

MAC-T Monthly Call

Midwest Agriculture and Climate Team

May 3, 2023

For more information:

Dennis.todey@usda.gov

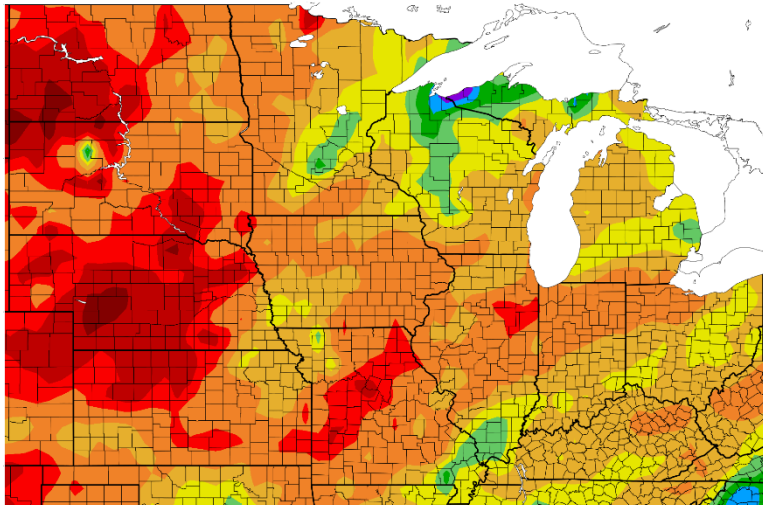
Justin.glisan@iowaagriculture.gov



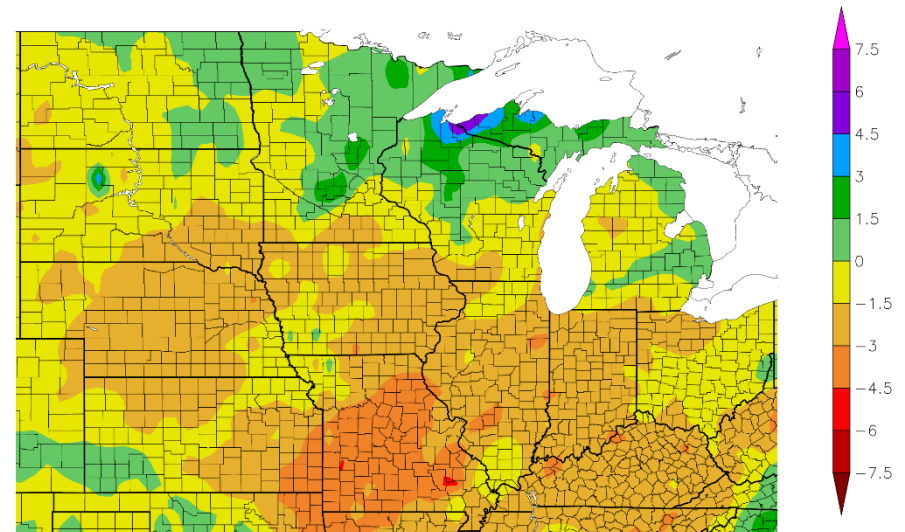
Midwest Climate Hub
U.S. DEPARTMENT OF AGRICULTURE



Precipitation (in)
4/2/2023 – 5/1/2023



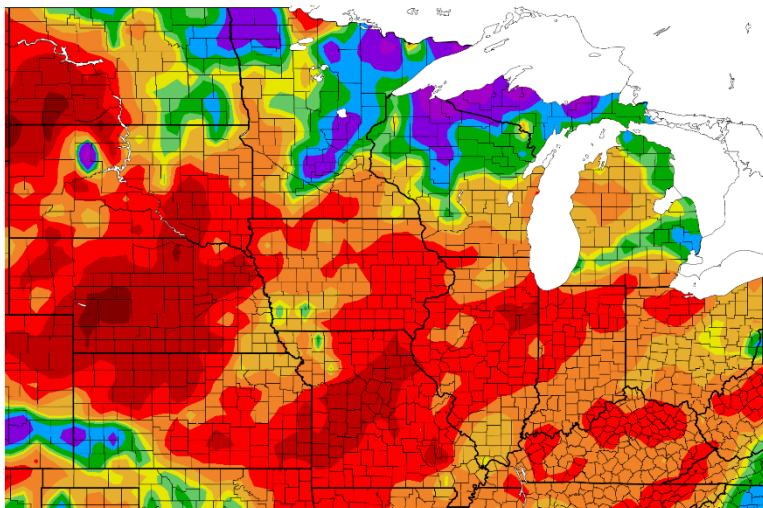
Departure from Normal Precipitation (in)
4/2/2023 – 5/1/2023



Generated 5/2/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
4/2/2023 – 5/1/2023



Generated 5/2/2023 at HPRCC using provisional data.

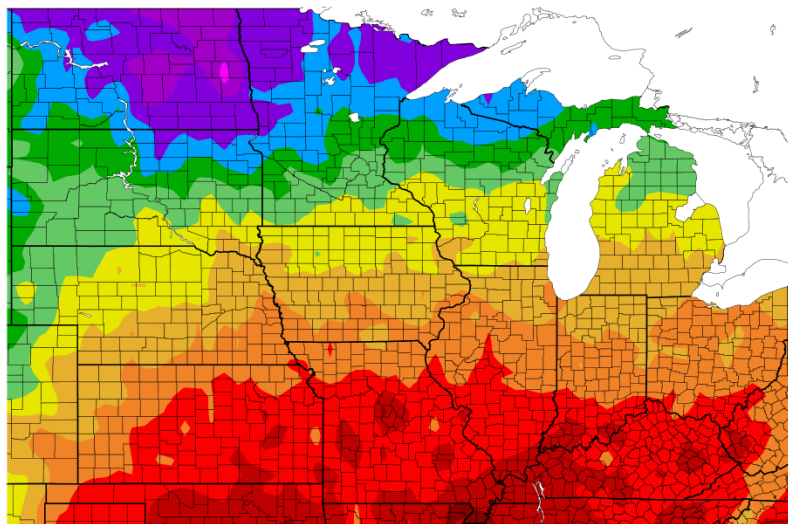
NOAA Regional Climate Centers

Generated 5/2/2023 at HPRCC using provisional data.

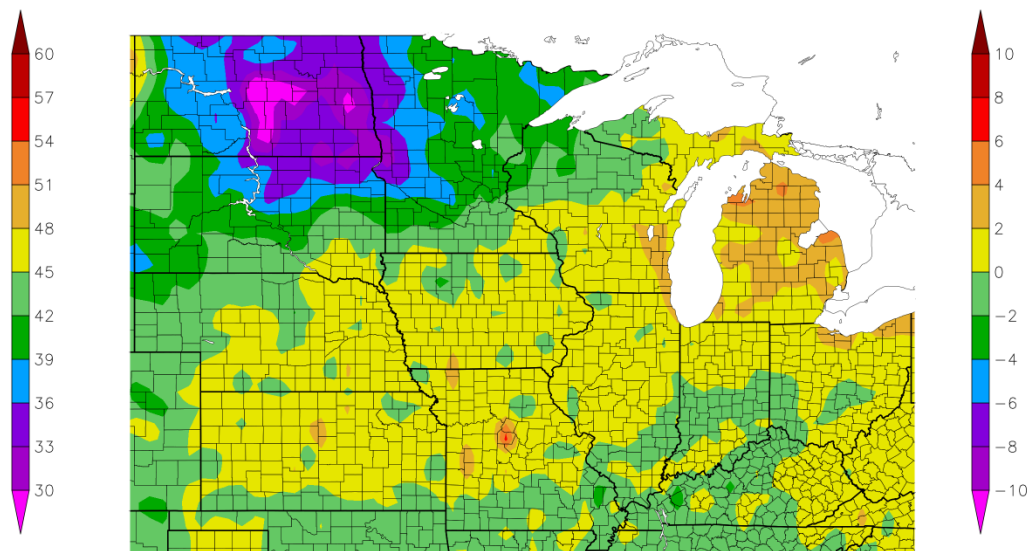
NOAA Regional Climate Centers

- Mostly drier than average across the region, except in northern MN/WI and central MN.

Temperature (F)
4/2/2023 - 5/1/2023



Departure from Normal Temperature (F)
4/2/2023 - 5/1/2023



Generated 5/2/2023 at HPRCC using provisional data.

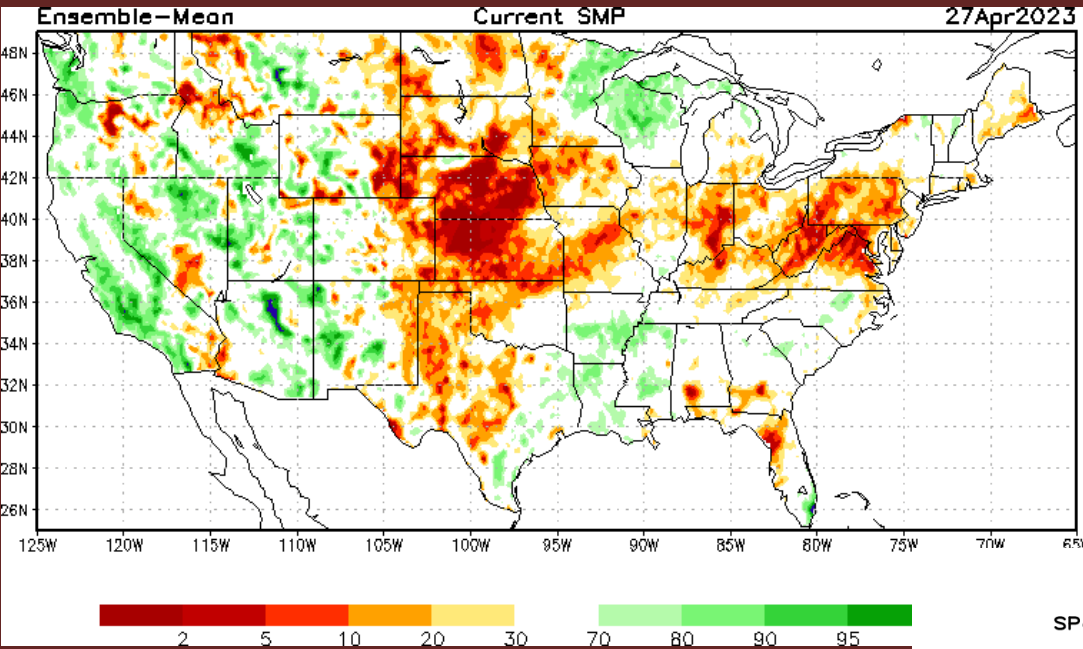
NOAA Regional Climate Centers Generated 5/2/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Very cool still north following late melt of heavy snow pack
- Near average or slightly cooler than average in the rest of the region, except a bit above average in most of Michigan.

Soil Moisture

https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp_new.shtml#

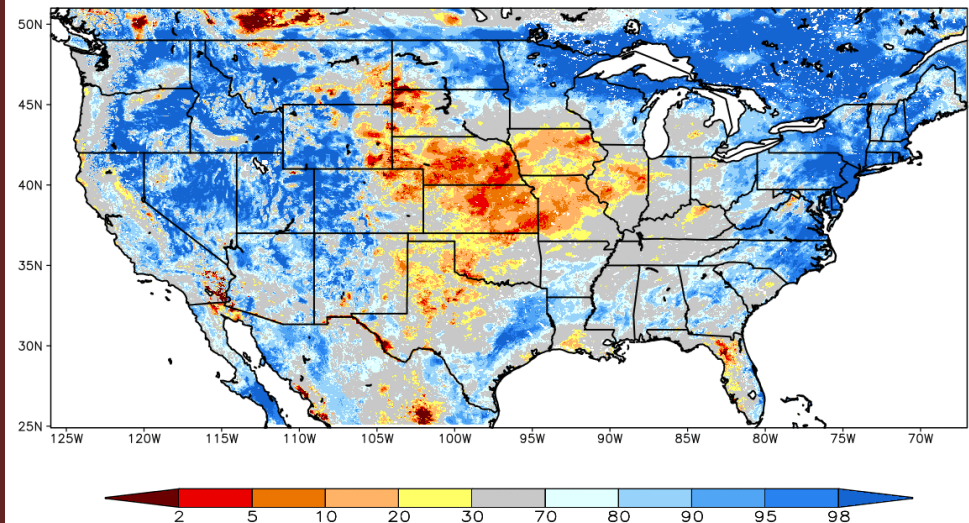


- Still some dry soils Plains into parts of MO-IA-MN
- Closer to average elsewhere and possibly wet north.
- NASA-SPoRT has had some corrections but possibly a bit too wet now.
- Unclear how much moisture entered soils in northern areas where snowpack recently melted.

Both percentile maps

- Upper – whole profile
- Lower – top 100 cm (~40")

SPoRT-LIS 0-100 cm Soil Moisture percentile valid 02 May 2023



NOTE
Experimental

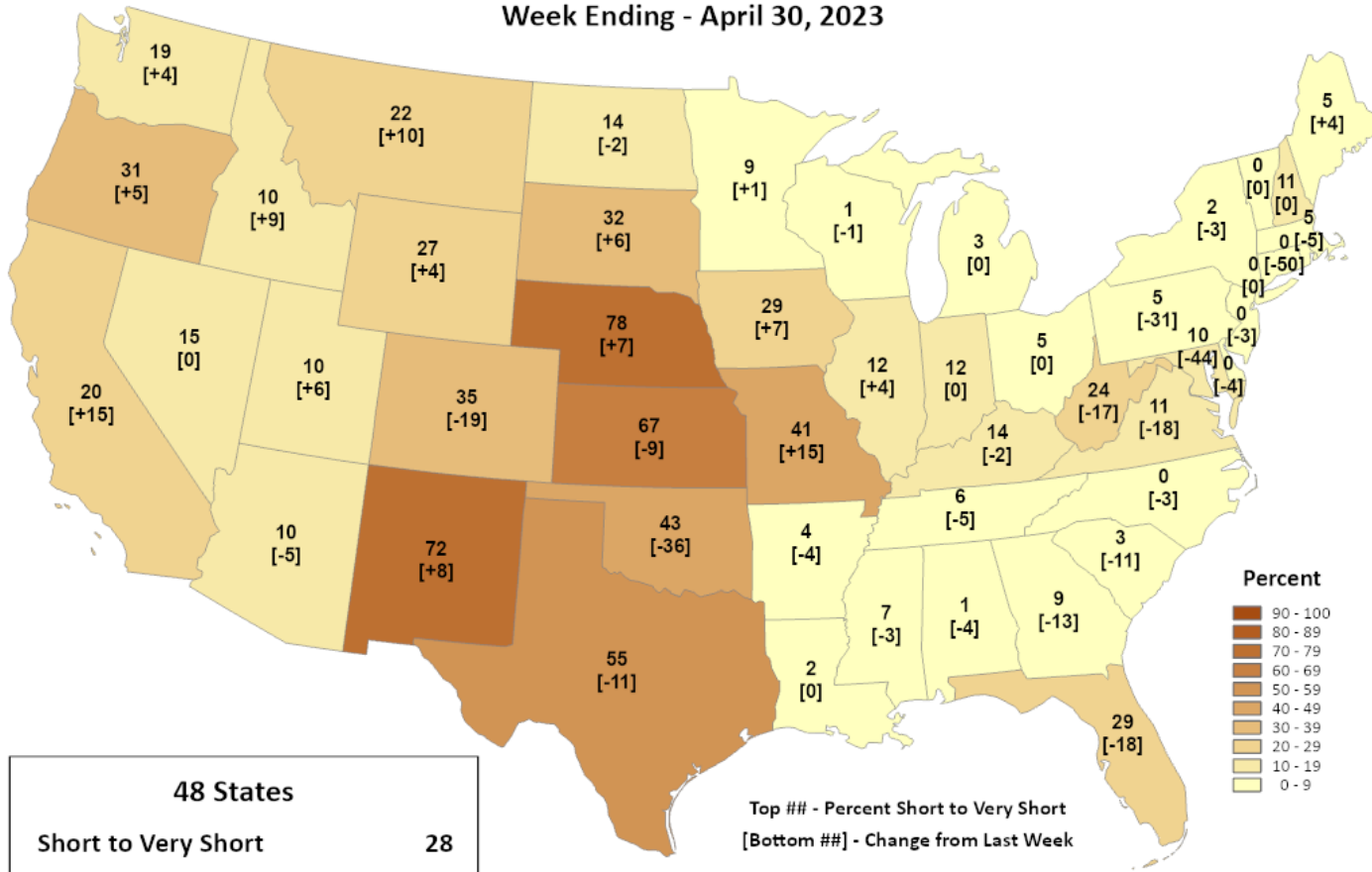
https://weather.msfc.nasa.gov/sport/case_studies/lis_CONUS.html

Soil Moisture (NASS)



This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Topsoil Moisture Percent Short to Very Short Week Ending - April 30, 2023



48 States	
Short to Very Short	28
Change from Last Week	0

Top ## - Percent Short to Very Short
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

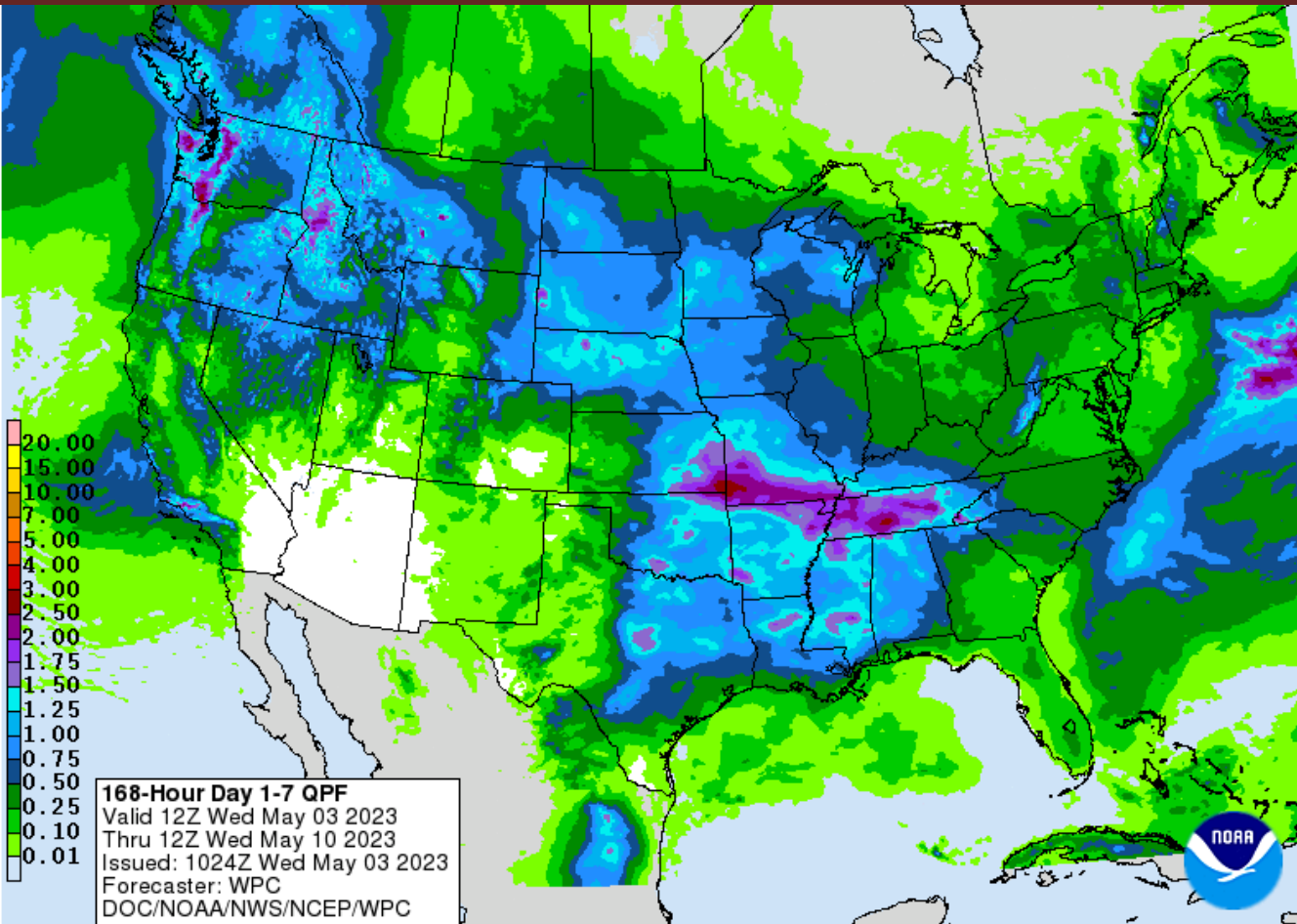
Assorted AG Issues

- Dry soils persist west.
- Soils becoming wet (possibly too wet) in north
- Recently thawed northern areas – questions on soil moisture recovery
- Very quick snow melt.

- Field work and planting rolling

- Some recent flooding in various areas.

1-7 Day Precip

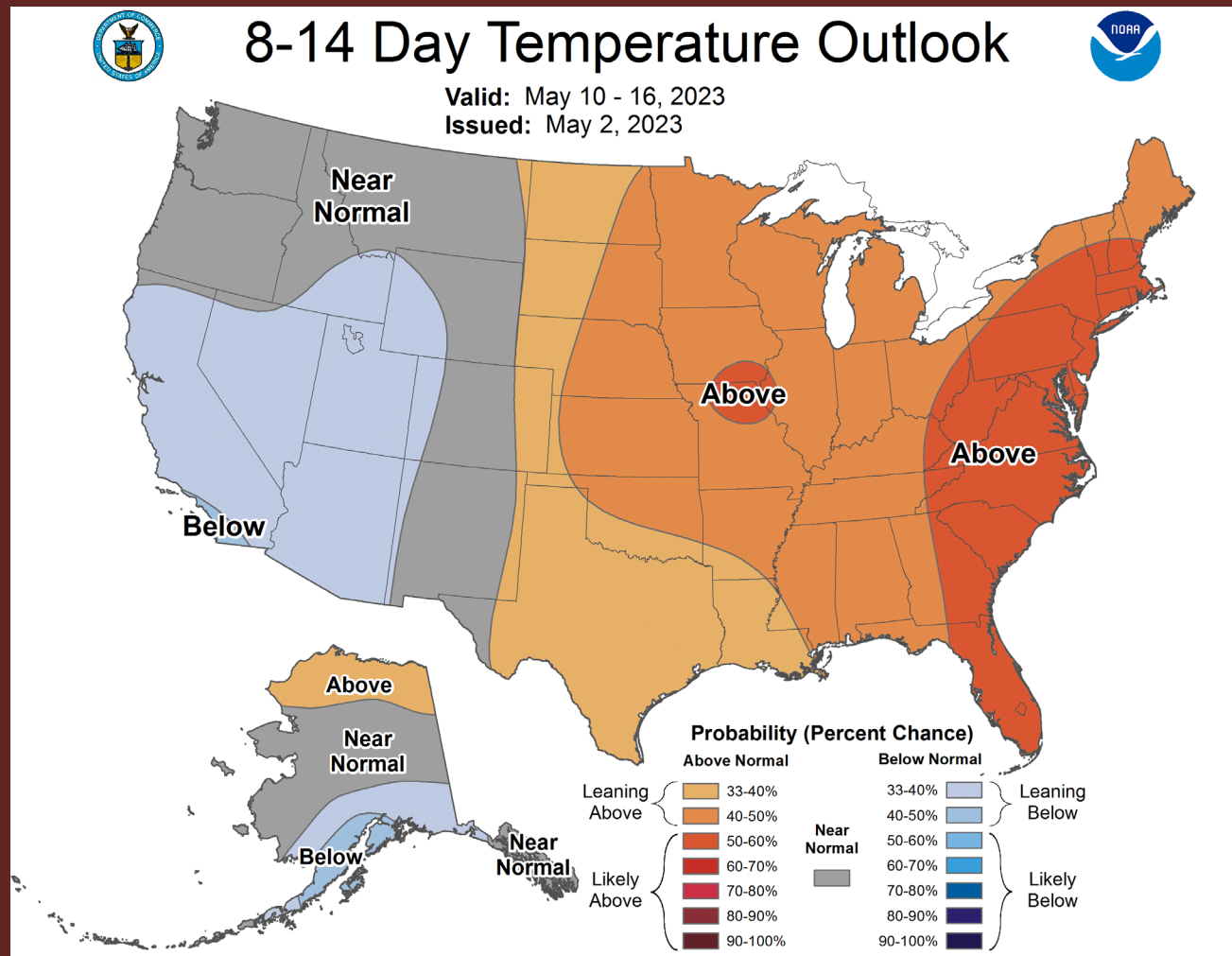


Next 7 days

- Brief cool period over weekend then recovery.
- High winds.
- Showers widespread – Potentially heavy in KS/MO/IL.

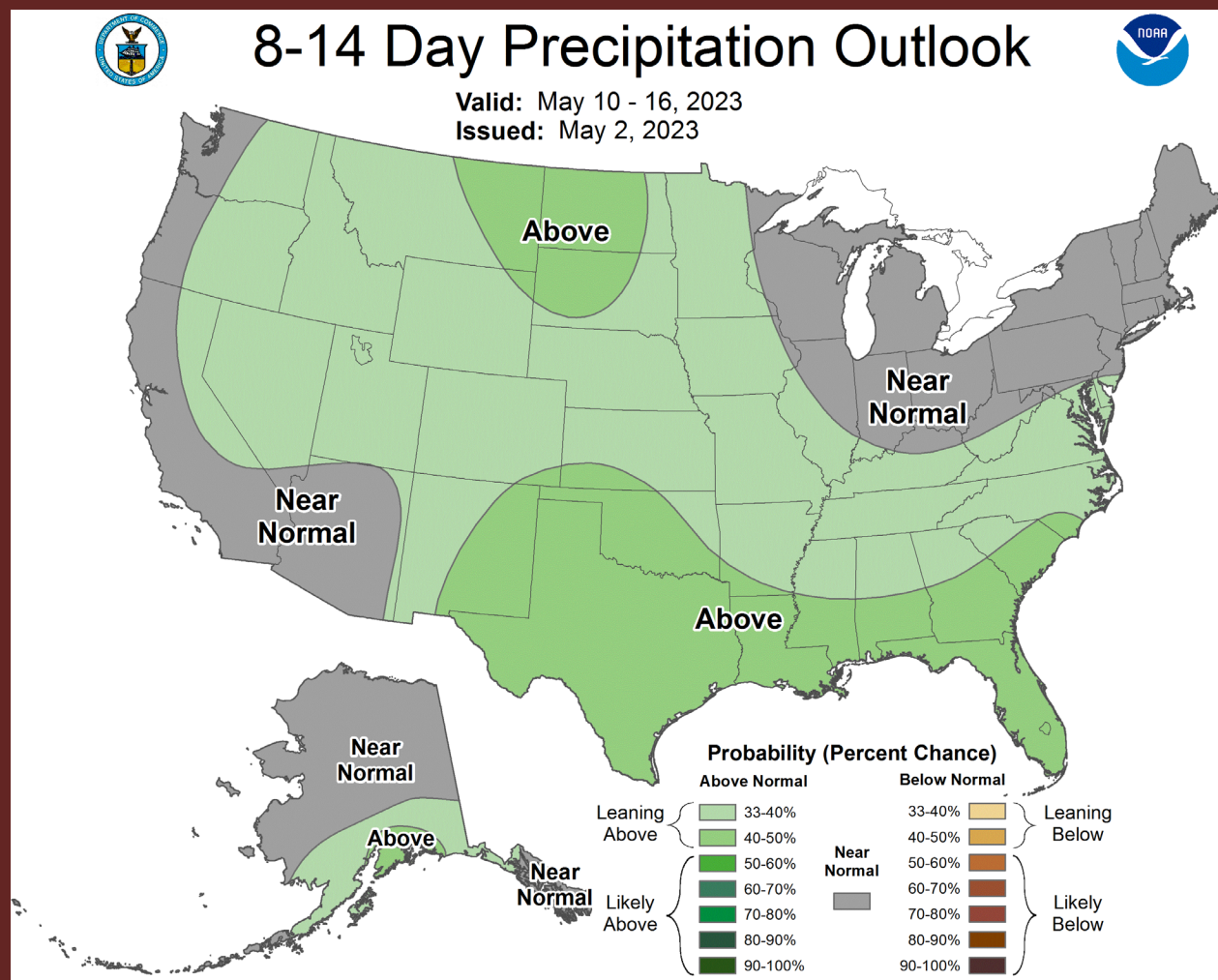
Temperature Outlook

- Likely warmer than normal throughout the Midwest and Plains



Precipitation Outlook

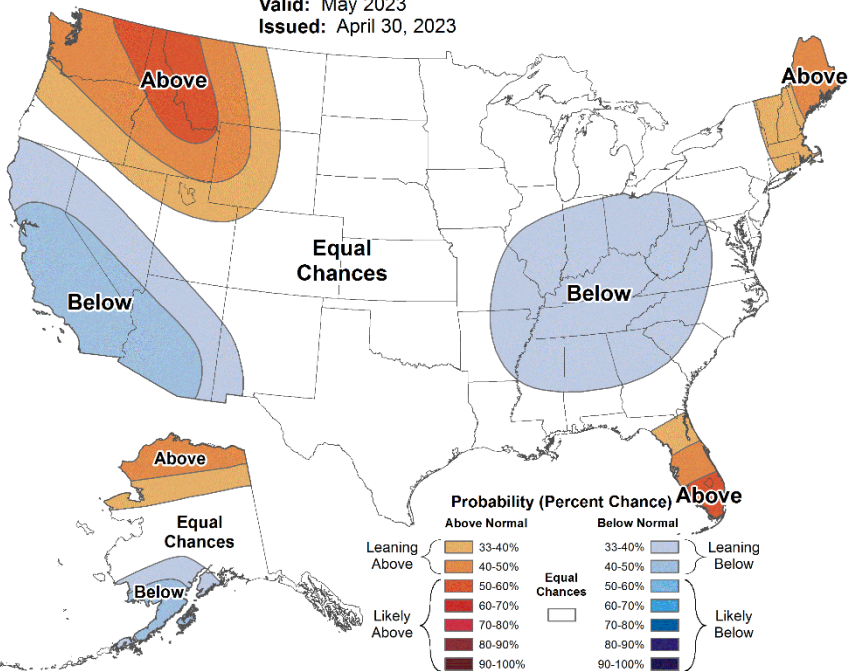
- Slight chance wetter in the Plains.
- Near normal elsewhere.



1-Month Outlook

Monthly Temperature Outlook

Valid: May 2023
Issued: April 30, 2023

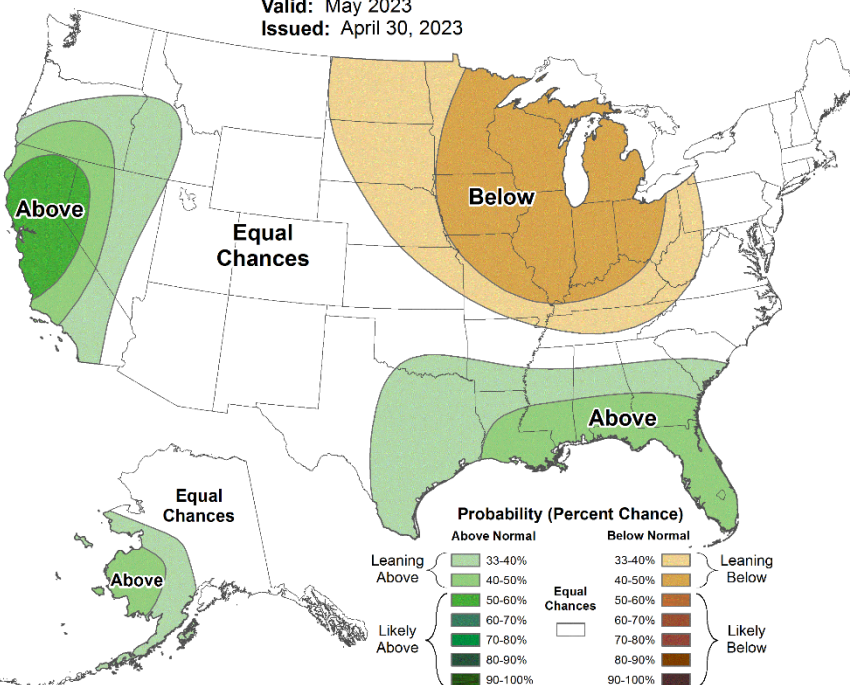


April Monthly Outlook

- Better chance cooler around Ohio Valley
- Drier than normal throughout Midwest

Monthly Precipitation Outlook

Valid: May 2023
Issued: April 30, 2023



March-May Outlook

Official NOAA CPC ENSO Probabilities (issued Apr. 2023)

based on $-0.5^{\circ}/+0.5^{\circ}\text{C}$ thresholds in ERSSTv5 Niño-3.4 index

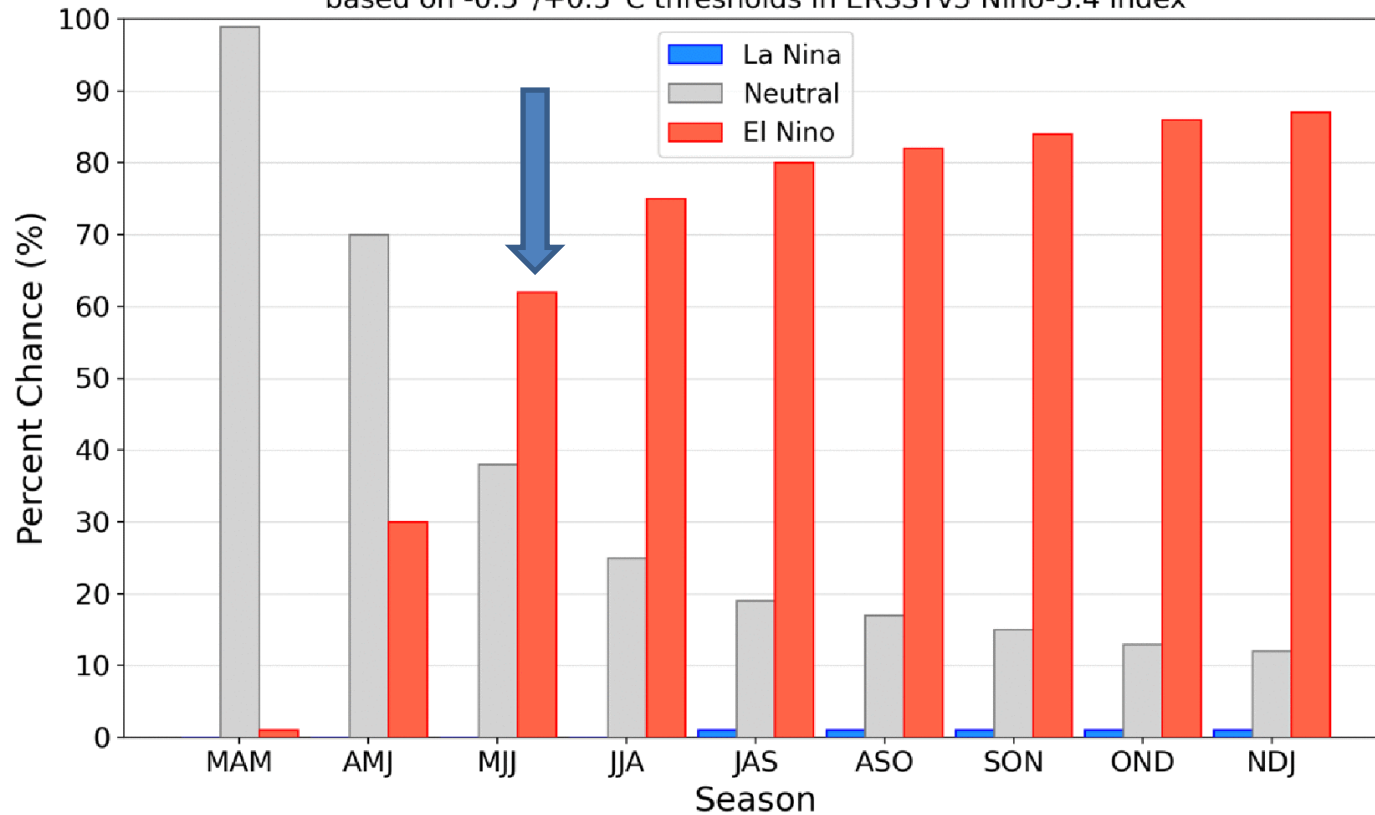
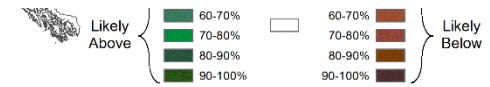


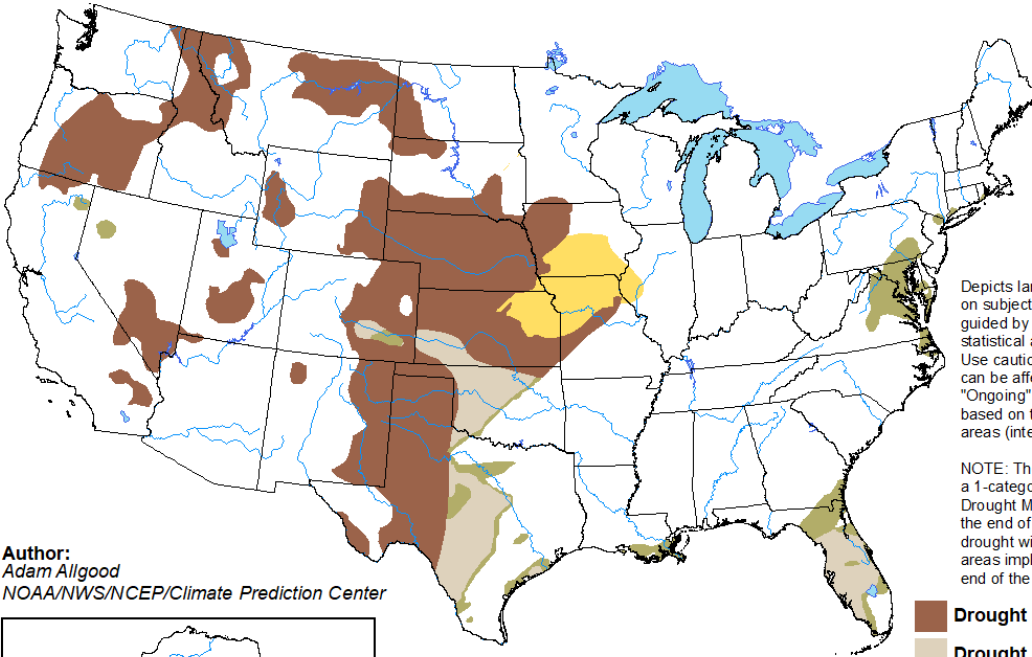
Figure 7. Official ENSO probabilities for the Niño 3.4 sea surface temperature index (5°N - 5°S , 120°W - 170°W). Figure updated 13 April 2023.



Drought in the Midwest/Plains

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

Valid for May 2023
Released April 30, 2023



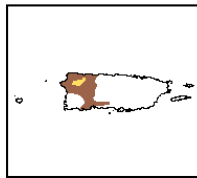
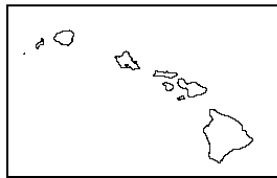
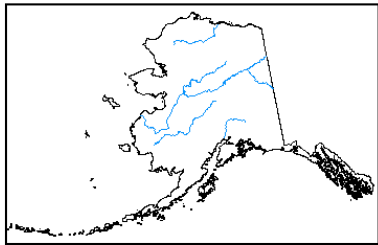
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

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



Author:
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NOAA/NWS/NCEP/Climate Prediction Center



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

- Spring 2023 drought outlook – expecting some worsening in IA/MO.
- Drought may persist in the Plains.

Summary

- Spring planting began with few delays overall.
- Very dry soils west still a concern.
- Rapid snow removal contributing to flooding along major rivers and lowland problems – may be contributing to field work delays in some areas?
- Transition from La Nina should ease some drought concerns.
- Ongoing drought issues in Plains, though.

Next MAC-T Monthly Call

Next Call

June 7, 2023, 9-10am CT