



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 <https://drought.gov/drought-information-statements>.
- Please visit <https://www.weather.gov/jan/DroughtInformationStatement> for previous statements.



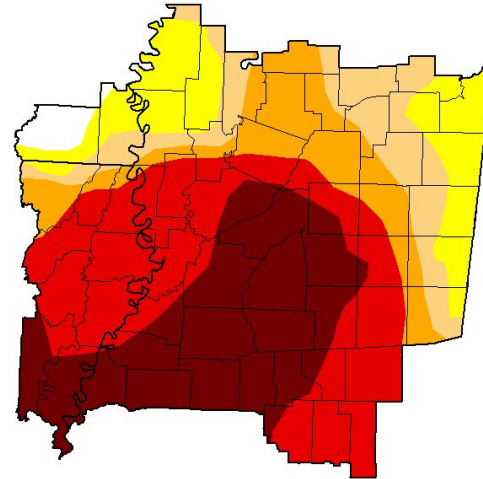


U.S. Drought Monitor

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

U.S. Drought Monitor Jackson, MS WFO



September 26, 2023
(Released Thursday, Sep. 28, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|
| Current 09-19-2023 | 1.82 | 98.18 | 84.39 | 71.69 | 58.13 | 27.97 |
| Last Week 09-19-2023 | 1.82 | 98.18 | 78.22 | 61.25 | 49.55 | 22.63 |
| 3 Months Ago 06-27-2023 | 70.49 | 29.51 | 0.51 | 0.00 | 0.00 | 0.00 |
| Start of Calendar Year 01-01-2023 | 54.55 | 45.45 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Water Year 09-27-2022 | 28.29 | 71.71 | 1.07 | 0.00 | 0.00 | 0.00 |
| One Year Ago 09-27-2022 | 28.29 | 71.71 | 1.07 | 0.00 | 0.00 | 0.00 |

Intensity

| | |
|---------------------|------------------------|
| None | D2 Severe Drought |
| D0 Abnormally Dry | D3 Extreme Drought |
| D1 Moderate Drought | D4 Exceptional Drought |

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.aspx>

Author:
Richard Heim
NCEI/NOAA



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 7am CDT September 26th.



Recent Change in Drought Intensity

Link to the latest [4-week change map](#) 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 northern MS and northern LA, where rainfall deficits have persisted.
 - No Change: None
 - Drought Improved: None

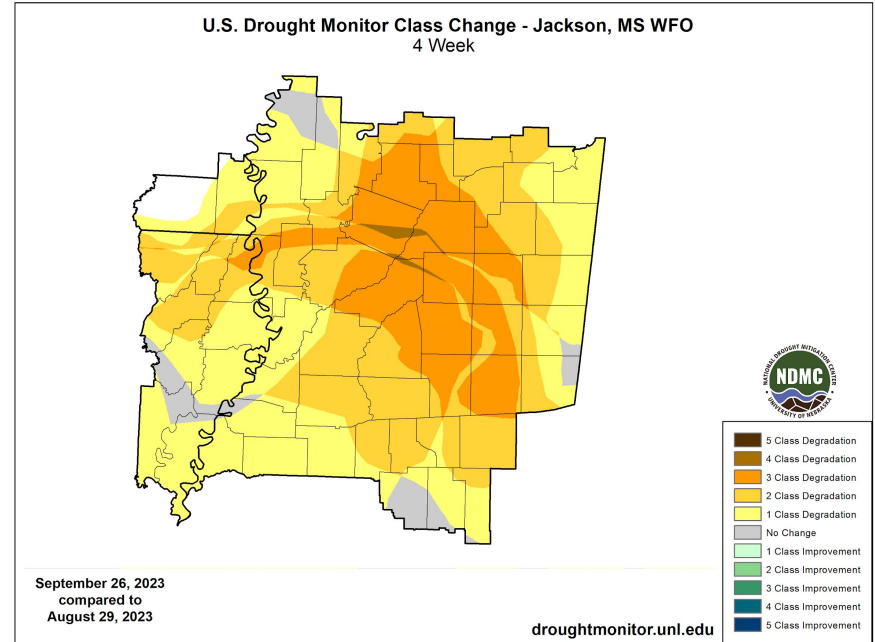


Image Caption: U.S. Drought Monitor 4-week change map valid 7am CDT September 26th.

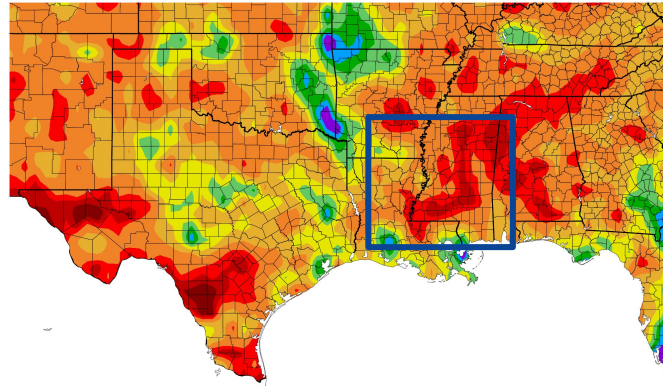




Precipitation

- Over the last 30 days most locations received less than 3 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.

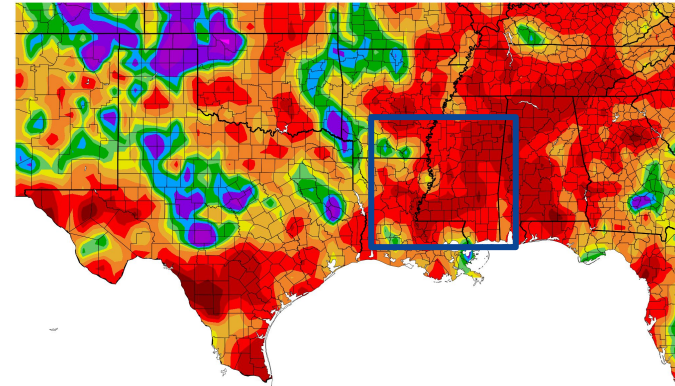
Precipitation (in)
9/3/2023 – 10/2/2023



Generated 10/3/2023 at HPRCC using provisional data.

NOAA Regional Climate Center

Percent of Normal Precipitation (%)
9/3/2023 – 10/2/2023



NOAA Regional Climate Center

Image Captions:
Left - Precipitation Amount for WFO Jackson, MS
Right - Percent of Normal Precipitation for [area]
Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending Month, DD, YYYY

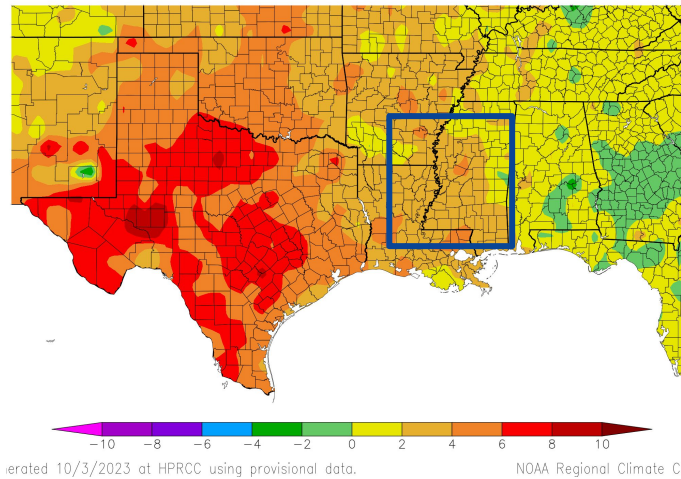




Temperature

- Over the last 30 days, average temperatures were mostly between 75 to 80 degrees.
- This was 2 to 4 degrees warmer than normal for much of the ArkLaMiss region.
- This added heat has added to drought stress of crops and vegetation, as well as evaporation of soil moisture and surface water.

Departure from Normal Temperature (F)
9/3/2023 - 10/2/2023



Temperature (F)
9/3/2023 - 10/2/2023

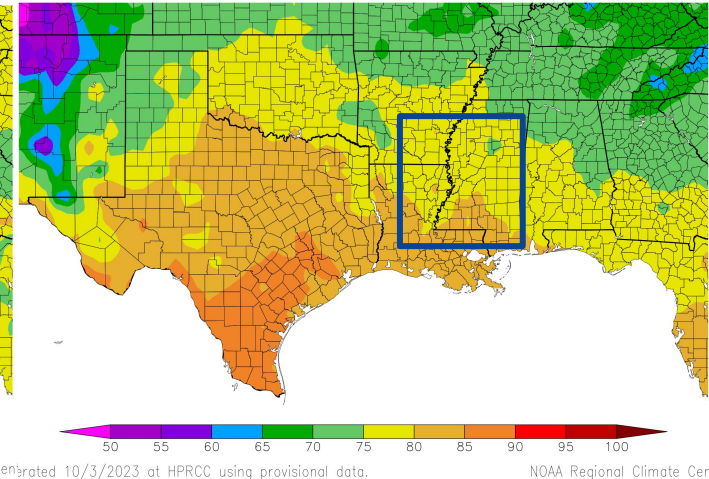


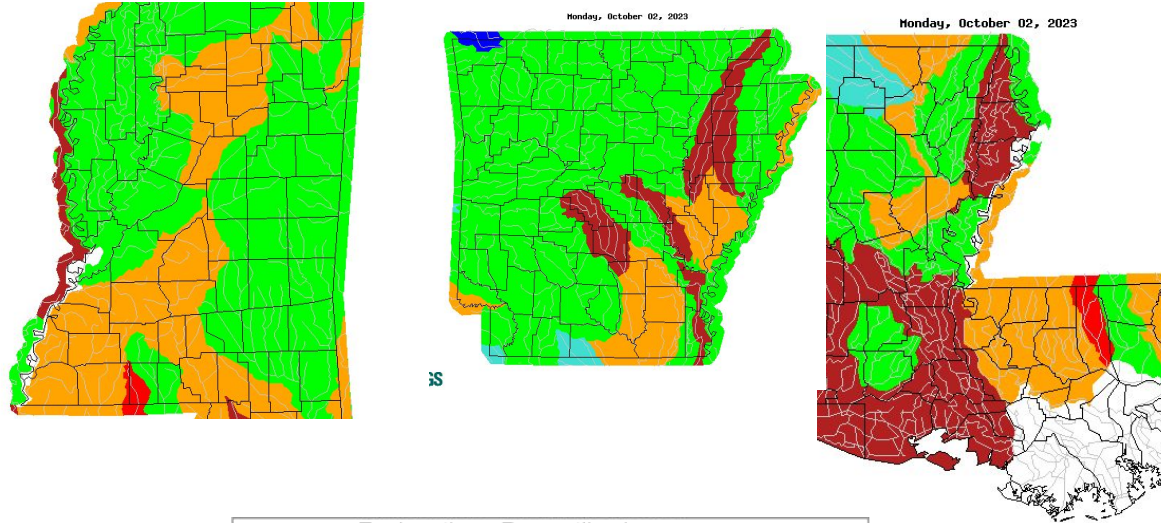
Image Captions:
Left - Average Temperature
Right - Departure from Normal Temperature
Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending Month, DD, YYYY





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.



| Explanation - Percentile classes | | | | | | | |
|----------------------------------|-------------------|--------------|--------|--------------|-------------------|------|---------|
| | | | | | | | |
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | No Data |
| | Much below normal | Below normal | Normal | Above normal | Much above normal | | |

Image Caption: USGS 7-day average streamflow HUC maps valid 10/02/2023

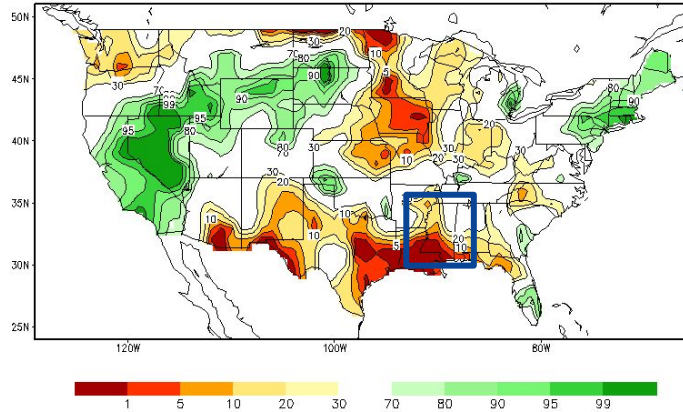




Agricultural Impacts

- 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.

Calculated Soil Moisture Ranking Percentile
OCT 02, 2023



Crop Moisture Index by Division
Weekly Value for Period Ending SEP 30, 2023
Short Term Need vs. Available Water in a Shallow Soil Profile

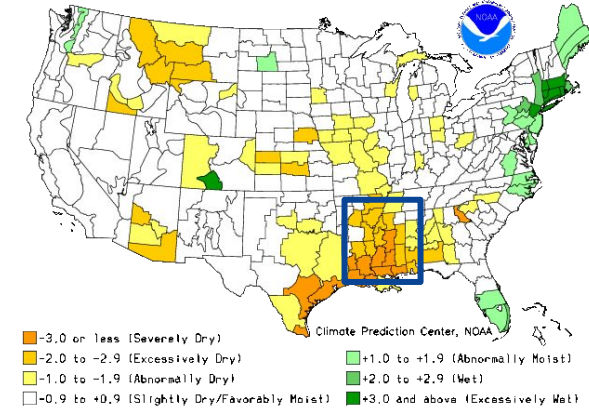


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid October 2, 2023.

Right: [Crop Moisture Index by Division](#). Weekly value for period ending September 30, 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: [MS](#), [LA](#), [AR](#).

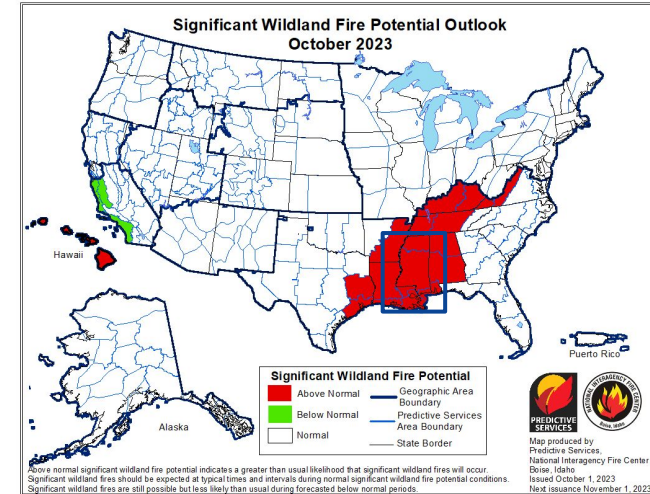
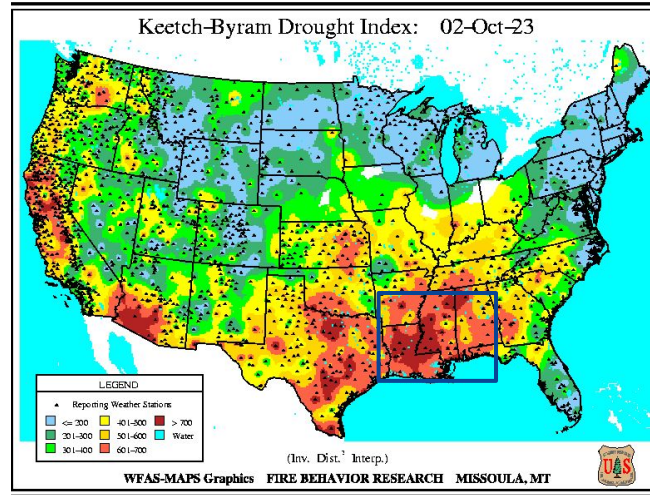


Image Captions:

Left: [Latest Keetch-Byram Drought Index valid 10/2/2023.](#)

Right: [Significant Wildland Fire Potential Monthly Outlook](#) for October 2023.





Seven Day Precipitation Forecast

- A cold front moving through the region around October 6-8 will bring a chance for showers and a few thunderstorms.
- A wetting rain is possible in parts of the local area, but average totals are expected to be less than 0.25 inches over the next 7 days.

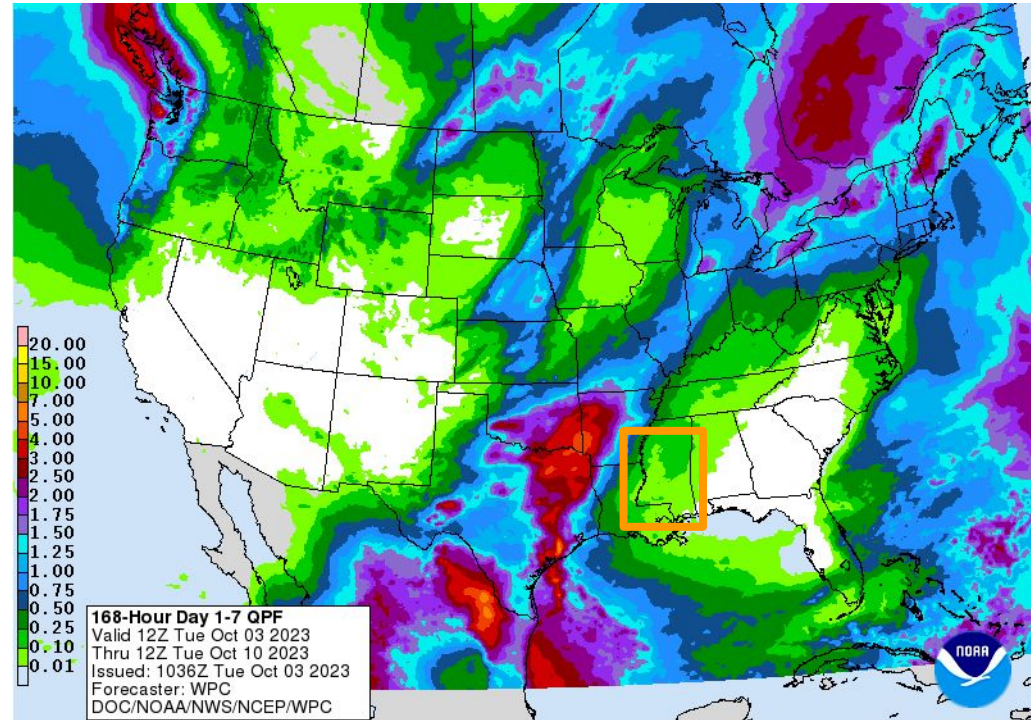


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Tuesday October 3 to Monday October 9





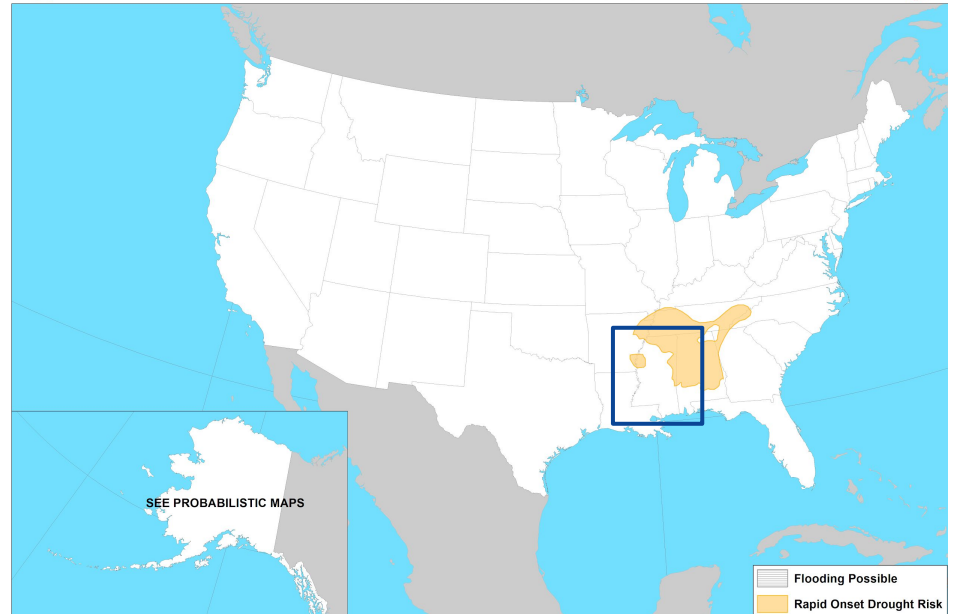
Rapid Onset Drought Outlook

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.



Day 8-14 U.S. Hazards Outlook
Valid: 10/10/2023-10/16/2023



Climate Prediction Center
Made: 10/02/2023 3PM EDT

Follow us:
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Image Caption:
[Days 8 to 14 U.S. Hazards Outlook](#) Valid October 10 to 16.





Summary of Impacts

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 [here](#).

Mitigation Actions

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





Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#).

- The pattern over the next month will continue to favor warmer than normal temperatures and below normal precipitation.

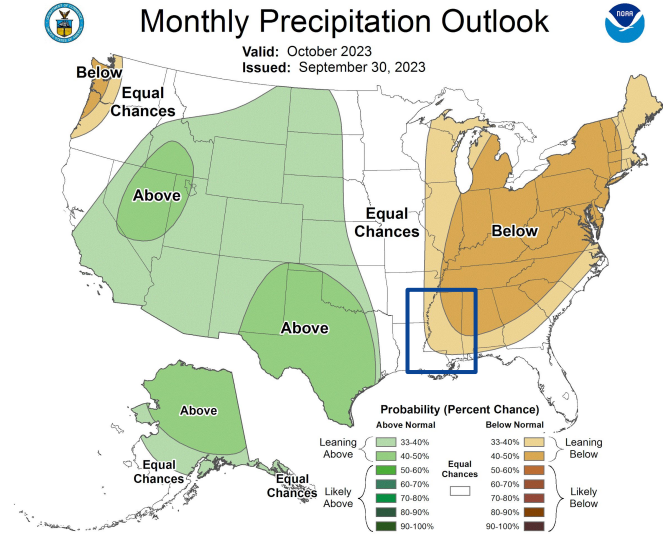
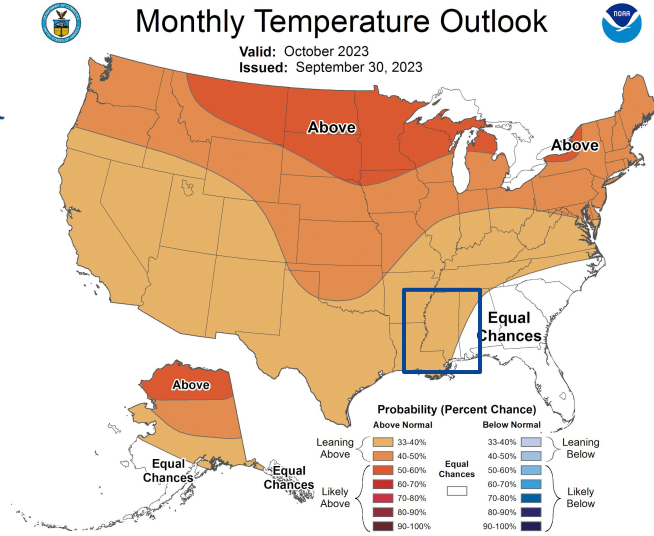


Image Captions:

Left - [Climate Prediction Center Monthly Temperature Outlook](#),

Right - [Climate Prediction Center Monthly Precipitation Outlook](#).

Valid October 2023





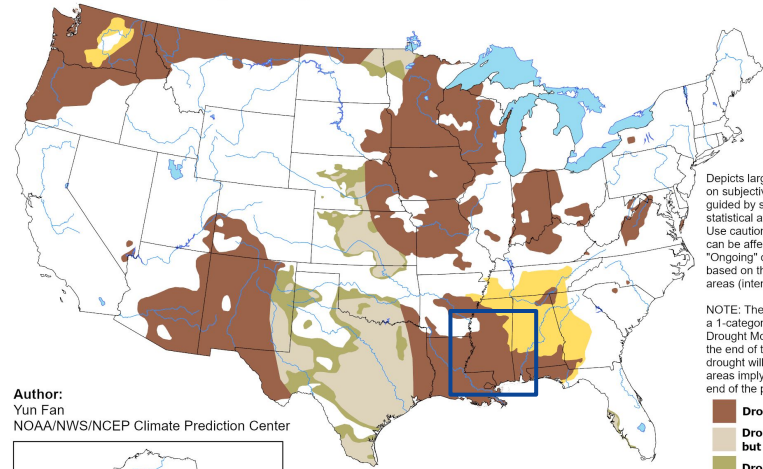
Drought Outlook

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.

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

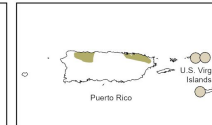
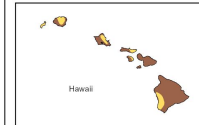
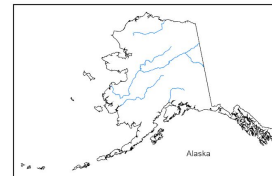
Valid for October 2023
Released September 30, 2023



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. *Ongoing* drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Yun Fan
NOAA/NWS/NCEP Climate Prediction Center



- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought



<https://go.usa.gov/3eZGd>

Image Caption:

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

Links to the latest:

[Climate Prediction Center Monthly Drought Outlook](#)

[Climate Prediction Center Seasonal Drought Outlook](#)



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

National Weather Service
WFO Jackson, MS