



# Drought Information Statement for Southern Indiana and Central Kentucky

Valid November 16, 2023

Issued By: WFO Louisville KY

Contact Information:

- This product will be updated at least once a month or when 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.

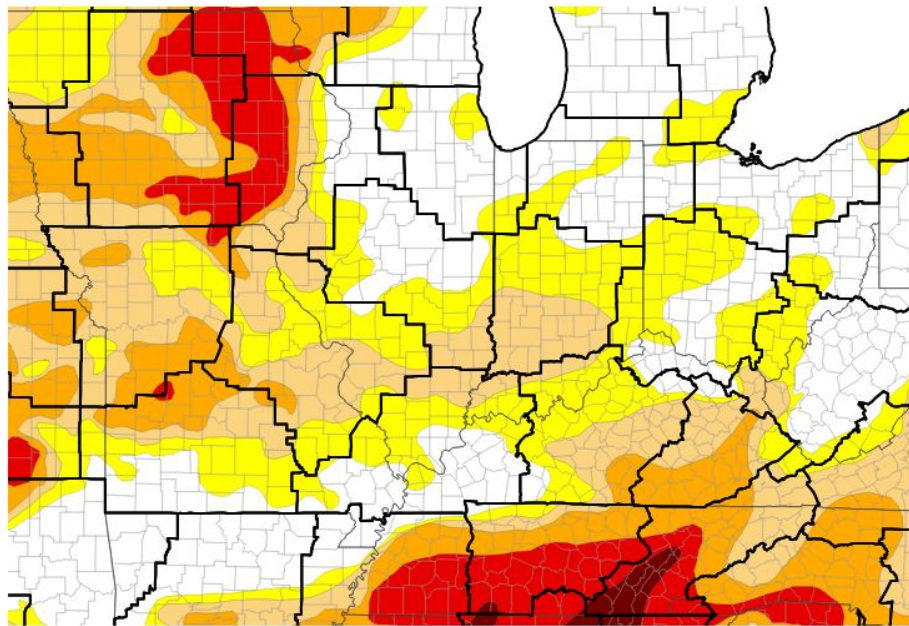




# U.S. Drought Monitor

- Since November 10 less than a tenth of an inch of rain has fallen across most of Kentucky, with slightly higher amounts in the far east. No rain has fallen on southern Indiana in that time.
- Severe drought now extends from the Lake Cumberland region into southeastern and parts of eastern Kentucky, including some sections of Daniel Boone National Forest.
- Moderate drought continues in portions of central Kentucky and central southern Indiana.

U.S. Drought Monitor



U.S. Drought Monitor

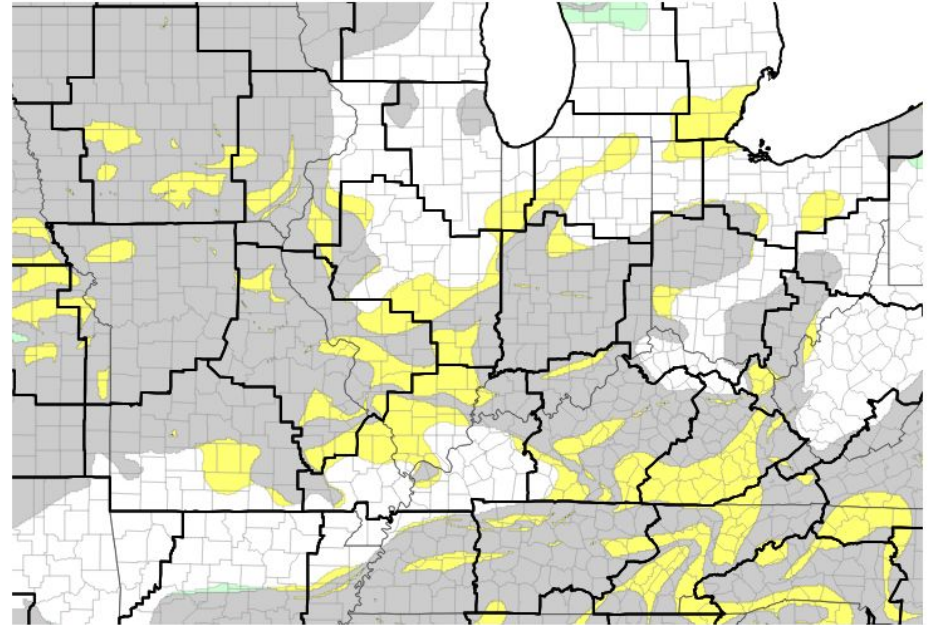




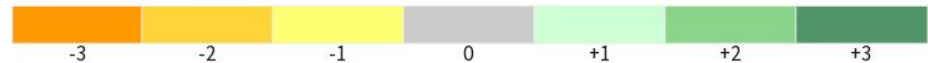
# Recent Change in Drought Intensity

- One Week Drought Monitor Class Change
  - Drought has worsened over southeast Kentucky and in a few spots in central Kentucky and southern Indiana.
  - Abnormally dry conditions continue across much of southern Indiana and north central Kentucky.

U.S. Drought Monitor 1-Week Change Map



Drought Change Since Last Week





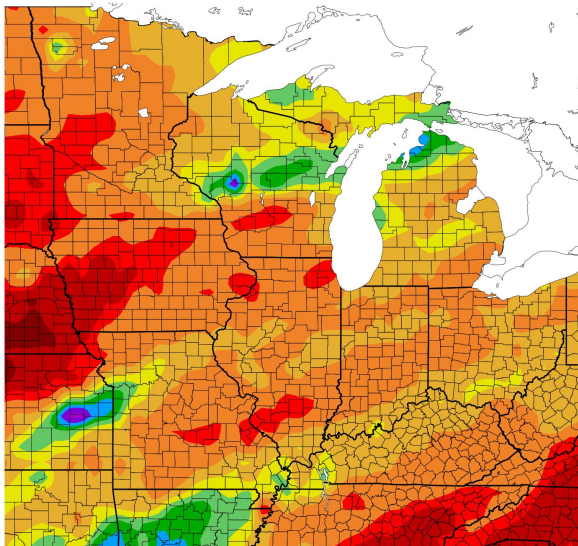


# Precipitation

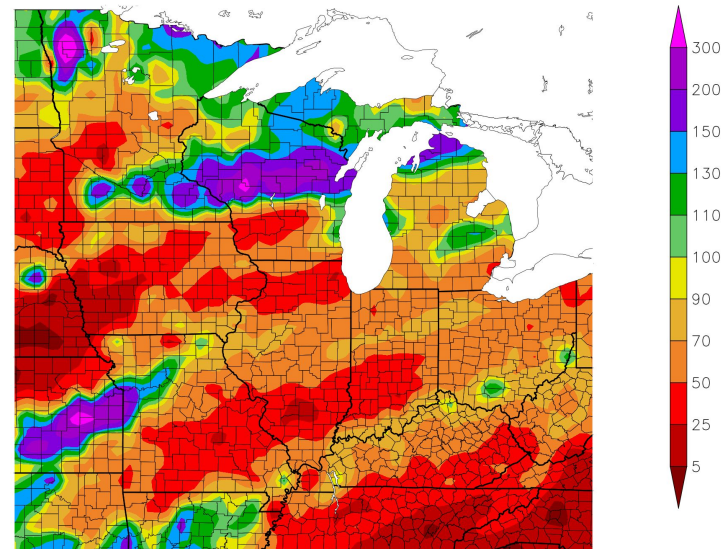
Rainfall has been below normal over the past 30 days throughout the region.

Deficits have been particularly severe in southern and southeastern Kentucky as well as south central Indiana.

Precipitation (in)  
10/17/2023 – 11/15/2023



Percent of Normal Precipitation (%)  
10/17/2023 – 11/15/2023



Data Courtesy Midwest Regional Climate Center.



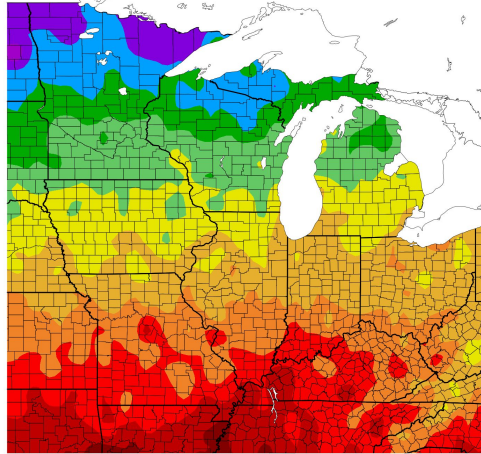




# Temperature

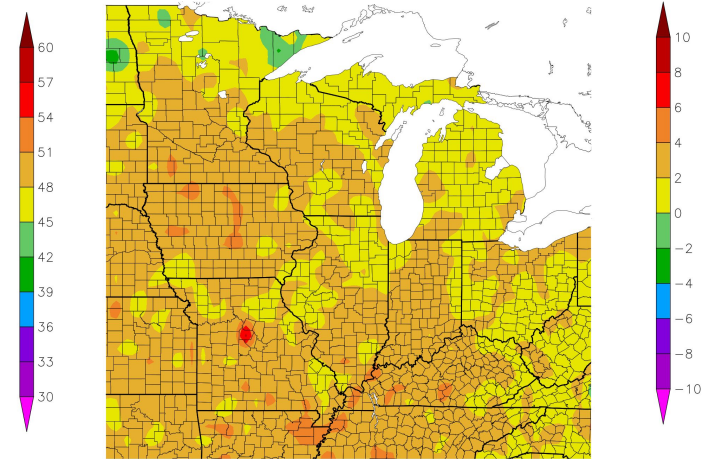
- Temperatures have averaged above normal over the past month despite a significant cold snap October 30 - November 3 that ended the growing season.
- Record highs were set throughout the area on November 8:  
Louisville 83°  
Lexington 81°  
Bowling Green 83°  
Frankfort 81°

Temperature (F)  
10/17/2023 - 11/15/2023



Generated 11/16/2023 at HPRCC using provisional data.

Departure from Normal Temperature (F)  
10/17/2023 - 11/15/2023



NOAA Regional Climate Centers 2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Data Courtesy Midwest Regional Climate Center.





# Summary of Impacts

## Hydrologic Impacts

- Stream levels have generally lowered, with some streams at less than 10% of their normal flow.

## Agricultural Impacts

- Dry weather has allowed most of the fall harvesting to be completed on time. However, some winter wheat is struggling to emerge, and sources of water and vegetation for livestock have diminished.

## Fire Hazard Impacts

- Wildfire activity increased significantly over the past week. Kentucky Governor Andy Beshear has declared a state of emergency.

## Other Impacts

- Some livestock in Kentucky have been receiving supplemental hay.

## Mitigation Actions

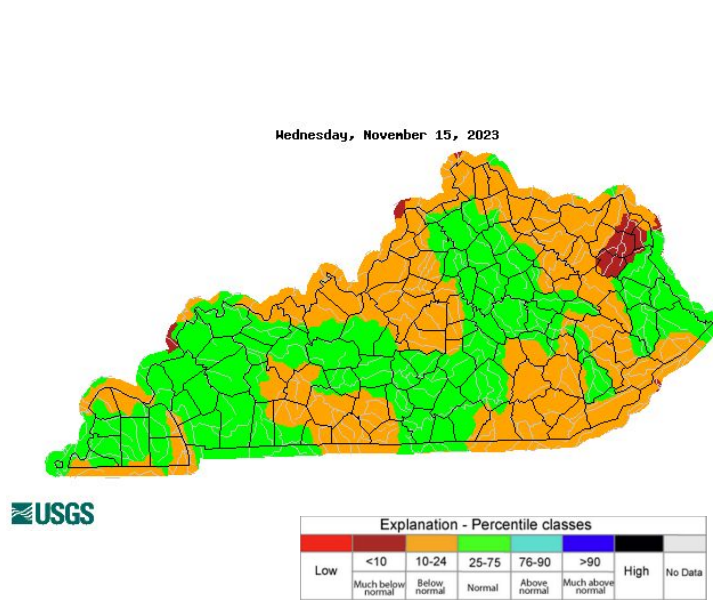
- Please refer to your municipality, water provider, or extension office for mitigation information.



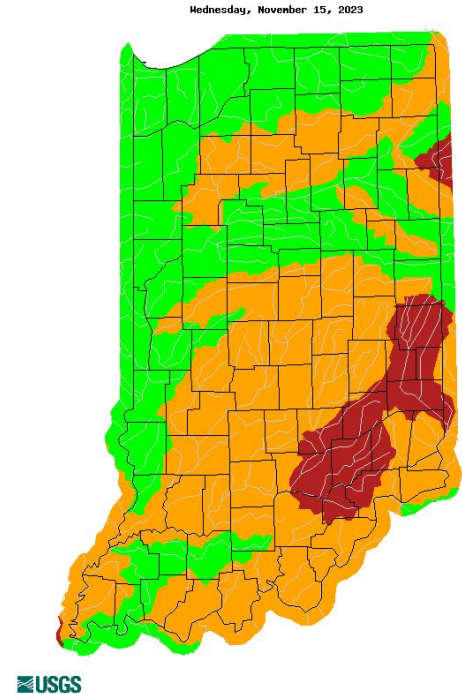


# Hydrologic Conditions and Impacts

- Streamflows have deteriorated significantly over the past several days, especially in southern Indiana.
- Several waterways are much below normal in Kentucky including Drakes Creek near Franklin, Pond Creek in Louisville, and the Dix River near Danville with a stage on November 16 of only 0.3'.



USGS 7 day average streamflow HUC map



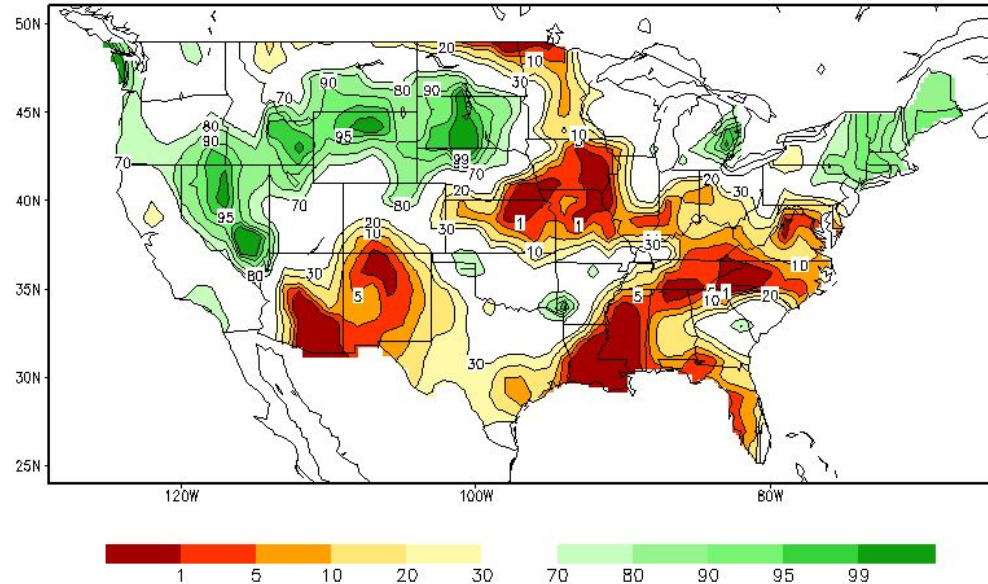




# Agricultural Impacts

- Soil moisture has decreased over the past several days.
- About half of Kentucky topsoil and subsoil is short or very short of moisture.
- Corn and soybean harvests are nearing completion thanks to the dry weather allowing for fieldwork to get done.
- The dry weather has slowed the emergence of winter wheat.
- Cattle producers are feeding hay due to poor pasture growth.

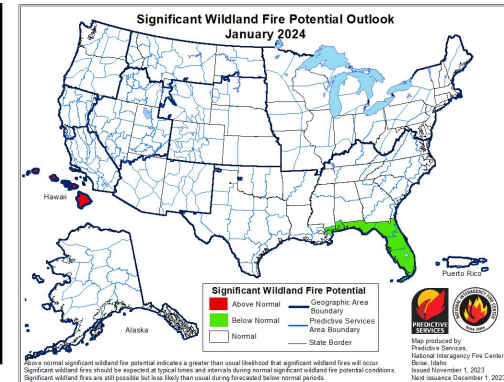
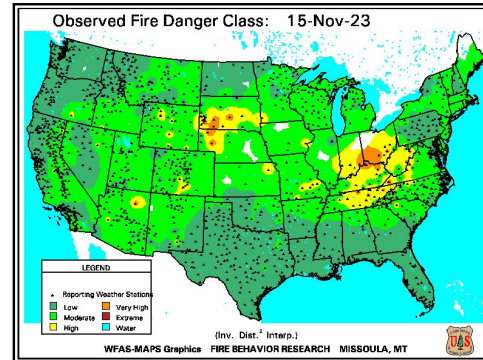
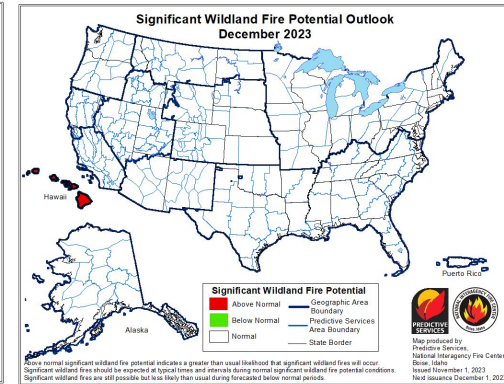
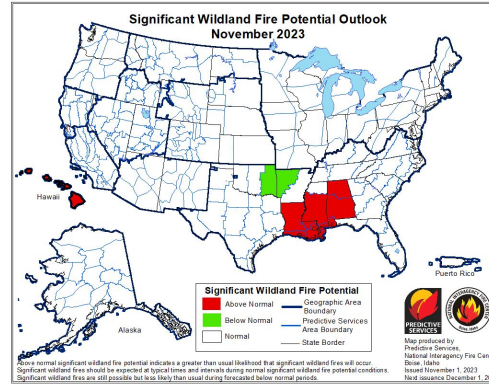
Calculated Soil Moisture Ranking Percentile  
NOV 15, 2023





# Fire Hazard Impacts

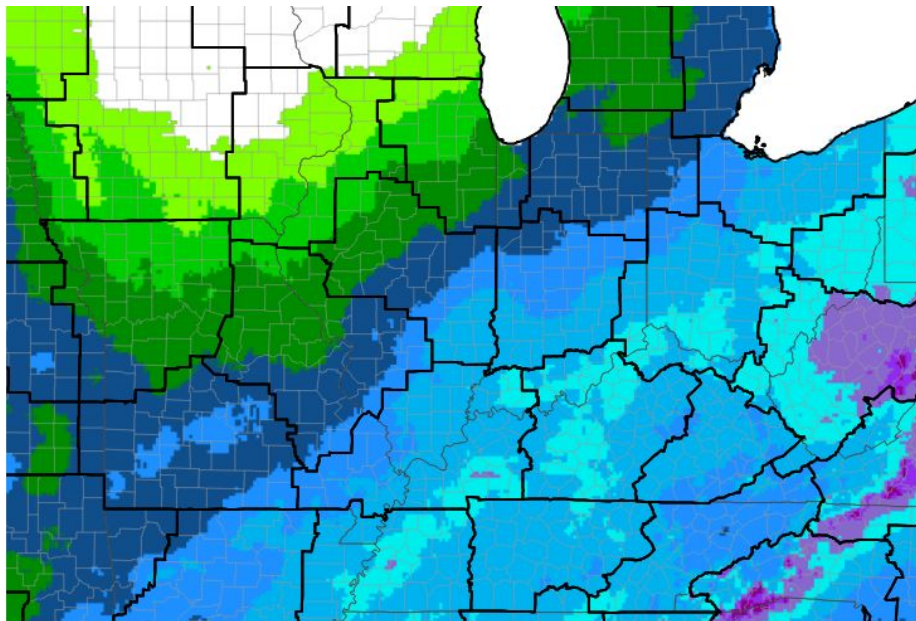
- Observed Fire Danger Class as of November 15 is high to very high in the Ohio Valley, and very high in Daniel Boone National Forest.
- Several wildfires are ongoing in southern Indiana in and near Hoosier National Forest. Wildfires also continue in eastern Kentucky.
- 33 counties in Kentucky have instituted burn bans, including eight in central Kentucky.



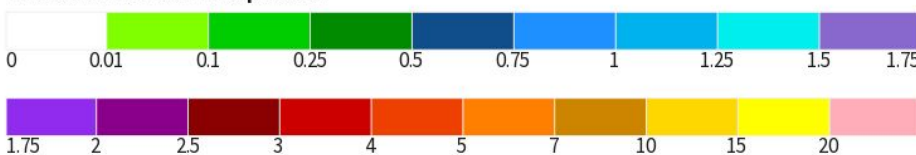


# Seven Day Precipitation Forecast

- There is some rain in the 7-day forecast, coming in two waves.
- The first rain event will come through southern Indiana and central Kentucky on November 17, and is expected to produce around a quarter inch on average, with possibly up to half an inch from southern Indiana to the northern Blue Grass.
- The next rainy period will be November 20-21. This could be a good rain producer with many locations receiving around an inch of rain.



Predicted Inches of Precipitation







# Rapid Onset Drought Outlook

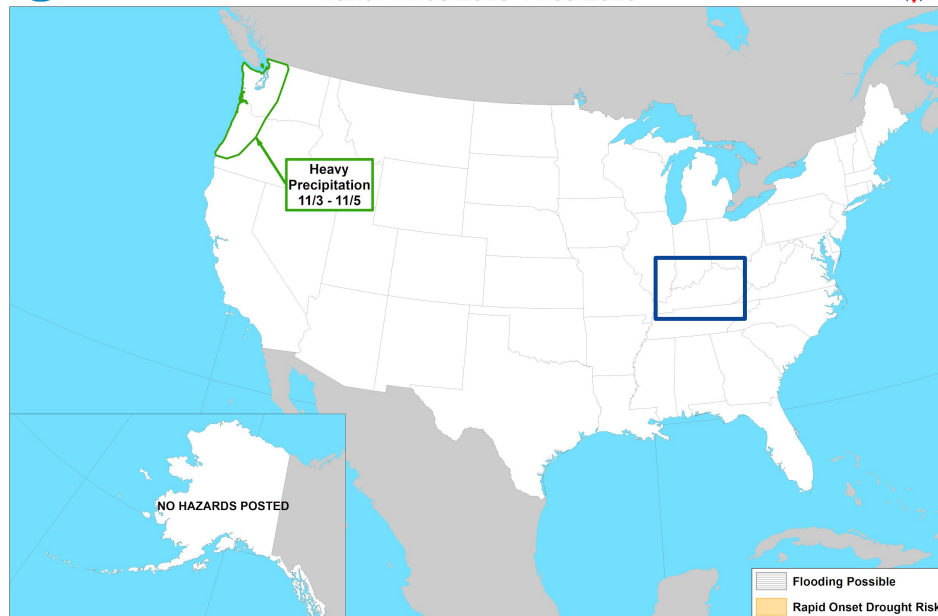
Links to the latest Climate Prediction Center 8 to 14 day [Temperature Outlook](#) and [Precipitation Outlook](#).

- Rapid drought onset or intensification is not expected.



Day 8-14 U.S. Hazards Outlook

Valid: 11/03/2023-11/09/2023



Climate Prediction Center

Made: 10/26/2023 3PM EDT

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National Oceanic and  
Atmospheric Administration

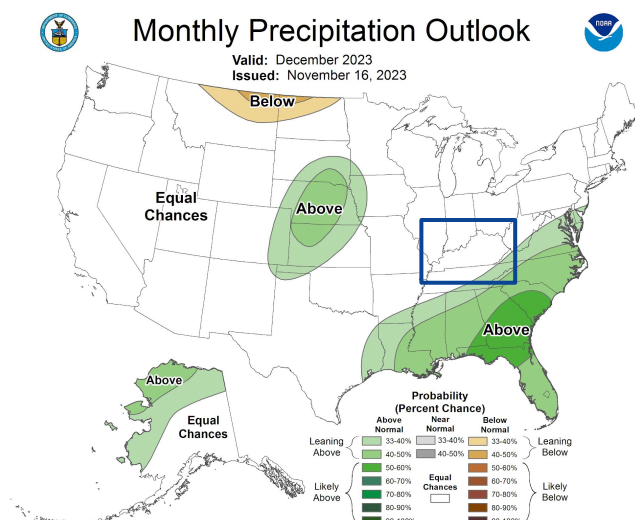
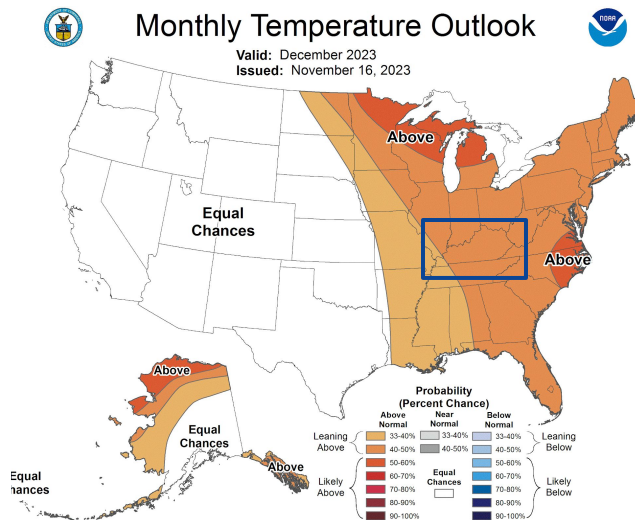
U.S. Department of Commerce

National Weather Service  
Louisville



# Long-Range Outlooks

- After a chilly final week of November, in December odds are tilting toward a warmer than normal month.
- There's no clear signal for precipitation in southern Indiana and central Kentucky. An El Niño type pattern is showing up in the southeast U.S., however, with wet conditions expected there.

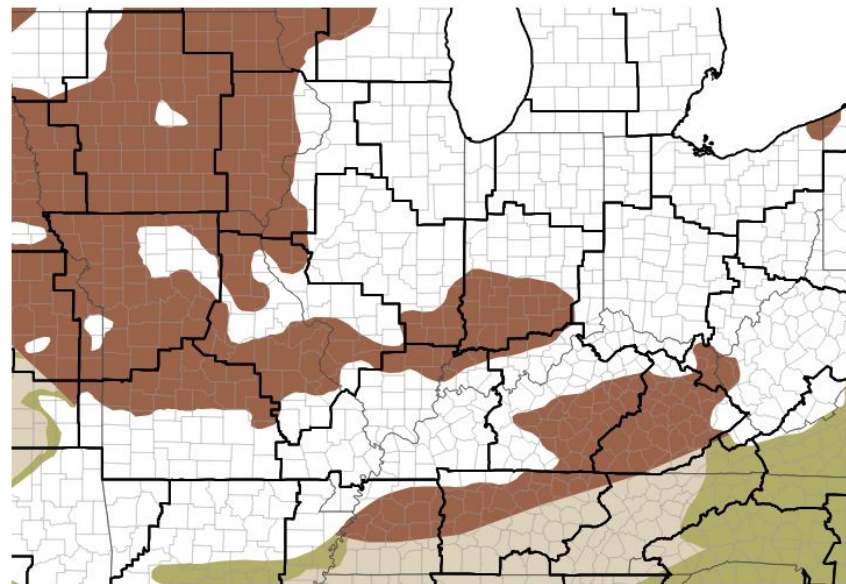




# Drought Outlook

- El Niño often results in dry conditions in the Ohio Valley, suggesting that drought conditions may continue into the winter.
- Forecast rainfall amounts over the next several days, as of this writing (November 16), would be very beneficial in the short term, especially with regard to ongoing wildfires.

## Seasonal (3-Month) Drought Outlook



### Drought Is Predicted To...

