

# Drought Information Statement for Southern Indiana and Central Kentucky Valid January 18, 2024

## Issued By: WFO Louisville KY Contact Information: nws.louisville@noaa.gov

- This product will be updated at least once a month or when drought conditions change significantly.
- Please see all currently available products at <u>https://drought.gov/drought-information-statements</u>.
- You may visit https://www.weather.gov/lmk/DroughtInformationStatement for previous statements.







# U.S. Drought Monitor

- Widespread rainfall, and some snow, has lessened the drought in southern Indiana and central Kentucky
- Moderate drought remains from the Lake Cumberland region northwestward to around Rough River Lake and Barren River Lake, including Mammoth Cave National Park.
- Moderate drought is also affecting Hoosier National Forest and points east in southern Indiana.
- There is no longer any severe drought in the Ohio Valley.

#### U.S. Drought Monitor Midwest



#### January 16, 2024 (Released Thursday, Jan. 18, 2024) Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	29.77	70.23	34.28	13.38	3.24	0.00
Last Week 01-09-2024	23.52	76.48	50.51	20.42	4.04	0.00
3 Month s Ago 10-17-2023	17.46	82.54	50.00	18.25	4.66	0.00
Start of Calendar Year 01-02-2024	22.92	77.08	50.25	20.76	4.20	0.00
Start of Water Year 09-26-2023	16.82	83.18	54.98	23.81	6.21	0.13
One Year Ago 01-17-2023	50.91	49.09	18.94	5.73	1.00	0.06



 None
 D2 Severe Drought

 D0 Abnormally Dry
 D3 Extreme Drought

 D1 Moderate Drought
 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.asp>

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droughtmonitor.unl.edu





U.S. Drought Monitor Class Change - Midwest Climate Region 4 Week

- Four Week Drought Monitor Class Change
  - Widespread and frequent precipitation January 6 through 15 improved drought conditions in many areas.







Precipitation is now above normal for the most recent 30-day period in most locations.

Some spots have seen more than 125% of normal precipitation.



Generated 1/19/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Generated 1/19/2024 at HPRCC using provisional data.

NOAA Regional Climate Center:

800

400

150

125

100

75

25

#### Data Courtesy Midwest Regional Climate Center.

National Weather Service Louisville



**National Oceanic and Atmospheric Administration** U.S. Department of Commerce



- Overall, temperatures have averaged near normal over the past month.
- A significant cold snap began on January 13 and continued through the third week of January.



Generated 1/19/2024 at HPRCC using provisional data.



NOAA Regional Climate Centers 324 at HPRCC using provisional data.

NOAA Regional Climate Centers

Data Courtesy Midwest Regional Climate Center.







### Hydrologic Impacts

• Streamflows have surged to near- and above-normal. A CoCoRaHS volunteer in Hardin County, KY reported increased streamflow turbidity.

### Agricultural Impacts

• Soils have begun to recharge. A CoCoRaHS volunteer in Logan County, KY reported wet ground and some water standing in fields.

### **Fire Hazard Impacts**

• No current fire hazards.

#### **Other Impacts**

• No known other impacts.

### **Mitigation Actions**

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



# Hydrologic Conditions and Impacts

- Recent precipitation has resulted in rapid improvements in streamflow.
- Streamflows are now at or above normal throughout the district.
- The Rough River at Dundee rose significantly and was above Action Stage January 12-13.



USGS 7 day average streamflow HUC map



National Oceanic and Atmospheric Administration U.S. Department of Commerce

# Seven Day Precipitation Forecast

- Warmer temperatures and widespread rains are expected late Monday night through Friday, January 23-26.
- These rains will further ameliorate, and possibly end, the drought.

National Oceanic and Atmospheric Administration

U.S. Department of Commerce

#### 7-Day Quantitative Precipitation Forecast



Predicted Inches of Precipitation



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





- There's no clear signal for temperature departures for February in southern Indiana and central Kentucky.
- Drier than normal conditions are favored in the Ohio Valley in February.









- Though the official 3-month forecast from the Climate Prediction Center (CPC) shows the possibility of drought persisting in southern Kentucky and south central Indiana, short-term forecasts for the next several days show that widespread rains may remove drought.
- It's possible that drought conditions could return later in the winter if dry weather sets back in, as is suggested by the CPC's February precipitation outlook shown on the previous slide. CPC's outlook for February through April also calls for increased chances of drier than normal weather.

#### Seasonal (3-Month) Drought Outlook



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

Data Valid: 01/18/24

