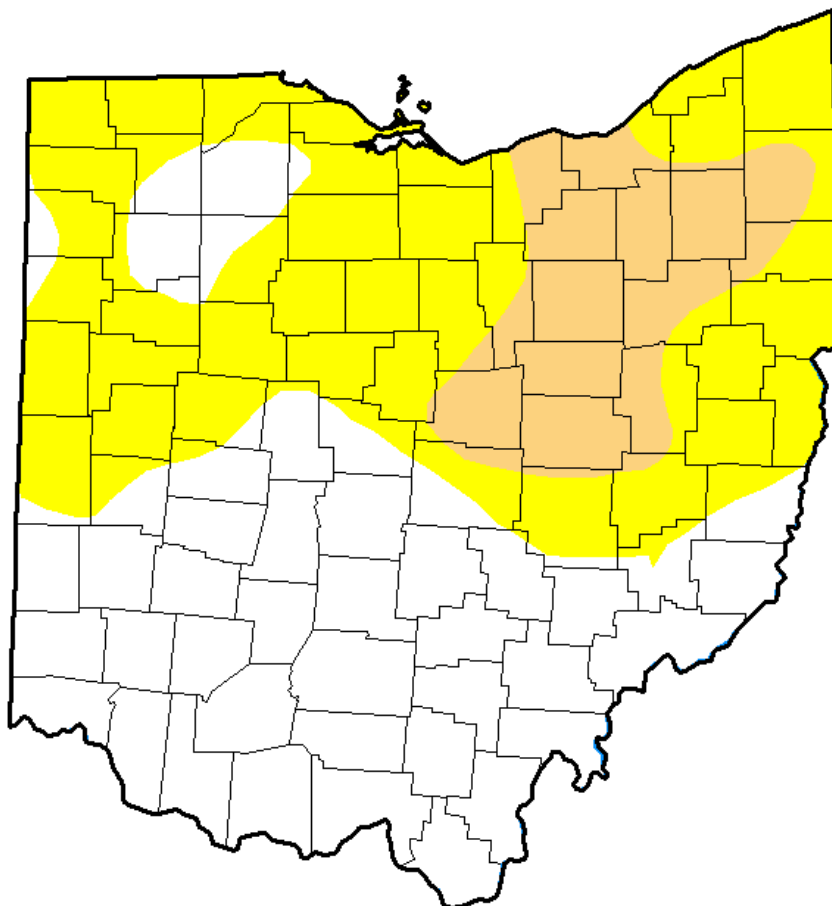


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# U.S. Drought Monitor Ohio

**October 17, 2017**  
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*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	45.75	54.25	14.19	0.00	0.00	0.00
<b>Last Week</b> <i>10-10-2017</i>	45.23	54.77	14.22	0.00	0.00	0.00
<b>3 Months Ago</b> <i>07-18-2017</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <i>01-03-2017</i>	88.16	11.84	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> <i>09-26-2017</i>	71.57	28.43	3.85	0.00	0.00	0.00
<b>One Year Ago</b> <i>10-18-2016</i>	74.88	25.12	0.00	0.00	0.00	0.00

*Intensity:*

- D0 Abnormally Dry
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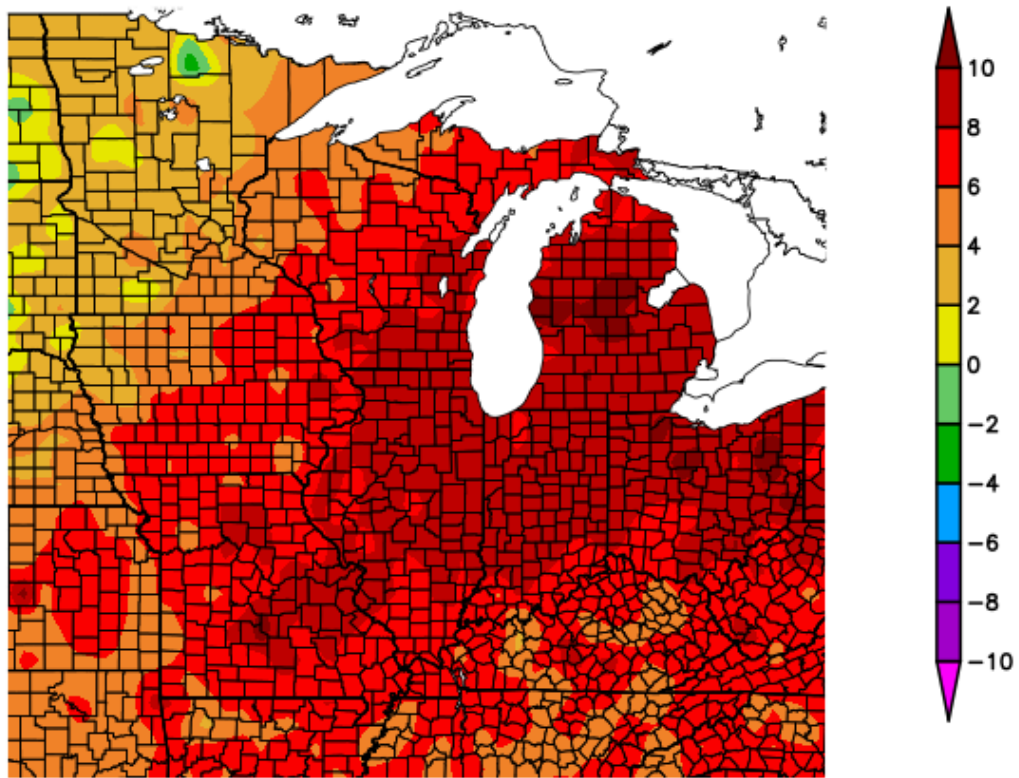
*Author:*  
Jessica Blunden  
NCEI/NOAA



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

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

Departure from Normal Temperature (F)  
9/19/2017 - 10/18/2017



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

Generated 10/19/2017 at HPRCC using provisional data.

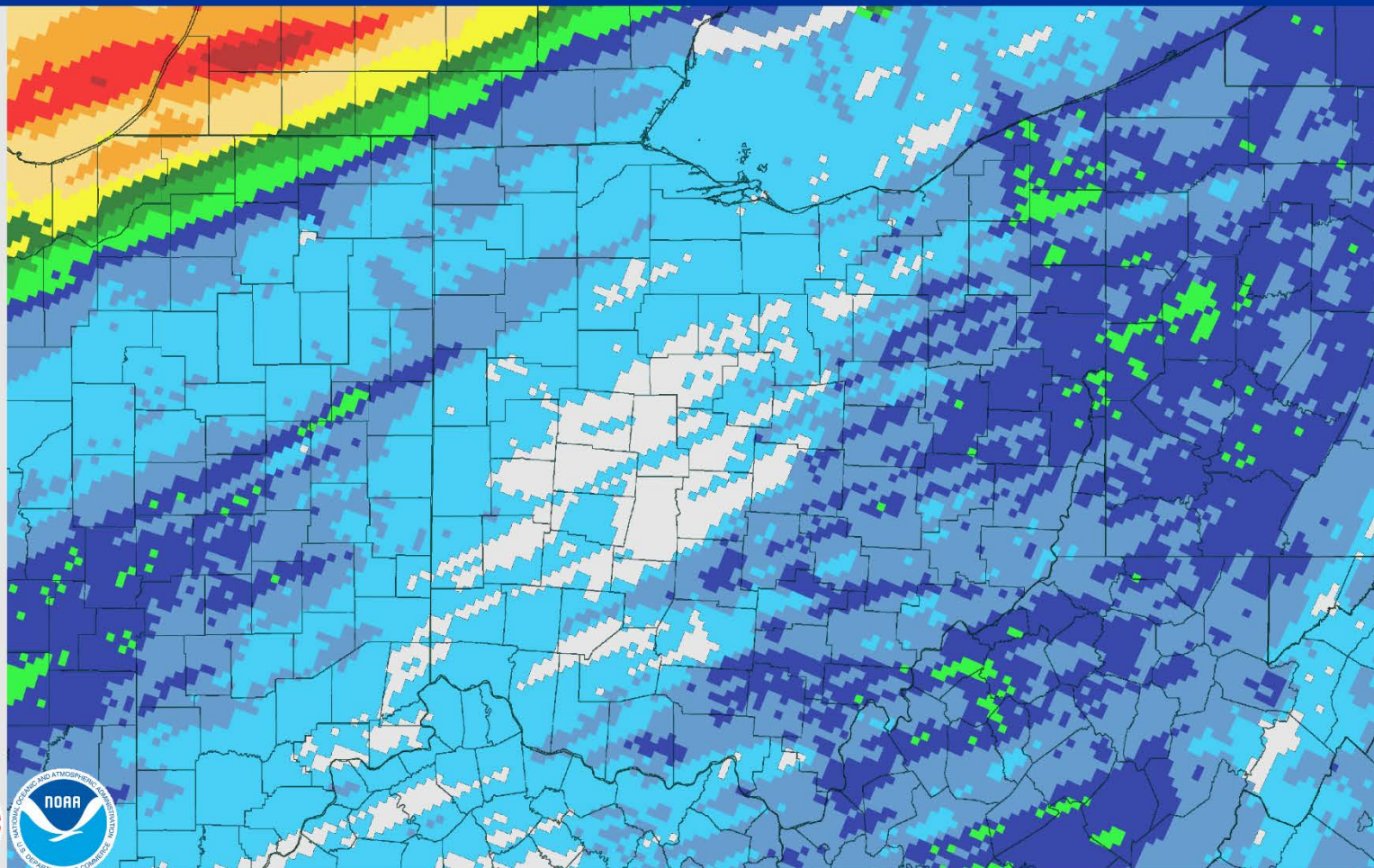
NOAA Regional Climate Centers

# Previous 7-Day Precipitation: Total

October 19, 2017 7-Day Observed Precipitation

Created on: October 20, 2017 - 12:44 UTC

Valid on: October 19, 2017 12:00 UTC



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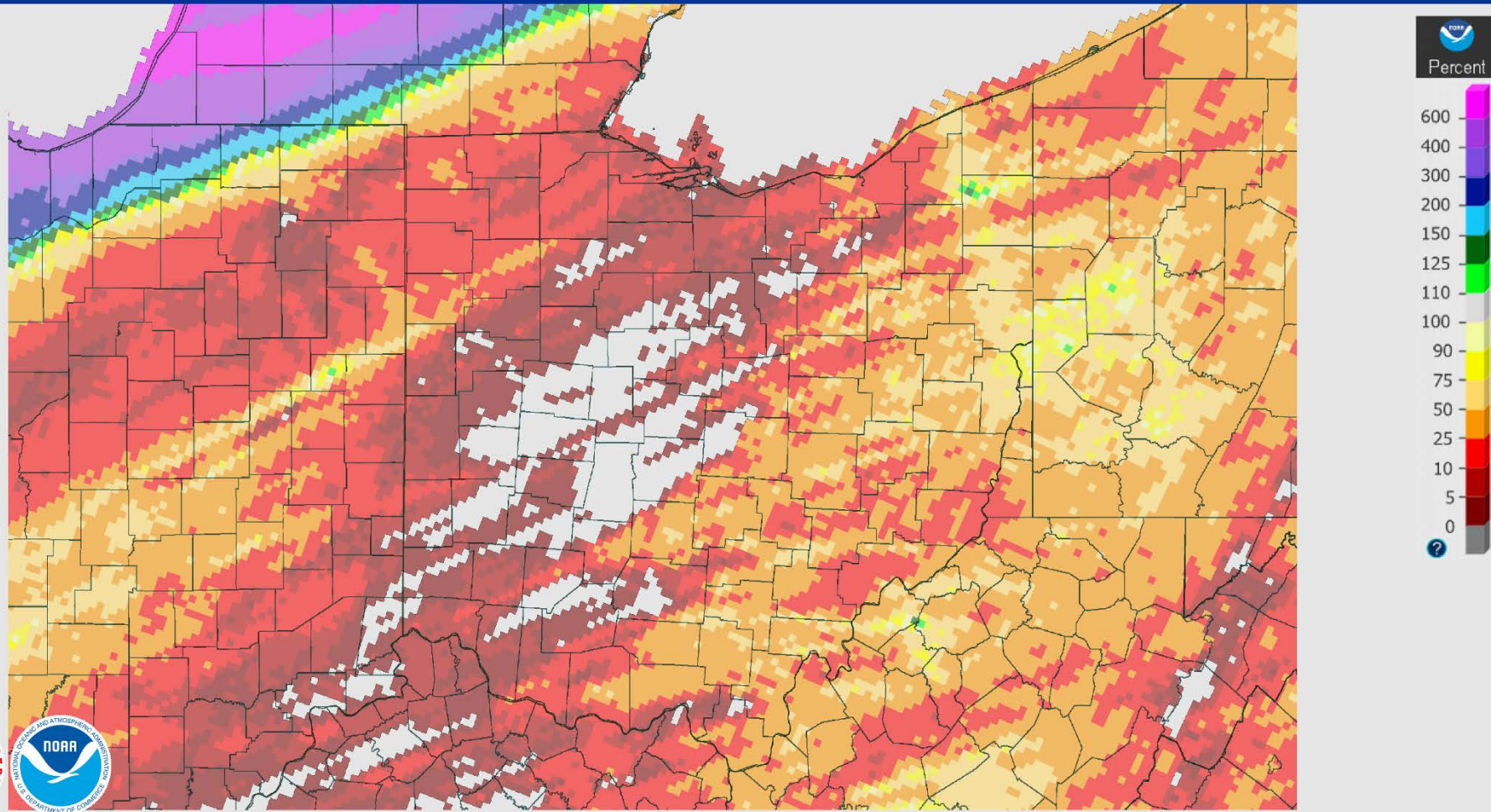
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# Previous 7-Day Precipitation: Percent of Normal

October 19, 2017 7-Day Percent Precipitation

Created on: October 20, 2017 - 12:44 UTC

Valid on: October 19, 2017 12:00 UTC

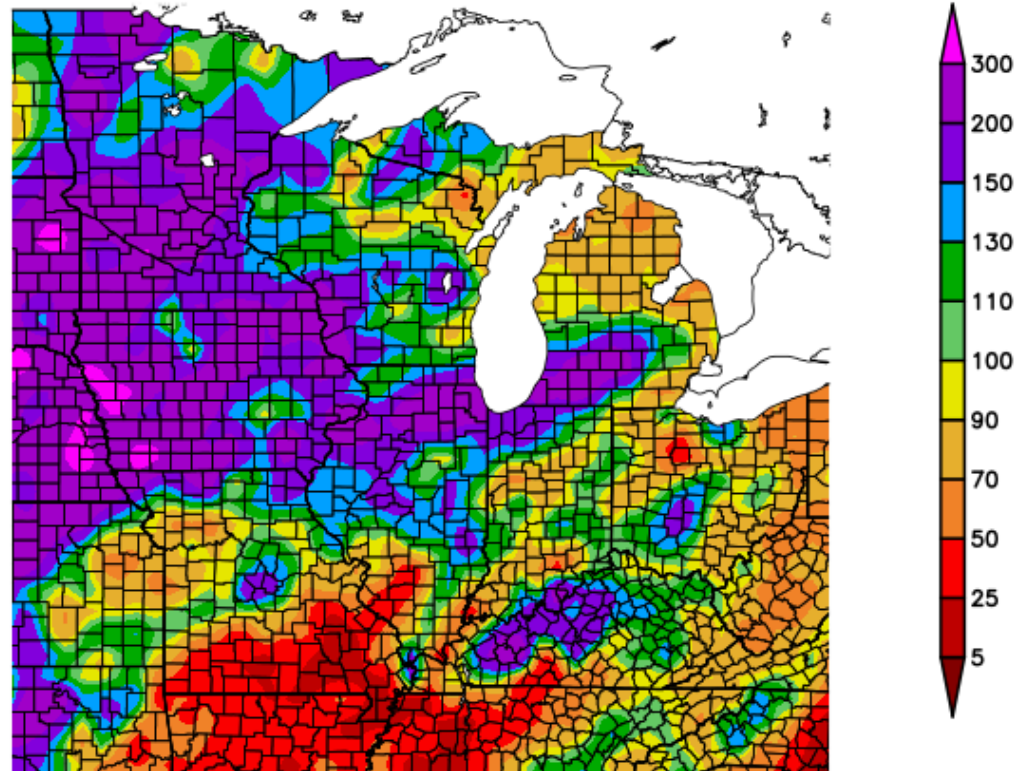


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# Previous 30-Day Precipitation Difference Compared to Average (1981-2010)

Percent of Normal Precipitation (%)  
9/19/2017 - 10/18/2017



NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM  
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U.S. Drought Portal

Generated 10/19/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

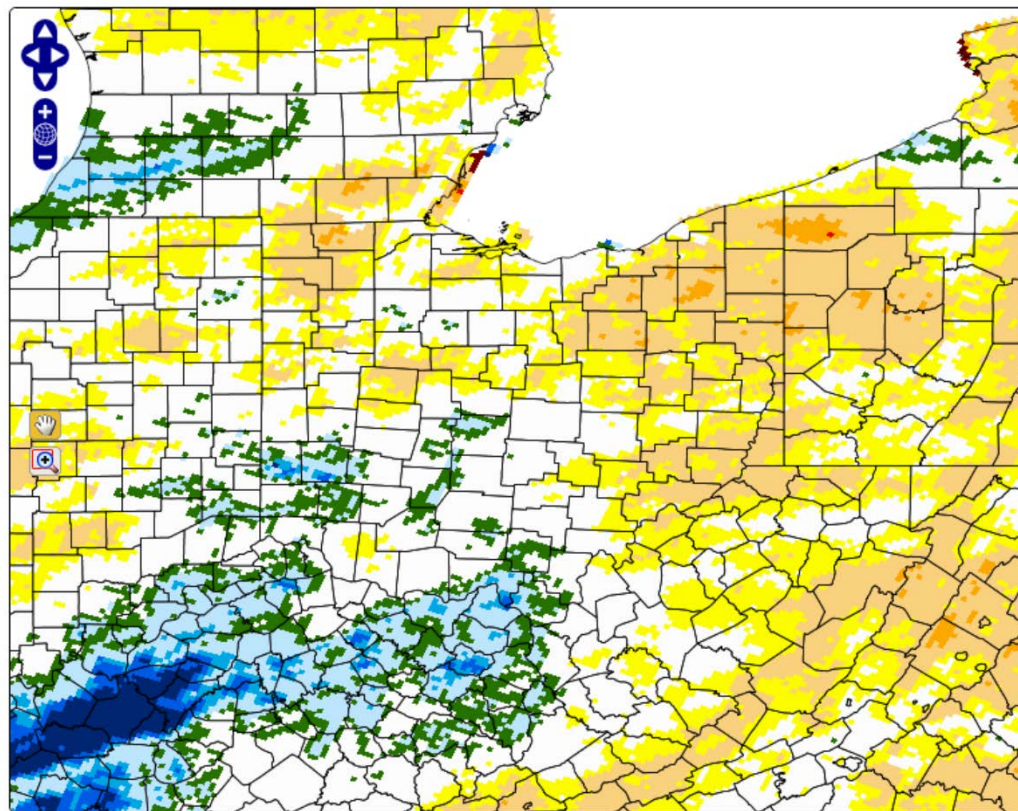


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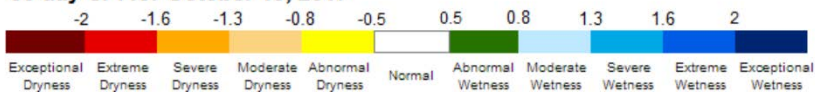
# Standard Precipitation Index (SPI)

## Experimental High Resolution Drought Trigger Tool



60-Day

60 day SPI for October 19, 2017



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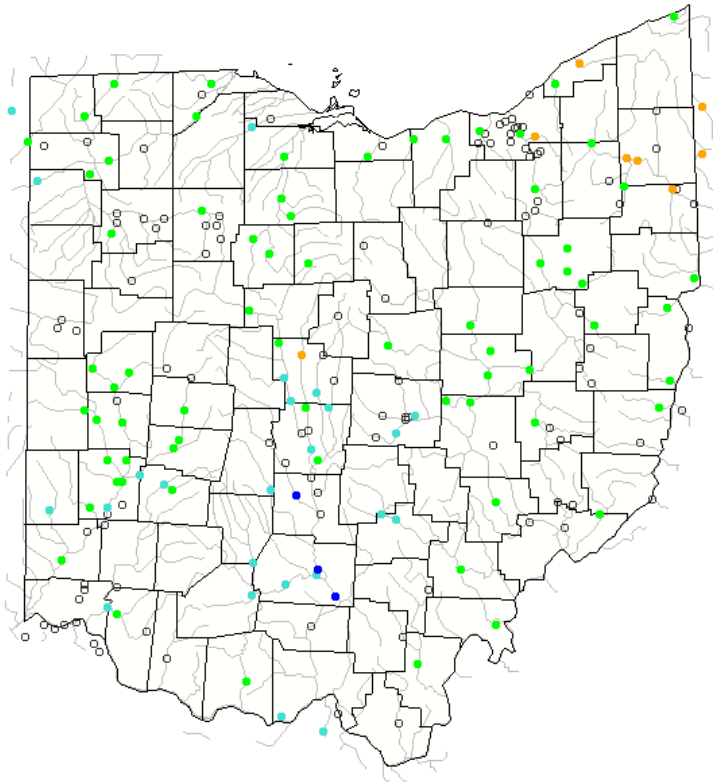
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7-DAY



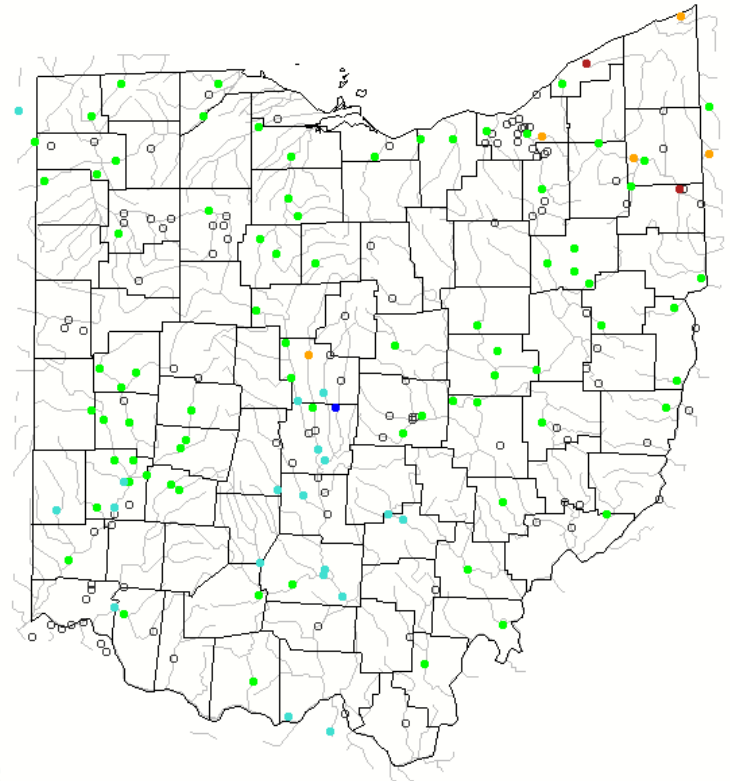
Explanation - Percentile classes

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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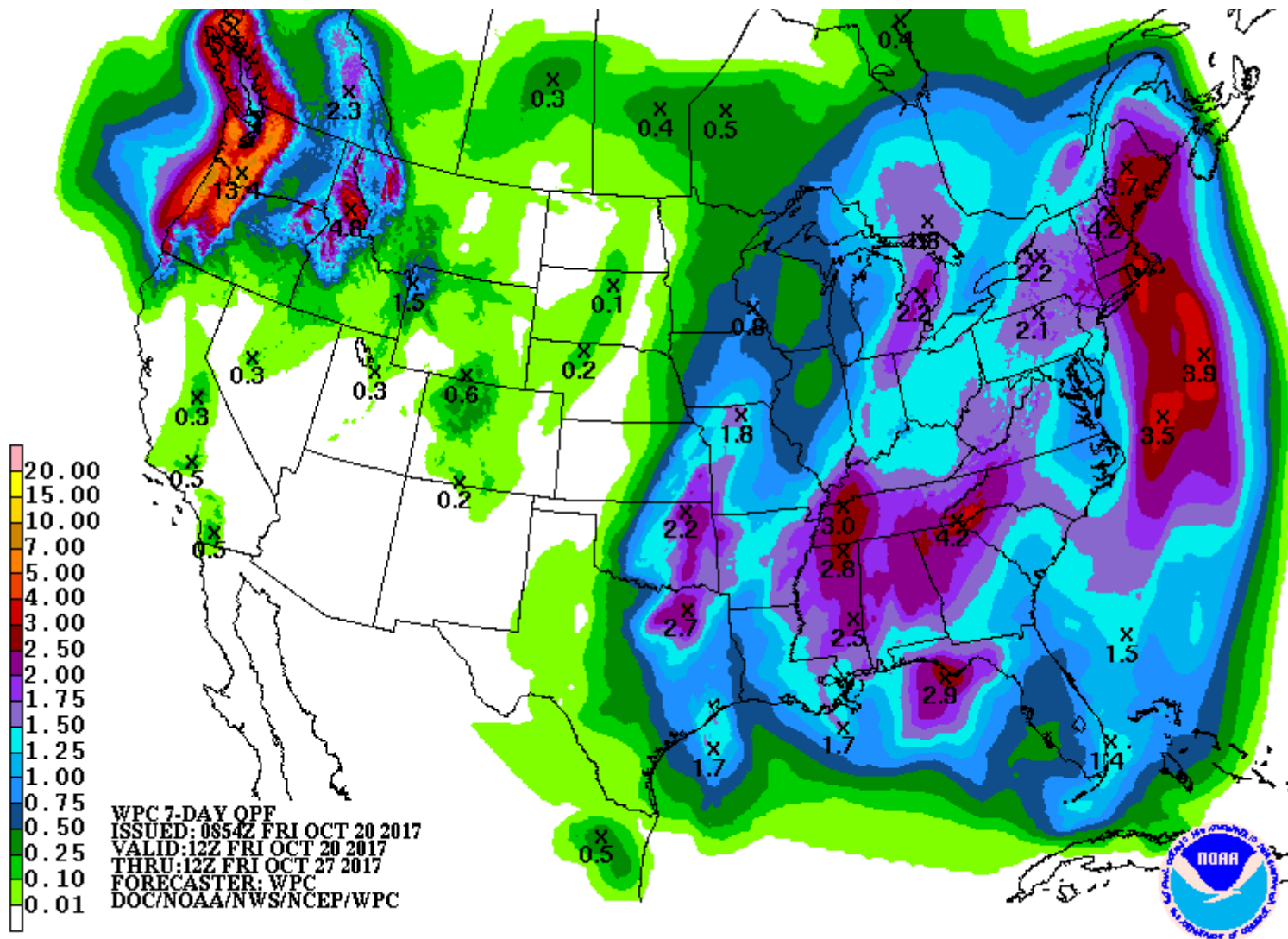
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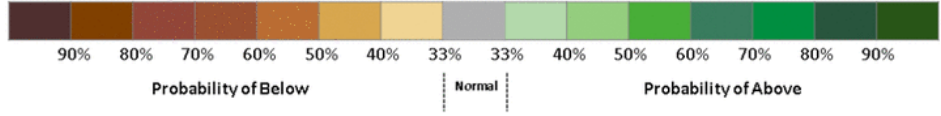
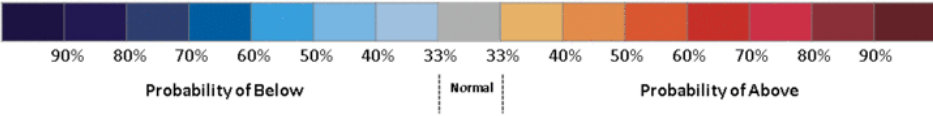
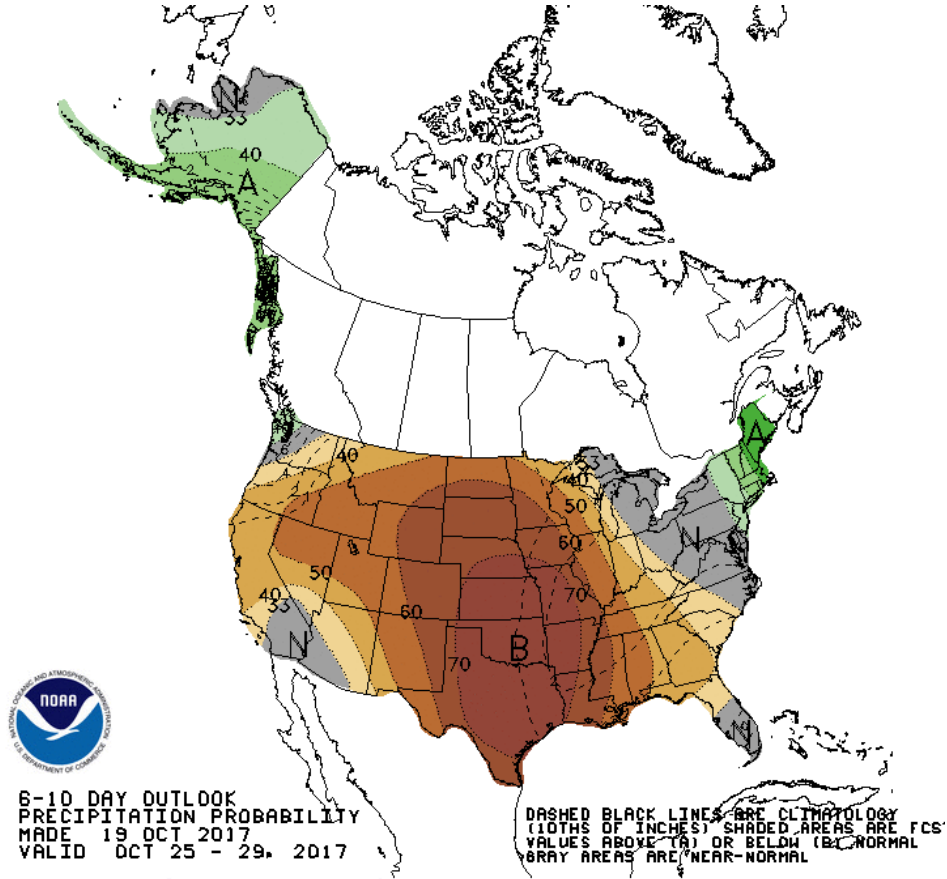
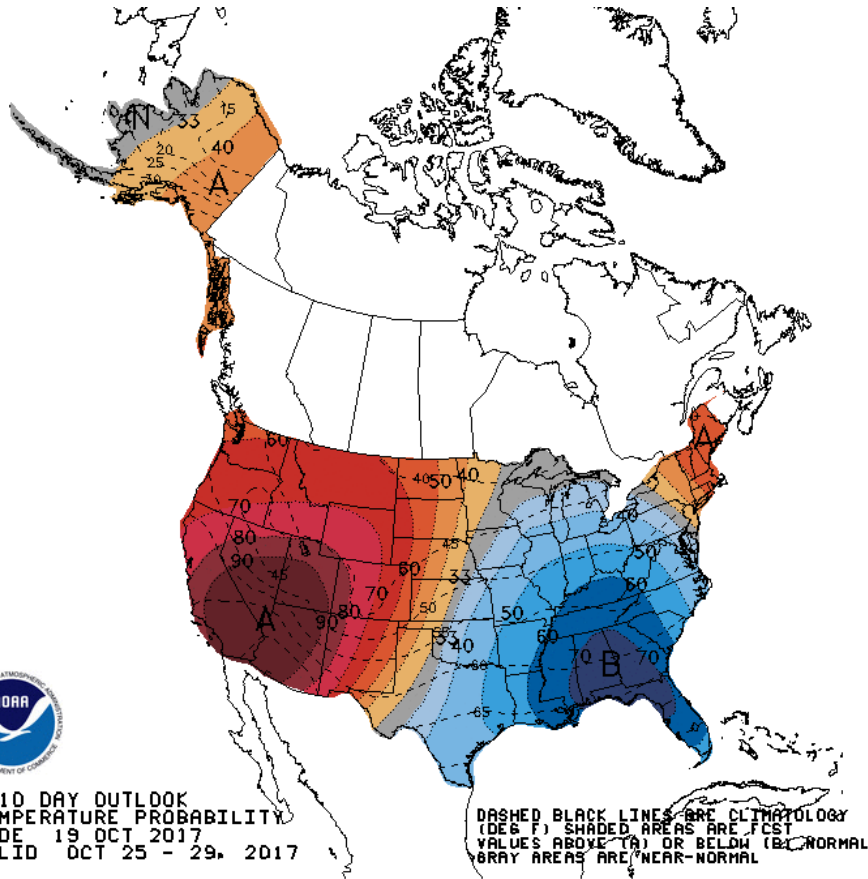
# Weather for the Week Ahead



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# 6-10 Day Outlook



Highs: Low to mid Upper 60s

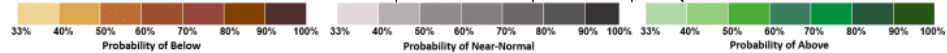
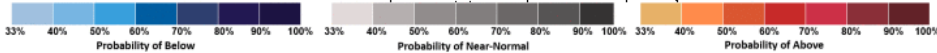
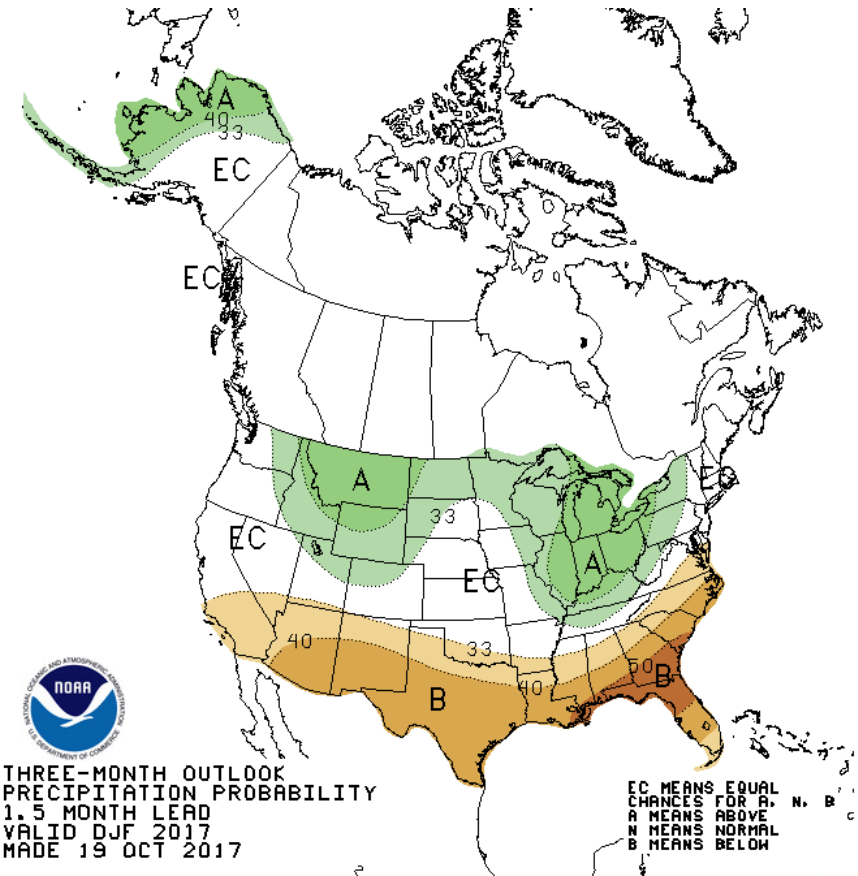
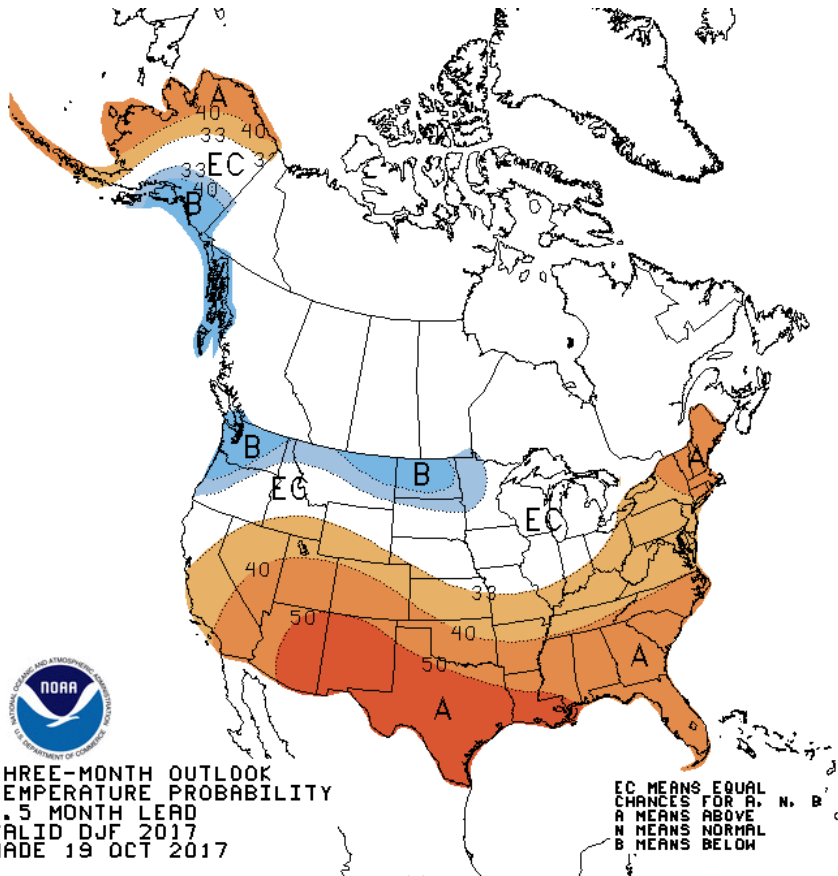
Lows: Low to Mid 40s



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# December-February Outlook

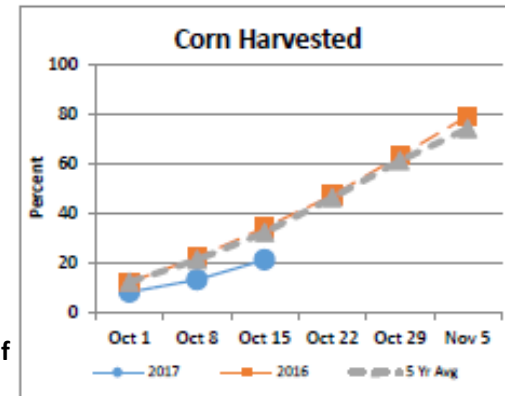
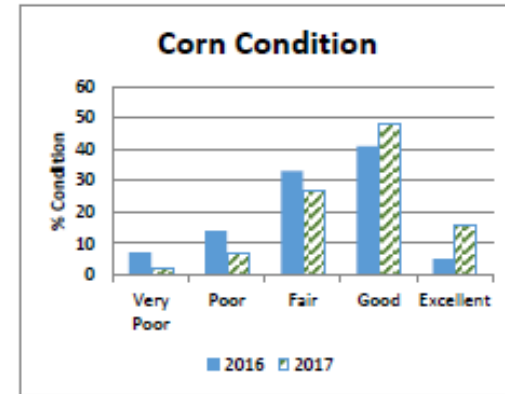
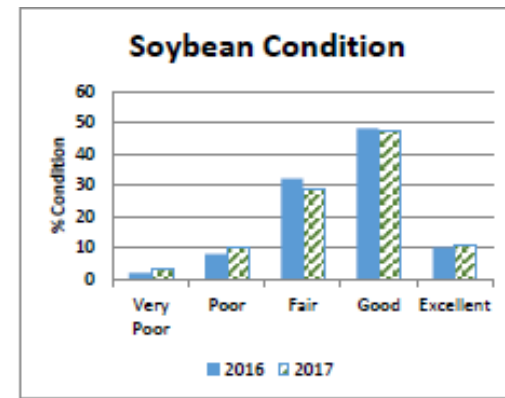


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# Ag Highlights

- 3.1 days suitable for fieldwork ending October 15
- Very wet last week delayed some harvest – dry weather this week should have helped
- Pasture conditions improving; winter wheat emerging



NASS: Cheryl Turner –

[https://www.nass.usda.gov/Statistics\\_by\\_State/Ohio/Publications/Crop\\_Progress\\_&\\_Condition/2017/cw3017oh.pdf](https://www.nass.usda.gov/Statistics_by_State/Ohio/Publications/Crop_Progress_&_Condition/2017/cw3017oh.pdf)



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# Summary of Conditions



**Drought Monitor:** Despite rain, only small improvements

**30-Day and 60-Day:** Still dry across the north

**The week ahead:** Dry/warm weather this weekend; Colder and damp next week



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