

MAC-T Monthly Call

Midwest Agriculture and Climate Team

October 5th, 2022

For more information:

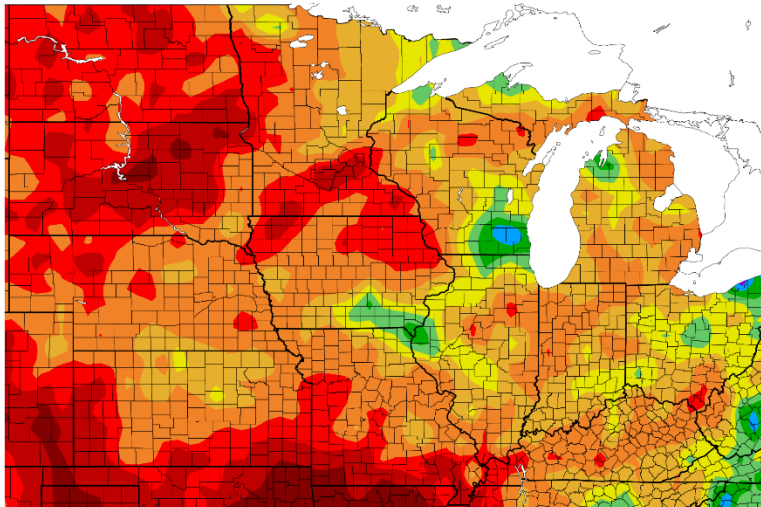
Dennis.todey@usda.gov



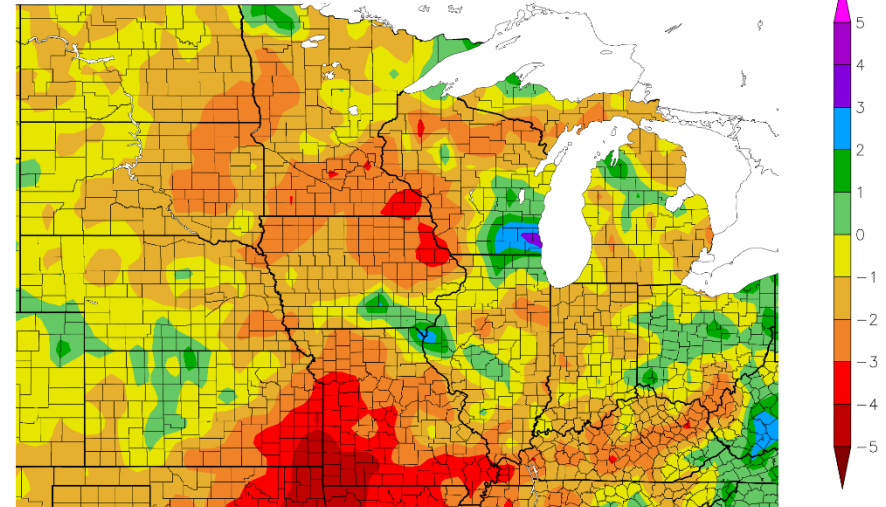
Midwest Climate Hub
U.S. DEPARTMENT OF AGRICULTURE



Precipitation (in)
9/4/2022 – 10/3/2022



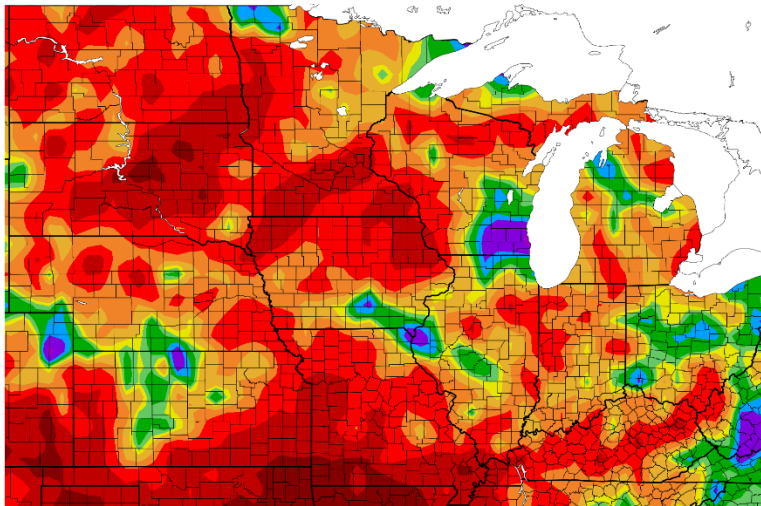
Departure from Normal Precipitation (in)
9/4/2022 – 10/3/2022



Generated 10/4/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
9/4/2022 – 10/3/2022



Generated 10/4/2022 at HPRCC using provisional data.

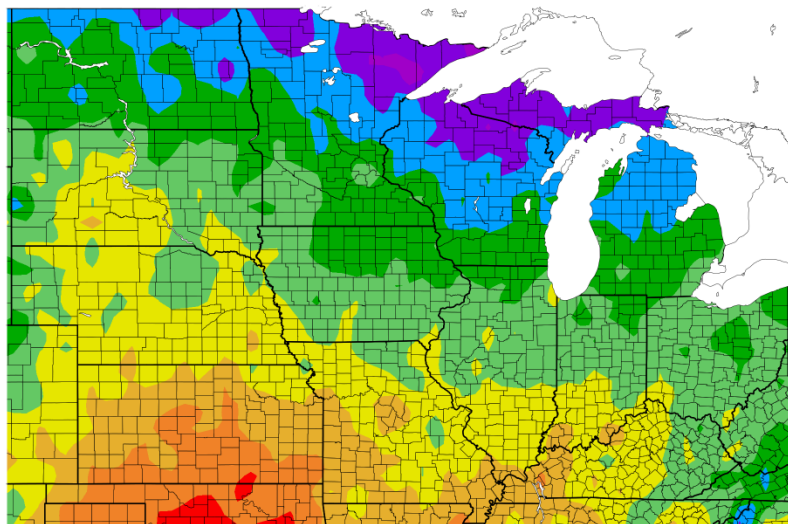
NOAA Regional Climate Centers

Generated 10/4/2022 at HPRCC using provisional data.

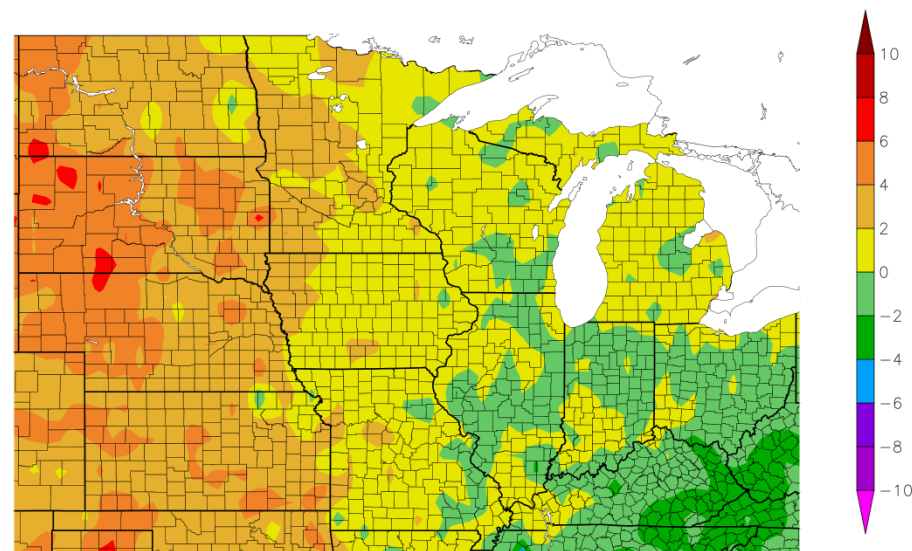
NOAA Regional Climate Centers

- Below average for most of region
- 2" or less in Plains, 3" in parts of cornbelt
- Large areas 50% average or less. Isolated pockets above.

Temperature (F)
9/4/2022 – 10/3/2022



Departure from Normal Temperature (F)
9/4/2022 – 10/3/2022



Generated 10/4/2022 at HPRCC using provisional data.

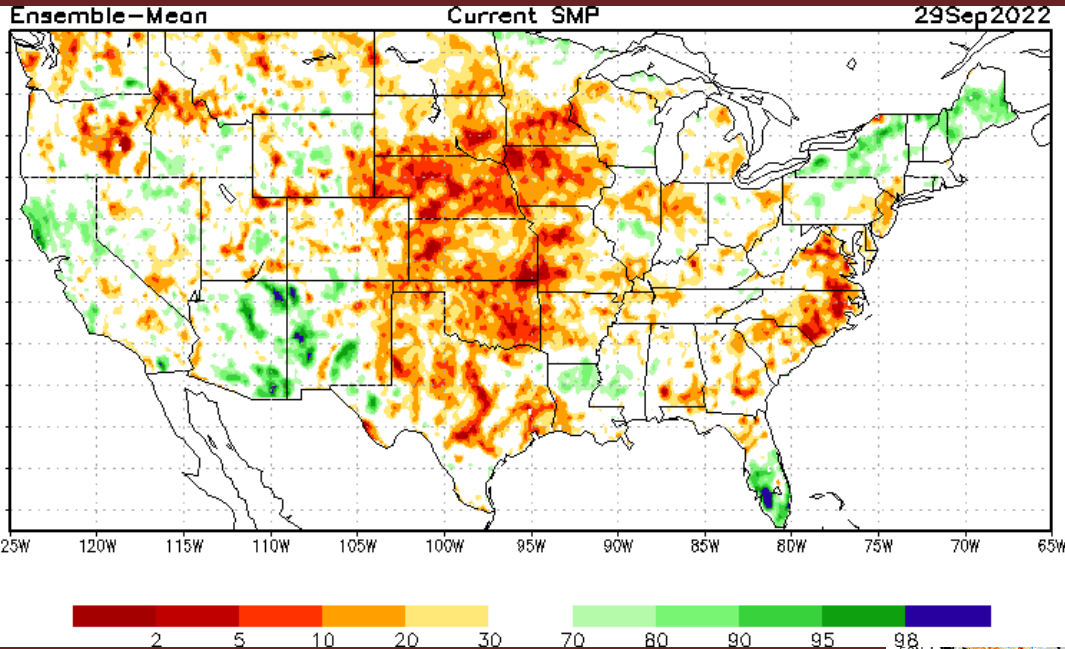
NOAA Regional Climate Centers Generated 10/4/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Gradient of warmest in south, in high 70s, to mid-60s in north
- Mostly warmer west (2-6F) – near to slightly below east.

Soil Moisture

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

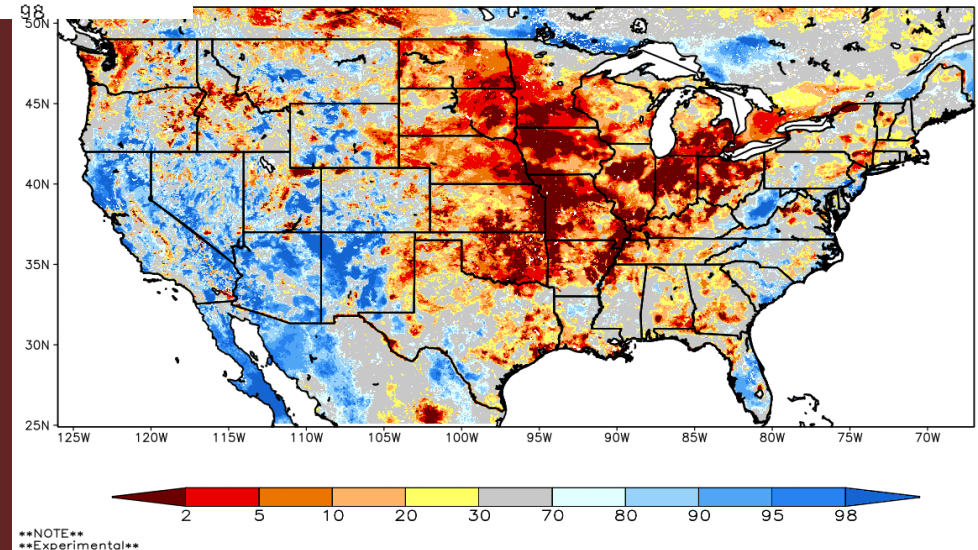


- Drying in Plains and pocket of central-east Corn Belt.
- Very dry soils at a dry soil time of year.
- NASA –SPoRT (below) overdoing dryness somewhat.

SPoRT-LIS 0–100 cm Soil Moisture percentile valid 04 Oct 2022

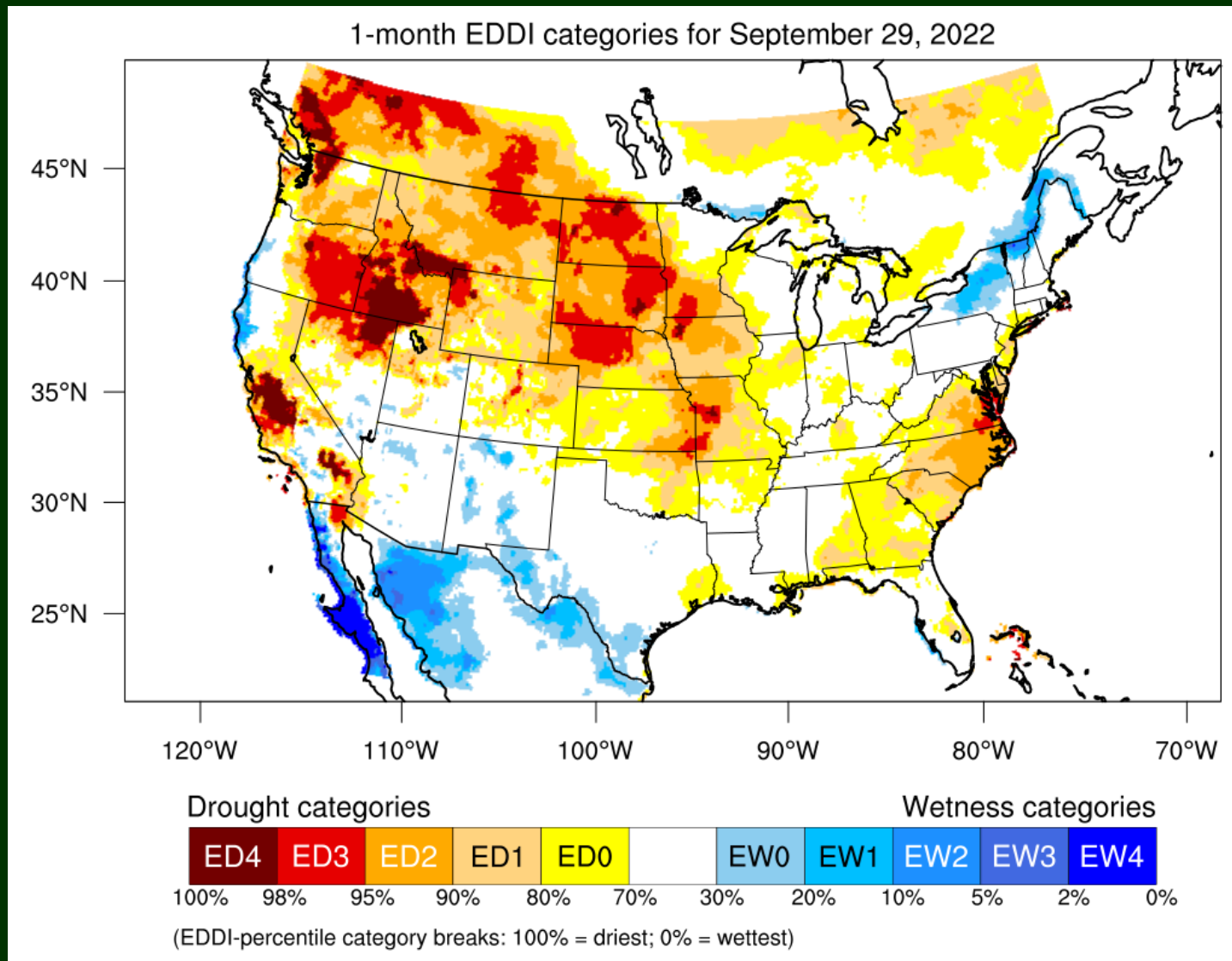
Both percentile maps

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



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

ET Estimates-EDDI

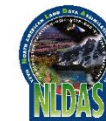
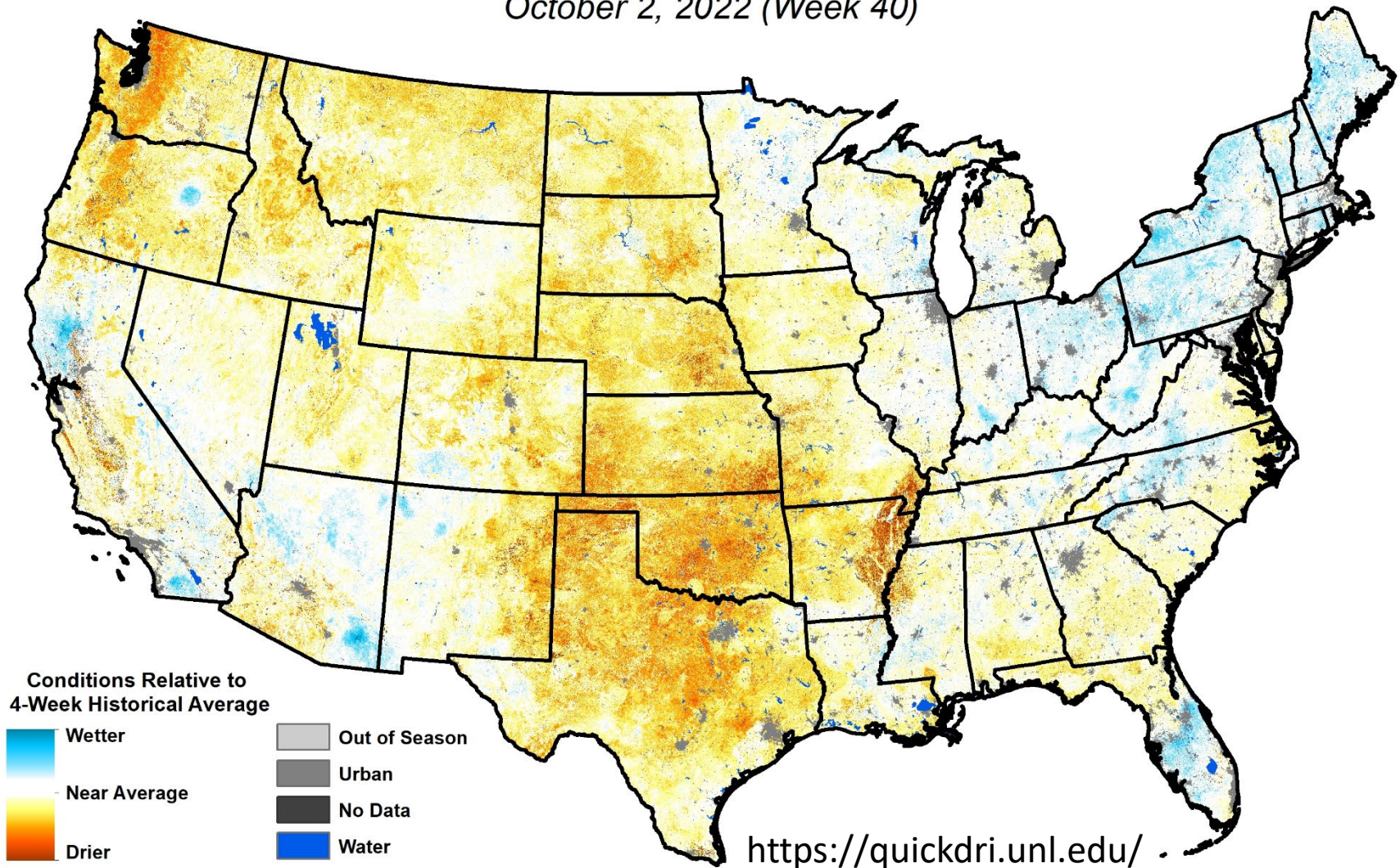


- Warmth in Plains adding to drying

https://psl.noaa.gov/eddi/#current_conditions

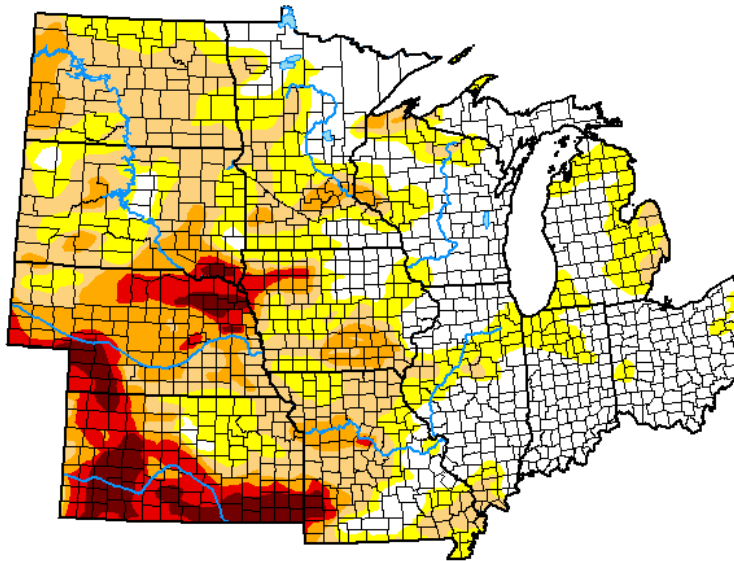
Quick Drought Response Index (QuickDRI)

October 2, 2022 (Week 40)



Drought in the Midwest

U.S. Drought Monitor North Central States



September 27, 2022

(Released Thursday, Sep. 29, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	32.06	67.94	43.99	21.51	9.92	4.04
Last Week 09-20-2022	37.27	62.73	37.69	19.65	9.61	3.27
3 Months Ago 06-28-2022	54.74	45.26	19.10	8.72	2.59	0.11
Start of Calendar Year 01-04-2022	44.51	55.49	27.55	7.10	1.31	0.00
Start of Water Year 09-28-2021	39.88	60.12	38.68	24.50	9.27	0.04
One Year Ago 09-28-2021	39.88	60.12	38.68	24.50	9.27	0.04

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. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Richard Heim
NCEI/NOAA



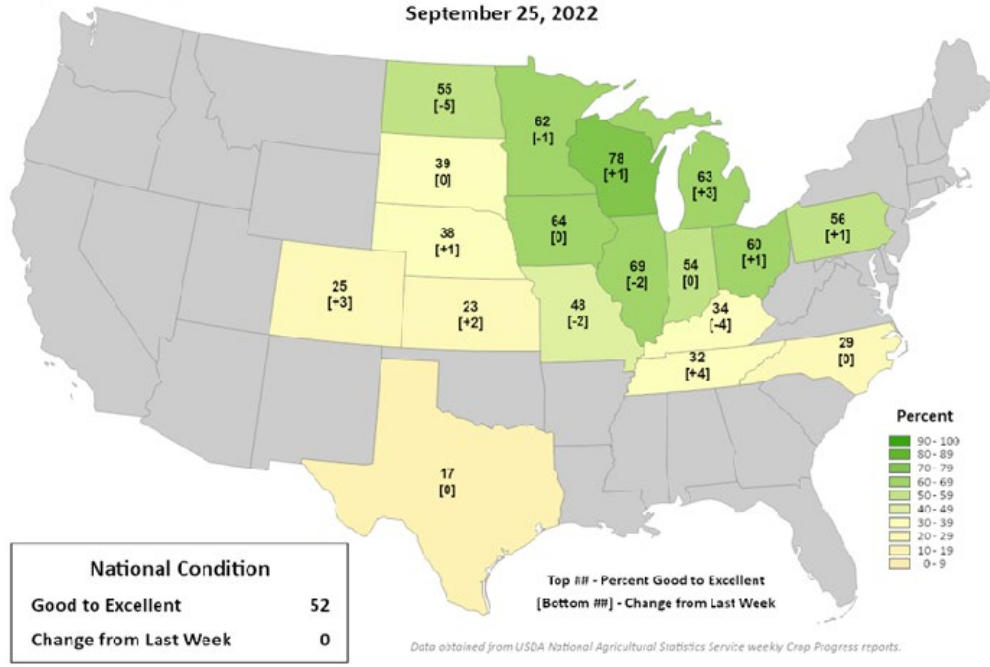
droughtmonitor.unl.edu

- Some level of coverage almost everywhere west.
- D3-D4 over Nebraska-Kansas and part of IA.
- Isolated pockets east.

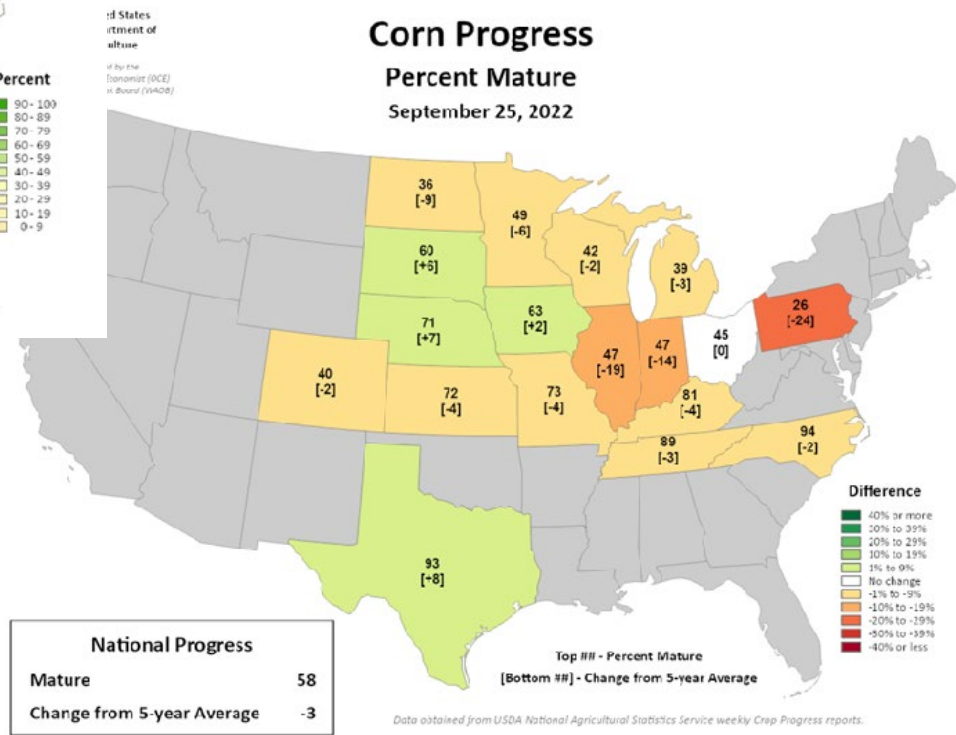
<http://droughtmonitor.unl.edu/>

USDA United States
Department of
Agriculture

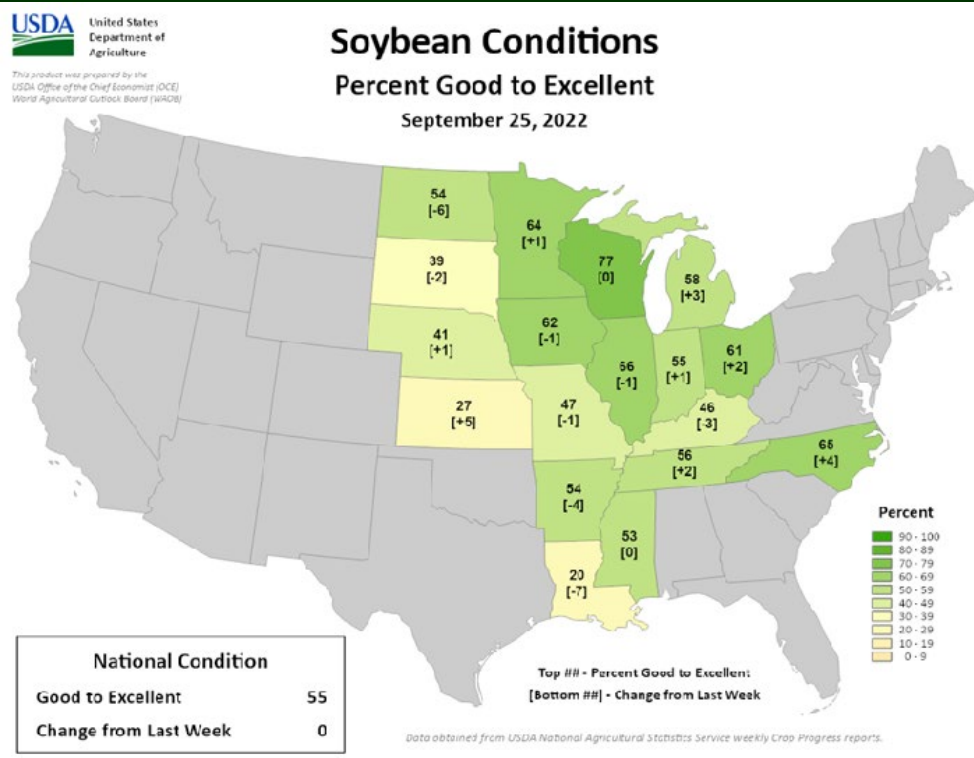
*This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)*



- Good to Excellent – National 52% ($\pm 0\%$)
- Mature – National 58% (-3%).
- Last week maps

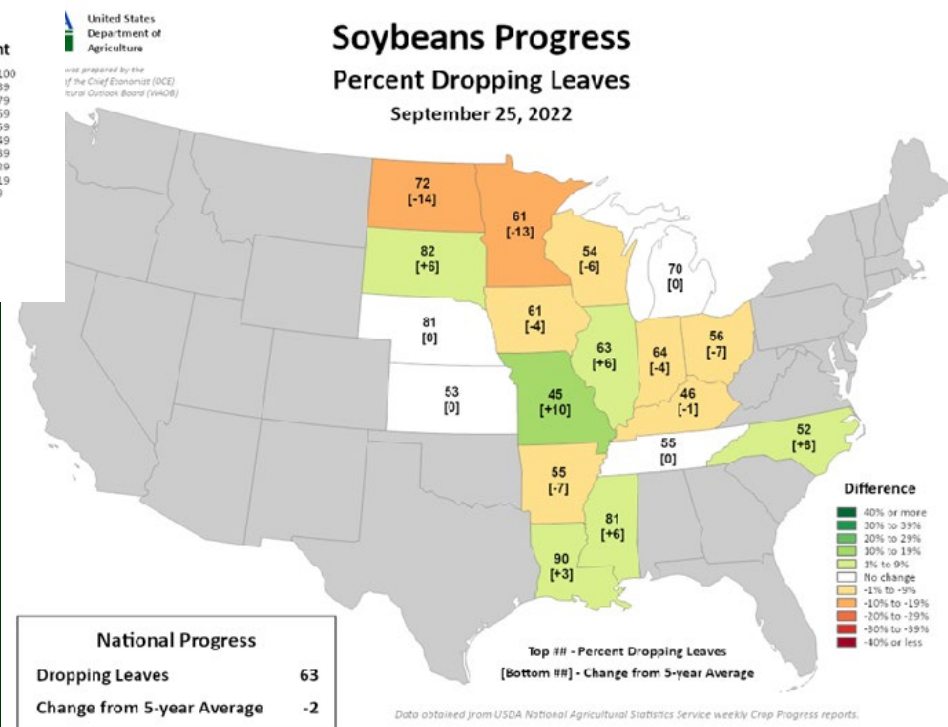


Bean Conditions (NASS)



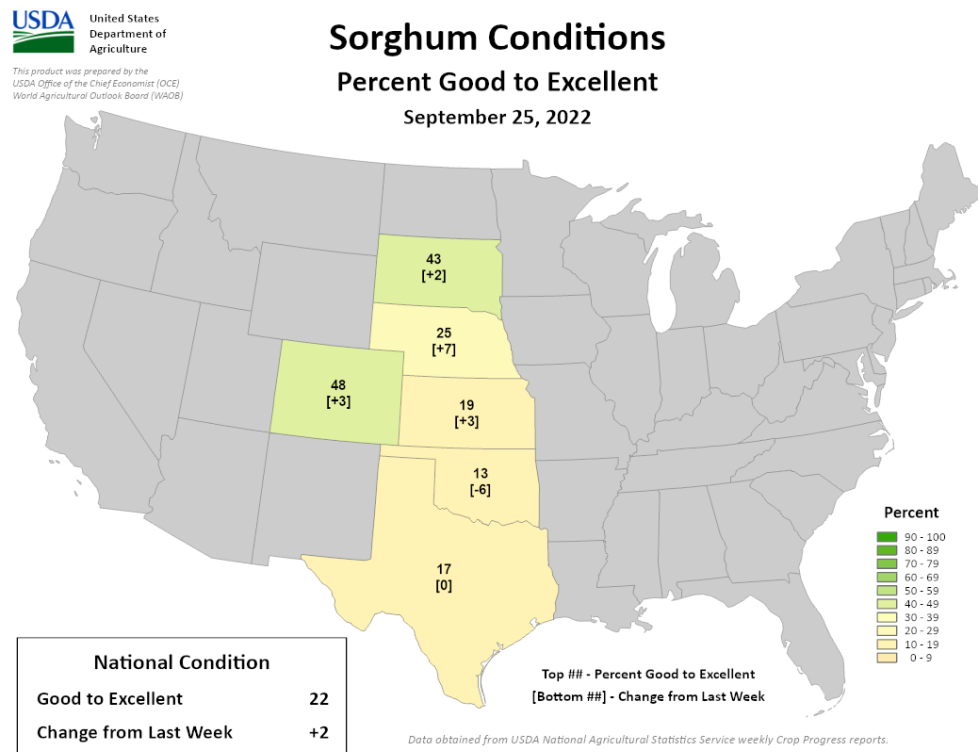
Soybean progress (NASS):

- Good to Excellent - National 55% ($\pm 0\%$)
- Dropping Leaves - National 63% (-2%)
- Last week maps



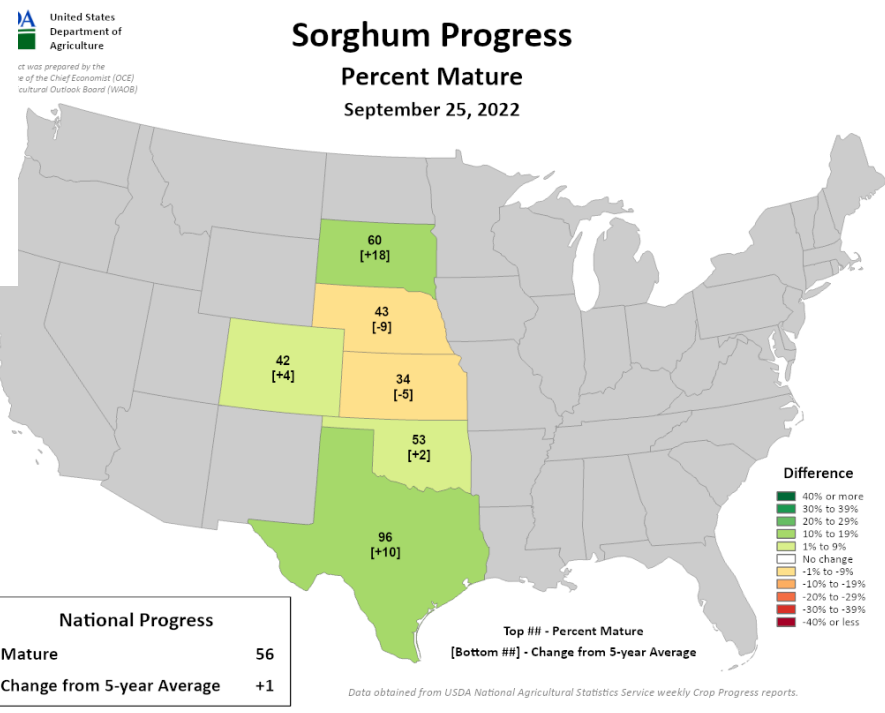
Soybean Condition worsening
Delayed for most states, ahead in SE region

Sorghum Conditions (NASS)

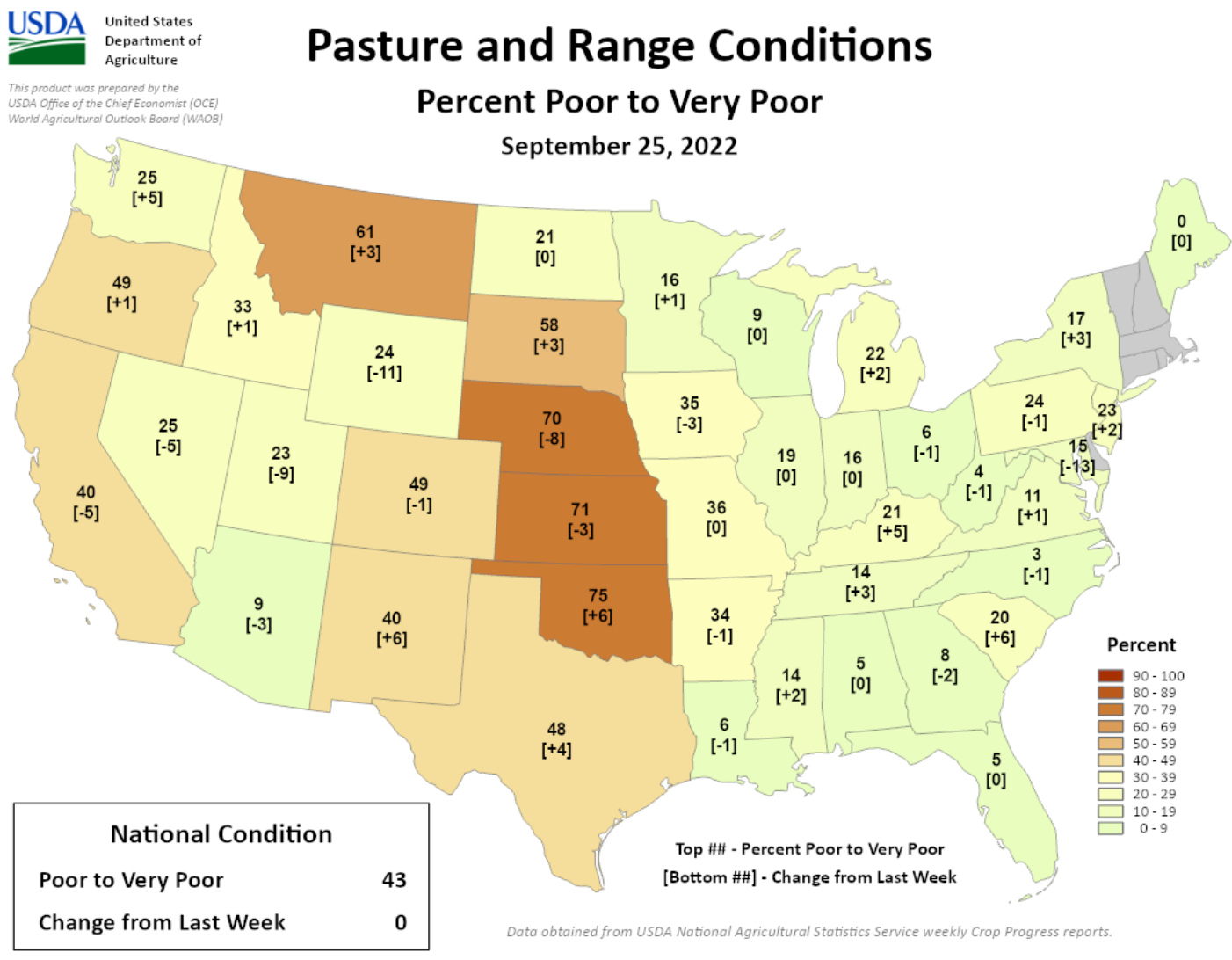


Sorghum (NASS):

- Good to Excellent – National 22% (+2%)
- Mature – National 56% (+1%)
- Harvested (not pictured) – National 27% (-3%)



Pasture/Range Conditions (NASS)



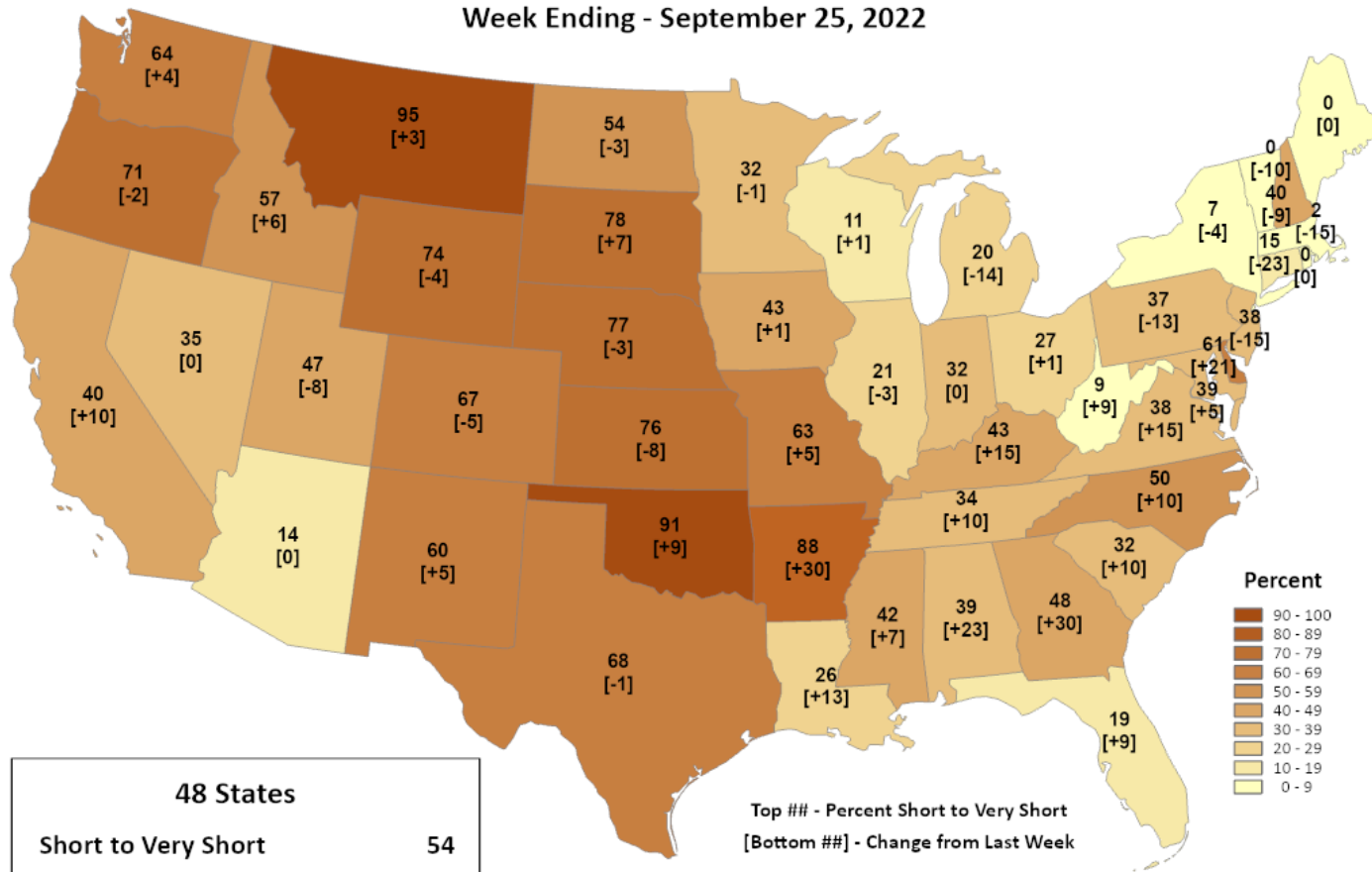
Soil Moisture (NASS)



United States
Department of
Agriculture

*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 - September 25, 2022



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



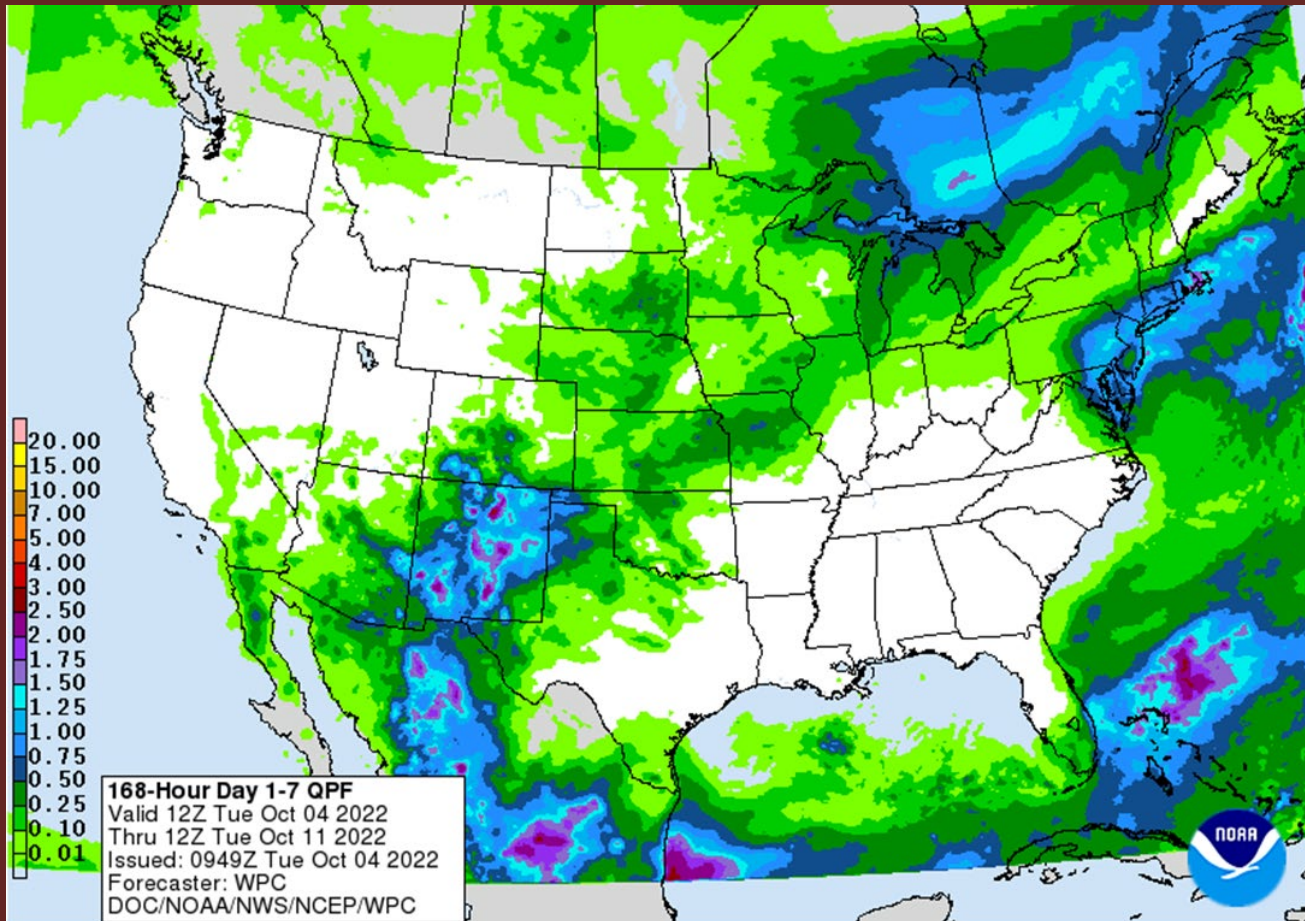
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U.S. DEPARTMENT OF AGRICULTURE

Pasture-Range P-VP (NASS): National 54% (+2%)

Assorted AG Issues

- Crop progress still a little slow despite some heat.
- Drying out continuing.
- Good for quicker drying but also leaving some fire issues
- Very dry soils
- Freeze has affected parts of region – think damaged some immature crops.
- Disease/insect issues?

1-7 Day Precip

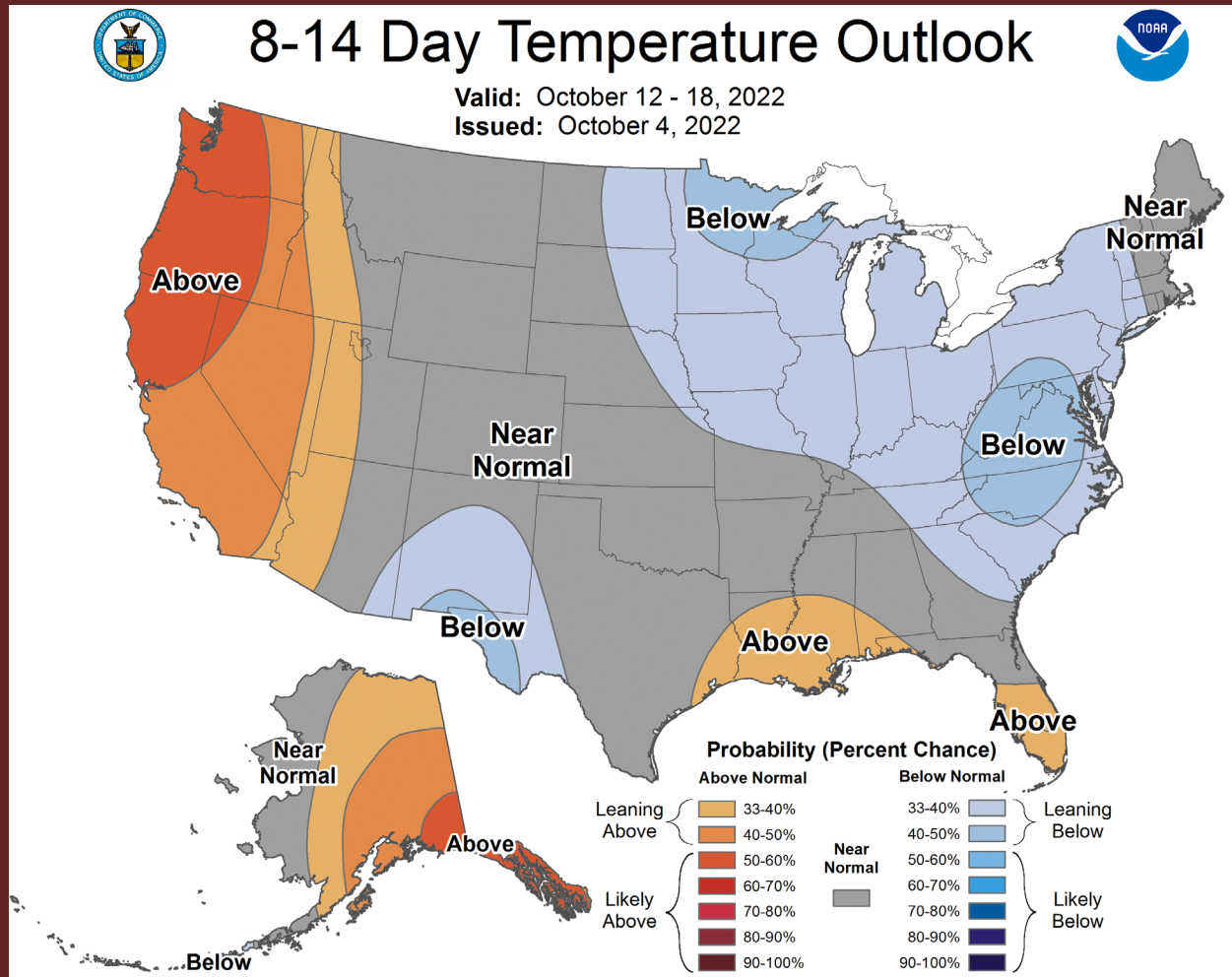


Next 7 days

- Some chance for precipitation – amounts fairly light.
- Dry Ohio Valley and Nrn Plains.

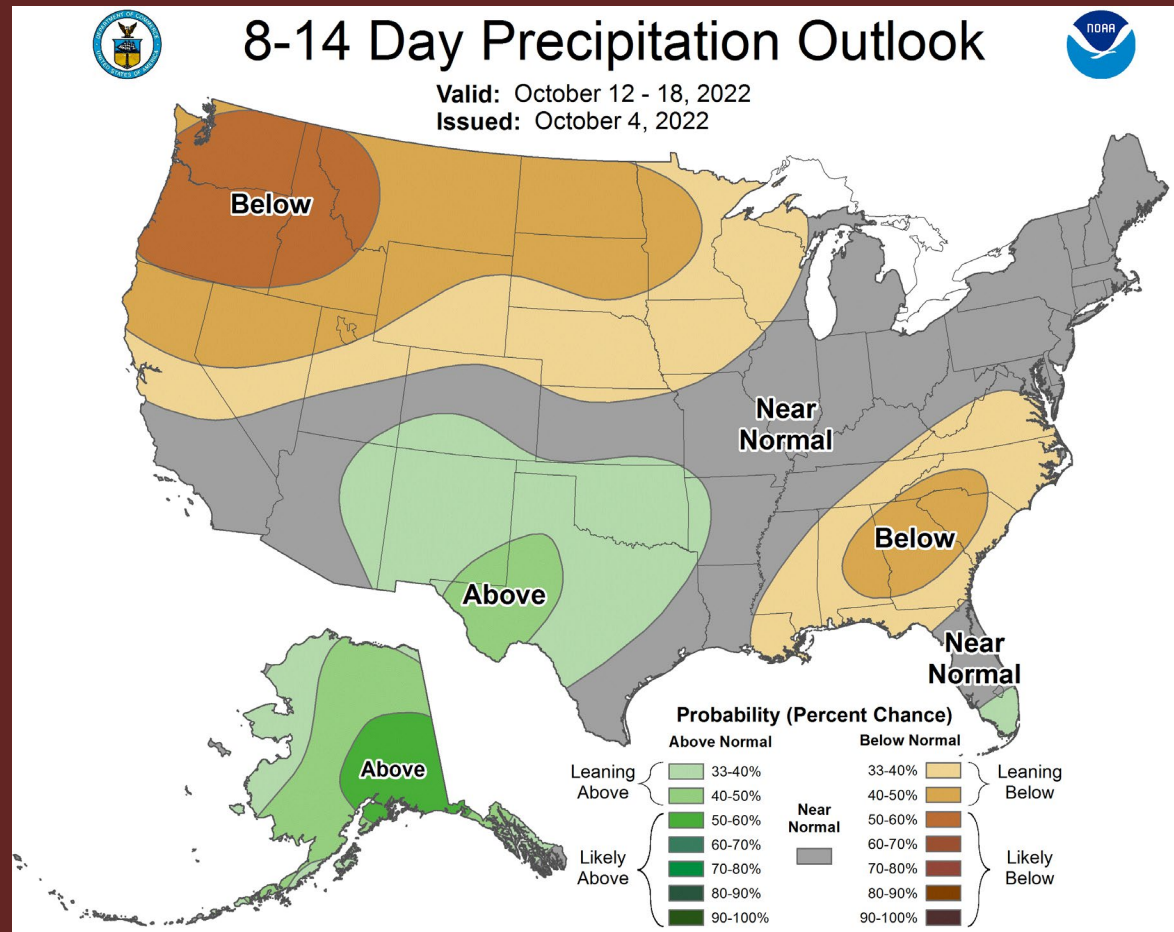
Temperature Outlook

- Overall warmer outlook giving way to slight chance for cooler - mostly east.
- Unlikely to be a major issue.

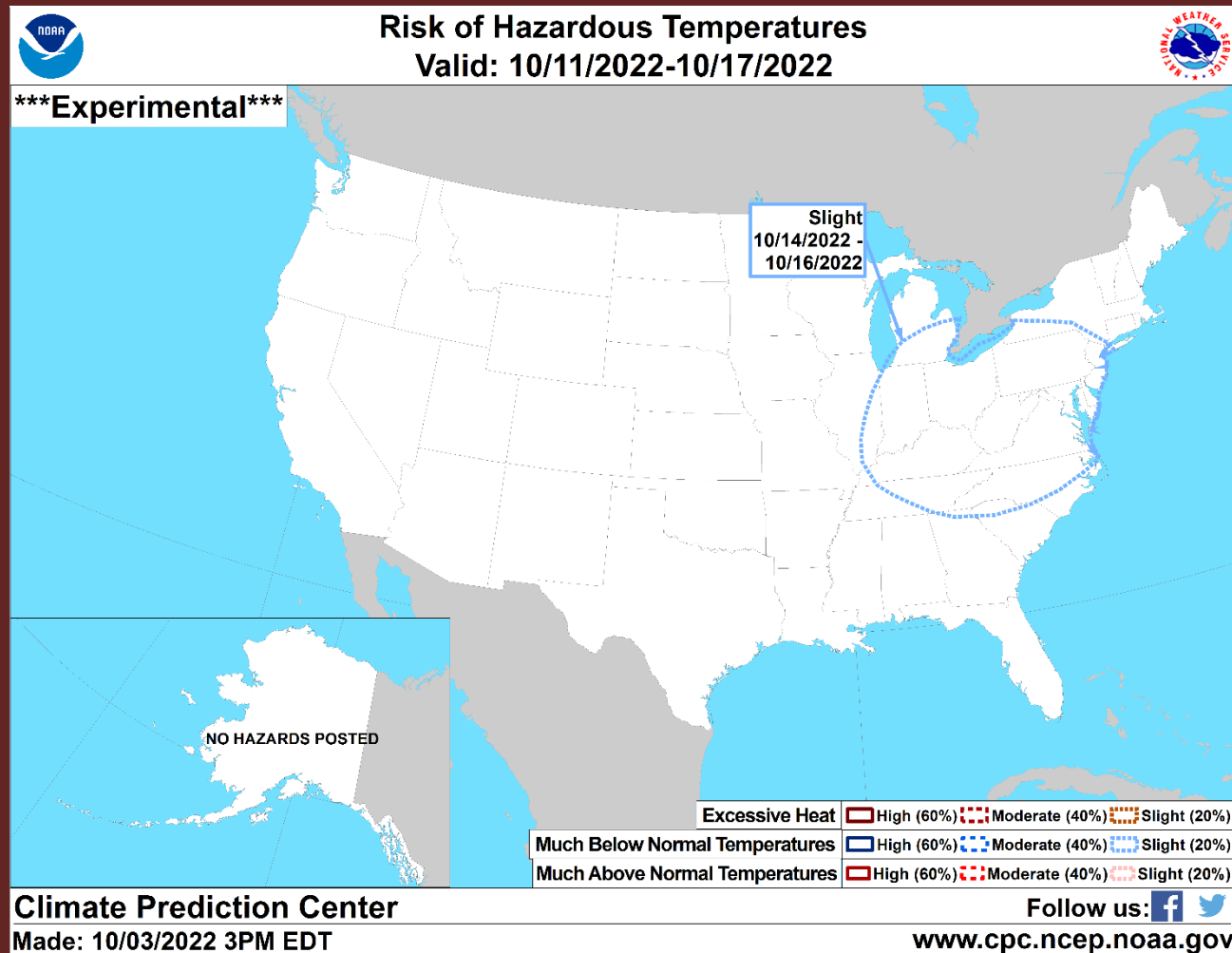


Precipitation Outlook

- Still more likely drier nrn plains
- Near-normal chances east.
- Nothing above except far south.



Other Risks

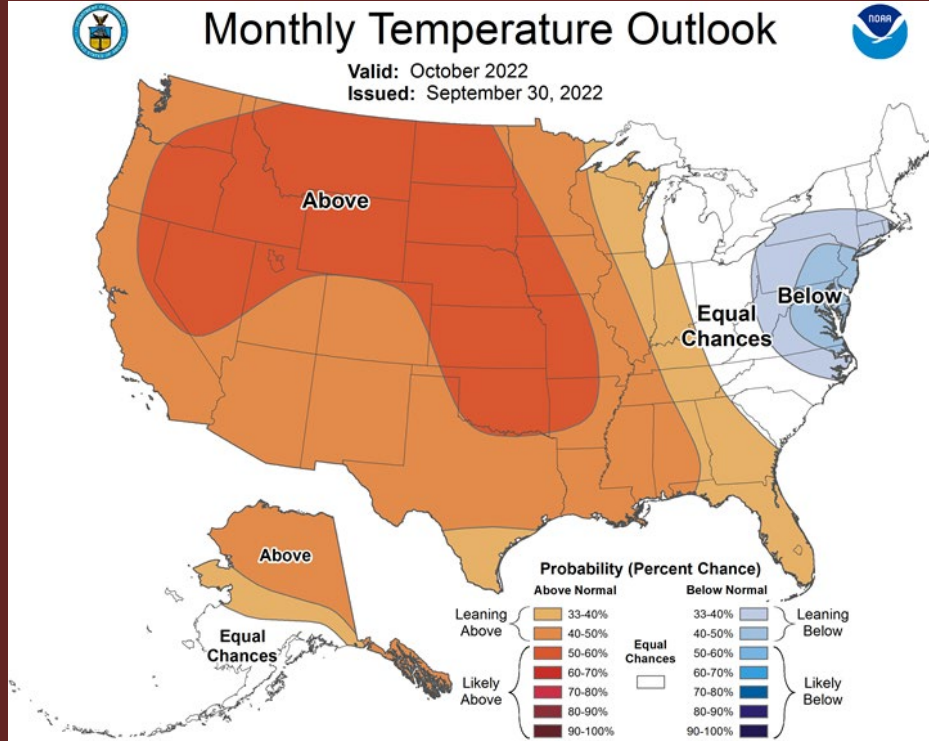


- Slight chance extreme cold east week 2 October.

1-Month Outlook

Monthly Temperature Outlook

Valid: October 2022
Issued: September 30, 2022

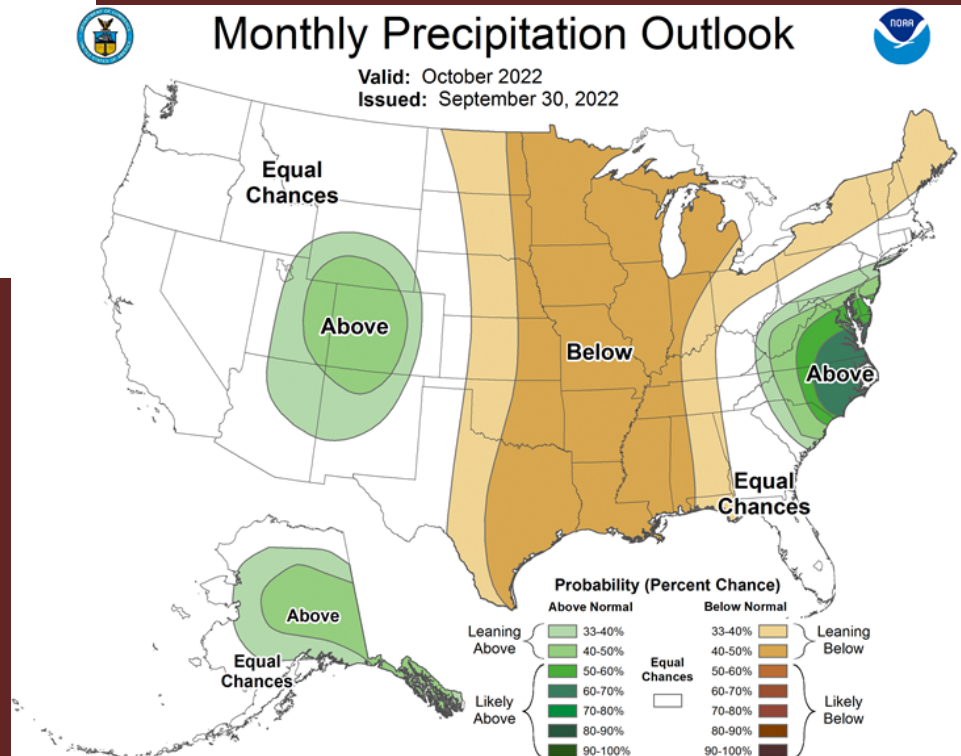


October Monthly Outlook

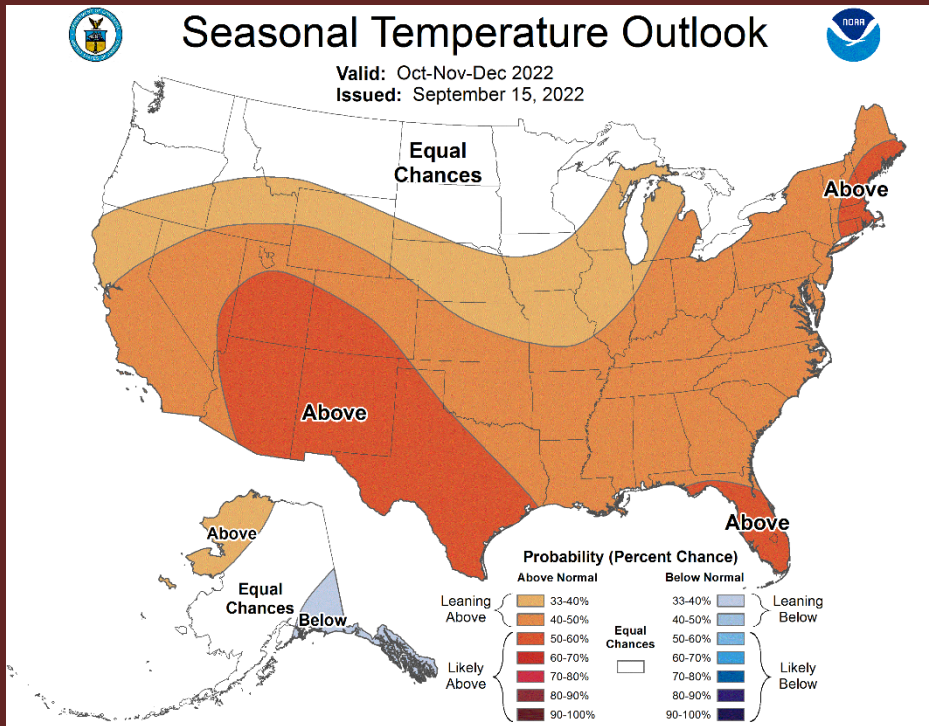
- Continued above average temperatures, increasingly in western region.
- Likely below average rainfall for high Plains and Midwest.

Monthly Precipitation Outlook

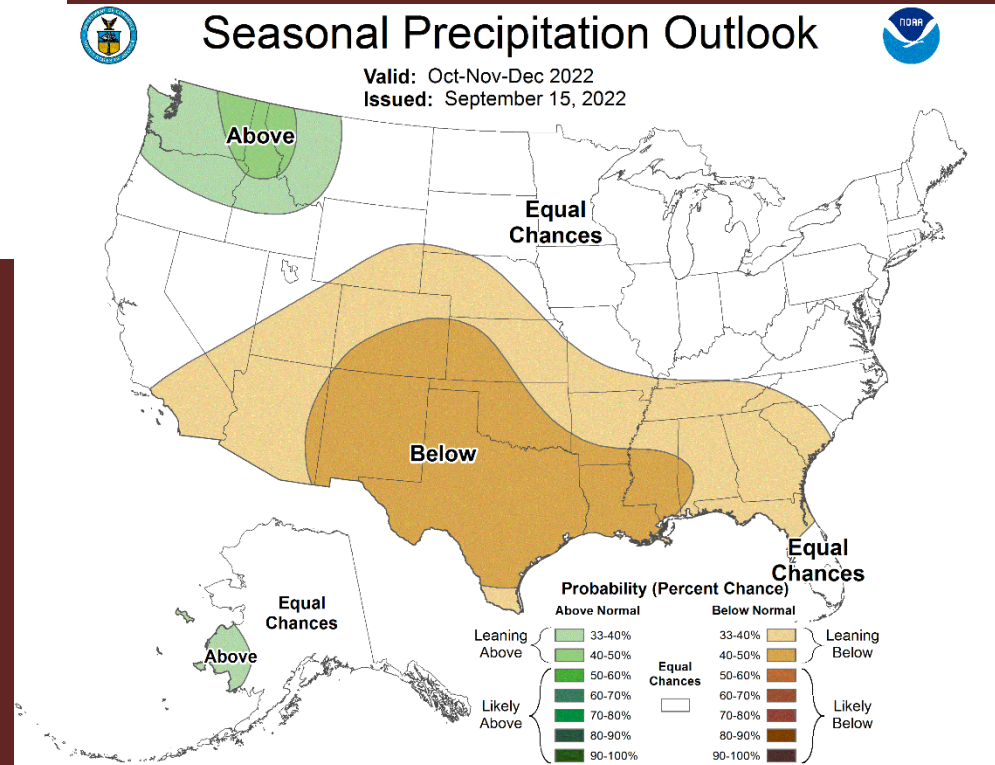
Valid: October 2022
Issued: September 30, 2022



October-December Outlook



- Still La Niña pattern – also soil moisture and computer model influence
- Leaning towards warmer most of region, more likely in southern states.
- Slight continued dryness for southern states, especially srn IL/ID

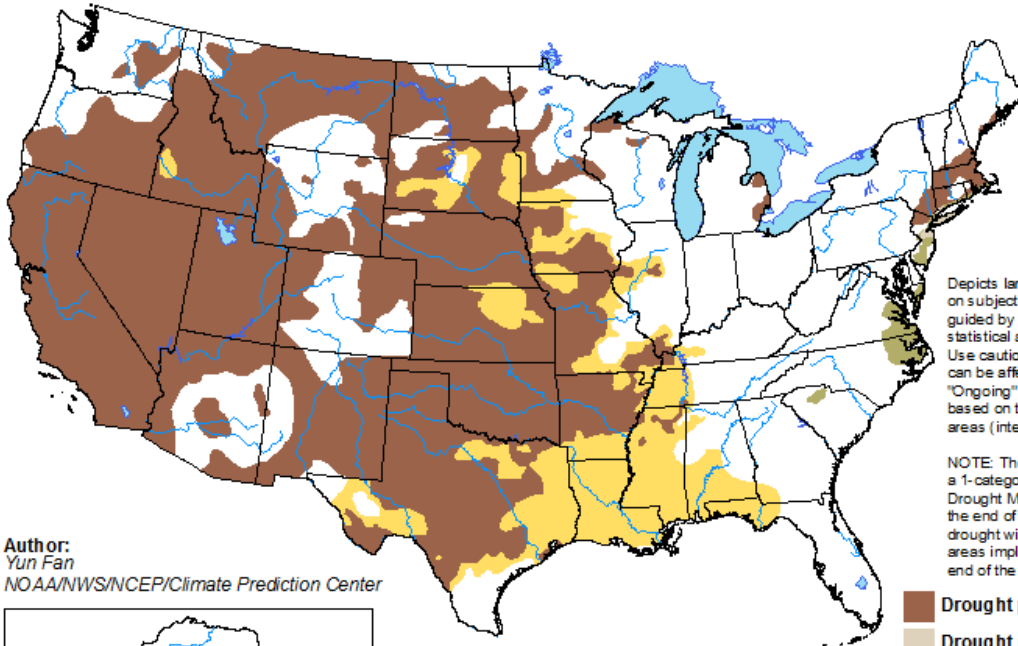


- Drought in Plains likely to remain and spread
- Low chances of early freeze for Fall harvest

Drought in the Midwest/Plains

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

Valid for October 2022
Released September 30, 2022



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>

- October 2022 outlook
- Projected spread into Dakotas and further south in NE and IA
- Drought persists for Plains, IA, MN

Summary

- Reaching harvest – dryness should allow harvest to progress easily
- Dryness becoming more an issue (drought/fire)
- No major changes in overall conditions.
- Some cooler air likely.

Next MAC-T Monthly Call

Next Call

November 2, 2022, 9-10am CT