

MAC-T Monthly Call

Midwest Agriculture and Climate Team

June 28, 2023

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Midwest Climate Hub

U.S. DEPARTMENT OF AGRICULTURE



El Niño Advisory

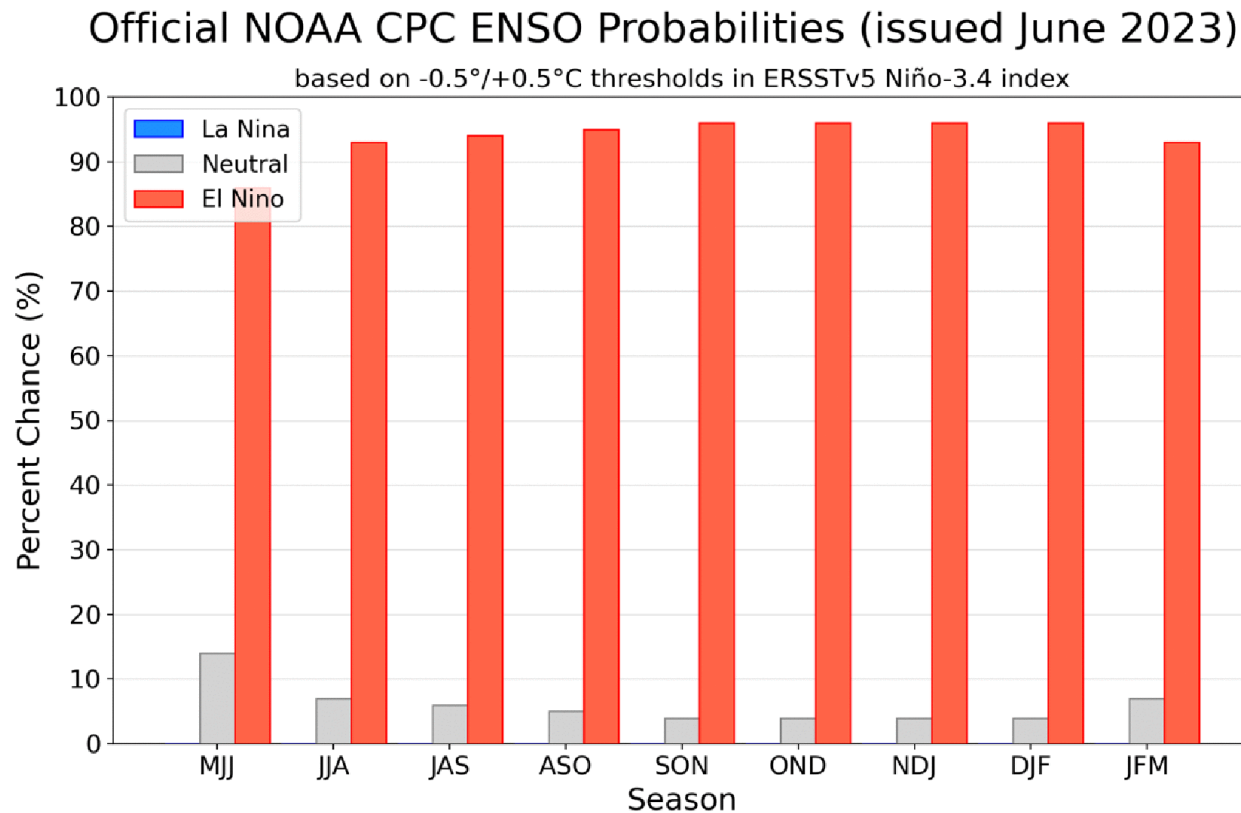
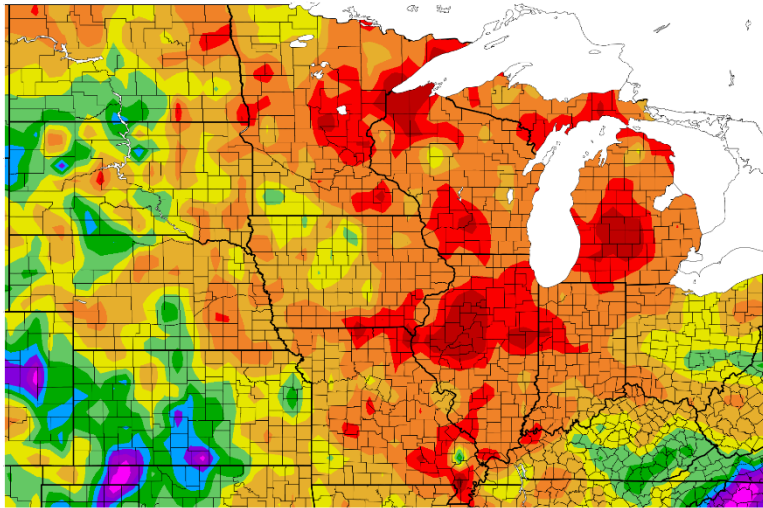
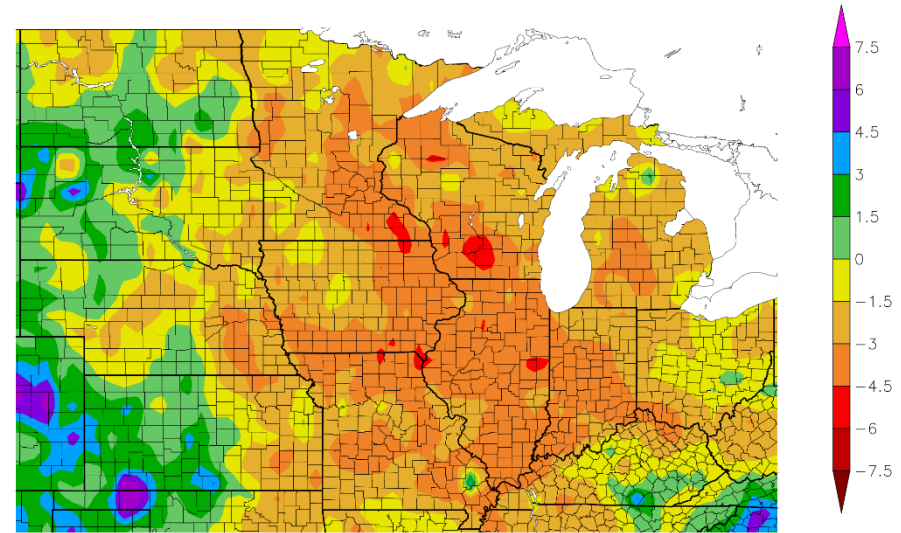


Figure 7. Official ENSO probabilities for the Niño 3.4 sea surface temperature index (5°N - 5°S , 120°W - 170°W). Figure updated 8 June 2023.

Precipitation (in)
5/28/2023 – 6/26/2023



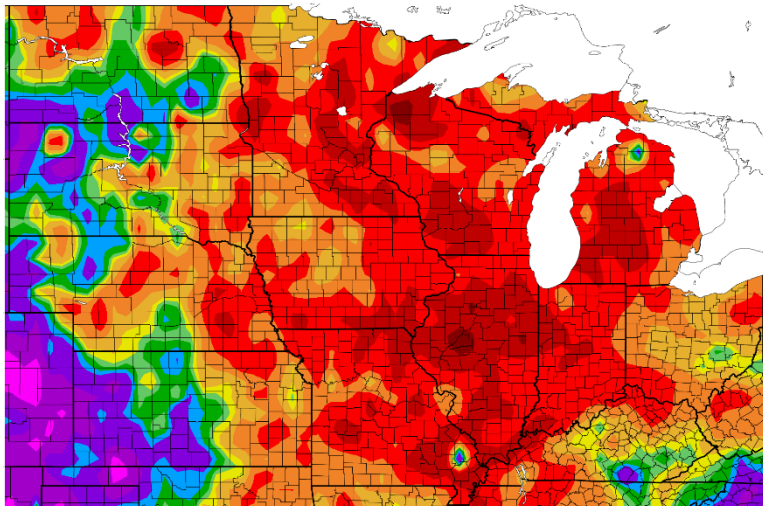
Departure from Normal Precipitation (in)
5/28/2023 – 6/26/2023



Generated 6/27/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
5/28/2023 – 6/26/2023



Generated 6/27/2023 at HPRCC using provisional data.

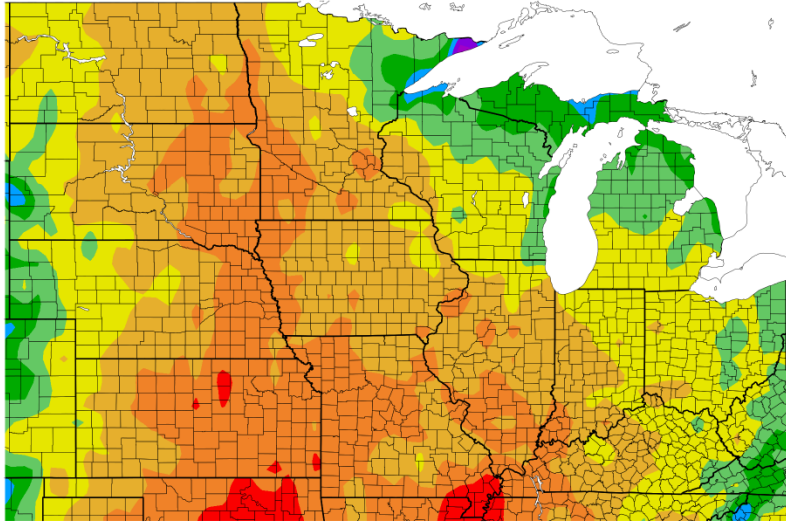
NOAA Regional Climate Centers

Generated 6/27/2023 at HPRCC using provisional data.

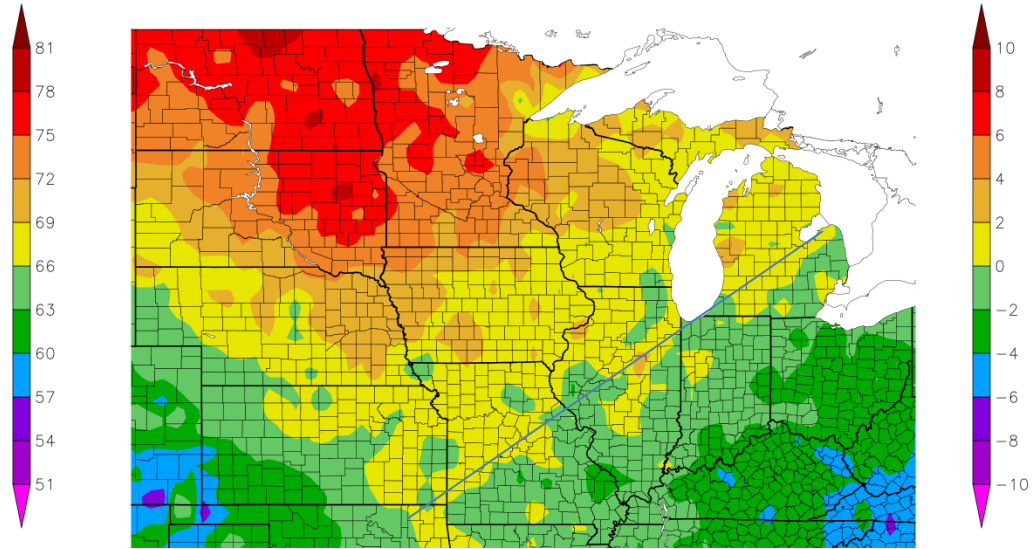
NOAA Regional Climate Centers

- Drier nearly everywhere in the region except for western Plains.
- Some dryness very severe. Widespread <50%. <25% across portions of most states in the region.

Temperature (F)
5/28/2023 – 6/26/2023



Departure from Normal Temperature (F)
5/28/2023 – 6/26/2023



Generated 6/27/2023 at HPRCC using provisional data.

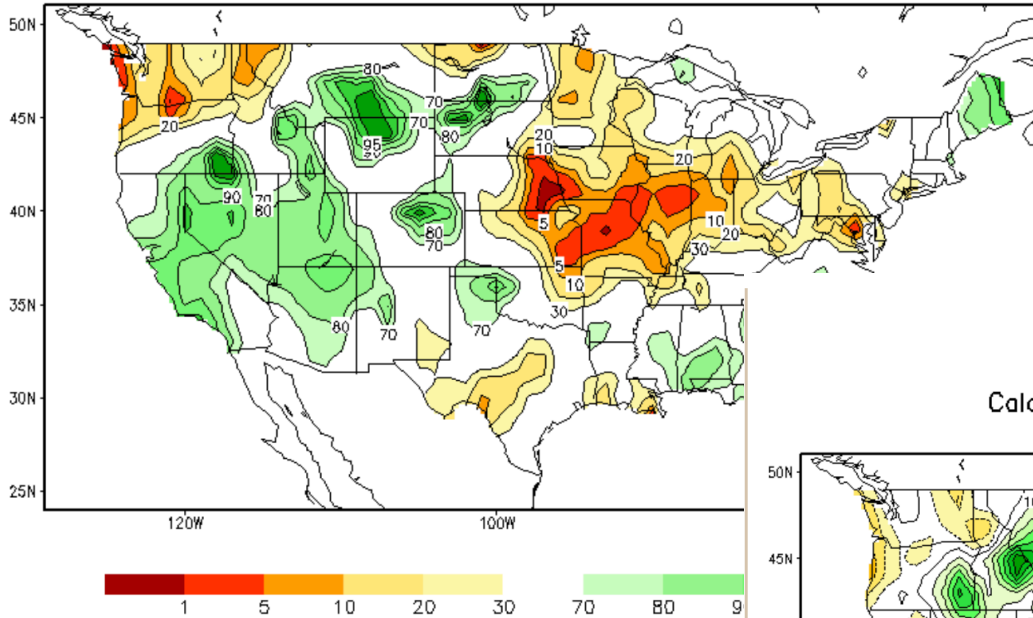
NOAA Regional Climate Centers Generated 6/27/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

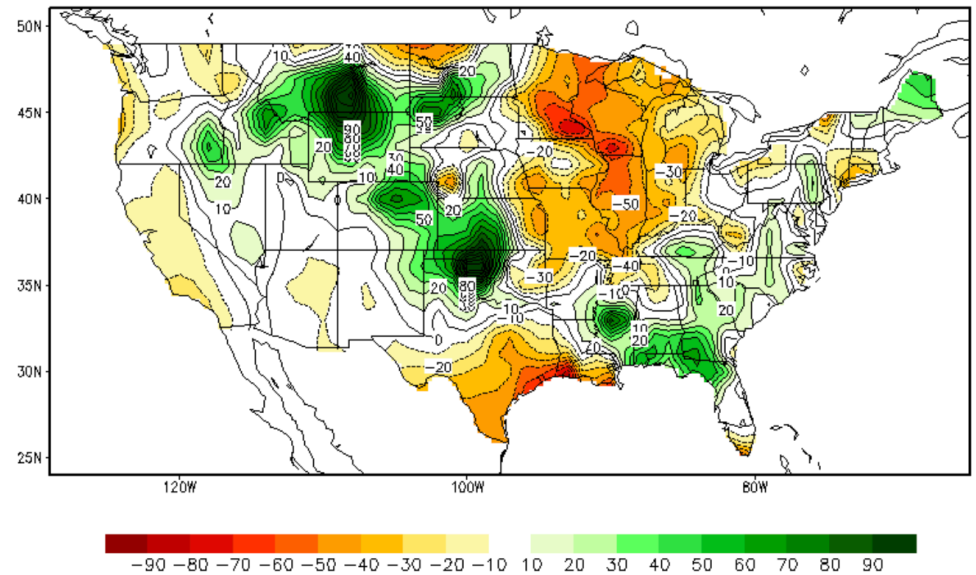
- Northern Plains much warmer than average (6-10F)
- Rest of region also warmer but less so – mostly (2-4 F).
- Eastern Corn Belt near normal to cooler (IN/OH).

Soil Moisture

Calculated Soil Moisture Ranking Percentile
JUN 27, 2023



Calculated Soil Moisture Anomaly Change
JUN 27, 2023 from MAY 31

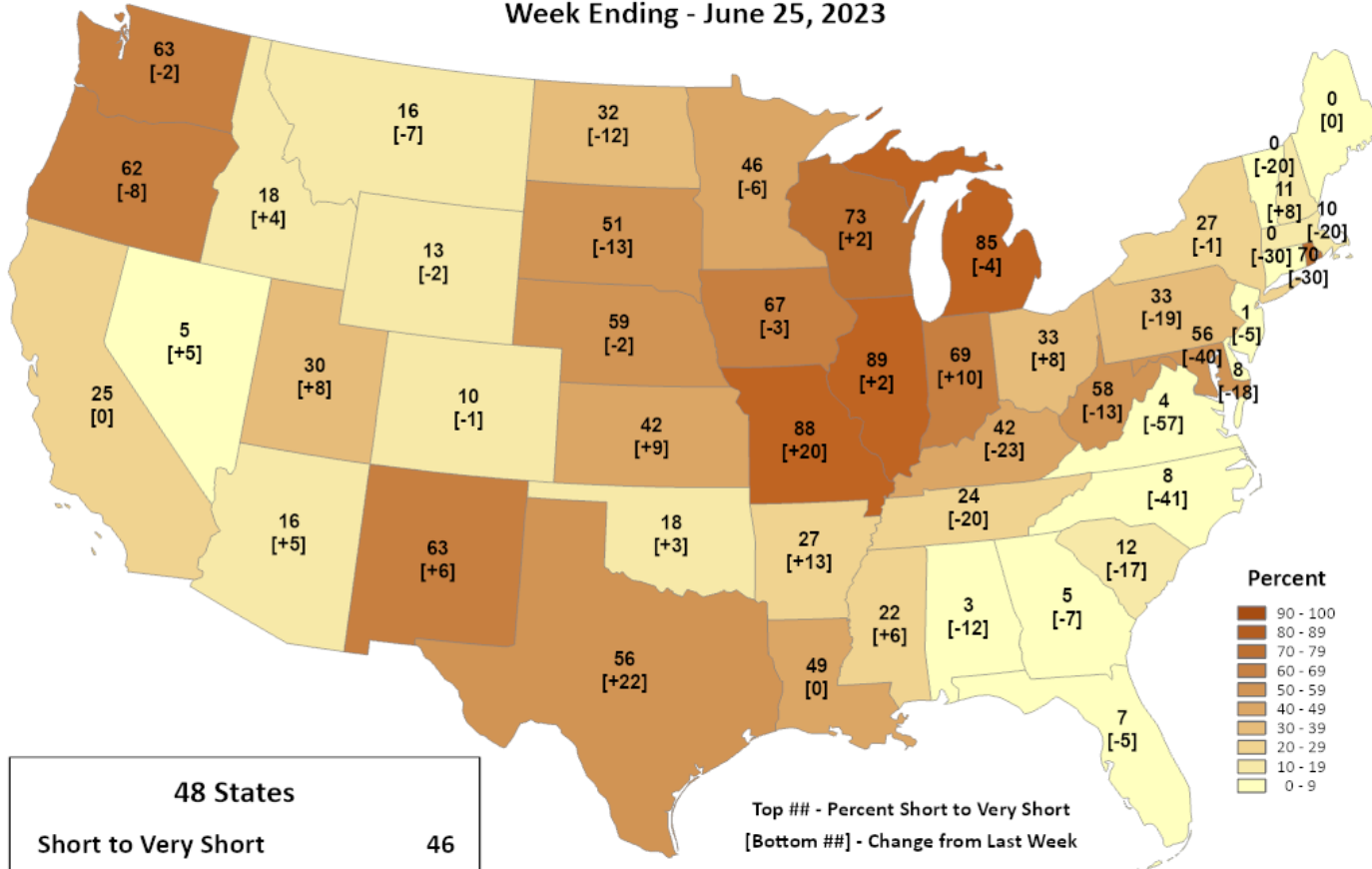


Soil Moisture (NASS)



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 - June 25, 2023



- Rapid increase in S-VS soil moisture across eastern Corn Belt

48 States

Short to Very Short 46

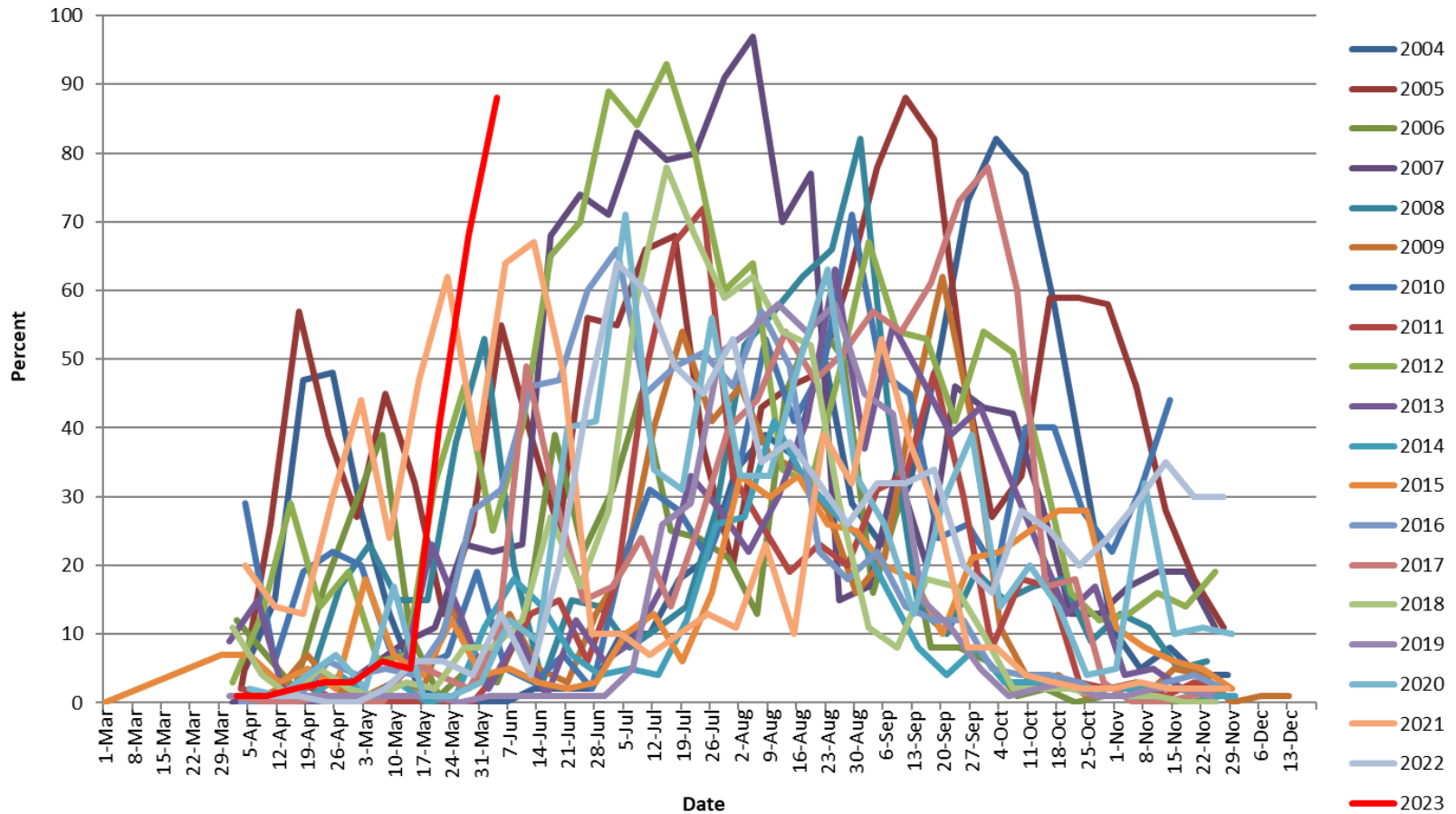
Change from Last Week -1

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

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

Soil Moisture (NASS)

MI Topsoil Moisture: Percent Short-Very Short



Based on NASS crop progress data.

Corn Conditions (NASS)

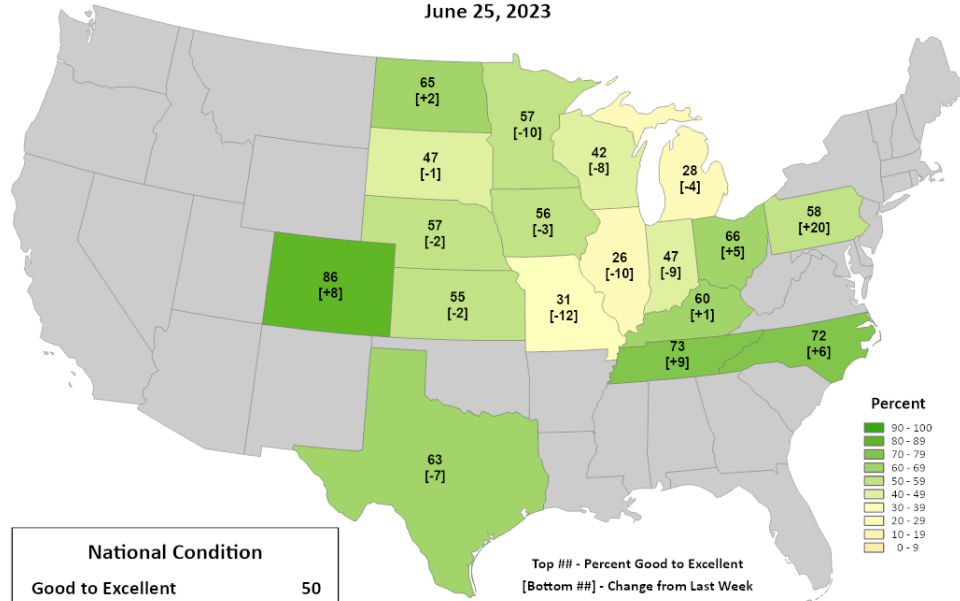


This product was prepared by the
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World Agricultural Outlook Board (WAOB)

Corn Conditions

Percent Good to Excellent

June 25, 2023



National Condition

Good to Excellent 50
Change from Last Week -5

Top ### - Percent Good to Excellent
[Bottom ##] - Change from Last Week

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

- Slow, but increasing poor to very poor across the Corn Belt

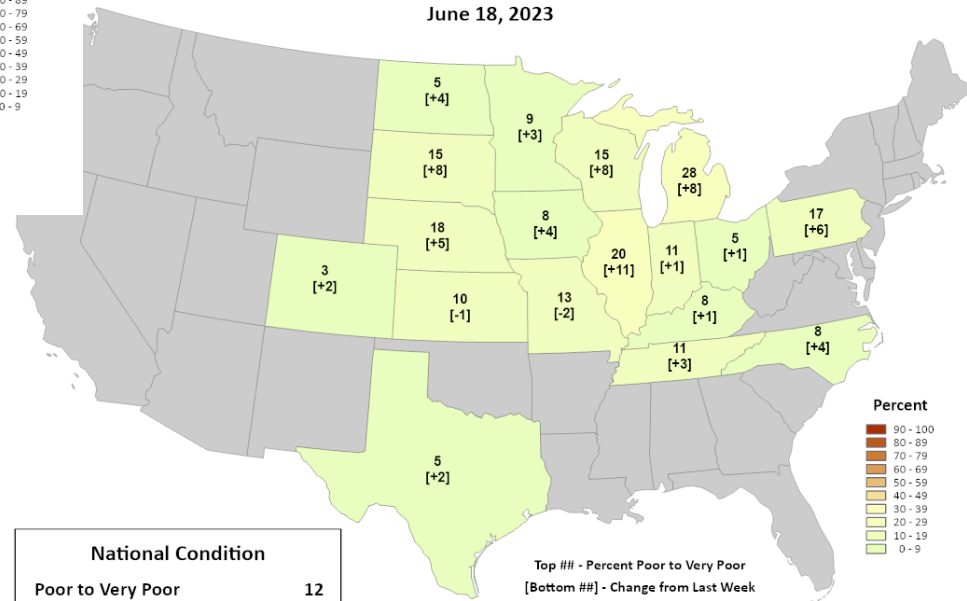


prepared by the
Chief Economist (OCE)
Outlook Board (WAOB)

Corn Conditions

Percent Poor to Very Poor

June 18, 2023



National Condition

Poor to Very Poor 12
Change from Last Week +4

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

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

Soybean Conditions (NASS)

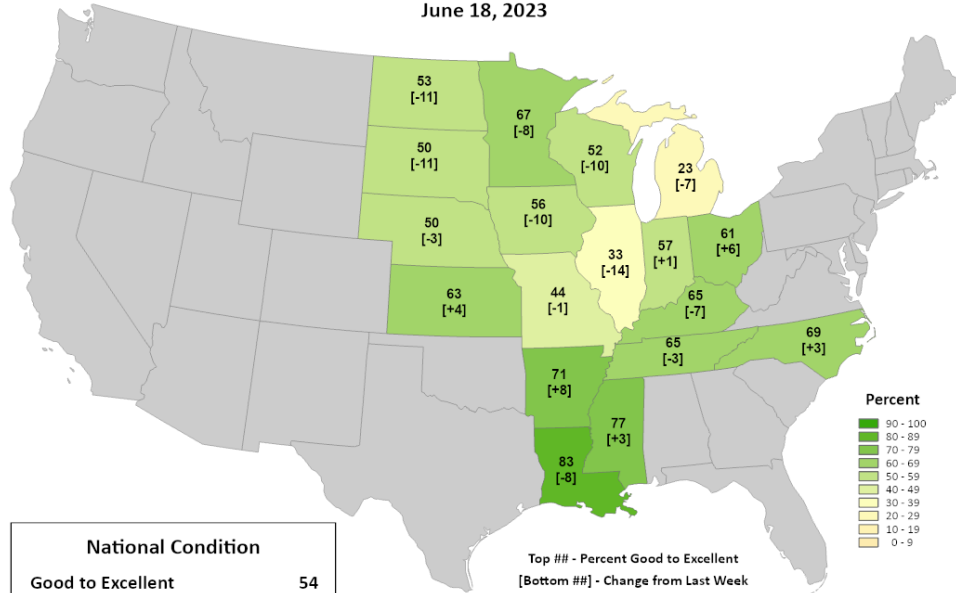


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Soybean Conditions

Percent Good to Excellent

June 18, 2023



National Condition

Good to Excellent 54

Change from Last Week -5

Top ## - Percent Good to Excellent
[Bottom ##] - Change from Last Week

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

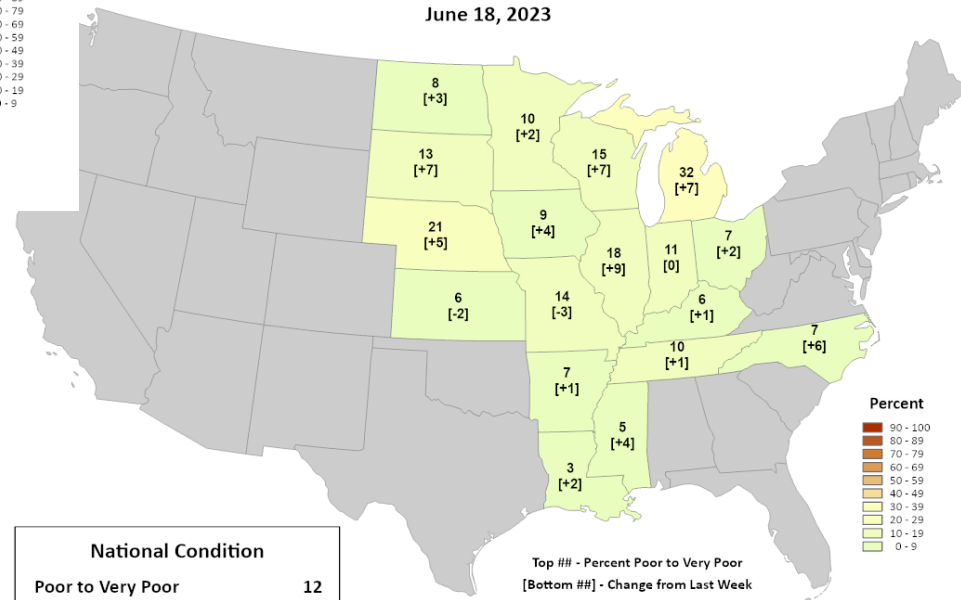


prepared by the
Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Soybean Conditions

Percent Poor to Very Poor

June 18, 2023



National Condition

Poor to Very Poor 12

Change from Last Week +3

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

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

Pasture/Range Conditions (NASS)

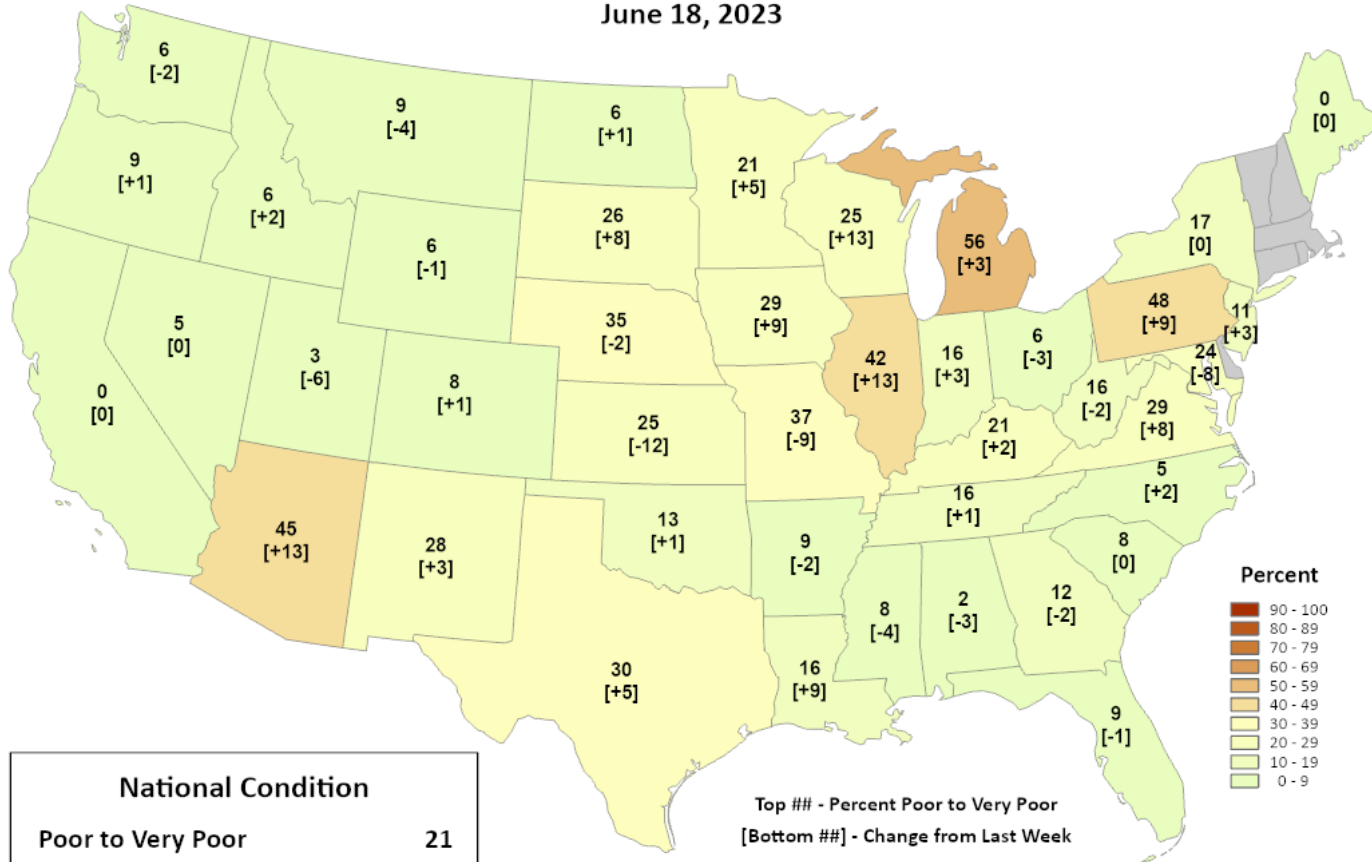


This product was prepared by the
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 World Agricultural Outlook Board (WAOB)

Pasture and Range Conditions

Percent Poor to Very Poor

June 18, 2023

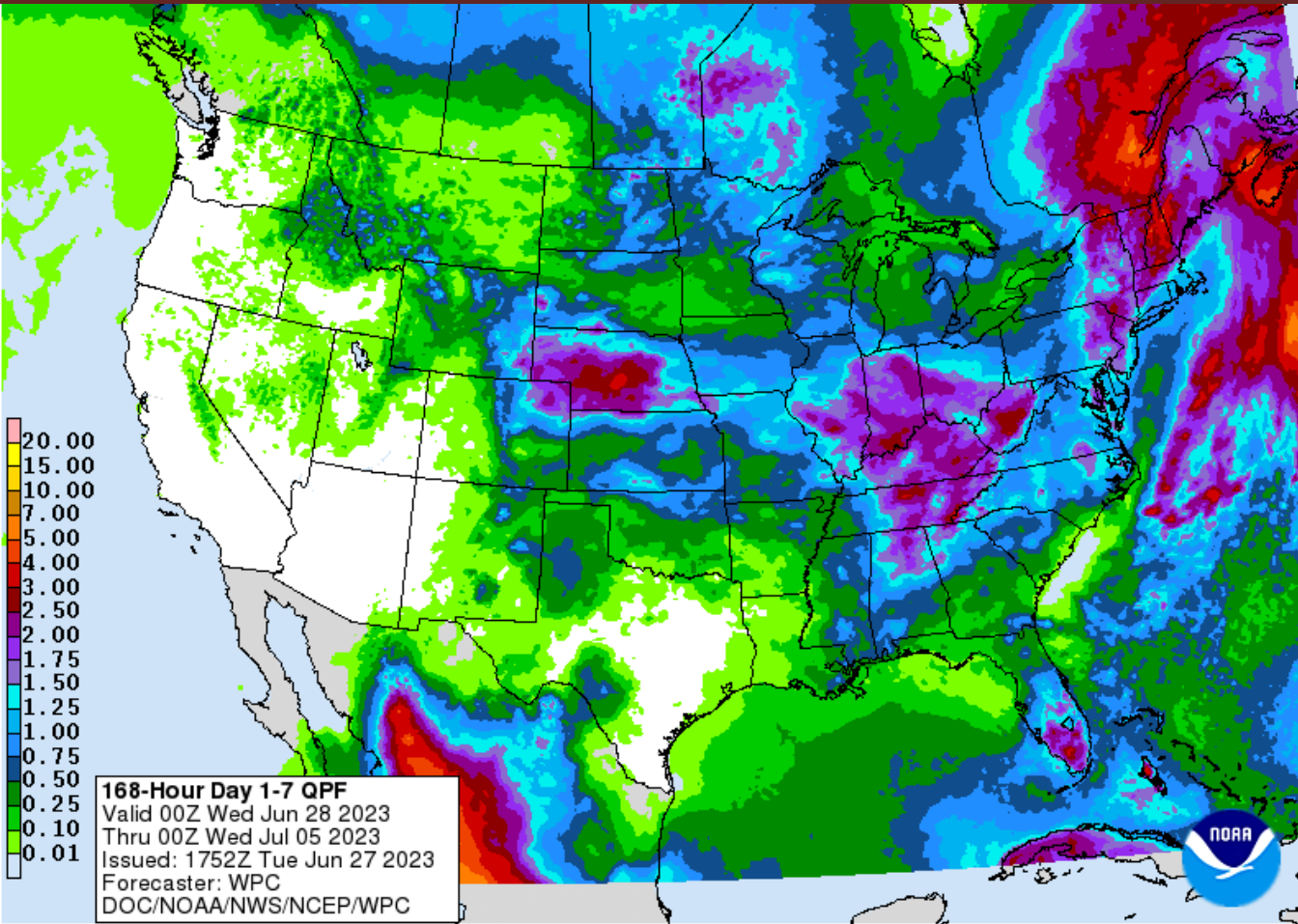


Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

Assorted AG Issues

- Rapid soil drying central-eastern Corn Belt.
- Stress on grasses/small grains.
 - Stress commonly noted on grasses
 - Small grain condition reports worsening slightly
- Row crop (corn/soy)
 - Conditions also worsening for corn (soy condition NA)
 - Yield losses minimal this early in season
- Hay cutting
 - Easier in drier conditions
 - Limited cutting in places due to dryness

1-7 Day Precip



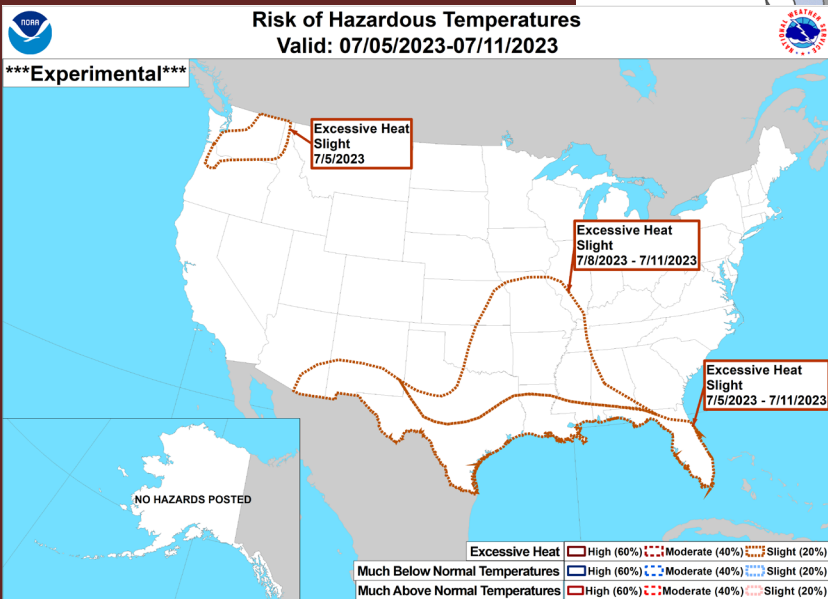
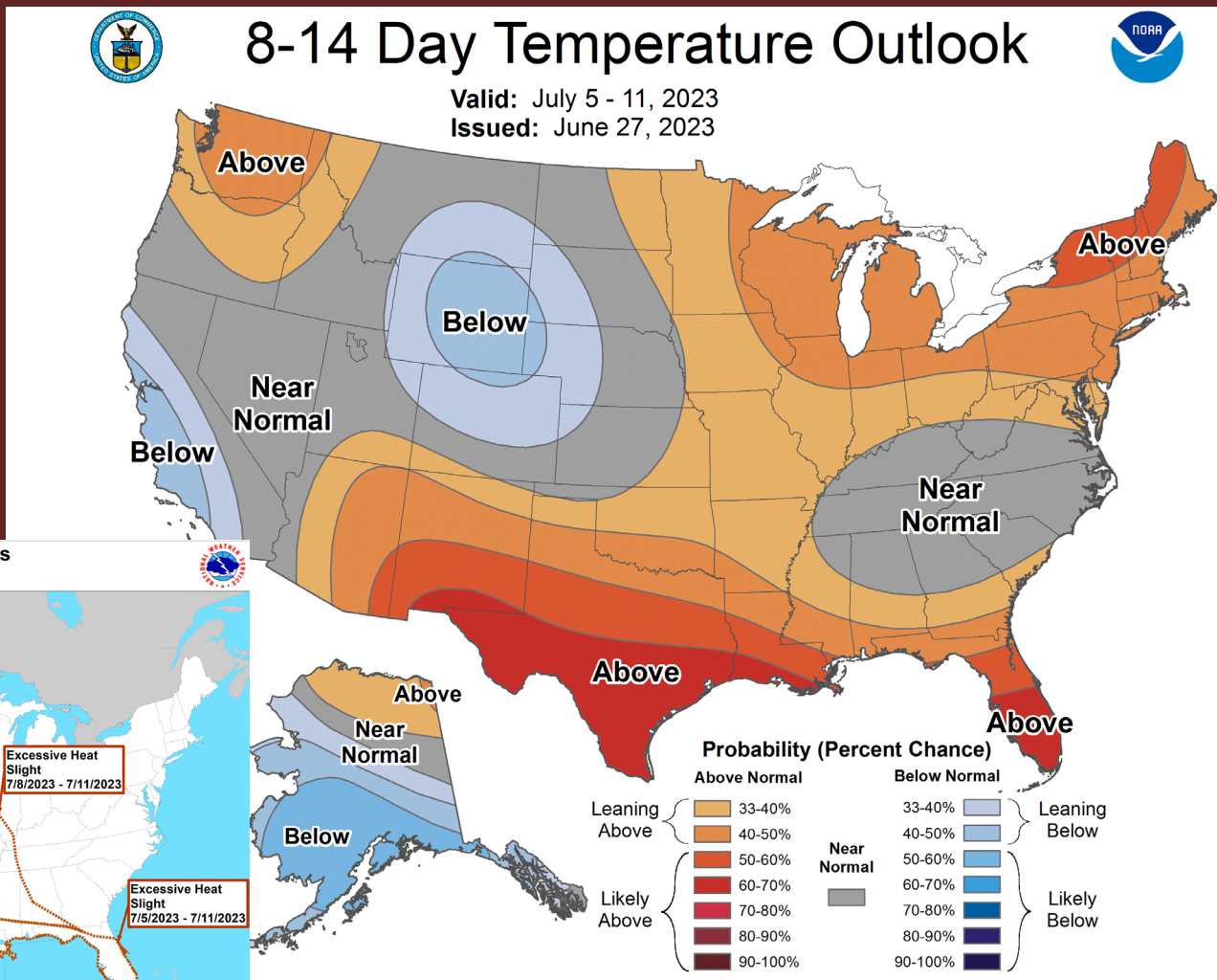
Next 7 days

- Some cooler conditions.
- More active pattern more south.
- Lesser chances MN/WI.

<http://www.wpc.ncep.noaa.gov/qpf/day1-7.shtml>

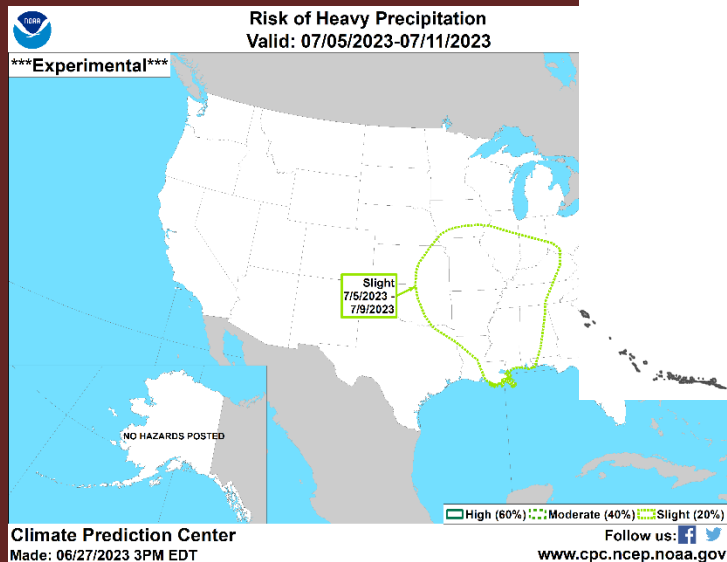
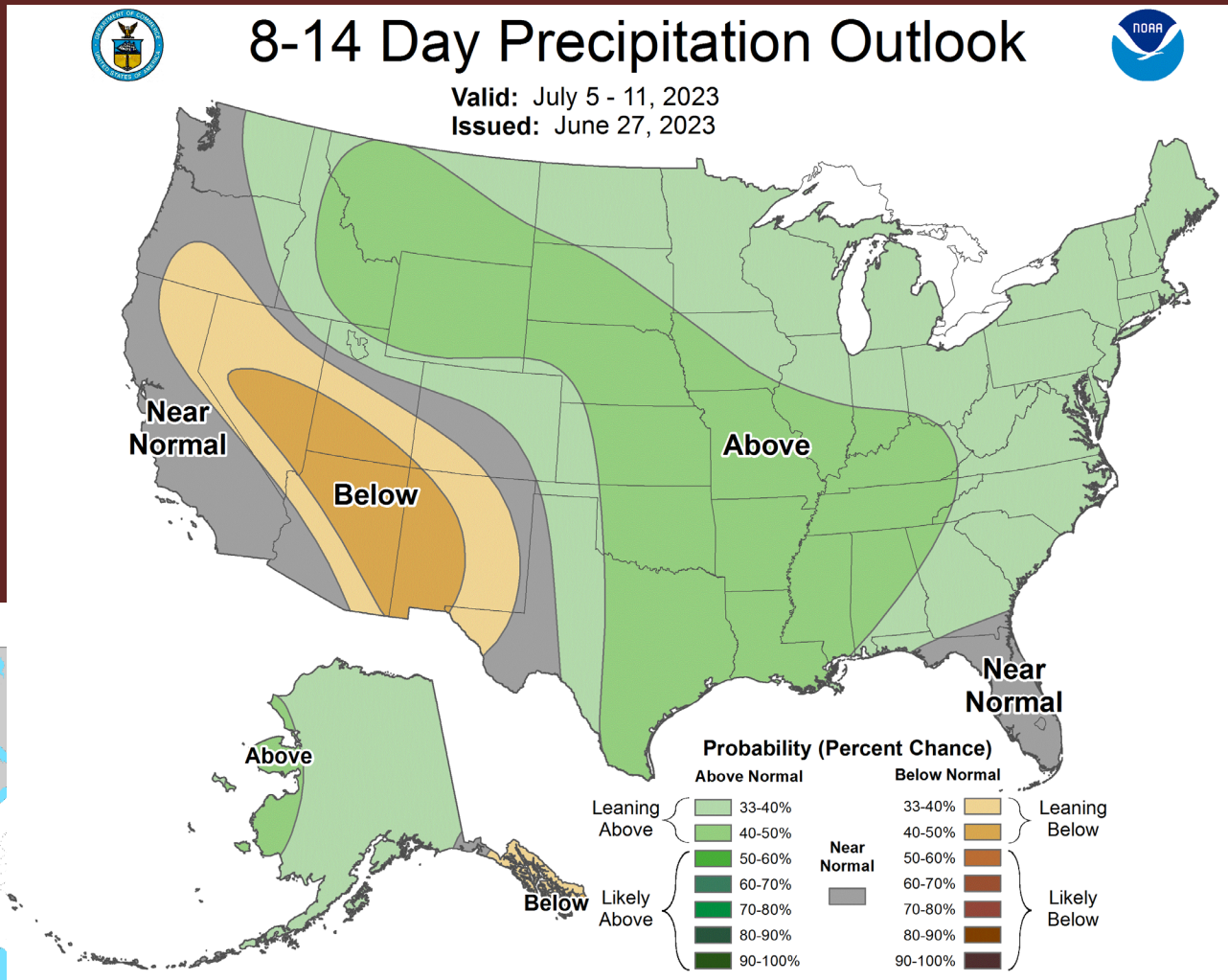
Temperature Outlook

- Likely warmer than normal throughout the Midwest and Plains.
- Some excessive heat possible – south.



Precipitation Outlook

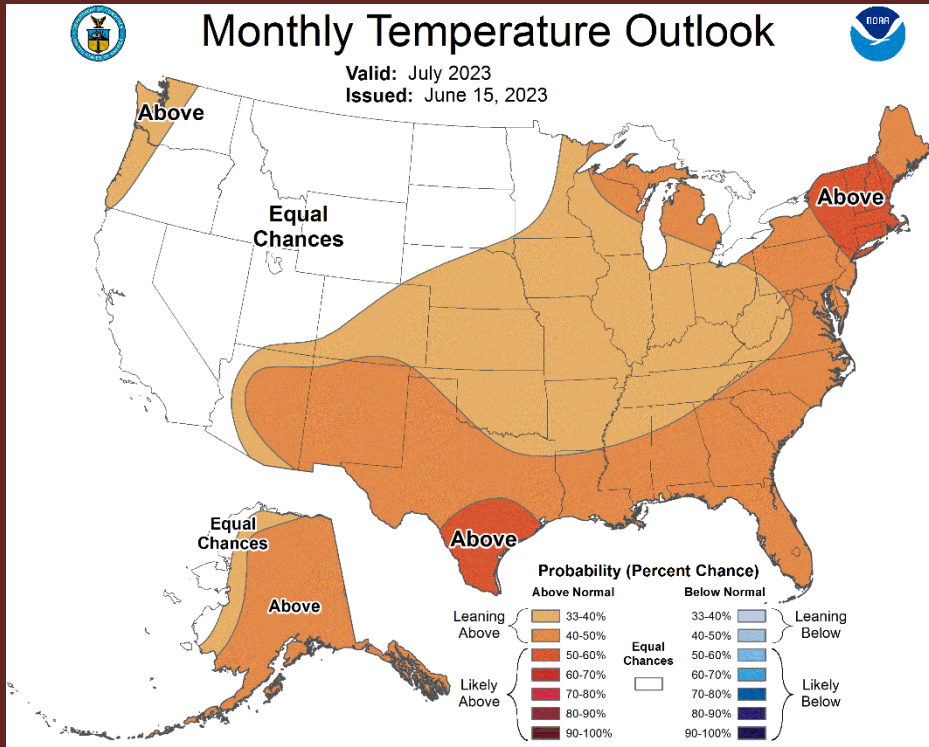
- Slight chance wetter in the Plains.
- Near normal narrow band
- Slightly below chances Great Lakes.



1-Month Outlook

Monthly Temperature Outlook

Valid: July 2023
Issued: June 15, 2023

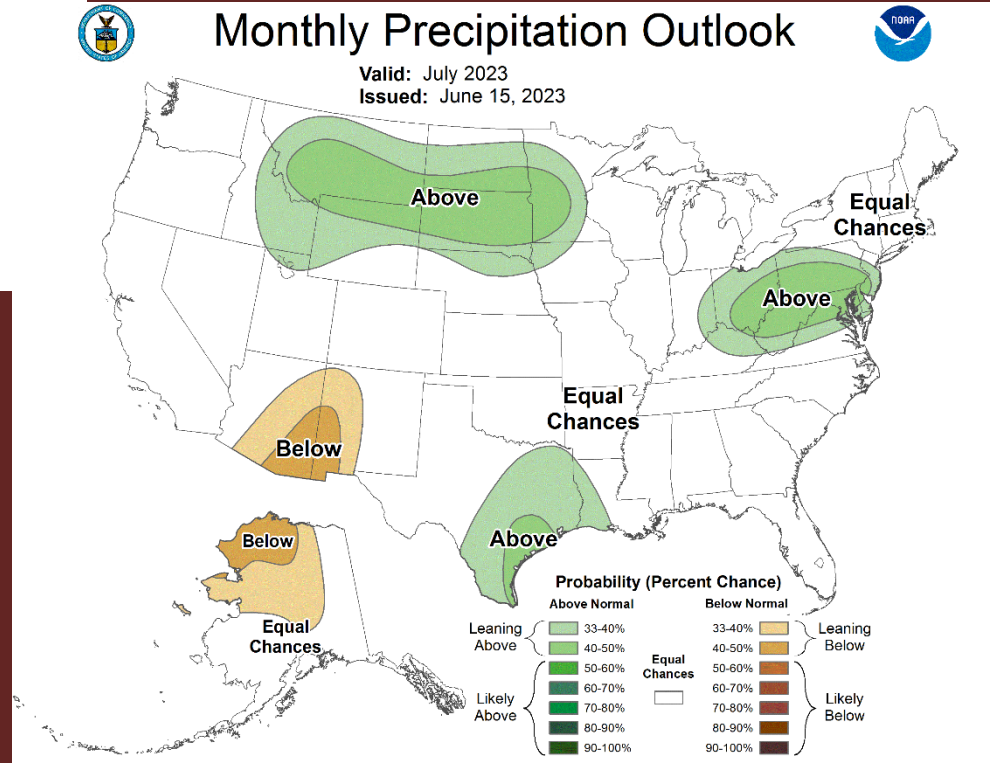


June Monthly Outlook

- Warmer more likely across most of the area – focused north.
- Pretty good chance drier around Great Lakes.

Monthly Precipitation Outlook

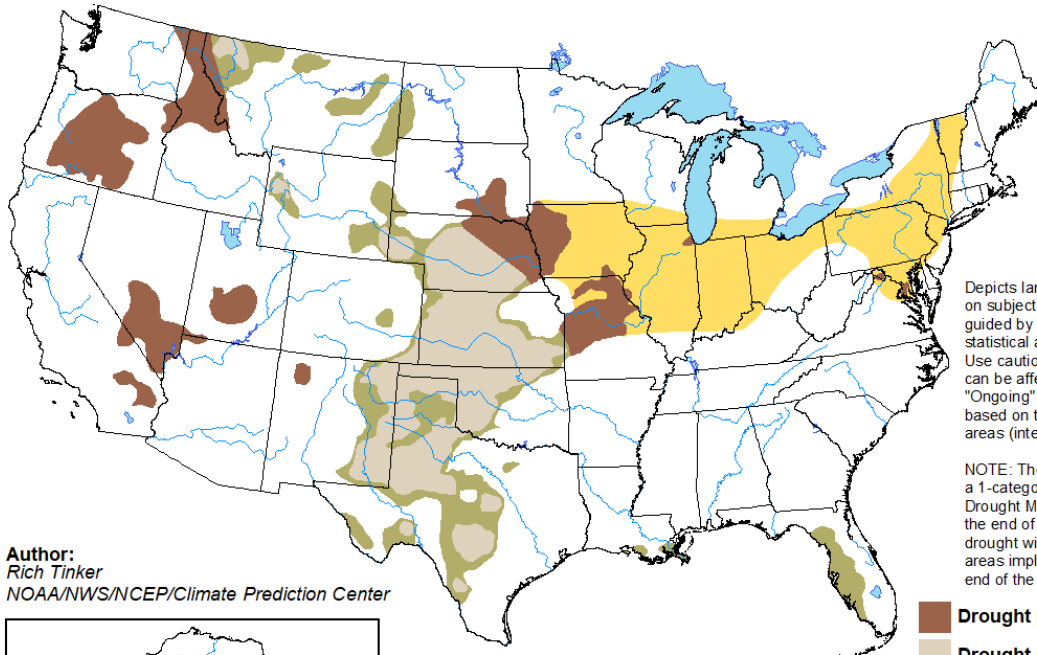
Valid: July 2023
Issued: June 15, 2023



Drought in the Midwest/Plains

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

Valid for June 2023
Released May 31, 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).

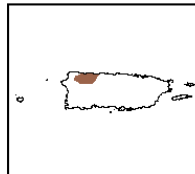
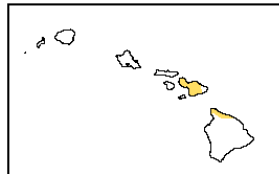
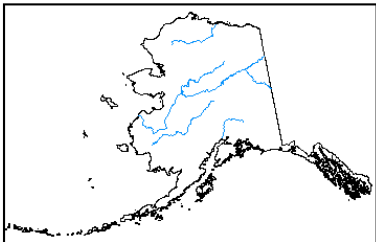
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

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



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

Author:
Rich Tinker
NOAA/NWS/NCEP/Climate Prediction Center



- June 2023 drought outlook – worsening expected Iowa to Ohio
- Some Plains improvement.

Summary

- Officially in an El Nino Advisory – low correlation with summer wx
- Rapid Onset Drought across the central-eastern Corn Belt
- Dry soils/precip. deficits of concern as we move into corn tasseling/pollination
- Overall crop conditions reflecting dryness
- Smoke probably will persist in region – at least periodically.
- Seven-day QPF and outlooks are showing positive signals for wetter conditions across the region

Next MAC-T Monthly Call

Next Call

July 12, 2023, 9-10am CT

Do we need a check-in sooner?