

Valid August 8, 2024 Issued By: WFO Louisville KY

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- 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 <u>https://www.weather.gov/lmk/DroughtInformationStatement</u> for previous statements.
- Please visit <u>https://www.drought.gov/drought-status-updates/</u> for regional drought status updates.
- Frequent rains have brought drought relief to much of the Kentucky Blue Grass.
- Small area of Moderate Drought remains southwest of Lexington, KY.





U.S. Drought Monitor



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Abnormally Dry (D0)	Moderate Drought (D1)	Severe Drought (D2)	Extreme Drought (D3)	Exceptional Drought (D4)
Source(s): NDMC, N	Data Valid: 08/06/24			

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Recent Change in Drought Intensity

Link to the latest <u>1-week change map</u> for the U.S.

- One-Week Drought Monitor Class Change:
 - Moderate Drought (D1) and Abnormally Dry (D0) conditions improved by one class across most of southern Indiana and central Kentucky.
 - Conditions remained the same in a small area centered around Harrodsburg, KY, and in the Paris and Carlisle areas.



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

Data Valid: 08/06/24







- Frequent rains July 28 through August 3 brought plentiful precipitation to most of southern Indiana and central Kentucky.
- While the convective nature of the rainfall led to uneven totals across the area, some spots received as much as 4 to 7 inches of rain during this time period.

30-Day Precipitation Accumulations (Inches)



Inches of Precipitation



Source(s): National Weather Service Multi-Radar Multi-Sensor System; Last Updated: 08/08/24 image courtesy of Drought.gov

30-Day Percent of Normal Precipitation



Percent of Normal Precipitation (%)



image courtesy of Drought.gov

Last Updated: 08/08/24



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7-Day Temperature Anomaly

Temperatures have generally been near normal over the 7and 30-day periods ending August 4.





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

30-Day Temperature Anomaly



Departure from Normal Max Temperature (°F)

0



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

Hydrologic Impacts

• Most streamflows in central Kentucky and southern Indiana are at or above normal. USGS

Agricultural Impacts

• With the recent rains, subsoil moisture in Kentucky is now 78% adequate or surplus. The corn crop is back to near the 5-year average with 68% of the crop good or excellent. Soybeans are slightly ahead of their 5-year average. Tobacco is slightly behind average, but that's due primarily to the frequent rains rather than drought. USDA Crop Progress and Condition

Fire Hazard Impacts

• No burn bans are in effect and fire danger class is low to moderate. WFAS, ky.gov, in.gov

Other Impacts

• Impacts are not significant at this time due to the restricted geographical coverage and low intensity.

Mitigation Actions

• Most water sources have been replenished, and in some areas pastures are difficult to use because of too much rain. USDA Crop Progress and Condition



Hydrologic Conditions and Impacts

- Although the recent rains came in the form of scattered summertime showers and storms, there were enough waves of showers and storms to bring streams back to normal or above normal average streamflows.
- No river flooding occurred, but several local Flood Advisories and Flash Flood Warnings were issued between July 28 and August 2.



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



Hednesday, August 07, 2024

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



Agricultural Impacts

https://www.cpc.ncep.noaa.gov/soilmst/img/curr.w.rank.daily.gif

- Soil moisture has returned to near normal across much of the area.
- Kentucky Mesonet soil moisture data at the Mercer County site show a slight decline in soil moisture at 2" but steady moisture levels at all other depths since August 3. Boyle County shows a very slow, gradual decline in soil moisture.

Calculated Soil Moisture Ranking Percentile AUG 07, 2024



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Seven Day Precipitation Forecast

- Very little rainfall is expected into early next week. Temperatures will be seasonable, with no extreme heat expected.
- By the second half of next week rain chances increase slightly, as do temperature and humidity levels.

Predicted Inches of Precipitation



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7-Day Quantitative Precipitation Forecast

Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day Temperature Outlook and Precipitation Outlook.

- No hazards are outlooked for the middle Ohio Valley for the period August 15-21.
- Drought may rapidly develop in Texas and Oklahoma. Excessive heat will be possible in the lower Mississippi Valley.



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Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the CPC homepage

For the remainder of August, there is greater confidence in the temperature outlook than the precipitation outlook, with odds leaning toward warmer than normal readings.



Probability of Below-Normal Precipitation



Probability of Above-Normal Precipitation



33% 40%

Source(s): Climate Prediction Center; image courtesy of Drought.gov Last Updated: 07/31/24

Monthly Temperature Outlook



Probability of Below-Normal Temperatures



Probability of Above-Normal Temperatures



Probability of Near-Normal Temperatures

50%

33%	40%	50%
Source(s): Climate Prediction Center; image courtesy of Drought.gov		Last Updated: 07/31/24

National Weather Service WFO Louisville, KY



Atmospheric Administration

Drought Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

• Drought is expected to end across the Bluegrass Region, with no drought development in the rest of the area.

Seasonal (3-Month) Drought Outlook



Drought Is Predicted To...

Persist	Improve	End	Develop	No Drought
Source(s): Climate F	Last Updated: 07/18/24			

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Links to the latest: <u>Climate Prediction Center Monthly Drought Outlook</u> <u>Climate Prediction Center Seasonal Drought Outlook</u>



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