

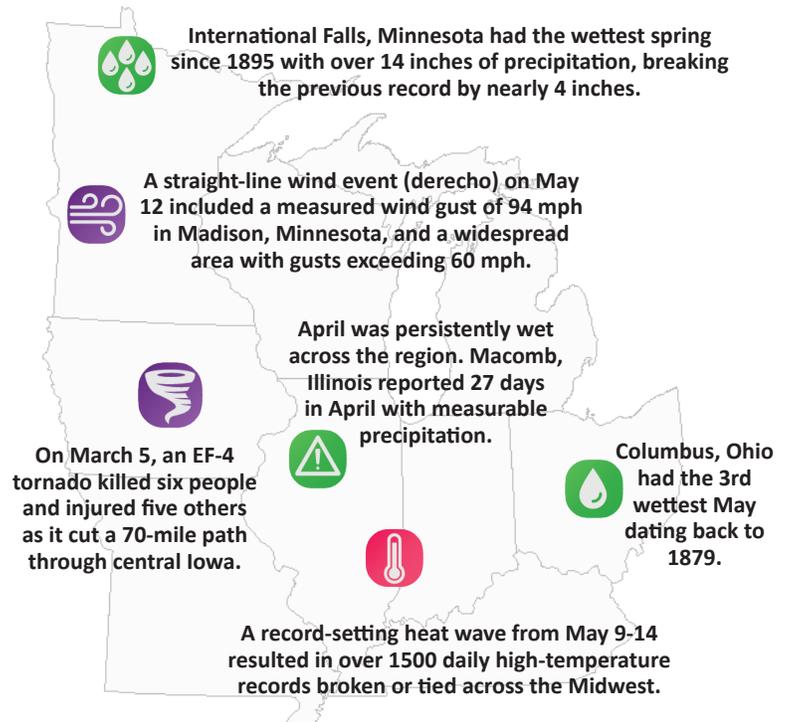


### Midwest Significant Events – March - May 2022

An early-season severe weather outbreak on March 5 affected the central Midwest, with over 60 reported tornadoes, large hail, and widespread damaging winds. As this system traversed the region, record warmth was reported from Missouri to Ohio.

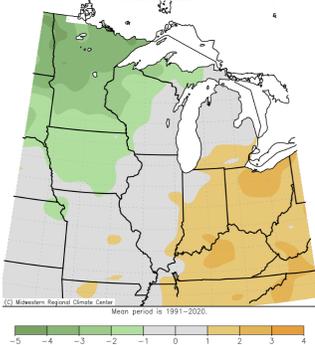
Above-normal winter snowpack, delayed ice-out, and repeated heavy precipitation events in late spring led to historic flooding across northern Minnesota, a region that was entrenched in extreme drought less than a year ago.

Following a cool and cloudy April, temperatures became very warm and humid in mid-May. Many places had the first 90°F day of the year, about a month earlier than average, with some areas reaching the upper 90s. Columbia, Missouri had six consecutive days with record heat (dating back to 1890). Dew point temperatures in the upper 70s and lower 80s pushed heat index values over 100°F in portions of Iowa, Illinois, and Wisconsin.



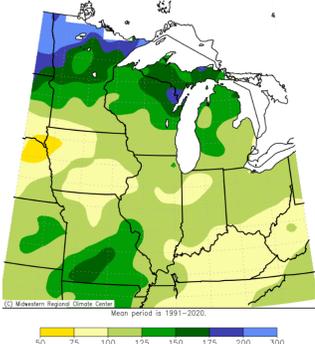
### Regional Climate Overview – March - May 2022

#### Spring Temperature Departure from Normal (°F)



Spring temperatures averaged 1-4°F below normal in the northwest and 1-3°F above normal in the southeast, with near-normal conditions in between. April was persistently cool, averaging 3.6°F below normal for the region. May saw widespread warmth with temperatures up to 6°F above normal in the east.

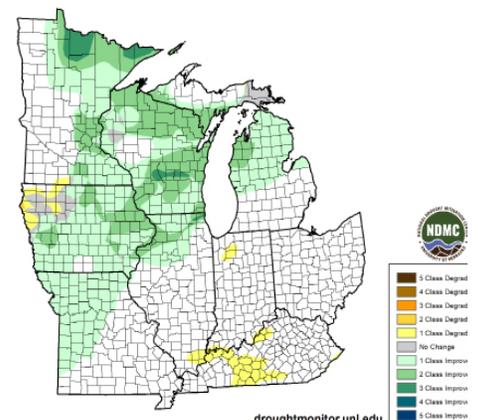
#### Spring Precipitation % of Normal



Spring precipitation was near- to above-normal across the Midwest, with most areas at 75-125 percent of normal precipitation. The upper Midwest and southern Missouri were the wettest locations with over 150 percent of normal precipitation. Ample spring precipitation reduced the total area in drought from 19 percent on March 1 down to less than 1 percent on May 31. Only a small portion of western Iowa remained in drought.

While spring is known to be breezy, this year was notably windy across the Midwest, especially in April. Average April winds were 2-3 miles per hour above normal in the western half of the region. Eight weather stations in Iowa had windspeeds sustained over 20 mph for 300 hours (42 percent of the month). Frequent high peak wind gusts were also notable. Minneapolis, Minnesota reported 22 days in April with gusts over 35 mph, the most since 1973 by 8 days. St. Louis, Missouri had 15 days in April with gusts over 35 mph, the most since records started in 1973. Chicago and Indianapolis both had peak wind gusts above 35 mph on about half the days in April.

#### Midwest Drought Change from March 1 to May 31



## Regional Impacts – March - May 2022

### Rapid Warm-up

Plant development was slowed due to cool and wet conditions in early spring. This delay was welcomed by specialty crop growers as it greatly reduced the risk of freeze injury for tree fruit. [Phenology](#) progressed rapidly as temperatures spiked in early May, with plants moving from bud to leaf-out within days. Specialty crop growers reported strong blooms across the Midwest, even requiring chemical thinning to optimize the



Damaged grain bin in Benson, MN  
(credit: Reed Anfinson)

crop. Row crop planting progressed quickly after early delays, without much concern for yield impacts. Unfortunately, the May heat wave resulted in [three fatalities](#) in Chicago. There were also reports of fish kills in some Indiana lakes.

### Severe Weather

A tornado outbreak on March 5 that affected the central Midwest resulted in [seven fatalities](#) in Iowa.

A straight-line wind event (derecho) on May 12 traversed the north-central US, resulting in [228 storm reports](#) in Iowa and Minnesota. These storms resulted in one fatality in Minnesota and [extensive damage](#) to buildings, vehicles, and trees.

Significant storms on May 30 again struck Minnesota, affecting nearly the entire state. About [100 homes](#) were damaged or destroyed in Forada. Elsewhere, [high winds destroyed](#) grain bins, boats, trees, and power lines.



Flooding on Rainy Lake, northern MN  
(credit: Rachel Dault Hudson)

### Flooding

Record high May water levels were persistent on Rainy Lake in northern Minnesota. Flood waters [damaged homes and businesses](#) and resulted in numerous [closures](#) of roads, trails, and recreational areas. In northeast Minnesota, [historic raging waterfalls](#) caused substantial damage to bridges, docks, and roads with many paths and overlooks closed. Flooding across northern Minnesota is expected to [continue into summer](#).

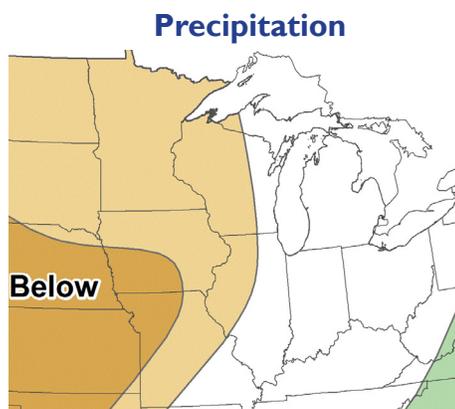
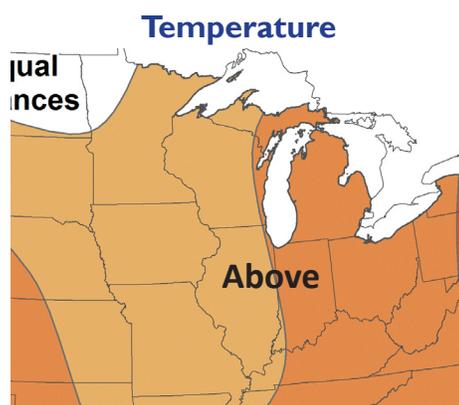
## Regional Outlook – July - September 2022

NOAA forecasters [are predicting](#) an increased chance of above-normal temperatures across nearly the entire Midwest, with equal chances of above-, below-, or near-normal temperatures in northwest Minnesota.

The precipitation outlook favors increased chances of below-normal precipitation in the western Midwest, with the highest chances in southwest Iowa and northwest Missouri. Equal chances of above-, below-, or near-normal precipitation are projected in the eastern Midwest, including southeast Missouri.

The forecasted hot and dry conditions may lead to the rapid intensification of drought in portions of the Midwest in early summer. Areas of concern, which are currently abnormally dry, include Illinois, Indiana, Kentucky, and Missouri. Portions of western Iowa remain in moderate to severe drought and the potential for rapidly deteriorating conditions exists.

Weak [La Niña](#) conditions remain present in the equatorial Pacific and are expected to persist through summer, and beyond.



## Midwest Region Partners

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