

# MAC-T Monthly Call

## Midwest Agriculture and Climate Team

February 2, 2022

For more information:

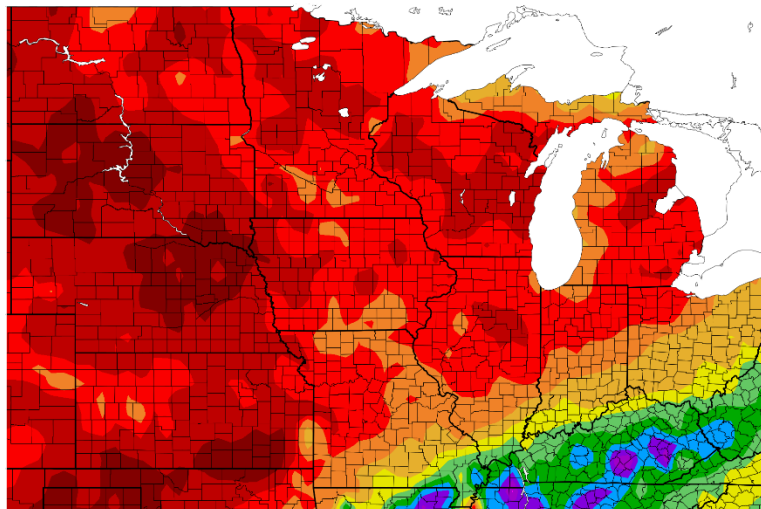
[Dennis.todey@usda.gov](mailto:Dennis.todey@usda.gov)



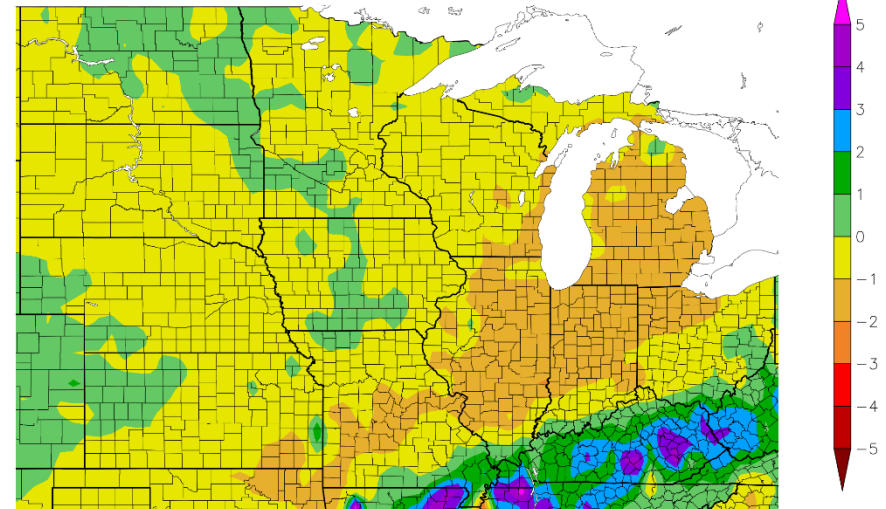
Midwest Climate Hub  
U.S. DEPARTMENT OF AGRICULTURE



Precipitation (in)  
1/1/2022 – 1/30/2022



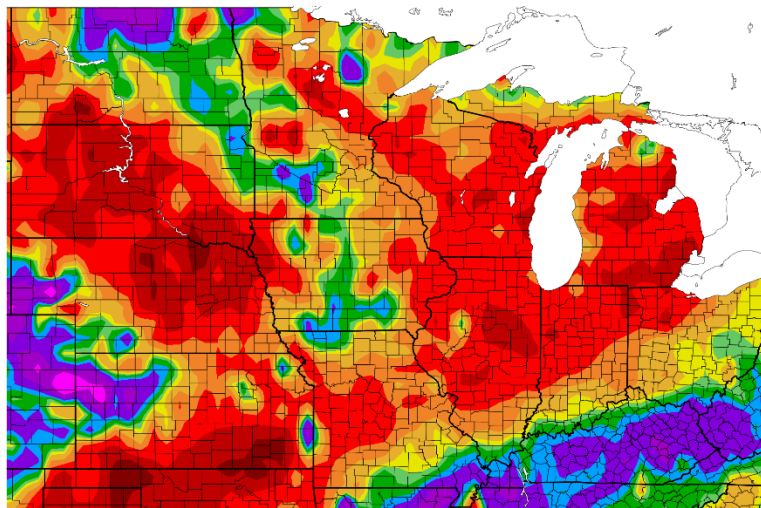
Departure from Normal Precipitation (in)  
1/1/2022 – 1/30/2022



Generated 1/31/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)  
1/1/2022 – 1/30/2022



Generated 1/31/2022 at HPRCC using provisional data.

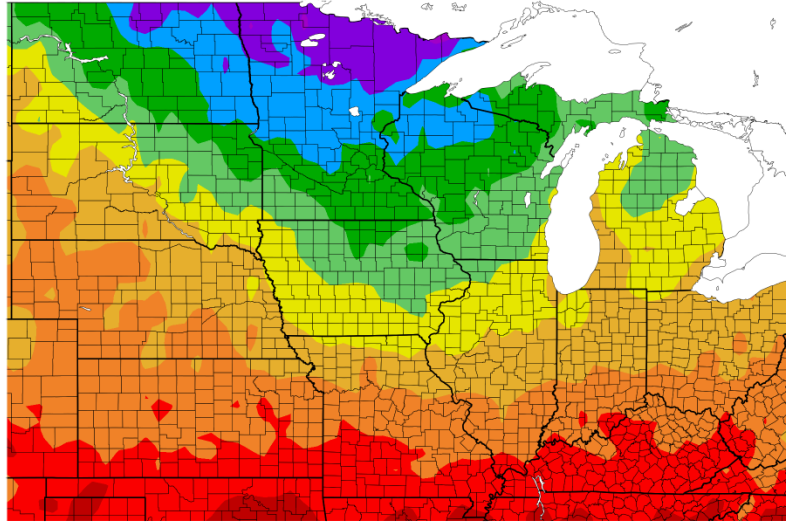
NOAA Regional Climate Centers

Generated 1/31/2022 at HPRCC using provisional data.

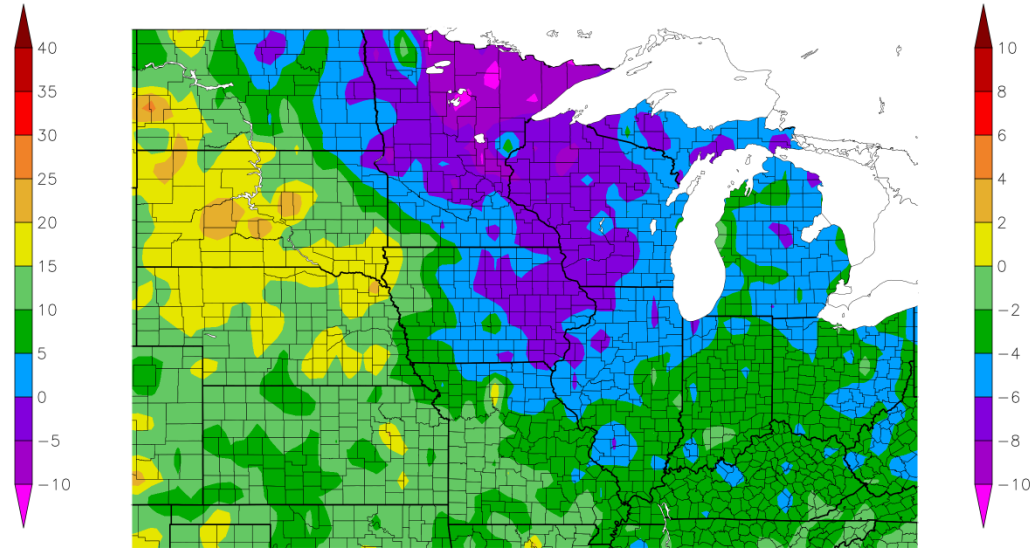
NOAA Regional Climate Centers

- Fairly limited precipitation for January
- Ohio Valley and other pockets above average.
- Most below average (large area less than 50%)

Temperature (F)  
1/1/2022 – 1/30/2022



Departure from Normal Temperature (F)  
1/1/2022 – 1/30/2022



Generated 1/31/2022 at HPRCC using provisional data.

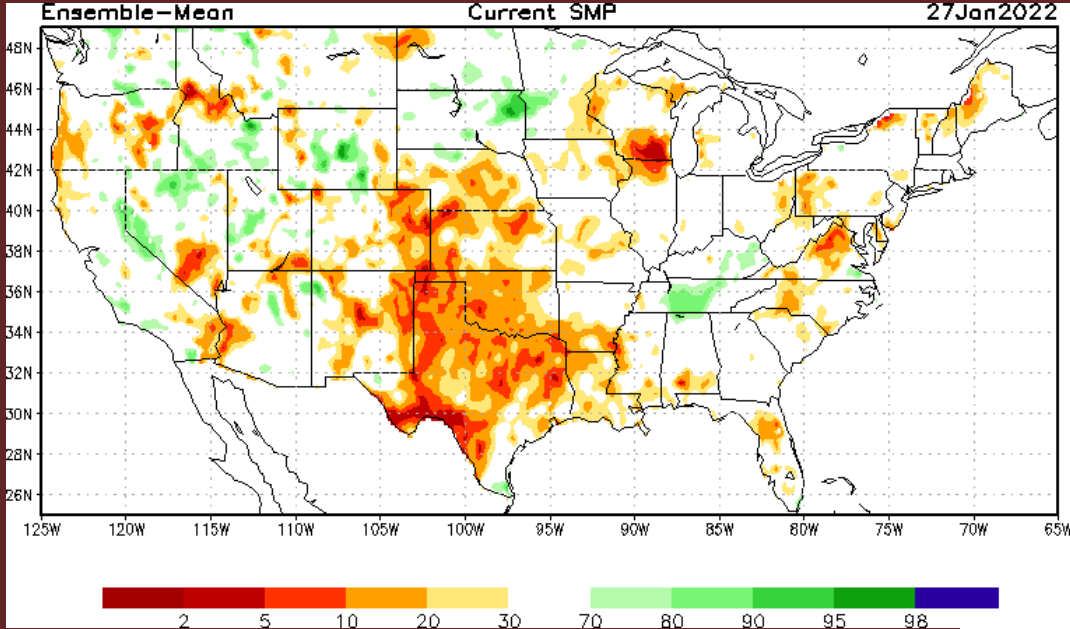
NOAA Regional Climate Centers Generated 1/31/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

- January flipped from December to be much cooler than average.
- Snow covered area north central coldest (up to 10 F below average)
- Plains (no snow) near to above average.

# Soil Moisture

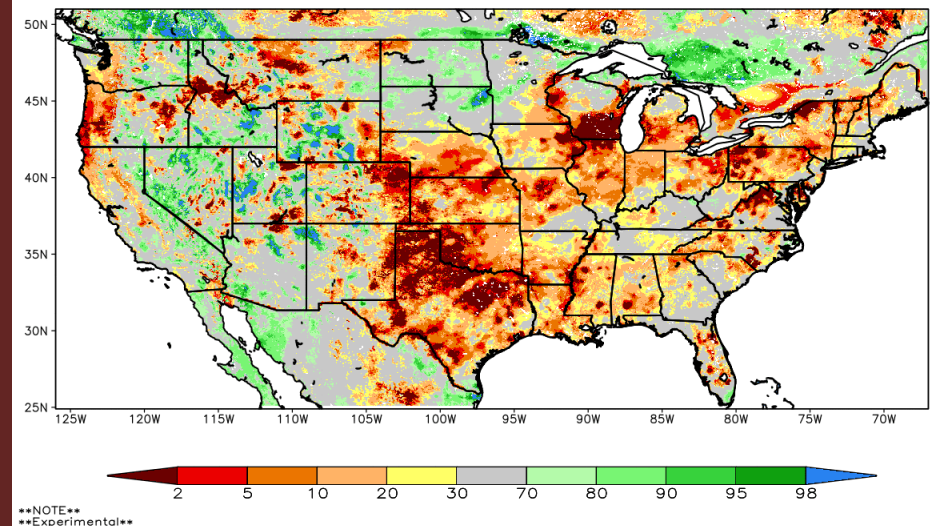
[https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp\\_new.shtml#](https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp_new.shtml#)



- Plains (central/south) soils continue to dry with limited precip and warmer temperatures.
- Eastern Corn Belt some drying though NASA model may be drying a bit too much.

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

SPoRT-LIS 0-100 cm Soil Moisture percentile valid 31 Jan 2022

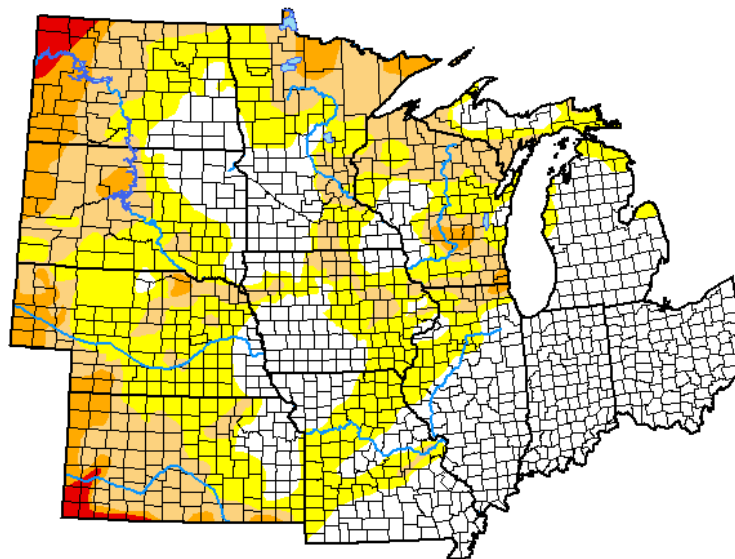


[https://weather.msfc.nasa.gov/sport/case\\_studies/lis\\_CONUS.html](https://weather.msfc.nasa.gov/sport/case_studies/lis_CONUS.html)



# Drought in the Midwest

## U.S. Drought Monitor North Central States



January 25, 2022

(Released Thursday, Jan. 27, 2022)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	40.98	59.02	29.50	8.12	1.32	0.00
<b>Last Week</b> 01-18-2022	43.38	56.62	29.13	7.65	1.25	0.00
<b>3 Months Ago</b> 10-26-2021	46.25	53.75	31.29	14.74	1.87	0.00
<b>Start of Calendar Year</b> 01-04-2022	44.51	55.49	27.55	7.10	1.31	0.00
<b>Start of Water Year</b> 09-28-2021	39.88	60.12	38.68	24.50	9.27	0.04
<b>One Year Ago</b> 01-26-2021	37.56	62.44	39.02	14.62	3.99	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. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

### Author:

Brad Rippey  
U.S. Department of Agriculture



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

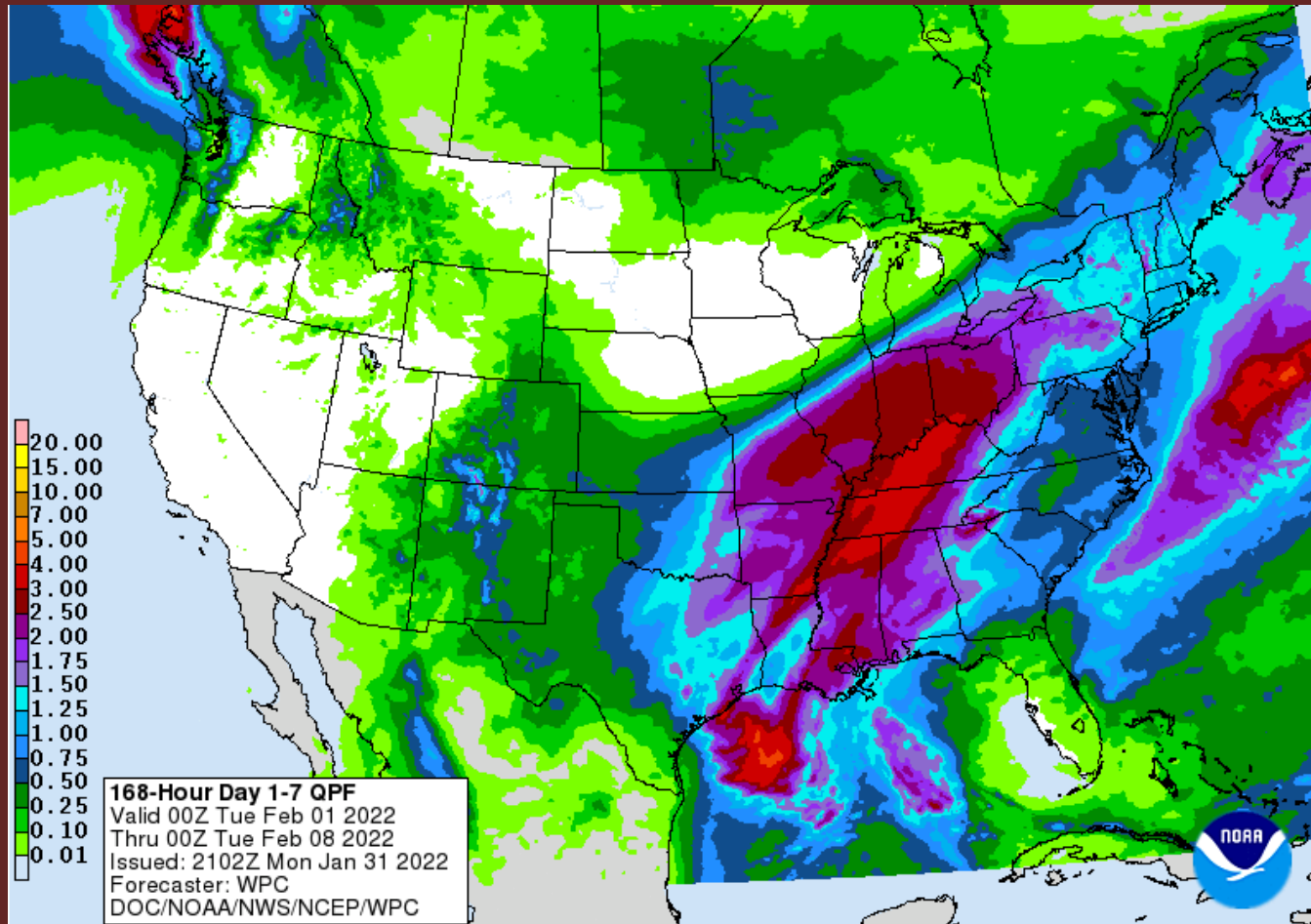
- Plains still have most USDM coverage and the worst overall conditions.
- Northern areas still some coverage also.
- Drying east now showing issues yet.
- USDM changes are fairly slow during the cold season.

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

# Assorted AG Issues

- Flip to colder conditions had mixed ag effects
- Cold and snow in Ohio eased mud issues for now and provided cover. But likely some wheat and alfalfa freeze damage
- Cold/warm cycling (and wet) in Illinois has damaged winter wheat. Frozen ground is limiting horseradish harvest (digging).
- Cold in Iowa damaged high tunnel greens that had grown more lush in December. Also leading to more heaters running and increased cost.
- Central plains winter wheat has been affected by ongoing drought. Have to wait for spring to know full effect.
- Non-Midwestern issue that could help Midwest. Recent cold likely damaged southeast US blueberries (Georgia).

# 1-7 Day Precip



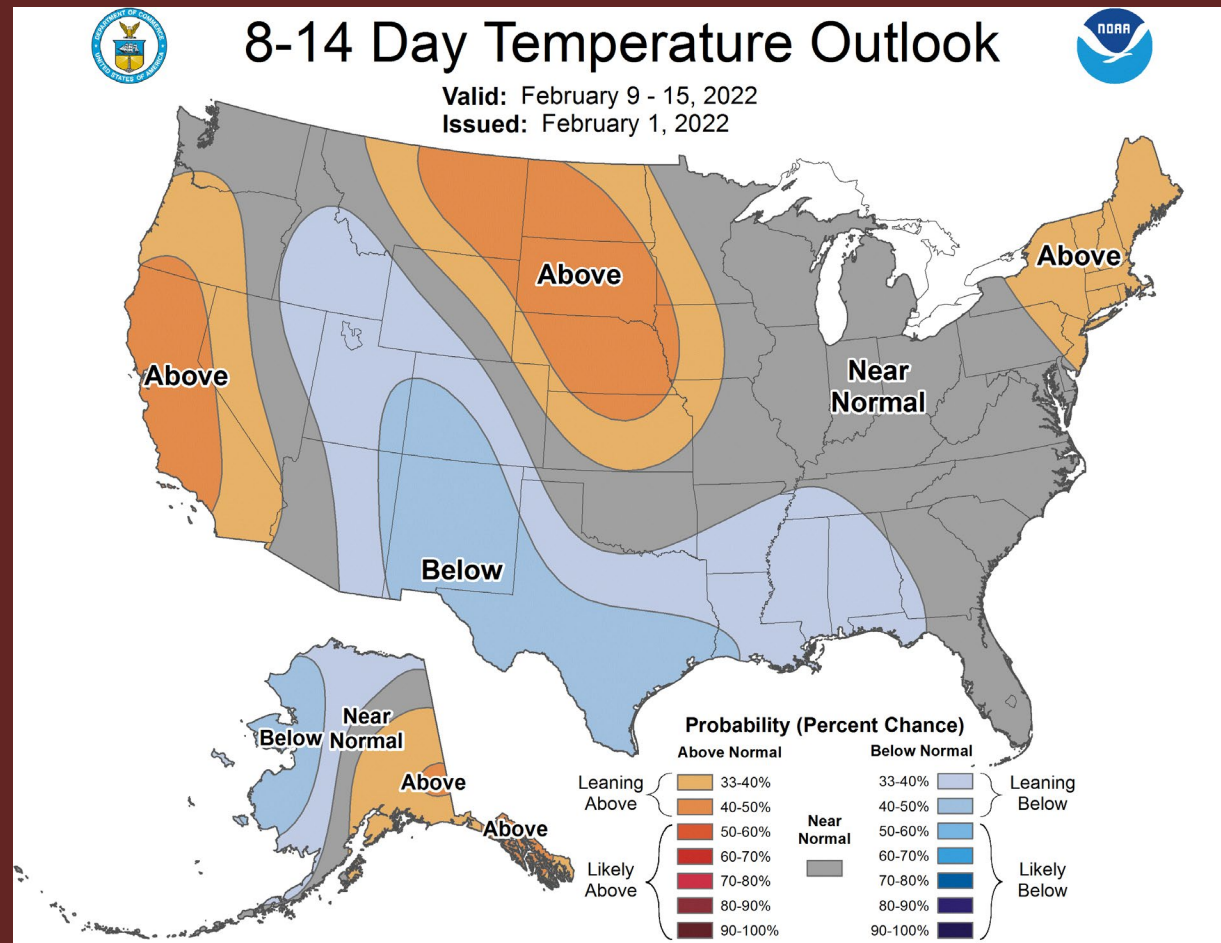
## Next 7 days

- Major storm ramping up through Plains and much of eastern Corn Belt with a mixture of precipitation (rain/snow/ice) with a band of very large snow accumulation.
- Likely increased soil wetness post-event.
- Mostly dry northern plains.
- Cold will follow later in the week.

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

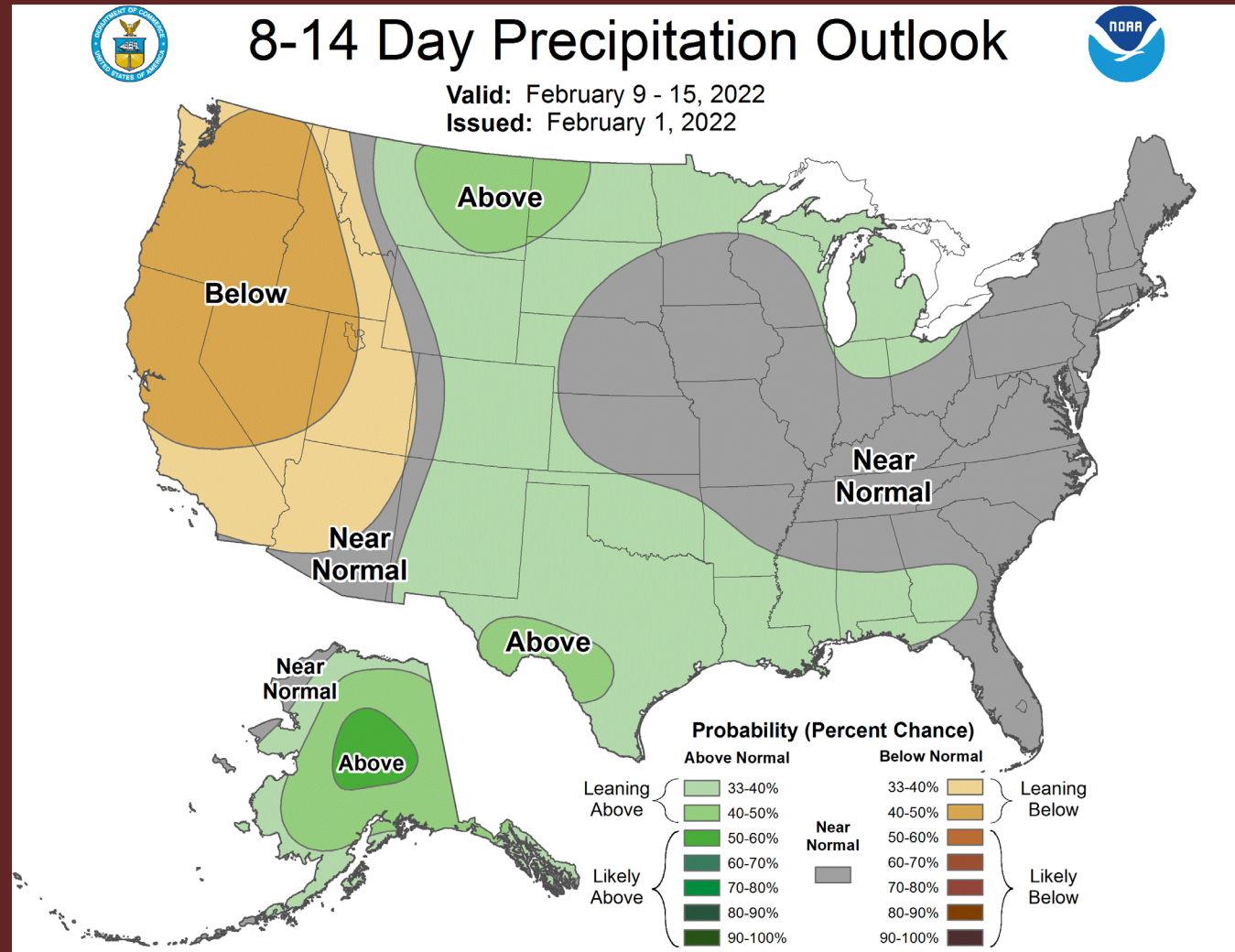
# Temperature Outlook

- Quick recovery from cold to warmer slightly more likely Northern Plains





# Precipitation Outlook

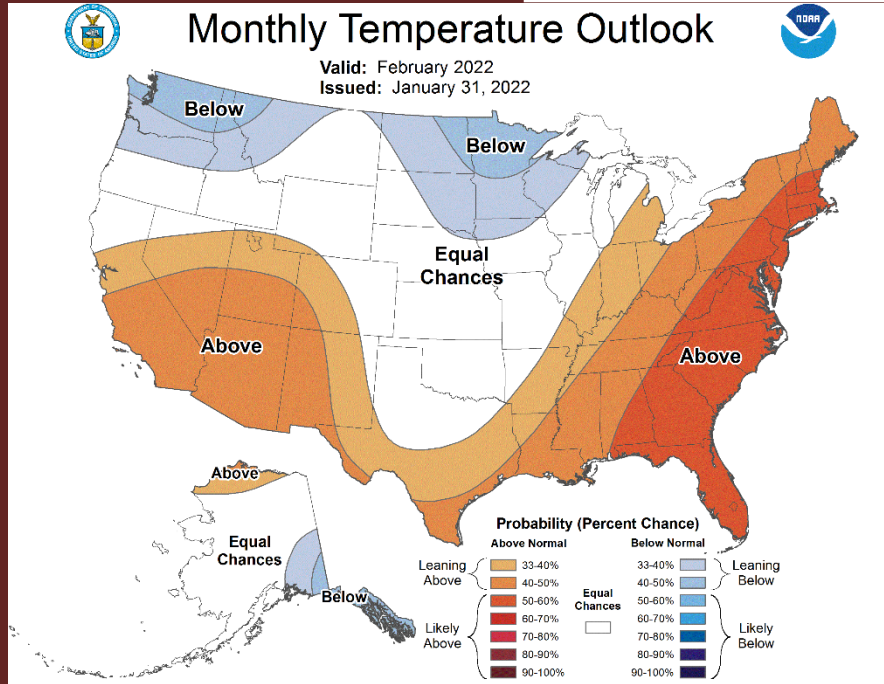


- Slightly increased precip chances northern Plains.
- Mostly near-normal elsewhere.

# 1-Month Outlook

## Monthly Temperature Outlook

Valid: February 2022  
Issued: January 31, 2022

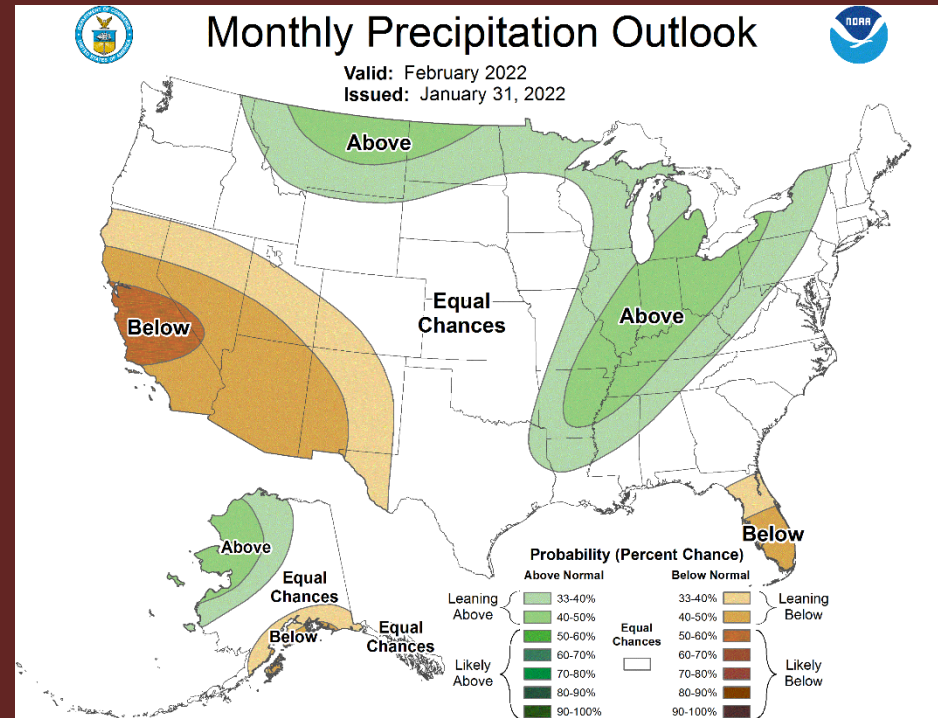


## February outlook

- Outlooks continue with La Niña look
- Better chance of wetter Northern Plains into Great Lakes/Ohio Valley
- Colder also possible north with slight chance warmer than average east.
- Likely more bouncing around in temperatures

## Monthly Precipitation Outlook

Valid: February 2022  
Issued: January 31, 2022

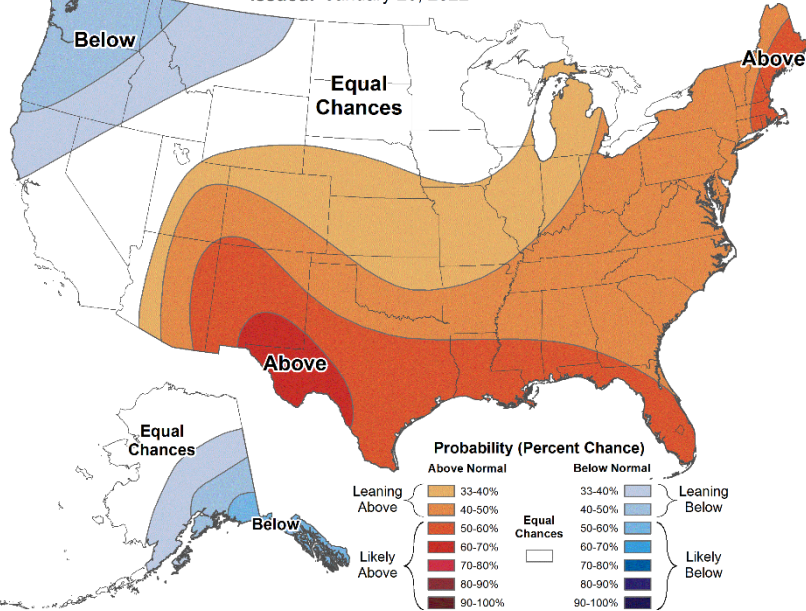


# February-April Outlook



## Seasonal Temperature Outlook

Valid: Feb-Mar-Apr 2022  
Issued: January 20, 2022

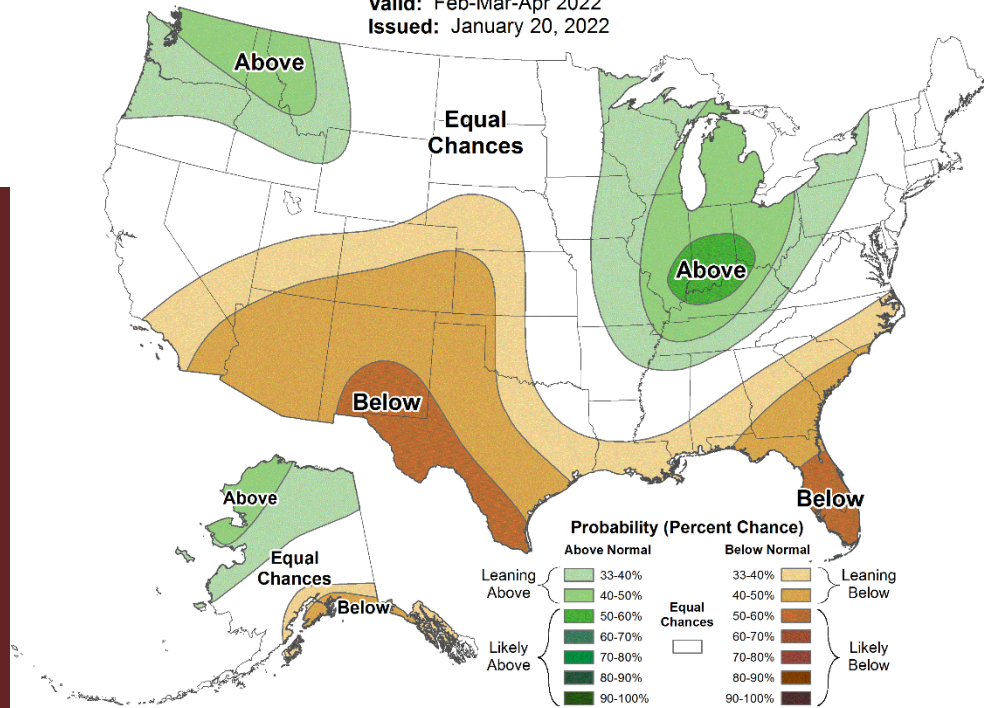


- Still La Niña pattern –relatively small changes
- Slight chance warmer south/east returns.
- Slight chance wetter Great Lakes/Ohio Valley and far NW.



## Seasonal Precipitation Outlook

Valid: Feb-Mar-Apr 2022  
Issued: January 20, 2022

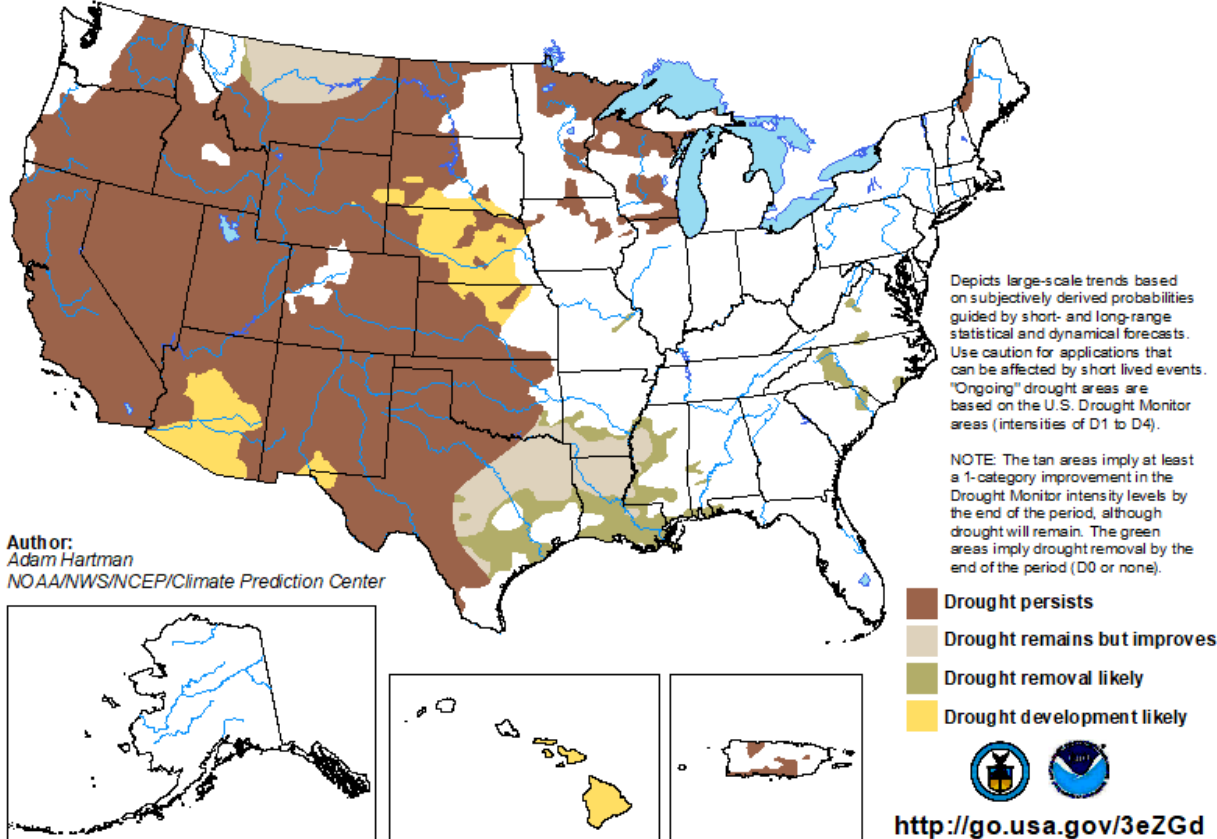


- Recent dryness may ease some concerns for wetness eastern Corn Belt.
- Increasing drought concerns Plains (central/south)

# Drought in the Midwest/Plains

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

Valid for February 2022  
Released January 31, 2022



- Monthly outlook for February 2022
- Drought continues with little change in the plains
- Could see expansion.
- Improvements less likely as wettest area outside drought regions.



# Summary

- Despite off-season, still impacts to various crops around the region.
- La Niña impacting late-winter/spring outlooks.
  - Could lead to excess wetness east – and possible delays in planting.
  - Drought areas unlikely to improve much and could see some worsening in Plains (central/south).
  - Northern Plains still unclear with no strong signals.



# Next MAC-T Monthly Call

Next Call

**March 2, 2022, 9-10am CT**