

Drought Information Statement For East Tennessee, Southwest Virginia, and Southwest North Carolina Valid October 26, 2023 Issued By: WFO Morristown, TN

Contact Information: 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 <u>https://drought.gov/drought-information-statements</u>.
- Please visit https://www.weather.gov/mrx/DroughtInformationStatement for previous statements.



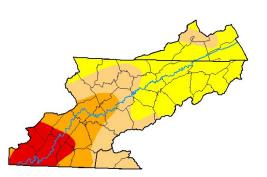


U.S. Drought Monitor

Link to the latest U.S. Drought Monitor for the NWS Morristown CWA

- Drought conditions continue to worsen across the Tennessee Valley and Southern Appalachians.
- <u>Drought intensity and Extent</u>
 - **D4 (Exceptional Drought):** None.
 - **D3 (Extreme Drought):** southern Plateau and far southern valley.
 - **D2 (Severe Drought):** rest of southeast Tennessee and parts of the central valley.
 - **D1 (Moderate Drought):** Most of the northern Plateau, western section of the Tennessee valley and parts of southwest Virginia.
 - **D0: (Abnormally Dry):** Northeast Tennessee and rest of southwest Virginia.

U.S. Drought Monitor Morristown, TN WFO



October 24, 2023 (Released Thursday, Oct. 26, 2023) Valid 8 a.m. EDT

	Drought Conditions (Percent Area)								
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4			
Current	0.05	99.95	56.65	29.02	11.93	0.00			
Last Week 10-17-2023	0.05	99.95	44.52	17.59	0.00	0.00			
3 Month s Ago 07-25-2023	84.54	15.46	3.72	0.00	0.00	0.00			
Start of Calendar Year 01-03-2023	100.00	0.00	0.00	0.00	0.00	0.00			
Start of Water Year 09-26-2023	58.94	41.06	6.95	0.00	0.00	0.00			
One Year Ago 10-25-2022	19.42	80.58	55.38	13.46	0.00	0.00			

Intensity:



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: Rocky Bilotta NCEI/NOAA



Image Caption: U.S. Drought Monitor valid 8am EDT October 24th.



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

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:** Portions of SW VA.
 - Drought Improved: None.

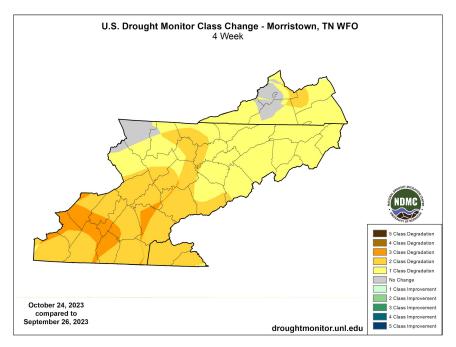
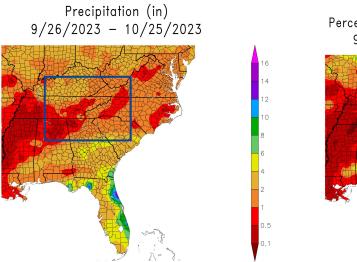


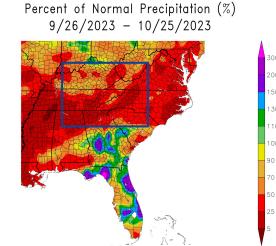
Image Caption: U.S. Drought Monitor 4-week change map valid October 24th.





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





Generated 10/26/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers 023 at HPRCC using provisional data.

NOAA Regional Climate Ce

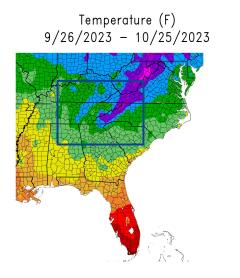
130 110 100

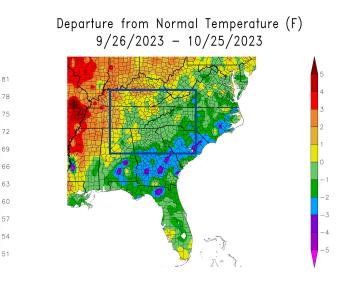
Image Captions: Left - Precipitation Amount **Right - Percent of Normal Precipitation** Data Courtesy High Plains Regional Climate Center. Data over the past 30 days ending October 25, 2023





 Temperatures have been near to slightly below normal during the past 4 weeks.





Generated 10/26/2023 at HPRCC using provisional data.

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 25, 2023





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

Hydrologic Impacts

• Stream flows have been low

Agricultural Impacts

• Dry weather has hampered small grain and fall hay seedings. Pasture conditions declined this week. Soil moisture is lower than normal.

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.

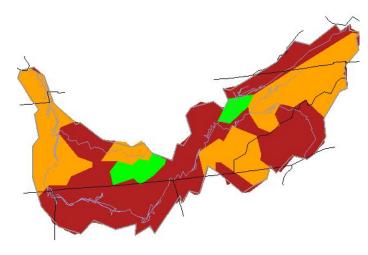
Mitigation Actions

• 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 for most areas. Wednesday, October 25, 2023



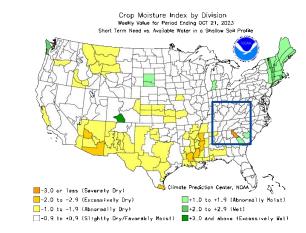
GS		Explanation - Percentile classes									
Low	Low	<10	10-24	25-75	76-90	>90	Ulinh				
	Much below normal	Below	Normal	Above normal	Much above normal	High	No Data				

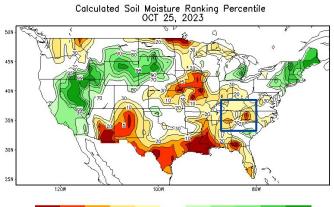
Image Caption: USGS 7 day average streamflow HUC map valid 10/25/2023





• Soil moisture is drier than normal.





95

qq

90

20 30

10

Image Captions: Left: CPC Calculated <u>Soil Moisture Ranking</u> <u>Percentile</u> valid Oct 25, 2023 Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending Oct 21, 2023





Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

• Fire conditions are slowly deteriorating across the area.

Latest TN Burn Ban map available <u>here.</u>

Latest VA Burn Ban map available <u>here.</u>

Latest NC Burn Ban information available <u>here.</u>

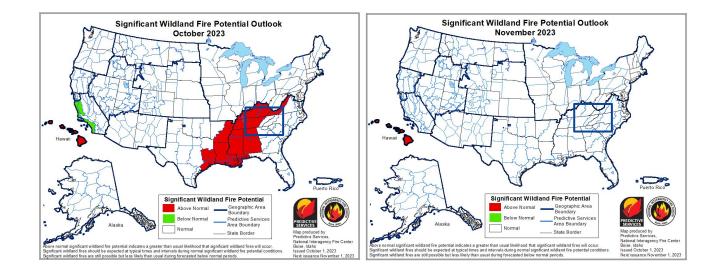


Image Caption: <u>Significant Wildland Fire</u> for October and November 2023



Seven Day Precipitation Forecast

- Some light precipitation is expected during the next 7 days mainly on October 30 and November 1.
 - Overall amounts will be low with little impact on drought improvement.
 - Highest precipitation amounts will be across the northern Plateau, northeast Tennessee, southwest Virginia.

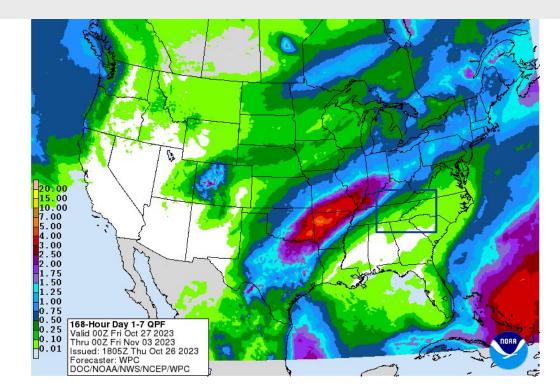


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid October 27 to November 3.



Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day <u>Temperature Outlook</u> and <u>Precipitation Outlook</u>.

• No hazards posted.

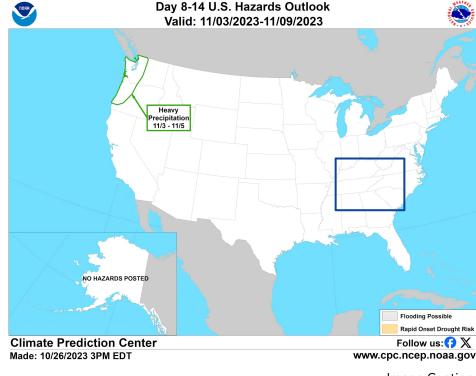


Image Caption: <u>Days 8 to 14 U.S. Hazards Outlook</u> Valid October 26th to November 1st



Long-Range Outlooks

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

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

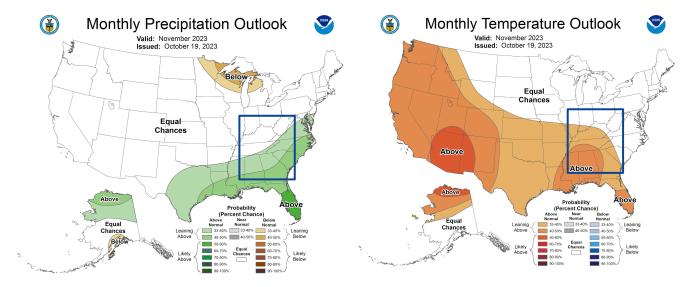


Image Captions:

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





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

• Drought development is likely to continue this month.

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 Drought persists NOAA/NWS/NCEP Climate Prediction Center Drought remains, but improves Drought removal likely Drought development likely No drought

U.S. Monthly Drought Outlook

Drought Tendency During the Valid Period

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

Puerto Rice

National Weather Service Morristown, TN

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

Valid for October 2023

Released September 30, 2023