

Drought Information Statement for the Mid-South Valid 11/30/2023

Issued By: NWS Memphis, TN Contact Information: sr-meg.wx@noaa.gov

- This product will be updated December 14, 2023, or sooner if drought conditions change significantly.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/meg/DroughtInformationStatement for previous statements.



Link to the <u>latest U.S. Drought Monitor</u> for the Mid-South

- DROUGHT CONDITIONS WORSEN
- Drought intensity and extent
 - D4 (Exceptional Drought): Continuing in northeast MS
 - D3 (Extreme Drought): Continuing in northwest MS and northwest TN
 - D2 (Severe Drought): Continuing in east-central AR, northwest TN and northwest MS
 - D1 (Moderate Drought): A small swath in east-central AR and West TN
 - D0 (Abnormally Dry): A small swath stretching along the northern portion of Interstate 40
 - None: Far northeast AR, the Missouri Bootheel, and far northwest TN

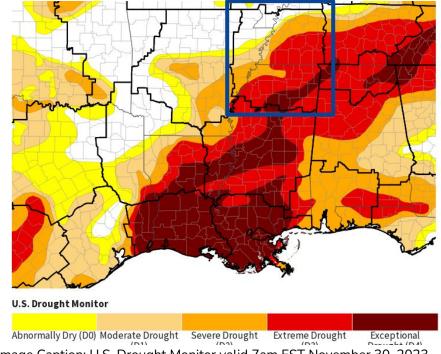


Image Caption: U.S. Drought Monitor valid 7am EST November 30, 2023

Recent Change in Drought Intensity

Link to the latest 4-week change map for the Mid-South

- One-Week Drought Monitor Class Change
 - No change: Most of the Mid-South
 - Drought improved: A small portion across northeast Mississippi

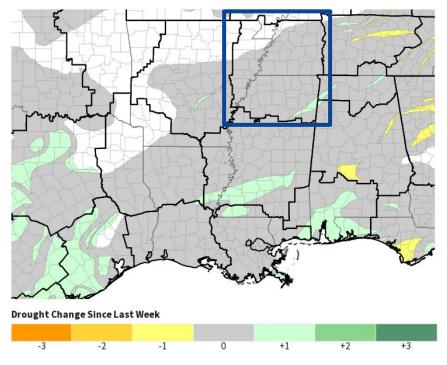


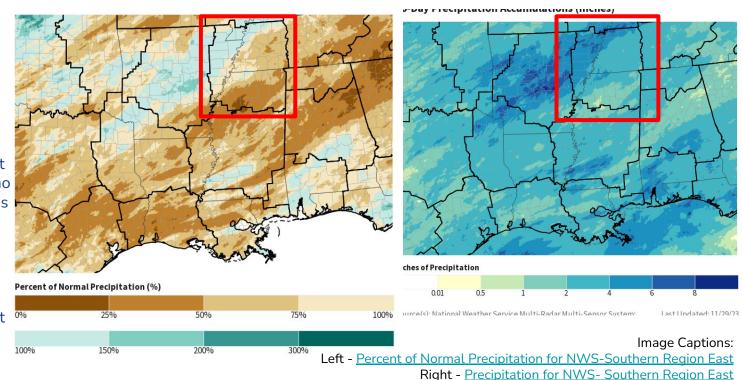
Image Caption: U.S. Drought Monitor 1-week change map valid 7 a.m. EST November 30, 2023





Over the past 30 days from the <u>High Plains Regional Climate Center</u>

- Precipitation totals
 ranged from 0.05-4"
 across the region.
 Northeast AR, Missouri
 Bootheel, and far
 northwest TN
 experienced the higher
 precipitation amounts.
 This reflects on the latest
 drought monitor where no
 drought conditions or less
 severe conditions are
 present in this area.
- The majority of the Mid-South experienced below normal precipitation over the last 30 days. Portions of northeast AR and far northwest TN received normal precipitation.



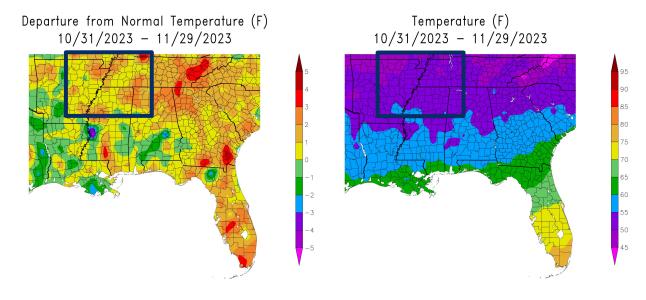


Data Courtesy High Plains Regional Climate Center.

Data over the past 30 days ending November 29, 2023

Data over the past 30 days from the <u>High Plains Regional Climate Center</u>

- Average temperatures have generally been in the 50s across the region over the last 30 days.
- Average temperatures ranged from normal to 2 to 3 degrees Fahrenheit above normal during this period.



Generated 11/30/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers 023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions: Left - <u>Departure from Normal Temperature</u>

Right - <u>Average Temperature</u>
Data Courtesy High Plains Regional Climate Center.

Data over the past 30 days ending November 29, 2023





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

Hydrologic Impacts

- The Mississippi River at Memphis remains below low-water threshold values. The extended river forecast keeps the river very low over the next month which will continue to impact barge and river traffic.
- Hydropower production on hold at Osceola, Arkansas because not enough Mississippi River water was passing through the intake pipes.

Agricultural Impacts

- Where some regions saw poor production, and in some cases, total loss, other pockets of the Mid-South reported above average yields or at least "better than expected yields" considering this season's drought.
- Supplemental feeding and watering of livestock is required across portions of north MS and West TN.
- Some reports in West TN depict the earliest supplemental feeding in 20 or more years.

Fire Hazard Impacts

• Normal wildland fire activity has been observed this month across the Mid-South. Below normal conditions exist off to the west and above normal fire conditions to the south.

Other Impacts

• There are no known impacts at this time.

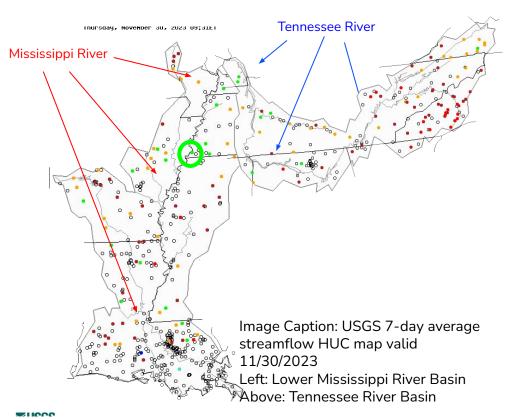
Mitigation Actions

• Please refer to your municipality and/or water provider for mitigation information.





Hydrologic Conditions and Impacts

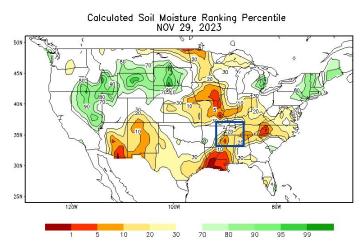


- The Mississippi River at Memphis is hovering just above low water threshold values. The extended river forecast depicts the river will fall to low water levels once again.
- The Tennessee River feeds into the Mississippi River, and is also experiencing near to below normal water levels.



Agricultural Impacts

- Soil moisture is roughly 30% of normal (or lower) mainly along and south of Interstate 40
- Crop yield has been negatively affected in a few areas in northwest MS
- Pastures in northwest MS and west TN are producing less feed for cattle than normal and requires supplemental feeding



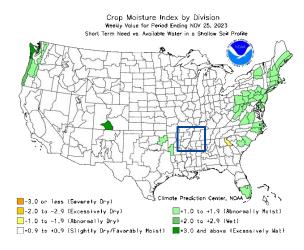


Image Captions:

Left: CPC Calculated Soil Moisture Ranking

Percentile valid November 29, 2023

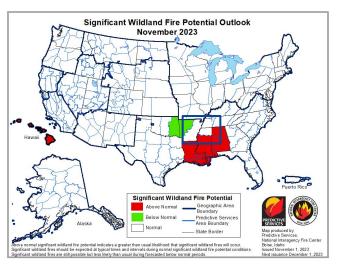
Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending November 25, 2023





Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

- Normal to above normal wildland fire potential is expected for the Mid-South during November. Below normal wildfire conditions are expected just to our west.
- Burn Bans currently in effect for:
 - Arkansas: None.
 - o Missouri: None.
 - Mississippi: Calhoun, Chickasaw, Itawamba, Lafayette, Pontotoc, Tallahatchie, Union, and Yalobusha Counties
 - <u>Tennessee</u>: None.



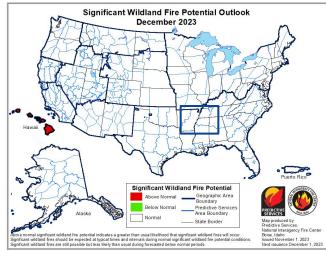


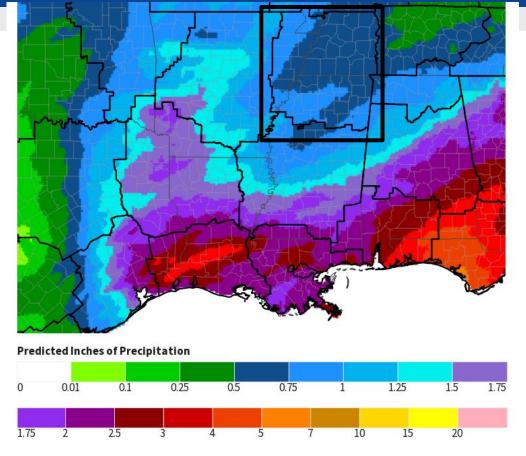
Image Caption: <u>Significant Wildland Fire</u>
<u>Potential Monthly Outlook</u> for November 2023



Seven Day Precipitation Forecast

- The best chances for widespread rain across the Mid-South is likely Thursday 11/30 through Friday 12/1.
- Forecast precipitation amounts (QPF) are expected to be 1" or less.

Image Caption: National Weather Service Weather Prediction Center courtesy of drought.gov; 7-Day Quantitative Precipitation Forecast Valid November 30, 2023 through December 7, 2023





Long-Range Outlooks

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

 The entire Mid-South has a 33% chance for above normal temperatures for December.

 There is a 33-40% chance that December precipitation across north MS will be above normal. The rest of the Mid-South has equal chances to be above or below normal for precipitation.

 In summary, December is trending warmer than normal, but could be above or below normal precipitation.

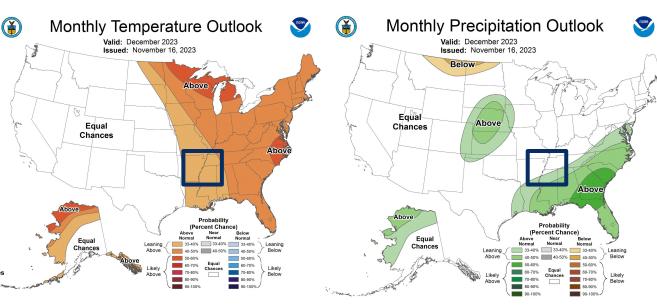


Image Captions:

Left - Climate Prediction Center Monthly Temperature Outlook.

Right - Climate Prediction Center Monthly Precipitation Outlook.

Valid December 2023

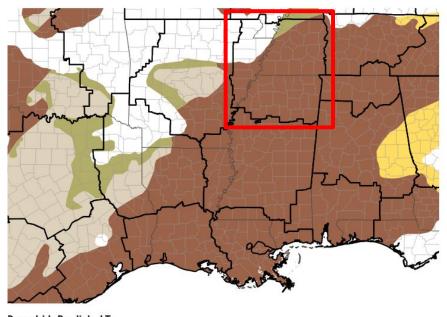


The latest monthly and seasonal outlooks can be found on the CPC homepage

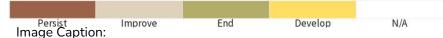
- Drought conditions are expected to persist across much of the Mid-South during the month of December.
- Little improvement is anticipated during this time, despite a small sector of far northwest TN where drought removal is likely.

Links to the latest:

Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook







Climate Prediction Center Monthly Drought Outlook Released 11/30/2023 valid for 12/2023

