

# Ohio's Climate Assessment

September 11, 2020



Photo Credit: David Marrison

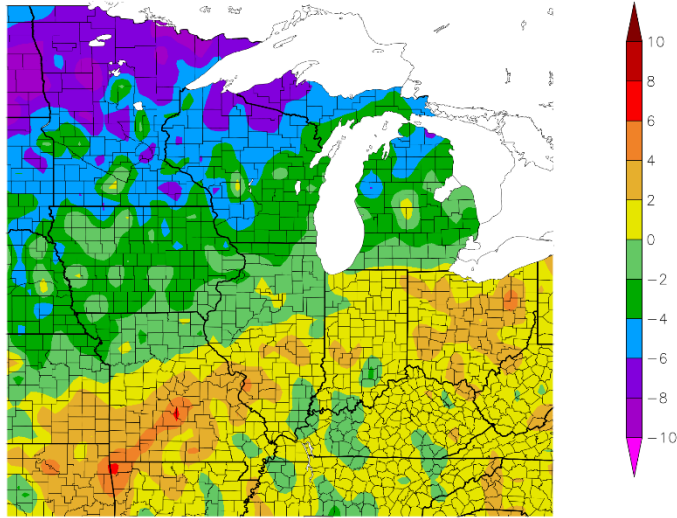


THE OHIO STATE UNIVERSITY

**Aaron B. Wilson**  
STATE CLIMATE OFFICE OF OHIO (SCOO)  
DEPARTMENT OF EXTENSION - CFAES  
BYRD POLAR & CLIMATE RESEARCH CENTER  
DEPARTMENT OF GEOGRAPHY

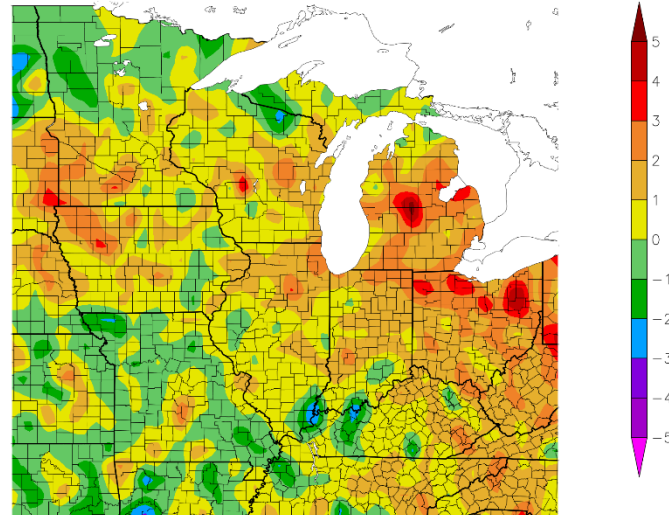
# Temperature Differences Compared to Average (1981-2010)

Departure from Normal Temperature (F)  
9/3/2020 – 9/9/2020



7-Day

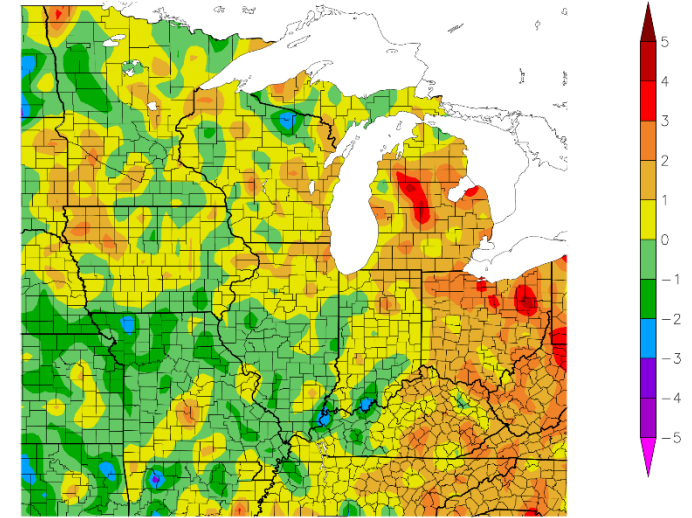
30-Day  
Departure from Normal Temperature (F)  
8/11/2020 – 9/9/2020



Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)  
7/12/2020 – 9/9/2020



Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

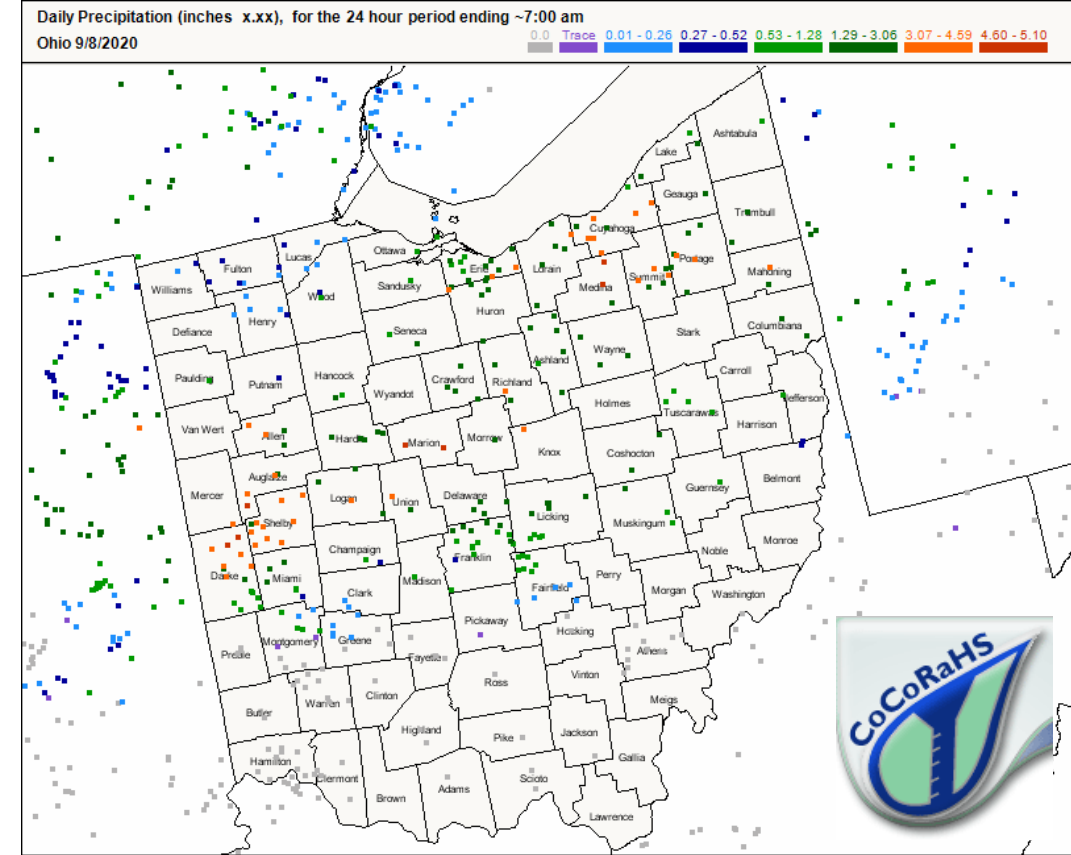
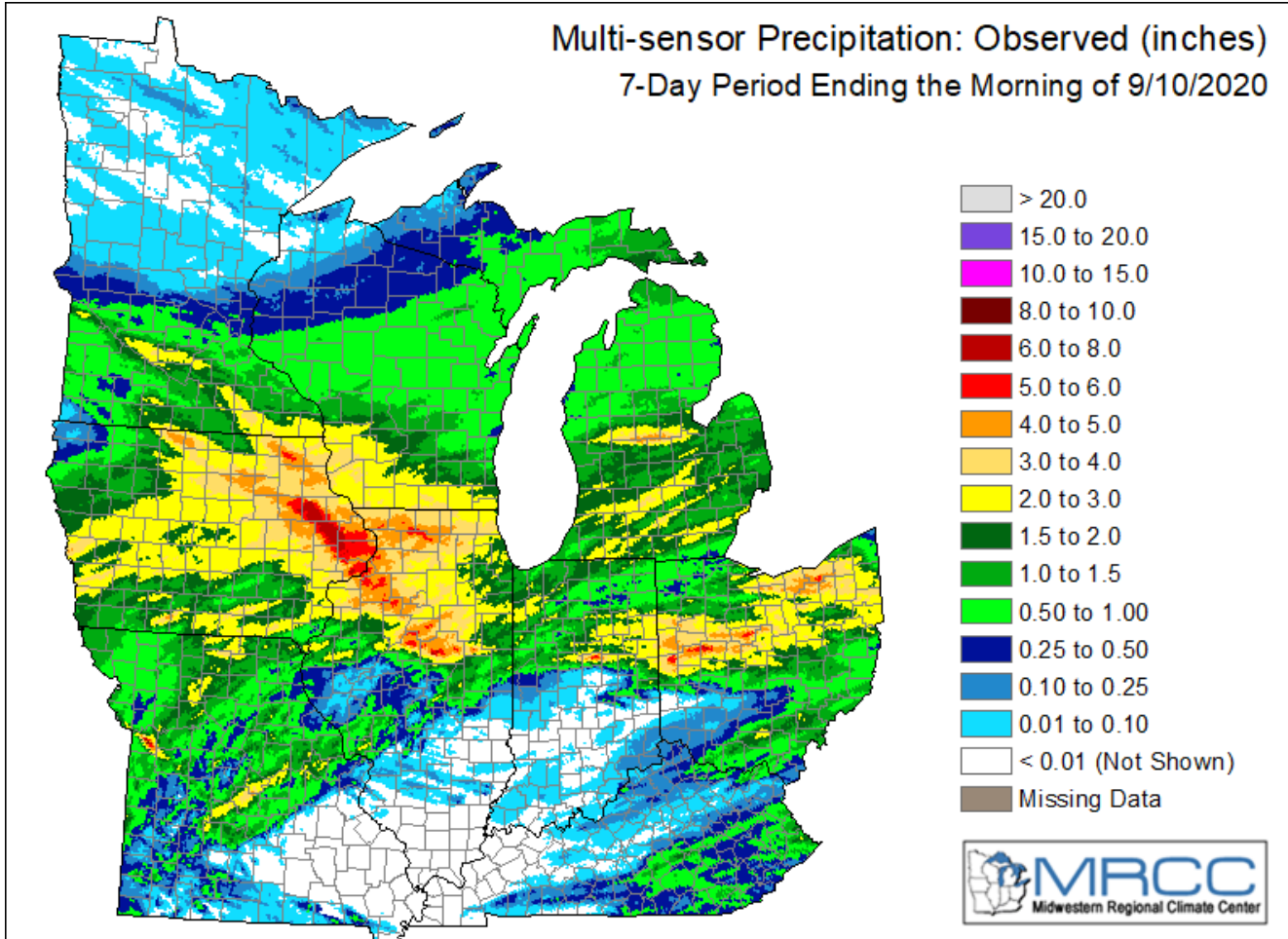
60-Day



<https://www.drought.gov/drought/dews/midwest/current-conditions>



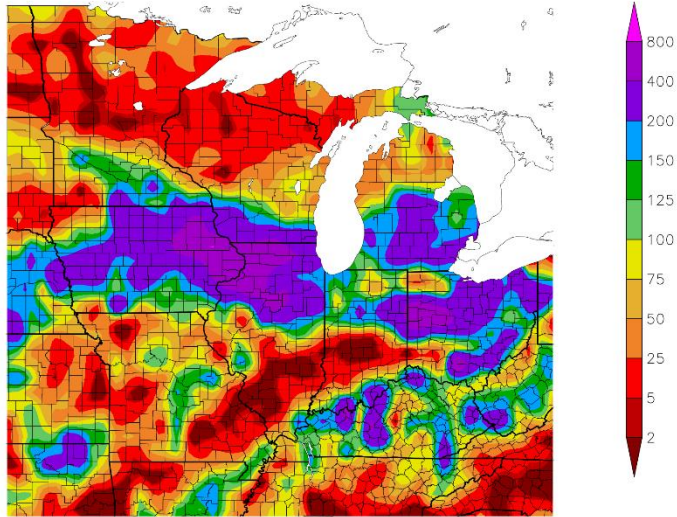
# This Week's Precipitation



<https://www.cocorahs.org/>

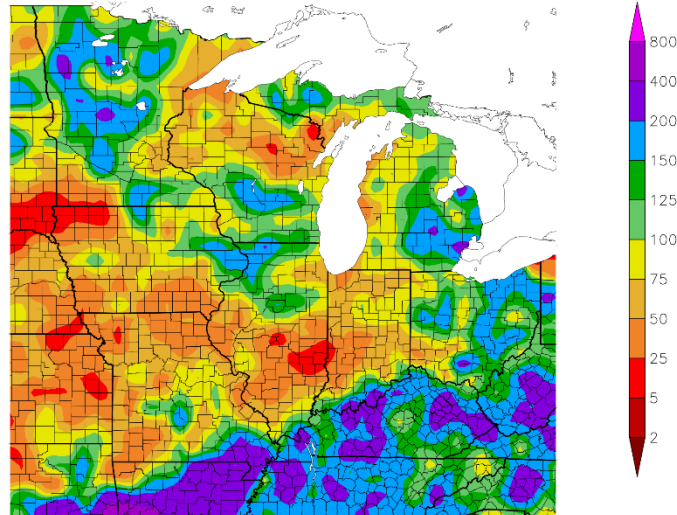
# Precipitation Differences Compared to Average (1981-2010)

Percent of Normal Precipitation (%)  
9/3/2020 – 9/9/2020

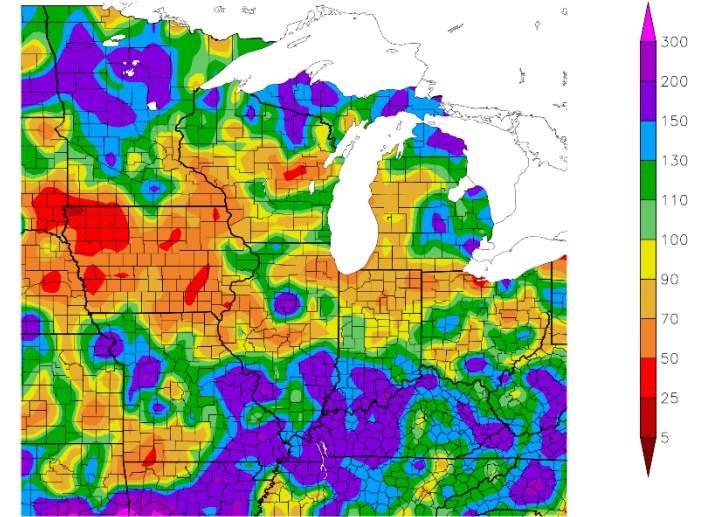


7-Day

30-Day  
Percent of Normal Precipitation (%)  
8/11/2020 – 9/9/2020



Percent of Normal Precipitation (%)  
7/12/2020 – 9/9/2020



60-Day

Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers



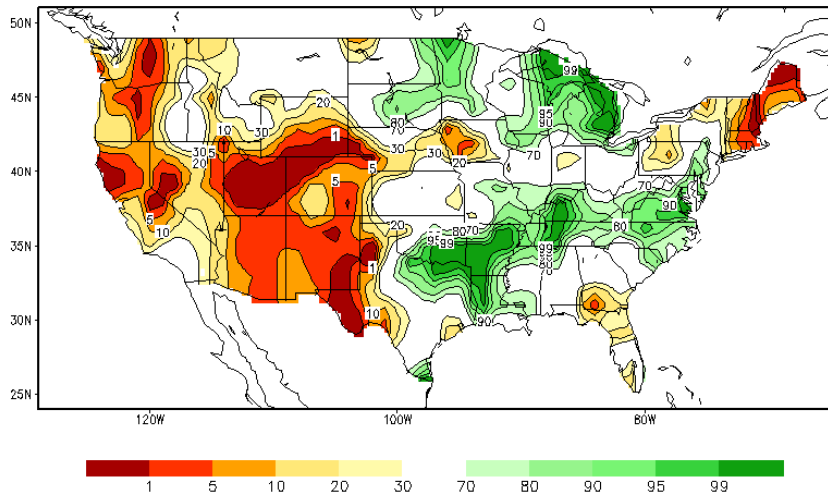
Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

<https://www.drought.gov/drought/dews/midwest/current-conditions>

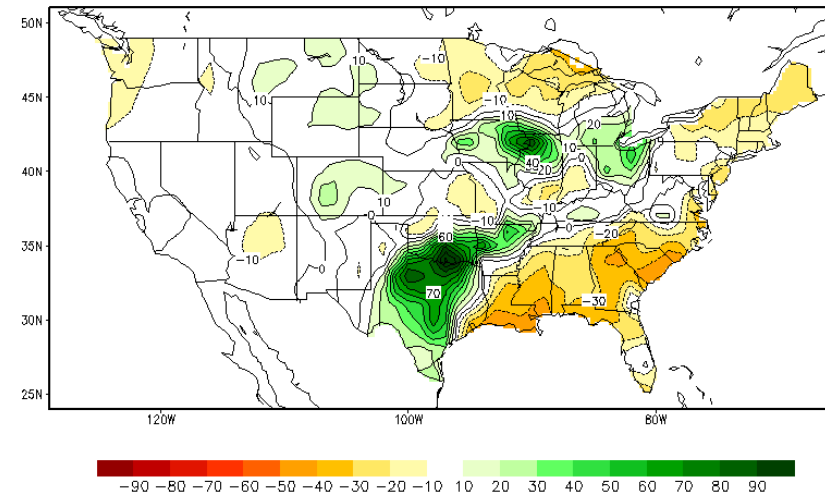


Calculated Soil Moisture Ranking Percentile  
SEP 10, 2020

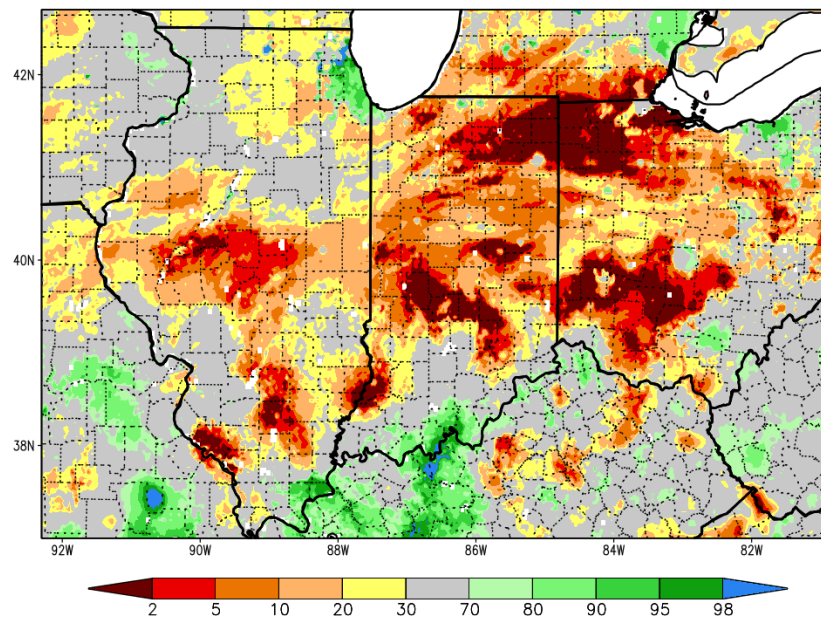


# Soil Moisture

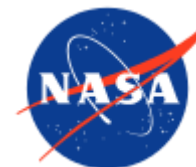
Calculated Soil Moisture Anomaly Change  
SEP 10, 2020 from AUG.31



SPoRT-LIS 0-100 cm Soil Moisture percentile valid 11 Sep 2020



[https://weather.msfc.nasa.gov/sport/case\\_studies/lis\\_IN.html](https://weather.msfc.nasa.gov/sport/case_studies/lis_IN.html)

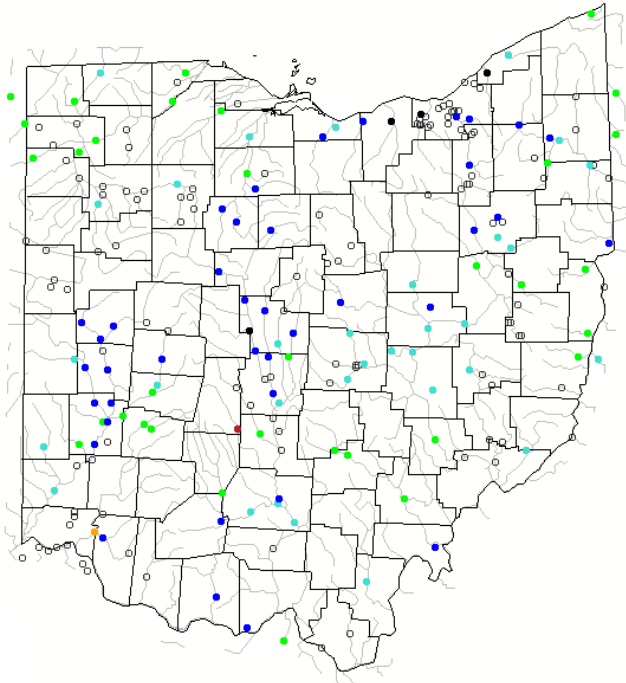


[https://www.cpc.ncep.noaa.gov/products/Soilmst\\_Monitoring/US/Soilmst/Soilmst.shtml#](https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml#)



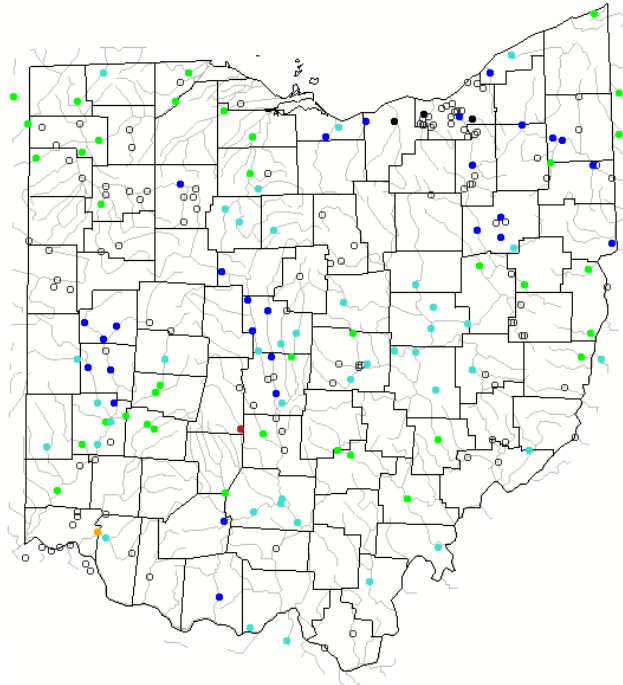
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7-DAY

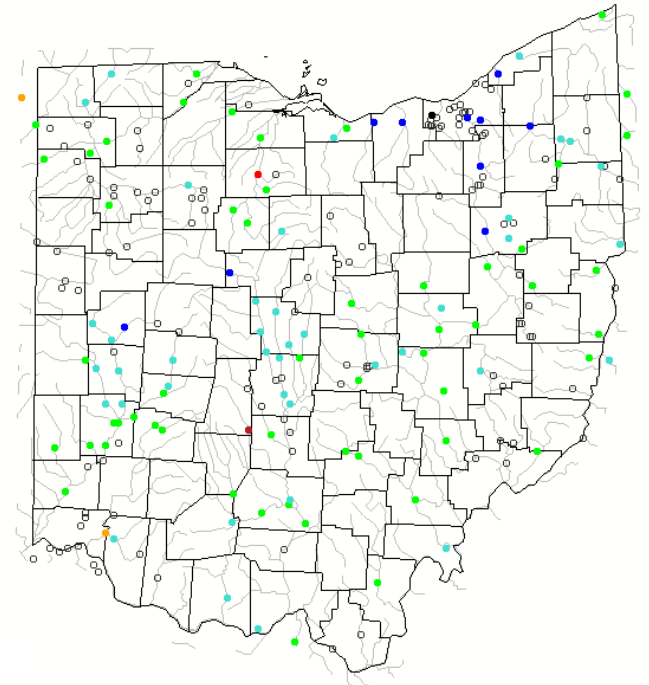


# USGS Stream Flow

14-DAY



28-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

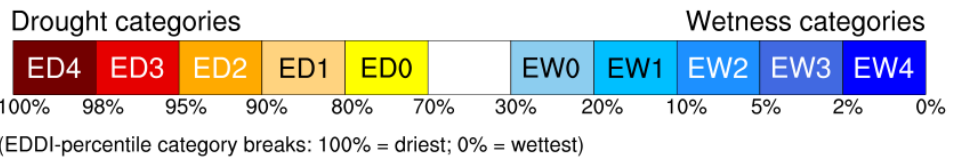
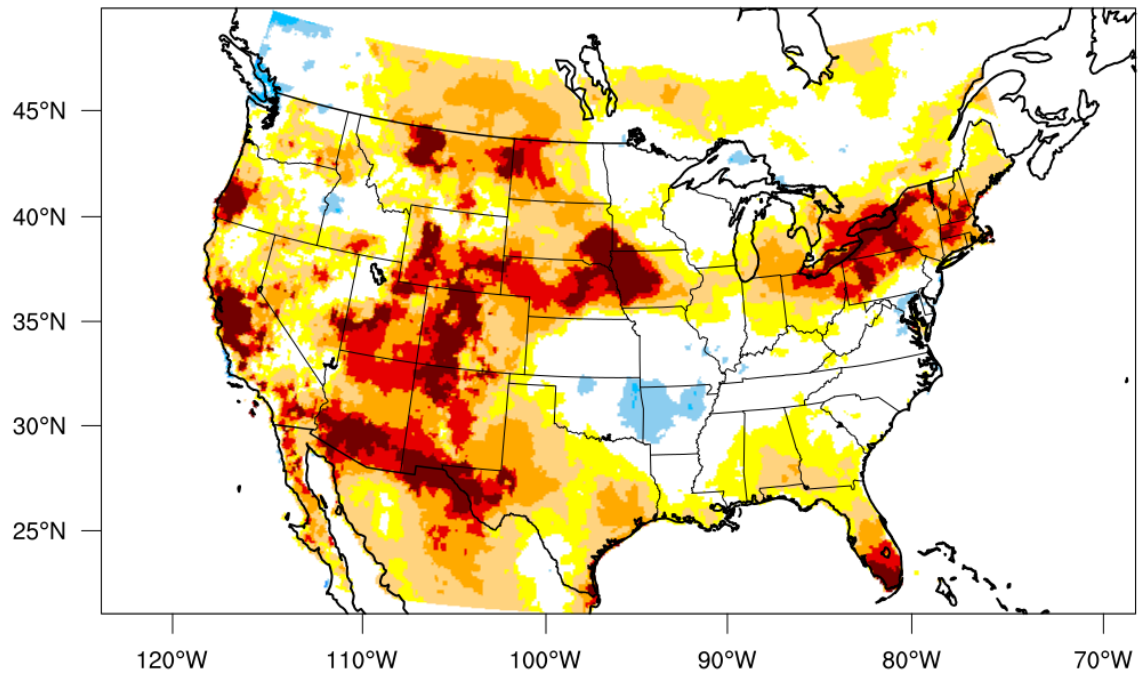
Average streamflow compared to historical streamflow for the day of the year



<https://waterwatch.usgs.gov/index.php>

# Moisture Demand

1-month EDDI categories for September 5, 2020

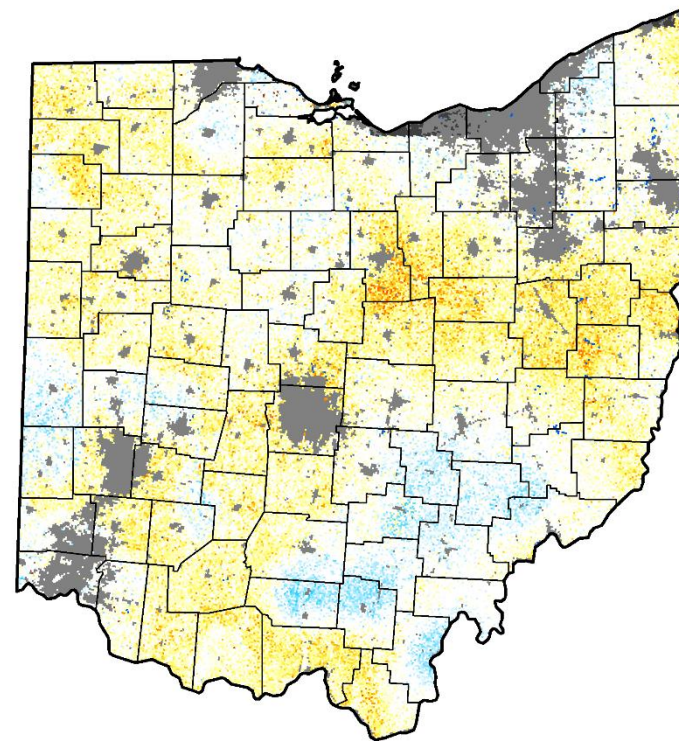


Generated by NOAA/ESRL/Physical Sciences Laboratory



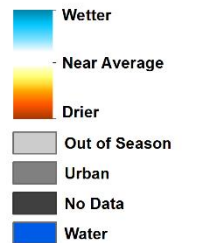
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Quick Drought Response Index  
Ohio



September 6, 2020  
(Week 36)

Conditions Relative to  
4-Week Historical Average

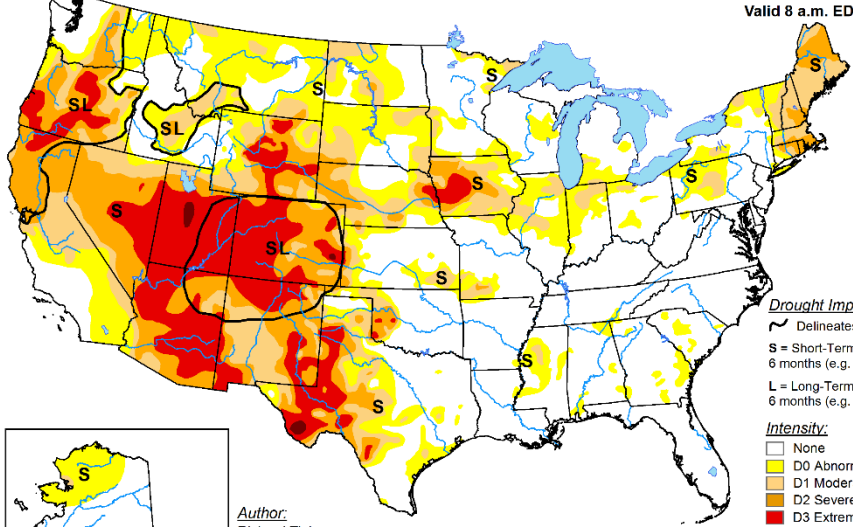


<https://quickdri.unl.edu/State.aspx?OH>

# Current U.S. Drought Monitor

## U.S. Drought Monitor

September 8, 2020  
 (Released Thursday, Sep. 10, 2020)  
 Valid 8 a.m. EDT



**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)

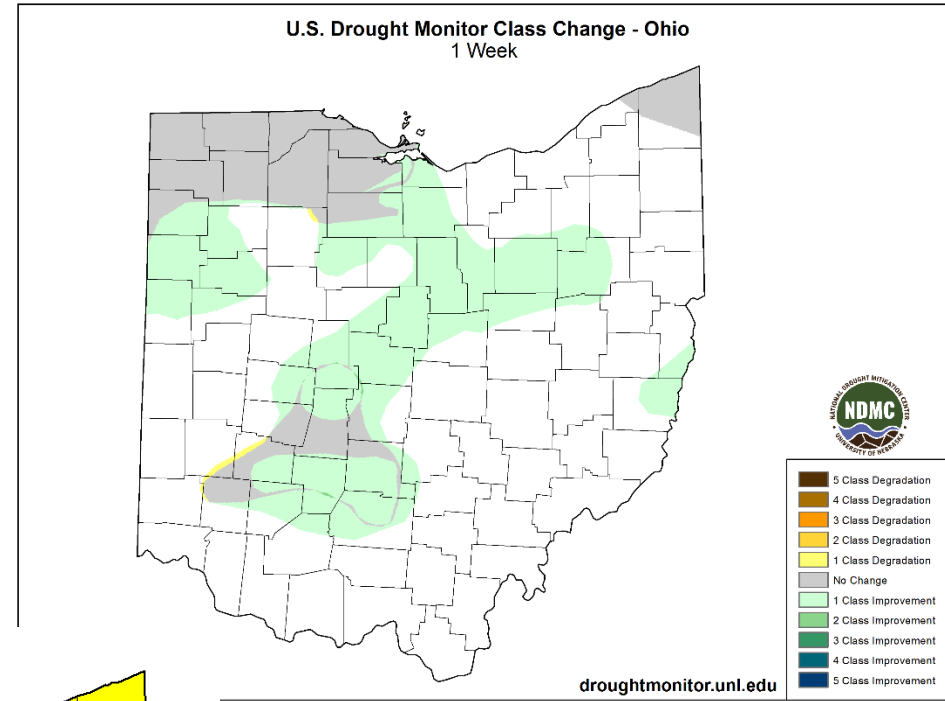
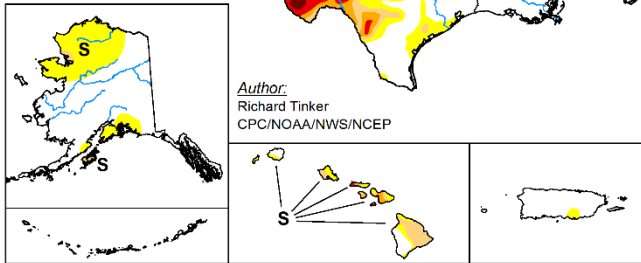
**Intensity:**  
 None  
 D0 Abnormally Dry  
 D1 Moderate Drought  
 D2 Severe Drought  
 D3 Extreme Drought  
 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



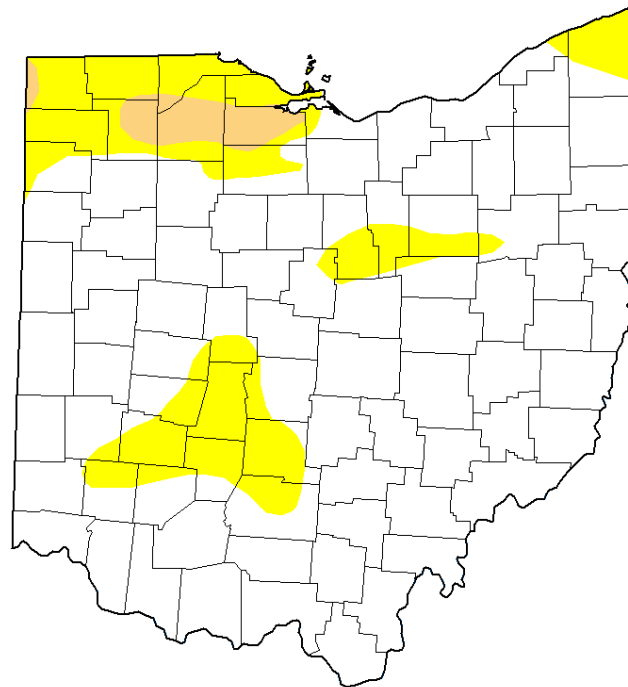
[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

**Author:**  
 Richard Tinker  
 CPC/NOAA/NWS/NCEP



5 Class Degradation  
 4 Class Degradation  
 3 Class Degradation  
 2 Class Degradation  
 1 Class Degradation  
 No Change  
 1 Class Improvement  
 2 Class Improvement  
 3 Class Improvement  
 4 Class Improvement  
 5 Class Improvement

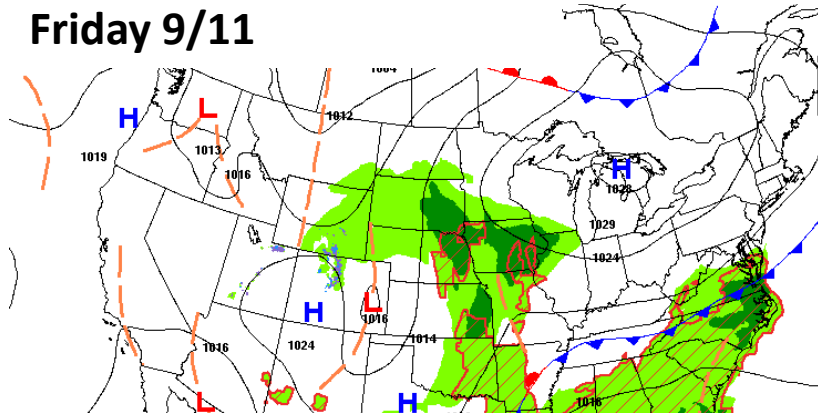
[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



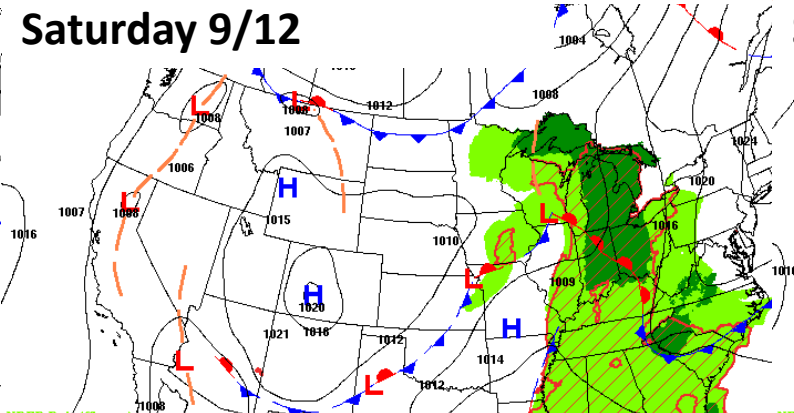


# Weather for the Week Ahead

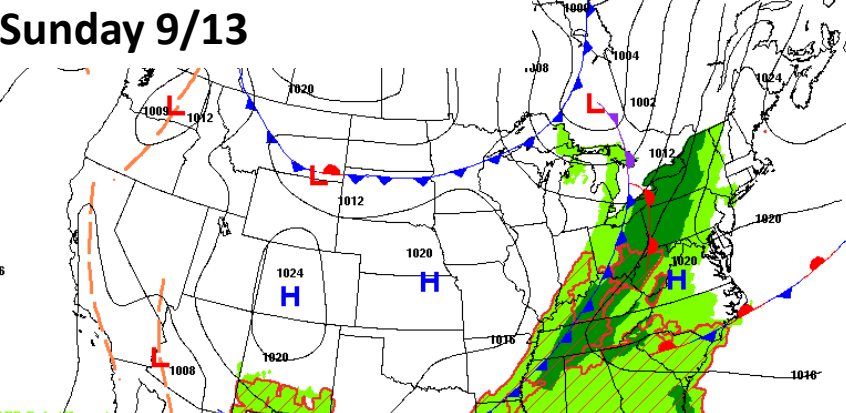
Friday 9/11



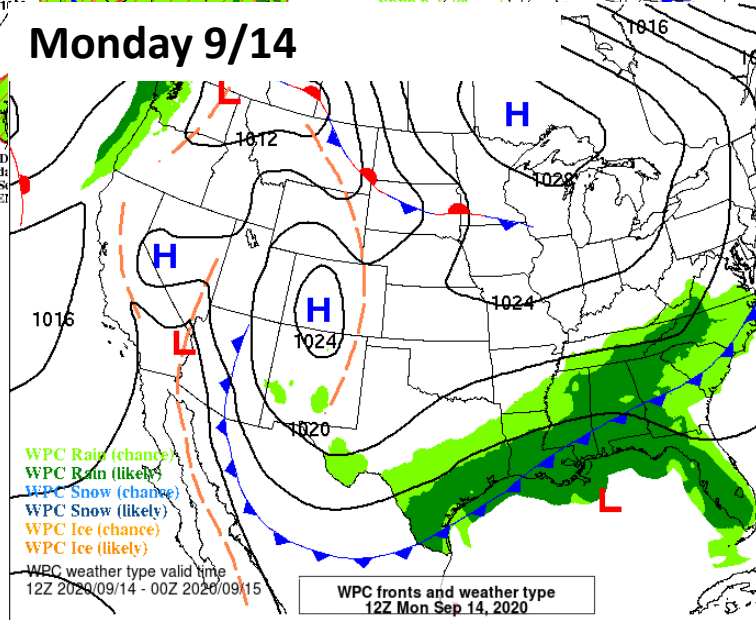
Saturday 9/12



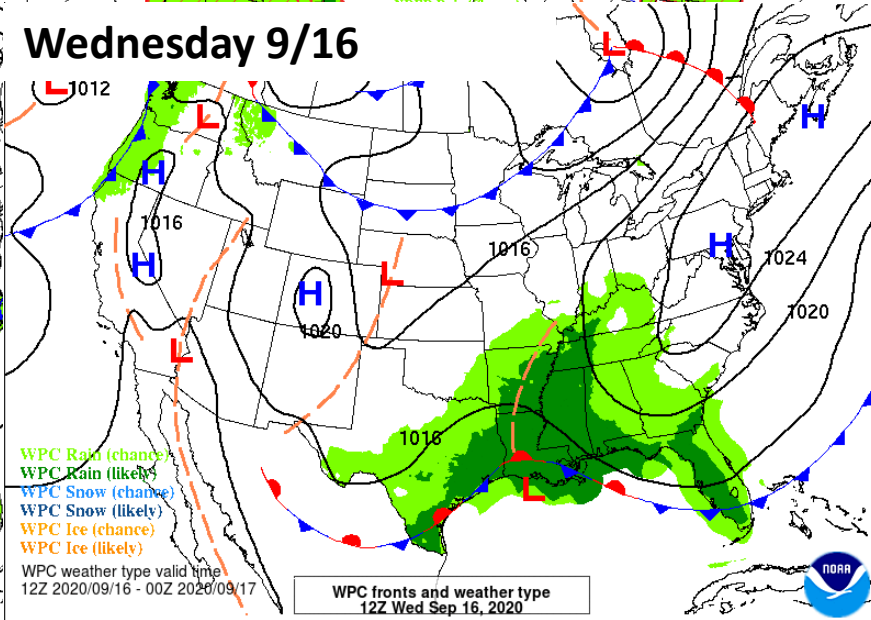
Sunday 9/13



Monday 9/14



Wednesday 9/16



- NDFD Rain (Chance)
- NDFD Rain (Likely)
- NDFD Snow (Chance)
- NDFD Snow (Likely)
- NDFD Mix (Chance)
- NDFD Mix (Likely)
- NDFD Ice (Chance)
- NDFD Ice (Likely)
- NDFD T-Storm (Chance) (Hatched)
- NDFD T-Storm (Likely and/or Severe)

WPC Fronts/NDFD  
Issued: 1242Z Friday  
Valid 18Z Friday  
Forecaster: ZIEGEL

- WPC Rain (chance)
- WPC Rain (likely)
- WPC Snow (chance)
- WPC Snow (likely)
- WPC Ice (chance)
- WPC Ice (likely)

WPC weather type valid time  
12Z 2020/09/14 - 00Z 2020/09/15

WPC fronts and weather type  
12Z Mon Sep 14, 2020

- WPC Rain (chance)
- WPC Rain (likely)
- WPC Snow (chance)
- WPC Snow (likely)
- WPC Ice (chance)
- WPC Ice (likely)

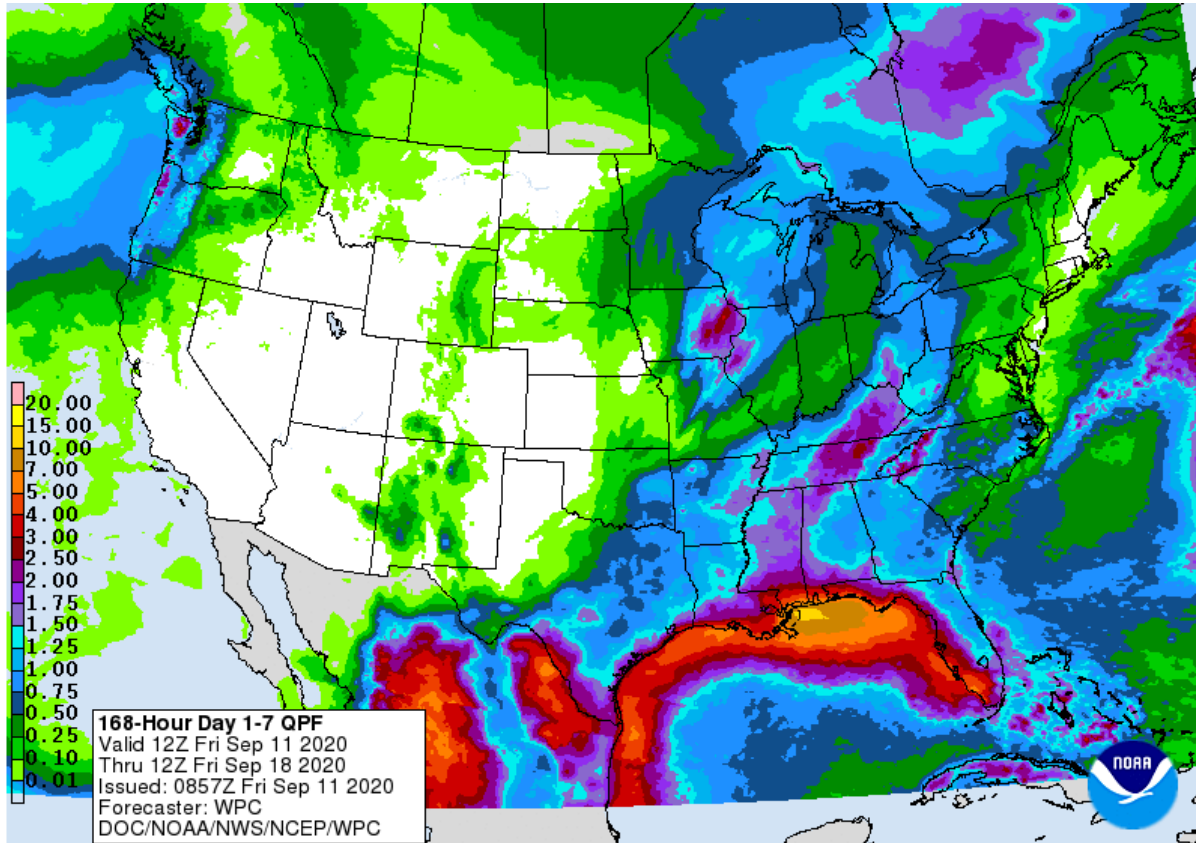
WPC weather type valid time  
12Z 2020/09/16 - 00Z 2020/09/17

WPC fronts and weather type  
12Z Wed Sep 16, 2020

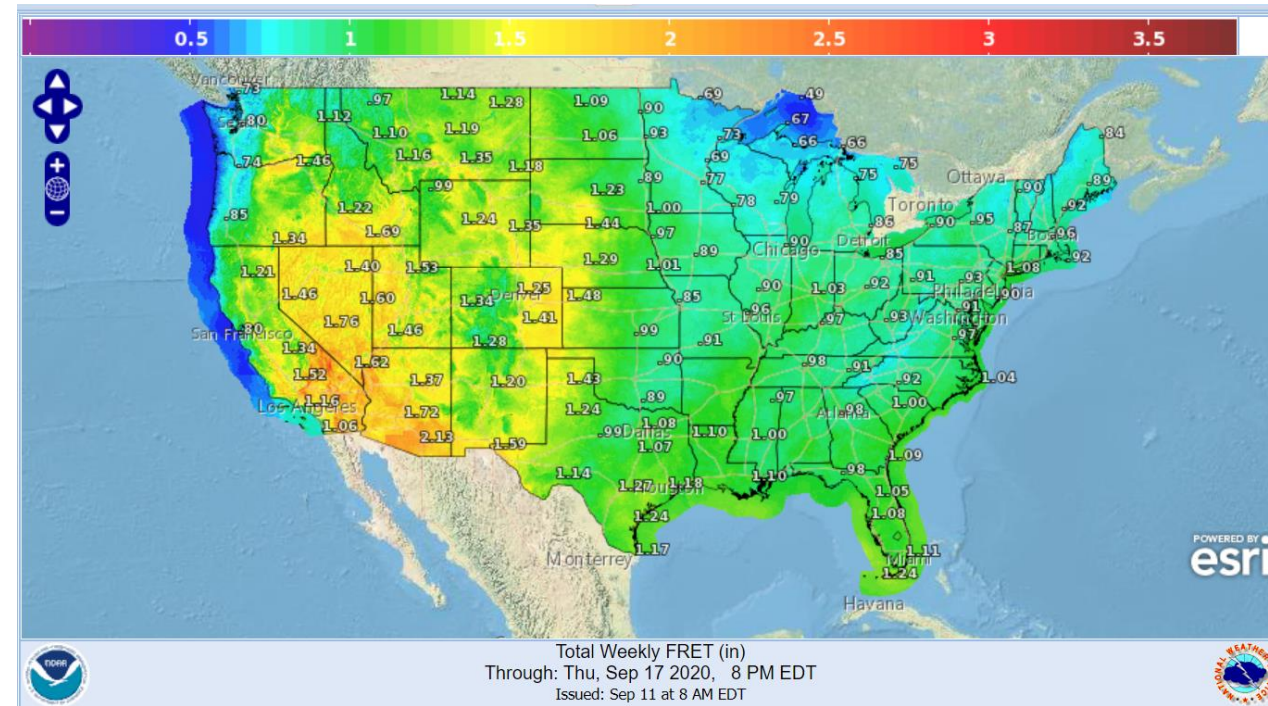
WPC weather type valid time  
12Z 2020/09/13 - 00Z 2020/09/14



# 7-Day Precipitation/Evaporation Forecast



<https://www.wpc.ncep.noaa.gov/#>

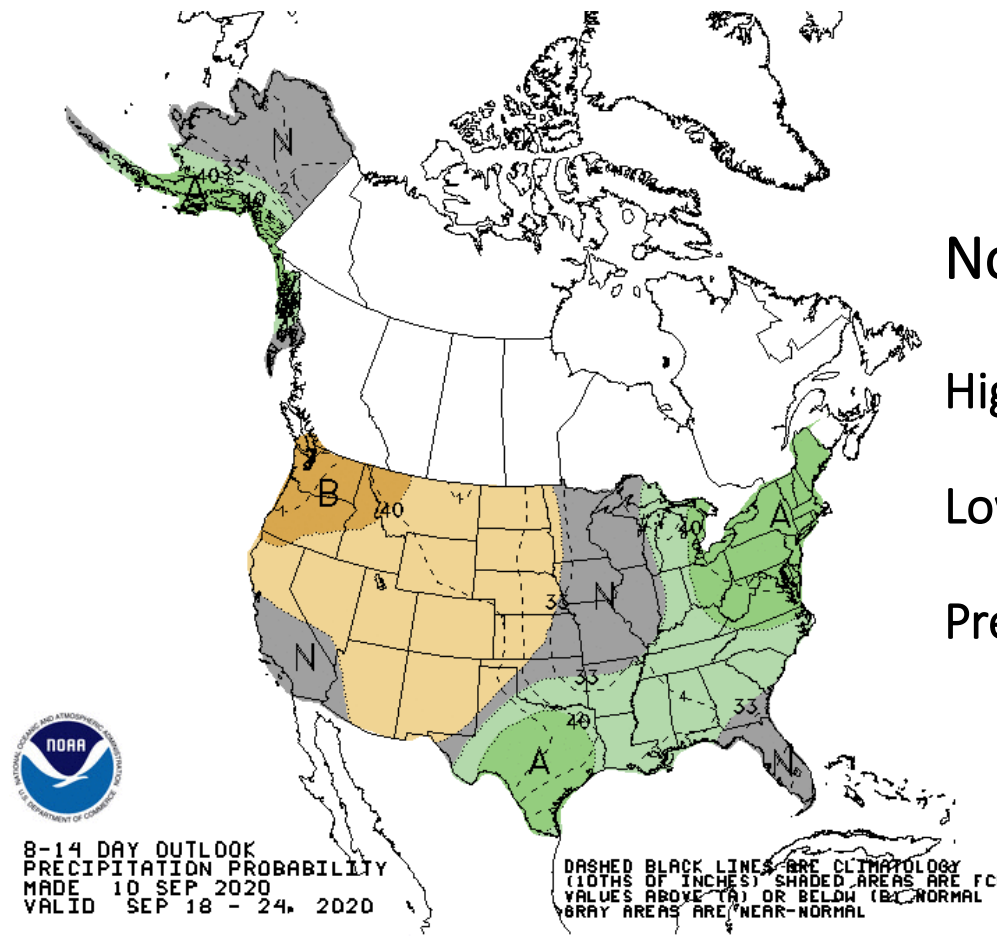
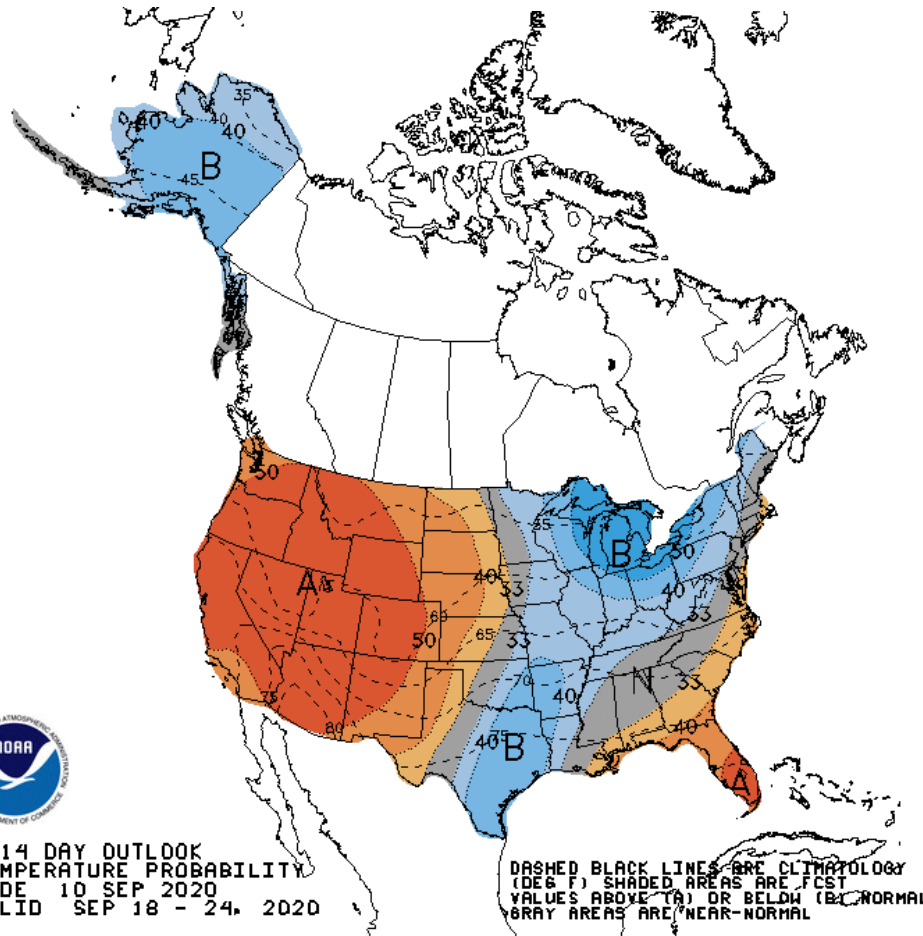


<https://www.weather.gov/abr/etforecasts>



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# 8-14 Day Outlook

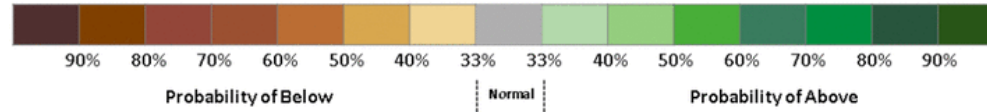
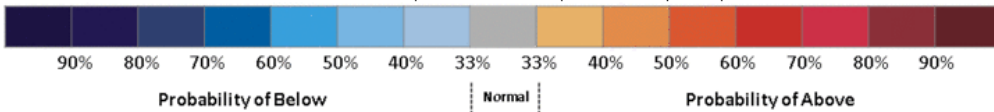


Normals (1981-2010)

Highs: 75-80°F

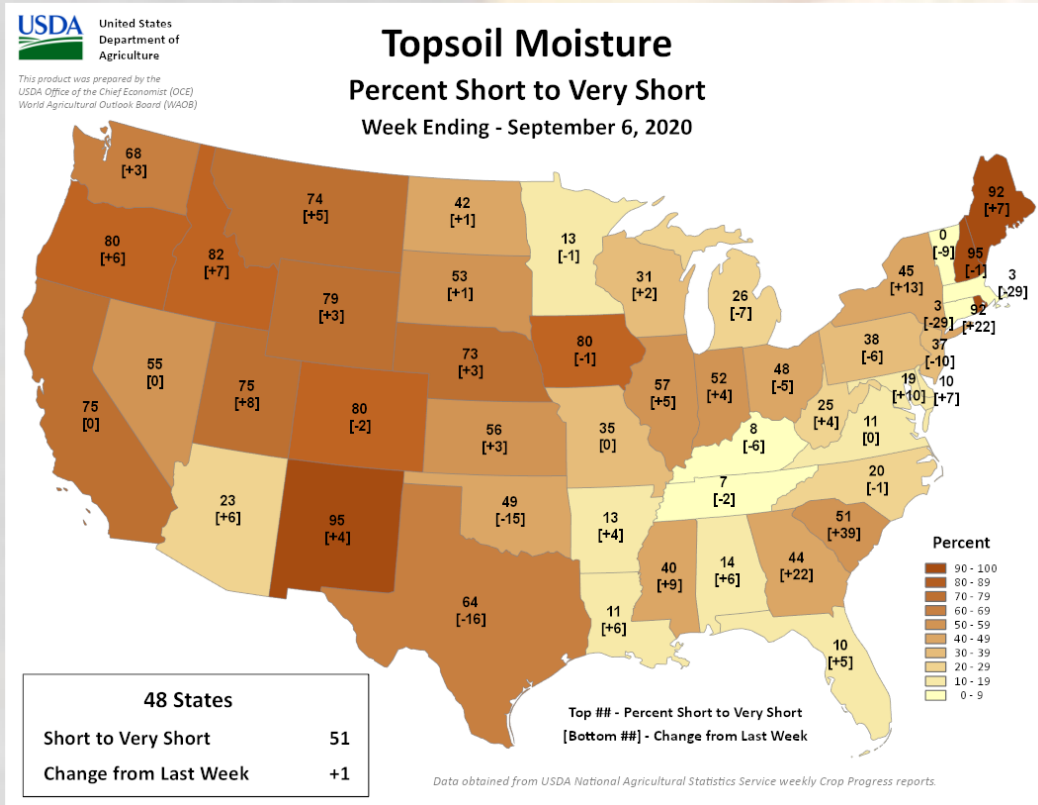
Lows: 55-60°F

Precip: 0.75"



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# Ag Highlights



- 5.7 suitable days for fieldwork ending Sept. 6
- Crop stress from August dry weather still present
- Most crop conditions still fair to good and ahead of 5yr averages

**NASS: Cheryl Turner –**

[https://www.nass.usda.gov/Statistics\\_by\\_State/Ohio/Publications/Crop\\_Progress\\_&\\_Condition/2020/cw3220oh.pdf](https://www.nass.usda.gov/Statistics_by_State/Ohio/Publications/Crop_Progress_&_Condition/2020/cw3220oh.pdf)

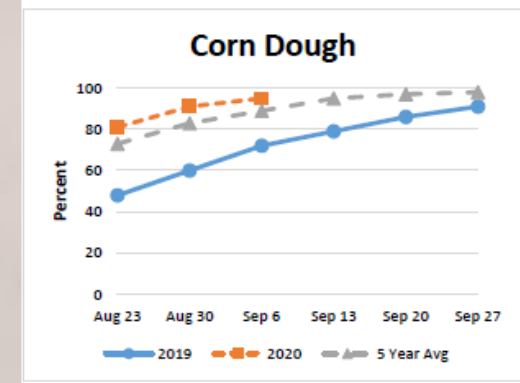
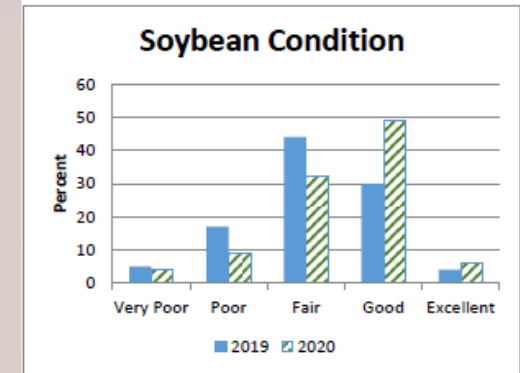
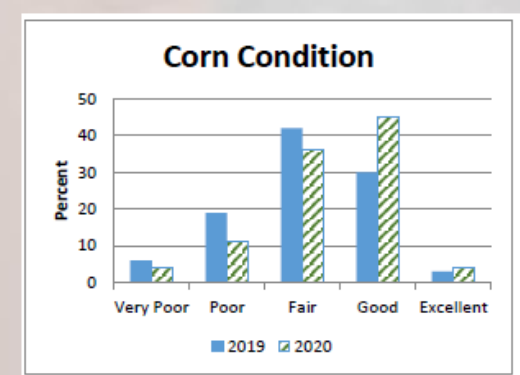


Photo Credit: Elizabeth Hawkins

# Summary of Conditions

A photograph of two black and white cows standing in a lush green field. In the background, there is a large white barn and a green tractor. The scene is slightly hazy, suggesting a misty or overcast day.

**Drought Monitor:** D0-D1 coverage shrinks to about 19% of the state

**Climate Recap:** Warmer than average; Labor Day event

**Week Ahead:** Warm with scattered storms this weekend; Drier and less humid to start next week

Photo Credit: David Marrison



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# Partners and Additional Information

- SCOO's Website: <https://climate.osu.edu>
- NOAA's National Climatic Data Center: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)
  - Monthly climate reports (U.S. & Global): [www.ncdc.noaa.gov/sotc/](http://www.ncdc.noaa.gov/sotc/)
- NOAA's Climate Prediction Center: [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)
- USDA Midwest Climate Hub: <https://www.climatehubs.oce.usda.gov/hubs/midwest>
- Climate Portal: [www.climate.gov](http://www.climate.gov)
- U.S. Drought Portal: [www.drought.gov](http://www.drought.gov)
- National Drought Mitigation Center: <https://drought.unl.edu/>
- Midwest Regional Climate Center: <https://mrcc.isws.illinois.edu>
- Community Collaborative Rain Snow Hail Network (CoCoRaHS): <https://cocorahs.org>
- Song: "Wishful Thinking" by Dan Lebowitz

