

March 2026

Precipitation

Precipitation in March was below normal for Kentucky, marking the fifth straight month with below normal precipitation. Though the majority of the Commonwealth experienced below normal precipitation, areas along the Ohio River were generally above normal. The month started out with a week of unsettled weather, unfortunately the higher precipitation totals were located to our north and west. There were a couple more precipitation events during the middle of the month, followed by a mainly dry second half of the month.

Preliminary data shows the Commonwealth averaged 3.09 inches of precipitation in March, 1.59 inches below normal. This ties 2026 with the 30th driest March on record. For the year to date, Kentucky has averaged just 7.42 inches of precipitation, 4.87 inches below normal. This makes 2026 the 4th driest January through March. Going back to November 2025, the first month in this streak of below normal precipitation, the Commonwealth has averaged 12.62 inches of precipitation, 7.64 inches below normal and the 3rd driest November to March on record. Records date back to 1895.

As of the March 31st U.S. Drought Monitor, much of western Kentucky was depicted as being in Moderate Drought (D1) with the Severe Drought (D2) along the Tennessee border. All of central and eastern Kentucky are depicted as Abnormally Dry (D0).

According to the Kentucky Mesonet, Trimble County recorded the highest monthly rainfall at 6.66 inches, while Metcalfe County had the lowest at 1.22 inches.

Table 1. Regional precipitation patterns.

Climate Region	Departure From Normal (inches)					Palmer Drought Severity Index*
	This Month	Past 2 Mos.	Past 3 Mos	Past 6 Mos	Past 12 Mos	
Western	-1.35	-4.48	-6.25	-8.93	-0.61	-1.70
Central	-2.15	-4.54	-5.61	-7.12	1.20	-0.27
Bluegrass	-0.57	-2.74	-3.94	-3.68	2.60	0.35
Eastern	-2.04	-3.33	-3.84	-5.35	-1.31	-0.67

*4.0 and above (Extremely Moist)
3.0 to 3.9 (Very Moist Spell)
2.0 to 2.9 (Unusual Moist Spell)
-1.9 to 1.9 (Near Normal)
-2.0 to -2.9 (Moderate Drought)
-3.0 to -3.9 (Severe Drought)
-4.0 or less (Extreme Drought)

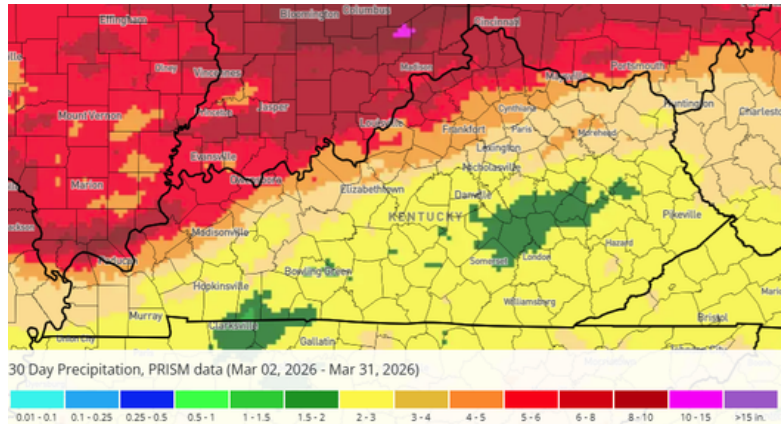


Figure 1. Monthly precipitation map.

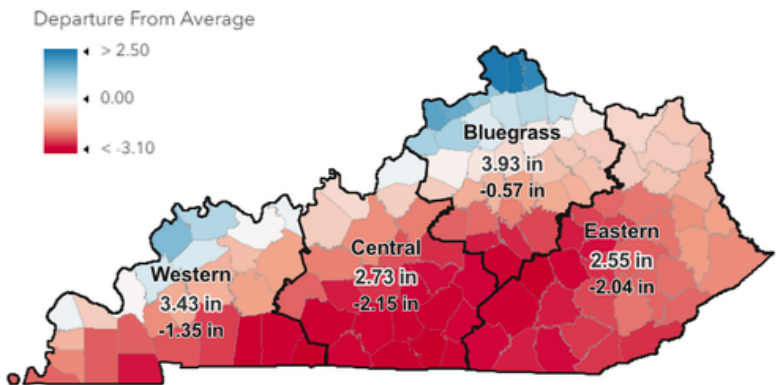


Figure 2. Departure from normal precipitation by county and climate division.

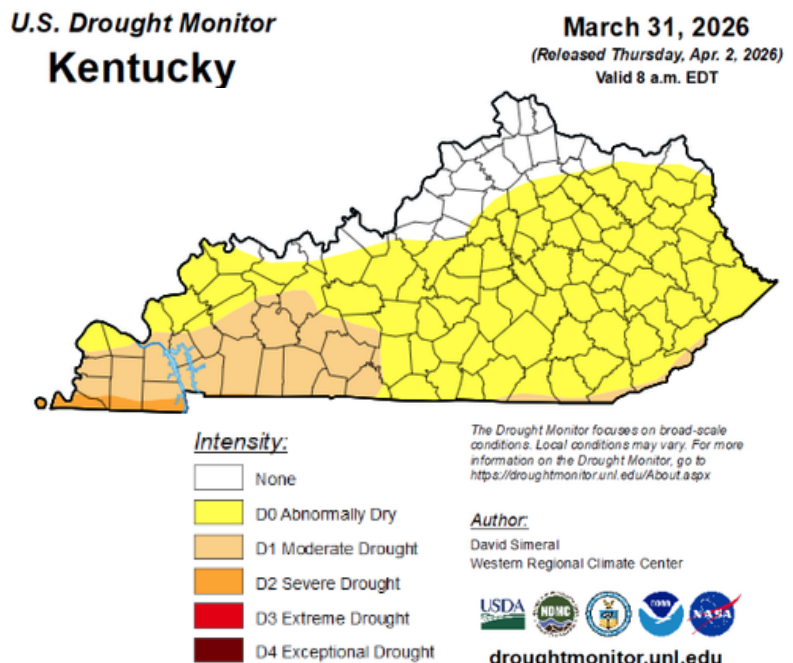


Figure 3. Current US Drought Monitor Map.

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Streamflow

Streamflow in March started the month low, after a drier than normal February. Rain and storms during the first week of the month resulted in peaks in flow across the state. These peaks were more prominent in smaller streams and rivers. After more precipitation in the middle of the month, flows quickly dropped, finishing the month below normal across much of the state.

The dry conditions this winter, and now spring, have resulted in the development of hydrologic drought across much of the state. There are no immediate concerns, as average flows this time of year are significantly higher than they are in the summer and fall. However, without above normal precipitation in April and May to help replenish the groundwater reserves that supply much of the baseflow during the summer, the Commonwealth's streams and rivers will be increasingly vulnerable to even mild drought conditions during the summer and fall.

The Division of Water's Water Supply Section will continue to monitor conditions closely.

7 Day Streamflows

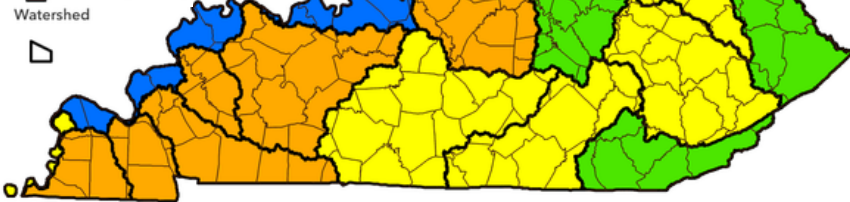
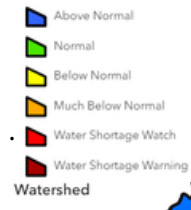


Figure 5. Average streamflow by watershed over the past 7-days (March 25-31).

28 Day Streamflows

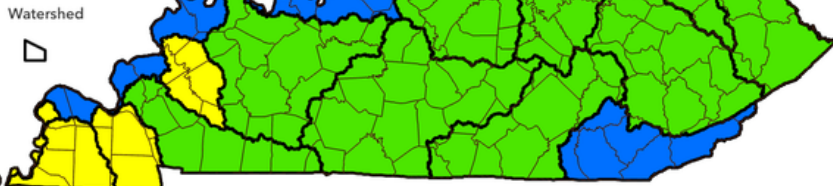


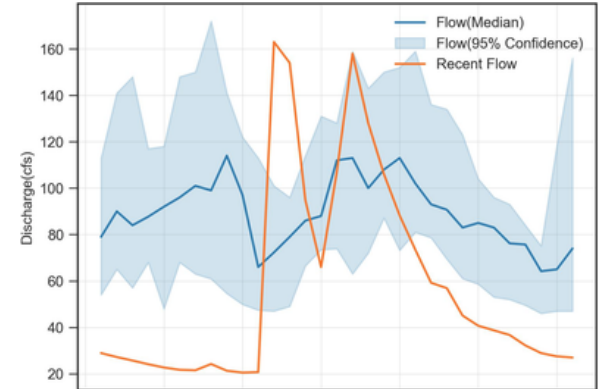
Figure 6. Average streamflow by watershed over the past 28-days (March 4-31).

Table 2. Mean Stream Discharge select stream gages.

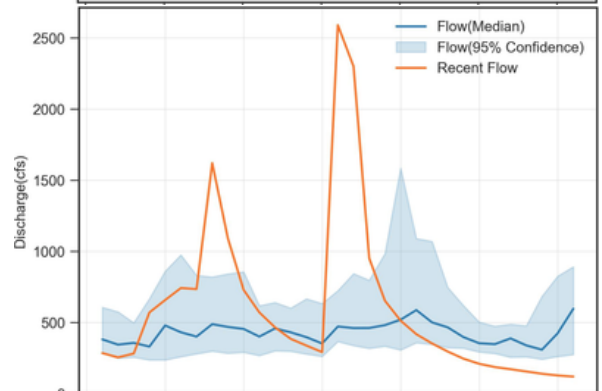
River and Location	Drainage Area (mi ²)	7 Day		28 Day	
		Average Flow (cfs)	% of Normal*	Average Flow (cfs)	% of Normal*
Levisa Fork at Pikeville	2,144	871	77	1,466	119
Little Sandy River near Grayson	400	343	94	733	178
Licking River at Blue Lick Springs	1,785	1686	77	2713	117.0
North Fork Kentucky River at Jackson	1,101	784	74	1501	129
Kentucky River at Lock 10	2,950	2,971	72	5,507	120
Cumberland River at Cumberland Falls	1,977	2,115	82	4,092	149
Beaver Creek near Monticello	43	24	59	51	111
Beech Fork at Bardstown	669	277	34	899	104
Barren River at Bowling Green	1,849	445	21	1,135	51
Green River at Calhoun	7,566	4,931	57	9,167	98
Tradewater River at Olney	255	39	15	359	124
Clarks River at Almo	134	22	15	51	33
Bayou De Chien near Clinton	69	32	37	57	64
Ohio River at Greenup Dam	62,000	156,375	216	158,676	203
Ohio River at Cannelton Dam	97,000	199,143	182	238,593	202
Mississippi River @ Thebes, IL	713,200	179,375	71	208,370	82

* Base Period 1980-2023

Johns Creek near Meta,
March 2026



Beech Fork at Maud,
March 2026



Green River at Calhoun,
March 2026

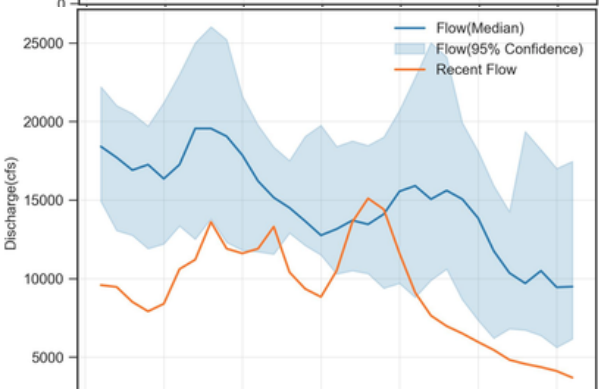


Figure 7. Streamflows compared to median flows for the month.

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Reservoir Storage

Reservoir storage for water supply lakes remain normal for most reservoirs in the state. Campton Reservoir has yet to reach normal pool and is several feet down. Simpson Lake (Bardstown) has artificially been lowered so repairs can be made to the dam.

We are in the time of year when reservoirs typically recharge, but recharge slows, and can end as inflow decreases and is outpaced by withdrawals and evaporation. If the dry conditions continue, we will likely see reservoirs start to be drawn down. Draw down starting this early in the year can leave reservoirs vulnerable to drought in late summer and fall.

Groundwater

General Statement: Kentucky is a geologically, and hydrogeologically, diverse state. Groundwater data is limited in availability and where available may only be applicable to the immediate area given regional geologic variability. Local conditions may not be accurately reflected by the reference locations selected and local rainfall and surface water conditions may provide additional or more representative information. Current data is compared to a 30-year reference period (1980 – 2010) or the longest available period of continuous data.

Inner Bluegrass: Flow at Royal Springs (Scott Co.) remained above the reference for the majority of the month in response to rainfall but fell below the reference at the close of the month. Flow peaked March 9th and ended the month around 15cfs.

Jackson Purchase: Water levels in the Viola Well (Graves Co.) rose in response to rainfall and followed the reference trend of increasing across the month of March. Wells across the region (Hickman, Benton-Rose, and Murray) followed similar trends of a modest increase for the month with peak water levels occurring between the 8th and 10th. Groundwater levels are expected to rise following seasonal recharge but given the historical rise in groundwater levels observed, groundwater levels may be lower than recent years.

Middlesboro: Water levels within the Middlesboro well (Bell Co.) were below or at the low-end of the monthly normal for most of March. With the only observed rise occurring in response to rainfall from March 12th through the 17th. Flow peaked on the 17th but the month ended with water levels roughly a foot below the reference median.

Additional data can be found at:
<https://www.uky.edu/KGS/water/water-groundwater-monitoring.php>

Figure 8. Locations of reference reservoirs across the state. Status of reservoir levels indicated by color.

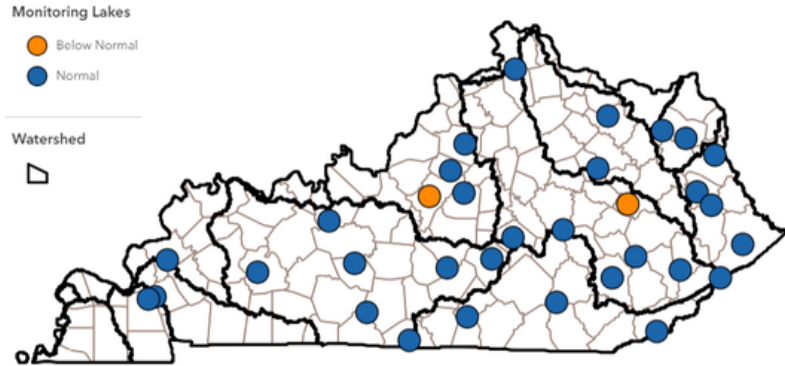
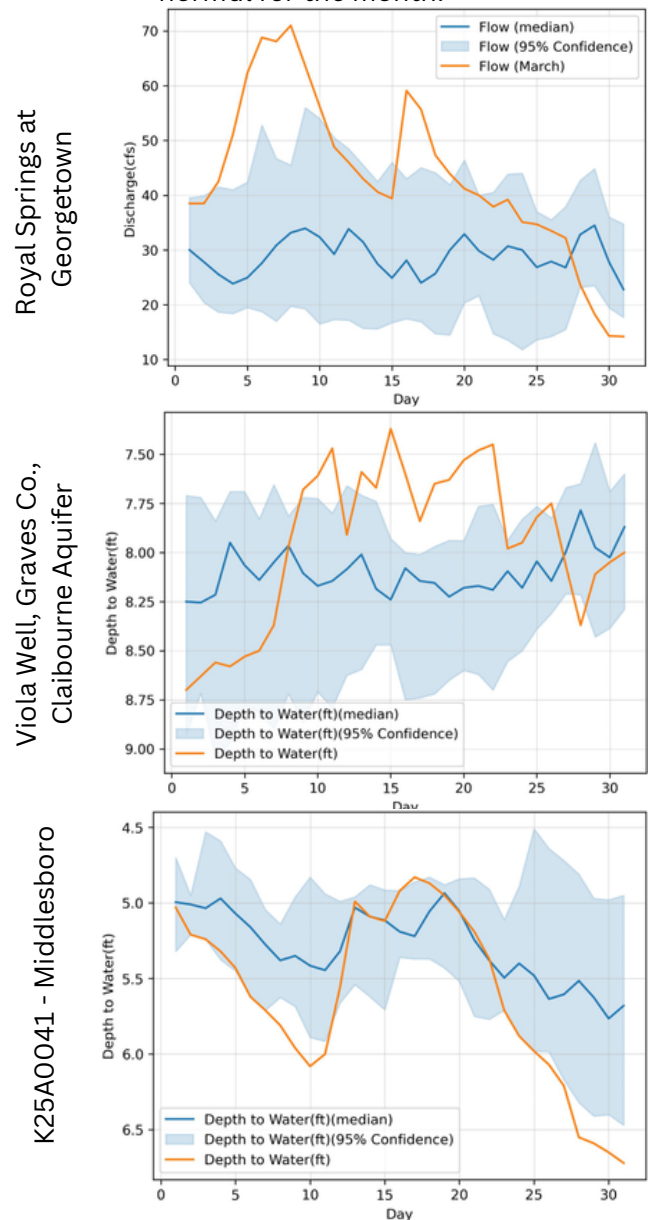


Figure 9. Groundwater observations compared to normal for the month.



March 2026

Forecast

The Climate Prediction Center (CPC) is currently predicting equal chances for above or below normal precipitation during April, for most of the state. Areas along the Ohio River have a slightly higher chance for above normal precipitation. The seasonal forecast (April through June) is for equal chance for above or below normal precipitation with slightly higher chances for above normal precipitation just to the east of Kentucky. Short-term forecasts show a continuation of the drier conditions to start April. The current U.S. Monthly Drought Outlook shows no new drought development in April, despite the rapidly deteriorating conditions across much of the Commonwealth.

Note: these forecasts do not provide the quantity above or below normal, just the probability it will occur.

U.S. Monthly Drought Outlook Drought Tendency During the Valid Period

Valid for April 2026
Released March 31, 2026

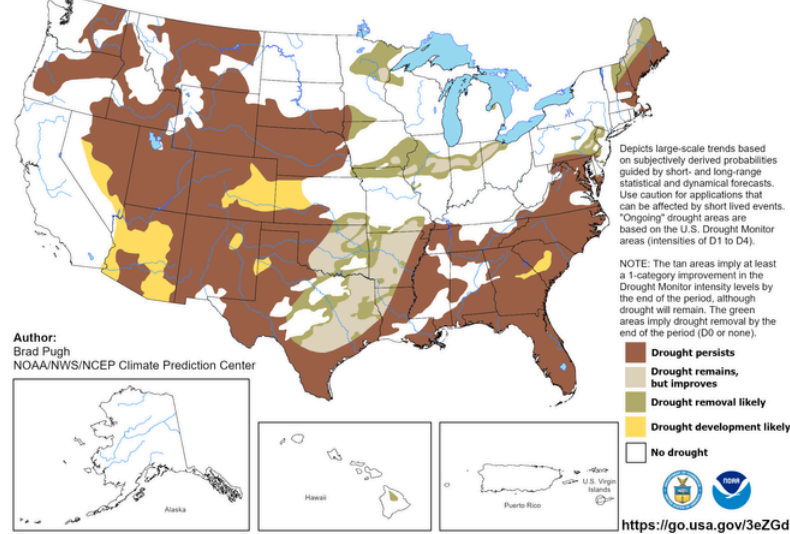
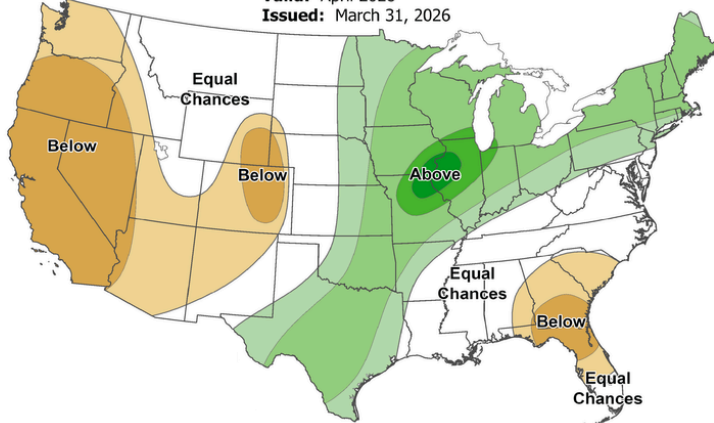


Figure 10. Monthly drought outlook.

Monthly Precipitation Outlook

Valid: April 2026
Issued: March 31, 2026



Seasonal Precipitation Outlook

Valid: Apr-May-Jun 2026
Issued: March 19, 2026

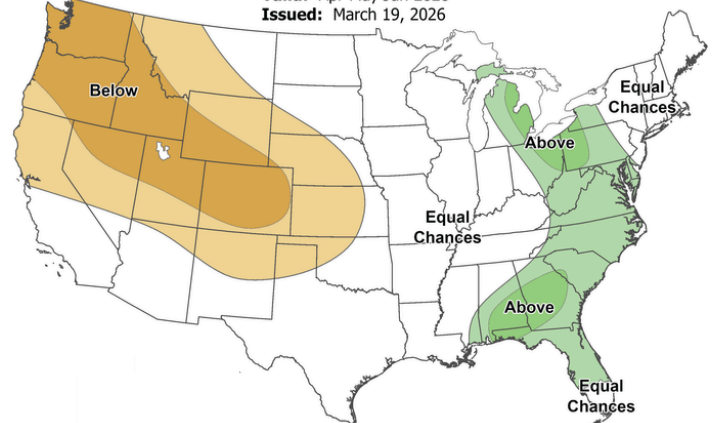


Figure 11. Monthly and seasonal precipitation outlooks.

Contact Us

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Report Drought Conditions



Acknowledgments

Precipitation Data:

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Centers for Environmental Information; Kentucky Mesonet; Midwest Regional Climate Center; Southern Regional Climate Center.

Streamflow Data:

U.S. Geological Survey, Water Resources Division.

Reservoir Data:

U.S. Army Corps of Engineers, Huntington, Louisville, and Nashville Districts; Kentucky Division of Water, Water Supply Section.

Forecast Data:

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Climate Prediction Center.