

MAC-T Monthly Call

Midwest Agriculture and Climate Team

April 6, 2022

For more information:

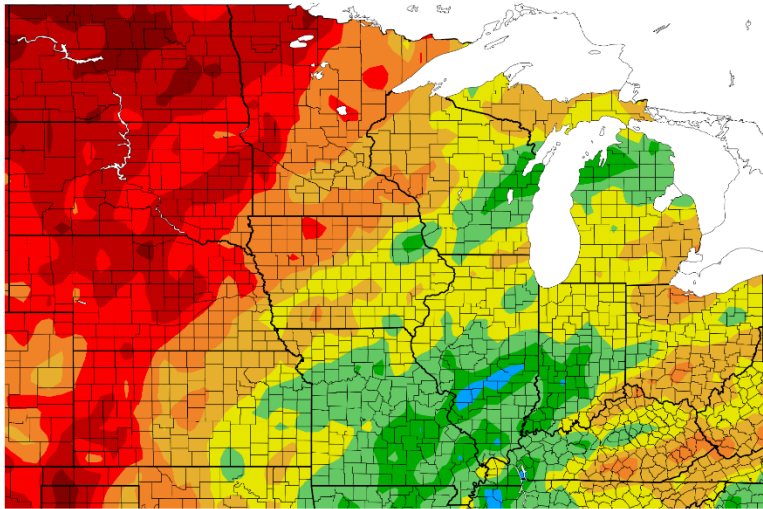
Dennis.todey@usda.gov



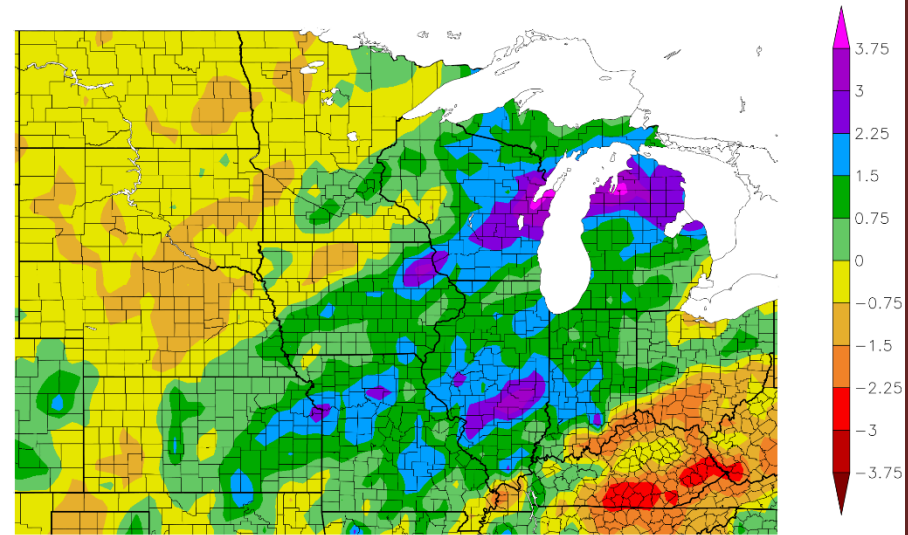
Midwest Climate Hub
U.S. DEPARTMENT OF AGRICULTURE



Precipitation (in)
3/5/2022 – 4/3/2022



Departure from Normal Precipitation (in)
3/5/2022 – 4/3/2022



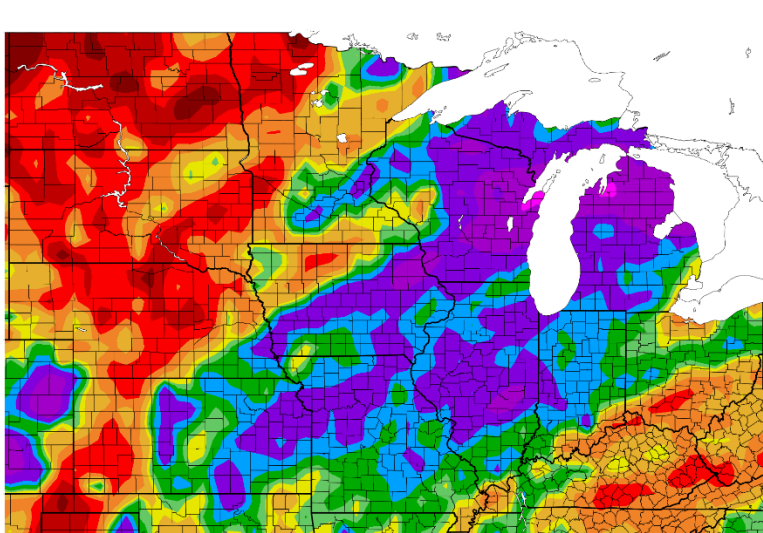
Generated 4/1/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Generated 4/1/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
3/5/2022 – 4/3/2022

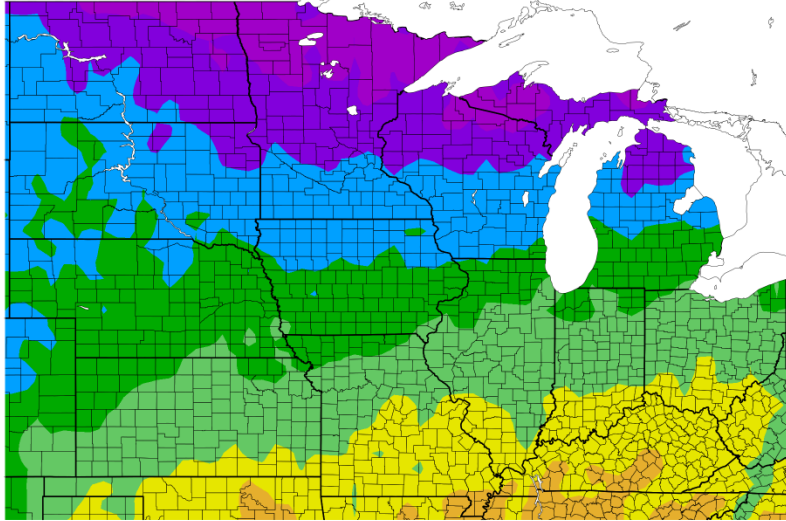


- Wet conditions east with near double average precipitation again.
- Dry west still – less than 1” in many areas.
- Less than 50% average common in plains.
- Some recent drying along Ohio River and into Kentucky.

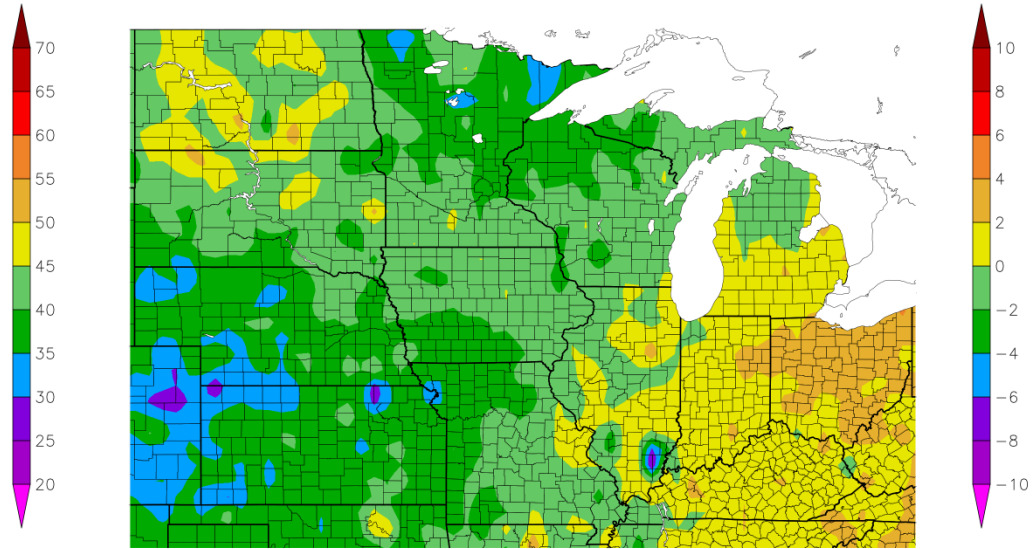
Generated 4/1/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Temperature (F)
3/5/2022 - 4/3/2022



Departure from Normal Temperature (F)
3/5/2022 - 4/3/2022



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

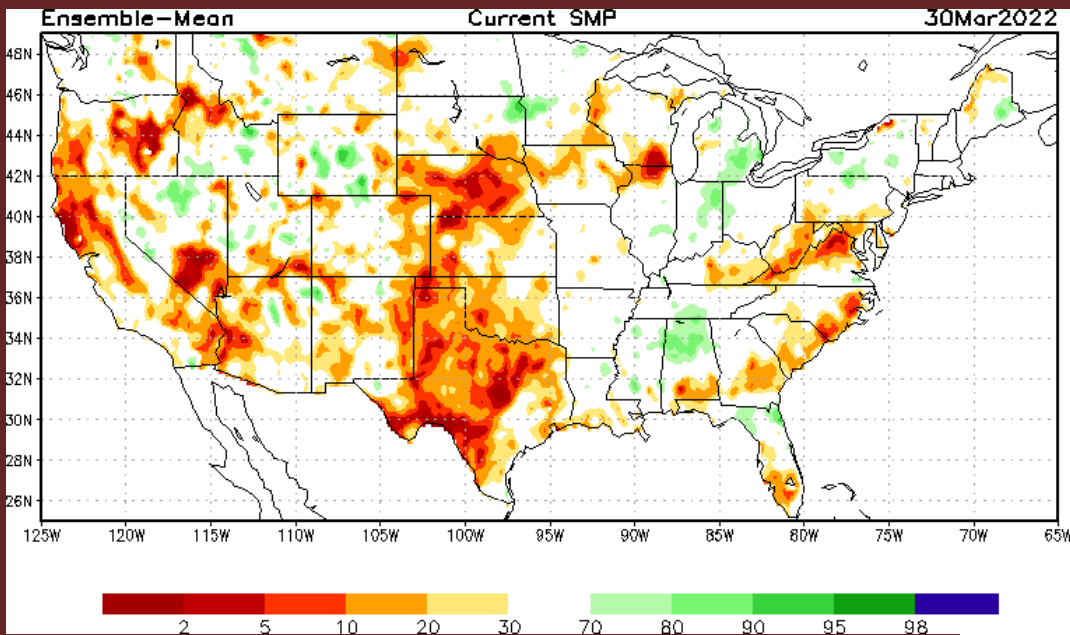
NOAA Regional Climate Centers Generated 4/4/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

- March mostly colder than average west.
- Slightly warmer east.

Soil Moisture

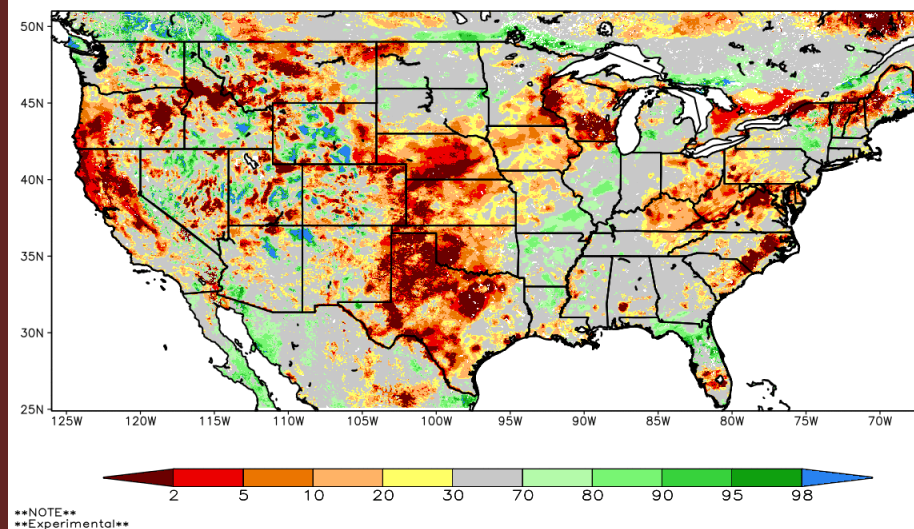
https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp_new.shtml#



- Plains (central/south) soils continue mostly dry with limited precip and warmer temperatures.
- Eastern Corn Belt mostly wetter though some drying in KY.
- Also possibly some wet in eastern Dakotas/Red River Valley.
- Mixed in IA/IL/WI/MN

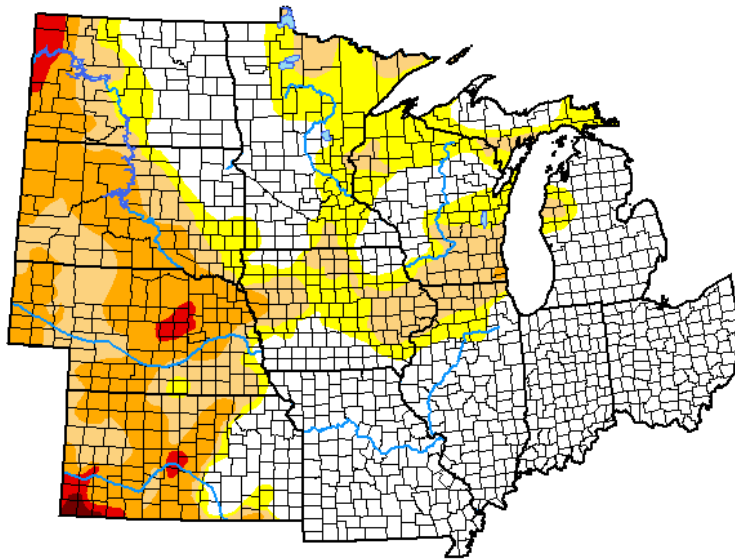
- Both percentile maps
- Upper – whole profile
- Lower – top 100 cm (~40")

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



Drought in the Midwest

U.S. Drought Monitor North Central States



March 29, 2022

(Released Thursday, Mar. 31, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	49.53	50.47	34.77	17.98	1.80	0.20
Last Week <i>03-22-2022</i>	42.07	57.93	36.22	15.48	1.56	0.17
3 Months Ago <i>12-28-2021</i>	42.28	57.72	27.89	7.91	1.16	0.00
Start of Calendar Year <i>01-04-2022</i>	44.51	55.49	27.55	7.10	1.31	0.00
Start of Water Year <i>09-28-2021</i>	39.88	60.12	38.68	24.50	9.27	0.04
One Year Ago <i>03-30-2021</i>	41.62	58.38	28.33	13.38	5.31	0.00

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:

Deborah Bathke
National Drought Mitigation Center

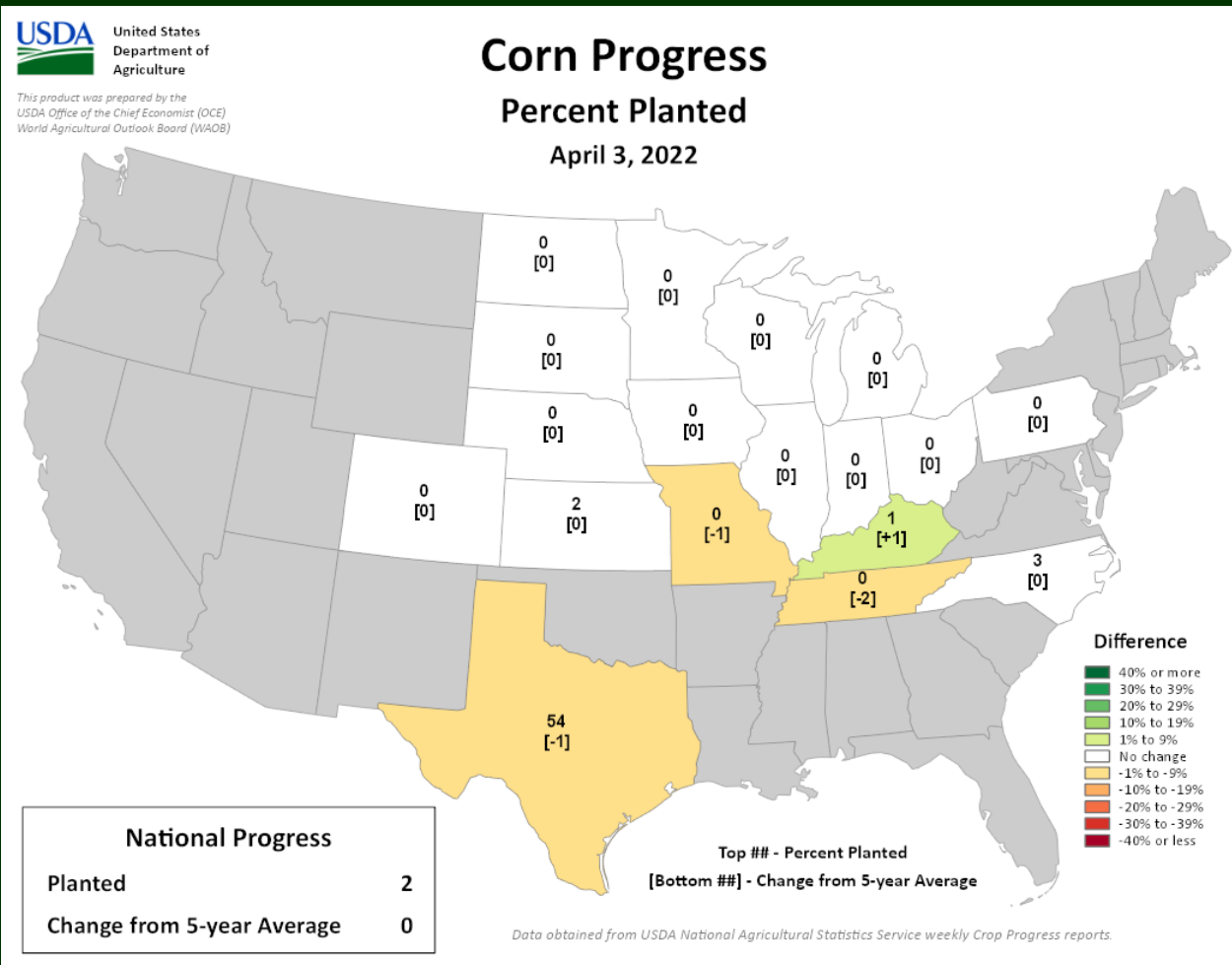


droughtmonitor.unl.edu

- Mostly drought-free eastern Corn Belt.
- Mixed conditions in IA-MN-WI-IL-MI
- Plains mostly some level of drought.

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

Corn Conditions (NASS)



Early data. Corn planting very early (NASS): Planted - Iowa 0% (+/-0%) – national 2% (+/-0%).

Oats Conditions (NASS)

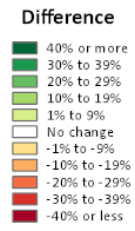
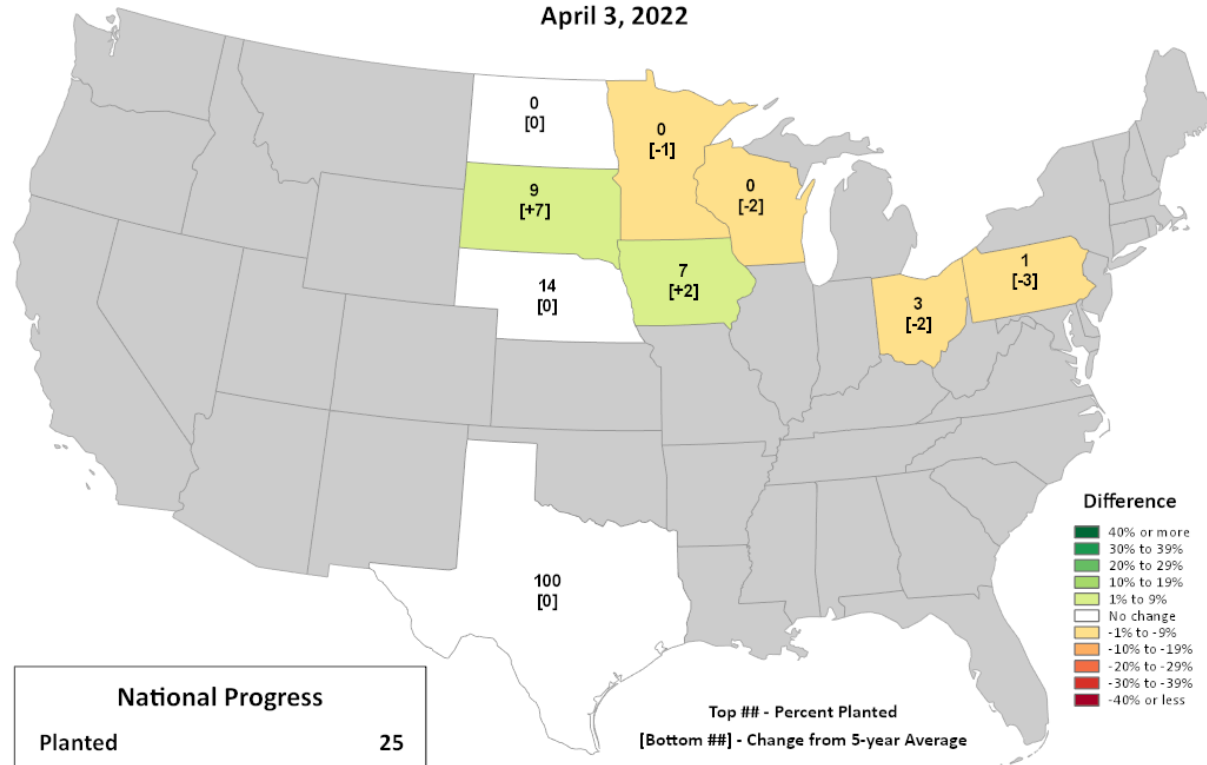


This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Oats Progress

Percent Planted

April 3, 2022



National Progress	
Planted	25
Change from 5-year Average	-1

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

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

Early data. Oat planting very early (NASS): Planted - Iowa 7% (+2%) – national 25% (-1%).

Oats Conditions (NASS)

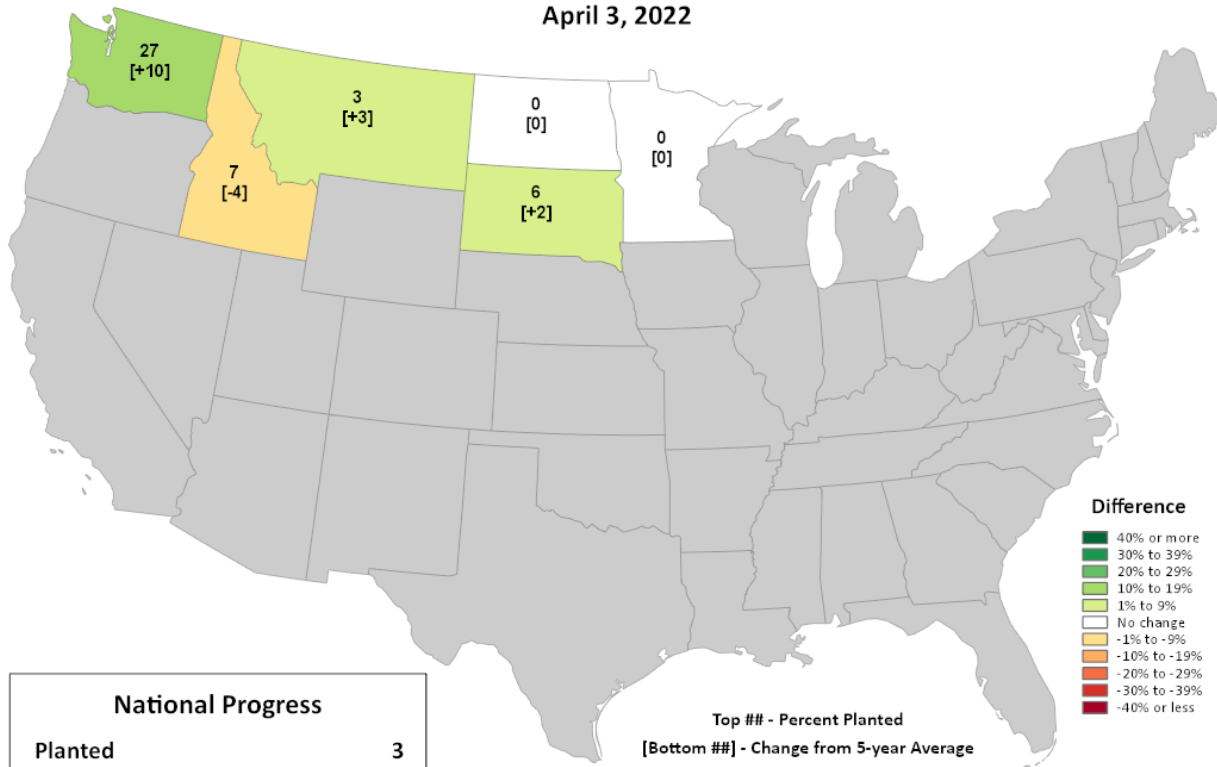


This product was prepared by the
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Spring Wheat Progress

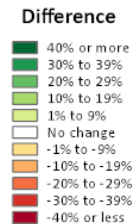
Percent Planted

April 3, 2022



National Progress	
Planted	3
Change from 5-year Average	+1

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



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

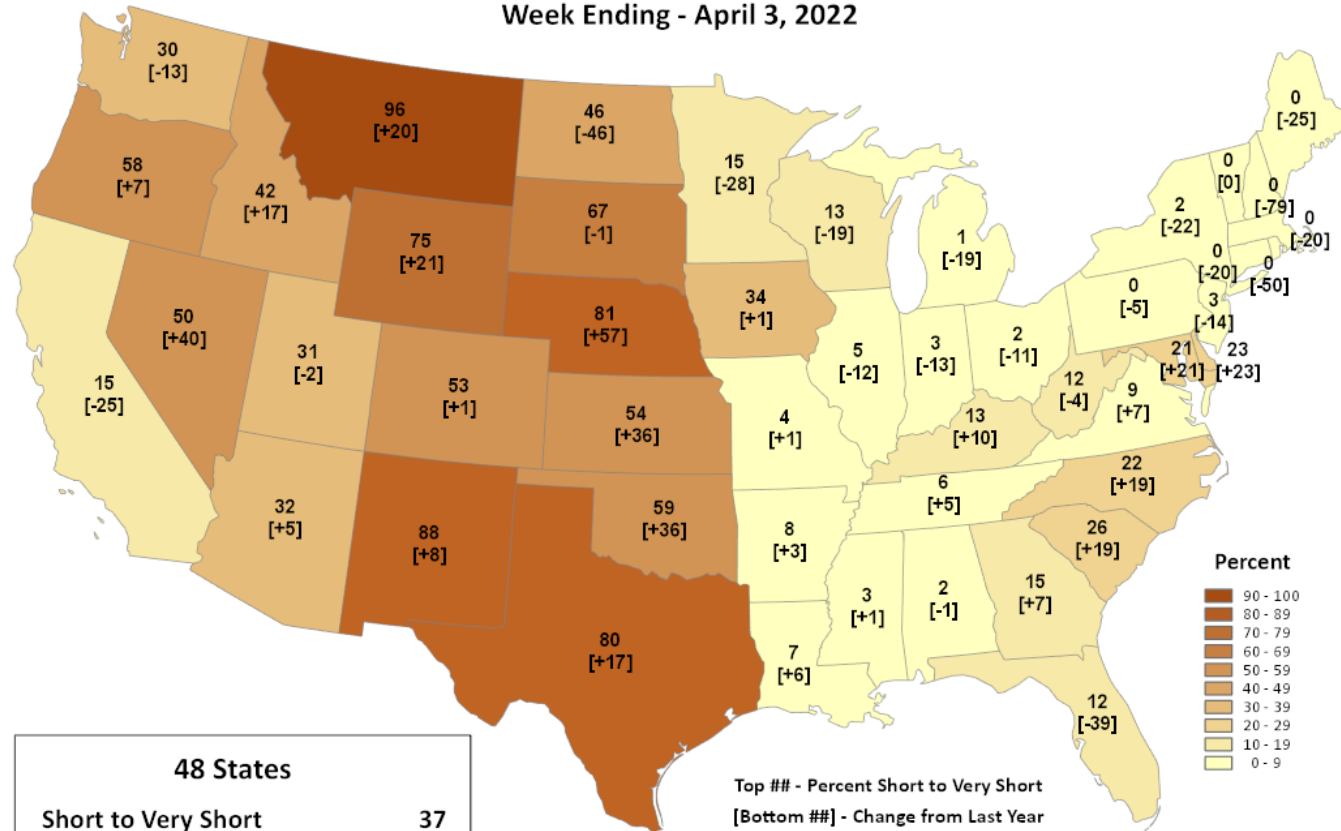
Early data. Spring wheat planting very early (NASS):
Planted – South Dakota 6% (+2%) – national 3% +/- 1%.

Soil Moisture Conditions (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 - April 3, 2022



48 States	
Short to Very Short	37
Change from Last Year	+2

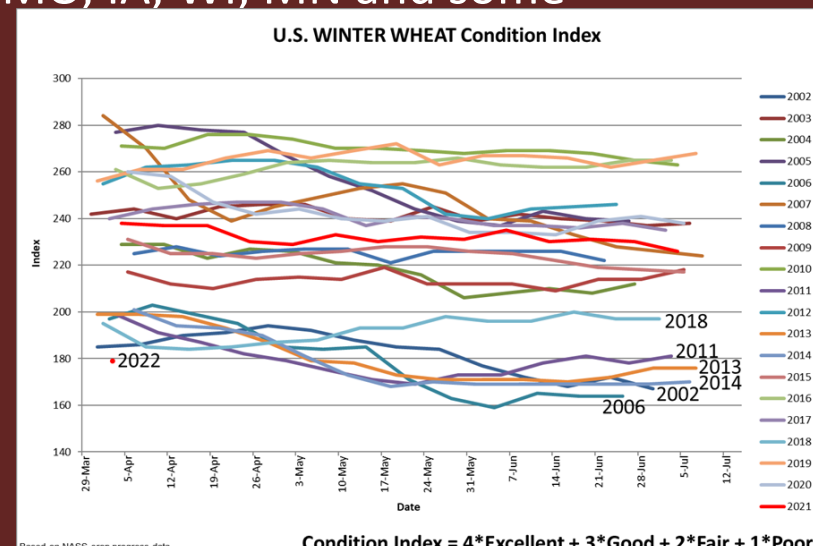
Top ## - Percent Short to Very Short
 [Bottom ##] - Change from Last Year

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

Soil moisture S-VS (NASS): Iowa 34% (+1%) – national 37% (+2%). No surprises on dry areas and limited dryness east.

Assorted AG Issues

- Plains winter wheat continues dry issues – worst initial conditions in 20 year (NASS condition data)
- Probably excess wetness problems in eastern winter wheat
- Lack of precip for rangeland/forage.
- More perennials at risk from a freeze
- Wetness starting to slow progress in eastern states (still early)
- Some soil moisture issues eased (KS, MO, IA, WI, MN and some adjacent areas).



Spring Freeze

SHADED MAPS MENU

CURRENT SEASON FREEZES

GROWING DEGREE DAYS

VEGETATION STATUS

28° FREEZE CLIMATOLOGIES

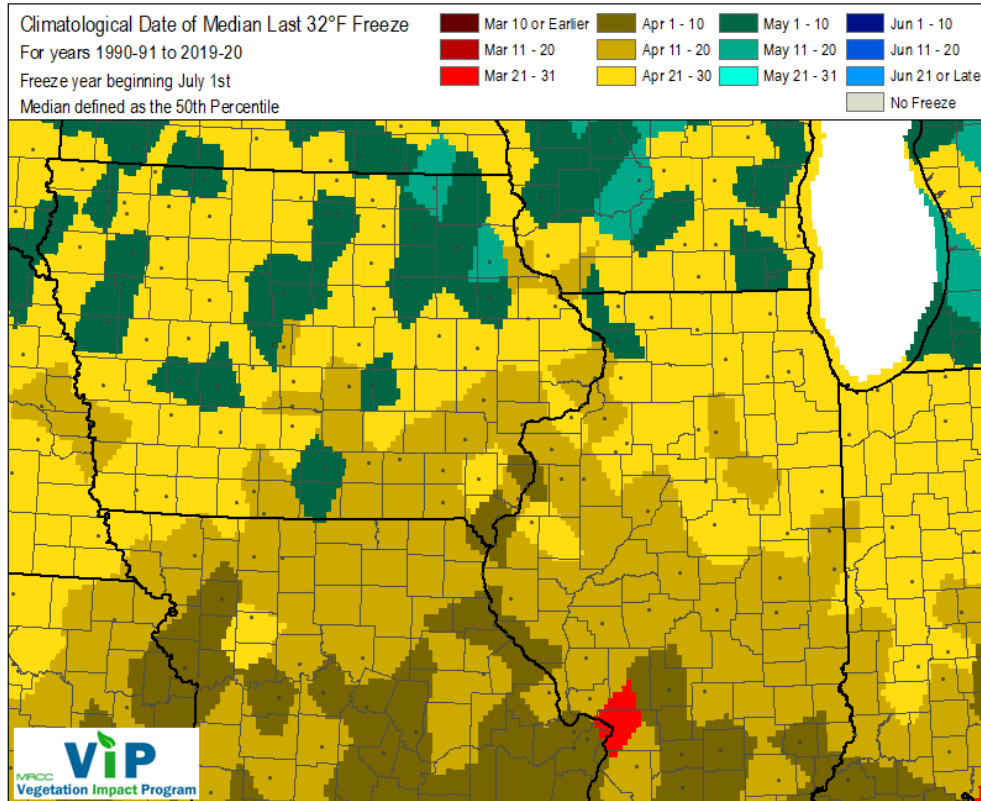
32° FREEZE CLIMATOLOGIES

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

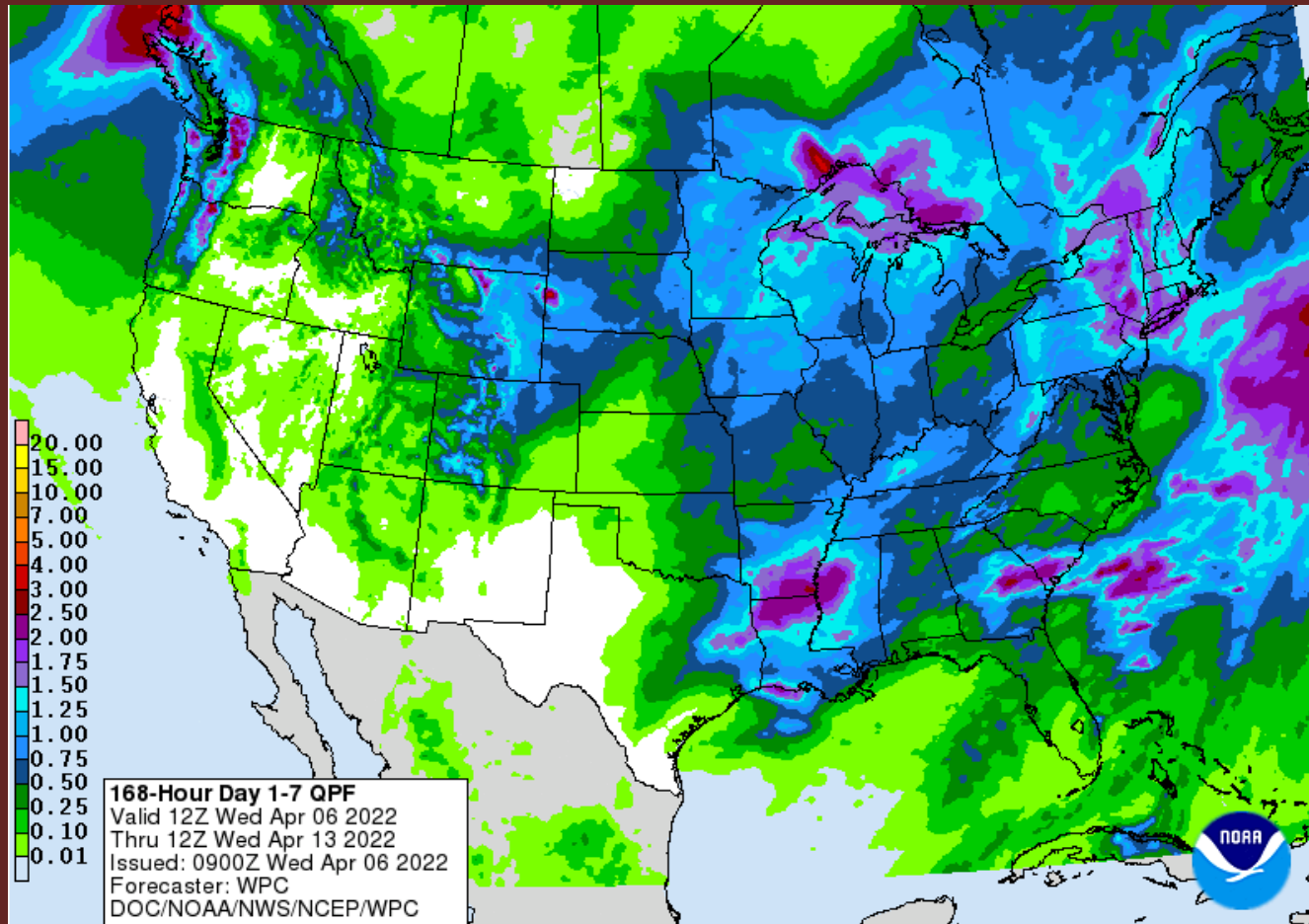


Climatologically whole state is susceptible to freeze (<32 F). Still a week or so out before median last freeze in southern parts of state.

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

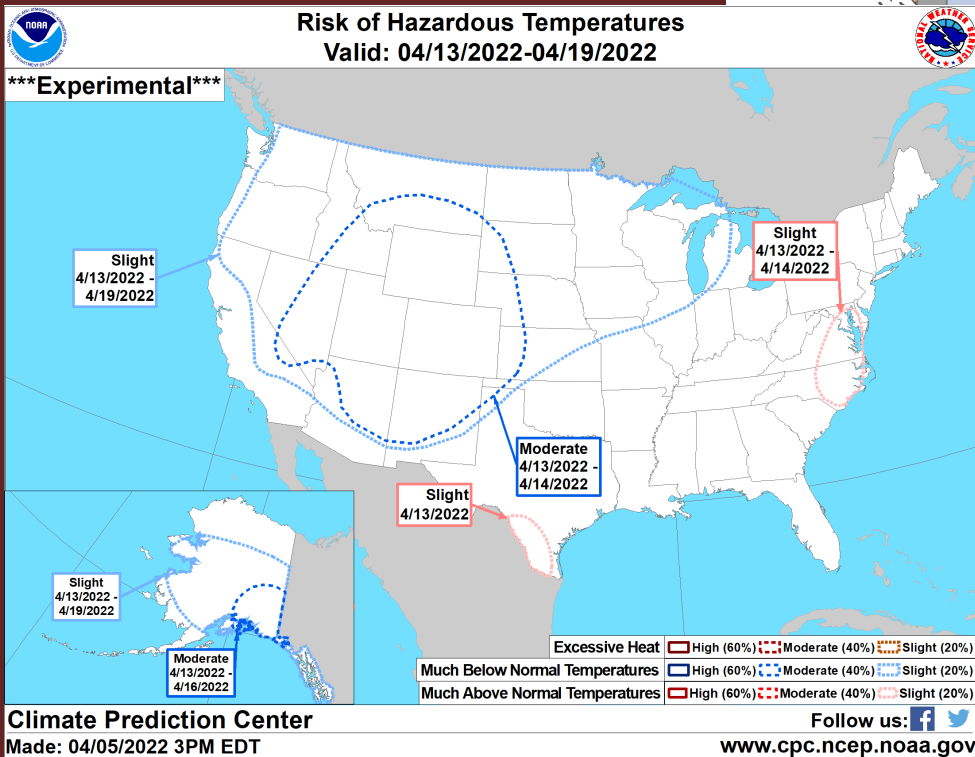
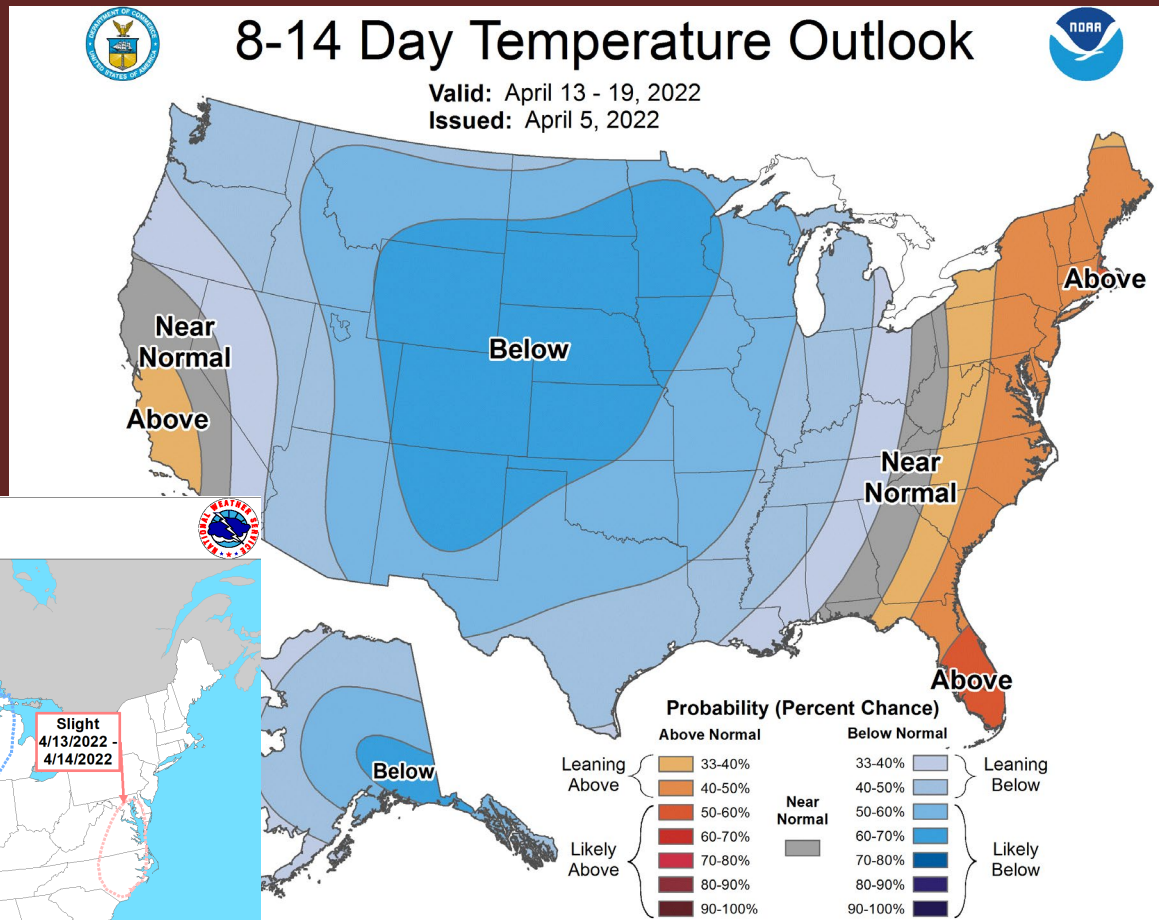


Next 7 days

- Most precipitation east and Great Lakes.
- Less into Plains
- Monitor storm in week 2 period in Plains.

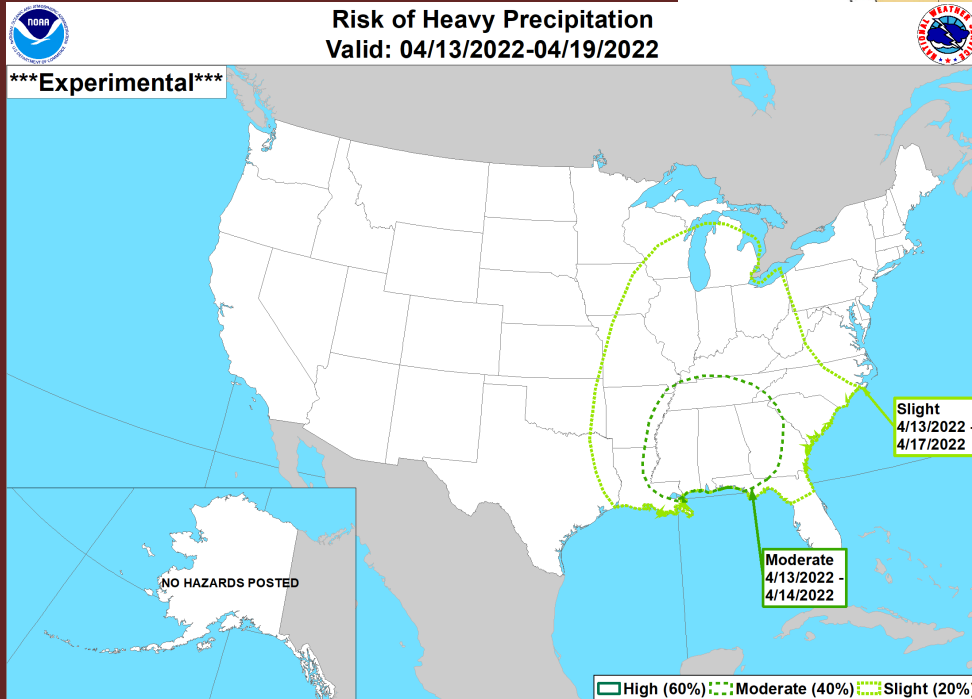
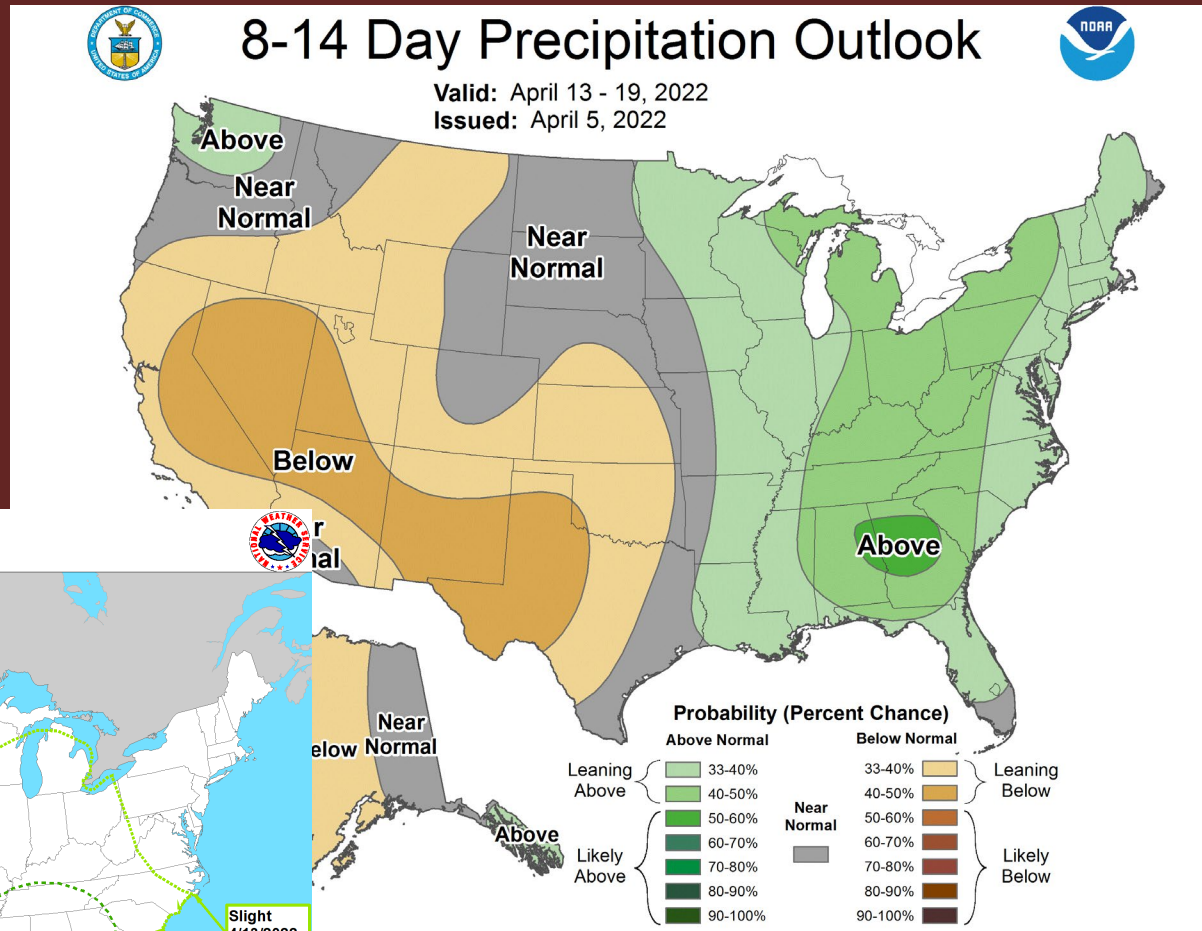
Temperature Outlook

- Warm early next week then colder more likely following.
- Risk of much colder particularly in Plains.
- Have to monitor movement into Midwest.



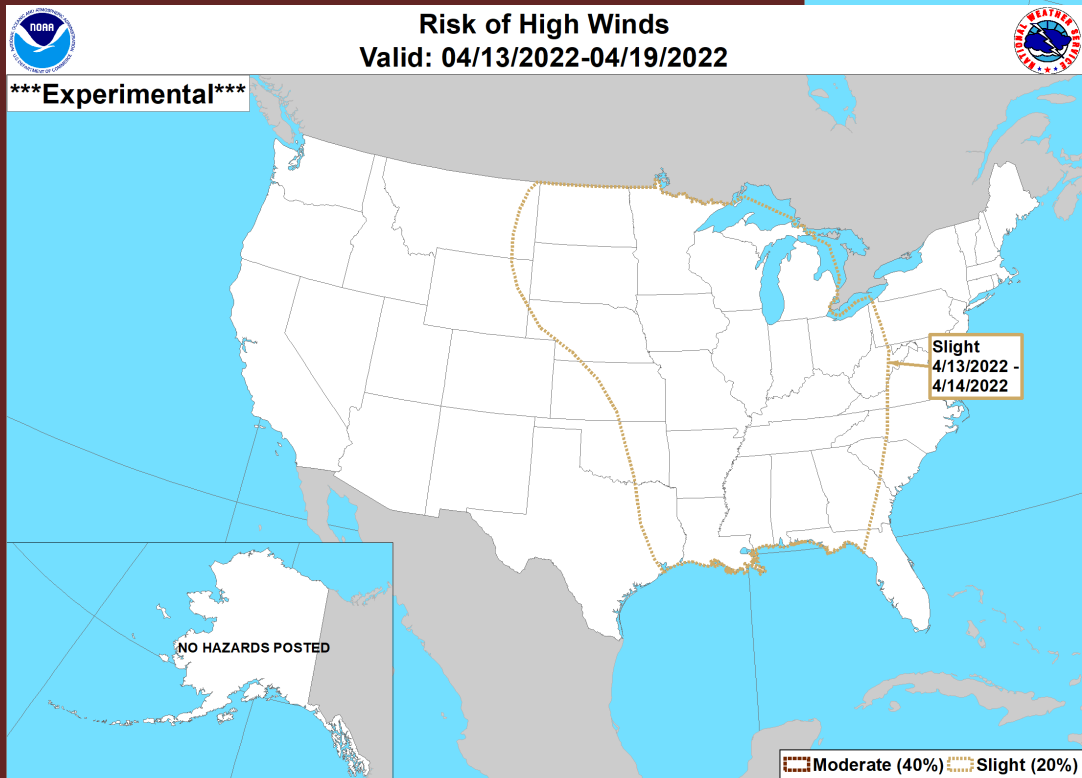
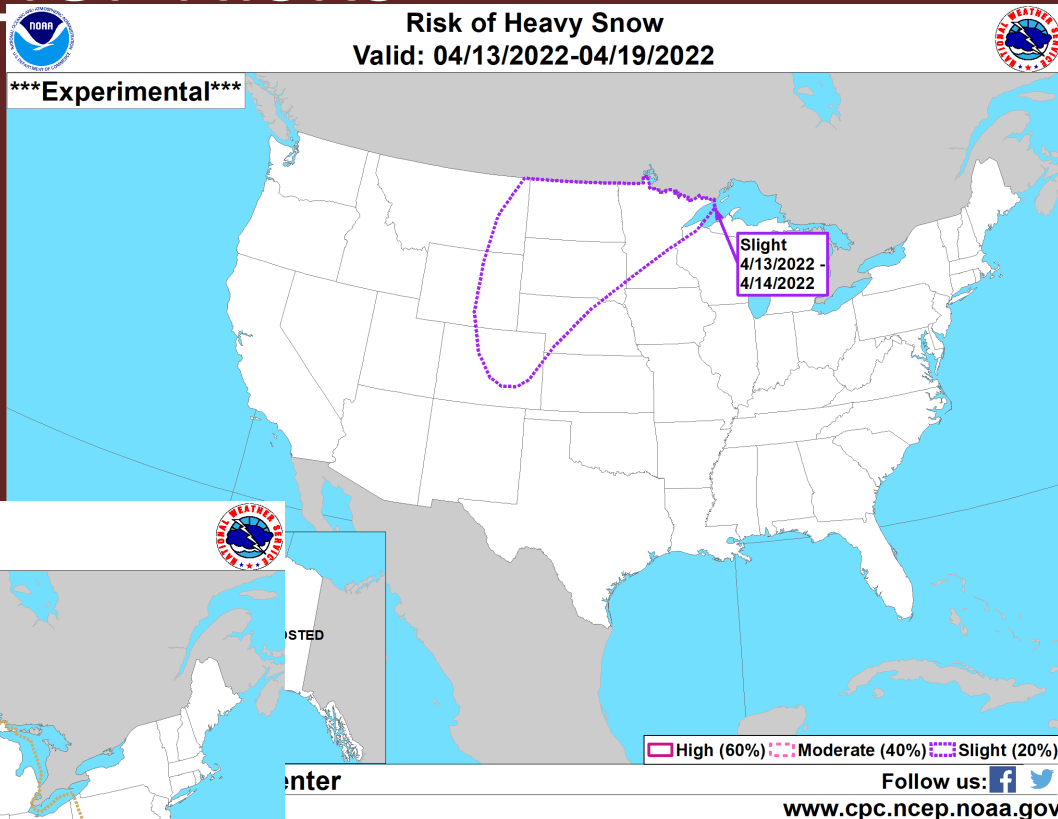
Precipitation Outlook

- Slightly increased precip chances east again.
- Possible drier in Plains.
- Some risk extreme precip south/east in region.

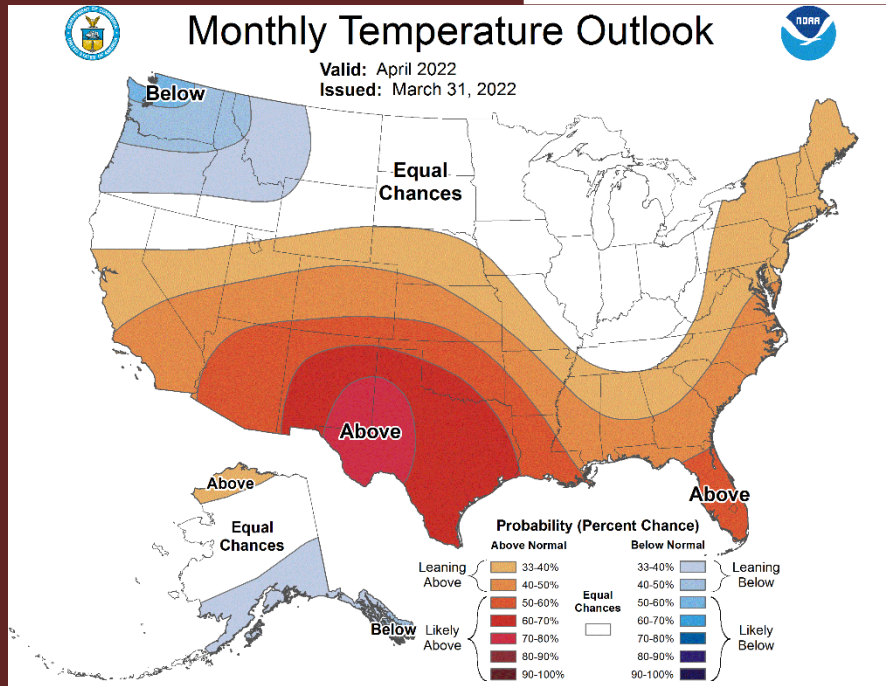


Other Risks

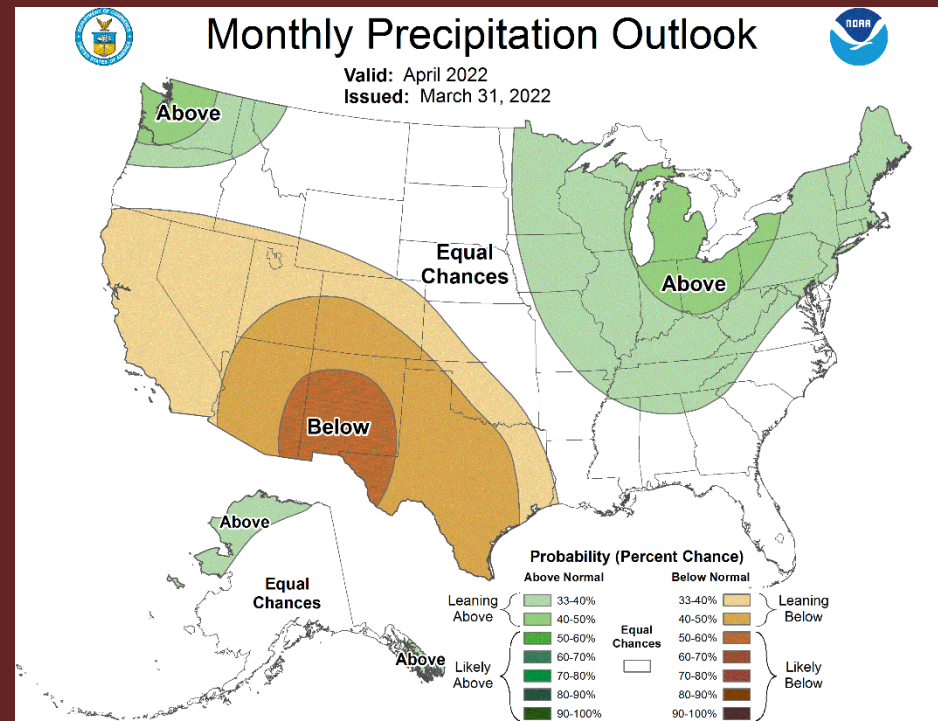
- Slight risk heavy snow Plains
- Slight risk strong winds most everywhere....



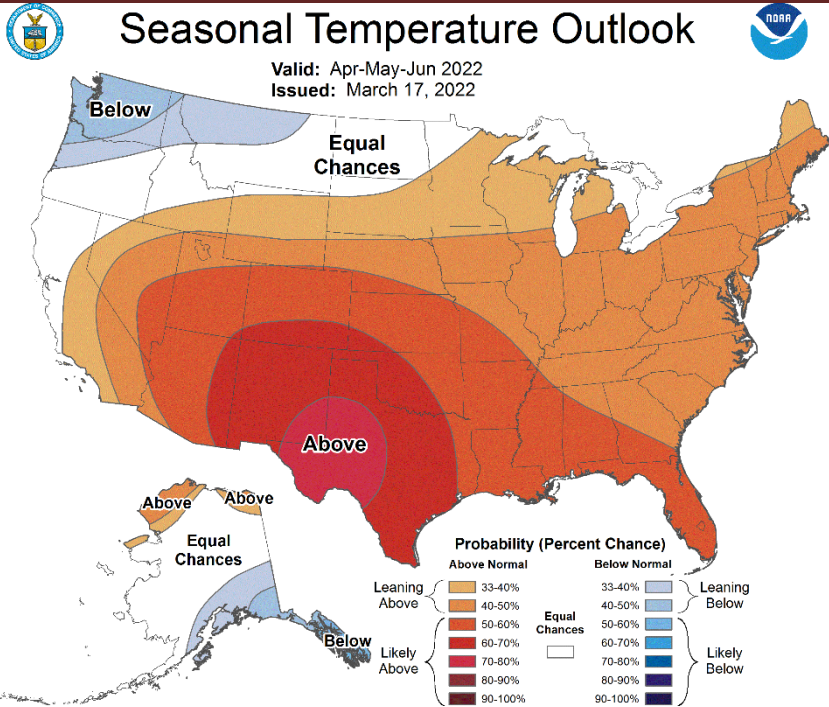
1-Month Outlook



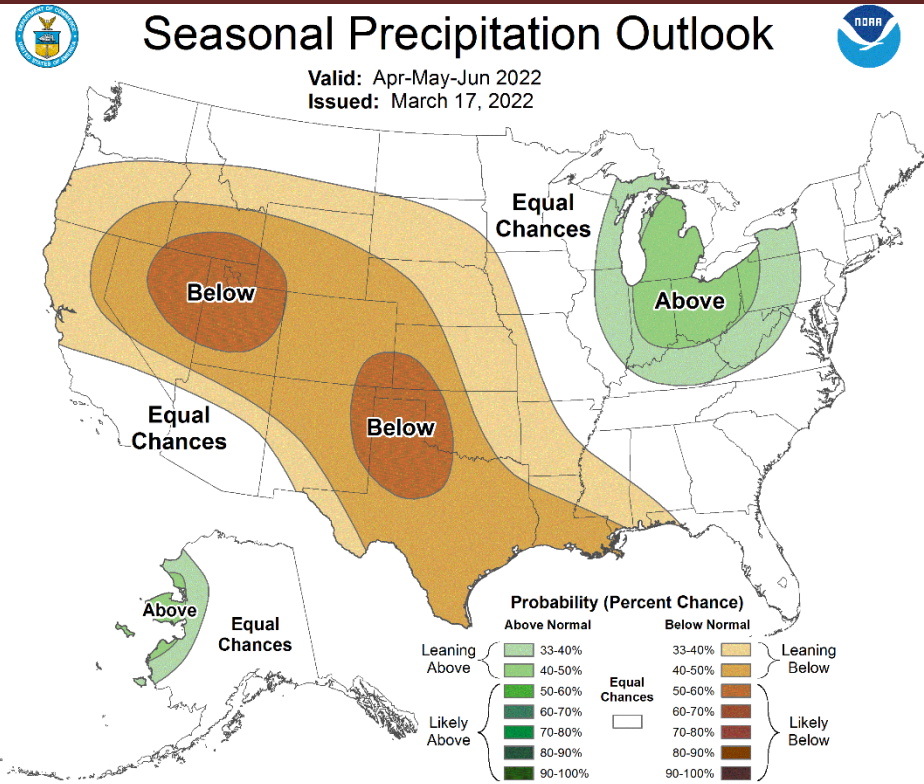
- March outlook
 - Outlooks continue with La Niña look
 - Better chance of wetter Great Lakes/Ohio Valley
 - Warmer chances in central/southern Plains with drought and La Niña conditions



April-June Outlook



- Still La Niña pattern –relatively small changes
- Slight chance warmer whole area – better chance in Plains.
- Slight chance wetter Great Lakes/Ohio Valley (smaller area).
- Drier more likely Plains.

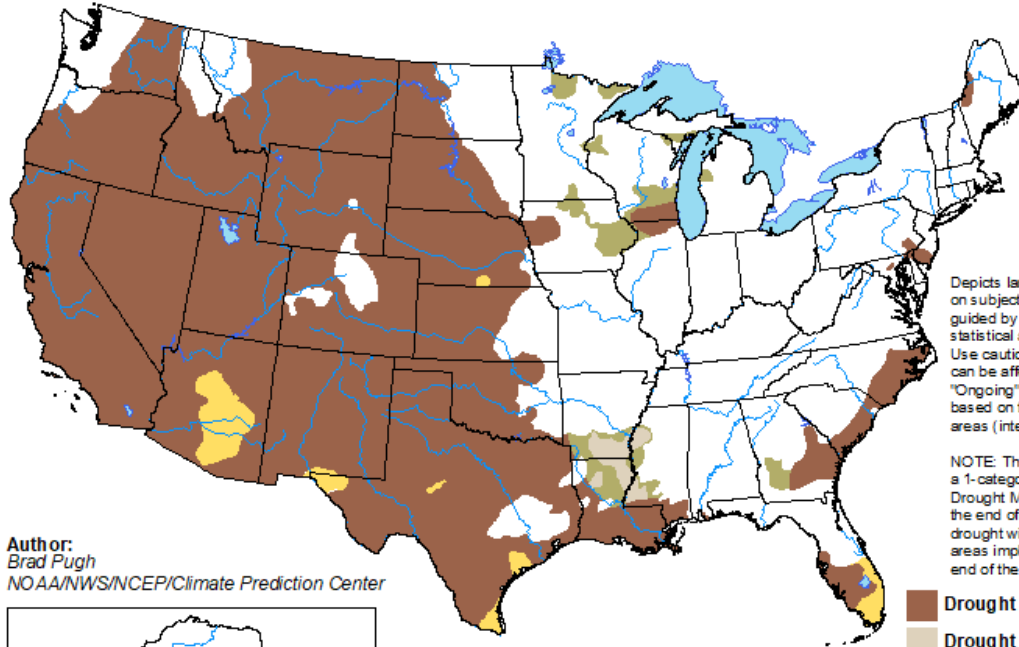


- Concerns about ongoing wetness eastern Corn Belt and planting.
- Increasing drought concerns Plains (central/south)

Drought in the Midwest/Plains





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

Valid for April 2022
Released March 31, 2022



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).

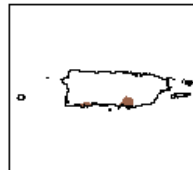
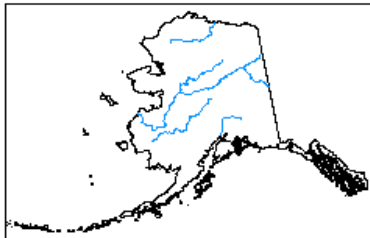
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

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



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

Author:
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NOAA/NWS/NCEP/Climate Prediction Center



- Monthly outlook for April 2022
- Drought continues with little change in the plains
- Some possible improvement MN-WI-IA with near-term precipitation.

Summary

- Wetter conditions east still/Drought west
- Some improvement in between
- La Niña impacting spring outlooks.
 - Could lead to excess wetness east – and possible delays in planting.
 - Drought areas unlikely to improve much
 - Northern Plains still unclear with no strong signals.
- Summer drought issues still in play
 - Plains certainly
 - Some risk further east

Next MAC-T Monthly Call

Next Call

May 4, 2022, 9-10am CT