

# MAC-T Monthly Call

## Midwest Agriculture and Climate Team

June 5, 2019

For more information:

[Dennis.todey@ars.usda.gov](mailto:Dennis.todey@ars.usda.gov)

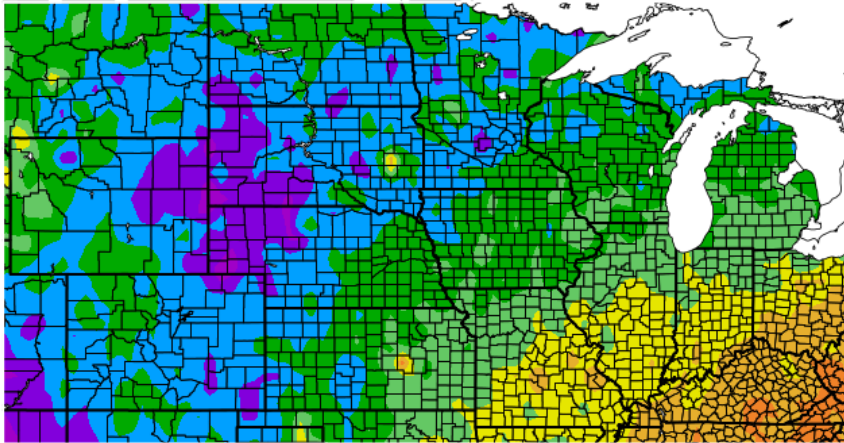
[Charlene.Felkley@ars.usda.gov](mailto:Charlene.Felkley@ars.usda.gov)



Midwest Climate Hub

U.S. DEPARTMENT OF AGRICULTURE

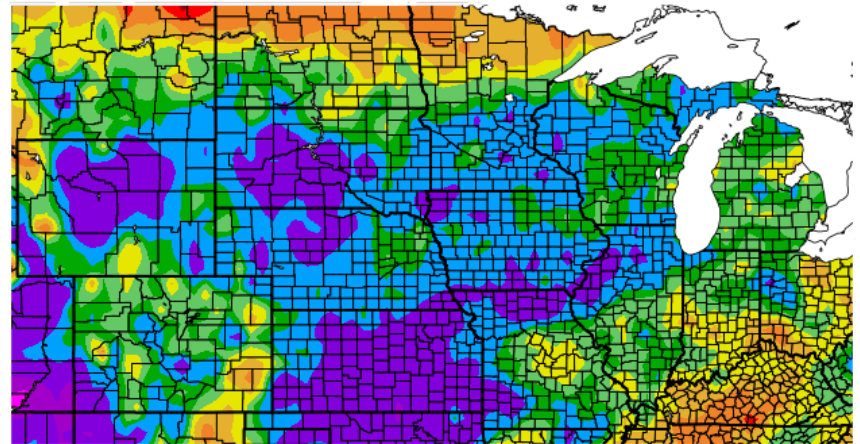
Departure from Normal Temperature (F)  
5/4/2019 – 6/2/2019



Generated 6/3/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)  
5/4/2019 – 6/2/2019



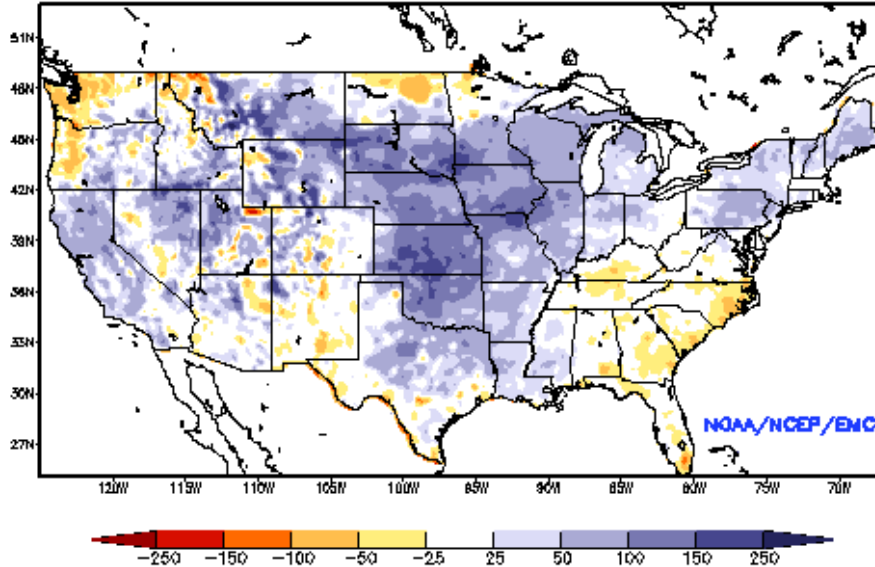
Generated 6/3/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

- May temperatures mostly colder than average. 6-10 F below average in nrn Plains to slightly above average along the Ohio River.
- Generally wet conditions – more than double in places to quite dry along the Canadian border and Kentucky.

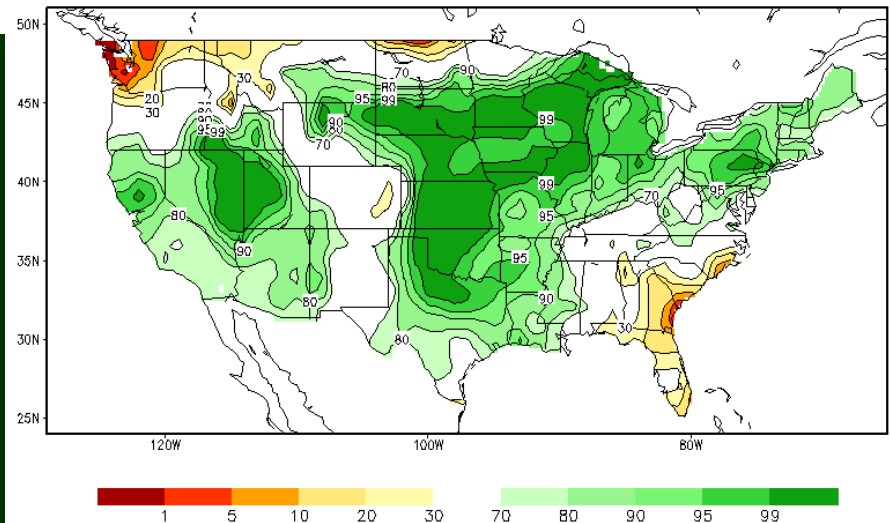
# Soil Moisture

Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)  
NCEP NLDAS Products Valid: MAY 30, 2019



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

Calculated Soil Moisture Ranking Percentile  
JUN 03, 2019



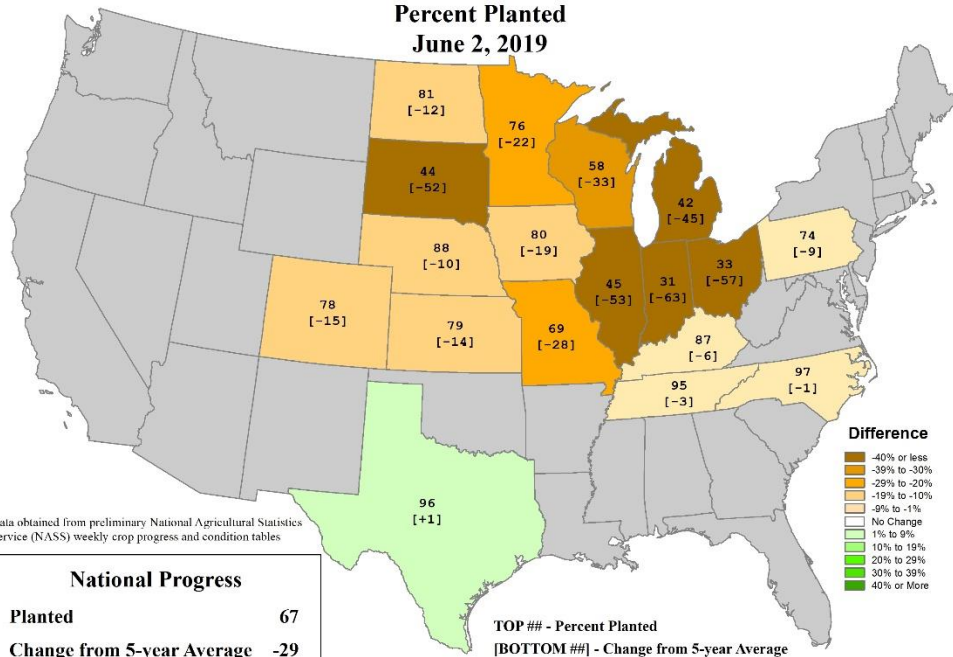
<http://www.emc.ncep.noaa.gov/mmb/nldas/drought/>

[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#)

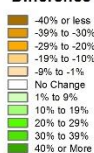
# Planting Progress

## U.S. Corn Progress

Percent Planted  
June 2, 2019



### Difference



### National Progress

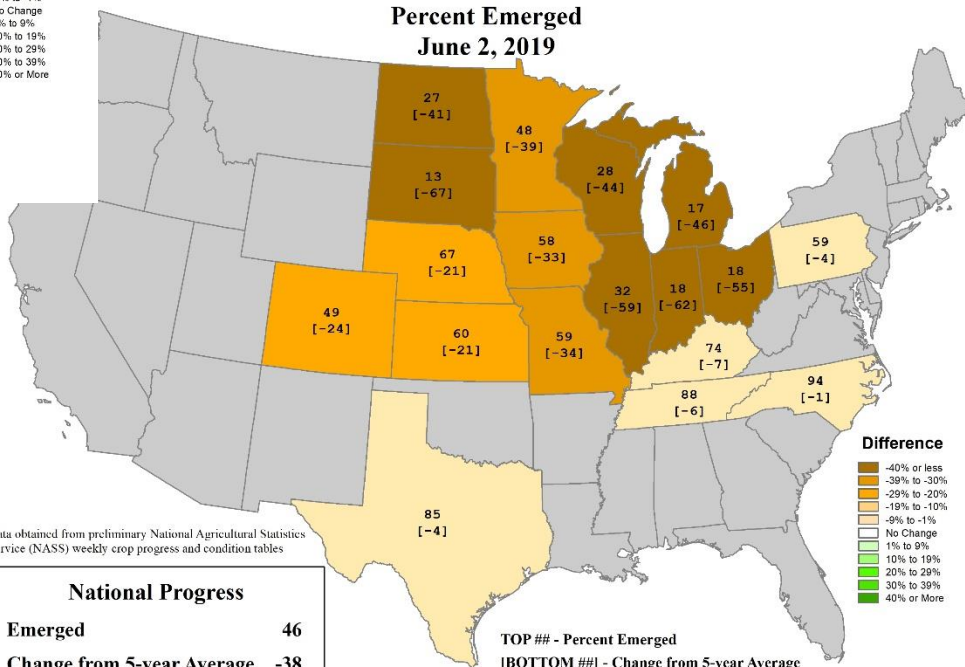
Planted 67  
Change from 5-year Average -29

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

- Record slow corn planting and emergence.
- Worst since 1995 for planting (67% vs. 77%) / 2011 for emergence (46% vs. 73%).

## U.S. Corn Progress

Percent Emerged  
June 2, 2019



### Difference



### National Progress

Emerged 46  
Change from 5-year Average -38

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

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

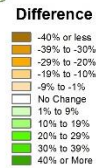
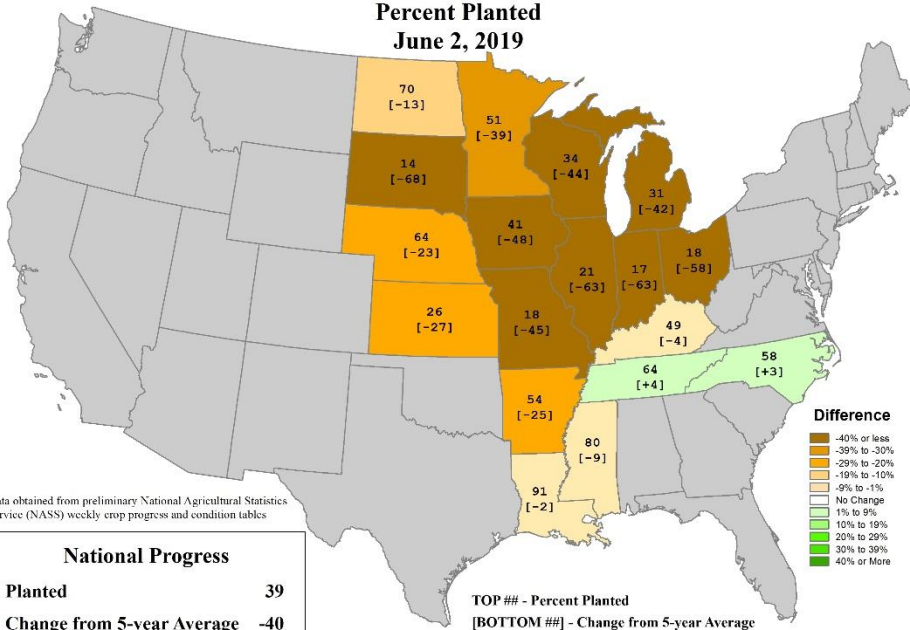
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables



# Planting Progress

## U.S. Soybeans Progress

Percent Planted  
June 2, 2019



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

### National Progress

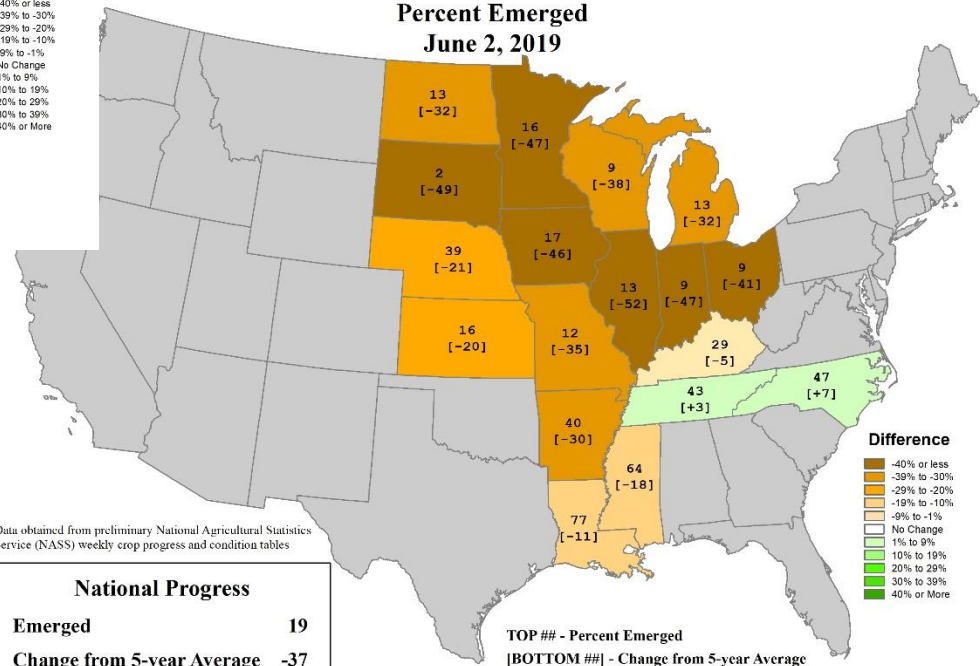
Planted **39**  
Change from 5-year Average **-40**

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

- Record slow bean planting and emergence.
- Worst since 1995 for planting (39% vs. 40%)/2013 for emergence (19% vs. 31%).

## U.S. Soybeans Progress

Percent Emerged  
June 2, 2019



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

### National Progress

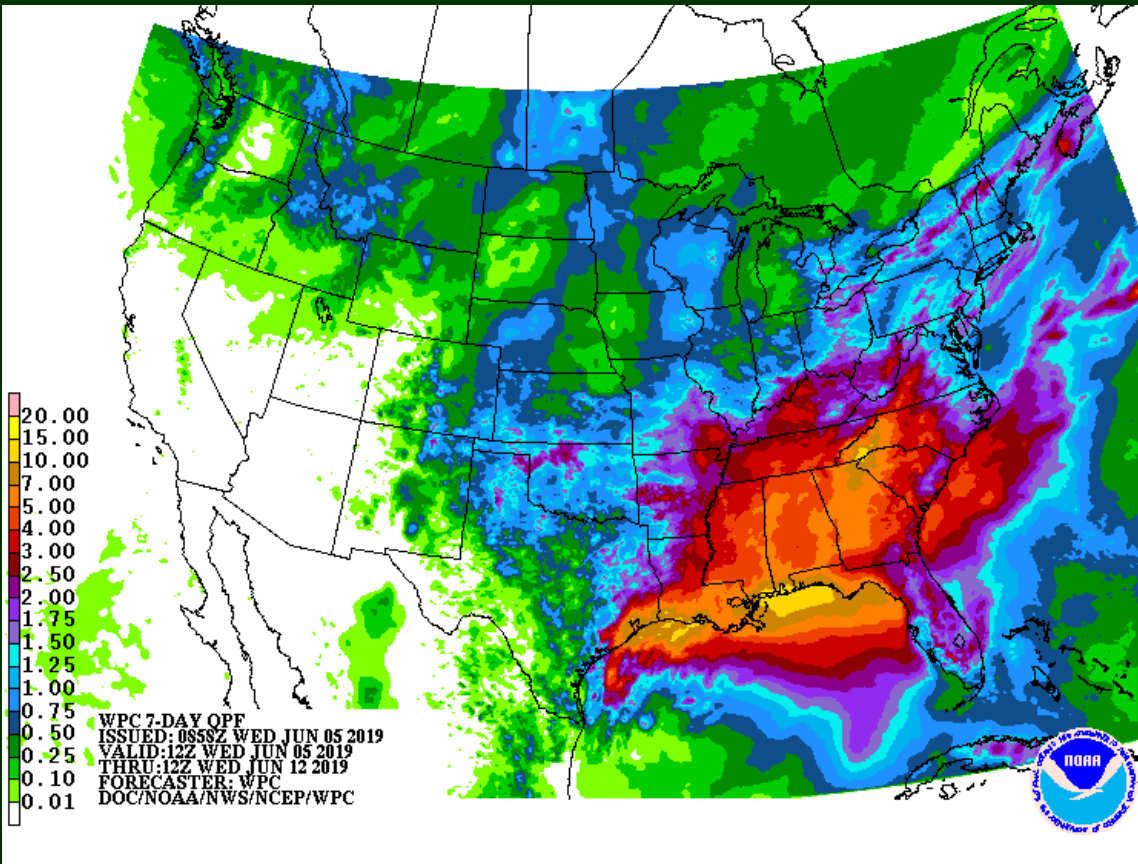
Emerged **19**  
Change from 5-year Average **-37**

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

# Assorted AG Issues

- Cool temperatures have delayed emergence and development as well as ET – even some frost ongoing far north.
- Wet soils continue to slow planting – many acres likely planted in soils that should not have equipment on them.
- USDA-NASS report crop conditions decent for those far enough along.
- Serious decision-making on planting. Many acres not going to be planted.

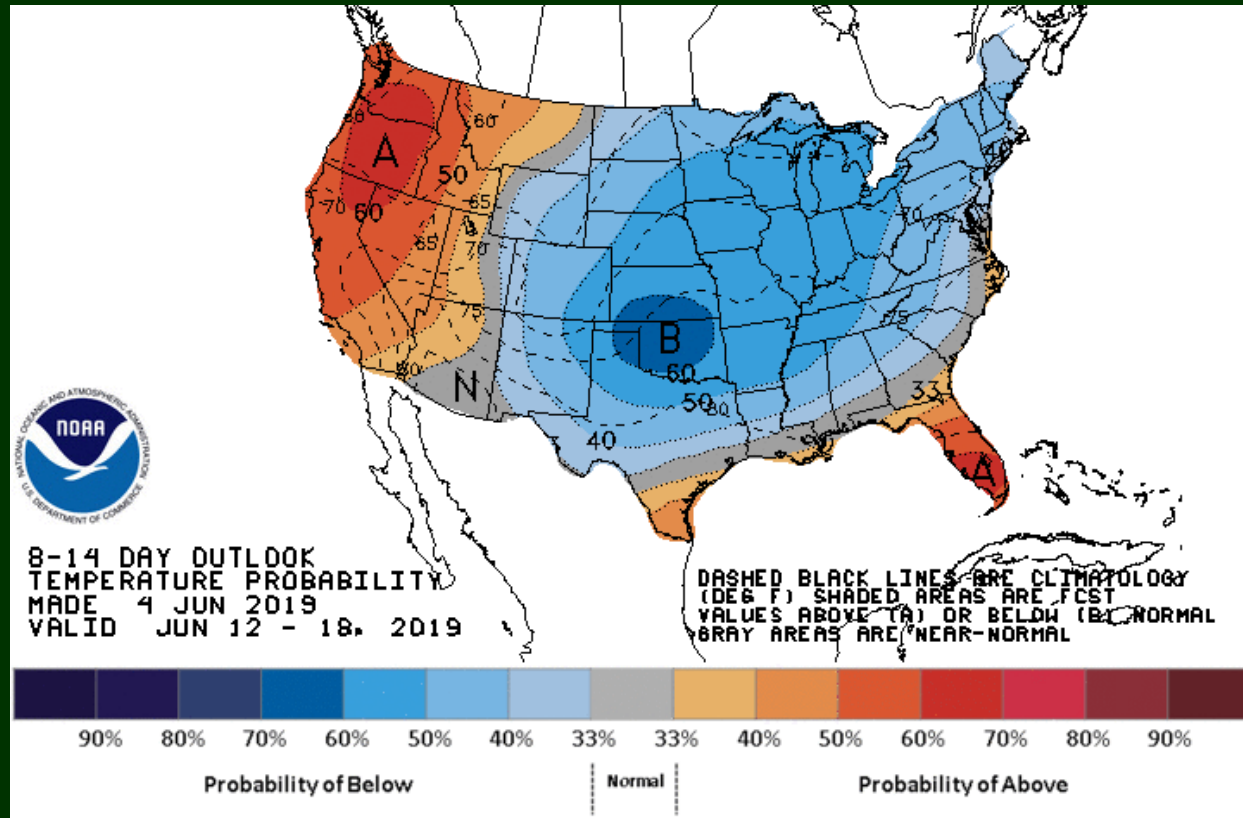
# 1-7 Day Precip



- Updated – few changes
- Continued heavy precip possible – mostly srn. Midwest and srn. Plains.
- Lesser amounts in nrn. Midwest and Plains.
- Still likely wet soil problems even with lighter precip.

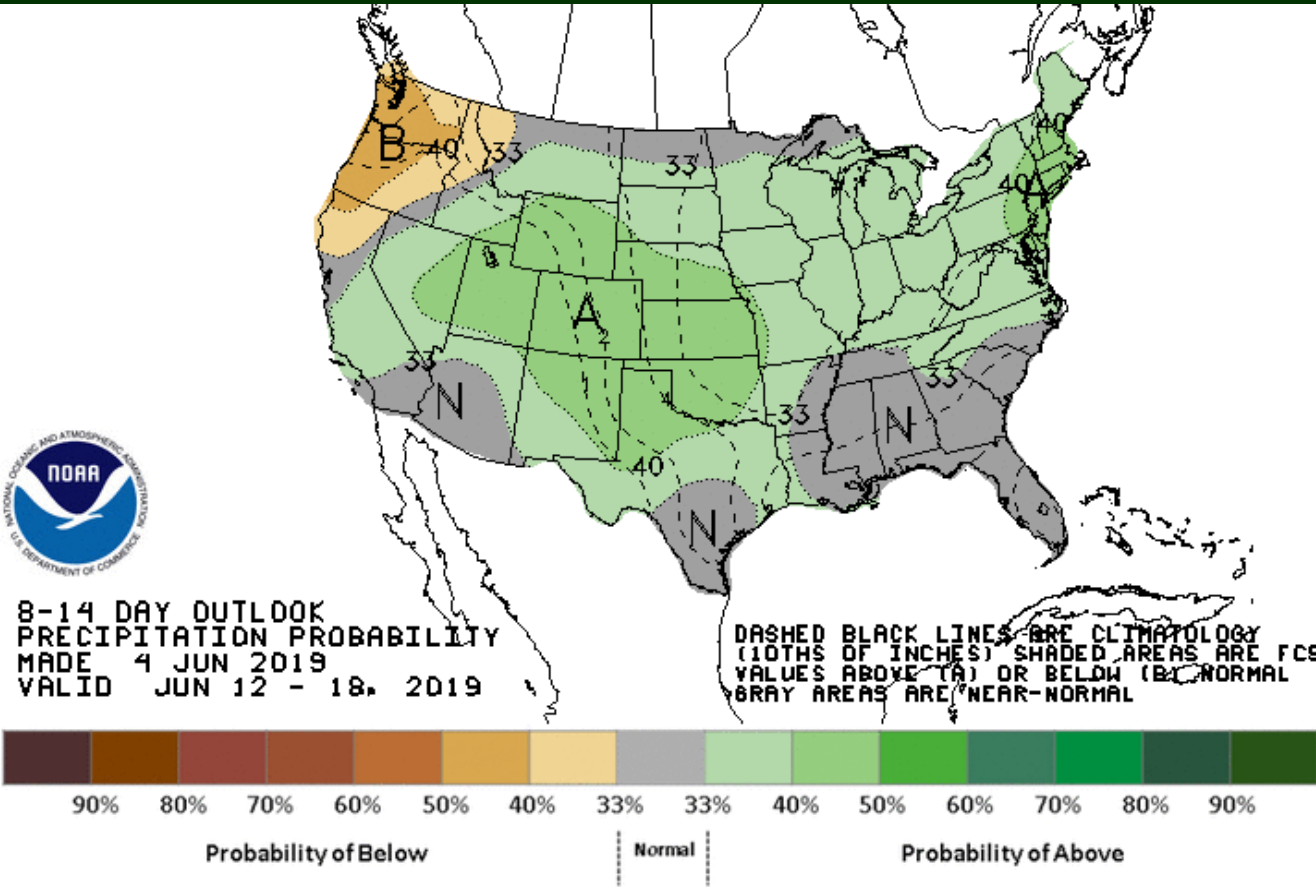
# Temperature Outlook

- Updated – few changes
- Not great news on temperature toward mid-June.
- Cooler than average more likely throughout the area.





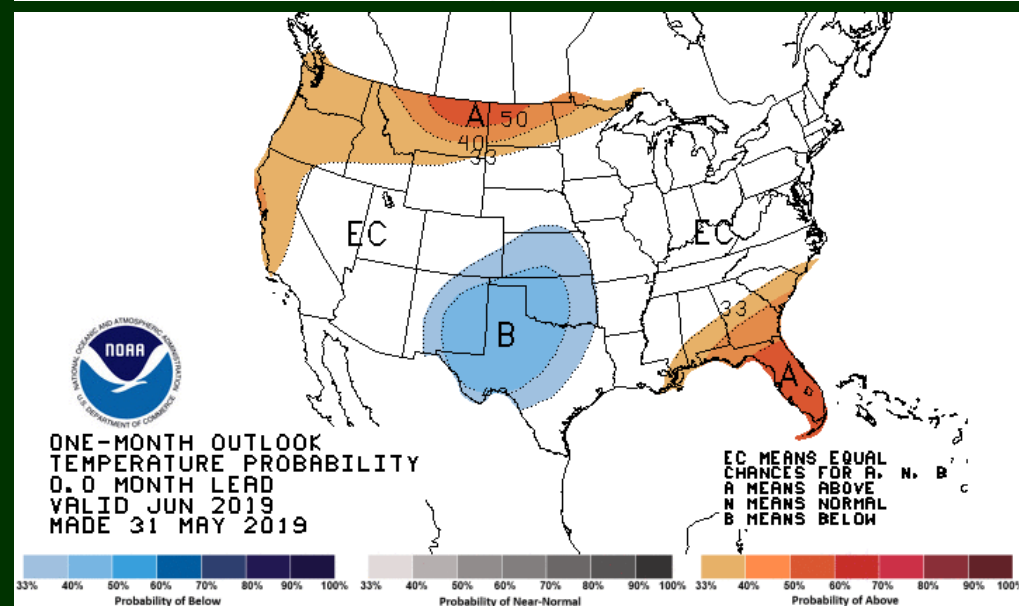
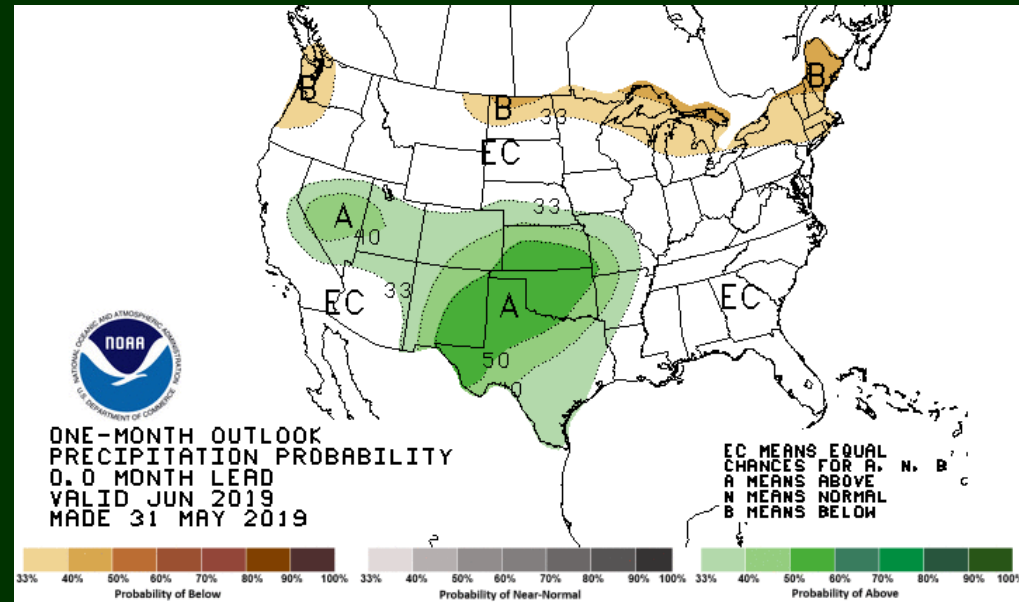
# Precipitation Outlook



- Updated – few changes
- Above average chances for precip continue.
- Small chance for drier in far nrn. 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 variability from mid to late month in the outlooks. Cooler and wetter in Week 2 may not continue into late month



# Drought in the Midwest

## U.S. Drought Monitor North Central

May 28, 2019

(Released Thursday, May 30, 2019)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	96.99	3.01	0.00	0.00	0.00	0.00
Last Week 05-21-2019	96.92	3.08	0.00	0.00	0.00	0.00
3 Months Ago 02-26-2019	99.03	0.97	0.00	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	95.93	4.07	1.43	0.00	0.00	0.00
Start of Water Year 09-25-2018	73.15	26.85	12.92	4.07	0.97	0.05
One Year Ago 05-29-2018	61.52	38.48	17.40	6.37	1.70	0.16

Intensity:

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

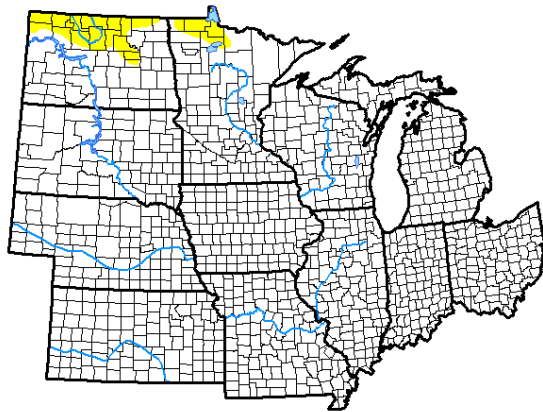
The Drought Monitor focuses on broad-scale conditions.  
Local conditions may vary. See accompanying text summary  
for forecast statements.

Author:

Richard Heim  
NCEI/NOAA



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

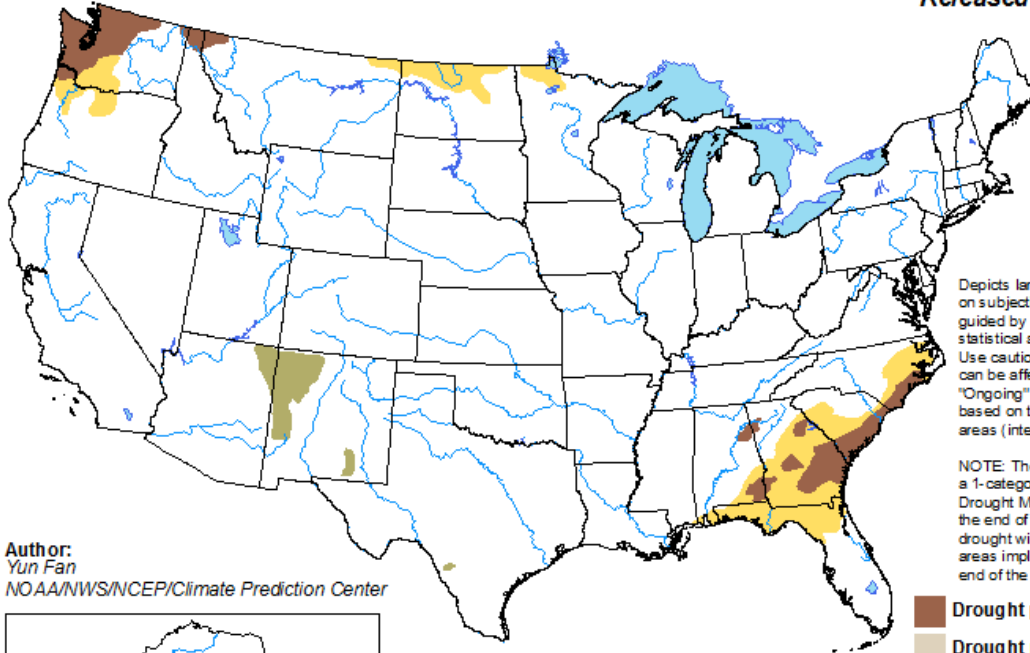


The Midwest remained free of drought, with significant flooding impacting the Mississippi River and its tributaries. Some D0 areas existed in ND and MN.

# Drought Outlook

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

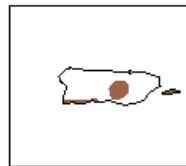
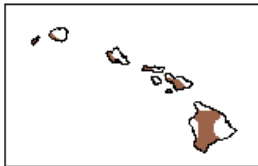
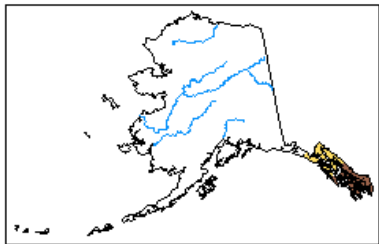
Valid for June 2019  
Released May 31, 2019







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.

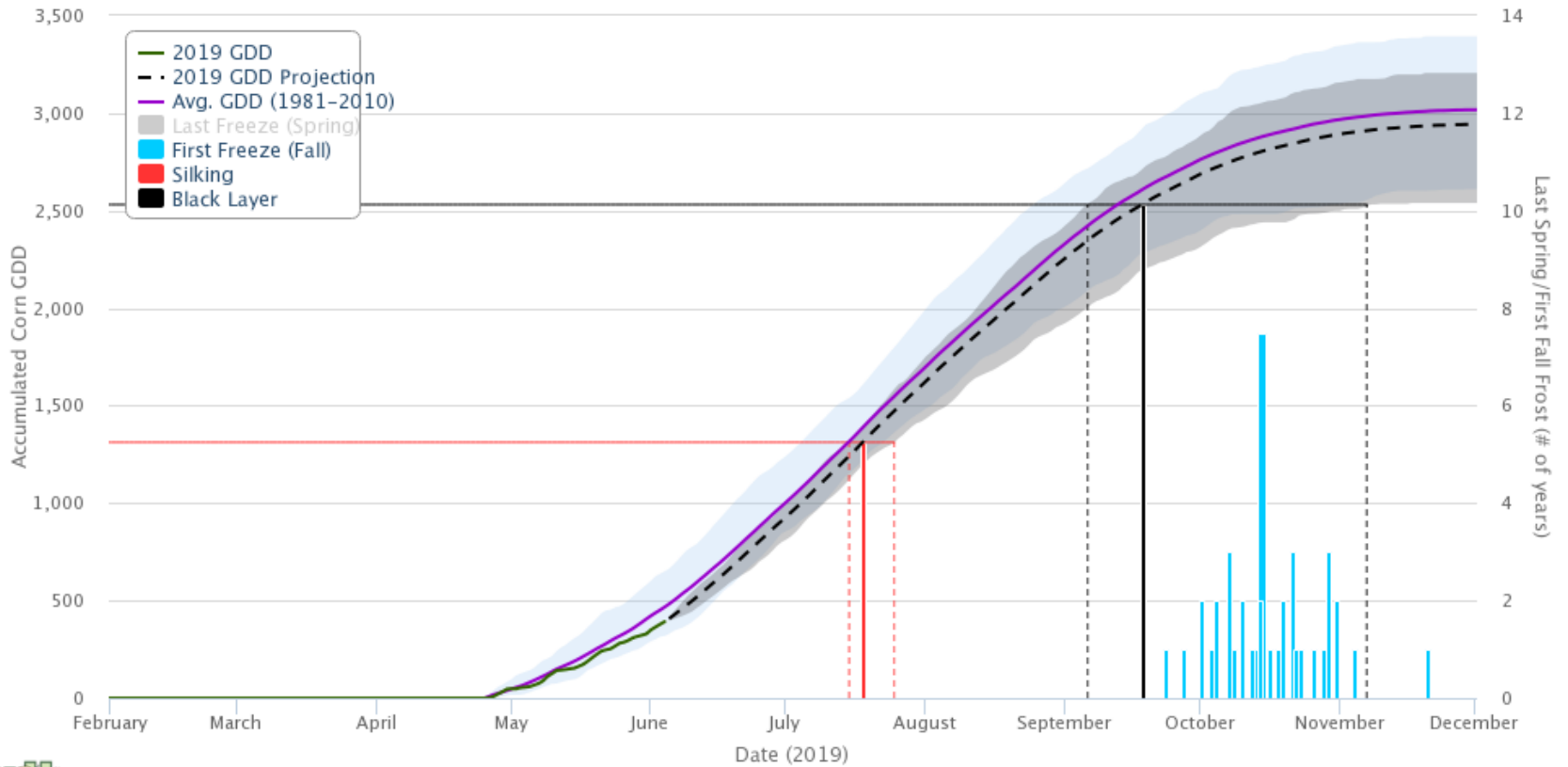
# Summary

- 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.
- Wet-avg. precip also difficult
- Disease issues likely to flare up
- Delayed crop development likely through season – could lead to immature/wet grains.



### Corn Growing Degree Day Tool

Location: 42.05, -93.57 in Story Co., IA, Start Date: April 25, Maturity Days: 105, Freeze Temp: 28°F, Variation: All Years



GDD Base 50/86 (degrees F); Created: 06/05/2019

<https://hprcc.unl.edu/gdd.php>

<https://mrcc.illinois.edu/U2U/gdd/>

# Special Outlook Webinar – please share with your stakeholders

- Time: Jun 6, 2019 1:00 PM Central Time (US and Canada)
- 
- Join Zoom Meeting
- <https://usda-oce.zoom.us/j/550156262>
- 
- One tap mobile
- +16699006833,,550156262# US (San Jose)
- +16465588656,,550156262# US (New York)
- 
- Dial by your location
- +1 669 900 6833 US (San Jose)
- +1 646 558 8656 US (New York)
- Meeting ID: 550 156 262
- Find your local number: <https://zoom.us/u/a1KA2NScF>

# Next MAC-T Monthly Call

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