

# MAC-T Monthly Call

## Midwest Agriculture and Climate Team

6 March 2024

For more information:

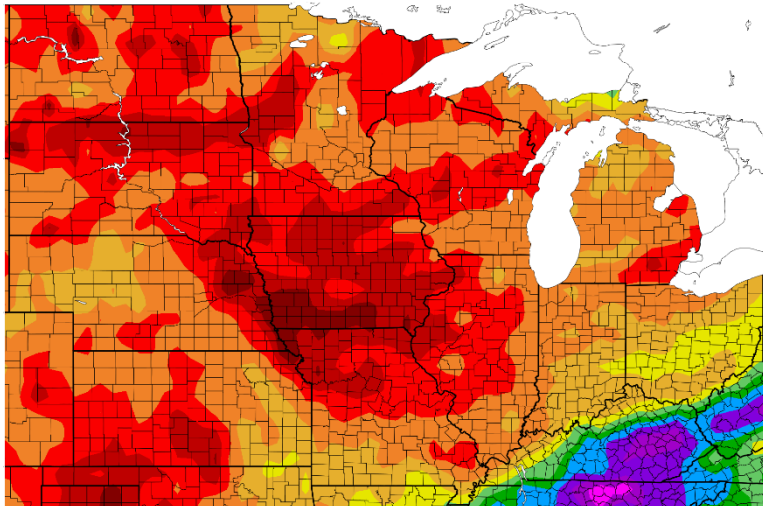
[Dennis.todey@usda.gov](mailto:Dennis.todey@usda.gov)



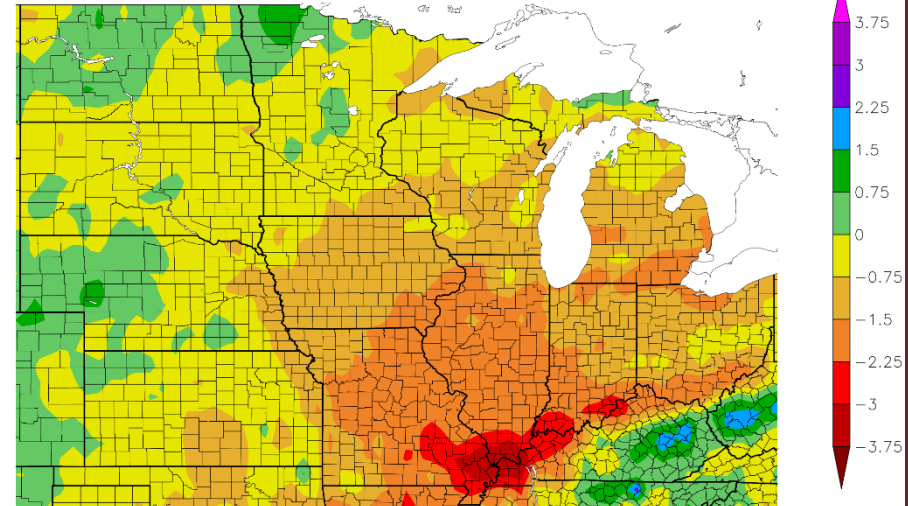
Midwest Climate Hub  
U.S. DEPARTMENT OF AGRICULTURE



Precipitation (in)  
2/4/2024 - 3/4/2024



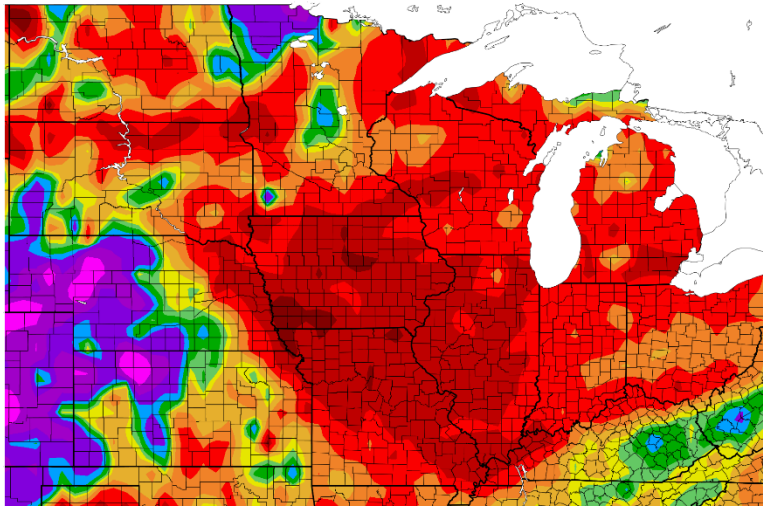
Departure from Normal Precipitation (in)  
2/4/2024 - 3/4/2024



Generated 3/5/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)  
1/31/2024 - 2/29/2024



Generated 3/1/2024 at HPRCC using provisional data.

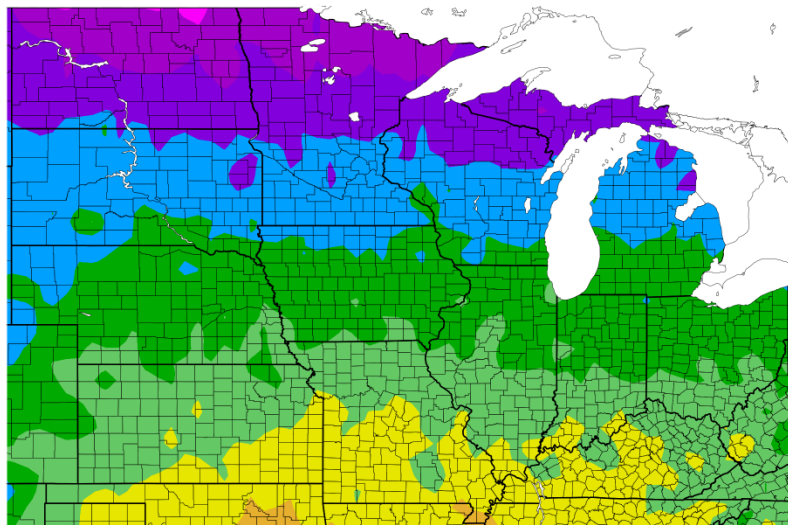
NOAA Regional Climate Centers

Generated 3/5/2024 at HPRCC using provisional data.

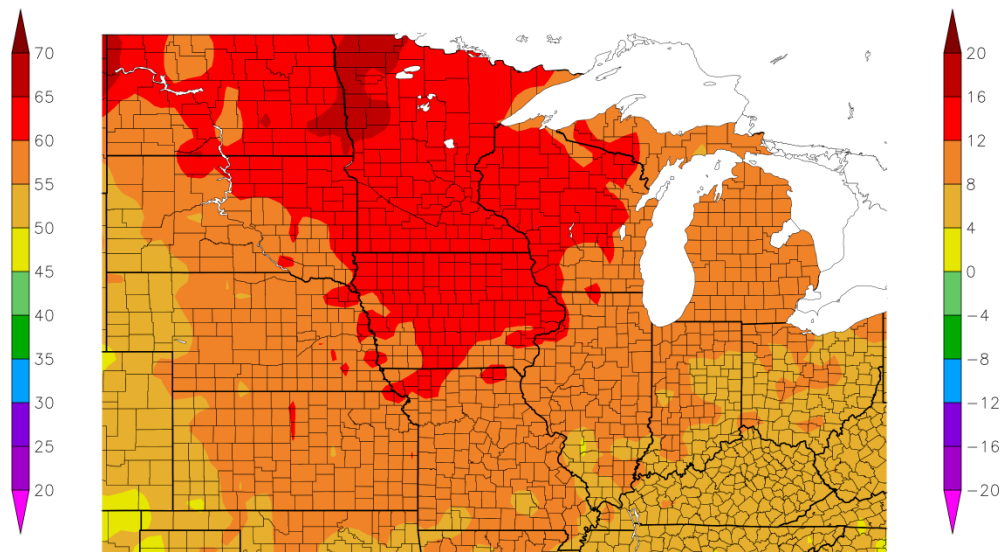
NOAA Regional Climate Centers

- Mostly dry again last 30 days except for south of Ohio River, Plains and nrn MN.
- Some very significant dryness
- Shift after wetness mid-winter

Temperature (F)  
2/4/2024 – 3/4/2024



Departure from Normal Temperature (F)  
1/31/2024 – 2/29/2024



Generated 3/5/2024 at HPRCC using provisional data.

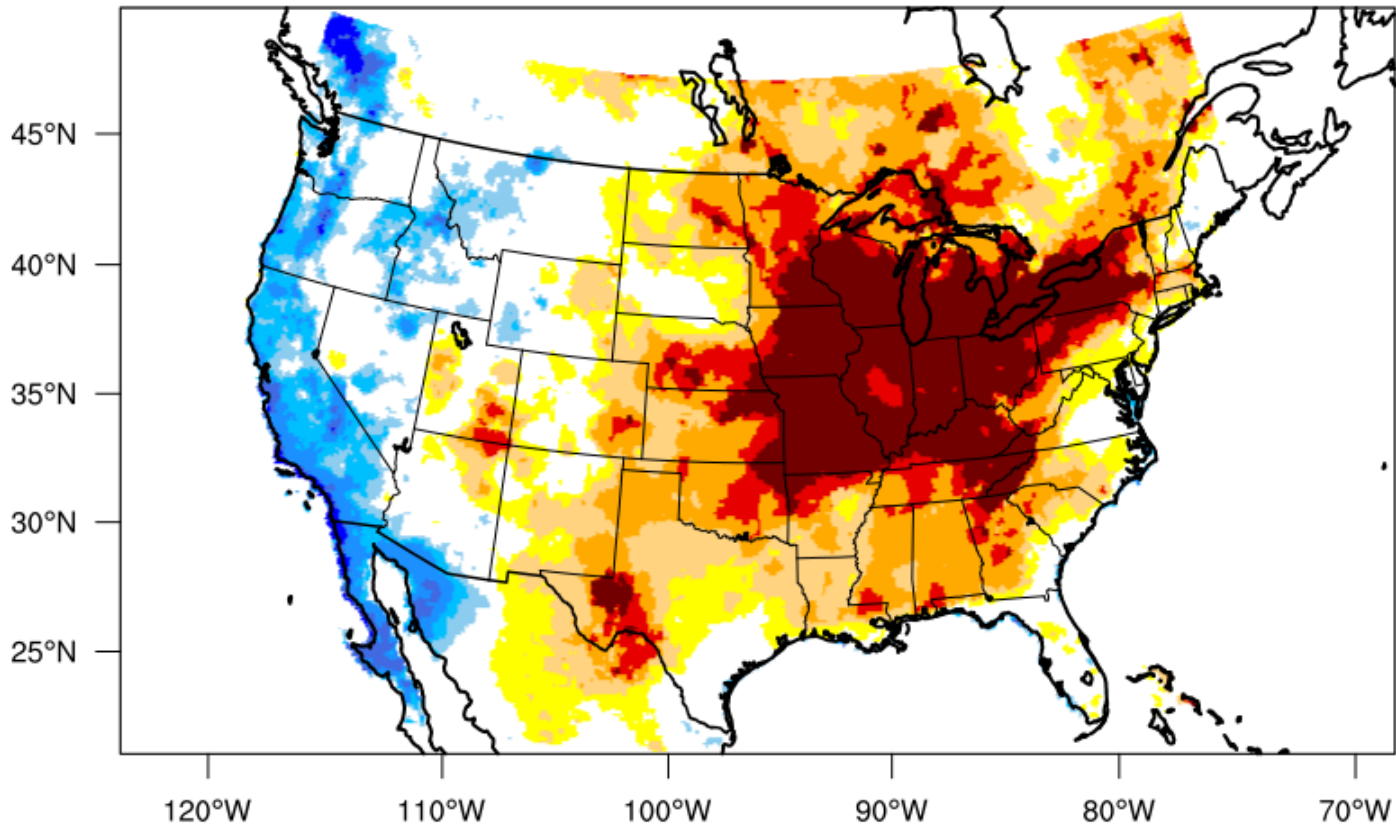
NOAA Regional Climate Center Generated 3/1/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Warmest in the southwest.
- Almost the entire region above average (1-8 F).
- North Central warmest deviation.

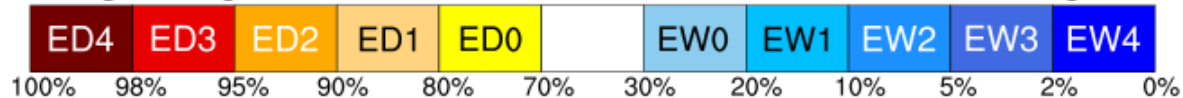
# ET - 1

1-month EDDI categories for March 1, 2024



Drought categories

Wetness categories



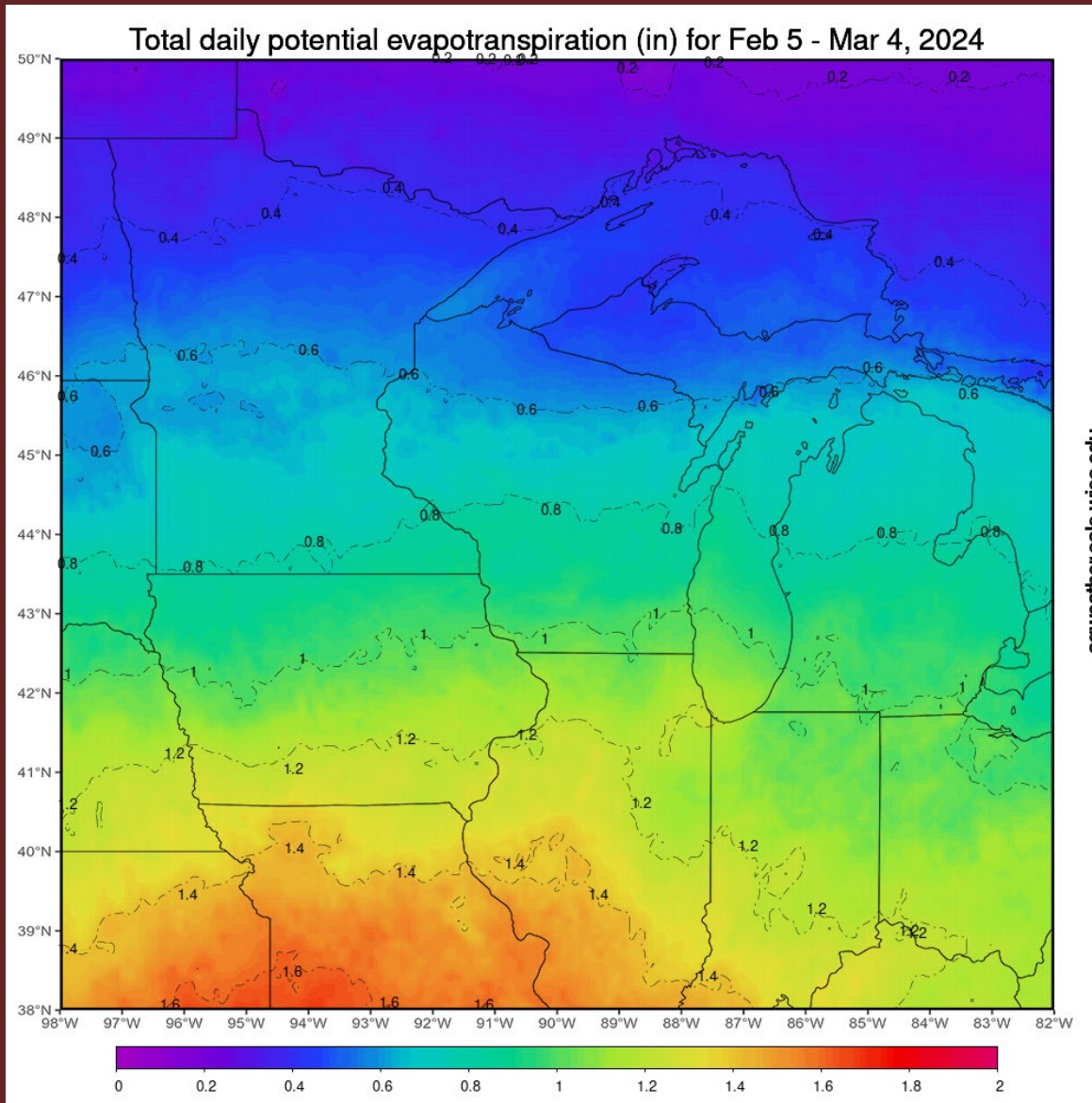
(EDDI-percentile category breaks: 100% = driest; 0% = wettest)

Generated by NOAA/ESRL/Physical Sciences Laboratory

- ET – EDDI product well into D4 category over the last month+
- Plains not quite as significant.



# ET - 2

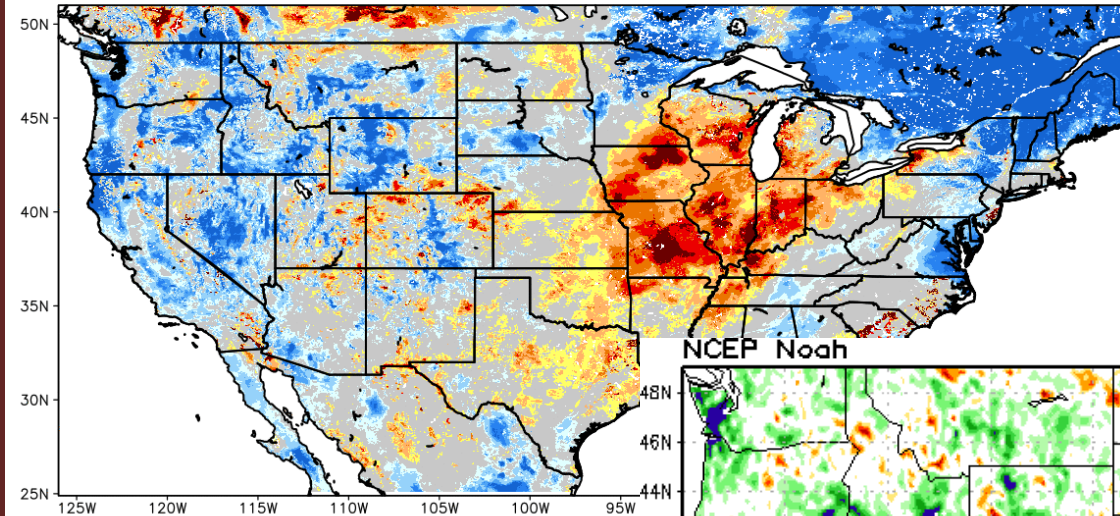


- New product – not “new” but new to us.
- Does daily and accumulated estimates of PET.
- Southern half-ish of area an inch or more last 30 days.

# Soil Moisture

SPoRT-LIS 0-100 cm Soil Moisture percentile valid 06 Mar 2024

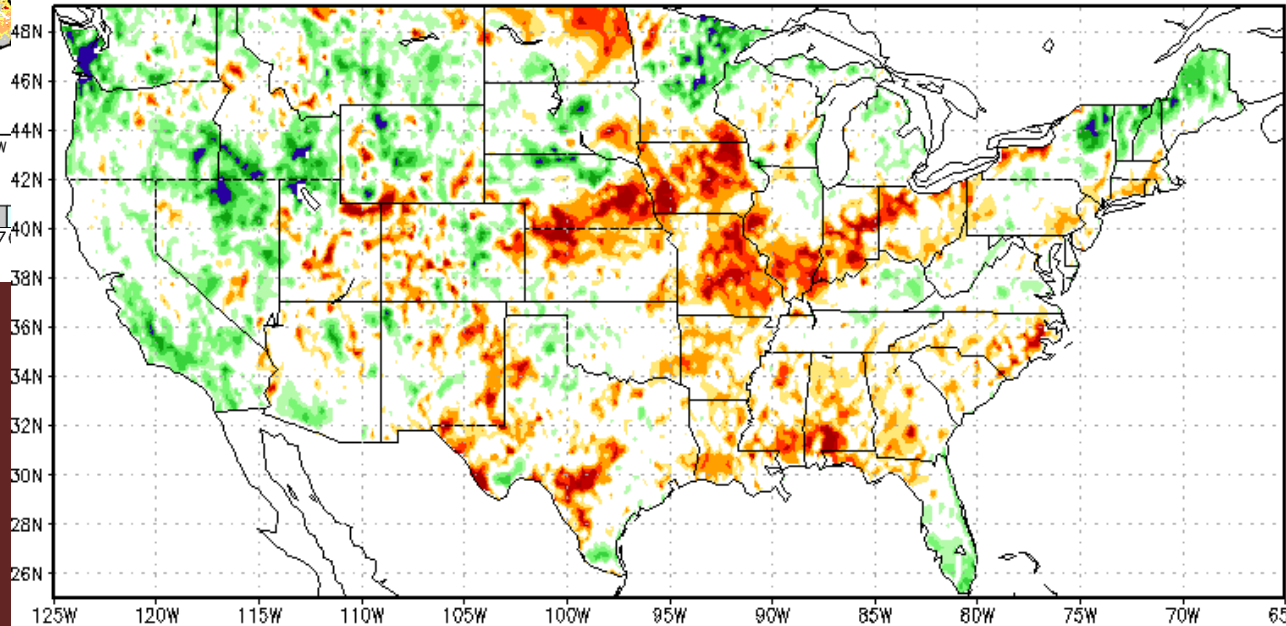
- Soils drying again over much of region
- Differences around Great Lakes and central Plains.



NCEP Noah

Current SMP

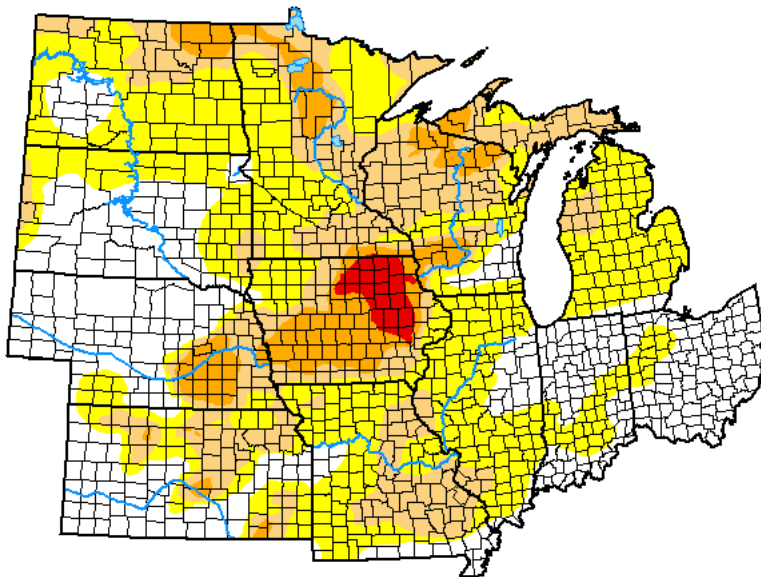
01Mar2024



\*\*NOTE\*\*  
\*\*Experimental\*\*

# US Drought Monitor

## U.S. Drought Monitor North Central States



**February 27, 2024**

(Released Thursday, Feb. 29, 2024)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	30.88	69.12	30.39	9.10	1.39	0.00
<b>Last Week</b> 02-20-2024	44.55	55.45	25.40	9.10	1.39	0.00
<b>3 Months Ago</b> 11-28-2023	37.43	62.57	37.04	17.51	4.07	0.37
<b>Start of Calendar Year</b> 01-02-2024	37.52	62.48	38.54	16.91	3.77	0.02
<b>Start of Water Year</b> 09-26-2023	25.87	74.13	49.98	25.16	7.67	0.73
<b>One Year Ago</b> 02-28-2023	46.79	53.21	35.32	17.17	9.79	4.41

Intensity:



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:

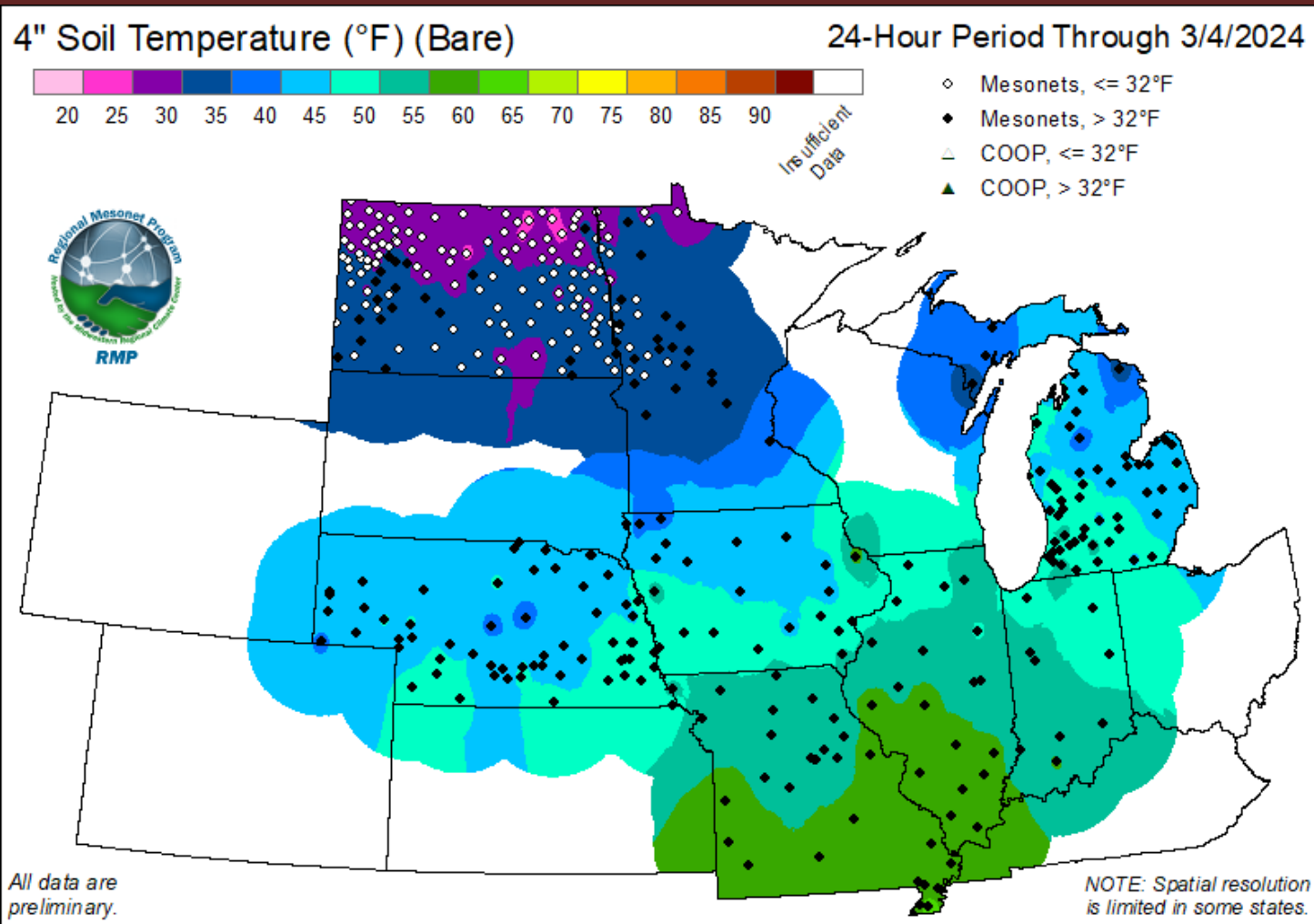
Richard Heim  
NCEI/NOAA



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

- Worse centered on IA with long term issues
- Redevelopment more widespread but not as serious yet.

# Soil Temperature



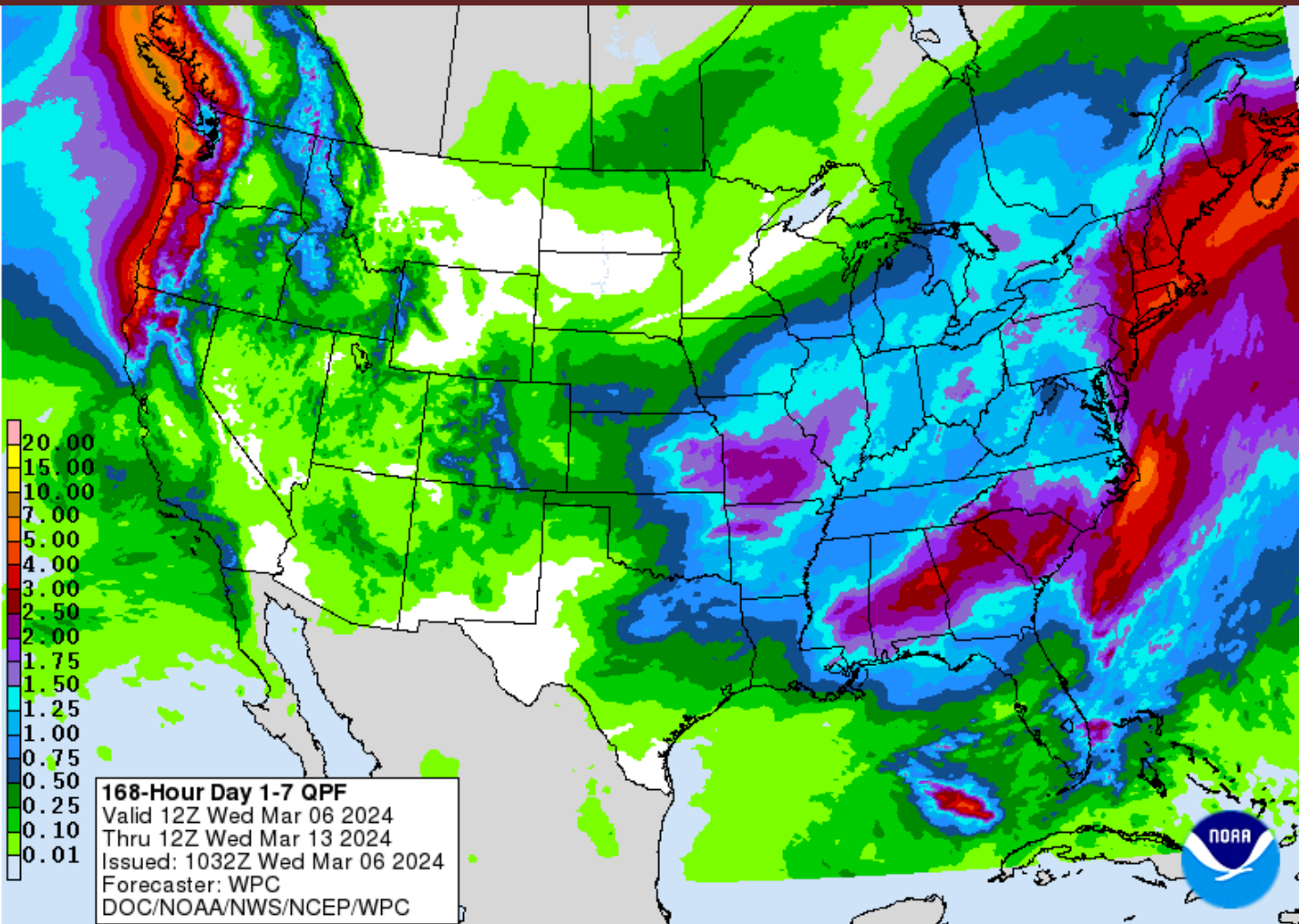
- Warming relatively quickly
- Already 50s south
- Frozen still in ND – a little surprising.
- Frost depths (not shown) only showing in parts nrn WI/MN



# Assorted AG Issues

- Soils remain dry through much of the region
- Some winter recovery – losing ground again
- Little frost depth
- Early field progress very likely
- Fire – still a very legitimate concern
- Warmth pushing early perennial movement – risk
- Some winter cold damage

# 1-7 Day Precip



- Some good news – east
- Increasing rainfall possible next 7 days.

# Temperature Outlook

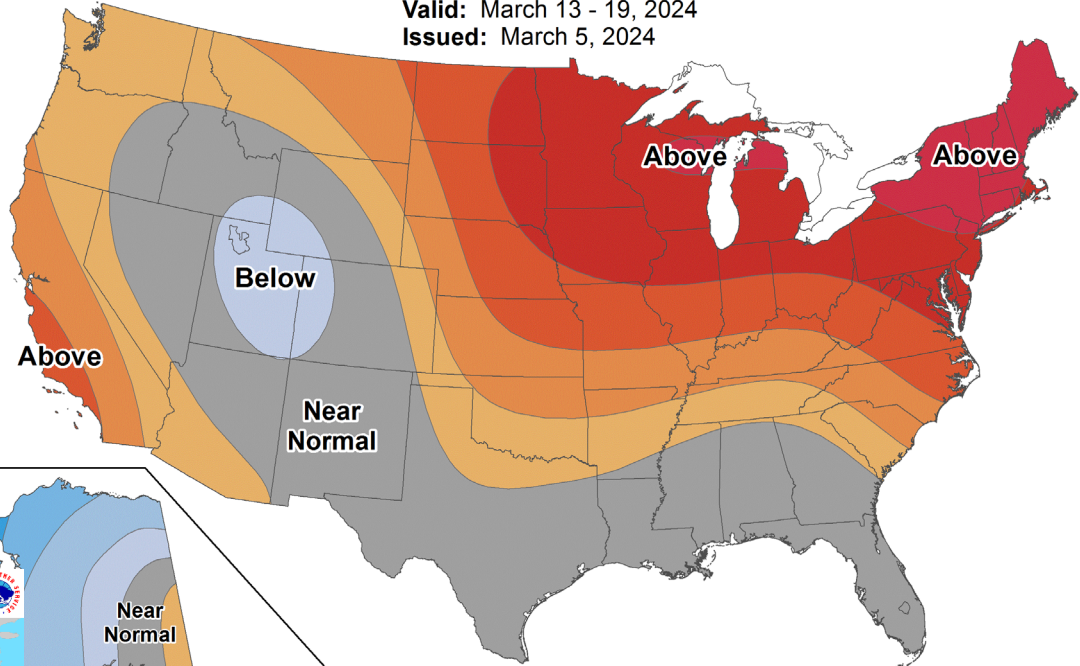
- Temperatures still likely above average across the entire region.
- No risk of hazardous temperatures (human) – not so much for perennials



## 8-14 Day Temperature Outlook

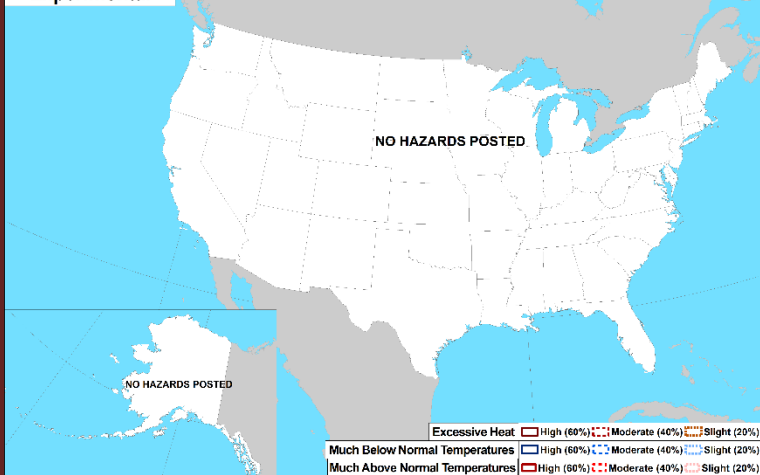


Valid: March 13 - 19, 2024  
 Issued: March 5, 2024



### Risk of Hazardous Temperatures Valid: 03/13/2024-03/19/2024

\*\*\*Experimental\*\*\*

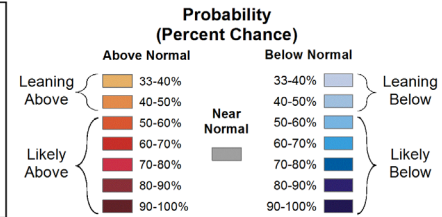
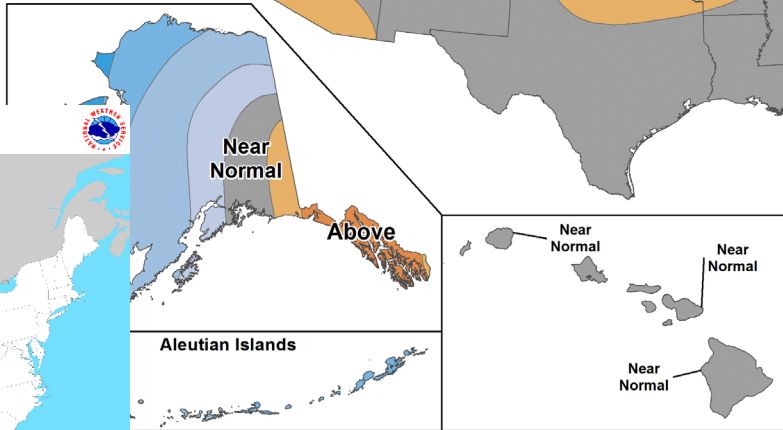


Climate Prediction Center

Made: 03/05/2024 3PM EST

Follow us:

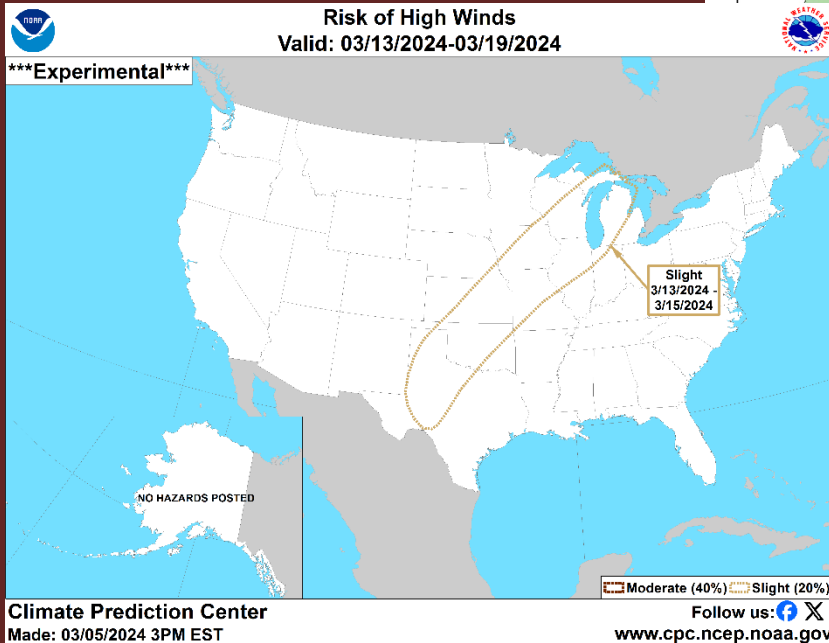
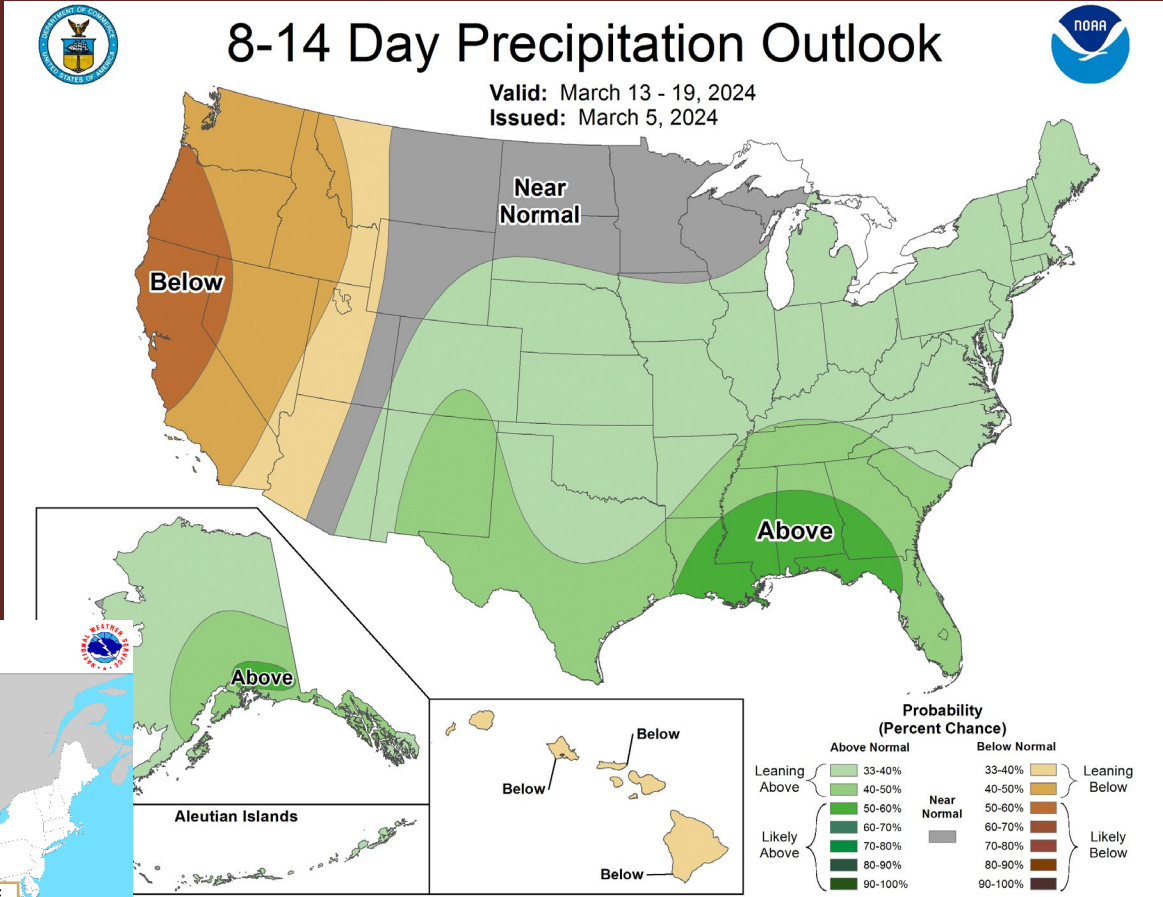
[www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)



<http://www.cpc.ncep.noaa.gov/>

# Precipitation Outlook

- Very slight hints to wet side south/east.
- Near normal north.

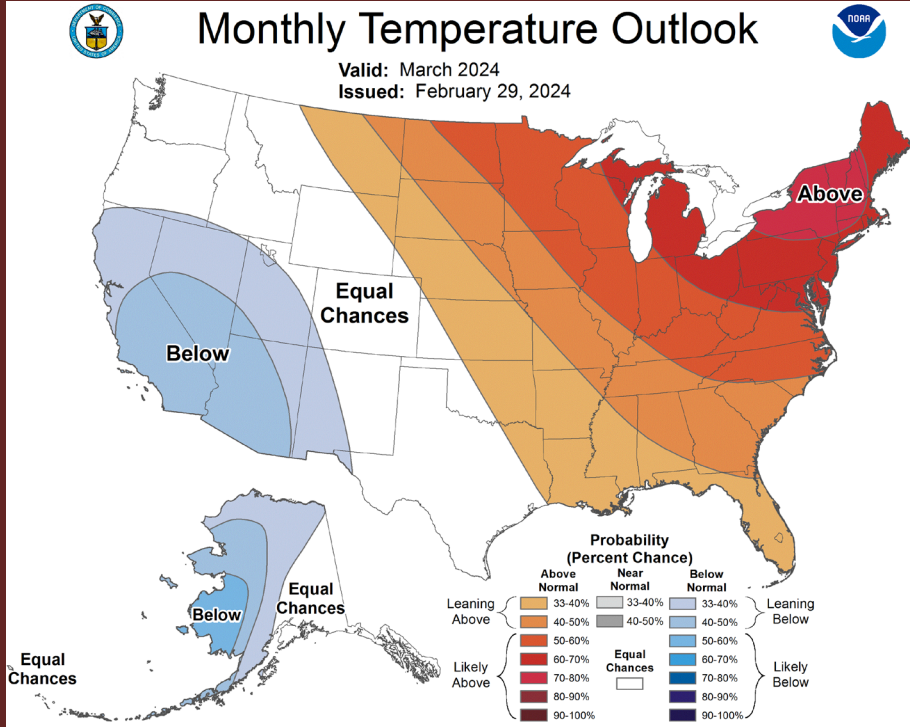




# 1-Month Outlook

## Monthly Temperature Outlook

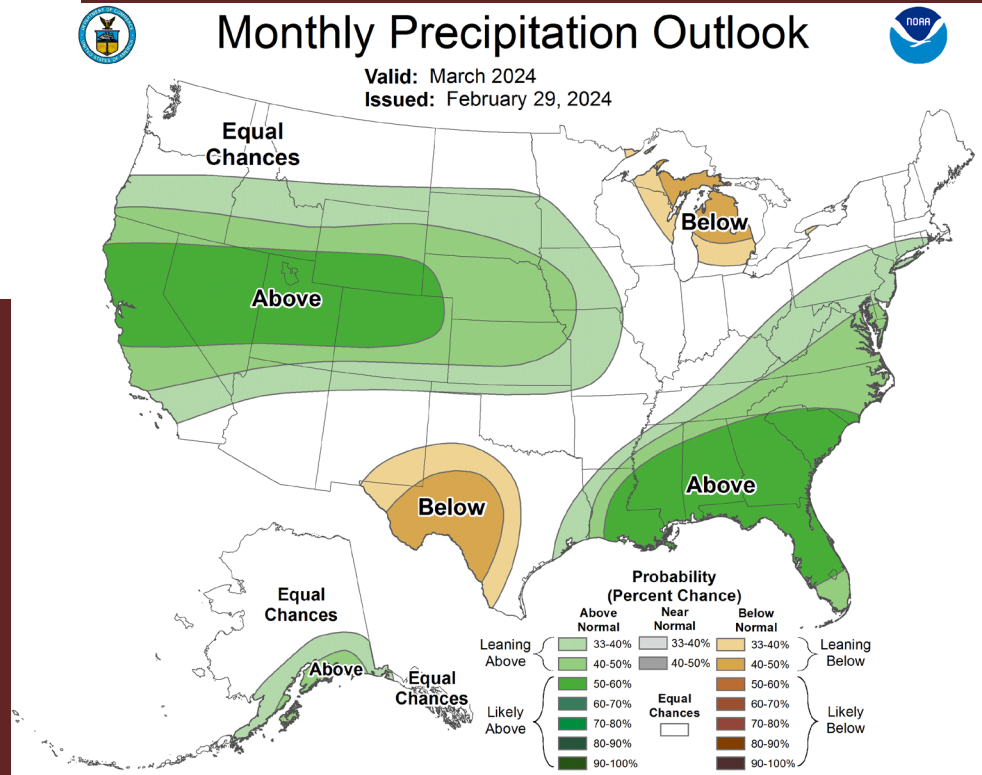
Valid: March 2024  
Issued: February 29, 2024



- Likely warmer across the entire area, especially in the northeast portion of the region.
- Slightly higher precipitation chances Plains – slightly below chances Great Lakes.

## Monthly Precipitation Outlook

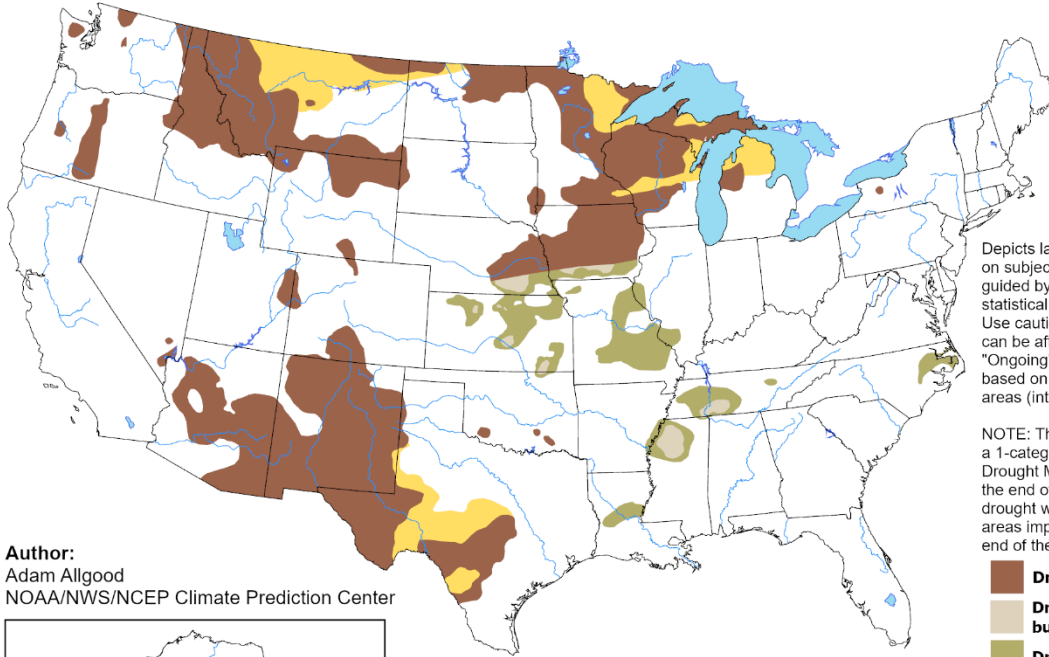
Valid: March 2024  
Issued: February 29, 2024



# Drought in the Midwest/Plains

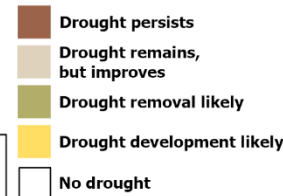
## **U.S. Monthly Drought Outlook** Drought Tendency During the Valid Period

Valid for March 2024  
Released February 29, 2024

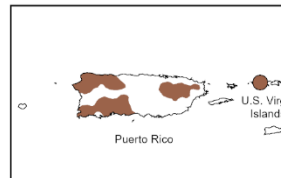
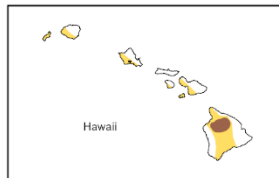


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

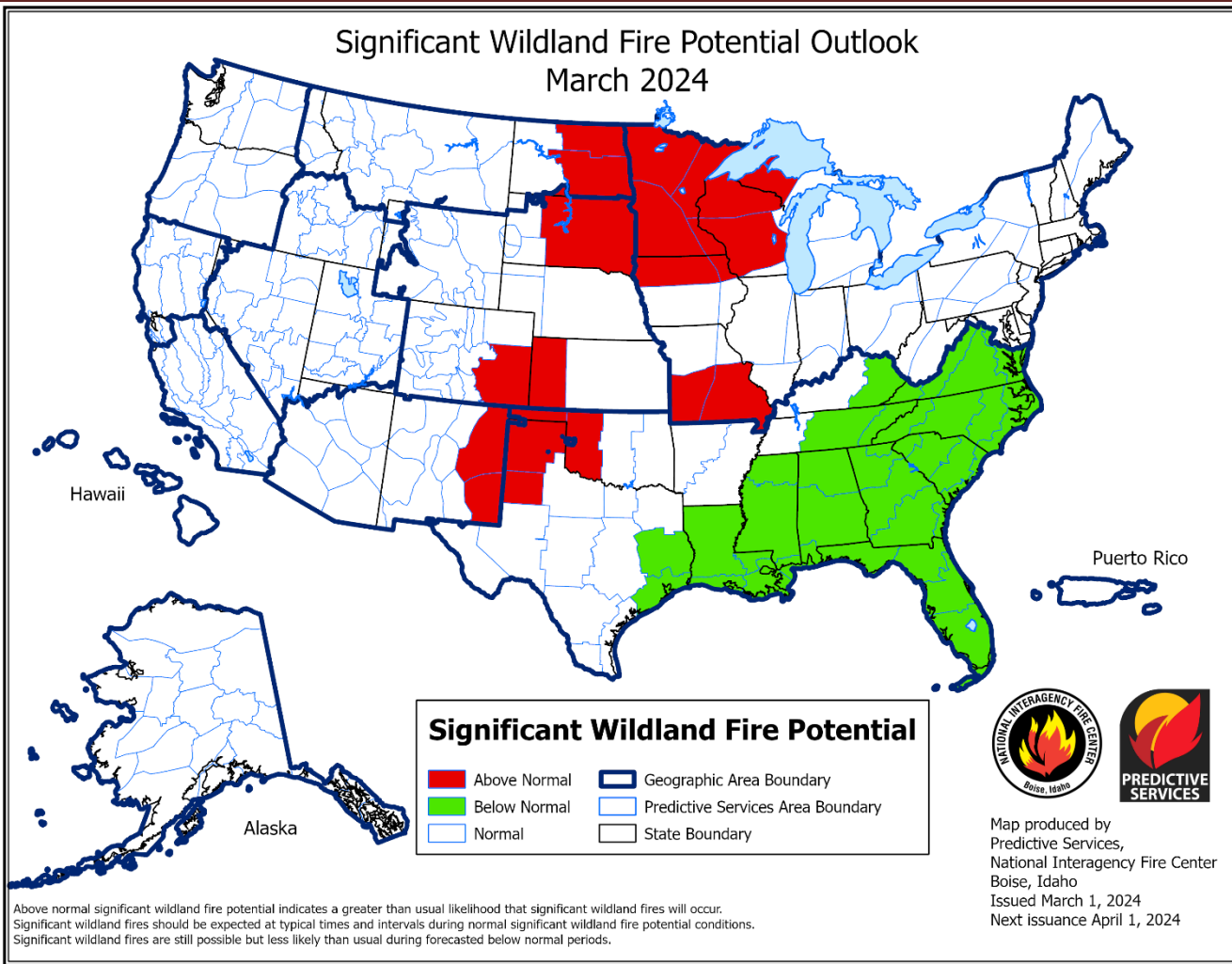


<https://go.usa.gov/3eZGd>

- Drought persistence or development north
- Some improvement possible south.

# Fire in the Midwest/Plains

Significant Wildland Fire Potential Outlook  
March 2024



- Fire risk increased over much of the region – not much surprise.

# Summary

- Drought persists, some winter improvement but worsening.
- Early spring field work likely
- Fire an issue
  
- Summer? – El Niño transitioning out to La Niña. Increased risk of heat – rapid transition.



# Next MAC-T Monthly Call

Next Call

**April 3, 2024, 9-10am CT**