

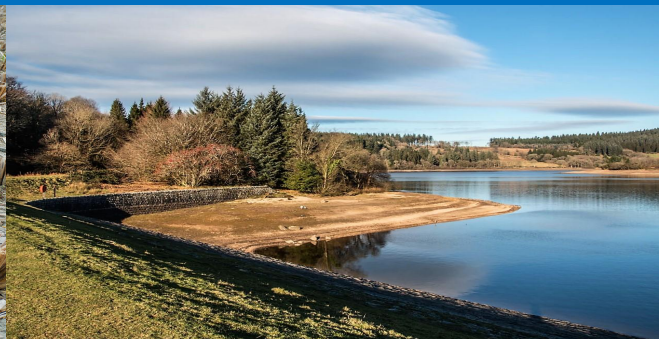
Drought Information Statement for the Mid-South

Valid 10/19/2023

Issued By: NWS Memphis, TN

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

- This product will be updated November 2, 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.



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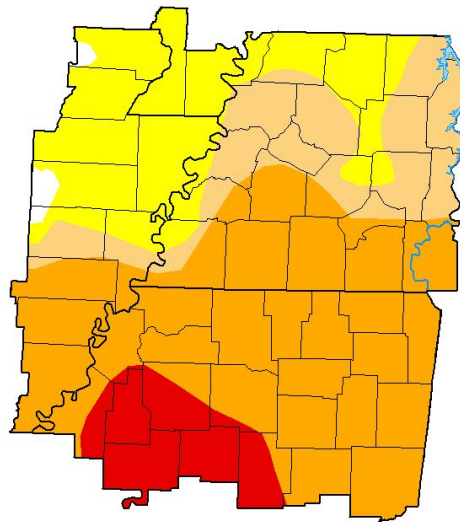


U.S. Drought Monitor

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

- DROUGHT CONDITIONS WORSEN
- Drought intensity and extent
 - D3 (Extreme Drought): Introduced in northwest MS
 - 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

U.S. Drought Monitor Memphis, TN WFO



October 17, 2023
(Released Thursday, Oct. 19, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.84	99.16	75.12	58.09	9.32	0.00
Last Week 10-10-2023	8.65	91.35	59.19	14.07	0.30	0.00
3 Months Ago 07-18-2023	61.31	38.69	8.51	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 10-18-2022	3.95	96.15	67.23	20.28	3.13	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

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NCEI/NOAA



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 8 a.m. EDT October 19, 2023



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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 in Coahoma County, MS, and Tunica County, MS
 - Drought improved: A very small area in Clay County, AR

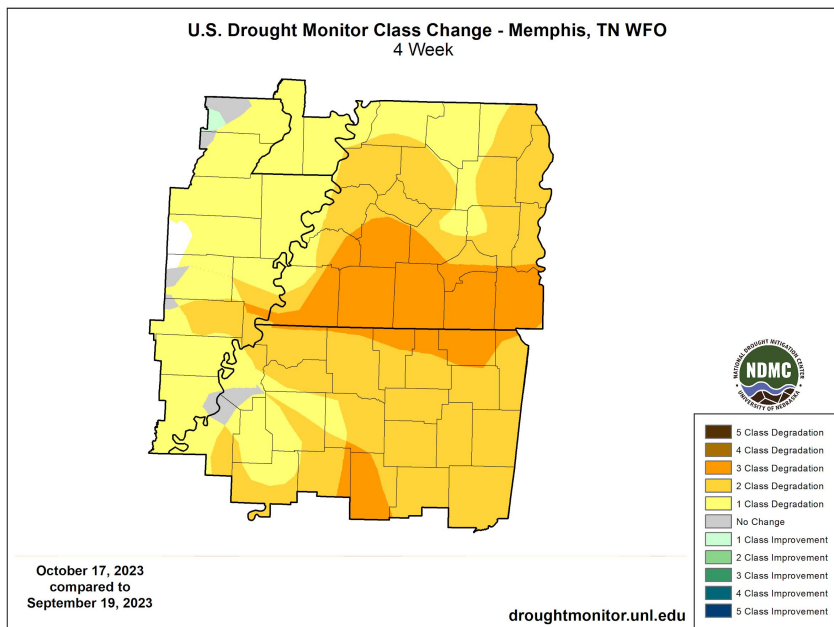


Image Caption: U.S. Drought Monitor 4-week change map valid 8 a.m. EDT October 19, 2023



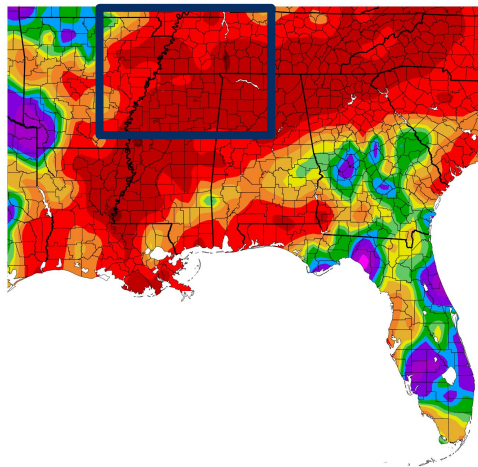


Precipitation

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

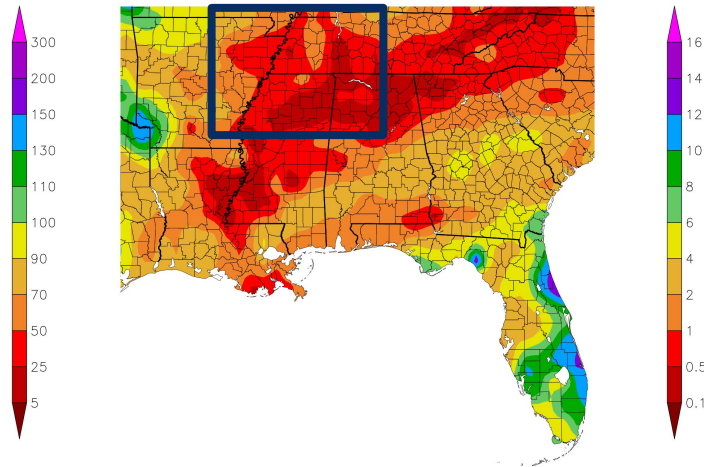
- Precipitation totals were generally less than 1" across the Mid-South over the past 30 days, with some areas below 0.50".
- The entire Mid-South experienced **below** normal precipitation over the last 30 days. Much of the Mid-South received less than 25% of normal precipitation.

Percent of Normal Precipitation (%)
9/19/2023 – 10/18/2023



Generated 10/19/2023 at HPRCC using provisional data.

Precipitation (in)
9/19/2023 – 10/18/2023



NOAA Regional Climate Centers 2023 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 October, 18, 2023



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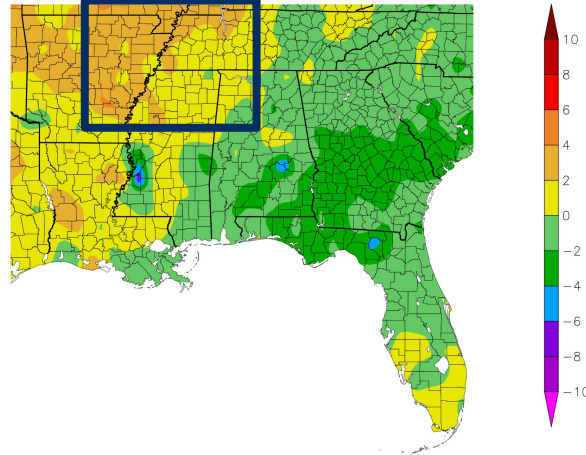


Temperature

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

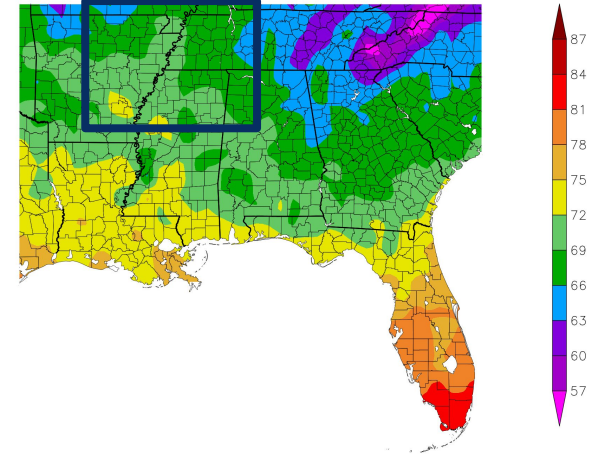
- Average temperatures have generally been in the upper 60s to lower 70s across the region over the last 30 days.
- Average temperatures ranged from 1 to 4 degrees Fahrenheit **above** normal during this period.

Departure from Normal Temperature (F)
9/19/2023 – 10/18/2023



Generated 10/19/2023 at HPRCC using provisional data.

Temperature (F)
9/19/2023 – 10/18/2023



NOAA Regional Climate Centers 023 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 October 18, 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 near historic 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 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

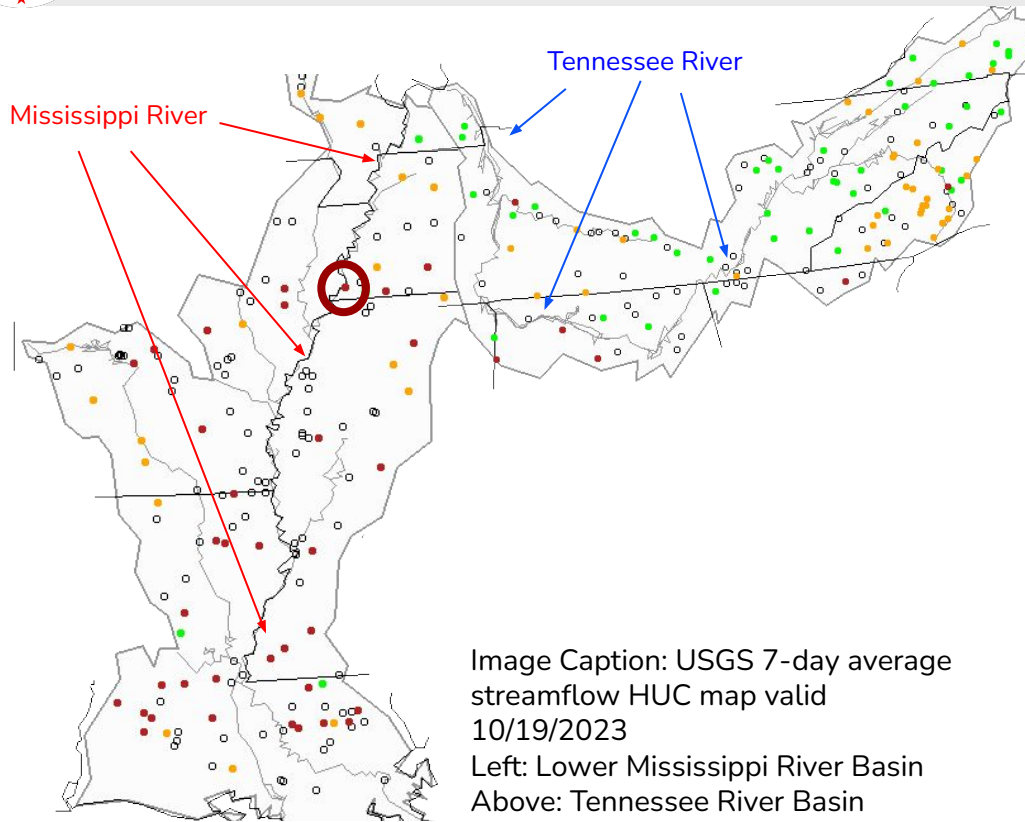


Image Caption: USGS 7-day average streamflow HUC map valid 10/19/2023
Left: Lower Mississippi River Basin
Above: Tennessee River Basin

- The **Mississippi River at Memphis** is already well below low water threshold values and has broken the all-time low water level (-11.99 ft). The extended river forecast keeps the river very low with no significant rain events forecasted upstream.
- The Tennessee River feeds into the Mississippi River, and is also experiencing near to below normal water levels.

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





Agricultural Impacts

- Soil moisture is roughly 30% of normal (or lower) across much of the Mid-South
- Crop moisture is abnormally to excessively dry across much of the area
- 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

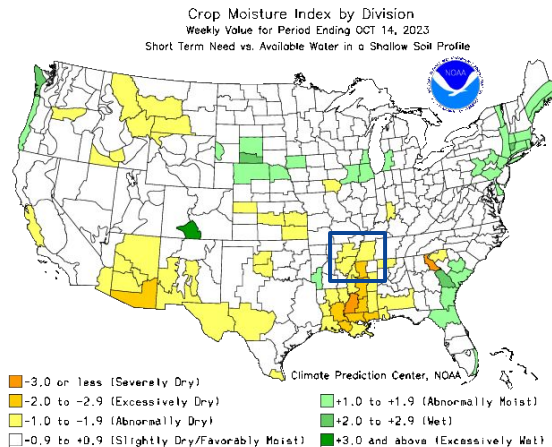
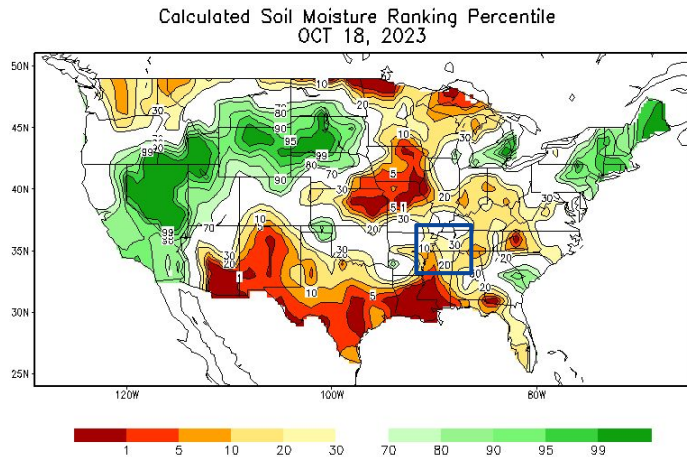


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid October 19, 2023

Right: [Crop Moisture Index by Division](#). Weekly value for period ending October 4, 2023





Fire Hazard Impacts

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

- Above normal significant wildland fire potential for the Mid-South through October. Normal conditions are currently anticipated in November.
- Burn Bans currently in effect for:
 - Arkansas: None.
 - Missouri: None.
 - Mississippi: Calhoun, Chickasaw, Lee, Monroe, Panola, Pontotoc, and Union Counties
 - Tennessee: None.

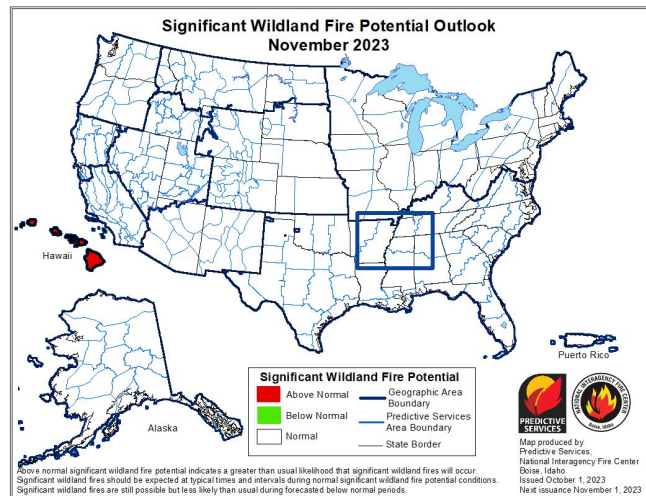
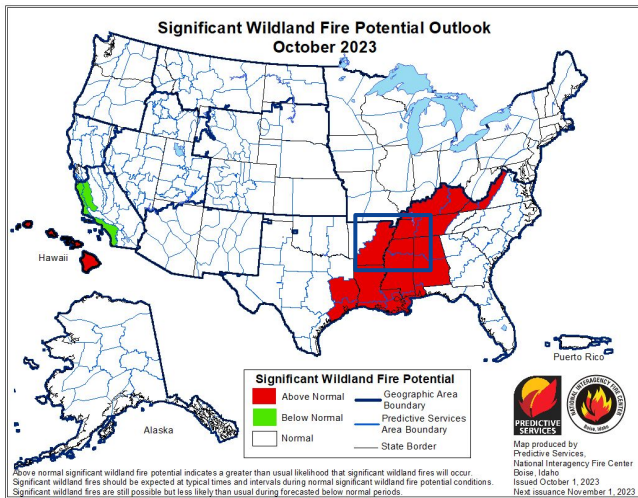


Image Caption: [Significant Wildland Fire Potential Monthly Outlook](#) for October 2023



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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.
- Most of this rain will occur through tonight with generally dry weather Friday (10/20) through the middle of next week.

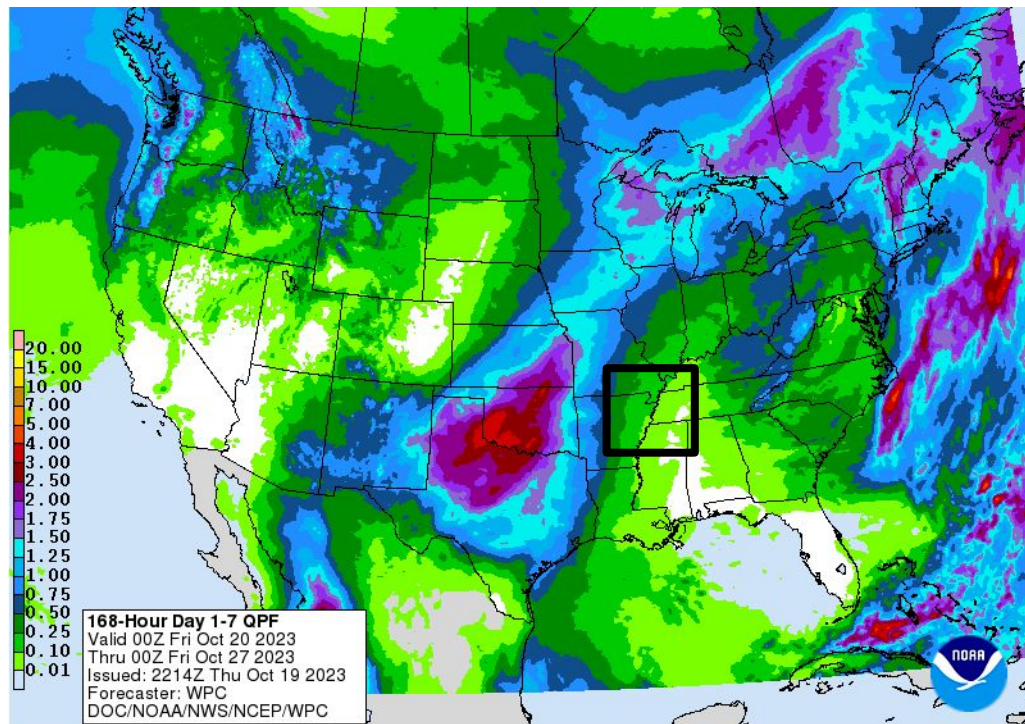


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Friday, October 20, until Friday, October 27.





Long-Range Outlooks

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

- There is roughly a 40% chance for above normal temperatures across the Mid-South during the month of October.
- There is a 40-50% chance that October precipitation will be below normal.
- In summary, October is trending warmer and drier than normal.

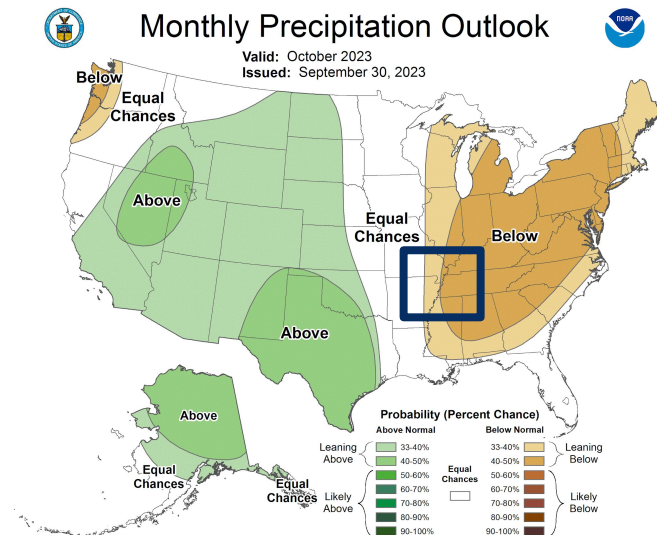
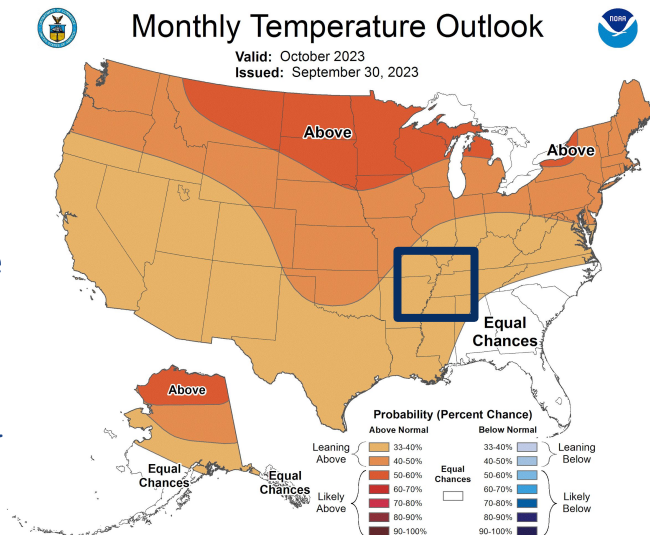


Image Captions:

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

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

Valid October 2023



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Memphis, TN



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 October.
- Little improvement is anticipated during this time.

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

Valid for October 2023
Released September 30, 2023

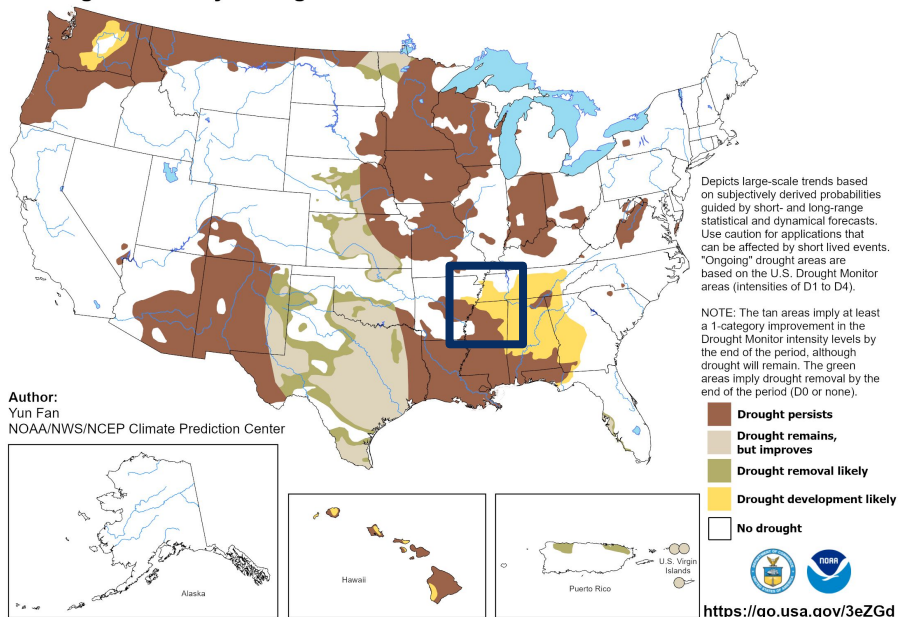


Image Caption:

Climate Prediction Center Monthly Drought Outlook Released
09/30/2023 valid for 10/2023

Links to the latest:

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



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