



# Drought Information Statement

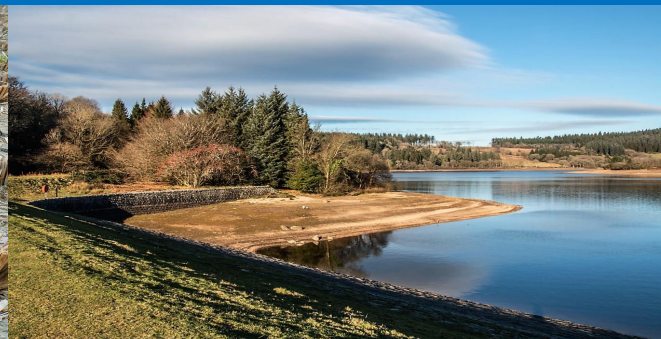
## For East Tennessee, Southwest Virginia, and Southwest North Carolina

Valid October 12, 2023

Issued By: WFO Morristown, TN

Contact Information: [sr-mrx.webmaster@noaa.gov](mailto:sr-mrx.webmaster@noaa.gov)

- This product will be updated in the next week 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/mrx/DroughtInformationStatement> for previous statements.





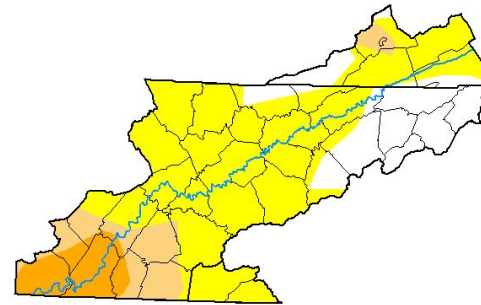
# U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for the NWS Morristown CWA

- DROUGHT CONDITIONS HEADLINE/KEY MESSAGE
- Drought intensity and Extent
  - D4 (Exceptional Drought): None.
  - D3 (Extreme Drought): None.
  - D2 (Severe Drought): None.
  - D1 (Moderate Drought): Wise, VA and Chattanooga to Marion/southern Sequatchie Counties.
  - D0: (Abnormally Dry): Places along and west of I-75 and places around Wise, VA.

## U.S. Drought Monitor Morristown, TN WFO

**October 10, 2023**  
(Released Thursday, Oct. 12, 2023)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	19.99	80.01	18.85	8.35	0.00	0.00
<b>Last Week</b> 10-09-2023	42.71	57.29	18.76	0.00	0.00	0.00
<b>3 Months Ago</b> 07-11-2023	82.80	17.20	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> 01-01-2023	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> 09-26-2023	58.94	41.06	6.95	0.00	0.00	0.00
<b>One Year Ago</b> 10-11-2022	52.39	47.61	8.62	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme 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:  
Brad Pugh  
CPC/NOAA



[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)

Image Caption: U.S. Drought Monitor valid 8am EDT October 10th.



# Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for the NWS Morristown CWA

- Four Week Drought Monitor Class Change.
  - Drought Worsened: Most places across southeast and central east Tennessee, Cumberland Plateau, and Cherokee and Clay counties of North Carolina
  - No Change: Much of southwest Virginia and northeast Tennessee
  - Drought Improved: Lee County, Virginia

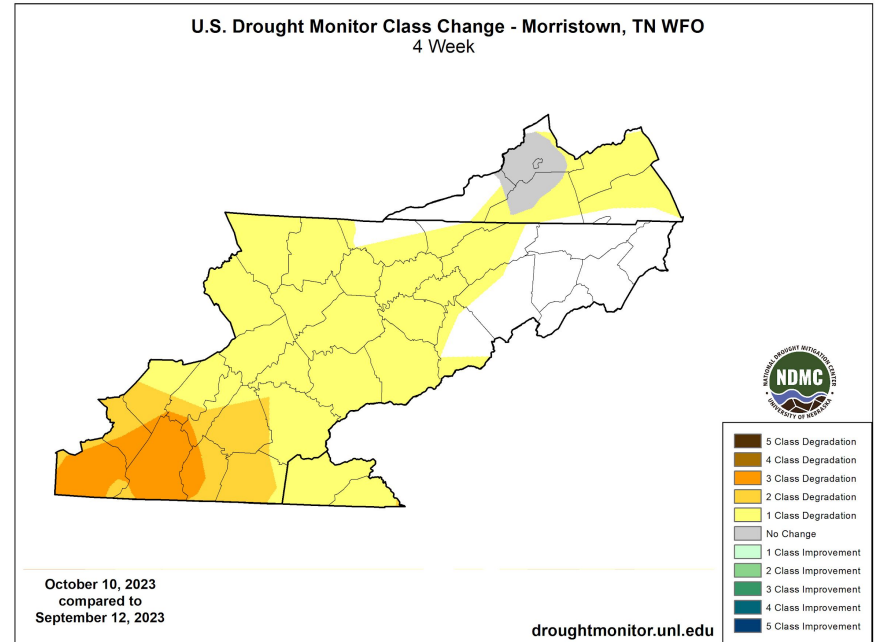


Image Caption: U.S. Drought Monitor 4-week change map valid October 10th.

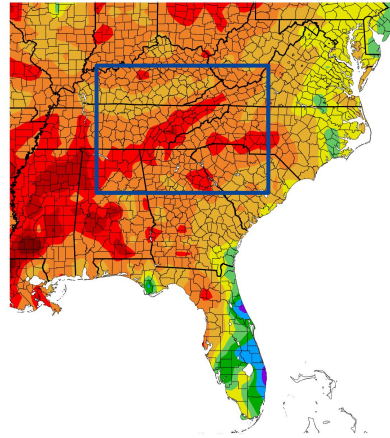




# Precipitation

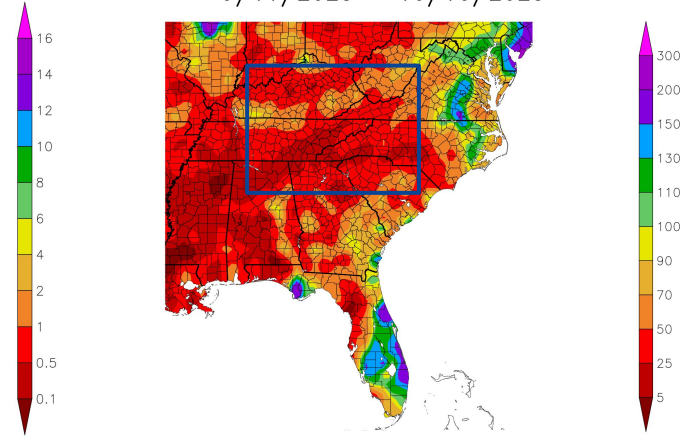
- Notably drier than normal conditions have been occurring across the region.

Precipitation (in)  
9/11/2023 - 10/10/2023



Generated 10/11/2023 at HPRCC using provisional data.

Percent of Normal Precipitation (%)  
9/11/2023 - 10/10/2023



NOAA Regional Climate Centers 023 at HPRCC using provisional data.

NOAA Regional Climate Ce

Image Captions:  
 Left - Precipitation Amount  
 Right - Percent of Normal Precipitation  
 Data Courtesy High Plains Regional Climate Center.  
 Data over the past 30 days ending October 10, 2023



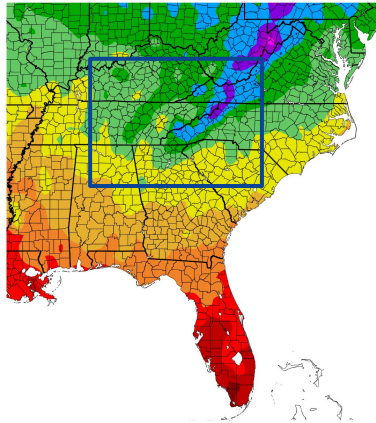




# Temperature

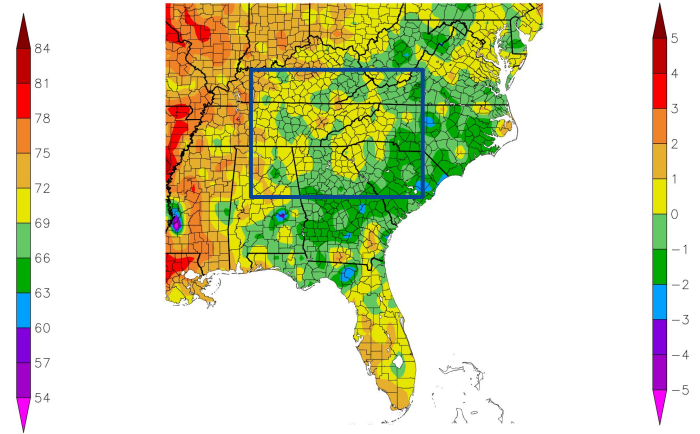
- Slightly warmer than normal conditions have occurred across much of the area.

Temperature (F)  
9/11/2023 – 10/10/2023



Generated 10/11/2023 at HPRCC using provisional data.

Departure from Normal Temperature (F)  
9/11/2023 – 10/10/2023



NOAA Regional Climate Centers 2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

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





# Summary of Impacts

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

## Hydrologic Impacts

- Stream flows have been low

## Agricultural Impacts

- There are no known impacts at this time

## Fire Hazard Impacts

- Tennessee Forestry reported a small increase in small fires across the area.

## Other Impacts

- Stay tuned for future updates as drought is likely to worsen in many areas

## Mitigation Actions

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

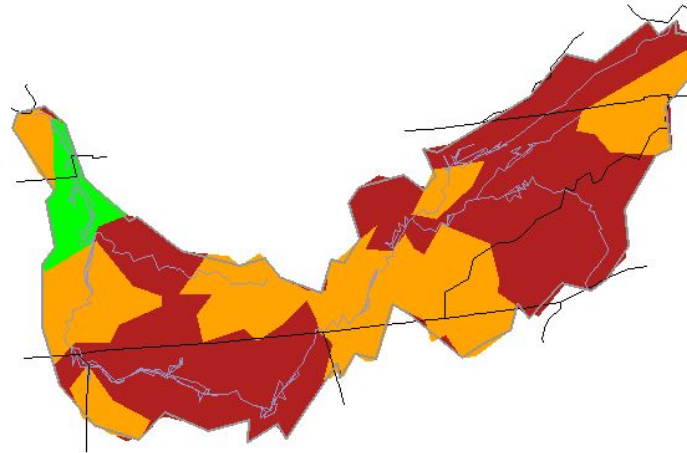




# Hydrologic Conditions and Impacts

- Streamflows have been below normal to much below normal.

Wednesday, October 11, 2023



GS

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 map valid 10/11/2023

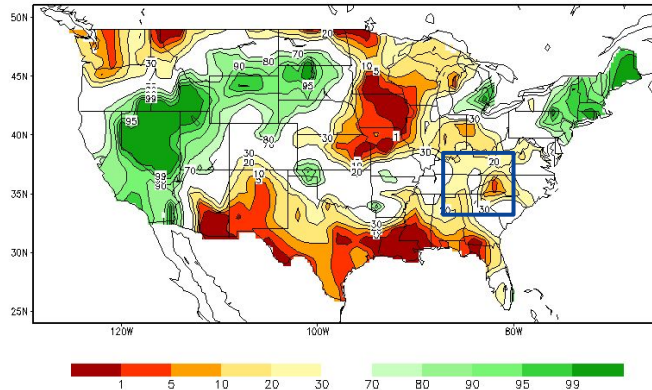




# Agricultural Impacts

- Most of the conditions are near normal but soil moisture is dry.

Calculated Soil Moisture Ranking Percentile  
OCT 10, 2023



Crop Moisture Index by Division  
Weekly Value for Period Ending OCT 7, 2023  
Short Term Need vs. Available Water in a Shallow Soil Profile

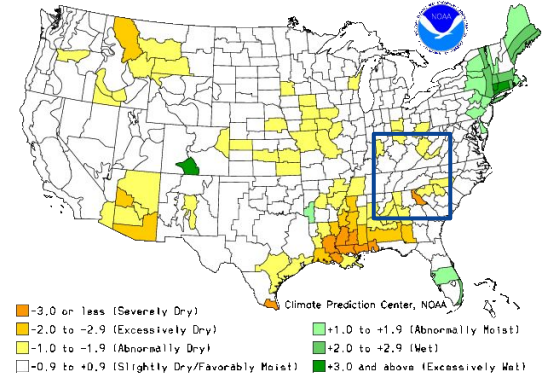


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid Oct 10, 2023

Right: [Crop Moisture Index by Division](#). Weekly value for period ending Oct 7, 2023







# Fire Hazard Impacts

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

- Fire conditions are slowly getting worse across the area.

Latest TN Burn Ban map available [here](#).

Latest VA Burn Ban map available [here](#).

Latest NC Burn Ban information available [here](#).

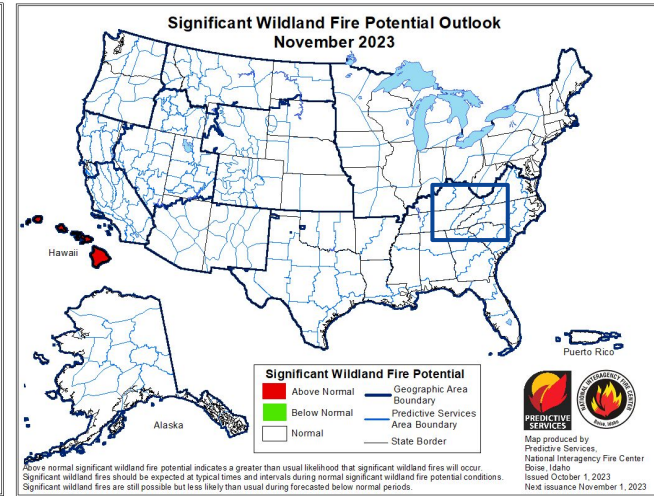
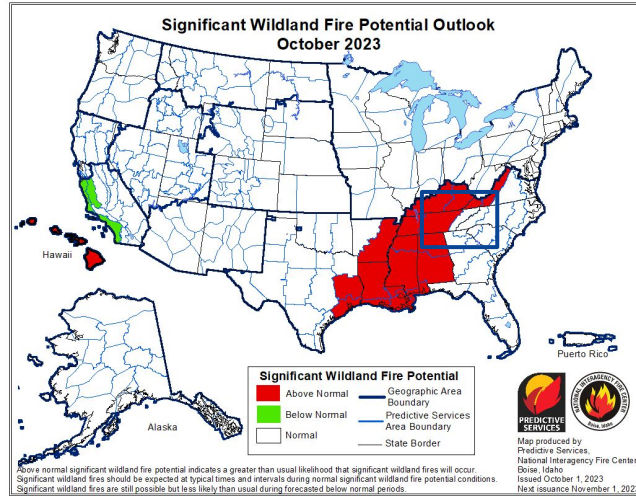


Image Caption: [Significant Wildland Fire](#) for October and November 2023





# Seven Day Precipitation Forecast

- Some light precipitation is expected during the next 7 days.

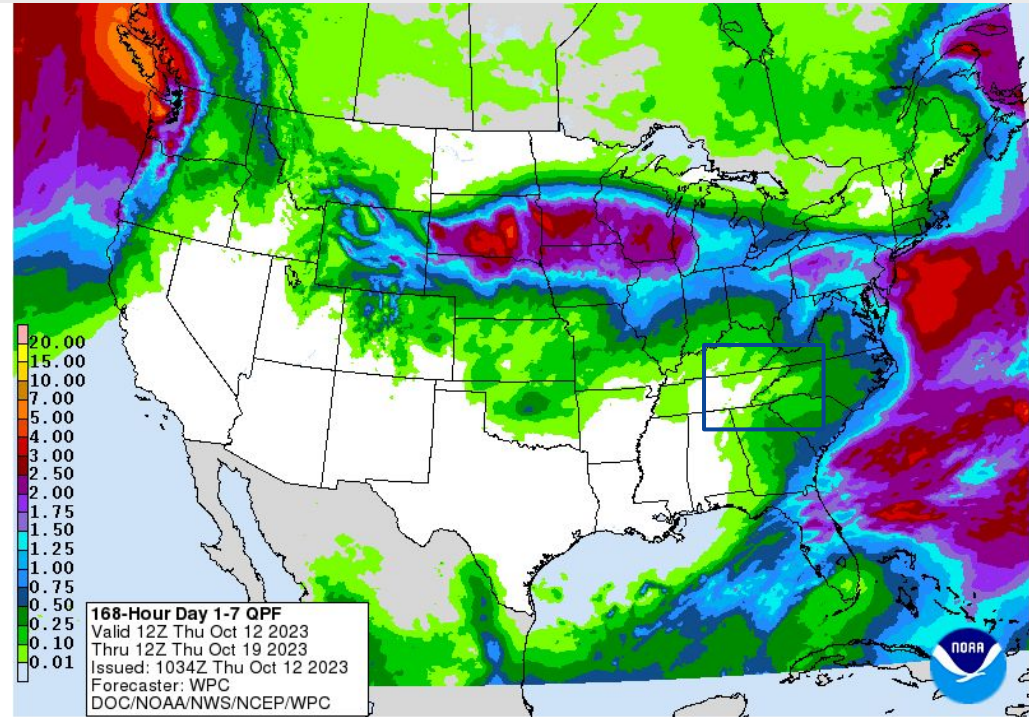


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Sunday October 12 to Saturday October 19





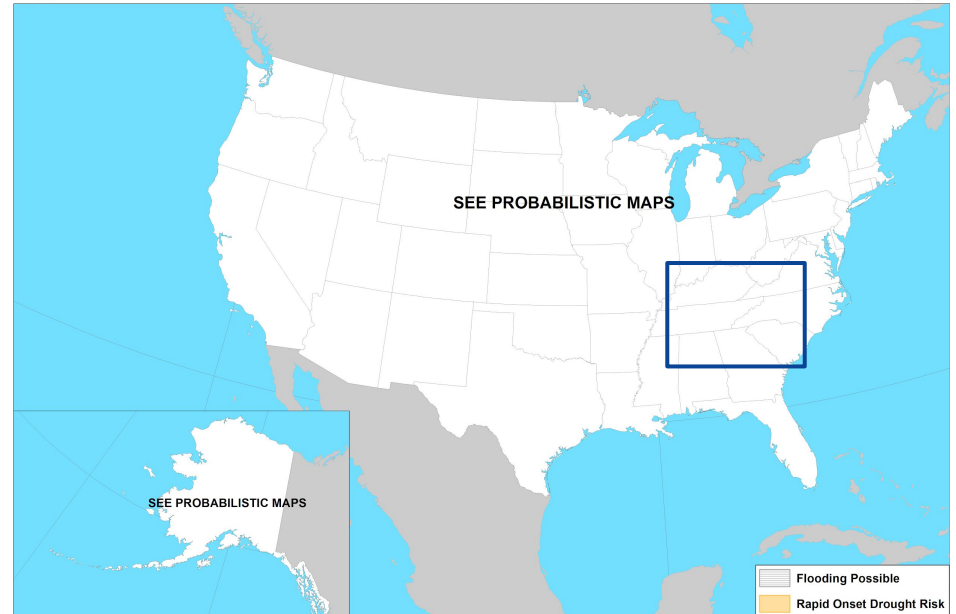
# Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day [Temperature Outlook](#) and [Precipitation Outlook](#).

- Gradual worsening drought conditions are expected for much of the area.



Day 8-14 U.S. Hazards Outlook  
Valid: 10/19/2023-10/25/2023



Climate Prediction Center  
Made: 10/11/2023 3PM EDT

Follow us:   
[www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

Image Caption:  
[Days 8 to 14 U.S. Hazards Outlook](#) Valid October 19th to 25th





# Long-Range Outlooks

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

- Above normal temperatures and below normal precipitation are favored over the next month.

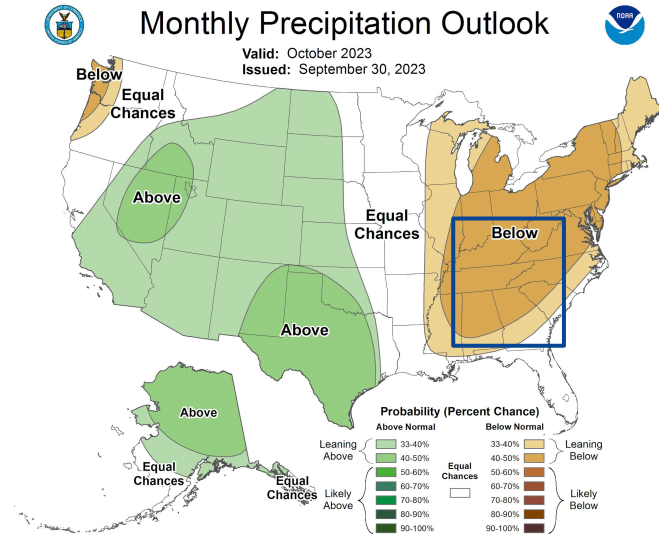
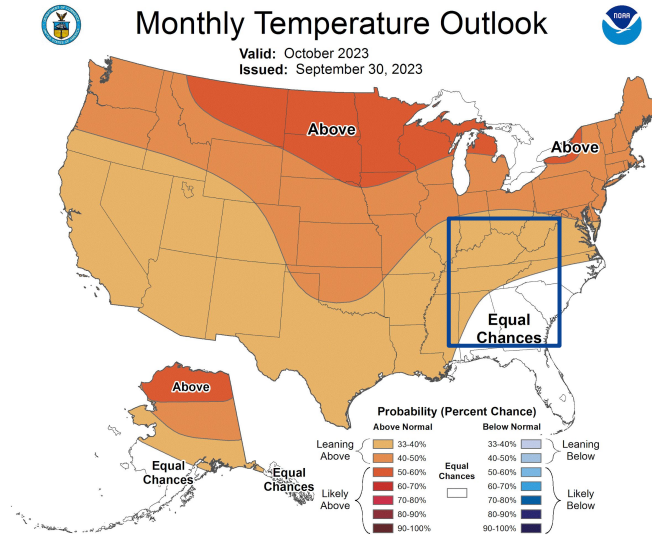


Image Captions:

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

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

Valid October 2023







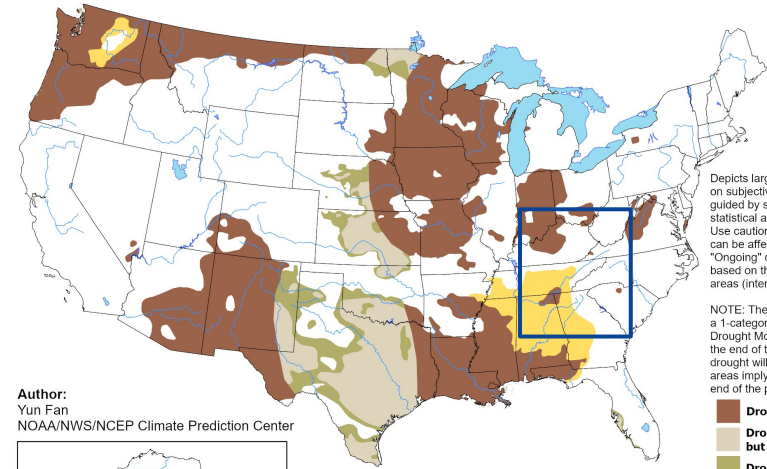
# Drought Outlook

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

- Drought development is likely for much of East Tennessee.

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

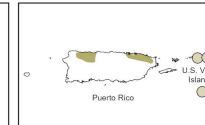
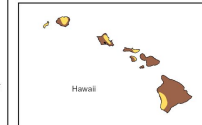
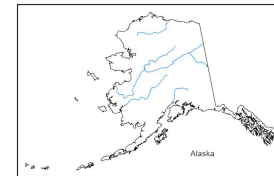
Valid for October 2023  
Released September 30, 2023



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>

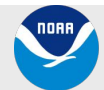
Image Caption:

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  
Morristown, TN