

# Dry Weather Causing Drought Conditions to Develop

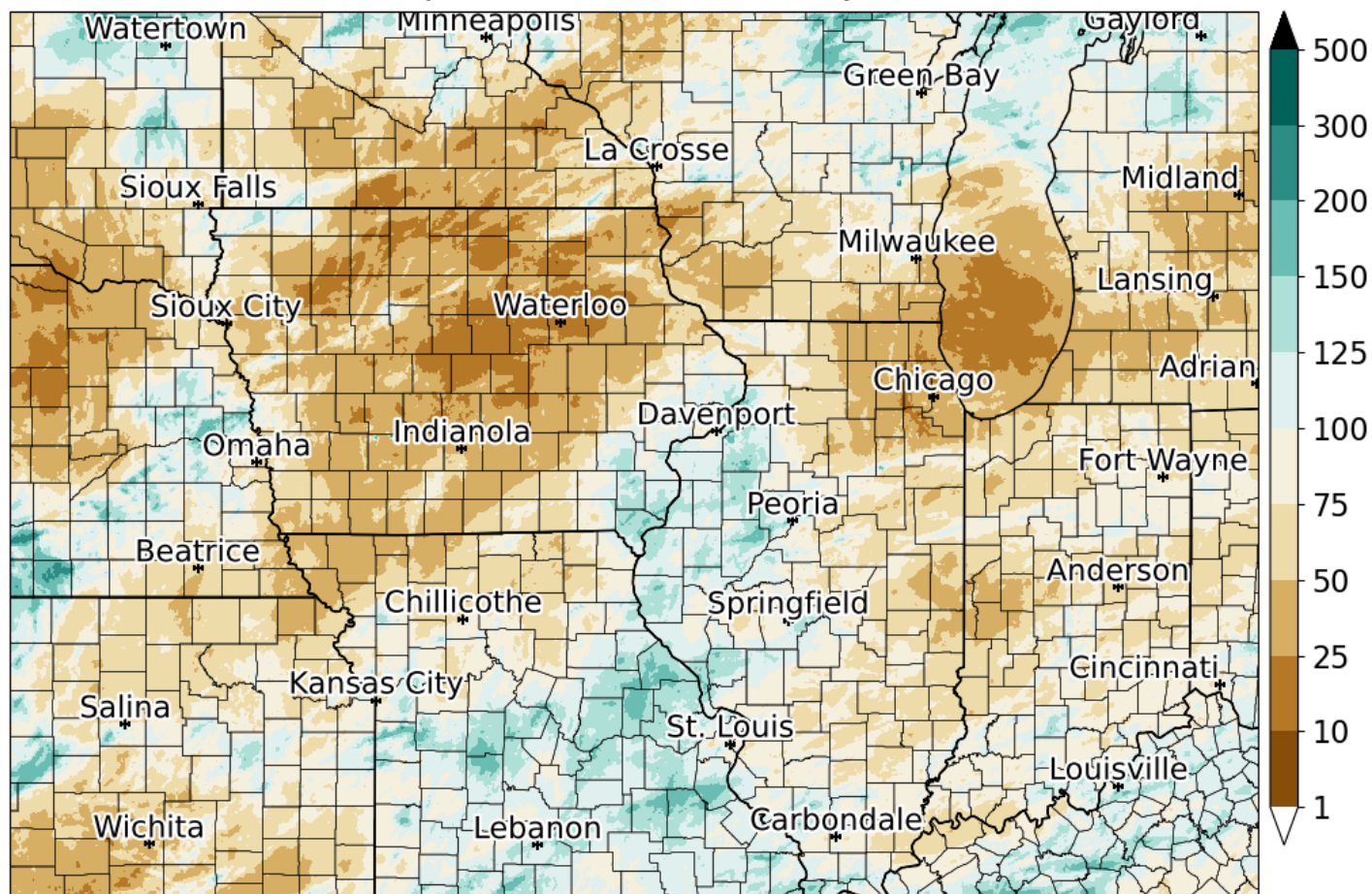
Recent dry conditions across northeast Illinois and northwest Indiana have caused a significant drop in river levels and soil moisture. Drought conditions have developed and worsened across the area. The most significant impacts at this time include the near surface soil moisture and the smaller rivers and streams in the Chicago metro area. Although water levels on larger rivers (such as the Fox, Kankakee, and Illinois) are not as significantly below average, they will continue to fall without additional precipitation.

Condition monitoring reports received by the National Drought Mitigation Center and by CoCoRaHS suggest that impacts to crops, trees, and landscaping have recently begun to increase.



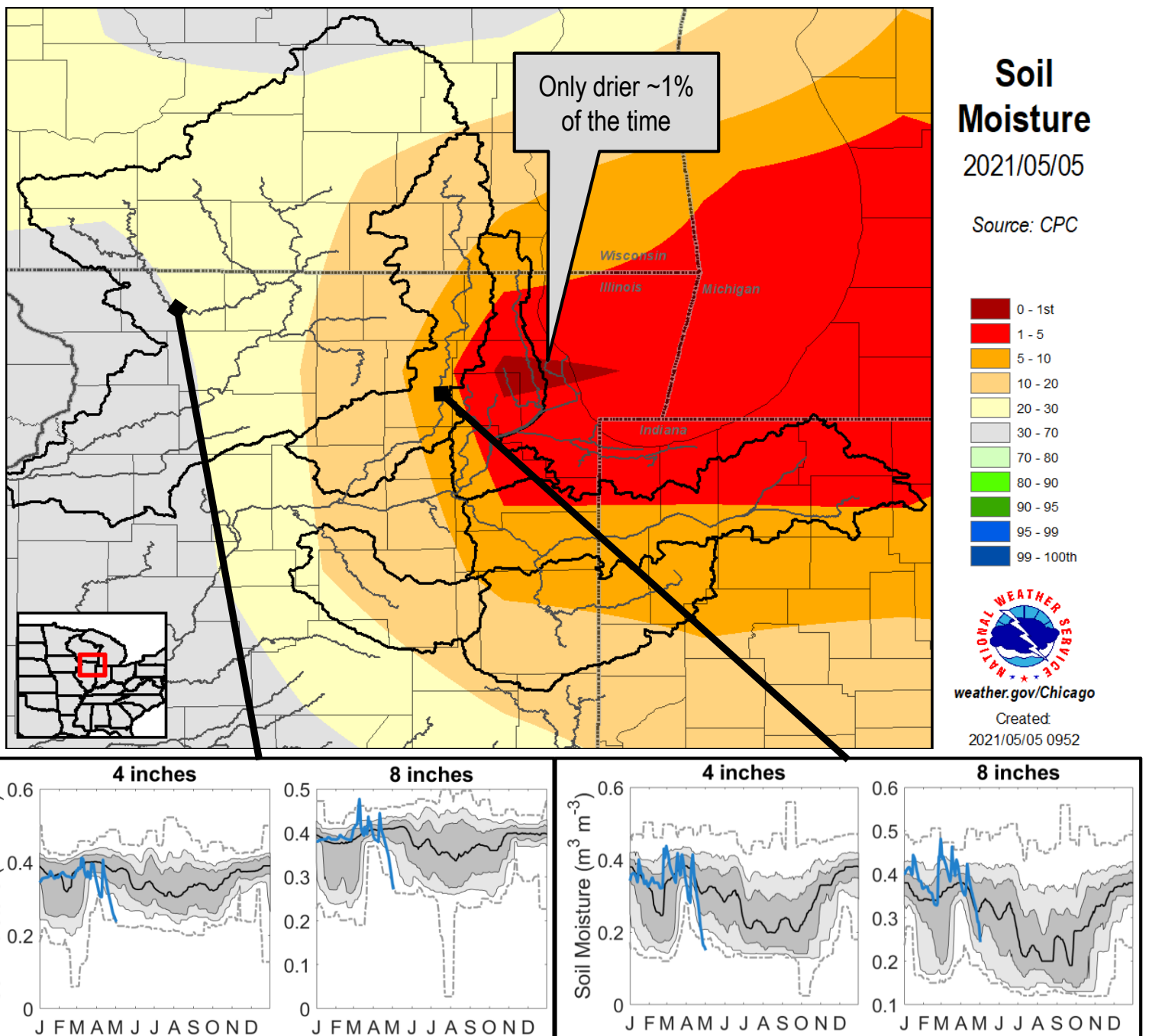
MRMS Q3:: 1 Apr to 4 May 2021 (inclusive) Precip Percent of Average [%]

Data from NOAA MRMS Project, MultiSensorPass2 and RadarOnly



## Soil Moisture

Soil moisture values in northern Illinois, especially areas closer to the Chicago metro, have been dropping quickly over the last few weeks. Measured soil moisture in the 8 inches nearest the surface at Freeport and St. Charles, for example, has dropped from near average values in early April to very rare low levels by late May. South of the Chicago metro area, precipitation has kept near surface soil moisture slightly higher, but deeper soil moisture is much lower due to longer-term dry conditions.

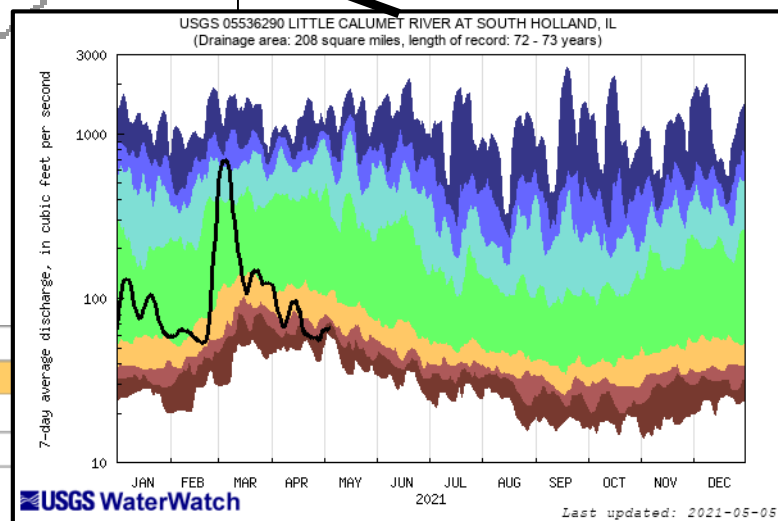
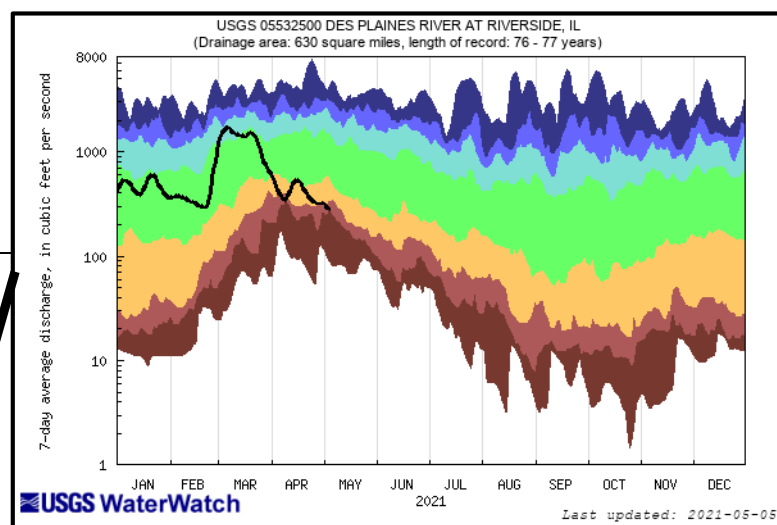
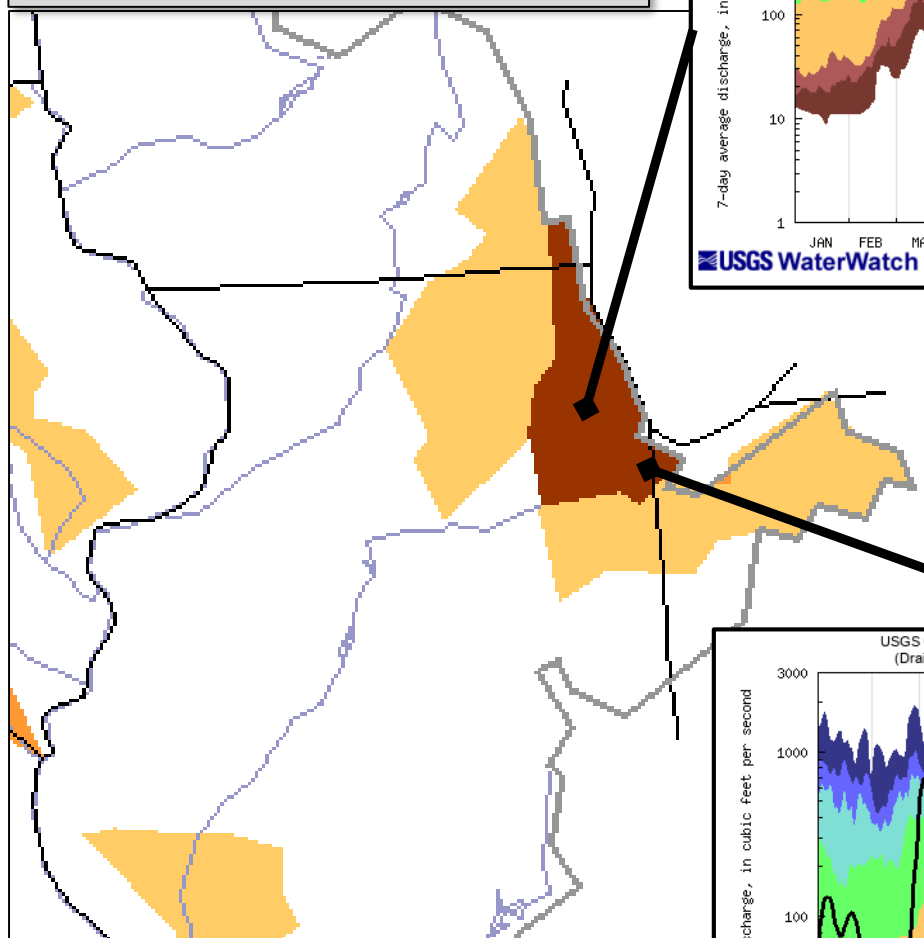


Graph credit: Trent Ford, Illinois State Climatologist, and ILSWS WARM Network

## Water Levels

Water levels in northeast Illinois have dropped since early spring with several locations near the Chicago metro area significantly below average. Stream gauges with long periods of record (>50 years) are indicating streamflow values ranging from below average to much below average, indicating at least a moderate hydrologic drought. Numerous stream gauges with short periods of record in the Chicago metro are near their lowest recorded streamflow values for this time of year.

### 14-day River Streamflow Compared to Past Streamflow (Early May)

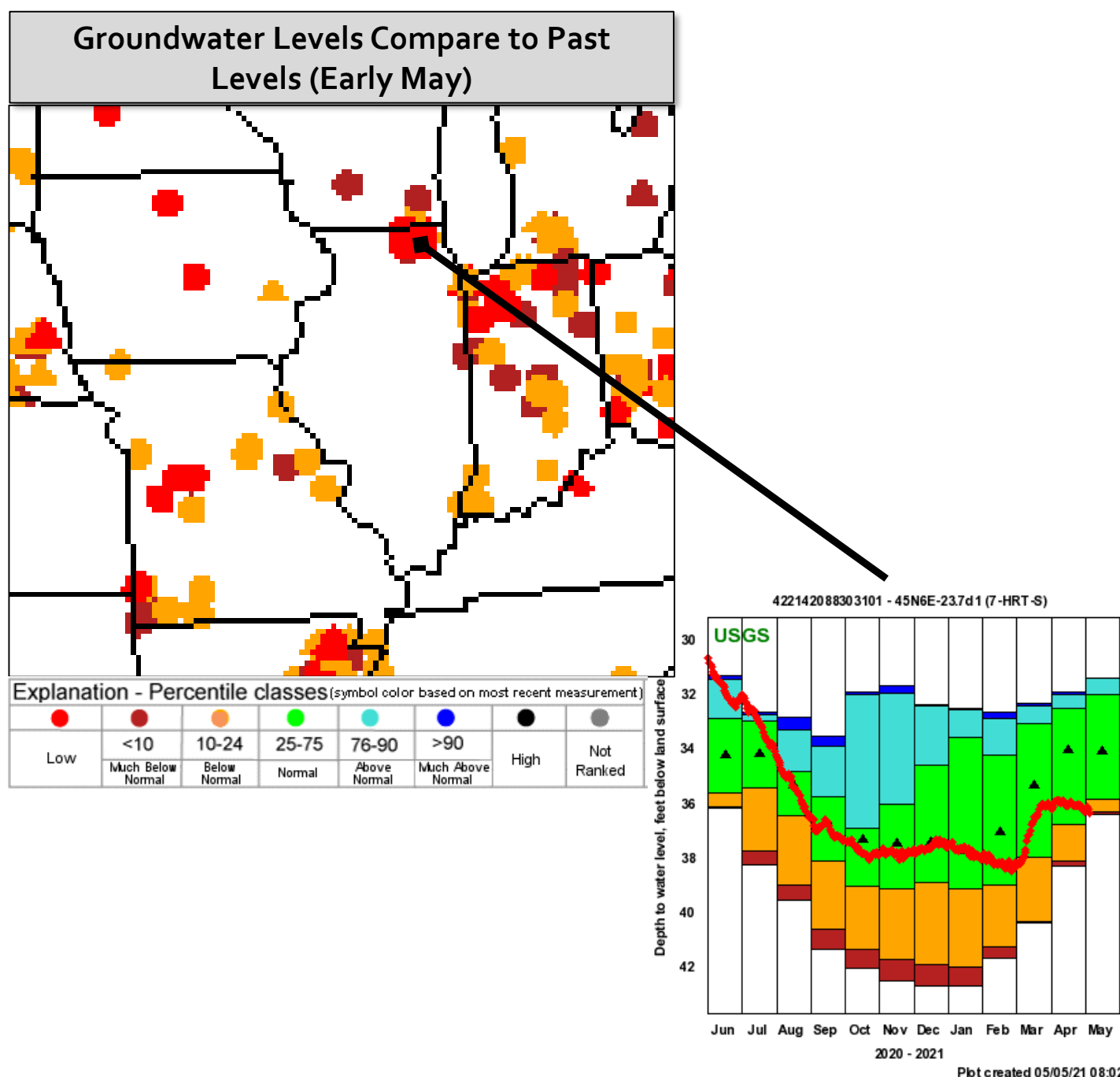


#### Explanation - Percentile classes

Low	<=5	6-9	10-24
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal

## Groundwater Levels

Groundwater levels have fallen below average at most measuring locations in northern Illinois and northwest Indiana. A few locations indicate water levels much below average, although the period of record for groundwater observations is relatively short (<30 years). The drop in water levels in northeast Illinois has generally occurred over the last several months, while portions of northwest Indiana have been below average since dry weather of last year.

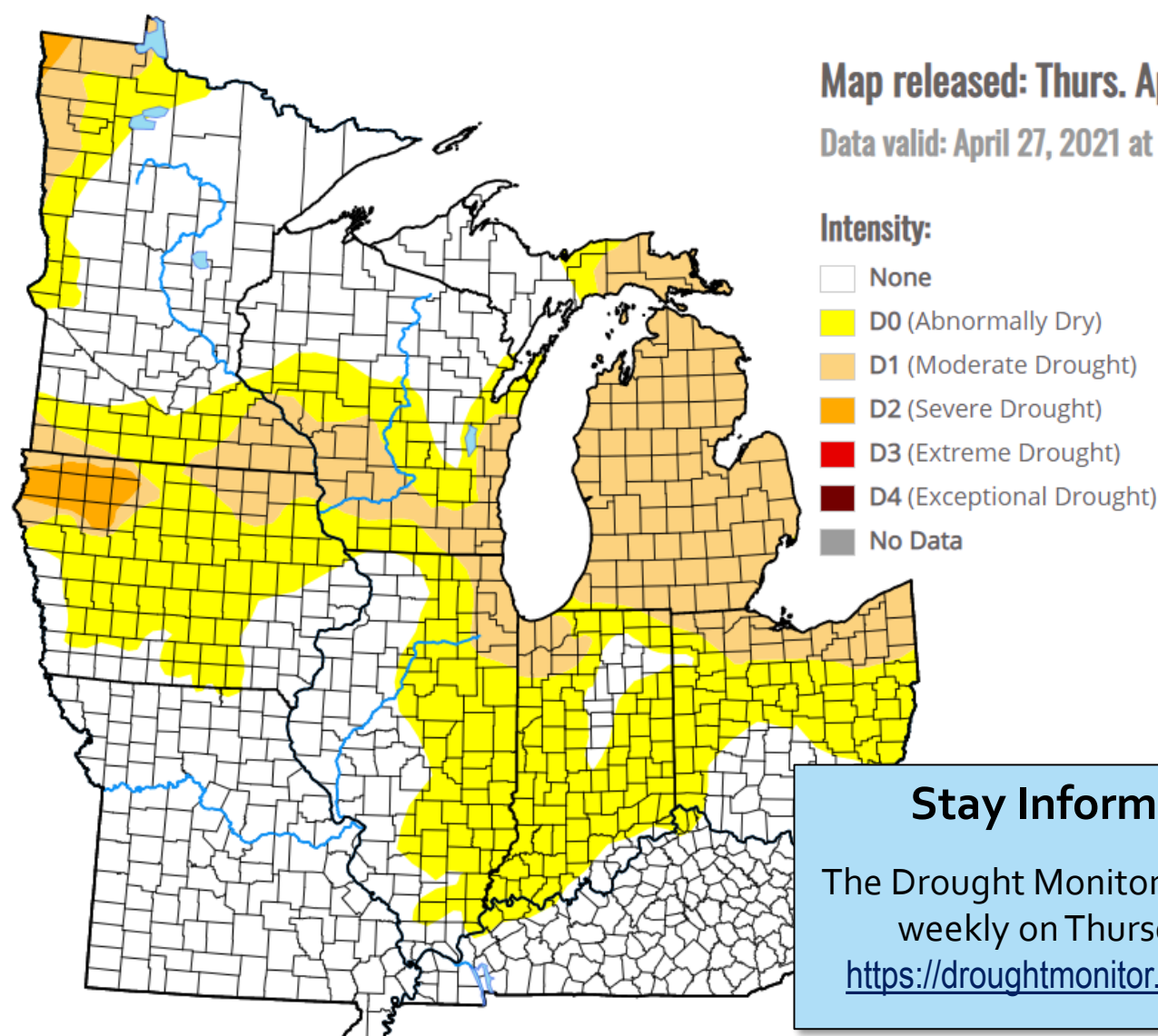




## Drought Monitor

The Drought Monitor from April 29, 2021, indicates abnormally dry conditions across most of northeast Illinois and northwest Indiana. Moderate drought conditions exist close to the Chicago metro area and along Lake Michigan.

Evaporation increases in late spring and early summer. Continued dry weather over the next few weeks may cause drought conditions to worsen further.



### Stay Informed

The Drought Monitor updates weekly on Thursday.

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

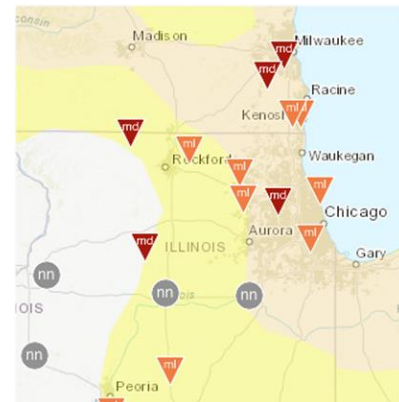
## Local Impacts

Drought affects different areas in different ways, and there are multiple ways local drought impacts can be shared to help with the Drought Monitor maps.

The National Drought Mitigation Center has provided portals for sharing reports of drought impacts as well as photo documentation. Visit [go.unl.edu/cmor\\_drought](https://go.unl.edu/cmor_drought) for more information.



Reports of landscape condition can also be submitted via CoCoRaHS at <https://cocorahs.org/Content.aspx?page=condition>



Or you can contact the Chicago National Weather Service office with impacts to local rivers and streams. This information is particularly important to us if there are possible impacts to water supply intakes or shipping. If provided to us, critical low water thresholds can be added to river gauges that we monitor.