

# Drought Information Statement for the Mid-South Valid 11/16/2023

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

- This product will be updated November 30, 2023, or sooner if drought conditions change significantly.
- Please see all currently available products at <u>https://drought.gov/drought-information-statements</u>.
- Please visit https://www.weather.gov/meg/DroughtInformationStatement for previous statements.

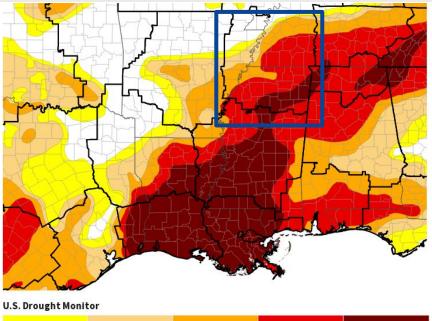






Link to the <u>latest U.S. Drought Monitor</u> for the Mid-South

- 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): Expanded to include much of the remainder of 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



Abnormally Dry (D0) Mod	lerate Drought S	evere Drought	Extreme Drought	Exceptional
Image Caption: U.S. Drought Monitor valid 7am EST November 16, 2023				



## Recent Change in Drought Intensity

Link to the latest <u>4-week change map</u> for the Mid-South

- One-Week Drought Monitor Class Change
  - Drought worsened: Northeast MS, West TN, and a small portion of northeast AR
  - No change: Most of the Mid-South
  - Drought improved: A small portion in the MS Delta Region

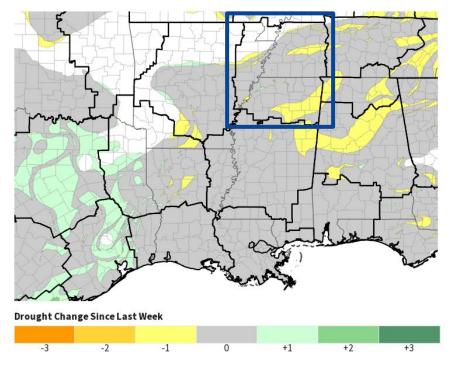


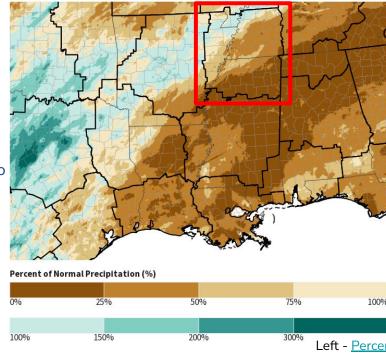
Image Caption: U.S. Drought Monitor 1-week change map valid 7 a.m. EST November 16, 2023



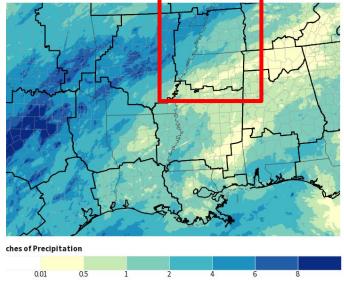
Precipitation

#### Over the past 30 days from the High Plains Regional Climate Center

- Precipitation totals
  ranged from 0.05-6"
  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 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.



v-vay riccipitation Accumutations (inclies)



jurce(s): National Weather Service Multi-Radar Multi-Sensor System: Last Undated: 11/17/23

#### Image Captions:

Left - <u>Percent of Normal Precipitation for NWS-Southern Region East</u> Right - <u>Precipitation for NWS-Southern Region East</u> Data Courtesy High Plains Regional Climate Center. Data over the past 30 days ending November 11, 2023

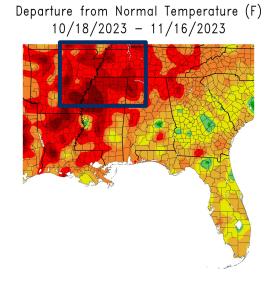
> National Weather Service Memphis, TN

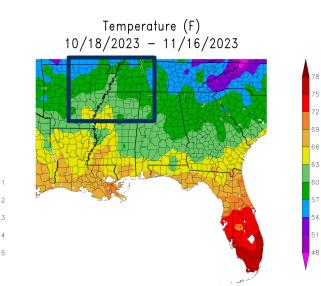


### Temperature

#### Data over the past 30 days from the High Plains Regional Climate Center

- Average temperatures have generally been in the 60s across the region over the last 30 days.
- Average temperatures ranged from 2 to 5 degrees Fahrenheit above normal during this period.





Generated 11/17/2023 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 15, 2023

#### National Weather Service Memphis, TN





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.

#### **Fire Hazard Impacts**

• Above normal wildland fire activity has been observed this month across northeast Arkansas and north Mississippi.

#### **Other Impacts**

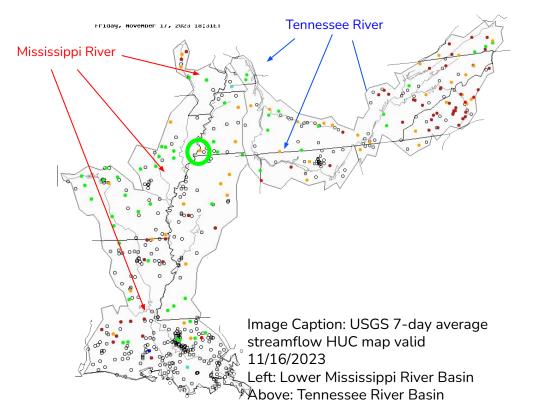
• There are no known impacts at this time.

### **Mitigation Actions**

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



# Hydrologic Conditions and Impacts



- The Mississippi River at Memphis is below low water threshold values. The extended river forecast gives the river a slow rise before beginning its fall again.
- The Tennessee River feeds into the Mississippi River, and is also experiencing near to below normal water levels.

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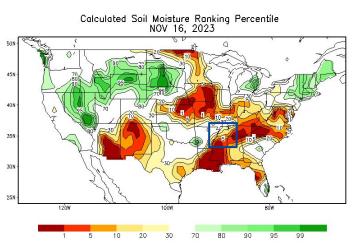


National Oceanic and Atmospheric Administration U.S. Department of Commerce



## **Agricultural Impacts**

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



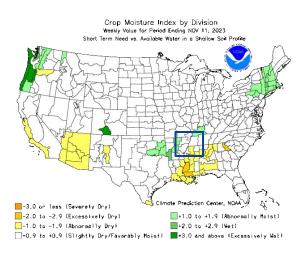


Image Captions:

Left: CPC Calculated <u>Soil Moisture Ranking</u> <u>Percentile</u> valid November 11, 2023 Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending November 16, 2023

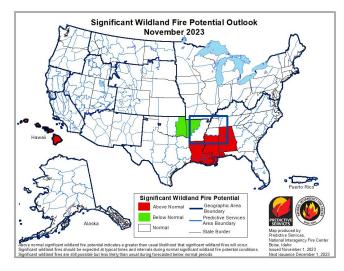
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Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

- 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.
  - <u>Missouri</u>: None.
  - <u>Mississippi</u>: Calhoun, Chickasaw, Itawamba, Lafayette, Lee, Marshall, Monroe, Panola, Pontotoc, Tallahatchie, Tate, Tishomingo, Union, and Yalobusha Counties
  - <u>Tennessee</u>: None.



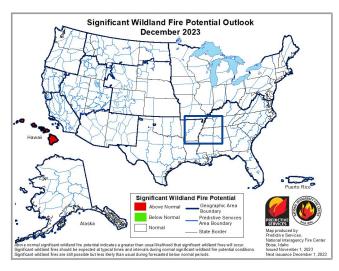


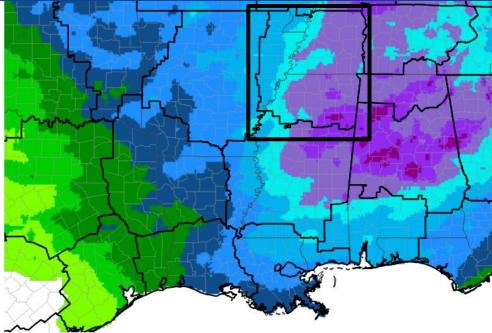
Image Caption: <u>Significant Wildland Fire</u> <u>Potential Monthly Outlook</u> for November 2023

> National Weather Service Memphis, TN



# Seven Day Precipitation Forecast

- The best chances for widespread rain across the Mid-South is likely Monday 11/20 through Tuesday 11/21.
- Forecast precipitation amounts (QPF) are expected to be 1-3".



#### **Predicted Inches of Precipitation**



Image Caption: National Weather Service Weather Prediction Center courtesy of drought.gov ; 7-Day Quantitative Precipitation Forecast Valid November 17, 2023 through November 24, 2023



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

Long-Range Outlooks

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

- There is roughly equal chances for above or below normal temperatures in November for a majority of the Mid-South. There is a small area that is 33% leaning above normal temperatures.
- There is a 33-50% chance that November precipitation will be below normal.
- In summary, November is trending drier than normal, but could be above or below normal temperatures.

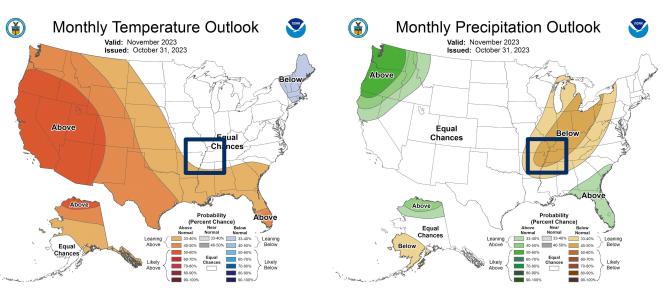


Image Captions:

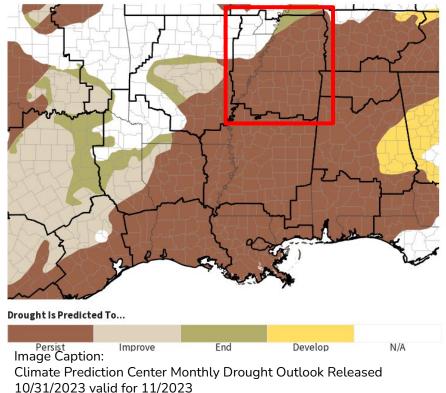
Left - <u>Climate Prediction Center Monthly Temperature Outlook.</u> Right - <u>Climate Prediction Center Monthly Precipitation Outlook.</u> Valid November 2023



**Drought Outlook** 

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

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



National Weather Service

Memphis, TN

 Climate Prediction Center Monthly Drought Outlook
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 Climate Prediction Center Seasonal Drought Outlook
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Links to the latest: