



Drought Information Statement for for Southern Indiana and Central Kentucky

Valid June 27, 2024

Issued By: WFO Louisville KY

Contact Information: nws.louisville@noaa.gov

- This product will be updated once a month or more frequently if drought conditions change significantly.
- Please see all currently available products at <https://drought.gov/drought-information-statements>.
- Please visit <https://www.weather.gov/lmk/DroughtInformationStatement> for previous statements.
- Please visit <https://www.drought.gov/drought-status-updates/> for regional drought status updates.

- After a Wet Spring, Moderate Drought Has Developed in Parts of Southern Indiana
- Drought Is Expected to Spread Through the Rest of Southern Indiana and into North Central Kentucky Along the Ohio River in Early-Mid July



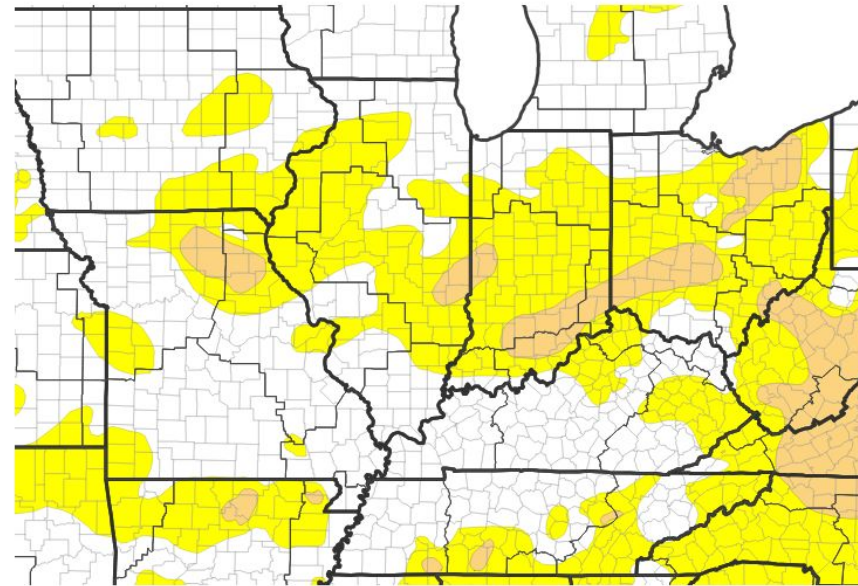


U.S. Drought Monitor

[U.S. Drought Monitor](#)

- Drought intensity and Extent
 - **D4 (Exceptional Drought):** [State each county or region under D4 or remove subheading.]
 - **D3 (Extreme Drought):** [State each county or region under D3 or remove subheading.]
 - **D2 (Severe Drought):** [State each county or region under D2 or remove subheading.]
 - **D1 (Moderate Drought):** [State each county or region under D1 or remove subheading.]
 - **D0: (Abnormally Dry):** [State each county or region under D0 or remove subheading.]

U.S. Drought Monitor



U.S. Drought Monitor



Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov

Data Valid: 06/25/24



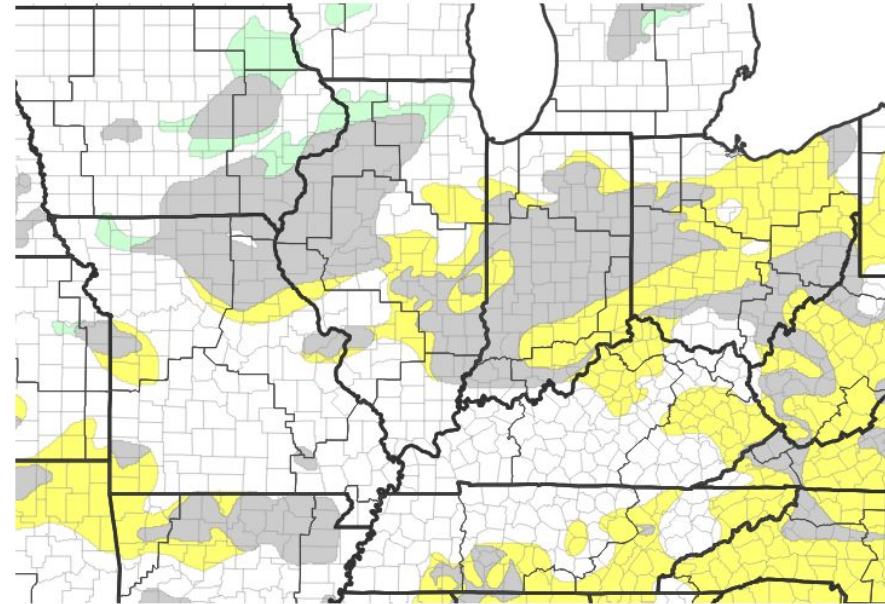


Recent Change in Drought Intensity

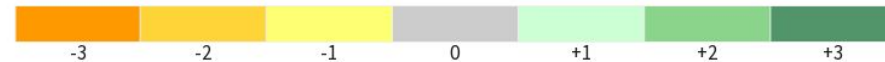
Link to the latest [1-week change map](#) for the U.S.

- One-Week Drought Monitor Class Change:
 - Drought worsened by one category in parts of southern Indiana. The most affected counties in the Louisville National Weather Service Office's area of responsibility include Orange, Washington, Scott, and Jefferson. This includes the cities of Paoli, Salem, Scottsburg, and Madison.
 - Though drought has not yet developed in north central Kentucky, "abnormally dry" conditions developed north of a line from Louisville to Springfield to Lexington. These areas will be particularly susceptible to the development of drought over the next 2-4 weeks.

U.S. Drought Monitor 1-Week Change Map



Drought Change Since Last Week



Source(s): NDMC, NOAA, USDA; image courtesy of Drought.gov

Data Valid: 06/25/24

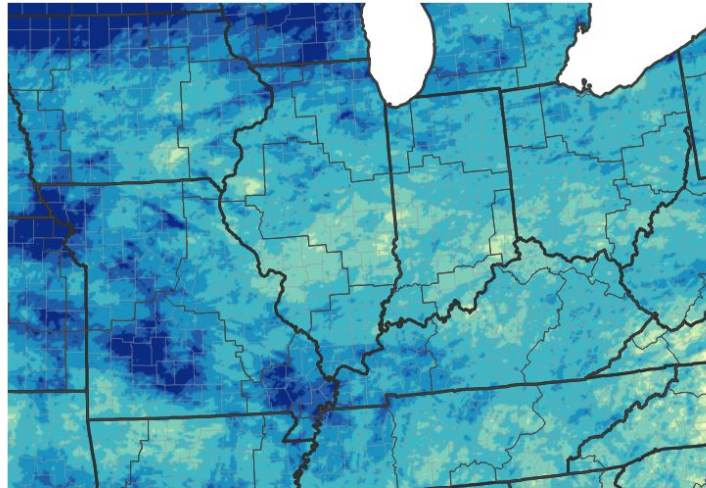




30-Day Precipitation

- Precipitation has been below normal over the past four weeks across much of the middle and upper Ohio Valley, central Appalachians, and Tennessee Valley
- Some parts of southern Indiana have received less than 25% of normal rainfall

30-Day Precipitation Accumulations (Inches)



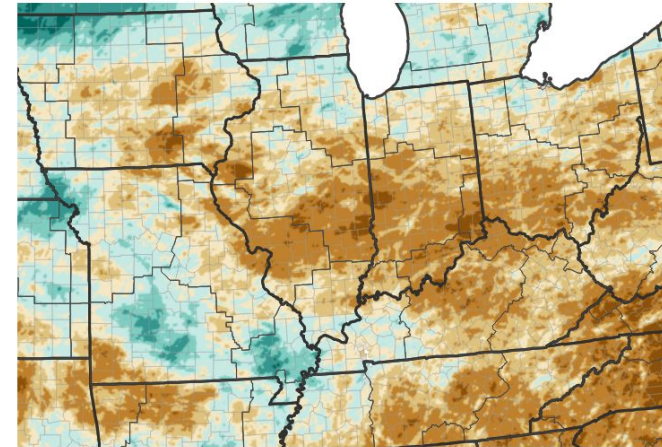
Inches of Precipitation



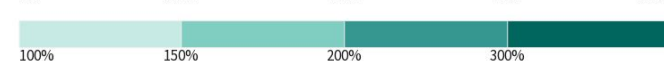
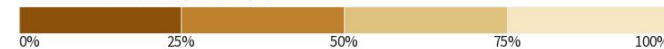
Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov

Last Updated: 06/29/24

30-Day Percent of Normal Precipitation



Percent of Normal Precipitation (%)



Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov

Last Updated: 06/29/24



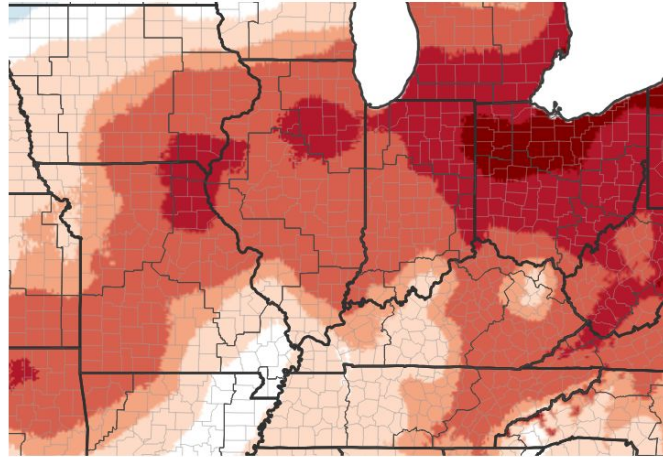


Temperature

Midwest Regional Climate Center

- Along with the dry conditions, temperatures have been warmer than normal over much of the region, especially during the second half of June
- Afternoon highs have shown a larger departure above normal than overnight lows over the past 30 days

7-Day Temperature Anomaly



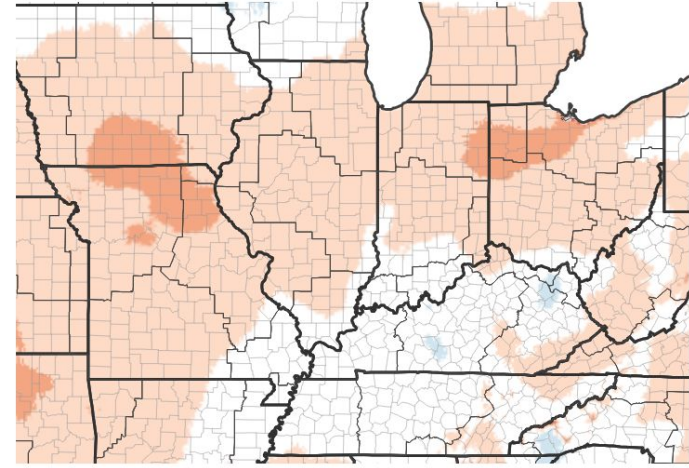
Departure from Normal Max Temperature (°F)



Source(s): NOAA's National Centers for Environmental Information; image courtesy of Drought.gov

Data Valid: 06/25/24

30-Day Temperature Anomaly



Departure from Normal Max Temperature (°F)



Source(s): NOAA's National Centers for Environmental Information; image courtesy of Drought.gov

Data Valid: 06/25/24





Summary of Impacts

Links: See/submit [Condition Monitoring Observer Reports \(CMOR\)](#) and view the [Drought Impacts Reporter](#)

Hydrologic Impacts

- Streamflows are well below normal. *USGS*

Agricultural Impacts

- Below-average precipitation levels have resulted in signs of crop stress in some parts of Indiana, especially on fields without irrigation systems. Corn and soybean conditions have declined and hay regrowth has stalled. Pastures have begun to struggle. *Indiana Crop Weather*

Fire Hazard Impacts

- Because this drought has just recently developed, fire hazards are still low at this time. *WFAS*

Other Impacts

- Impacts are not severe at this time due to the restricted geographical coverage, low intensity, and recent development of the drought.

Mitigation Actions

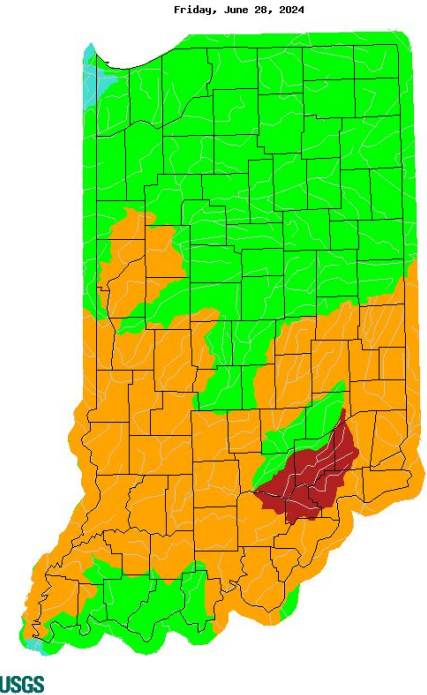
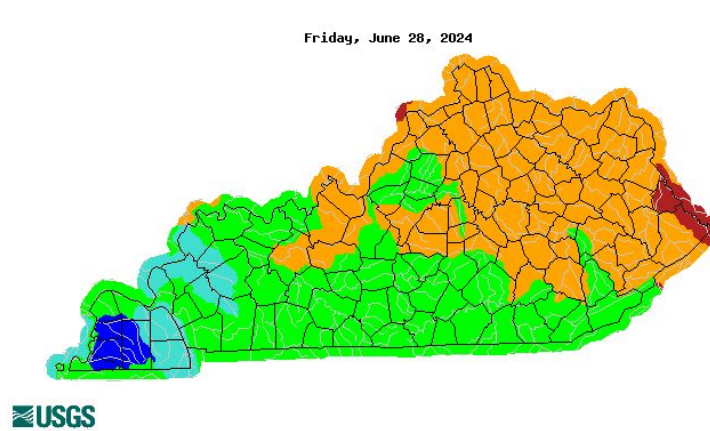
- Field irrigation has become a significant source of water for crops. *Indiana Crop Weather*





Hydrologic Conditions and Impacts

- The dry conditions have led to decreases in streamflow
- Most streamflows in southern Indiana are less than 25% of normal
- At this time the Ohio River is near or just above normal pool



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

USGS 7-day average streamflow Hydrologic Unit Code (HUC) maps

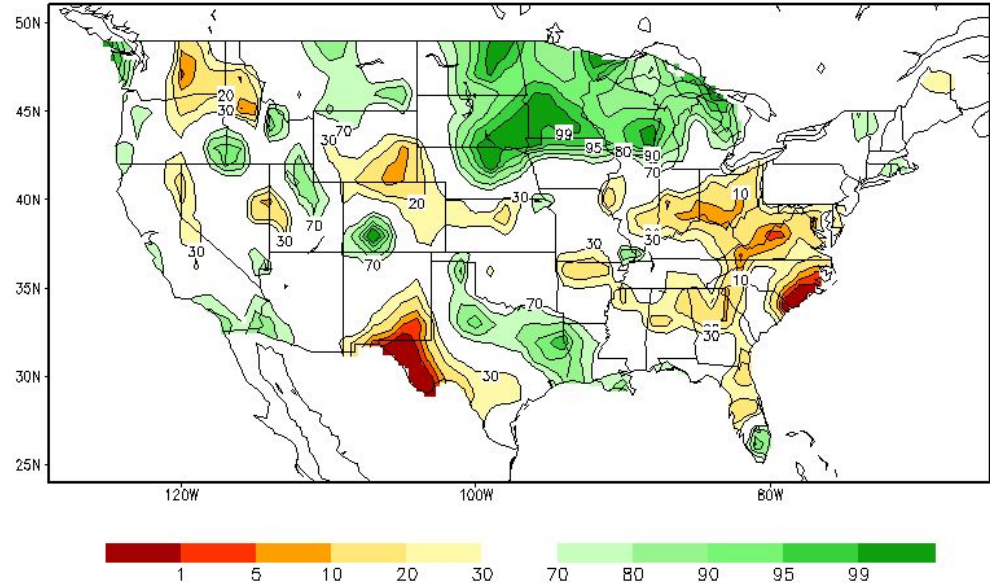




Agricultural Impacts

- Soil moisture is low in the middle and upper Ohio Valley as well as the central and southern Appalachians
- Purdue Mesonet data show decreases in soil moisture content in Crawford County at the 2, 4, and 8 inch levels, while the 20" level remains fairly constant. In Dubois County the 20" level does show a slow decrease.
- In the drier sections of Dubois County cut hay fields are slow to recover. Gardens are quick to dry out. *County Extension*
- In Clark County, Indiana, lawns, pastures, and row crops are stalled in growth. A few fields show corn rolling. Gardens and trees need irrigation. *County Extension*

Calculated Soil Moisture Ranking Percentile
JUN 28, 2024

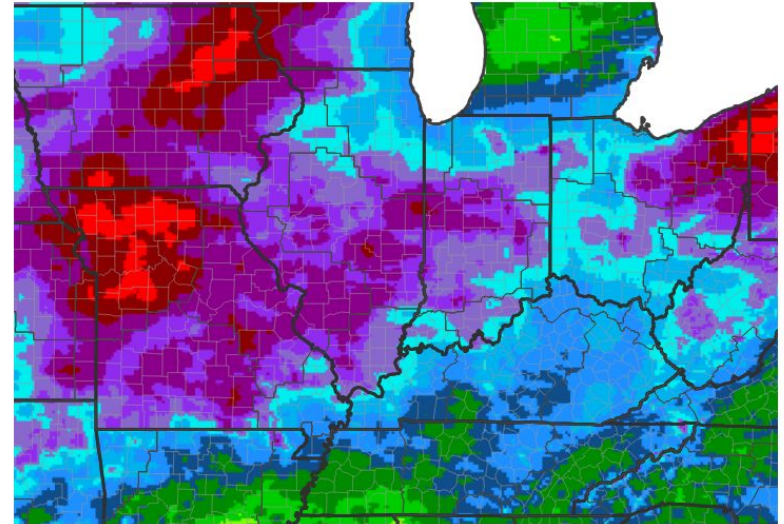




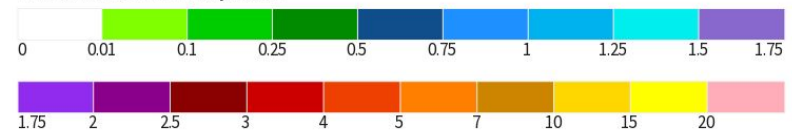
Seven Day Precipitation Forecast

- Dry conditions are forecast for Monday and Tuesday, July 1-2.
- Rain will return mid- and late-week as a slow-moving cold front drifts through the region. The best chance for the most widespread shower and storm activity is expected to be on Thursday and Friday, the 4th and 5th.
- While isolated strong summertime storms can't be ruled out, significant widespread severe weather is currently not expected.

7-Day Quantitative Precipitation Forecast



Predicted Inches of Precipitation



Source(s): National Weather Service Weather Prediction Center; image courtesy of Drought.gov

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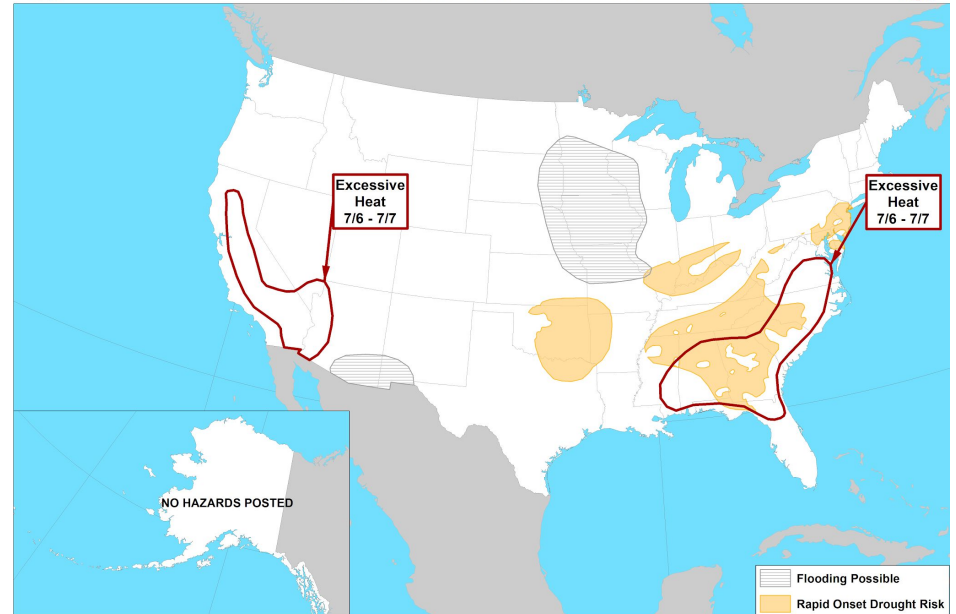
Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day [Temperature Outlook](#) and [Precipitation Outlook](#).

- While some rain is in the forecast, there is still a chance of drought spreading through the Ohio Valley early-mid July.
- The main driver will be warmer than normal temperatures, resulting in increased rates of evapotranspiration. Odds lean toward above normal temperatures through much of the month of July.



Day 8-14 U.S. Hazards Outlook
Valid: 07/06/2024-07/12/2024



Climate Prediction Center
Made: 06/28/2024 3PM EDT

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www.cpc.ncep.noaa.gov



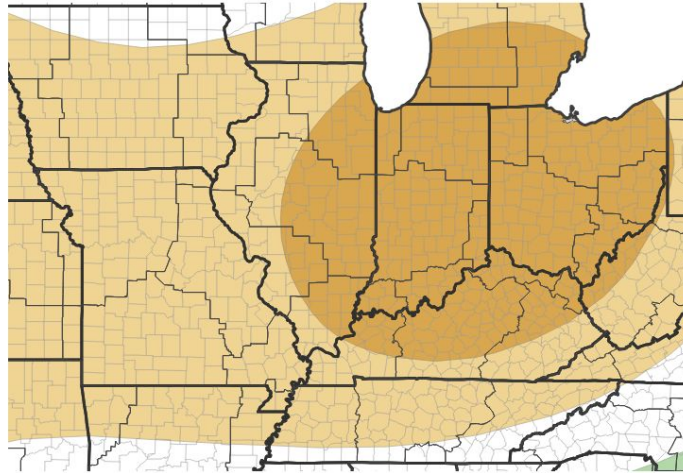


Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- While odds lean toward a drier than normal July overall, at this time it appears that dry weather will still be punctuated by occasional rain chances
- Given the nature of summertime convection, some areas may receive sufficient moisture while others miss out
- There is greater confidence in the temperature outlook than the precipitation outlook, with warmer than normal readings likely

Monthly Precipitation Outlook



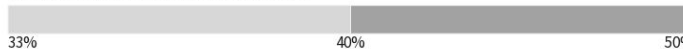
Probability of Below-Normal Precipitation



Probability of Above-Normal Precipitation



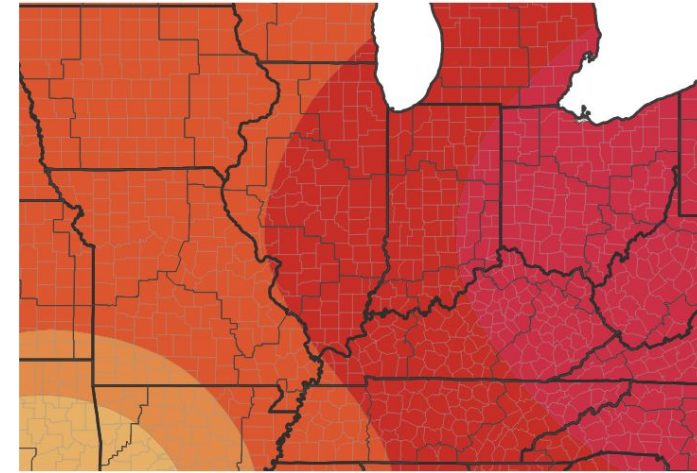
Probability of Near-Normal Precipitation



Source(s): Climate Prediction Center; image courtesy of Drought.gov

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Monthly Temperature Outlook



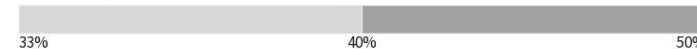
Probability of Below-Normal Temperatures



Probability of Above-Normal Temperatures



Probability of Near-Normal Temperatures



Source(s): Climate Prediction Center; image courtesy of Drought.gov

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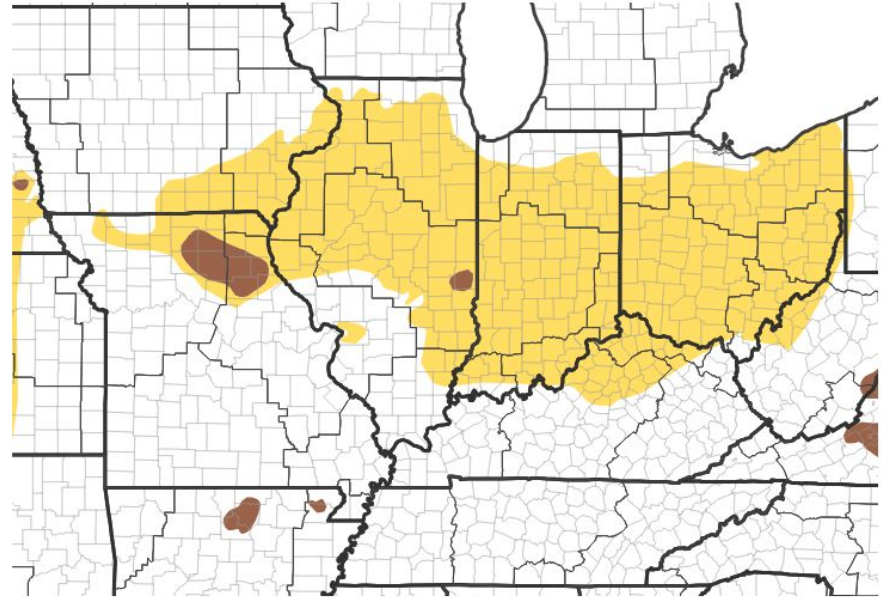


Drought Outlook

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- Drought is expected to develop across much of Illinois, Indiana, Ohio, and northern Kentucky during the July-September time period.

Seasonal (3-Month) Drought Outlook



Drought Is Predicted To...



Source(s): Climate Prediction Center; image courtesy of Drought.gov

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Links to the latest:

[Climate Prediction Center Monthly Drought Outlook](#)

[Climate Prediction Center Seasonal Drought Outlook](#)

