

MAC-T Monthly Call

Midwest Agriculture and Climate Team

May 3, 2022

For more information:

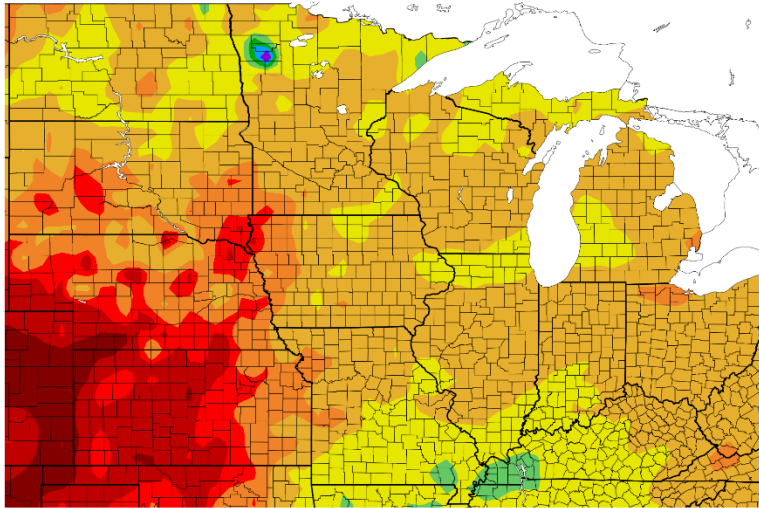
Dennis.todey@usda.gov



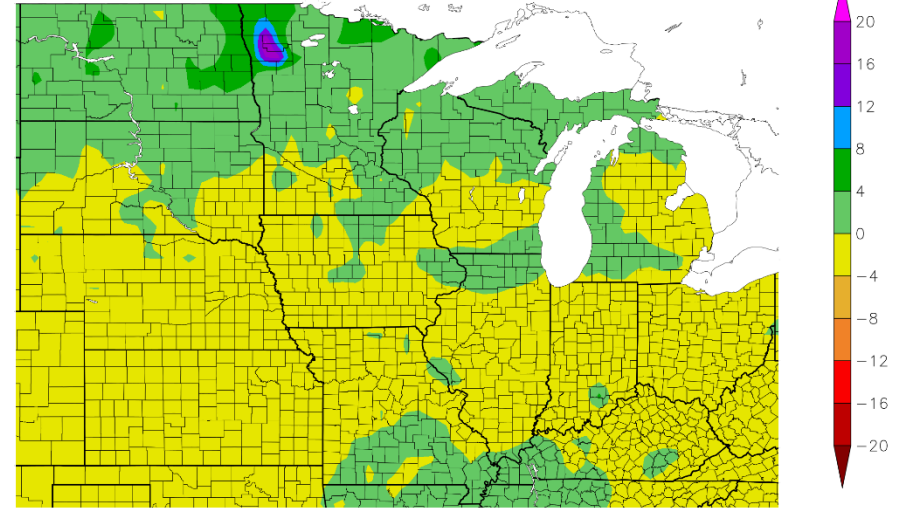
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U.S. DEPARTMENT OF AGRICULTURE



Precipitation (in)
4/2/2022 – 5/1/2022



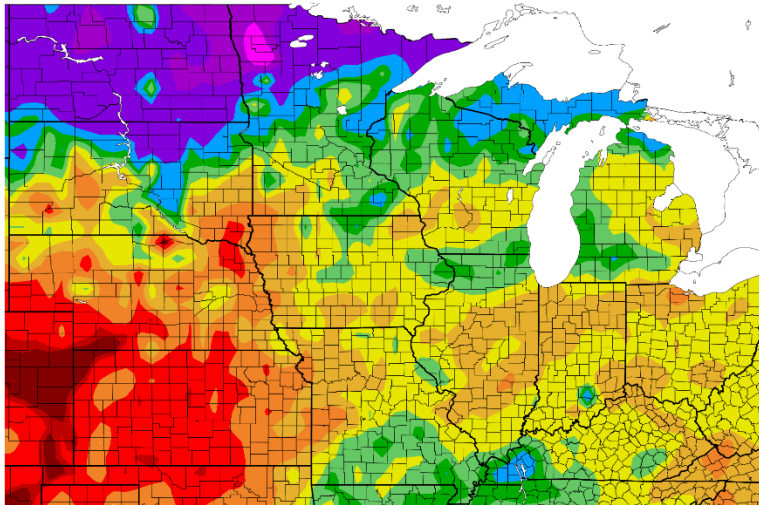
Departure from Normal Precipitation (in)
4/2/2022 – 5/1/2022



Generated 5/2/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
4/2/2022 – 5/1/2022



Generated 5/2/2022 at HPRCC using provisional data.

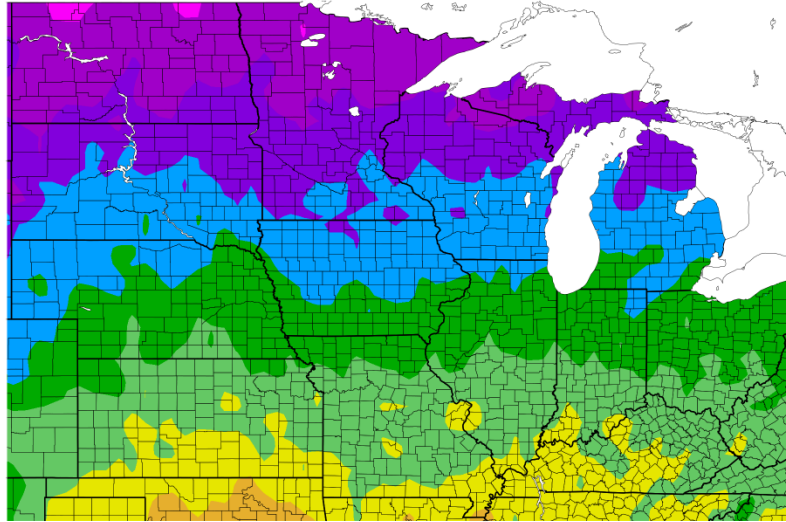
NOAA Regional Climate Centers

Generated 5/2/2022 at HPRCC using provisional data.

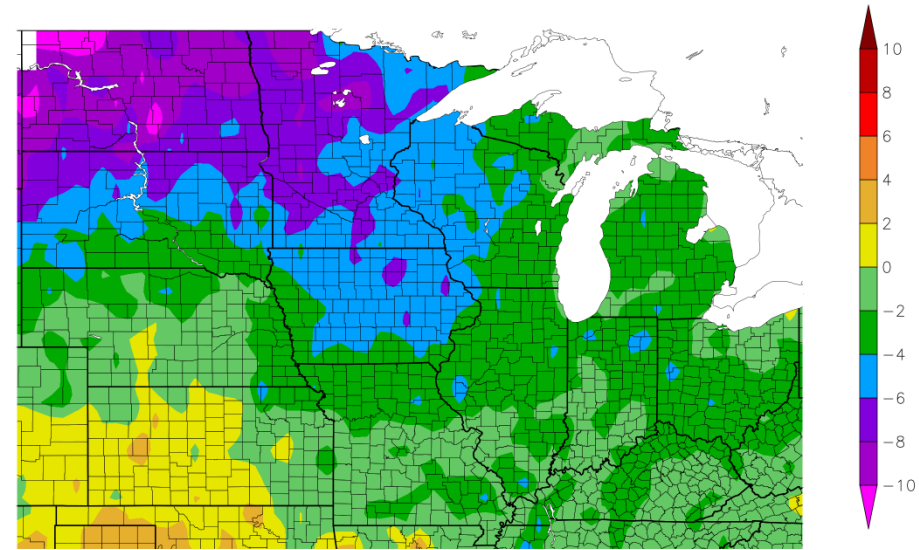
NOAA Regional Climate Centers

- Much wetter than average across North Dakota and parts of South Dakota/Minnesota.
- Drier than average from plains to Ohio last 30 days.
- Still very dry Nebraska/Kansas/Colorado

Temperature (F)
4/2/2022 – 5/1/2022



Departure from Normal Temperature (F)
4/2/2022 – 5/1/2022



Generated 5/2/2022 at HPRCC using provisional data.

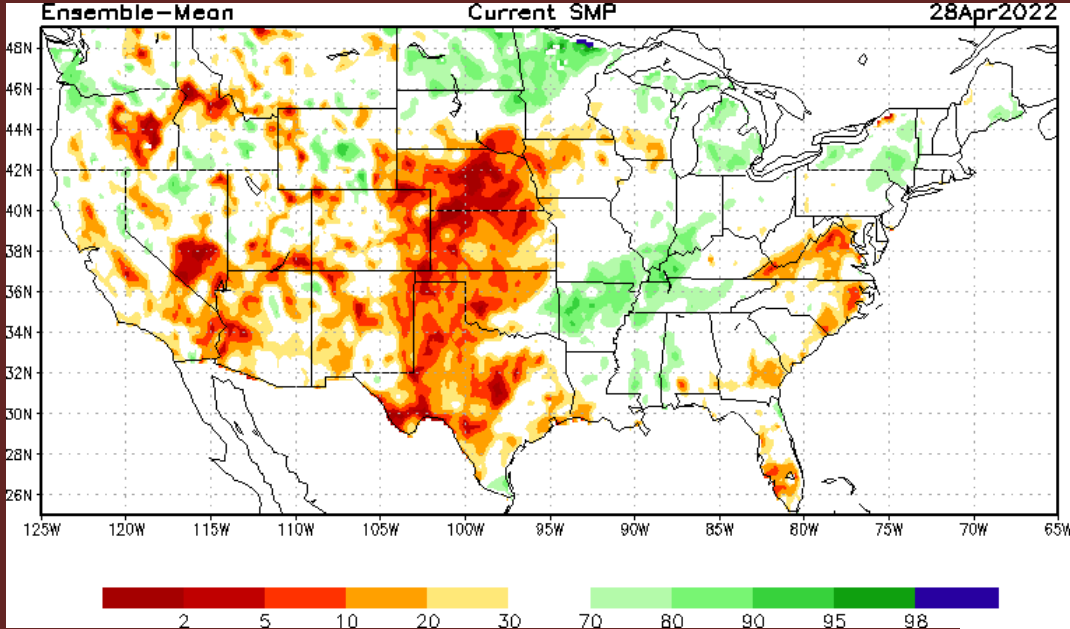
NOAA Regional Climate Centers Generated 5/2/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Colder than average nearly everywhere in region.
- Only above average in dry area.
- 4-8+F below average Dakotas to Iowa/Wisconsin

Soil Moisture

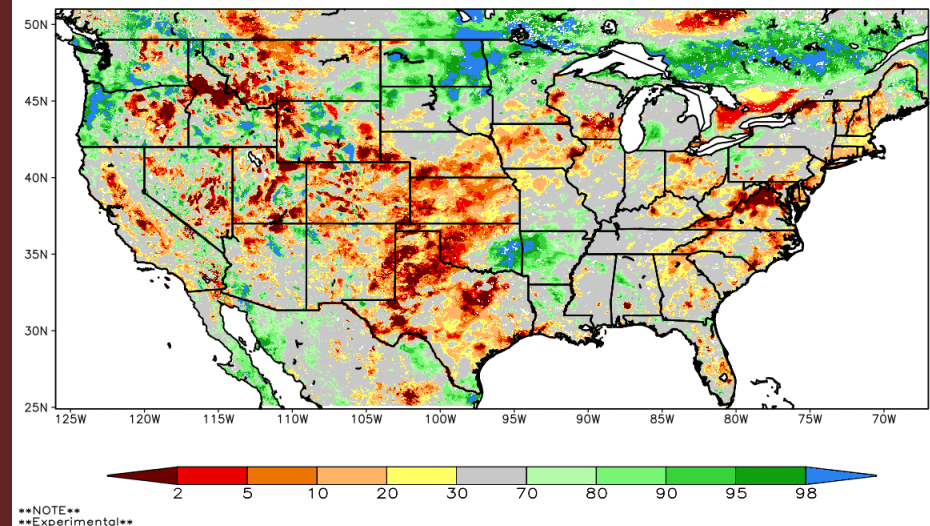
https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp_new.shtml#



- Wetter than average in north
- Wetter also east, though not quite as extreme
- Dry plains
- Mixed still IA and WI/IL border.

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

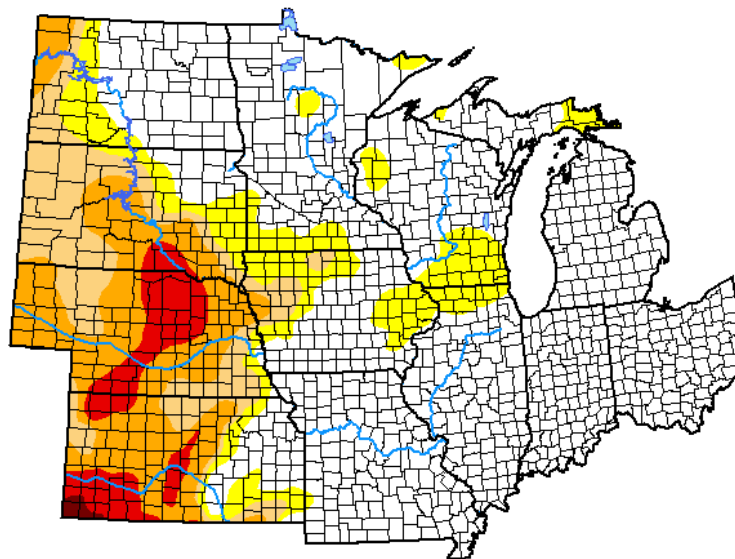
SPoRT-LIS 0-100 cm Soil Moisture percentile valid 03 May 2022



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

Drought in the Midwest

U.S. Drought Monitor North Central States



April 26, 2022

(Released Thursday, Apr. 28, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	61.80	38.20	27.00	17.45	4.82	0.22
Last Week 04-19-2022	56.84	43.16	30.97	19.44	4.72	0.22
3 Months Ago 01-25-2022	40.98	59.02	29.50	8.12	1.32	0.00
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 04-27-2021	40.19	59.81	31.94	13.67	9.59	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

- More easing of drought – very limited drought most of Corn Belt
- Still serious drought issues Plains
- Upcoming precip likely to help that area (at least temporarily)

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

Corn Conditions (NASS)



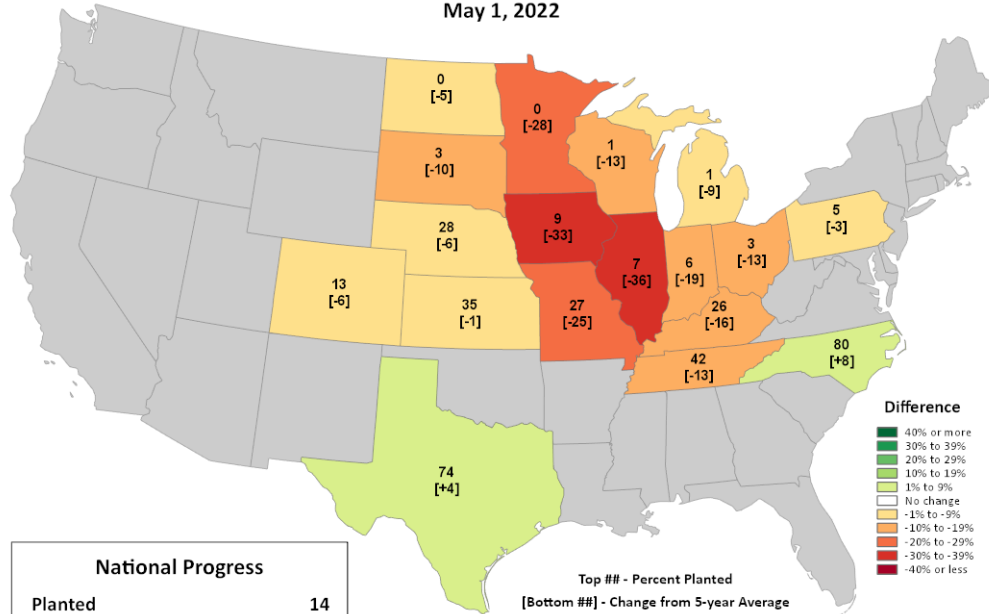
United States
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World Agricultural Outlook Board (WAOB)

Corn Progress

Percent Planted

May 1, 2022



National Progress

Planted 14
Change from 5-year Average -19

Top ## - Percent Planted
[Bottom ##] - Change from 5-year Average

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

Difference

40% or more
30% to 39%
20% to 29%
10% to 19%
1% to 9%
No change
-1% to -9%
-10% to -19%
-20% to -29%
-30% to -39%
-40% or less

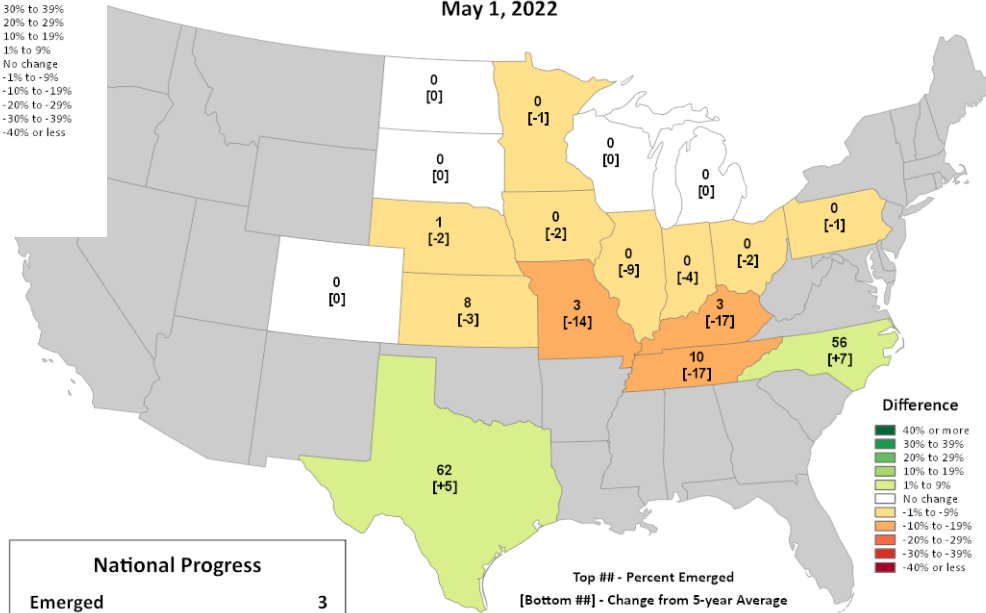
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Corn Progress

Percent Emerged

May 1, 2022



National Progress

Emerged 3
Change from 5-year Average -3

Top ## - Percent Emerged
[Bottom ##] - Change from 5-year Average

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

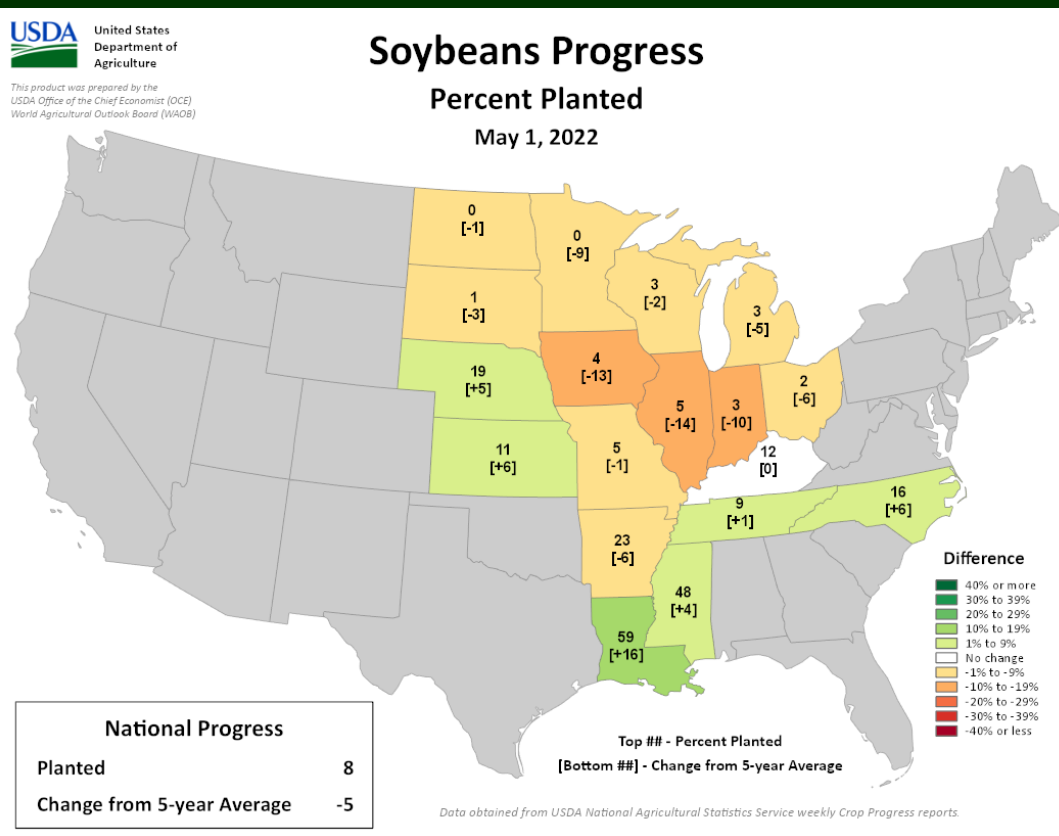
Difference

40% or more
30% to 39%
20% to 29%
10% to 19%
1% to 9%
No change
-1% to -9%
-10% to -19%
-20% to -29%
-30% to -39%
-40% or less



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Bean Conditions (NASS)



Corn progress (NASS): Planted - Iowa 4% (-13%) – National 8% (-5%). Emerged - National - NR

Oats Conditions (NASS)



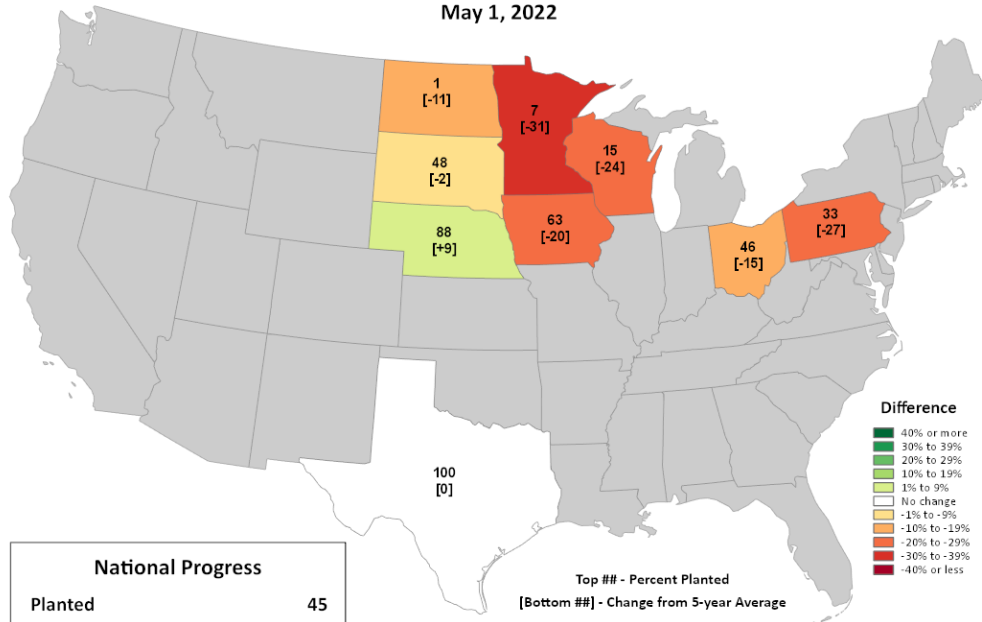
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Oats Progress

Percent Planted

May 1, 2022



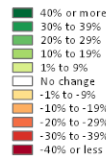
National Progress

Planted 45
Change from 5-year Average -13

Top ## - Percent Planted
[Bottom ##] - Change from 5-year Average

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

Difference

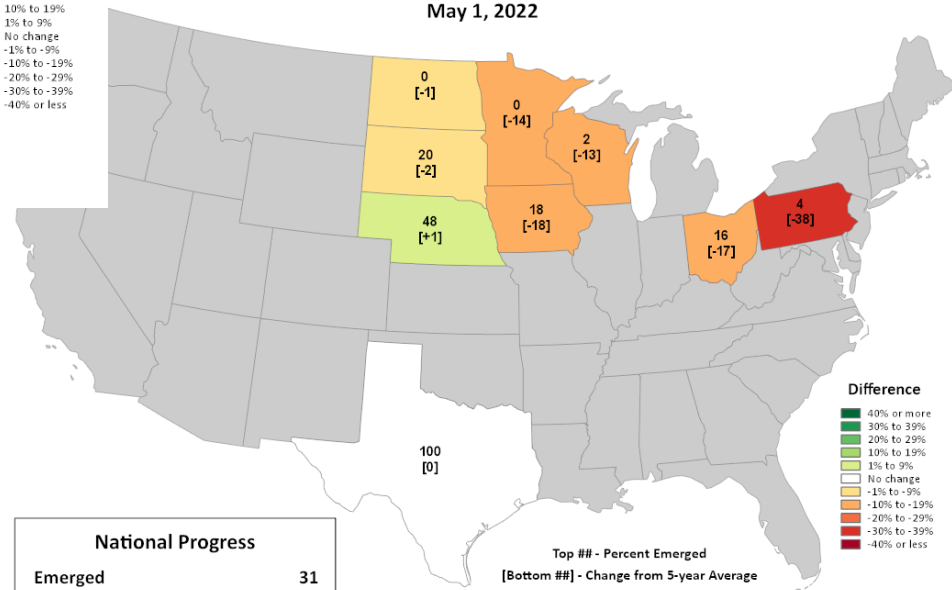


Early data. Oats (NASS):
Planted - National 45% (-13%).
Emerg - National 31% (-9%)

Oats Progress

Percent Emerged

May 1, 2022



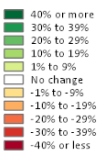
National Progress

Emerg 31
Change from 5-year Average -9

Top ## - Percent Emerged
[Bottom ##] - Change from 5-year Average

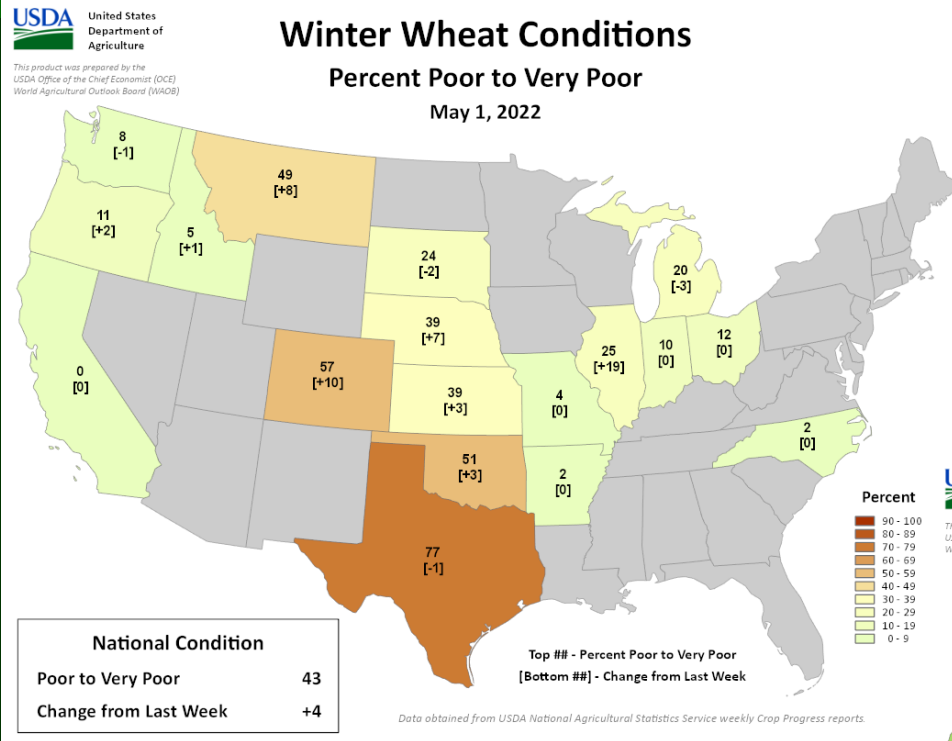
Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

Difference

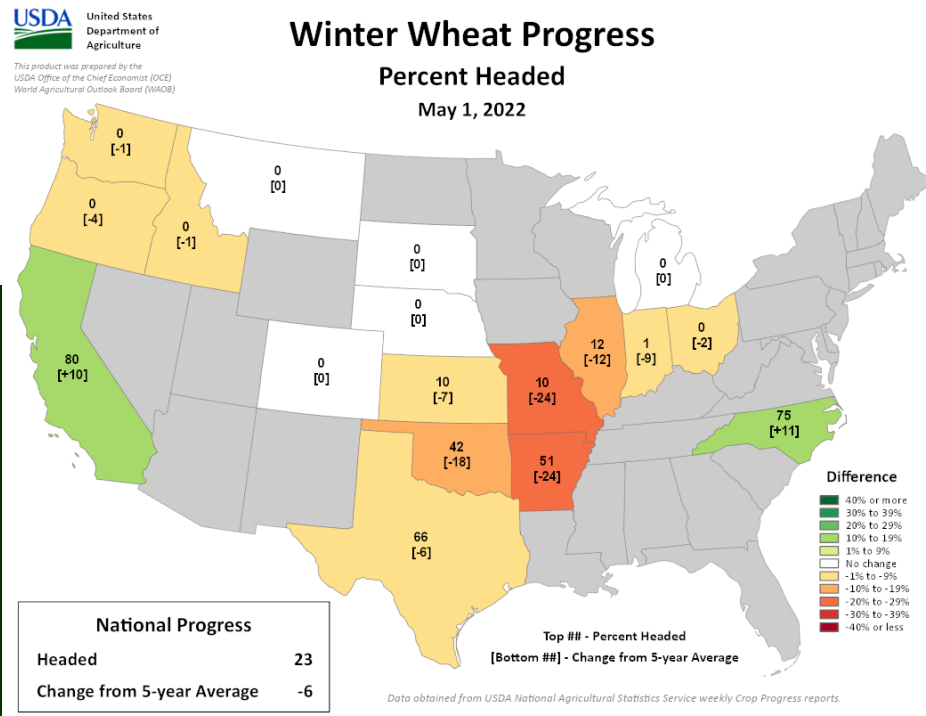


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Wheat Conditions (NASS)



Winter wheat (NASS) : Headed – National 23% (-6%). Condition – P-VP National 43% (+4%)



Pasture/Range Conditions (NASS)



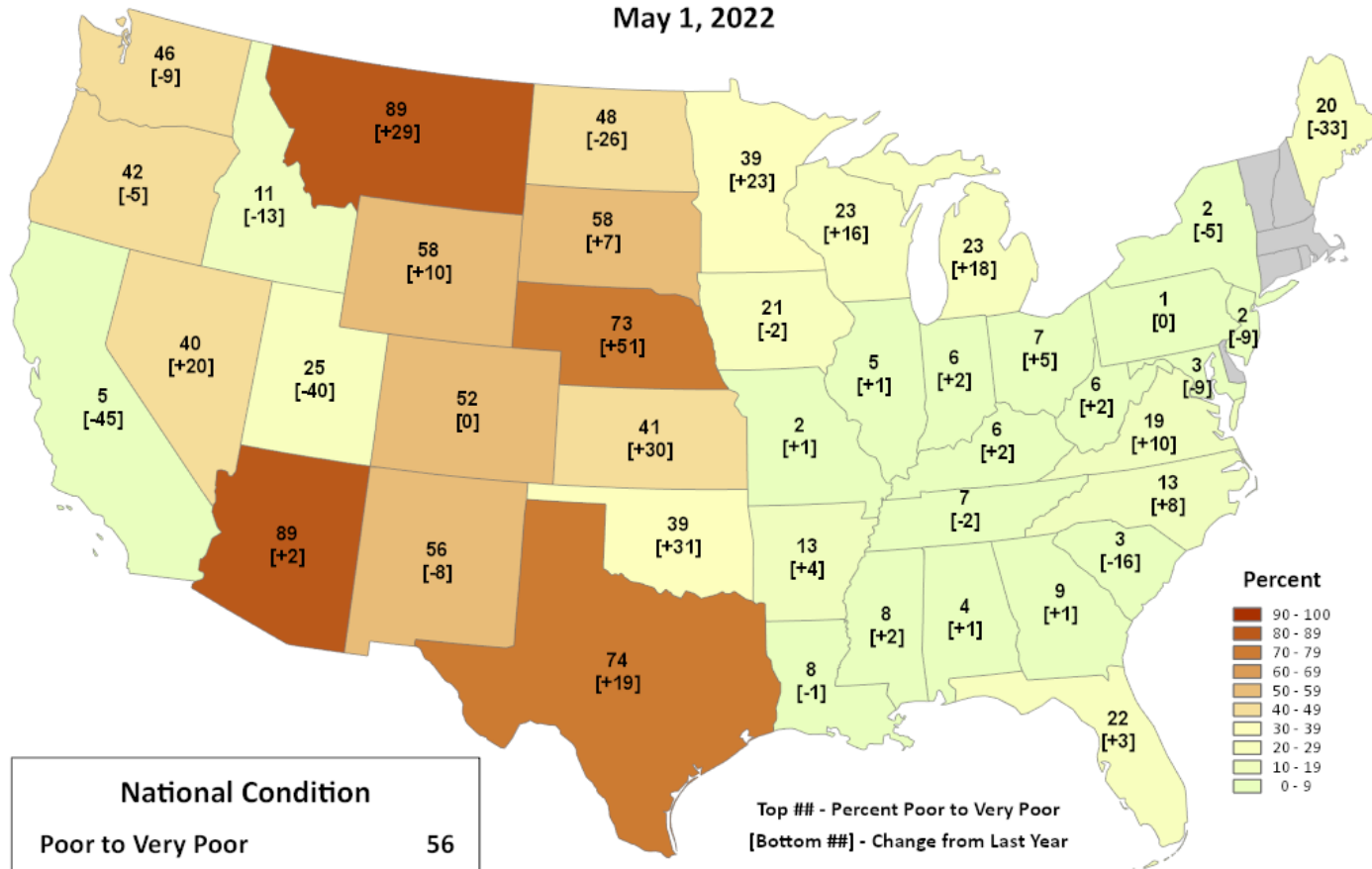
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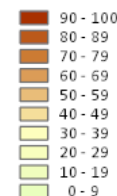
Pasture and Range Conditions

Percent Poor to Very Poor

May 1, 2022



Percent



National Condition

Poor to Very Poor 56

Change from Last Year +9

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

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



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Pasture-Range P-VP (NASS): National 56% (+9%). Worst at this point in season since 2000.

Assorted AG Issues

- Planting progress slowed by cool/wet conditions central-east. Starting to make some progress this week.
- Some progress small grains in dry Plains
- Delayed development in winter wheat, other perennials
- Good for some delayed development – avoided some freeze issues
- Freezes so far have not been too damaging?
- Livestock losses in blizzards
- Pasture-range conditions very poor as is winter wheat.

Spring Freeze

SHADED MAPS MENU

CURRENT SEASON FREEZES

GROWING DEGREE DAYS

VEGETATION STATUS

28° FREEZE CLIMATOLOGIES

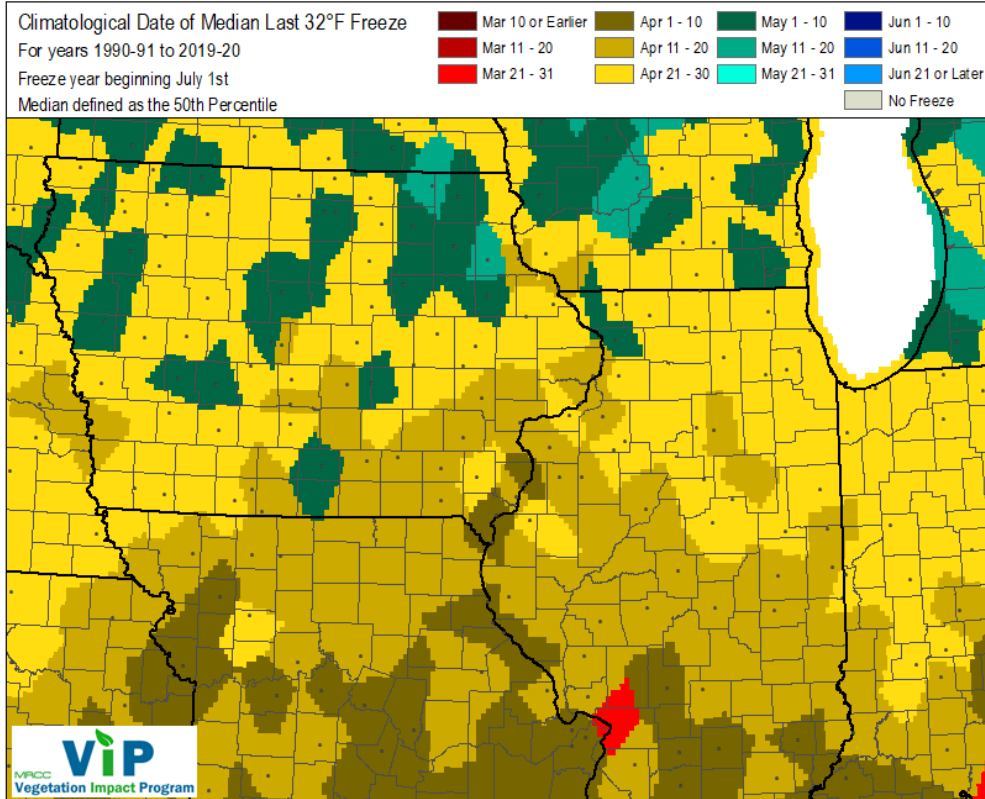
32° FREEZE CLIMATOLOGIES

FIRST (FALL) FREEZES

Date of Earliest First 32° Freeze
Date of Early First 32° Freeze
Date of Median First 32° Freeze
Date of Late First 32° Freeze
Date of Latest First 32° Freeze

LAST (SPRING) FREEZES

Date of Earliest Last 32° Freeze
Date of Early Last 32° Freeze
Date of Median Last 32° Freeze
Date of Late Last 32° Freeze
Date of Latest Last 32° Freeze

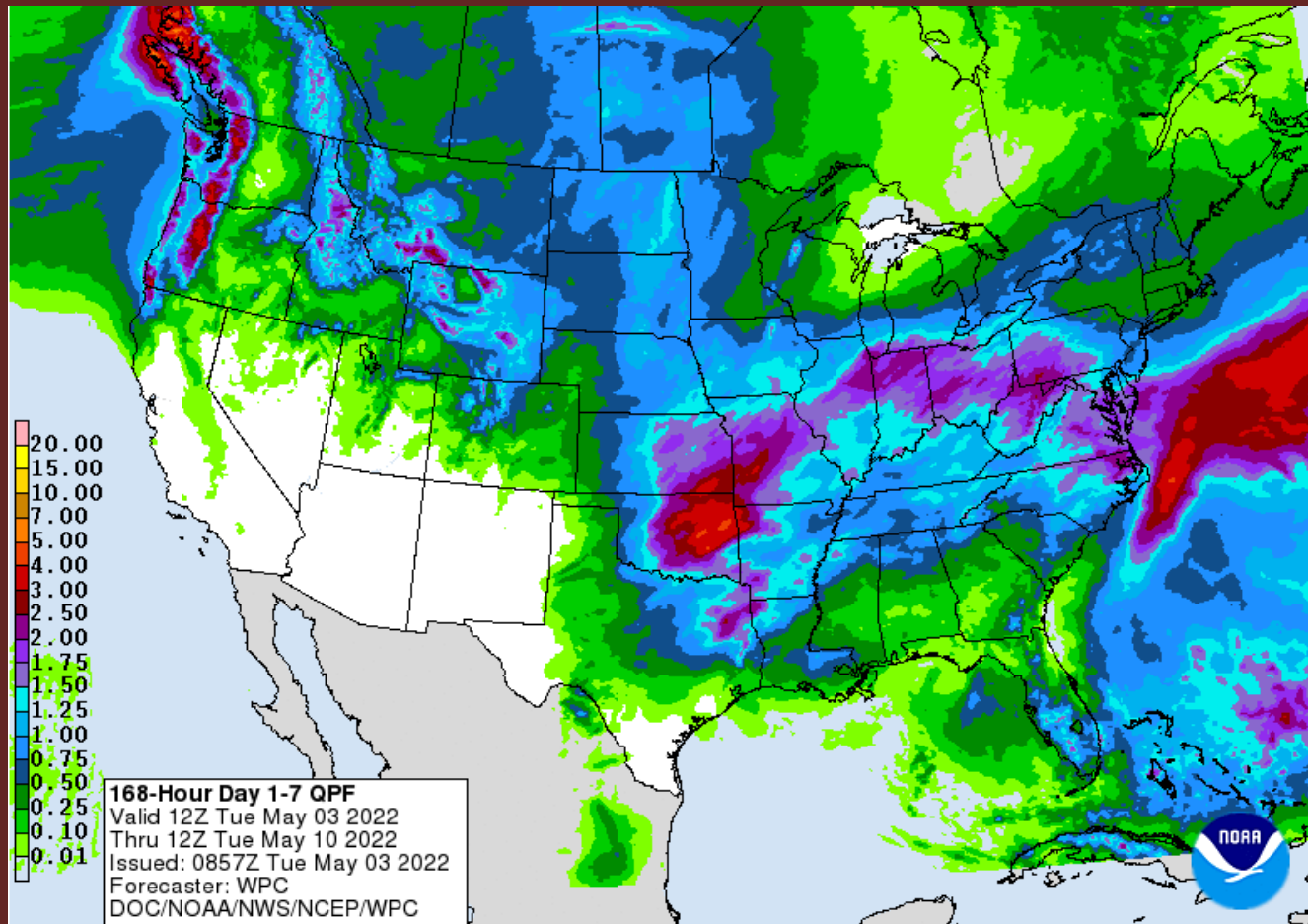


Climatologically whole state is susceptible to freeze (<32 F). Still a week or so out before median last freeze in southern parts of state.

Cold temperatures coming will likely have some sub-freezing temperatures again.

https://mrcc.purdue.edu/VIP/frz_maps/freeze_maps.html#frzMaps

1-7 Day Precip

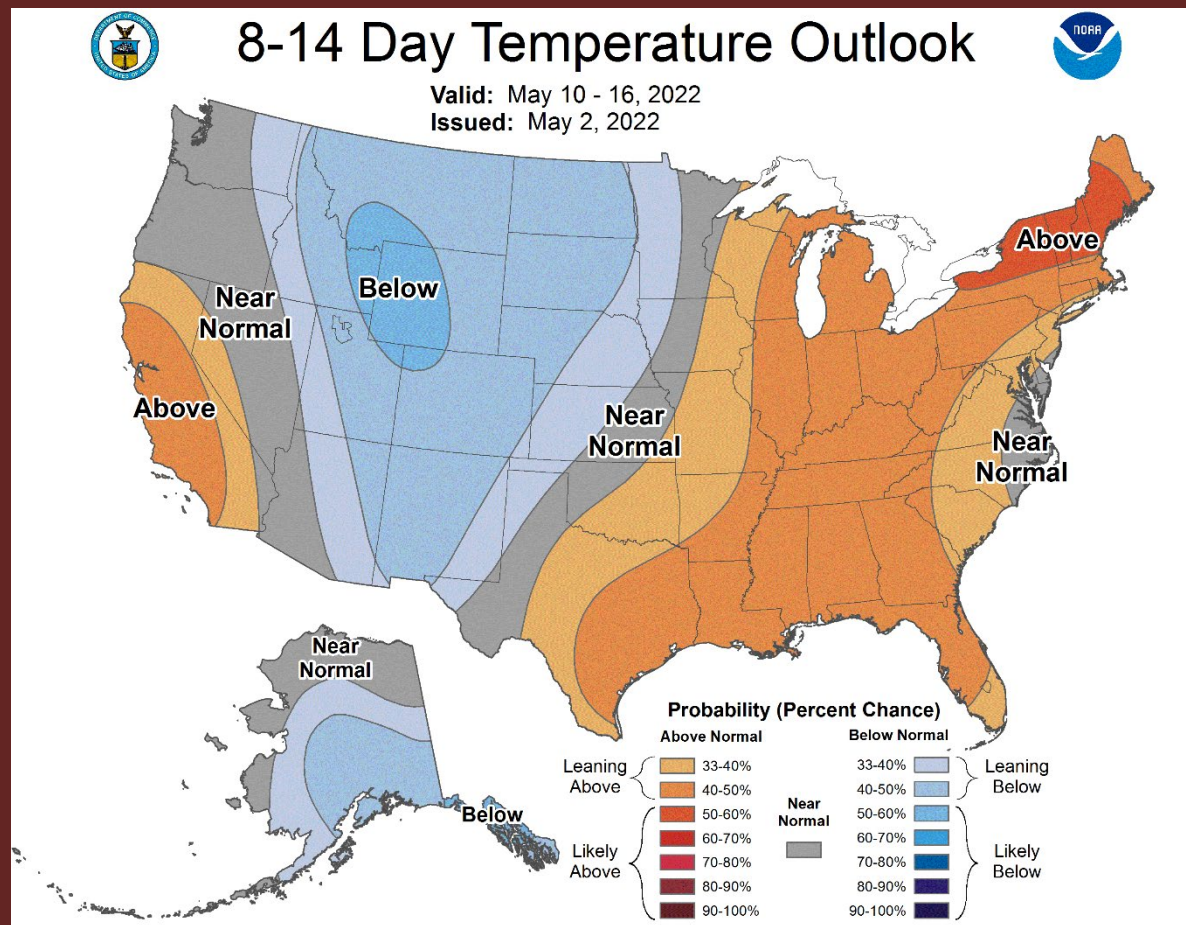


Next 7 days

- More active pattern to continue over most of region
- Heavier precip south-east
- Some even into plains

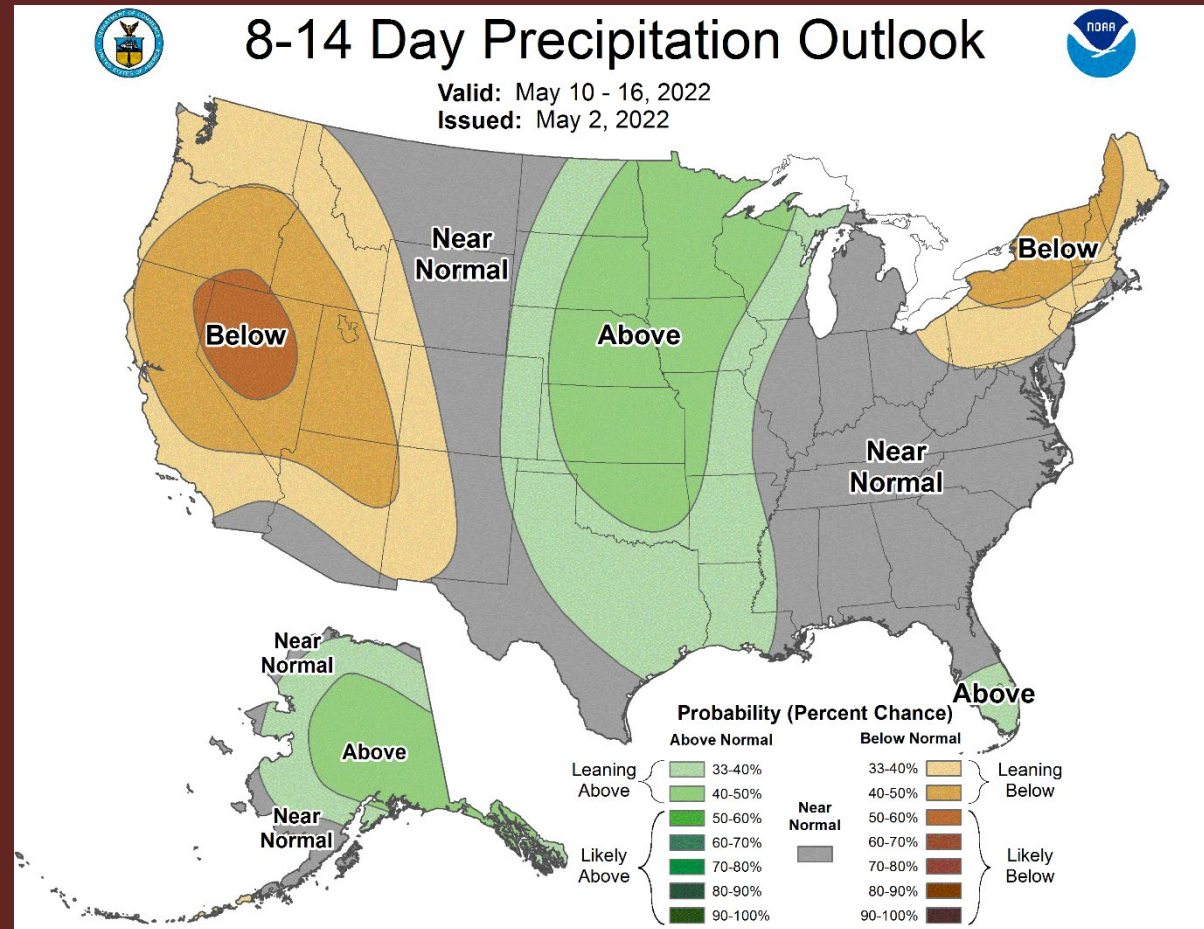
Temperature Outlook

- Warmth this weekend into early next week central eastern Corn Belt
- Better chance colder plains



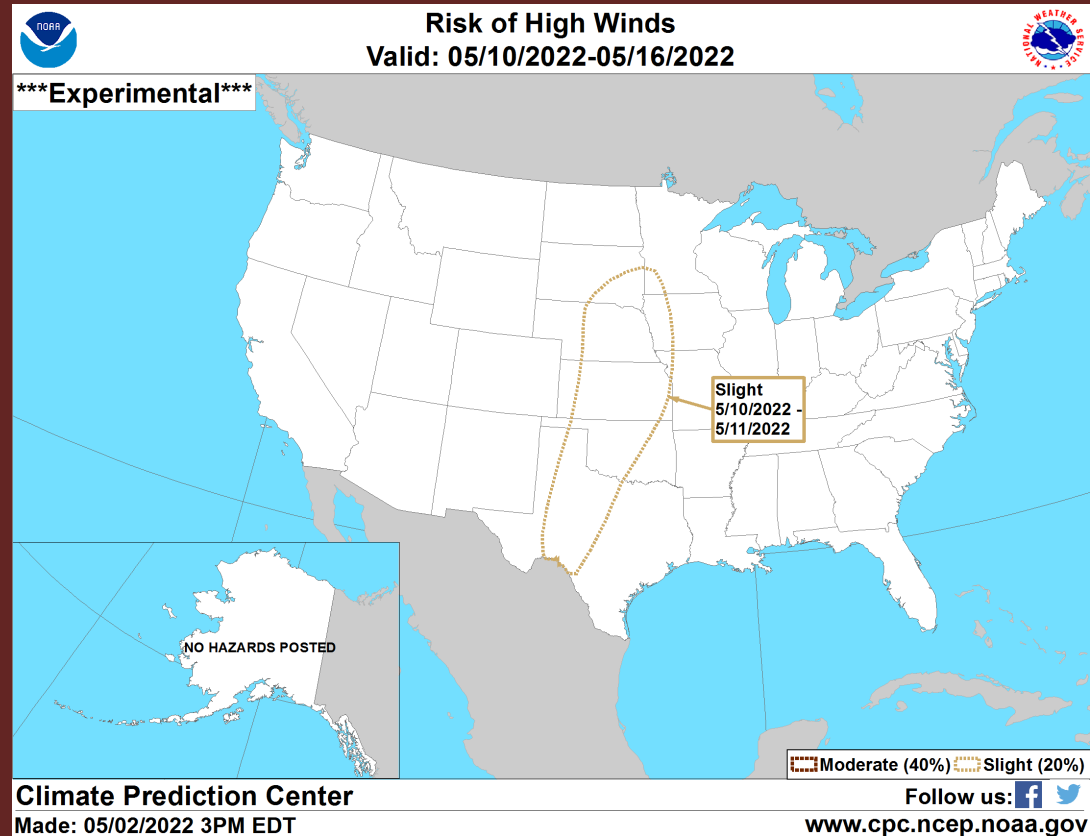
Precipitation Outlook

- Increased chances for precip continues central particularly
- Would help plains states more

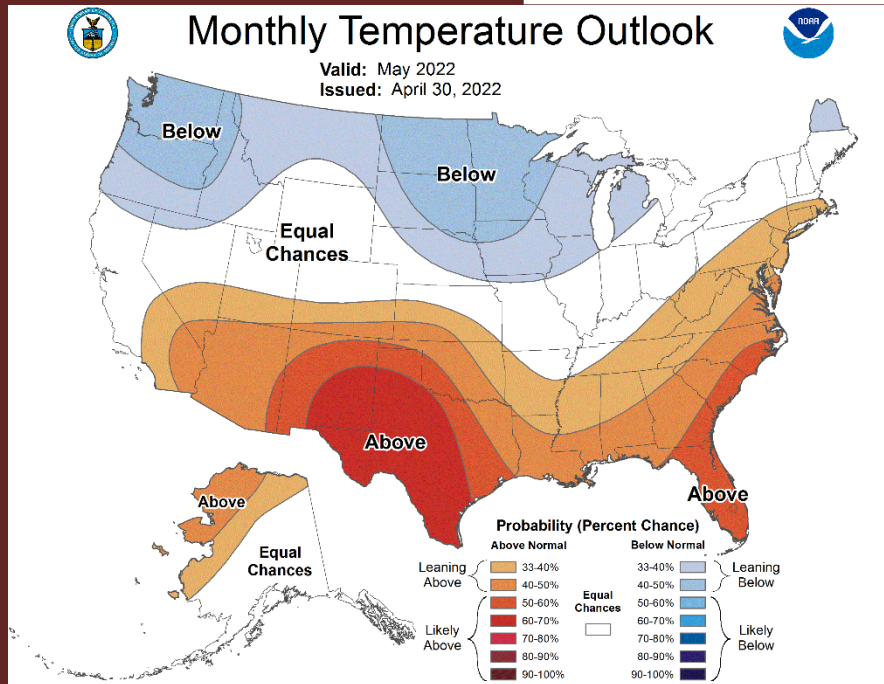


Other Risks

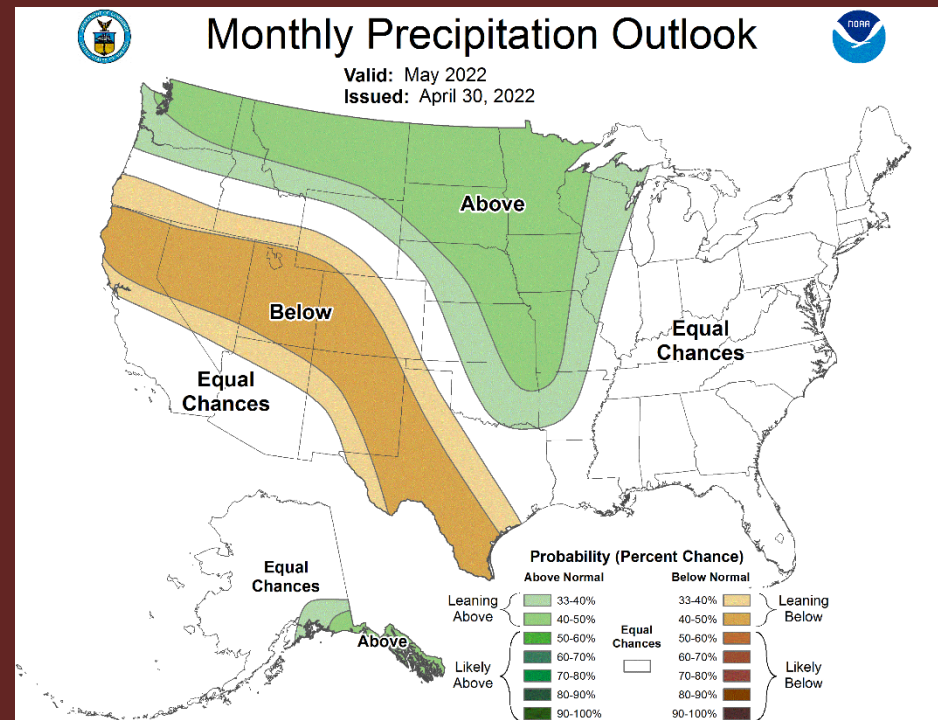
- Slight risk strong winds in the plains
- Seems to go without saying this year



1-Month Outlook



- May outlook
 - Better chance cooler north/warmer possible dry areas Plains
 - Better chance wetter Plains to Central Corn Belt.
 - Both probabilities weak, but would continue current pattern.

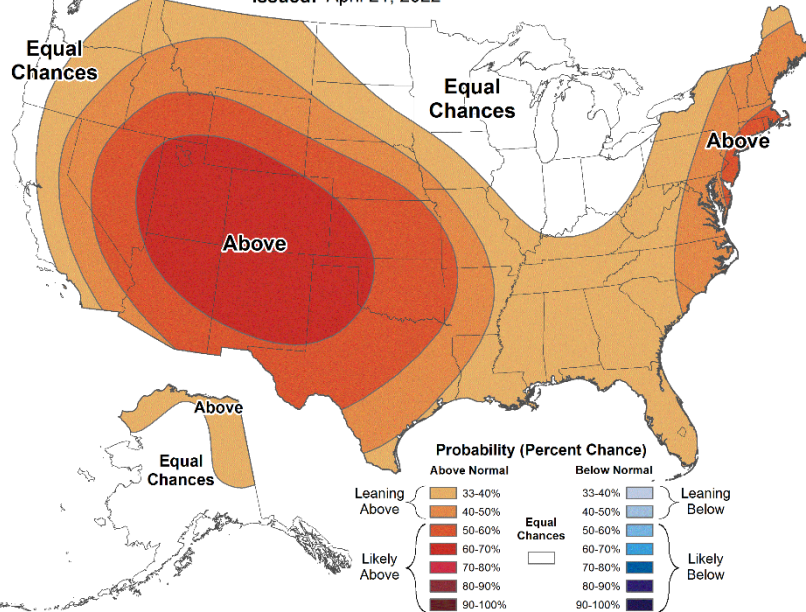


May-July Outlook



Seasonal Temperature Outlook

Valid: May-Jun-Jul 2022
Issued: April 21, 2022

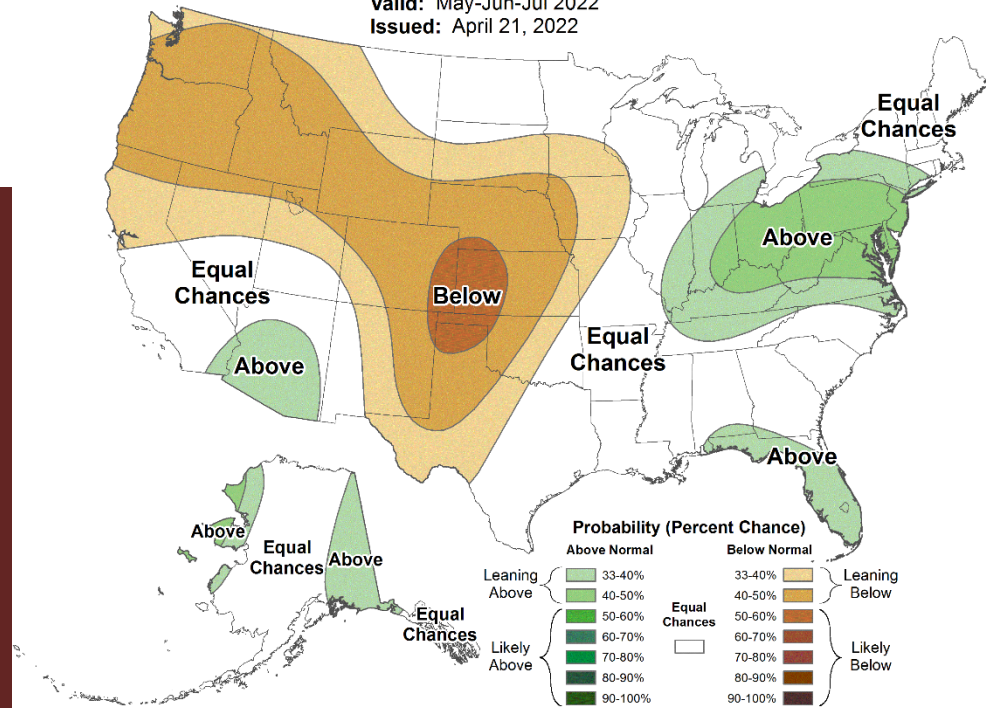


- Still La Niña pattern – also soil moisture and computer model influence.
- Slight chance warmer whole area – better chance in Plains. Better south.
- Slight chance wetter Ohio Valley (smaller area).
- Drier more likely Plains into Iowa.



Seasonal Precipitation Outlook

Valid: May-Jun-Jul 2022
Issued: April 21, 2022

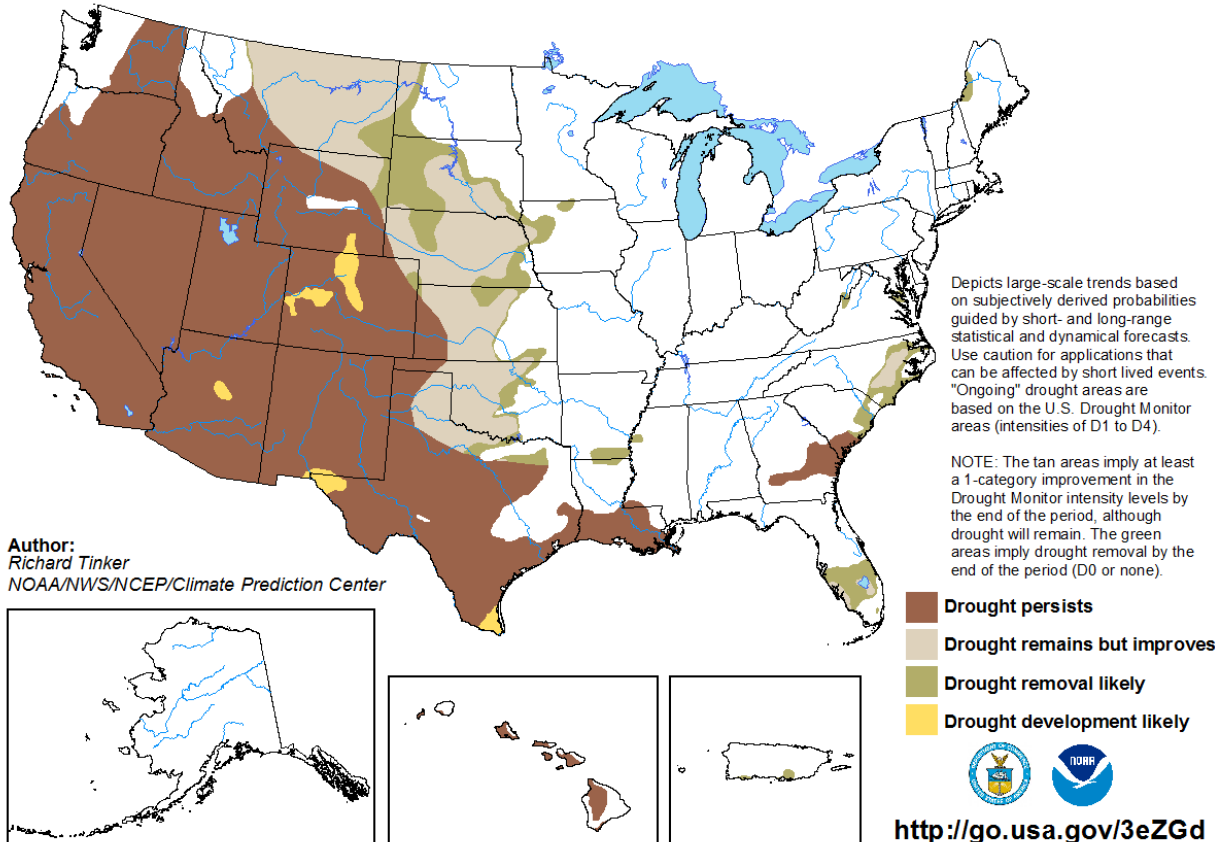


- Concern about drought returning Plains (central/south)

Drought in the Midwest/Plains

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

Valid for May 2022
Released April 30, 2022



- Monthly outlook for May 2022
- Recent precipitation and forecast next 1-2 weeks
- Shows chances of improvement much of Plains.

Summary

- Wetter conditions wide spread, except plains. Not all above avg. precip – lack of evap important
- Drought improving – but can't ignore for summer
- Field work progress generally slow
- Summer drought issues still in play
 - Plains certainly
 - Some risk further east

Next MAC-T Monthly Call

Next Call

June 1, 2022, 9-10am CT