

# Hydrologic and Climate Assessment

Farm Science Review Edition 2017



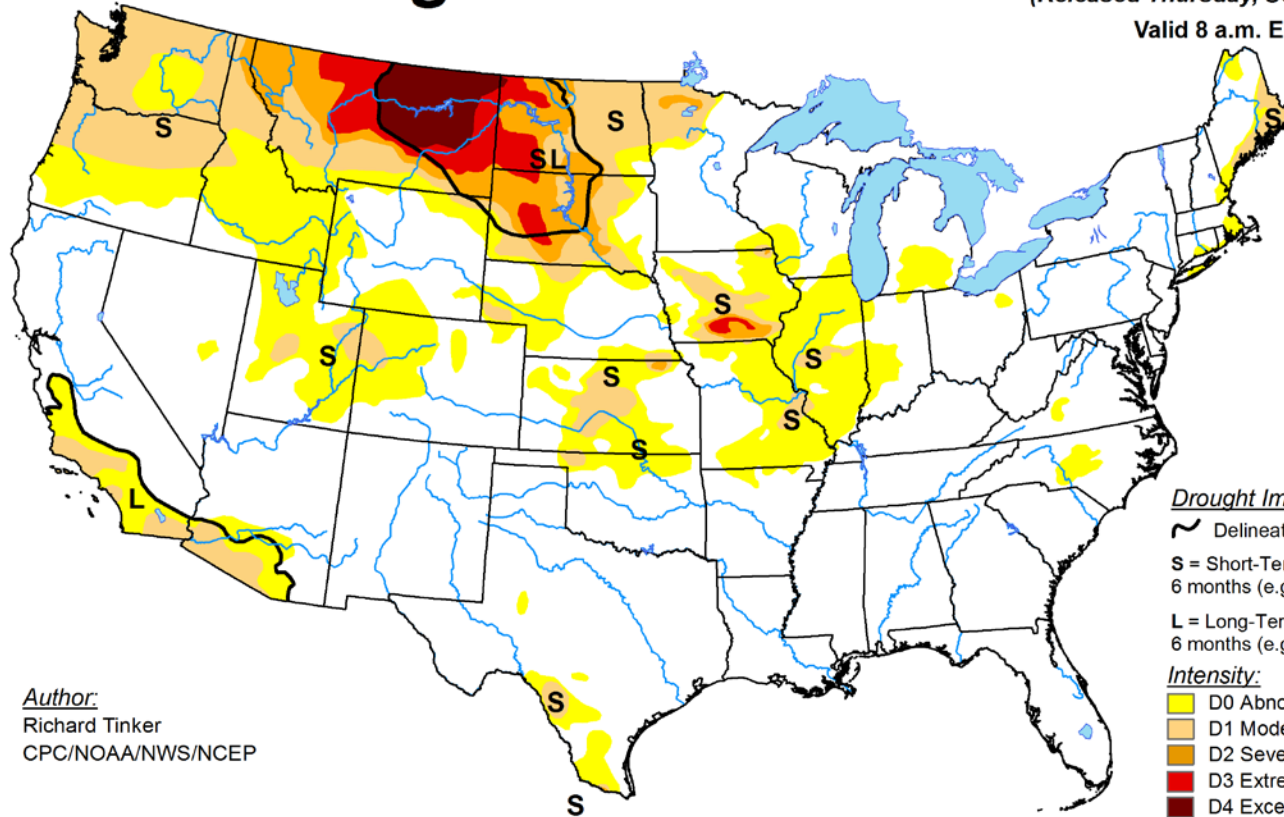
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COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES  
DEPARTMENT OF EXTENSION  
BYRD POLAR & CLIMATE RESEARCH CENTER  
DEPARTMENT OF GEOGRAPHY

# U.S. Drought Monitor

September 12, 2017  
(Released Thursday, Sep. 14, 2017)

Valid 8 a.m. EDT



Author:  
Richard Tinker  
CPC/NOAA/NWS/NCEP

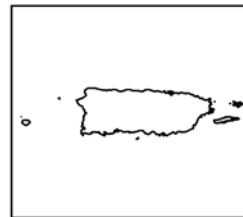
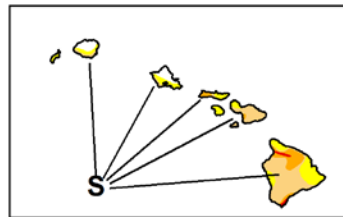
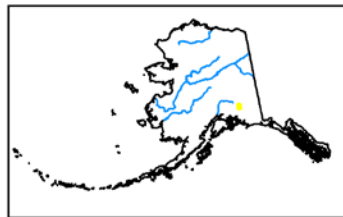
Drought Impact Types:

- ~ 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/>

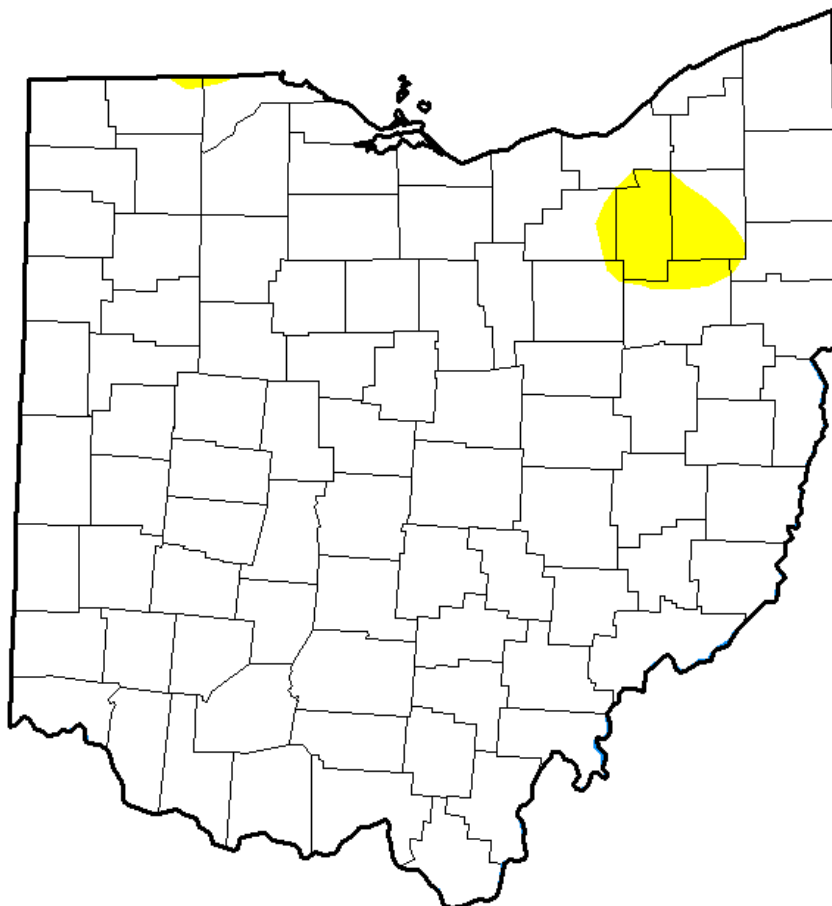


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# U.S. Drought Monitor Ohio

**September 12, 2017**  
(Released Thursday, Sep. 14, 2017)  
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Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	97.47	2.53	0.00	0.00	0.00	0.00
<b>Last Week</b> <i>09-05-2017</i>	97.47	2.53	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> <i>06-13-2017</i>	83.29	16.71	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>09-27-2016</i>	36.51	63.49	7.94	0.00	0.00	0.00
<b>One Year Ago</b> <i>09-13-2016</i>	50.97	49.03	17.53	0.00	0.00	0.00

Intensity:

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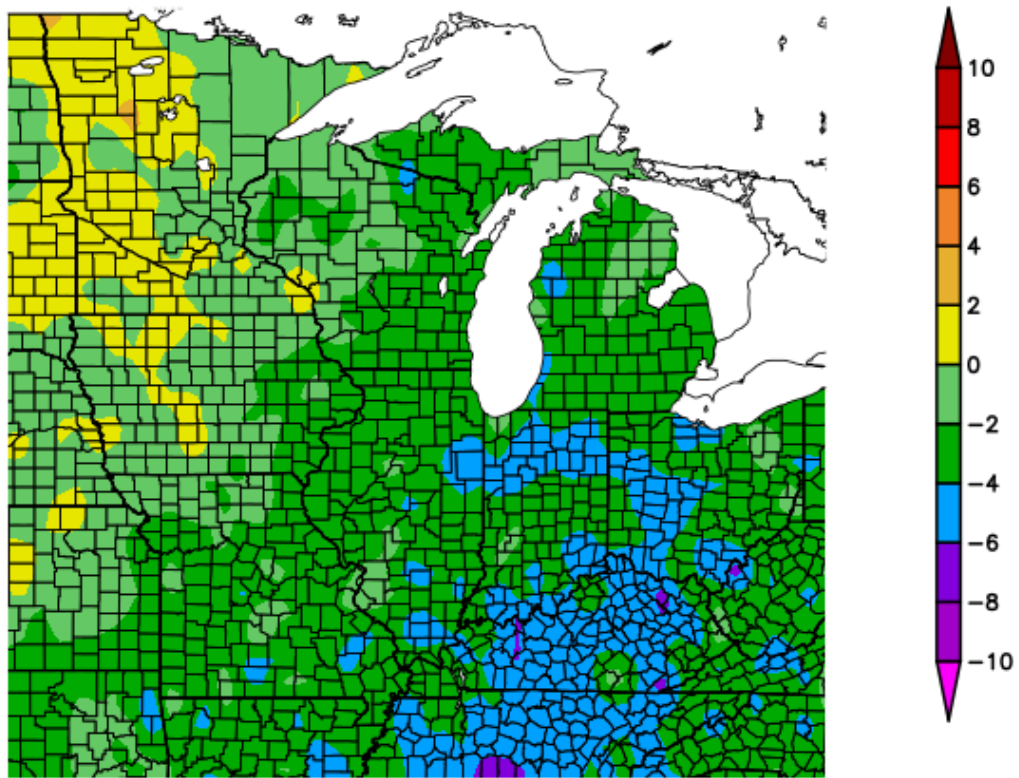
Richard Tinker  
CPC/NOAA/NWS/NCEP



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

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

Departure from Normal Temperature (F)  
8/19/2017 - 9/17/2017



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

Generated 9/18/2017 at HPRCC using provisional data.

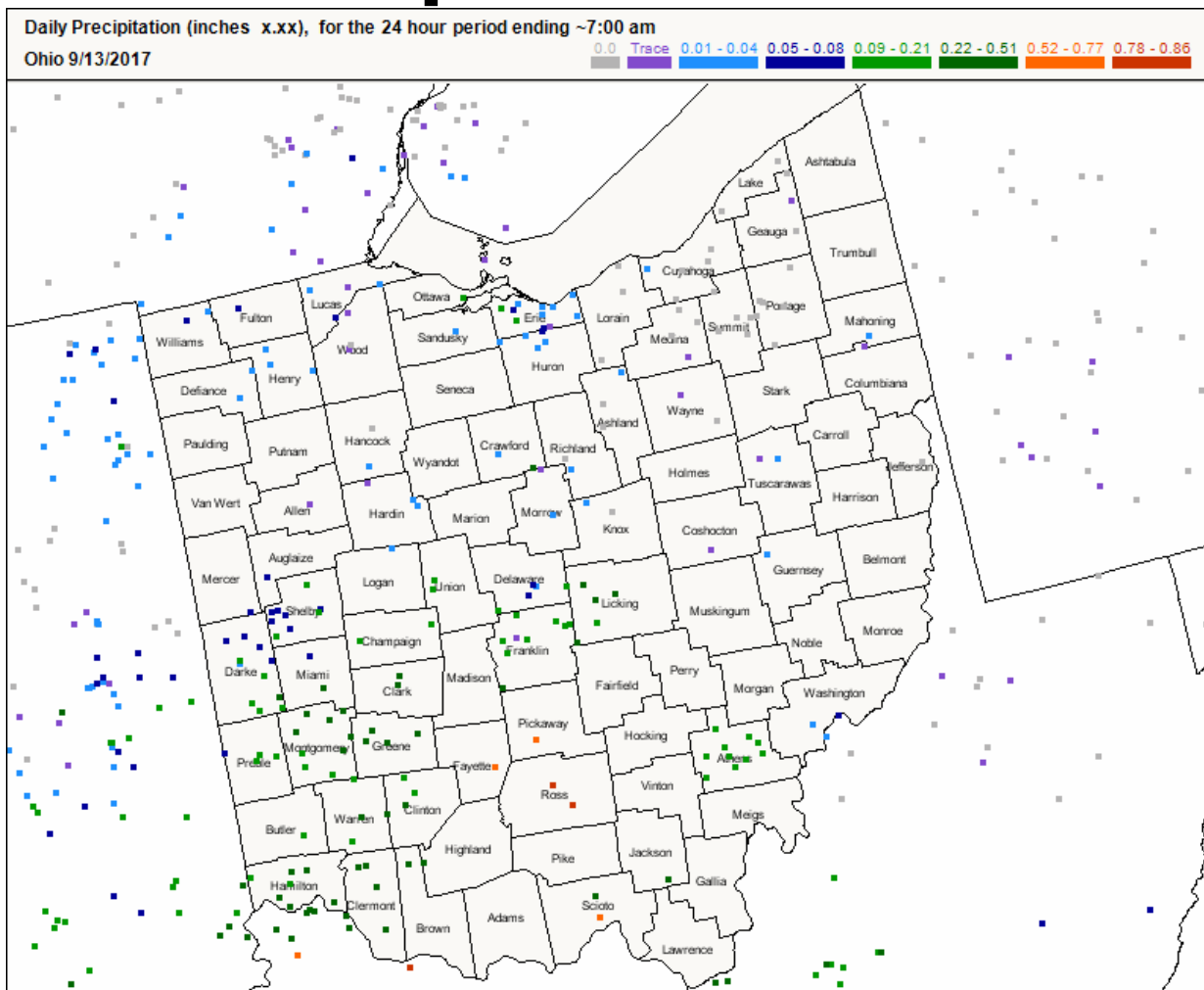
NOAA Regional Climate Centers



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# CoCoRaHS Observed Precipitation: September 13

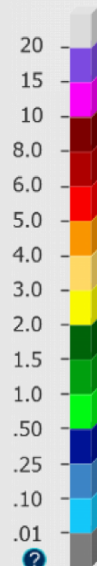
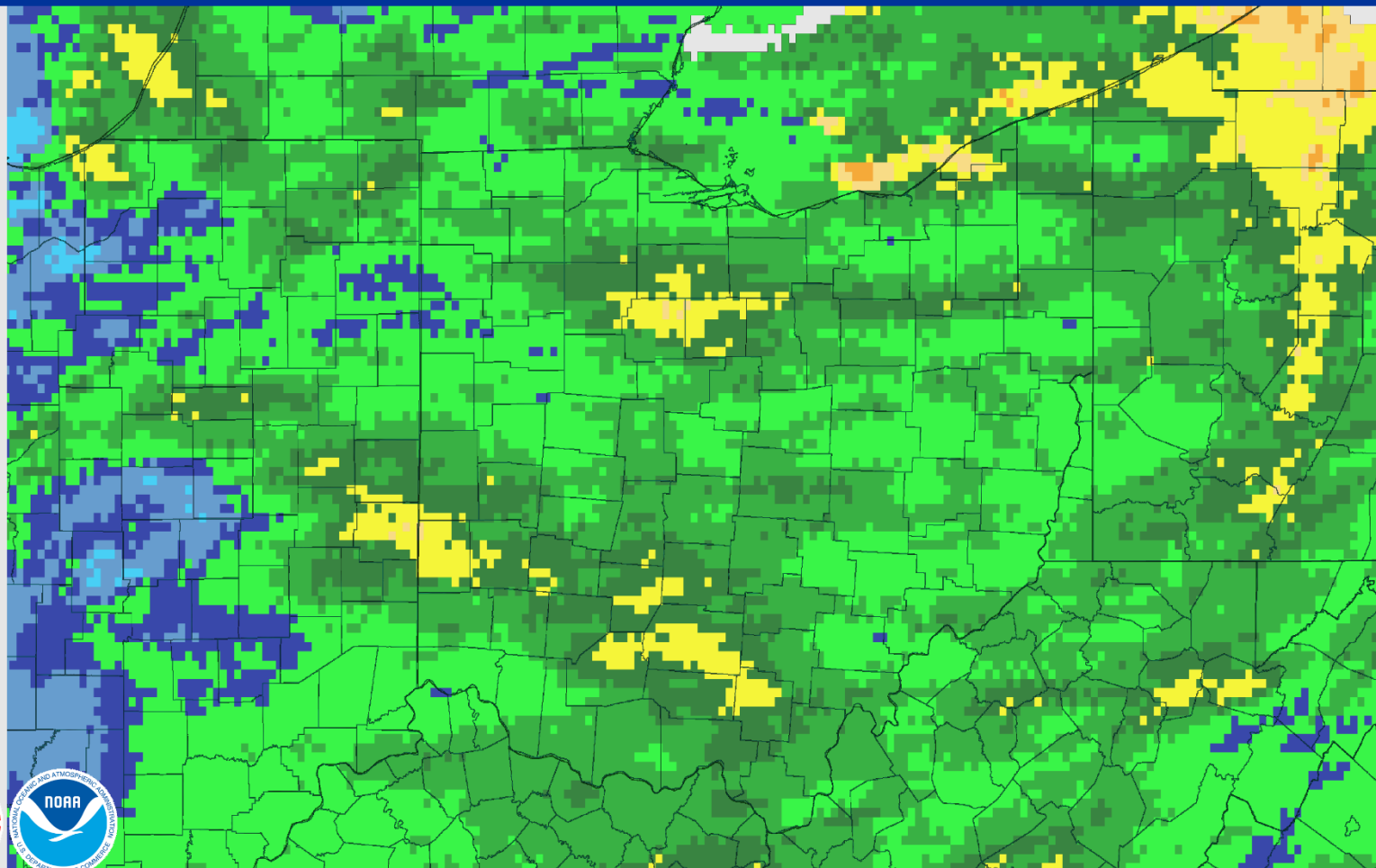


# Previous 14-Day Precipitation: Total

September 18, 2017 14-Day Observed Precipitation

Created on: September 18, 2017 - 20:56 UTC

Valid on: September 18, 2017 12:00 UTC



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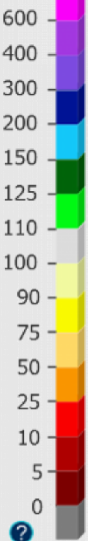
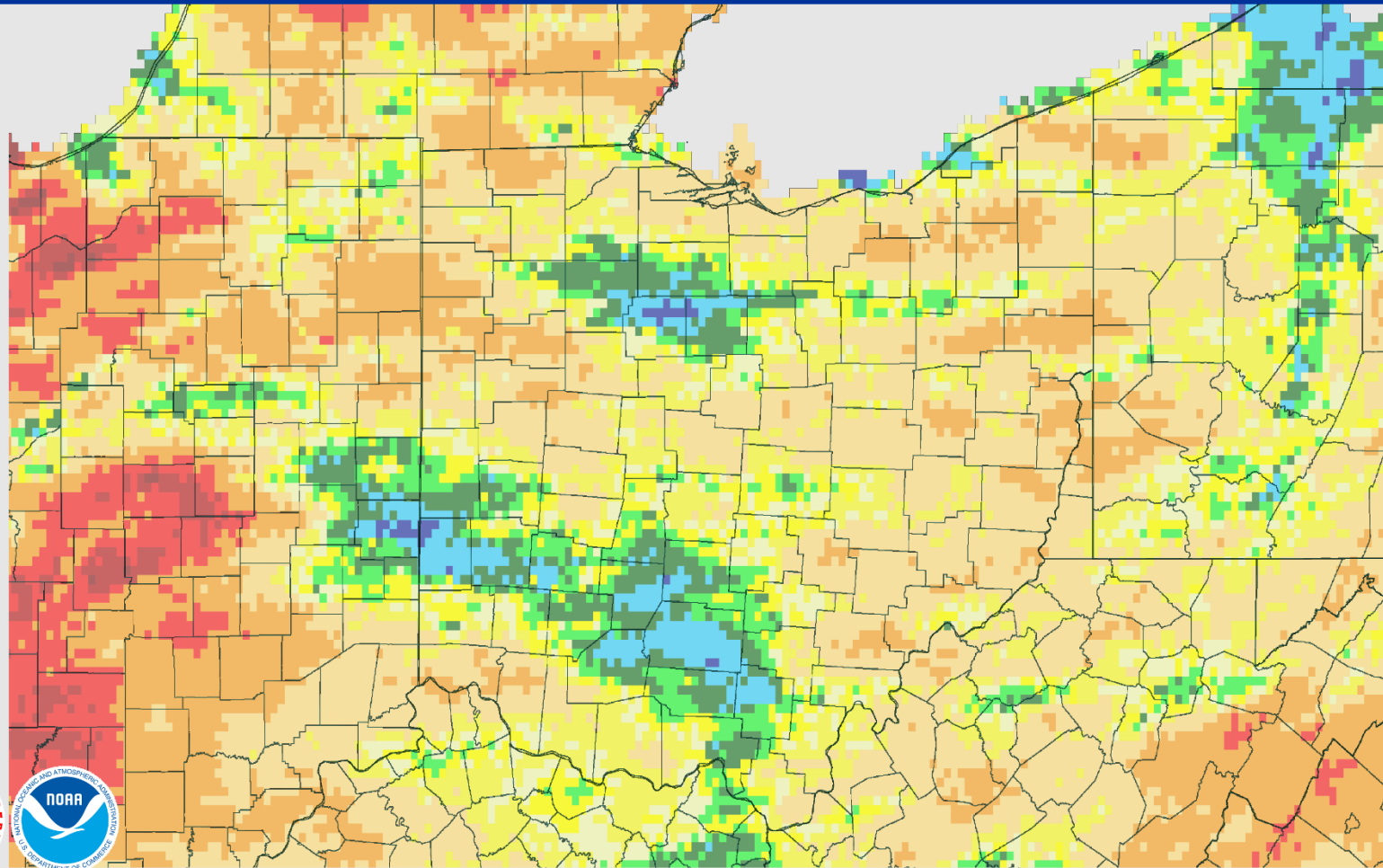
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# Previous 14-Day Precipitation: Percent of Normal

September 18, 2017 14-Day Percent Precipitation

Created on: September 18, 2017 - 20:57 UTC

Valid on: September 18, 2017 12:00 UTC

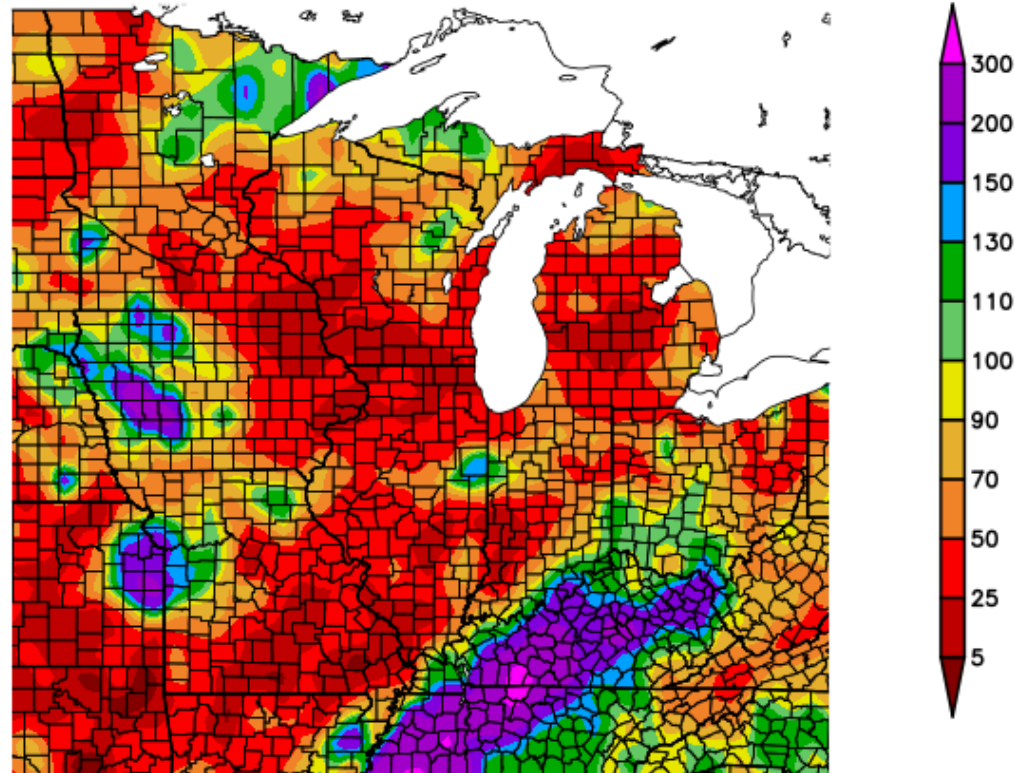


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# Previous 30-Day Precipitation Difference Compared to Average (1981-2010)

Percent of Normal Precipitation (%)  
8/19/2017 - 9/17/2017



NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM  
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Generated 9/18/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

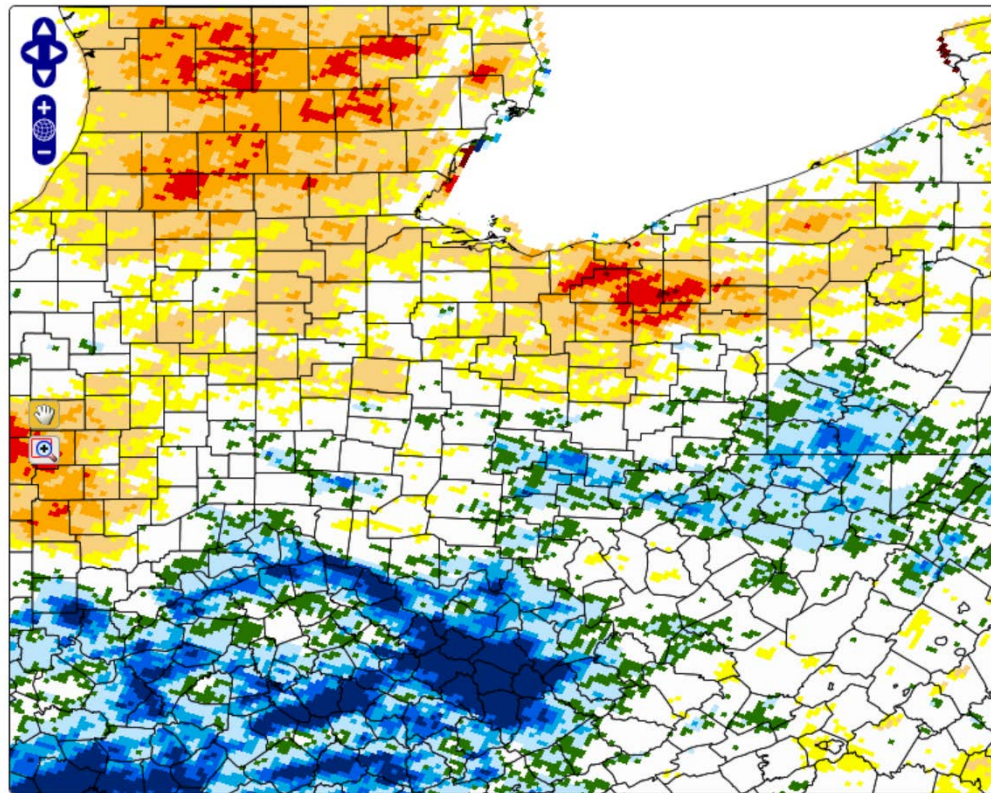


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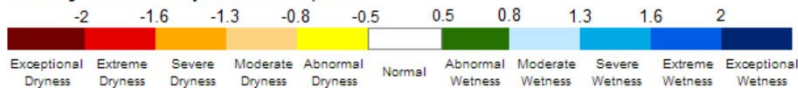
# Standard Precipitation Index (SPI)

## Experimental High Resolution Drought Trigger Tool



60-Day

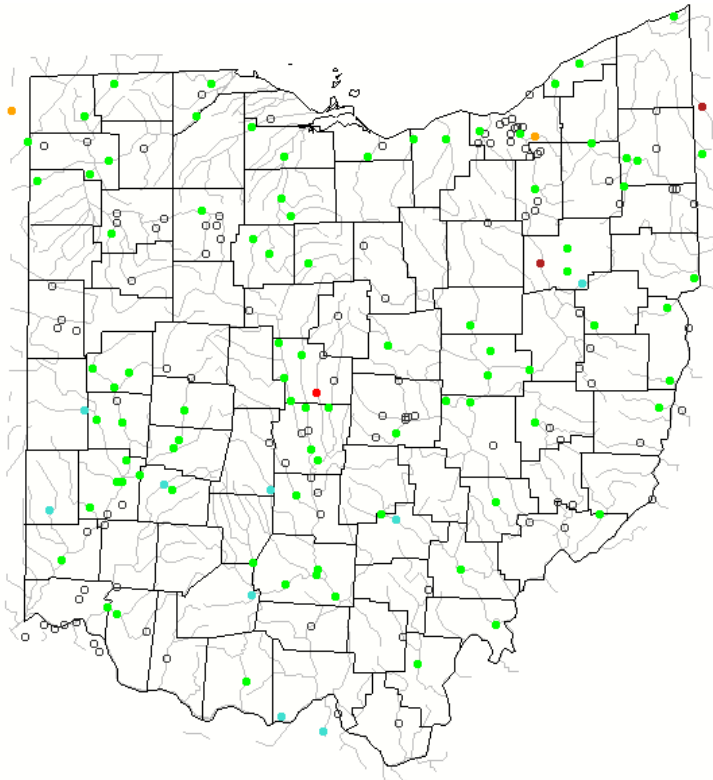
60 day SPI for September 17, 2017



Transparency:   
[About these maps](#)



7-DAY



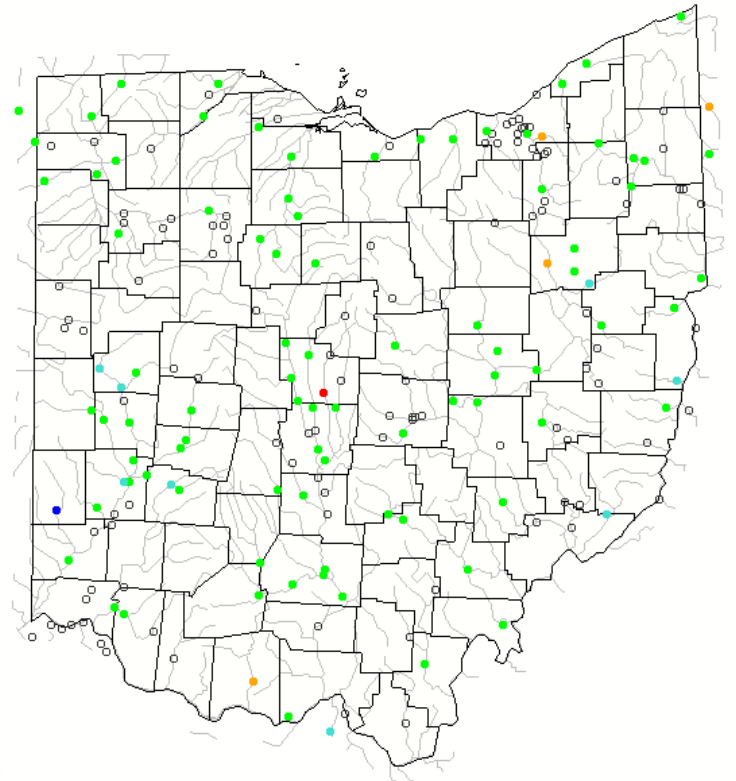
Explanation - Percentile classes

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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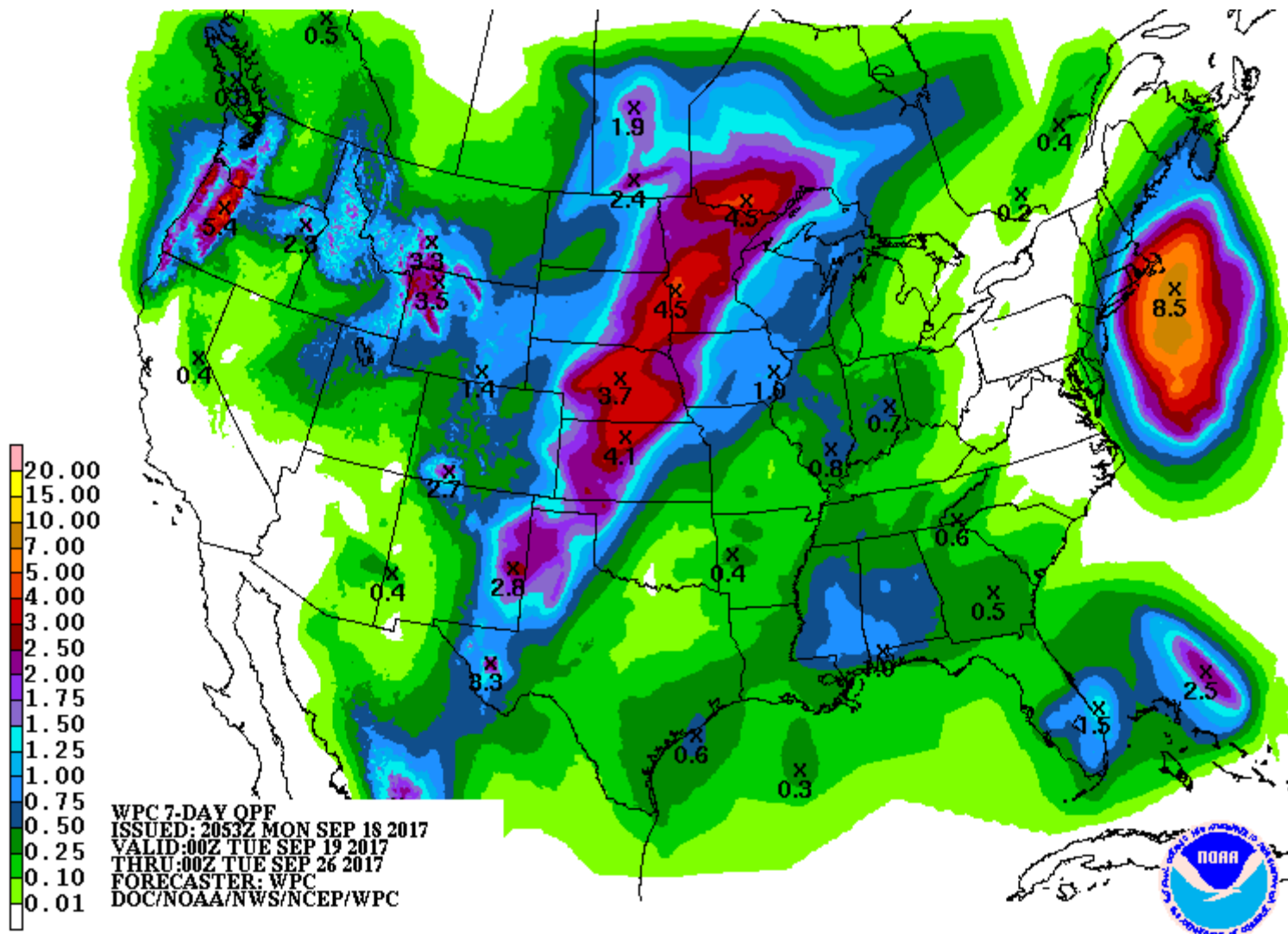
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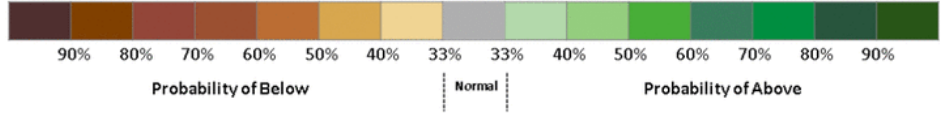
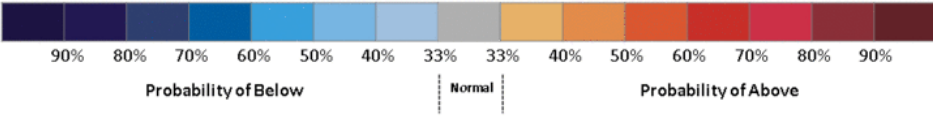
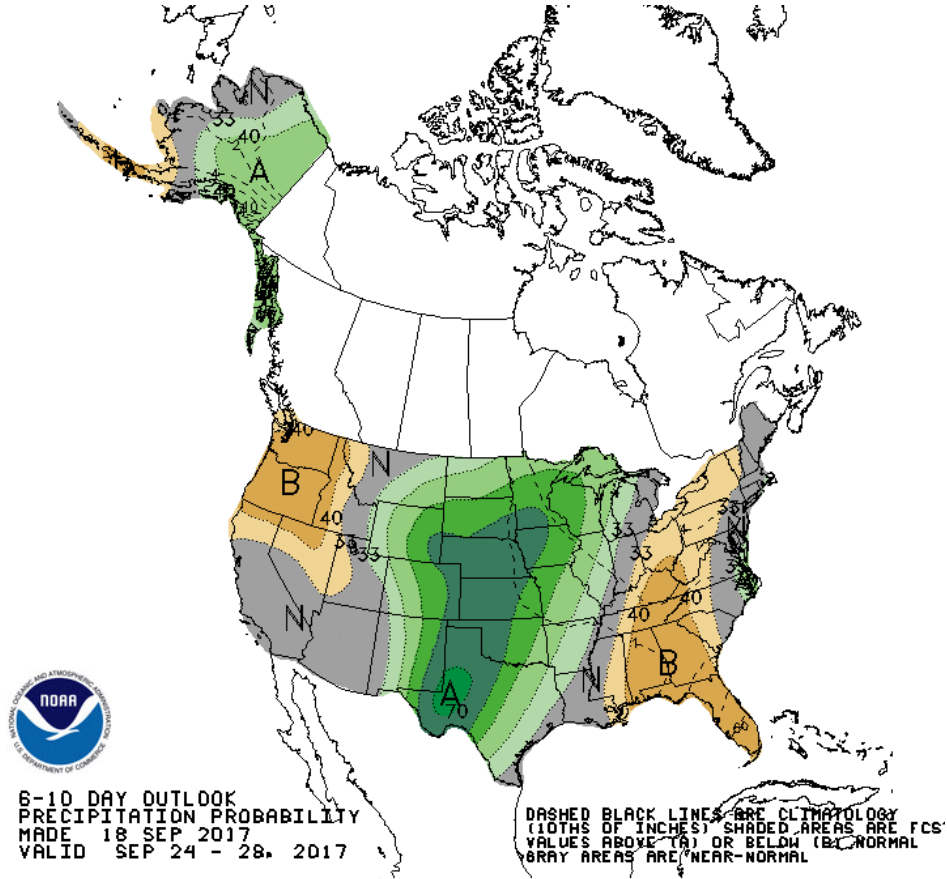
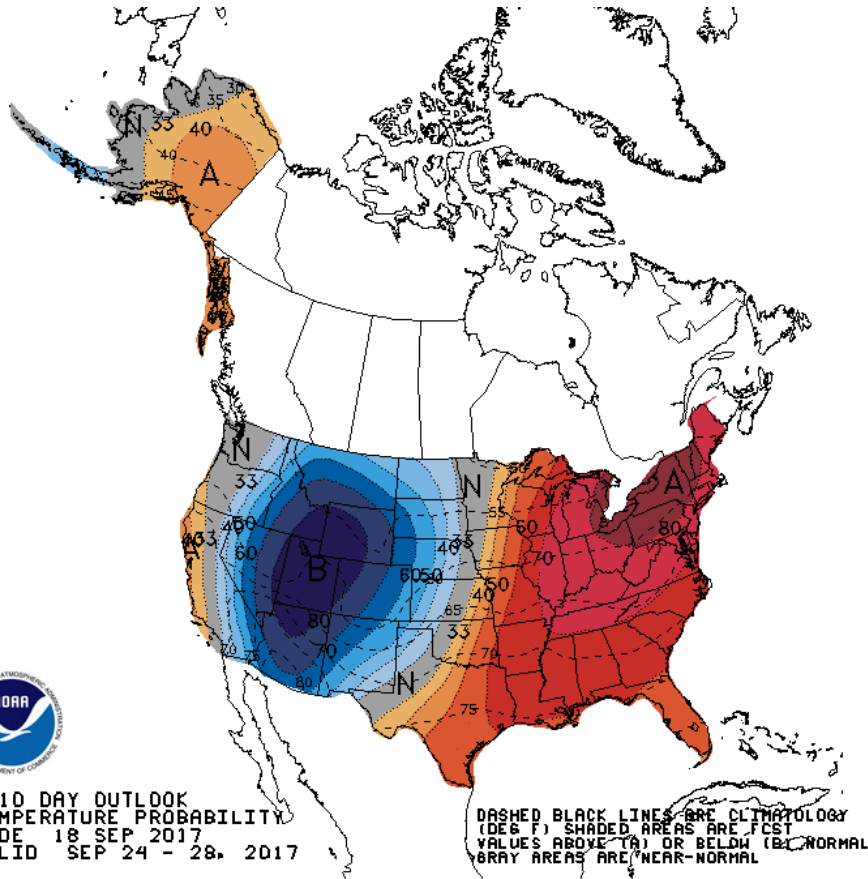


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# Weather for the Week Ahead



# 6-10 Day Outlook



Highs: Mid 70s

Lows: Mid 50s

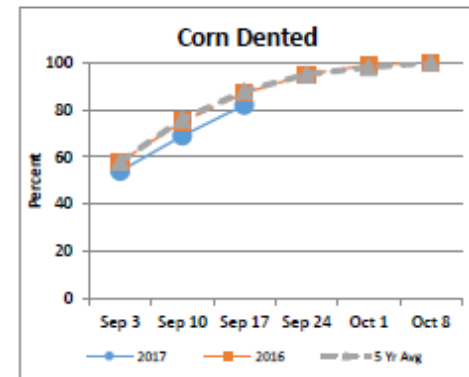
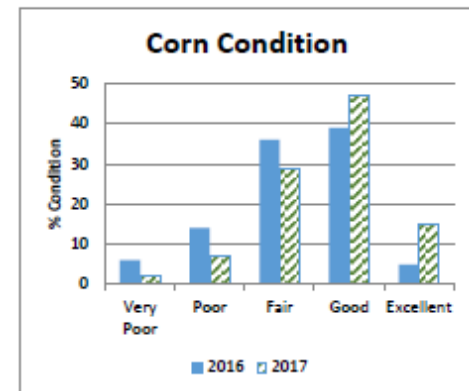
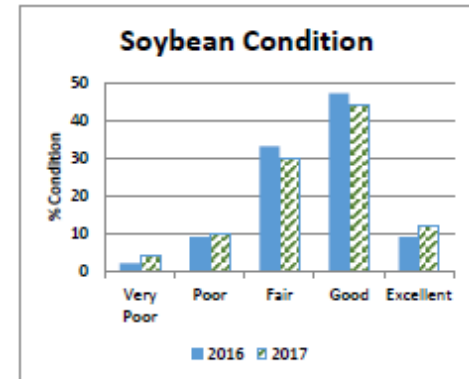


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# Ag Highlights

- 5.6 days suitable for fieldwork
- Due to late planting, early season rainfall – soybean maturity is quite varied
- Some signs of moisture stress on pastures and hay



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:** Abnormally dry in NE and far NW

**30-Day and 60-Day:** Dry conditions expanding across the north/west

**The week ahead:** Storms early this week then dry conditions likely



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