

National Weather Service

Kansas City, Missouri

Thursday, September 14, 2023 9:05 PM

Extreme Drought Lingers Across West Central Missouri

*This product will be updated weekly throughout the growing season.



Abnormally Dry (D0): Going into drought: short-term dryness slowing planting, growth of crops or pastures; fire risk above average. Moderate Drought (D1): Some damage to crops, pastures; fire risk high; streams, reservoirs, or wells low, some water shortages developing or imminent. Severe Drought (D2): Crop or pasture losses likely; fire risk very high;

Drought Information Statement

water shortages common; water restrictions imposed. Extreme Drought (D3): Major crop/pasture losses; extreme fire danger; widespread water shortages or

restrictions. Exceptional Drought (D4):

Exceptional and widespread crop/pasture losses; exceptional fire risk; shortages of water in reservoirs, streams, and wells, creating water emergencies.

Summary:

A couple weeks of well below average precipitation has allowed severe and extreme drought conditions to expand across west central and central Missouri as well as east central Kansas. Otherwise conditions remain most unchanged across north central Missouri where moderate and severe drought reside. Mainly just abnormally dry conditions are impacting the KC,Metro, northwest Missouri and northeast Kansas. To report drought conditions in your area, use the link below: https://droughtimpacts.unl.edu/Tools/ConditionMonitoringObservations.aspx

Local & State Actions:

Missouri - The state is providing emergency water and hay for farmers. More information can be found here: <u>https://mostateparks.com/drought</u>

Kansas - As of September 30, 2022 (and updated August 15, 2023, all of Kansas was under a drought watch, warning or emergency. Please refer to the Kansas Water Office for more information.

Soil Moisture Conditions:

Additional information concerning the drought in Missouri can be obtained via the **Department of National Resources**:

https://dnr.mo.gov/water/hows-water/state-water/drought

Additional information concerning the drought in Kansas can be obtained via the Kansas Water Office website at: https://kwo.ks.gov/

Additional information about federal disaster declarations due to the drought and drought assistance information can be found at the farm service agency website at: www.fsa.usda.gov

Missouri - Topsoil moisture was rated as 59% short or very short. Subsoil moisture was rated as 61% short or very short.

Kansas - Topsoil moisture was rated as 72% short or very short. Subsoil moisture was rated as 73% short or very short. Additional information about soil moisture conditions can be found at the NWS Climate Prediction Center (CPC) Web Site at:

http://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/U S/Soilmst/Soilmst.shtml



160-140-120-100-80-60-40-20 20 40 60 80 100 120 140 160

Agricultural Impacts:

Missouri - As of September 10th, the corn crop was rated as 38% poor to very poor condition. The soybean crop was as rated as 23% poor to very poor. Pasture conditions were rated as 47% poor to very poor. Hay and other roughages supply were 77% short or very short. Stock water supplies were 45% short or very short.

Kansas - As of September 10th, corn condition was rated as 34% poor to very poor. Soybean condition was rated as 45% poor to very poor. Sorghum condition was rated as 30% poor to very poor condition. 49% of pastures and ranges were in poor or very poor condition.

Additional information on agriculture impacts may be viewed at the United States Department of Agriculture (USDA) National Agricultural Statistics Service NASS Web Site: https://www.nass.usda.gov/Statistics_by_Sta te/index.php

River and Streamflow Conditions:



are normal with a few below normal.

Most streamflows across central



Explanation - Percentile classes

•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•
•</t

Hourly and forecast river stages out to 90 days can be found at the National Weather Service's (NWS) Advanced Hydrologic Prediction Service (AHPS) web page:

http://water.weather.gov/ahps2/index.php?wfo=eax Additional Current stream and river stages may be viewed at the following USGS Web Site: http://waterwatch.usgs.gov/

Missouri to east central Kansas are below normal with some much below normal. Conditions are NW Missouri and NE Kansas are near normal.

Fire Danger:



http://www.wfas.net/images/firedanger/kbdi.png

Ketch-Byram Drought Index (KBDI) is a drought index that is specifically related to fire potential. The KBDI is broken into four categories which indicate the susceptibility of ground fuels to fire danger. Below are the four categories and a brief description of each.

KBDI Value	Description of Fire Potential
0-200	Low - Wet with little danger of fire initiation
201-400	Moderate - Drying occurring with some fire danger
401-600	High - Ground cover dry and will burn readily
601-800	Extreme - Dead and live fuels will burn readily

Local Climatology:

Looking at the 14-day percent of normal precipitation (top image) it depicts the recent dry conditions with most areas only receiving 5 to 25 percent of normal precipitation. The long-tern overall dryness is evident in the 180-day departure from normal precipitation (bottom map). Particularly over areas of west central Missouri and east central Kansas as well as northeast Missouri where deficits of 8-12 inches are depicted



Precipitation & Temperature Outlooks:

For the week of September 22-28, above-normal temperatures and precipitation are favored. Beyond that there is little signal for above or below normal temperatures or precipitation. Consequently, drought is expected to persist.



Questions and/or Comments:

If you have any questions or comments about the information in this document please contact:

Chris Bowman Drought Focal Point National Weather Service – Pleasant Hill chris.bowman@noaa.gov (816) 540-6021 Other Contacts:

Missouri State Climatologist: University of Missouri <u>http://climate.missouri.edu/</u>

Kansas State Climatologist: Kansas State University http://climate.k-state.edu/

Acknowledgements:

The drought monitor is a multi-agency effort involving NOAA's National Weather Service and National Climatic Data Center, the USDA, state and regional center climatologists and the National Drought Mitigation Center. Information for this statement has been gathered from NWS and FAA observation sites, cooperative and volunteer observations, USDAFS, the USDA and USGS.

Related Websites: <u>NWS - http://www.weather.gov/kc</u> <u>CPC - http://www.cpc.ncep.noaa.gov</u>

Drought Monitor: http://droughtmonitor.unl.edu/ USGS - http://water.usgs.gov/ COE - http:// www.nwo.usace.army.mil/