

Midwest Ag-Focus Climate Outlook

Main Points

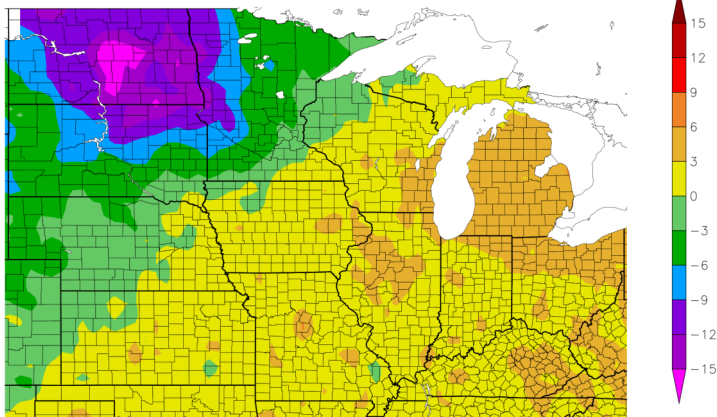


- ◆ Drought conditions are generally unchanged, with some reductions in the North and some increases towards the South.
- ◆ Soils are dry in the eastern and southern areas, but not serious. Northern soils are wetter.
- ◆ Spring planting started in a timely fashion in southern areas but has slowed more recently. There are likely some planting delays in the North.
- ◆ Cooler-than-average temperatures will likely persist into early May. Currently there are no indications of big increases in wet conditions.



Current Conditions

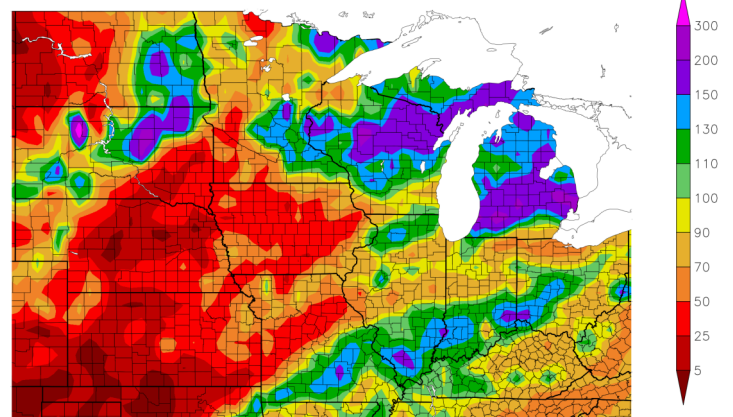
Departure from Normal Temperature (F)
3/21/2023 – 4/19/2023



Generated 4/20/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
3/21/2023 – 4/19/2023



Generated 4/20/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Across the region, a generally uniform temperature pattern has continued, with largely 3 to 6°F warmer than average towards the East (with periodic cold outbreaks) and 12 to 15°F cooler than average northwest. The persistent snow cover in the northern Plains helped to influence the overall cool conditions there. Record warmth in early April covered much of the region with temperatures in the 90s extending into South Dakota, while temperatures over the remaining snow cover remained in the 40s to low 50s. Conversely, sub-freezing temperatures have covered the region in later April.

Precipitation is a mixed bag. The drought area in the Plains persists as precipitation has still been limited, with less than 50% of average in much of that area. Much-wetter-than-average conditions (up to 200% of average) have covered the area around the Great Lakes and part of the Ohio Valley. Less precipitation allowed for early field work and planting progress in the driest areas. Northern areas have been too wet and too snow-covered or cool for much early planting efforts to occur.

Images from High Plains Regional Climate Center (HPRCC), Online Data Services: [ACIS Climate Maps](https://www.climatehubs.usda.gov/hubs/midwest). Generated: 4/26/2023.

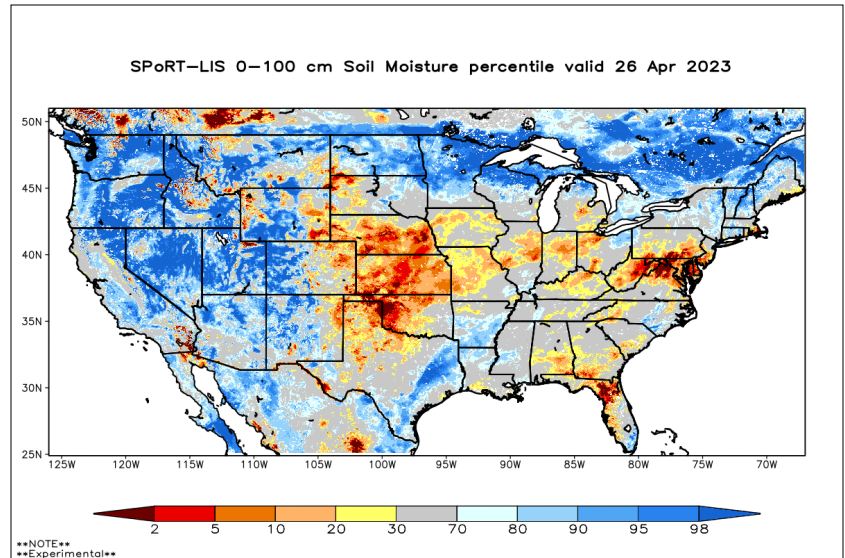


Impacts

Overall drought conditions are largely unchanged, with some smaller improvements in northern areas and slight increases towards the South. Dryness in the East has largely been a positive factor for spring field work, though dryness is becoming notable in some places. Drought towards the West continues to plague winter wheat and soil moisture conditions. Northern areas have seen reduced levels of drought on the U.S. Drought Monitor, but the soil moisture status is still in question in some areas because much of the snow fell on frozen ground. Melted snow has added some soil moisture but may not have helped soil moisture deficits deeper in the soil profile.

Early April warmth warmed soils in southern areas, allowed planting progress throughout the region, and quickly melted northern snow cover. Owing to drier conditions, planting began quickly across the southern Corn Belt, with corn and soybeans getting rapid, early starts; these planting efforts were then slowed by cooler temperatures and rainier conditions.

The early April warmth also quickly melted the significant snowpack leading to overland and river flooding. Flooding at this point is mostly confined to major rivers and chronically flood-prone rivers (e.g. James River in North and South Dakotas and Red River in North Dakota and Minnesota), where ongoing wetness will lead to delays and likely some prevent-plant situations.



U.S. Drought Monitor
North Central States

April 18, 2023
(Released Thursday, Apr. 20, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	55.84	44.16	26.41	16.64	9.14	5.39
Last Week (04-11-2023)	53.48	46.52	27.66	16.88	9.08	5.23
3 Months Ago (01-17-2023)	28.00	72.00	45.10	22.06	11.54	5.13
Start of Calendar Year (01-01-2023)	23.51	76.49	51.22	24.39	11.79	5.25
Start of Water Year (09-01-2022)	32.06	67.94	43.99	21.51	9.92	4.04
One Year Ago (04-19-2022)	56.84	43.16	30.97	19.44	4.72	0.22

Intensity:

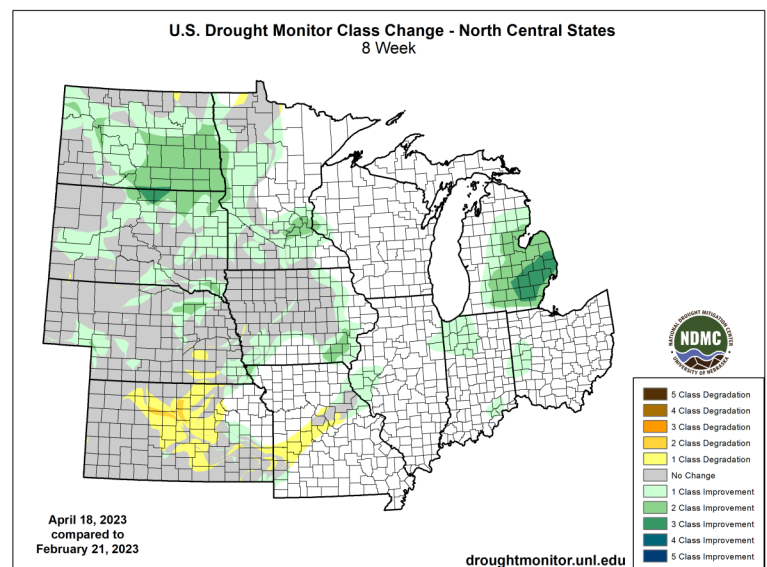
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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>

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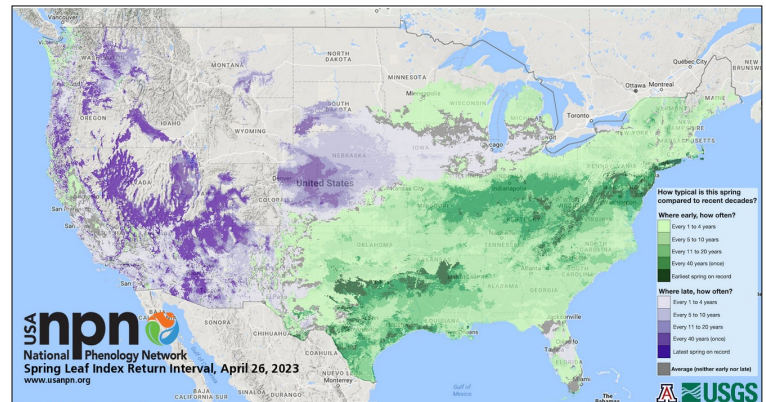
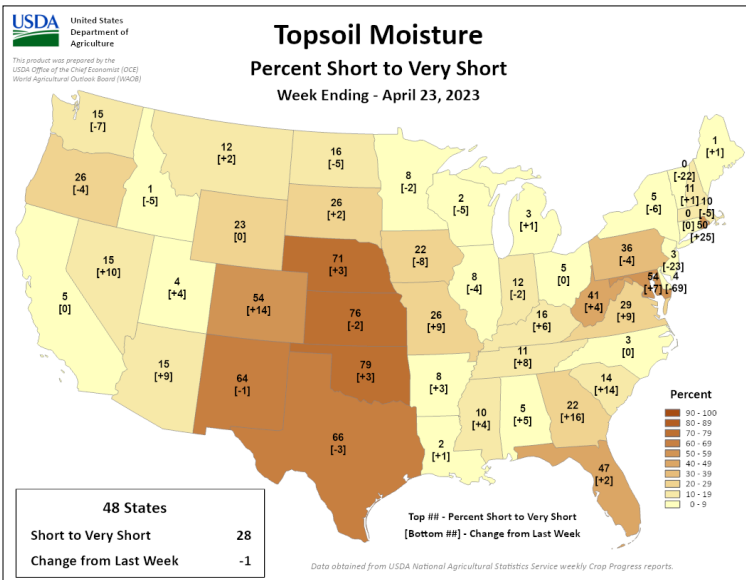
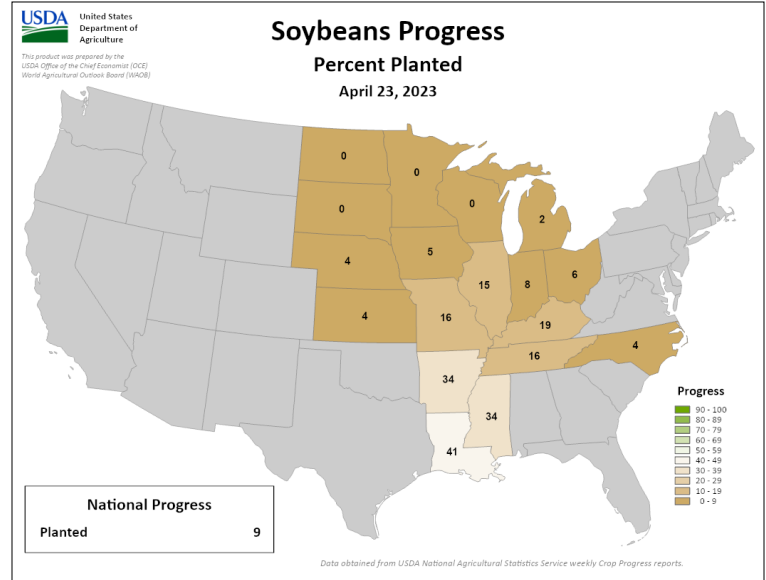
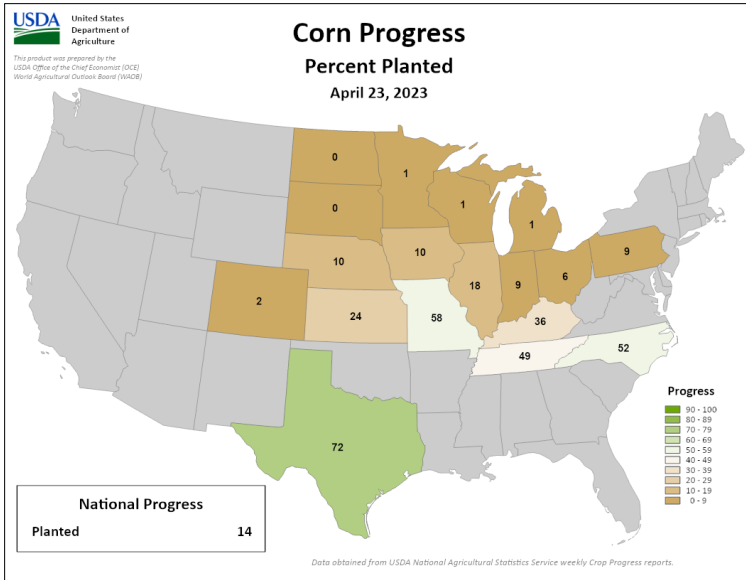
droughtmonitor.unl.edu



Maps Generated by the [National Drought Mitigation Center](https://www.ndmc.gov/) and the [Short-term Prediction Research and Transition Center](https://www.sprtc.org/).

Freezing conditions in late April may have caused some damage to fruit and other perennial crops due to advanced phenology. Late March cold had actually slowed phenology to reduce earlier cold damage, but freezing conditions in later April may have caused some crop loss. Damage to crops is currently being assessed.

Livestock have been hit fairly hard by recent cold in the northern Plains. Extreme cold at the end of March led to calf losses, and the extended cold and snow cover caused stress and loss of gain in other cattle.



Maps Generated by the [USDA National Agricultural Statistics Service](#) and the [National Phenology Network](#)

Outlook



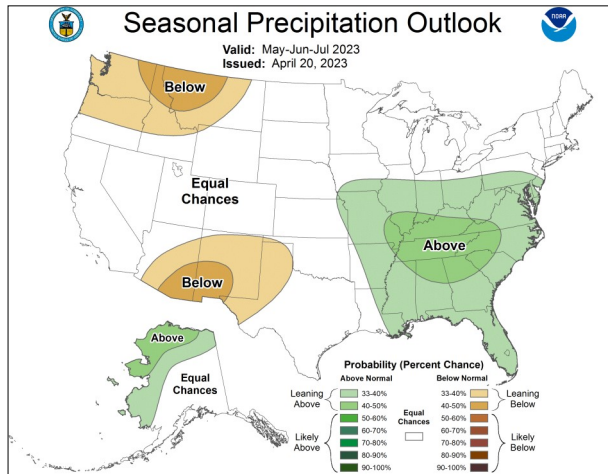
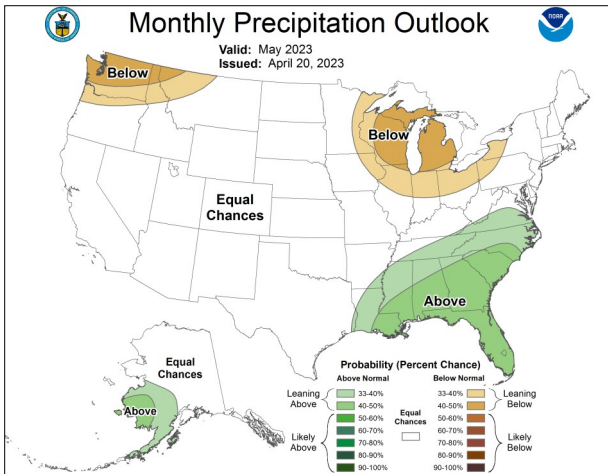
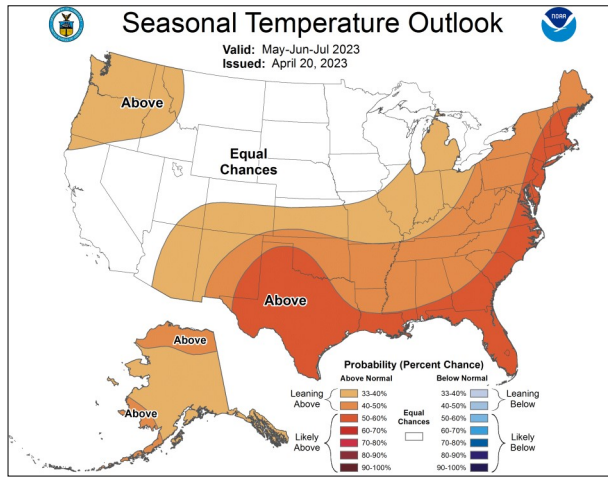
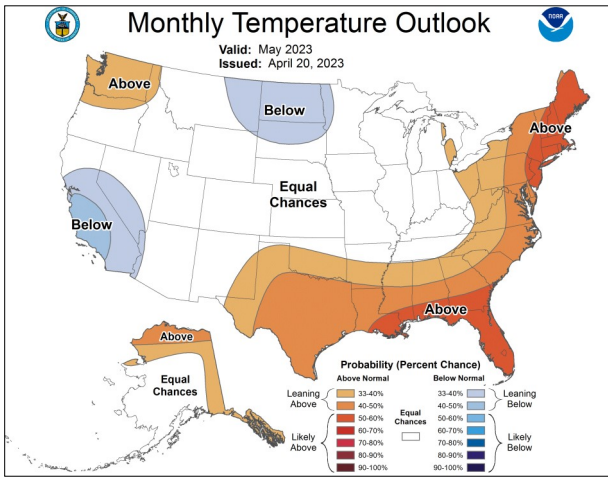
The disappearance of La Niña and the possible quick transition toward El Niño have been the dominant discussion surrounding climate outlooks. Neutral conditions in the El Niño/Southern Oscillation (ENSO) status lead to limited confidence in the longer-range outlooks across the US from the NOAA Climate Prediction Center.

In the nearer-term, somewhat-cooler-than-average conditions are likely to persist across much of the region. Impacts will probably include slower planting and delayed development of planted crops. The slower warm-up of northern soils will be a

notable issue. Currently, outlooks do not indicate an increasingly wet situation along with the coolness. Conditions may actually be a little drier than normal.

In the 30-day outlook for May, coolness in the Dakotas may persist while other areas are less definitive. Drier conditions are slightly more likely for the areas around the Great Lakes.

Looking ahead to the 90-day outlook and the summer season, warmer-than-average conditions are slightly more likely in the East and South with equal chances in the Plains to the central Corn Belt. Wetter conditions are slightly more likely in parts of the eastern Corn Belt. The shift away from La Niña and possibly toward El Niño generally reduces drought risk in the Corn Belt at some level. The persistence of dry soil conditions in the Plains is still a major problem that may not be overcome this season. This is the Plains' wettest time of year climatologically. Missing out on precipitation now adds to the difficulty of recovery.



Outlooks provided by the [Climate Prediction Center](#).

Partners and Contributors



- [United States Department of Agriculture \(USDA\)](#)
- [National Oceanic and Atmospheric Administration \(NOAA\)](#)
- [Climate Prediction Center \(CPC\)](#)
- [National Weather Service \(NWS\)](#)
- [National Center for Environmental Information \(NCEI\)](#)

- [National Drought Mitigation Center \(NDMC\)](#)
- [National Integrated Drought Information System \(NIDIS\)](#)
- [Midwestern Regional Climate Center \(MRCC\)](#)
- [Midwest State Climatologists](#)
- [High Plains Regional Climate Center \(HPRCC\)](#)



For More Information

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For more information, please visit:
<https://www.climatehubs.usda.gov/hubs/midwest>