

# MAC-T Monthly Call

Midwest Agriculture and Climate Team

June 19, 2019

For more information:

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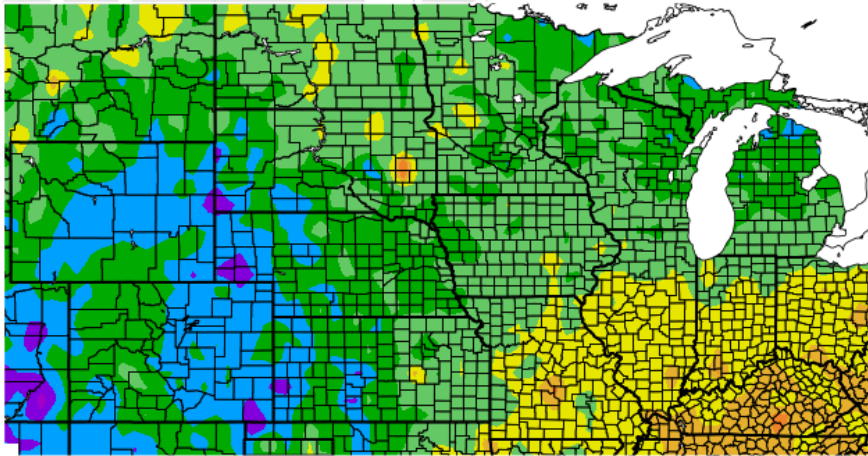
[Charlene.Felkley@ars.usda.gov](mailto:Charlene.Felkley@ars.usda.gov)



Midwest Climate Hub

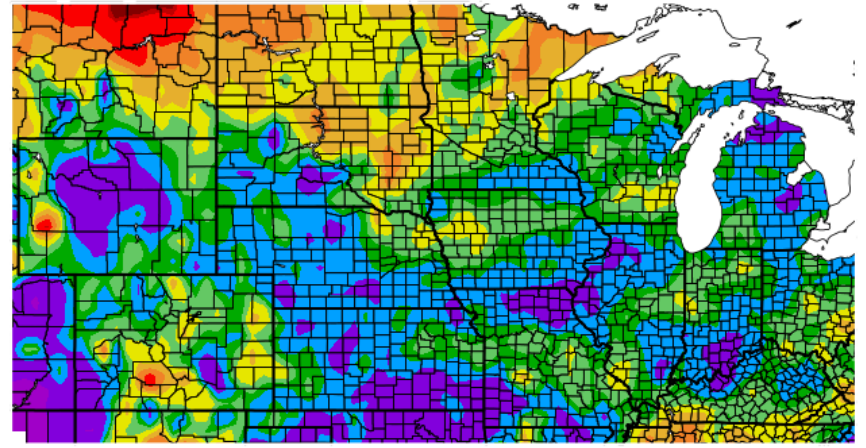
U.S. DEPARTMENT OF AGRICULTURE

Departure from Normal Temperature (F)  
5/19/2019 – 6/17/2019



Generated 6/18/2019 at HPRCC using provisional data. NOAA Regional Climate Centers

Percent of Normal Precipitation (%)  
5/19/2019 – 6/17/2019

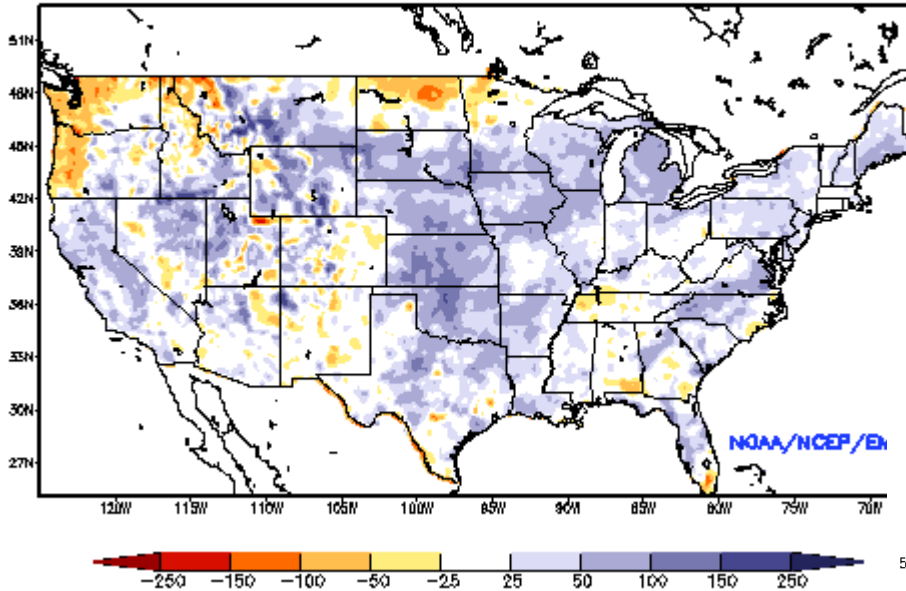


Generated 6/18/2019 at HPRCC using provisional data. NOAA Regional Climate Centers

- Last 30 day temperatures mostly colder than average - west. Up to 8°F cooler in plains. Slightly above average along the Ohio River.
- Mostly wet conditions – more than double in places to quite dry Montana, Dakotas and nrn Minnesota.

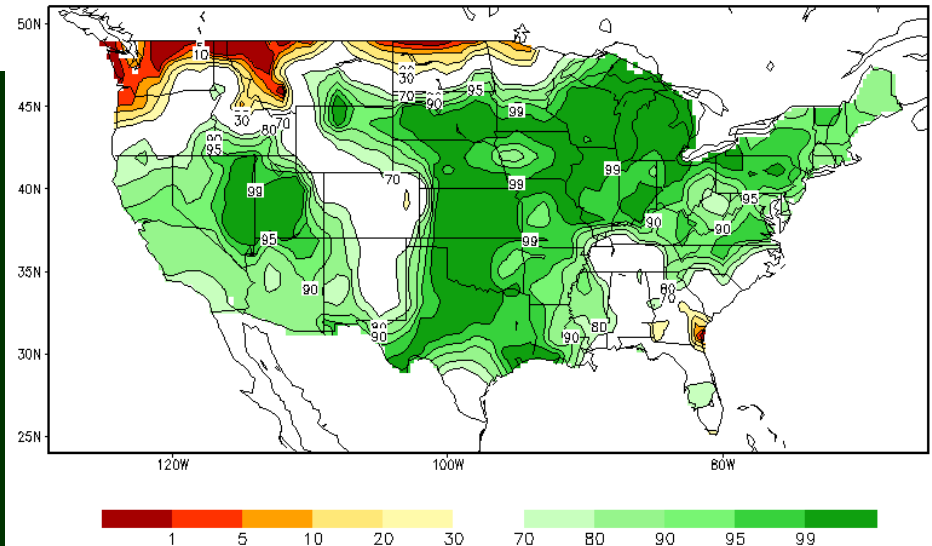
# Soil Moisture

Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)  
NCEP NLDAS Products Valid: JUN 14, 2019



- Very wet soils over most of the region. 99<sup>th</sup> percentile for much of it.
- Few dry areas north.
- Cool and wet conditions and low ET contribute to the overall conditions.
- Some dry pockets showing in Iowa

Calculated Soil Moisture Ranking Percentile  
JUN 17, 2019



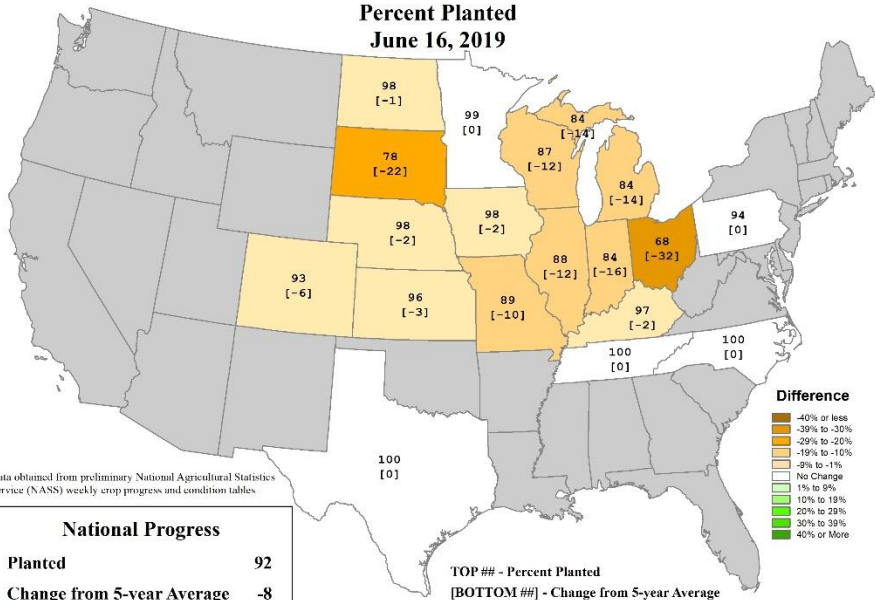
<http://www.emc.ncep.noaa.gov/mmb/nldas/drought/>

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

# Planting Progress

## U.S. Corn Progress

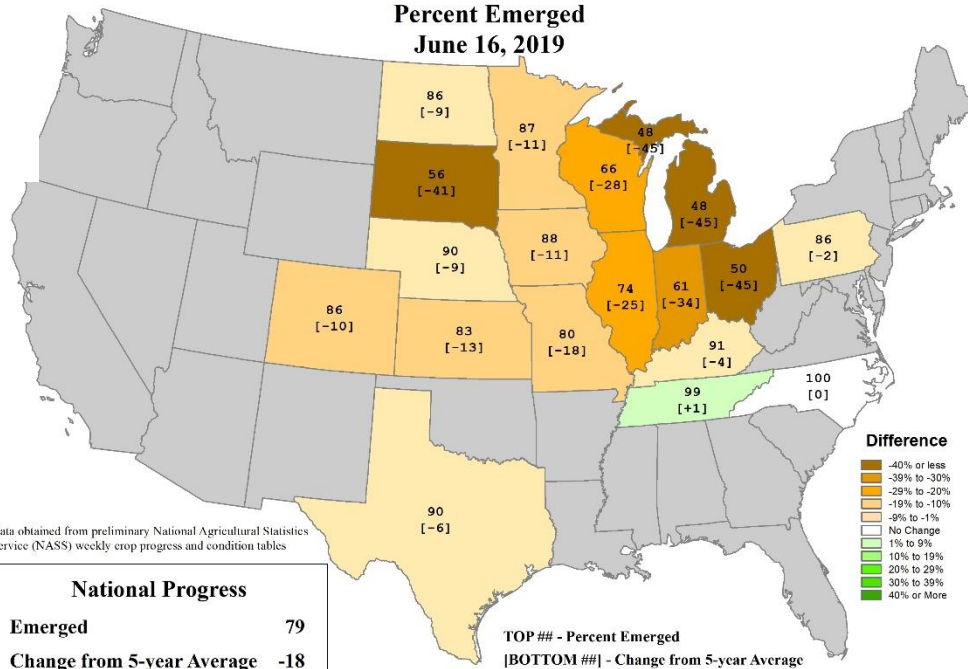
Percent Planted  
June 16, 2019



- Record slow corn planting and emergence.
- Planting (92%) emergence (79% worst since 2013).

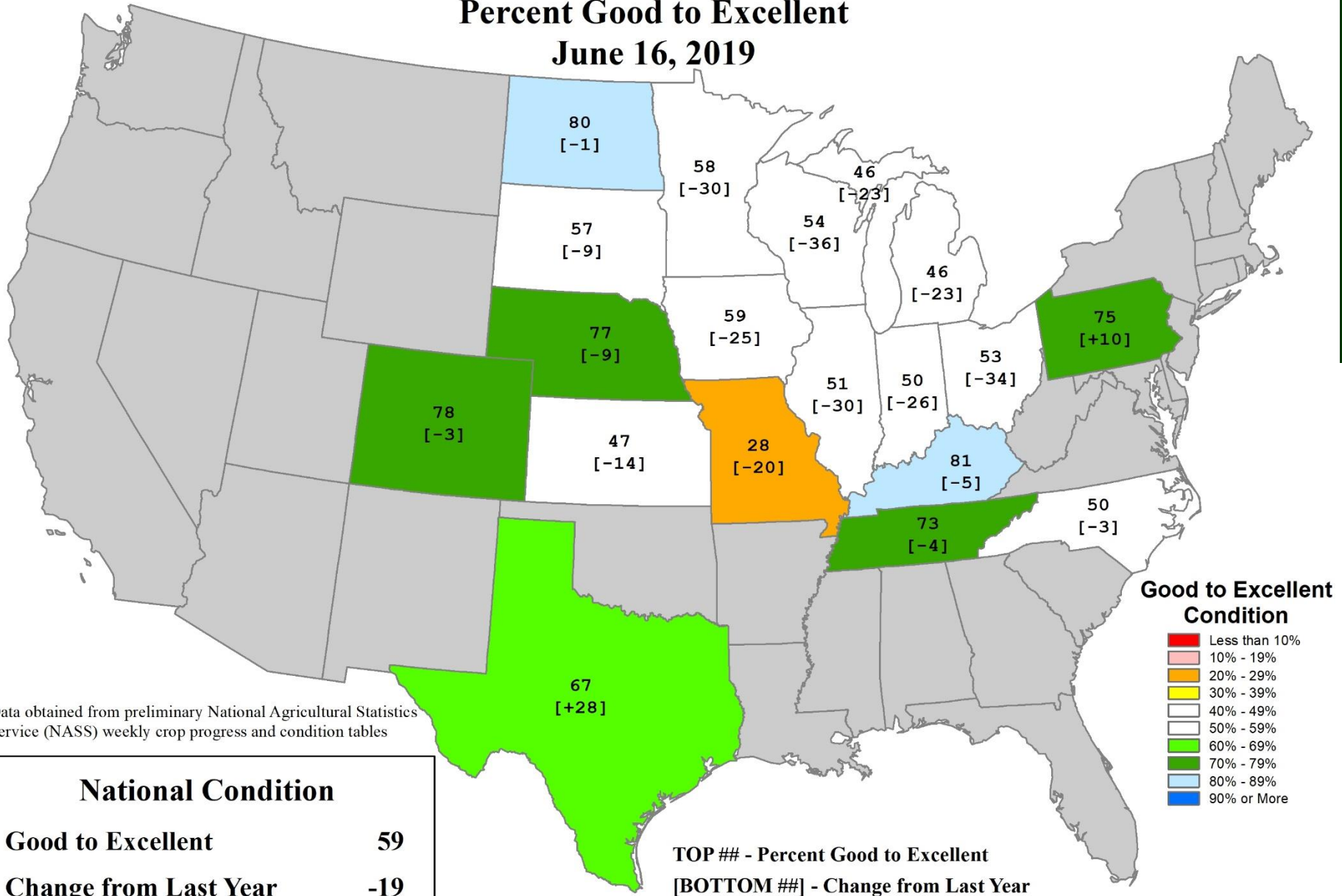
## U.S. Corn Progress

Percent Emerged  
June 16, 2019



# U.S. Corn Conditions

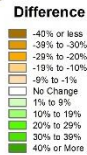
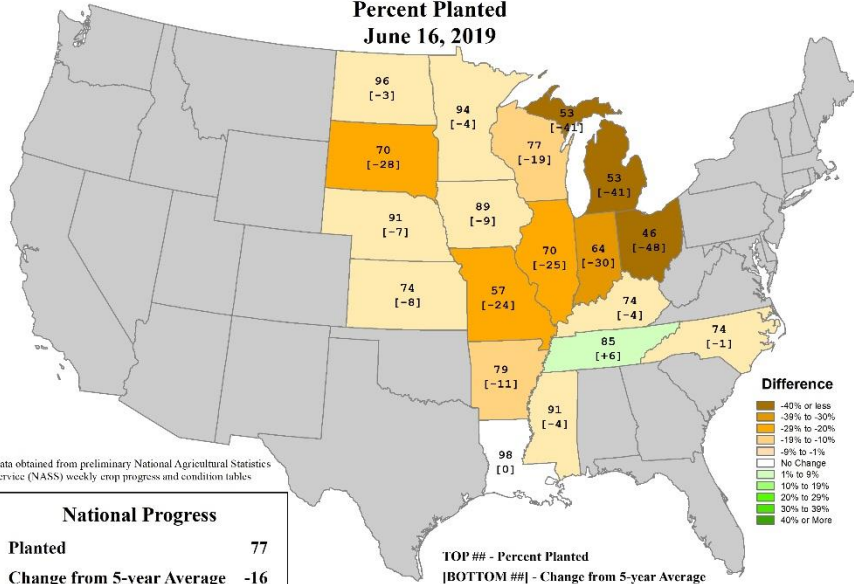
Percent Good to Excellent  
June 16, 2019



# Planting Progress

## U.S. Soybeans Progress

Percent Planted  
June 16, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

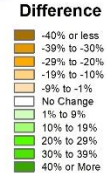
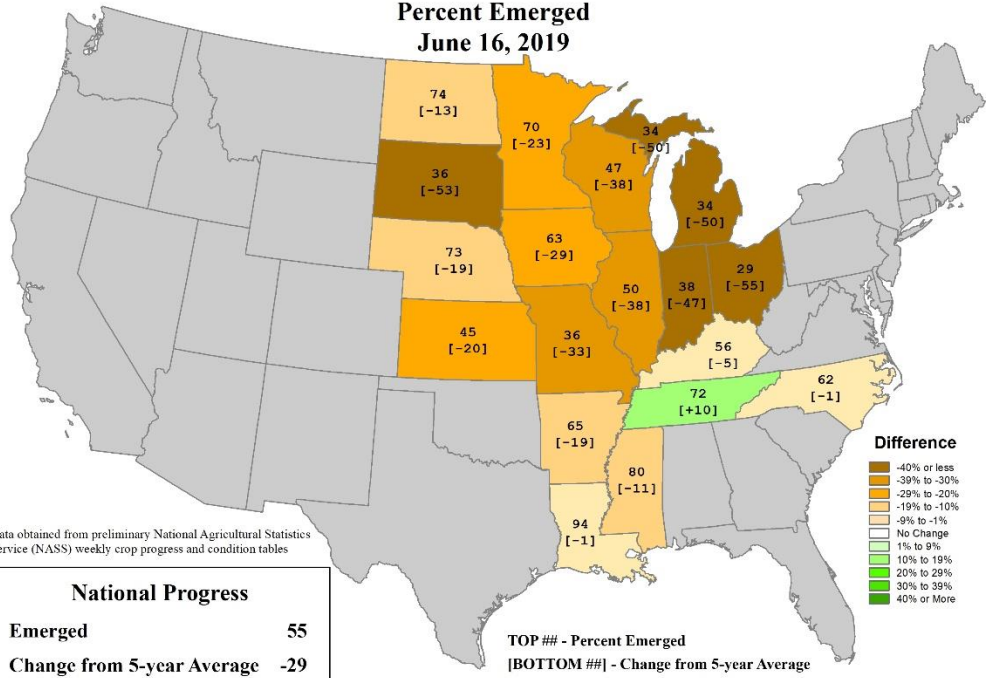
National Progress	
Planted	77
Change from 5-year Average	-16

TOP ## - Percent Planted  
[BOTTOM ##] - Change from 5-year Average

- Slow bean planting and emergence.
- Planting (77%-3<sup>rd</sup> slowest 1995-96)/2013 for emergence (55% - slowest).

## U.S. Soybeans Progress

Percent Emerged  
June 16, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

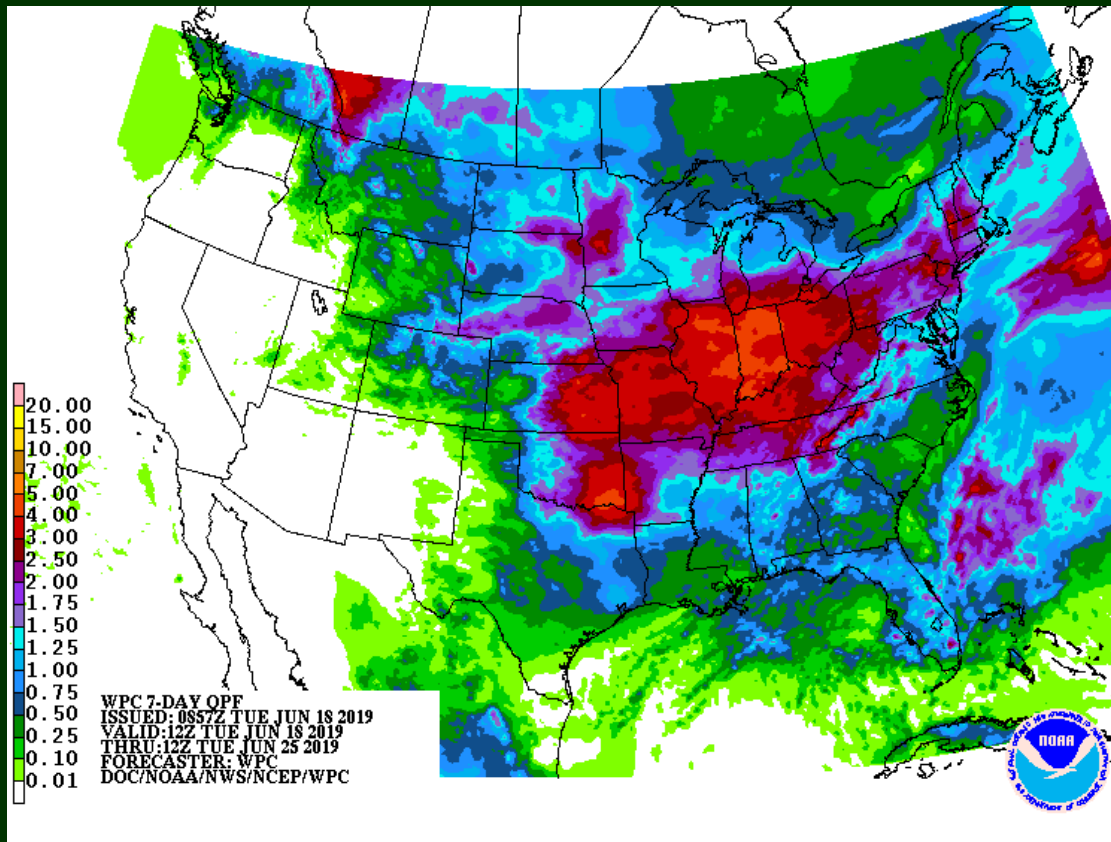
National Progress	
Emerged	55
Change from 5-year Average	-29

TOP ## - Percent Emerged  
[BOTTOM ##] - Change from 5-year Average

# Assorted AG Issues

- Cool temperatures have delayed emergence and development as well as ET. Some drying with warmer temperatures.
- Wet soils. Some final planting occurring – very late corn and beans.
- USDA-NASS report crop conditions decent for those far enough along.
- Serious decision-making on planting. Many acres not going to be planted.

# 1-7 Day Precip

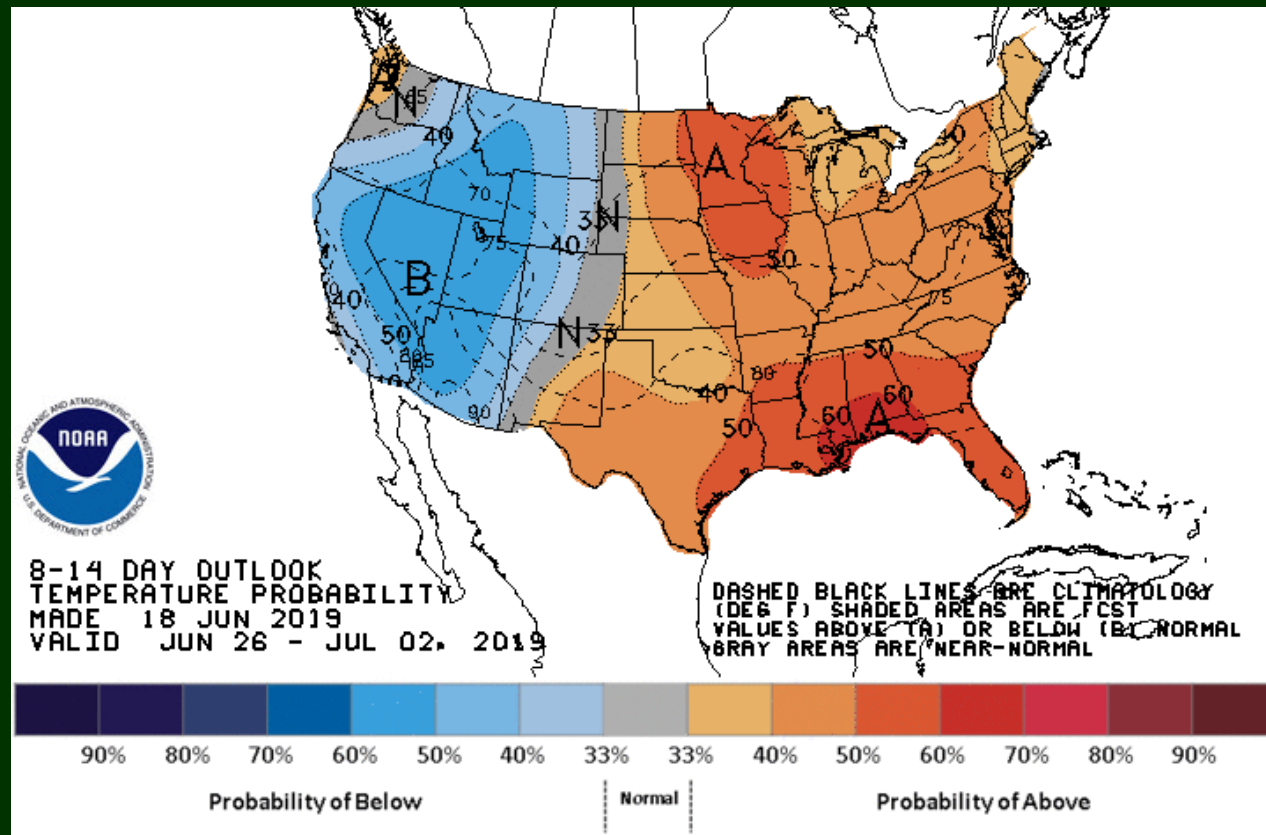


- Continued heavy precip possible Midwest and southern Plains.
- Amounts in northern Midwest and Plains-some help.
- Soils still do not have much capacity even with lighter precip.

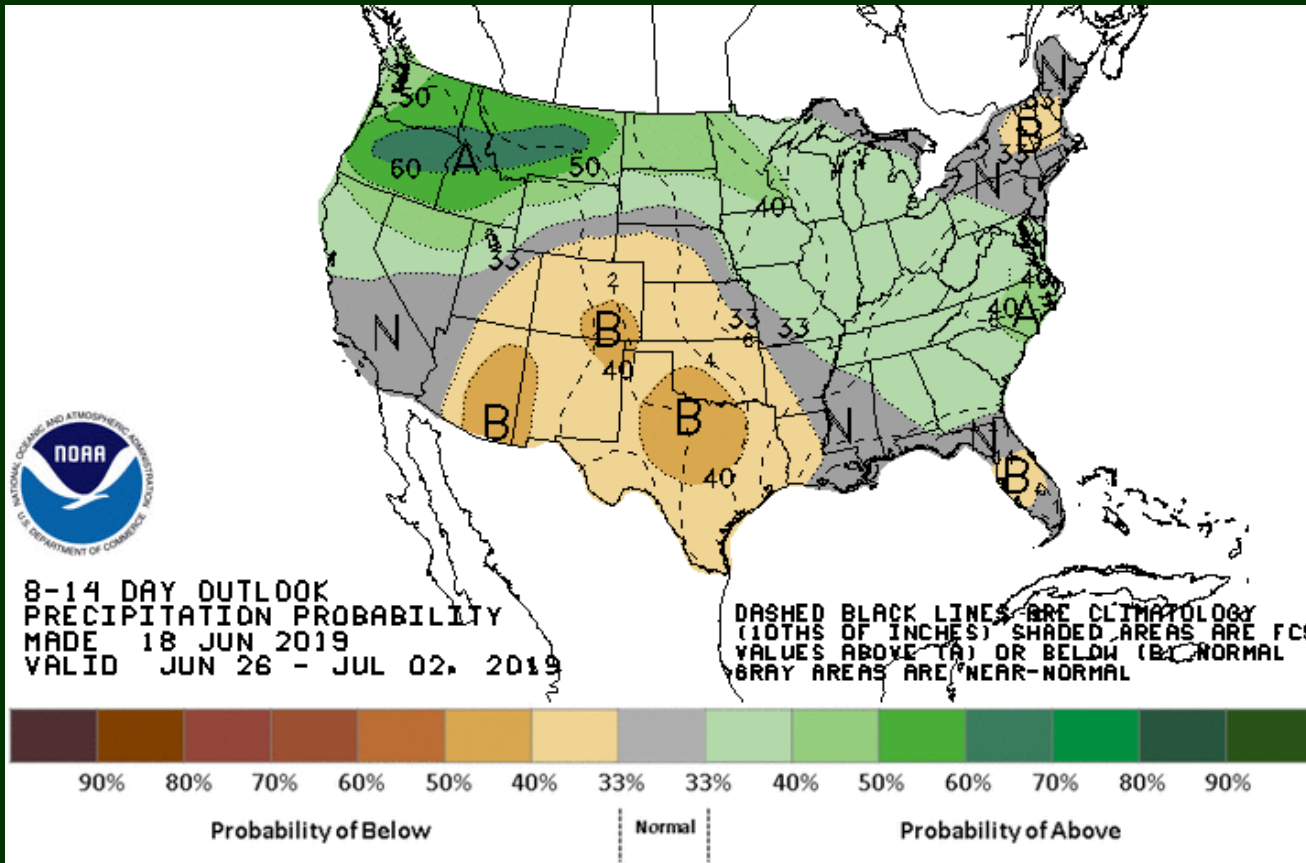


# Temperature Outlook

- Likely warmer than average toward end of June.
- Good news for crop development needing heat.



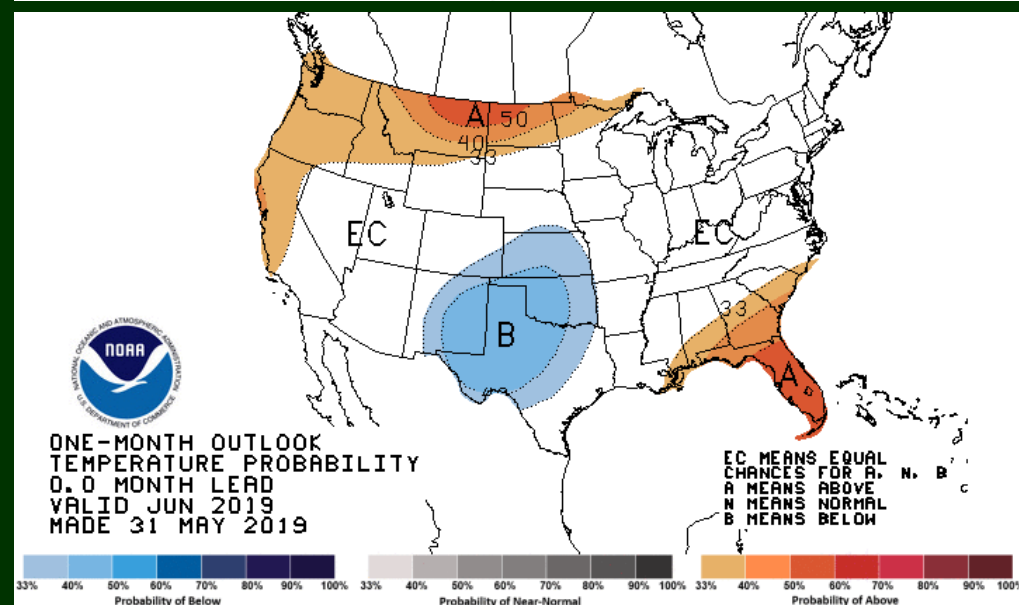
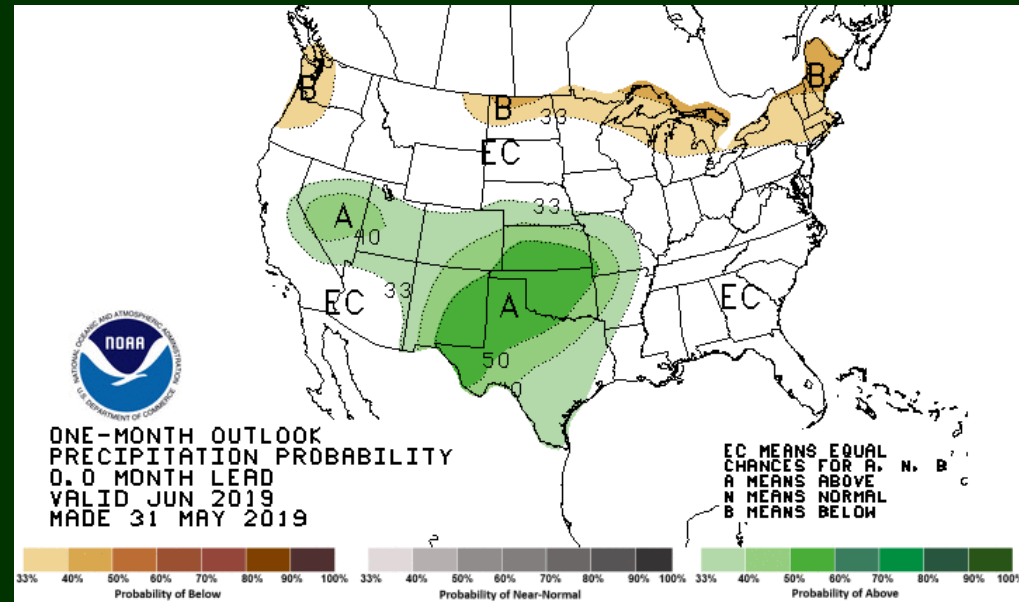
# Precipitation Outlook



- Above average chances for precip continue.
- Not as strong a chance
- Small chance for drier central/srn. Plains.

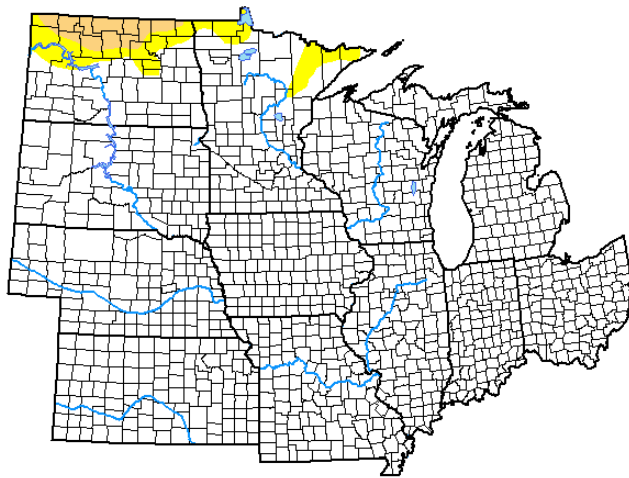
# 1-Month Outlook

- Interesting June outlook
- Precip – likely wetter central-southern Plains – likely drier along Canadian border
- Temps – likely cooler over the wet area and more likely warmer nrn Plains
- Indicates some shift from week 2 outlook in much of the region later in month or larger uncertainty later in the month.
- Will be updated Thursday



# Drought in the Midwest

## U.S. Drought Monitor North Central



**June 11, 2019**

(Released Thursday, Jun. 13, 2019)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	95.25	4.75	1.60	0.00	0.00	0.00
<b>Last Week</b> 06-04-2019	96.46	3.54	1.09	0.00	0.00	0.00
<b>3 Months Ago</b> 03-12-2019	99.03	0.97	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> 01-01-2019	95.93	4.07	1.43	0.00	0.00	0.00
<b>Start of Water Year</b> 09-25-2018	73.15	26.85	12.92	4.07	0.97	0.05
<b>One Year Ago</b> 06-12-2018	61.93	38.07	17.50	5.35	1.36	0.00

Intensity:

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

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

Author:

David Simeral  
Western Regional Climate Center



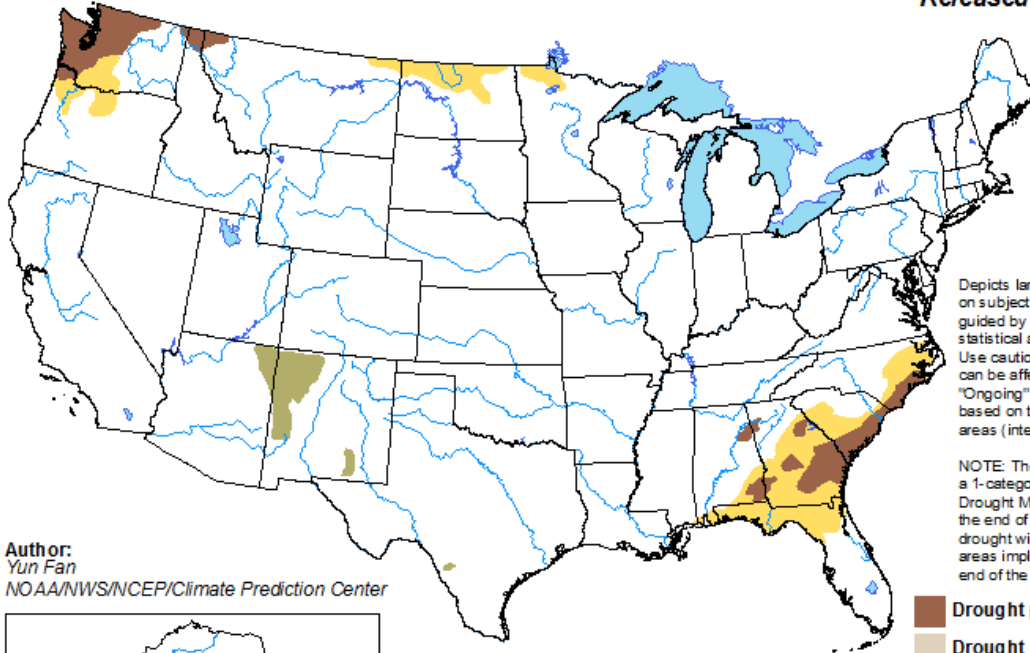
[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)

The Midwest remained free of drought. Some D0 areas existed in ND and MN/D1 in ND.

# Drought Outlook

## U.S. Monthly Drought Outlook Drought Tendency During the Valid Period

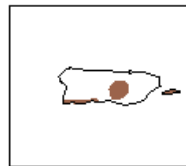
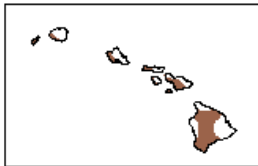
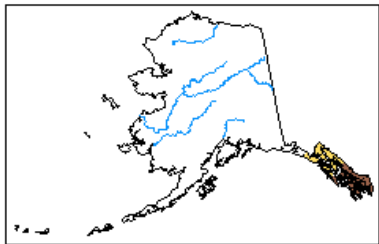
Valid for June 2019  
Released May 31, 2019







Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:  
Yun Fan  
NOAA/NWS/NCEP/Climate Prediction Center



-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZGd>

Current D0 area in ND-MN headed toward drought category during the month.

# Summary

- Cold and wet conditions generally over the area leading to delayed planting and emergence.
- Major decisions ongoing with final planting due to various influences.
- Cool – avg. temps not a great thing for ongoing crop development (some warmth coming finally).
- Wet-avg. precip also difficult
- Disease issues likely to flare up
- Delayed crop development likely through season – could lead to immature/wet grains.

# Next MAC-T Monthly Call

Next Call **Wednesday, July 3rd.**