



# Drought Information Statement for the ArkLaMiss Region Valid October 3, 2023

### Issued By: WFO Jackson, MS Contact Information: sr-jan.webmaster@noaa.gov

- This product will be updated October 13, 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/jan/DroughtInformationStatement for previous statements.

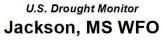


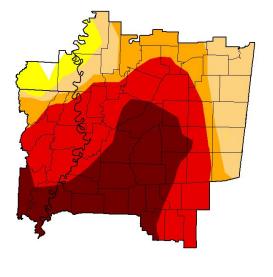


U.S. Drought Monitor

Link to the latest U.S. Drought Monitor for the ArkLaMiss Region

- DROUGHT CONDITIONS INTENSIFY
- Drought intensity and Extent
  - D4 (Exceptional Drought): Expanded to cover portions of central and southern MS & LA
  - D3 (Extreme Drought): Expanded further across Northeast LA & central MS
  - D2 (Severe Drought): Expanded further across Northeast LA & central MS
  - D1 (Moderate Drought): Expanded further across portions of northern & eastern MS
  - D0: (Abnormally Dry): Expanded further across northern & eastern MS





#### October 3, 2023 (Released Thursday, Oct. 5, 2023) Valid 8 a.m. EDT

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.54	99.46	94.23	77.64	64.45	28.75
Last Week 09-26-2023	1.82	98.18	84.39	71.69	58.13	27.97
3 Month s Ago 07-04-2023	70.32	29.68	0.51	0.00	0.00	0.00
Start of Calendar Year 01-03-2023	54.55	45.45	0.00	0.00	0.00	0.00
Start of Water Year 09-26-2023	1.82	98.18	84.39	71.69	58.13	27.97
One Year Ago 10-04-2022	26.87	73.13	1.07	0.00	0.00	0.00



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

Author: Brad Pugh CPC/NOAA



Image Caption: U.S. Drought Monitor valid 7am CDT October 3rd.



### Recent Change in Drought Intensity

Link to the latest <u>4-week change map</u> for the ArkLaMiss Region

- Four Week Drought Monitor Class Change.
  - Drought Worsened: There was a general worsening across the region over the last few weeks. The most significant changes have been across portions of central and northeastern MS and northern LA, where rainfall deficits have persisted.
  - No Change: None
  - Drought Improved: None

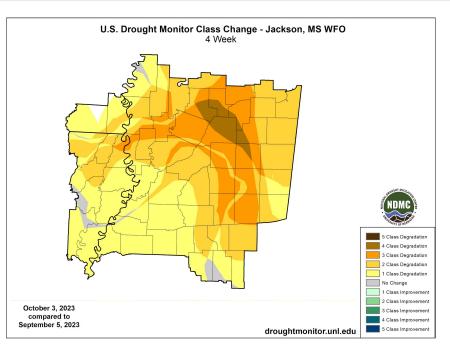
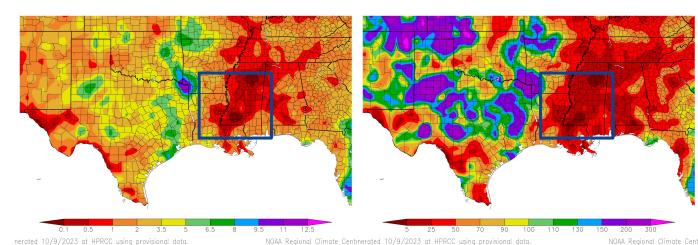


Image Caption: U.S. Drought Monitor 4-week change map valid 7am CDT October 3rd





- Over the last 30 days most locations received less than 2 inches of rain.
- For much of the region this was less than 25% to 50% of normal for this time of year.
- Many areas received less than 25% of normal rainfall.



Precipitation (in)

9/9/2023 - 10/8/2023

#### Image Captions:

Left - Precipitation Amount for WFO Jackson, MS Right - Percent of Normal Precipitation for WFO Jackson, MS Data Courtesy High Plains Regional Climate Center. Data over the past 30 days ending 10/08/2023

Percent of Normal Precipitation (%)

9/9/2023 - 10/8/2023





- Over the last 30 days, average temperatures were mostly between 70 to 80 degrees.
- This was near normal to 2 degrees above normal for the ArkLaMiss region.
- This added heat in above normal areas has added to drought stress of crops and vegetation, as well as evaporation of soil moisture and surface water.

Departure from Normal Temperature (F) 9/9/2023 - 10/8/2023 Temperature (F) 9/9/2023 - 10/8/2023

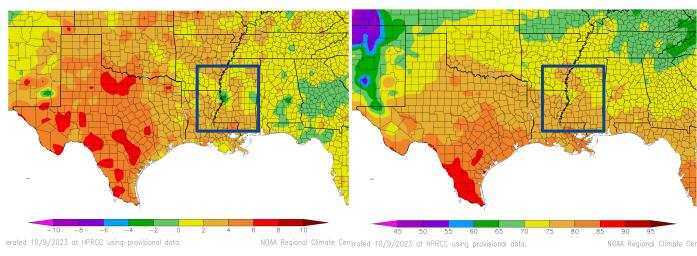


Image Captions: Left - Average Temperature Right - Departure from Normal Temperature Data Courtesy High Plains Regional Climate Center. Data over the past 30 days ending 10/08/2023



## Hydrologic Conditions and Impacts

- Over the past week, area streamflows have ranged from normal to below normal for most of the region.
- Several rivers in the region have streamflows at levels much below normal.

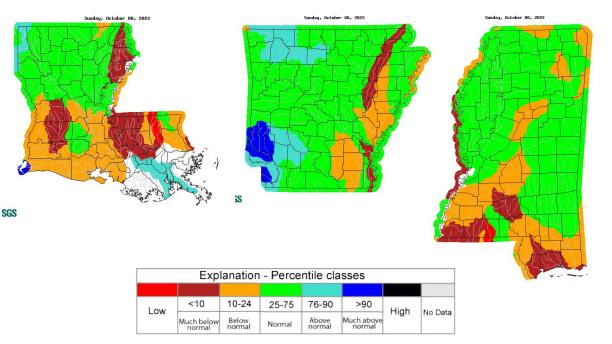


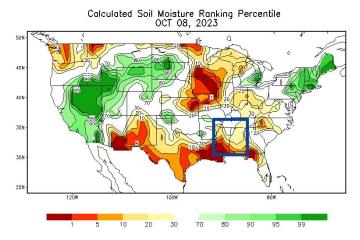
Image Caption: USGS 7-day average streamflow HUC maps valid 10/08/2023

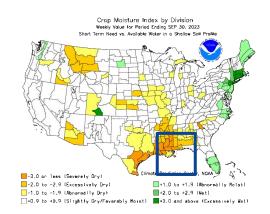




### **Agricultural Impacts**

- Soil moisture remains depleted across much of the area.
- Crop yields have been severely affected including: reductions of cotton production by up to 90% in some portions of southern Mississippi, and loss of young pine trees on pine plantations.
- Regional cattle have been transitioned to early hay feeding where pastures are stressed.





**Image Captions:** 

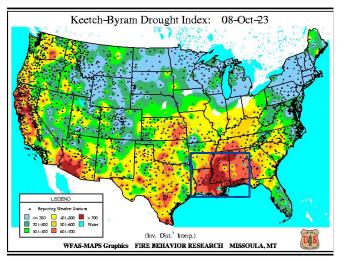
Left: CPC Calculated <u>Soil Moisture Ranking</u> <u>Percentile</u> valid October 8th, 2023. Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending October 8th, 2023.



## Fire Hazard Impacts

Link to Wildfire Potential Outlooks from the Southern Area Coordination Center

- High values of the Keetch-Byram Drought Index indicate forest litter will continue to aid fire intensity.
- The outlook for significant wildfire potential through October remains above normal.
- Burn bans remain in place across the region. Latest maps for burn bans in: <u>MS</u>, <u>LA</u>, <u>AR</u>.



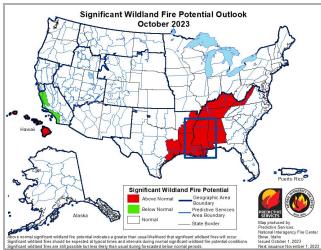


Image Captions:

Left: Latest Keetch-Byram Drought Index valid 10/8/2023. Right: Significant Wildland Fire Potential Monthly Outlook for October 2023.

> National Weather Service WFO Jackson, MS



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

## Seven Day Precipitation Forecast

- A cold front moving through the region around October 11-14 will bring a chance for showers and a few thunderstorms.
- Portions of southeast MS could see an inch of precipitation, however we are generally expected to see less than 0.50 inches across the ArkLaMiss region.

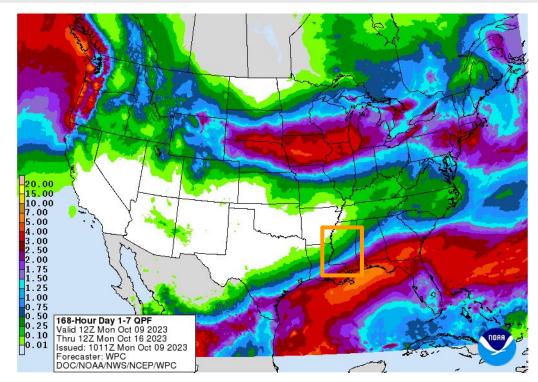


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid Monday, October 9th to Monday October 16th



## Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day Temperature Outlook and Precipitation Outlook.

• In the October 10-16 time frame, above normal temperatures and below normal rainfall should contribute to rapid onset of drought or additional drought intensification in northern Mississippi and eastern Arkansas.

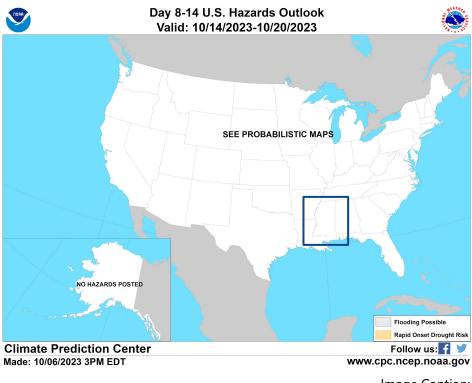


Image Caption: <u>Days 8 to 14 U.S. Hazards Outlook</u> Valid October 10 to 16.





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

### Hydrologic Impacts

• Low streamflows are affecting several rivers in the region, which could negatively impact recreational activities.

### Agricultural Impacts

• Significant impacts to agricultural producers are being felt in the region including substantial reductions in crop output and additional feeding requirements for livestock.

### Fire Hazard Impacts

• Dead and drought stressed vegetation is contributing to increased wildfire intensity.

#### **Other Impacts**

- Late summer heat and drought have put a stress on residential and municipal water usage.
- Please submit observed impacts using the CMOR app. More information available <u>here</u>.

### **Mitigation Actions**

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

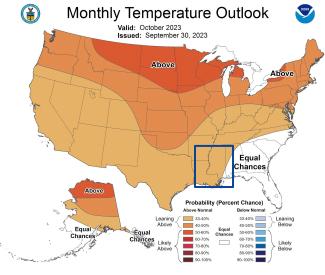


National Oceanic and Atmospheric Administration U.S. Department of Commerce



The latest monthly and seasonal outlooks can be found on the <u>CPC homepage</u>.

 The pattern over the next month will continue to favor warmer than normal temperatures with equal chances for above or below normal precipitation chances.



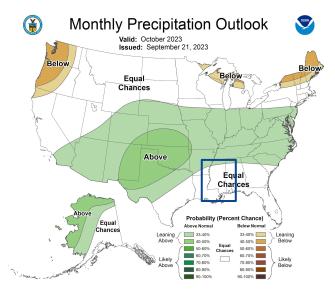


Image Captions:

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



### **Drought Outlook**

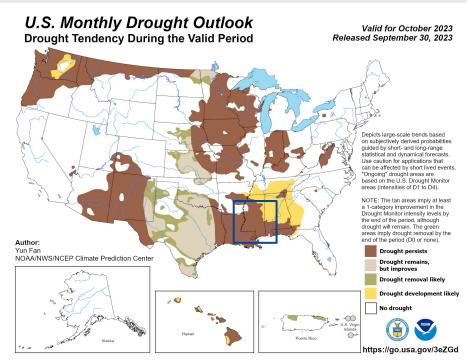
The latest monthly and seasonal outlooks can be found on the CPC homepage.

 Drought conditions are expected to persist or worsen across the region through October.

Links to the latest: <u>Climate Prediction Center Monthly Drought Outlook</u> <u>Climate Prediction Center Seasonal Drought Outlook</u>



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



#### Image Caption:

Climate Prediction Center Monthly Drought Outlook Released September 30, 2023 valid for October 2023