



Drought Information Statement for the Mid-South

Valid 11/2/2023

Issued By: NWS Memphis, TN

Contact Information: sr-meg.wx@noaa.gov

- This product will be updated November 16, 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.



National Oceanic and Atmospheric Administration

U.S. Department of Commerce

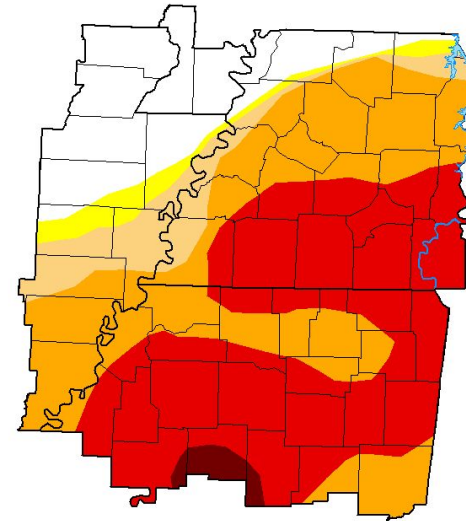


U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for the Mid-South

- DROUGHT CONDITIONS WORSEN
- Drought intensity and extent
 - D4 (Exceptional Drought): Introduced in northwest MS
 - D3 (Extreme Drought): Continuing in northwest MS and introduced into northwest TN
 - D2 (Severe Drought): Expanded to include more of east-central AR and northwest MS
 - D1 (Moderate Drought): Expanded to include much of the remainder of West TN
 - D0 (Abnormally Dry): Includes most of the remaining Mid-South counties, excluding northeast AR, the MO Bootheel, and far northwest AR

U.S. Drought Monitor Memphis, TN WFO



October 31, 2023
(Released Thursday, Nov. 2, 2023)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	17.36	82.64	79.47	71.74	41.25	1.48
Last Week 10-24-2023	0.58	99.42	84.47	64.47	18.81	0.00
3 Months Ago 08-01-2023	81.16	18.84	7.73	0.00	0.00	0.00
Start of Calendar Year 01-01-2023	60.52	39.48	0.00	0.00	0.00	0.00
Start of Water Year 09-26-2023	37.78	62.22	21.24	5.76	0.00	0.00
One Year Ago 11-01-2022	0.00	100.00	66.72	39.03	0.96	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>

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National Drought Mitigation Center



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 8 a.m. EDT November 2, 2023



Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for the Mid-South

- Four-Week Drought Monitor Class Change
 - Drought worsened: Most of the Mid-South
 - No change: A swath across northeast AR and West TN
 - Drought improved: A swath across northeast AR, the MO Bootheel, and far northwest TN

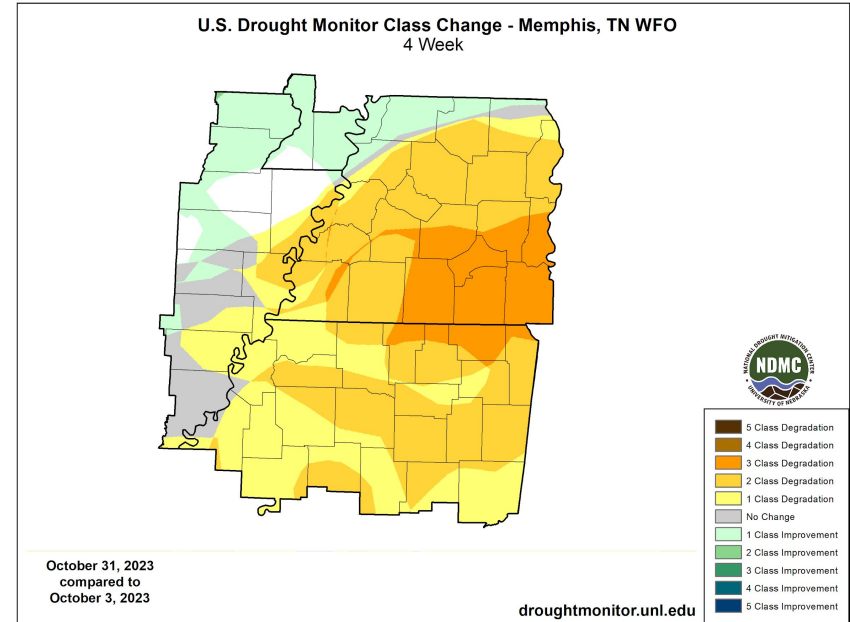


Image Caption: U.S. Drought Monitor 4-week change map valid 8 a.m. EDT November 2, 2023



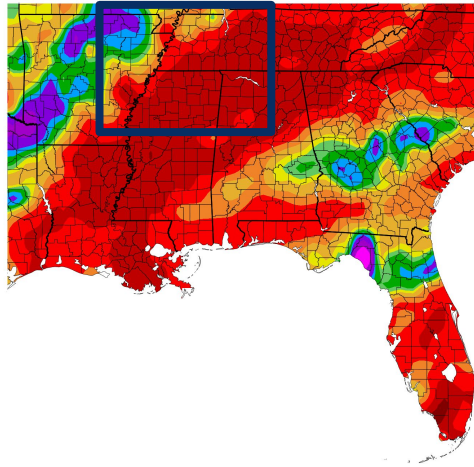


Precipitation

Over the past 30 days from the [High Plains Regional Climate Center](#)

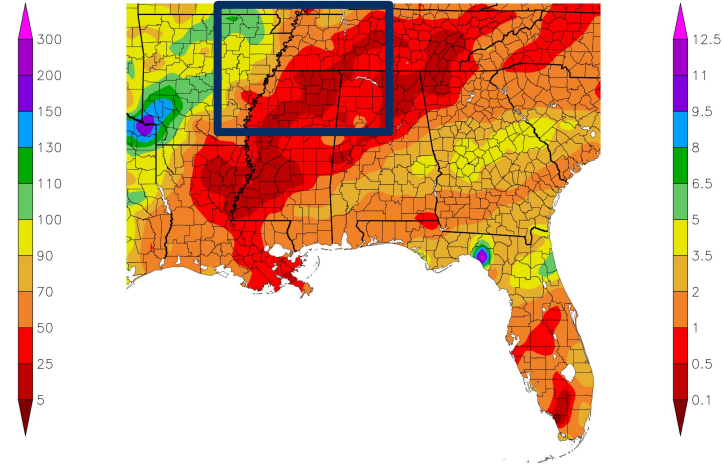
- Precipitation totals were generally less than 1” along and south of Interstate 40 over the past 30 days, with some areas below 0.50”. Portions of northeast AR received over 5”, improving drought in this area.
- The majority of the Mid-South experienced **below** normal precipitation over the last 30 days. Portions of northeast AR were **above** or well above normal precipitation.

Percent of Normal Precipitation (%)
10/3/2023 – 11/1/2023



Generated 11/2/2023 at HPRCC using provisional data.

Precipitation (in)
10/3/2023 – 11/1/2023



NOAA Regional Climate Centers 023 at HPRCC using provisional data.

NOAA Regional Climate Center

Image Captions:

Left - [Percent of Normal Precipitation for NWS-Southern Region East](#)

Right - [Precipitation for NWS- Southern Region East](#)

Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending November 1, 2023



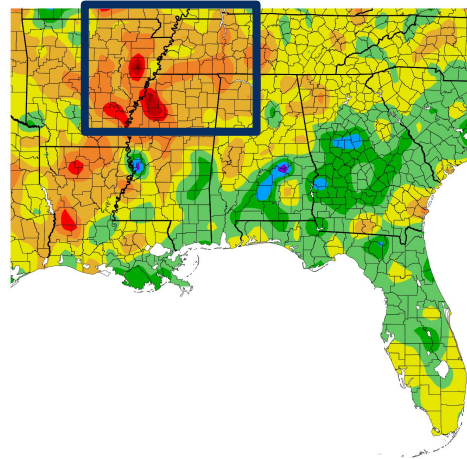


Temperature

Data over the past 30 days from the [High Plains Regional Climate Center](#)

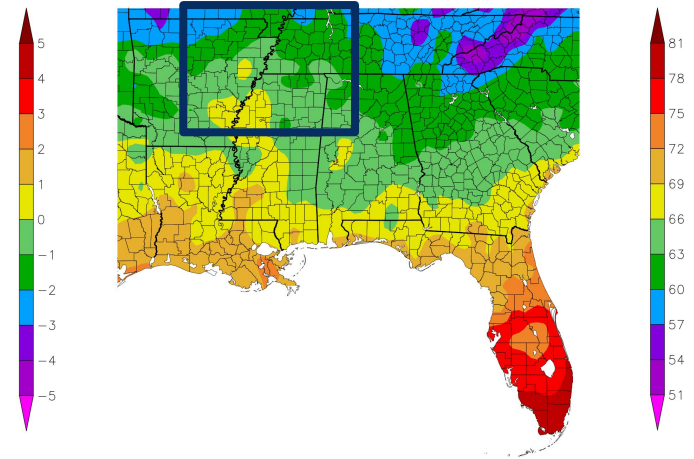
- Average temperatures have generally been in the 60s across the region over the last 30 days.
- Average temperatures ranged from 1 to 4 degrees Fahrenheit **above** normal during this period.

Departure from Normal Temperature (F)
10/3/2023 – 11/1/2023



Generated 11/2/2023 at HPRCC using provisional data.

Temperature (F)
10/3/2023 – 11/1/2023



NOAA Regional Climate Centers 23 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:

Left - [Departure from Normal Temperature](#)

Right - [Average Temperature](#)

Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending November 1, 2023





Summary of Impacts

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

Hydrologic Impacts

- Main takeaway: 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.

Agricultural Impacts

- Some crop yield has been negatively affected, especially across northwest MS.
- 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

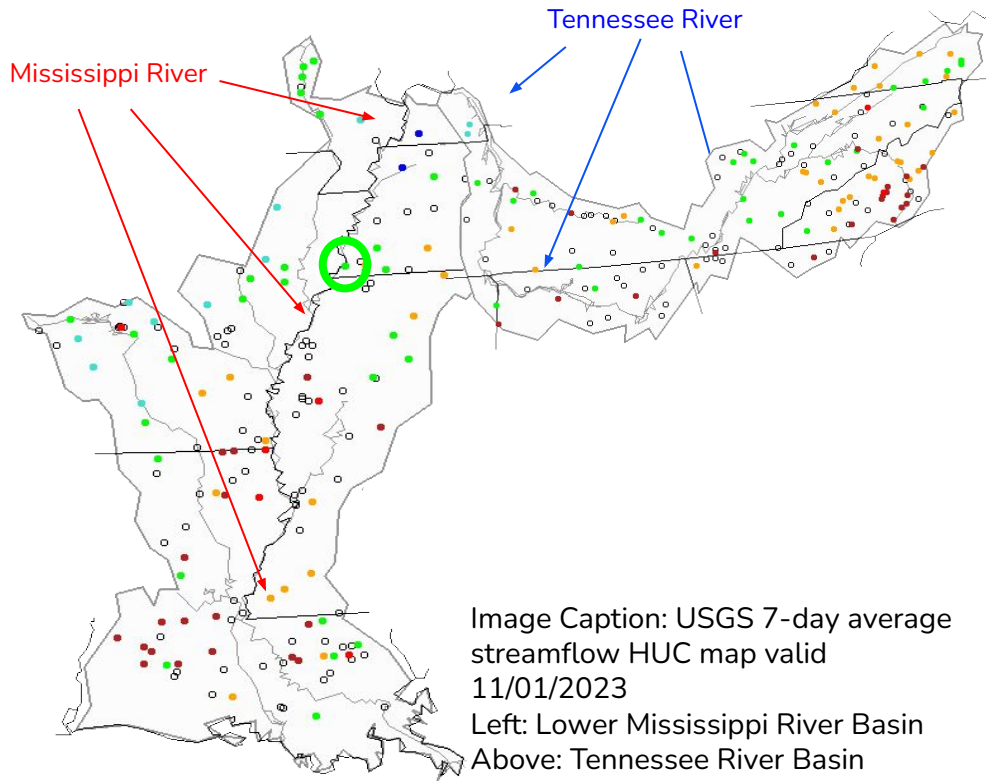


Image Caption: USGS 7-day average streamflow HUC map valid 11/01/2023
 Left: Lower Mississippi River Basin
 Above: Tennessee River Basin

- The **Mississippi River at Memphis** is already well 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.

Explanation - Percentile classes						
	●	●	●	●	●	●
	<10	10-24	25-75	76-90	>90	
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	High

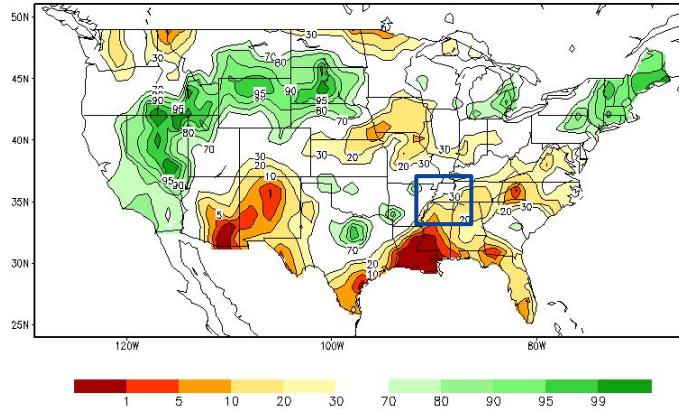




Agricultural Impacts

- Soil moisture is roughly 30% of normal (or lower) mainly along and south of Interstate 40
- Crop moisture is abnormally to excessively 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

Calculated Soil Moisture Ranking Percentile
NOV 01, 2023



Crop Moisture Index by Division
Weekly Value for Period Ending OCT 28, 2023
Short Term Need vs. Available Water in a Shallow Soil Profile

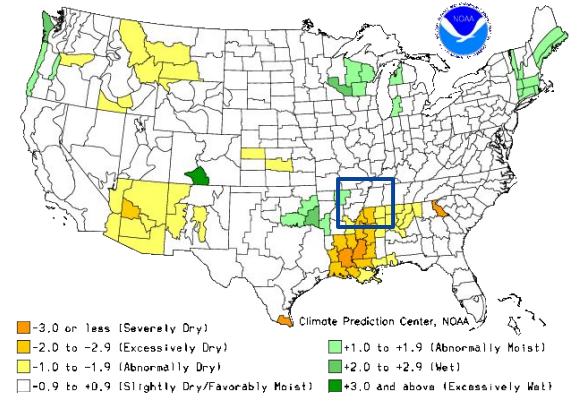


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid November 1, 2023

Right: [Crop Moisture Index by Division](#). Weekly value for period ending October 26, 2023





Fire Hazard Impacts

Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center](#).

- Normal wildland fire potential is expected for the Mid-South during November. Below normal wildfire conditions are expected just to our west, with above normal conditions to our south and east.
- Burn Bans currently in effect for:
 - [Arkansas](#): None.
 - [Missouri](#): None.
 - [Mississippi](#): Calhoun, Chickasaw, Itawamba, Lafayette, Lee, Marshall, Monroe, Panola, Pontotoc, Tate, Union, and Yalobusha Counties
 - [Tennessee](#): None.

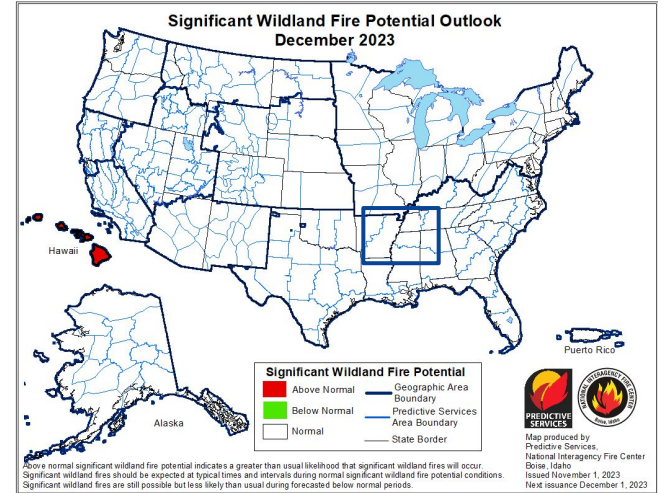
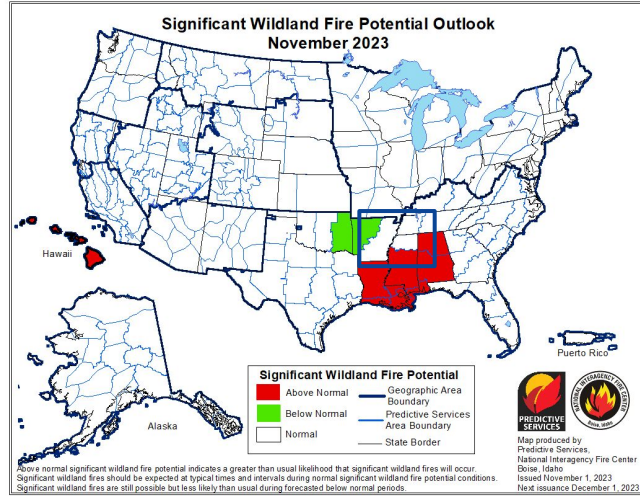


Image Caption: [Significant Wildland Fire Potential Monthly Outlook](#) for October 2023





Seven Day Precipitation Forecast

- Widespread appreciable rainfall is not expected across the Mid-South over the next 7 days.
- Forecast precipitation amounts (QPF) are expected to be near 0.25" or less.
- Dry weather is expected through the weekend with most of this precipitation anticipated early next week.

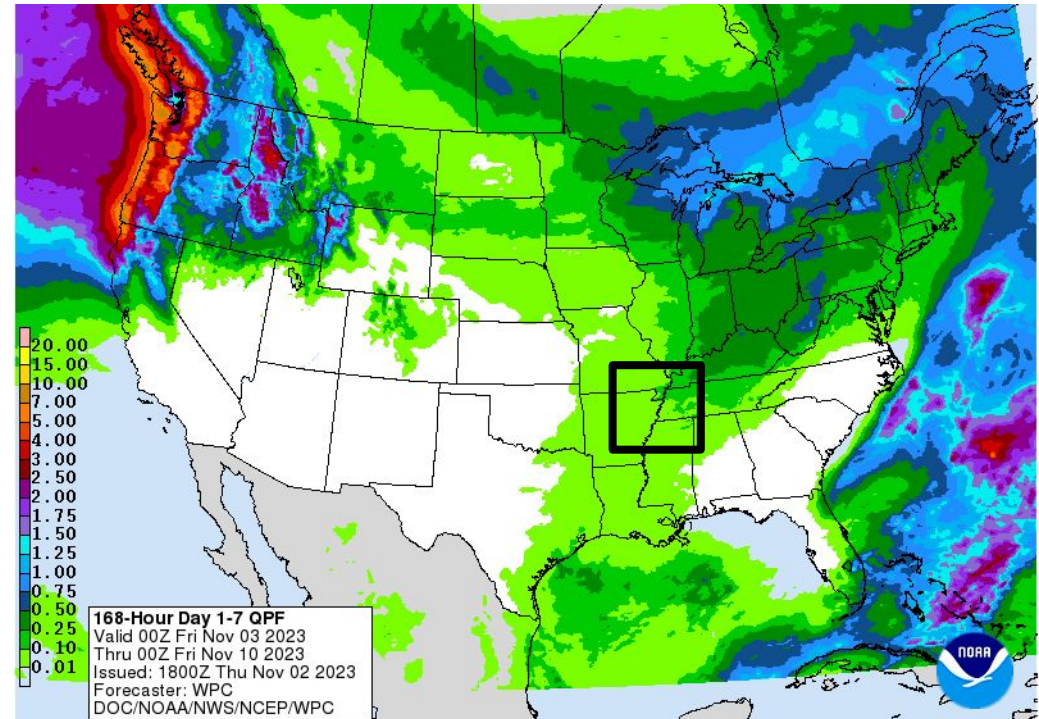


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Friday, November 3, until Friday, November 10.



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.

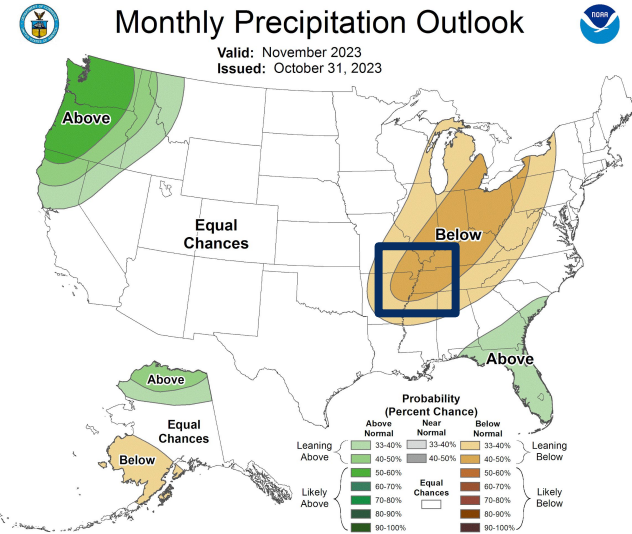
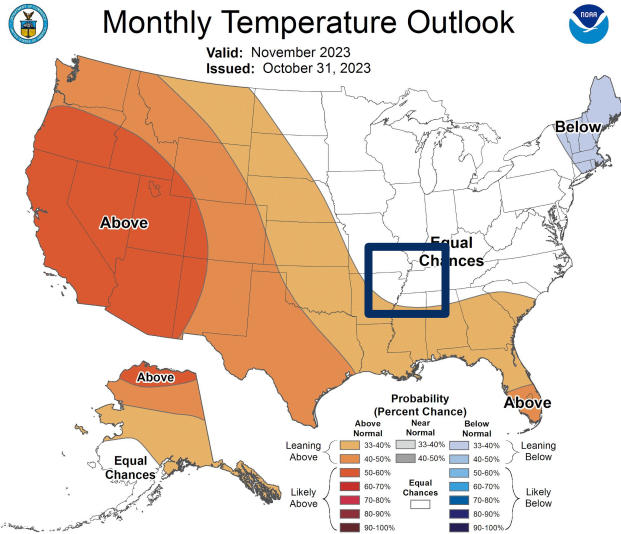


Image Captions:

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

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

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.

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

Valid for November 2023
Released October 31, 2023

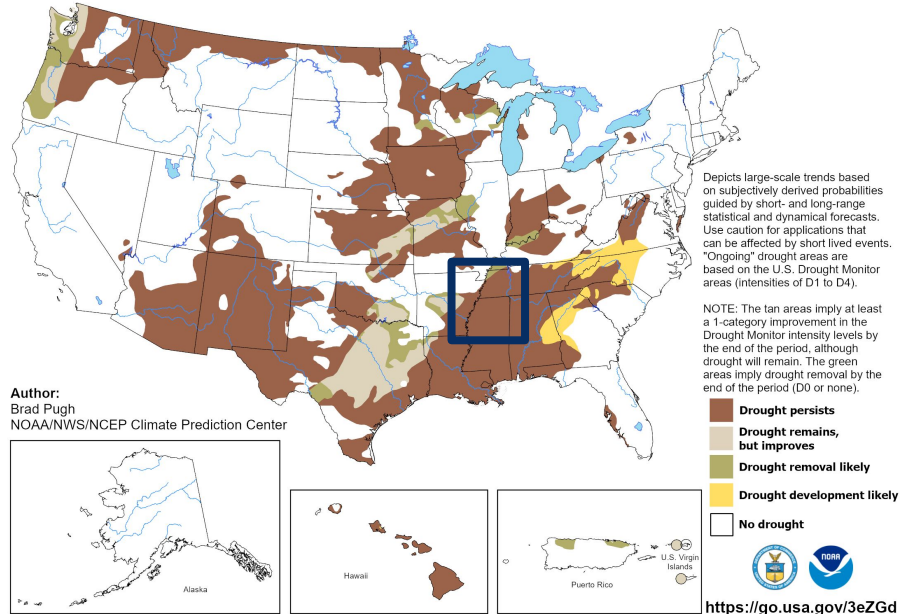


Image Caption:
Climate Prediction Center Monthly Drought Outlook Released
10/31/2023 valid for 11/2023

Links to the latest:

- [Climate Prediction Center Monthly Drought Outlook](#)
- [Climate Prediction Center Seasonal Drought Outlook](#)

