

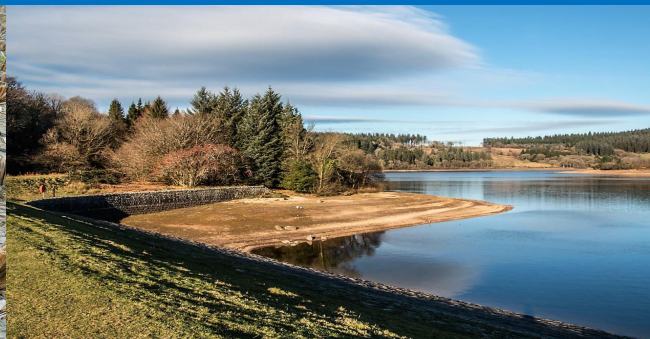


Drought Information Statement for the Central Tennessee Valley

Issued by: WFO Huntsville, AL

Contact information: sr-hun.webmaster@noaa.gov

- Since much of the area is still in D1(Moderate) drought, this product will be updated at least once per month, but statements may be updated otherwise to communicate any significant information.
- Please see all currently available products at <https://drought.gov/drought-information-statements>
- Please visit <https://www.weather.gov/hun/DroughtInformationStatement> for previous statements





U.S. Drought Monitor

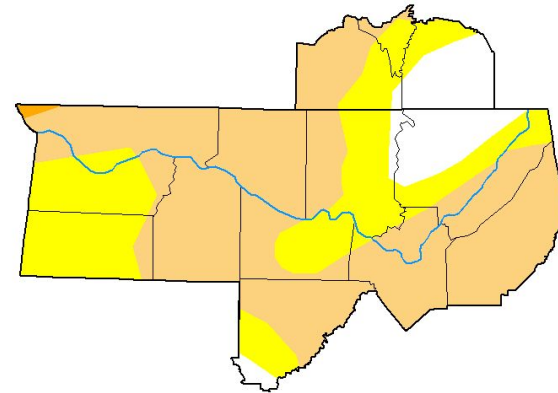
Latest U.S. Drought Monitor Map

- Drought intensity and Extent

- **D4 Exceptional Drought:** None
- **D3 Extreme Drought:** None
- **D2 Severe Drought:** A very small area in northwest Lauderdale County.
- **D1 Moderate Drought:** A complex shaped area encompassing most of Lauderdale, NW and E portions of Colbert, eastern Franklin (AL), all of Lawrence and Limestone, western Madison and Lincoln, northern Moore, much of Morgan, Cullman and Marshall, nearly all of DeKalb, and southeastern Jackson Counties.
- **D0 Abnormally Dry:** The remainders of Colbert, Franklin (AL), Morgan and Moore Counties, much of southern Cullman, eastern Madison, eastern Lincoln, northern Franklin (TN), NE Morgan, and a SW-NE swath across central Jackson County.

U.S. Drought Monitor
Huntsville, AL WFO

February 6, 2024
(Released Thursday, Feb. 8, 2024)
Valid 7 a.m. EST



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>

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National Drought Mitigation Center



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 7AM CDT, February 6th, 2024.



National Oceanic and Atmospheric Administration

U.S. Department of Commerce

National Weather Service
Huntsville, AL



Recent Change in Drought Intensity

- One Week U.S. Drought Monitor Class Change
 - **Drought Worsened:** No areas
 - **No Change:** Much of the area saw no change in the drought designations from last week.
 - **Drought Improved:** Drought conditions, however, did improve mainly in portions of Lauderdale, Colbert, and Franklin Counties in NW Alabama, and also in southern portions of Cullman, Marshall and DeKalb Counties. A far southern portion of Cullman County, in fact, experience a two-tier change in Drought levels, from D1 (Moderate Drought) to No Drought.

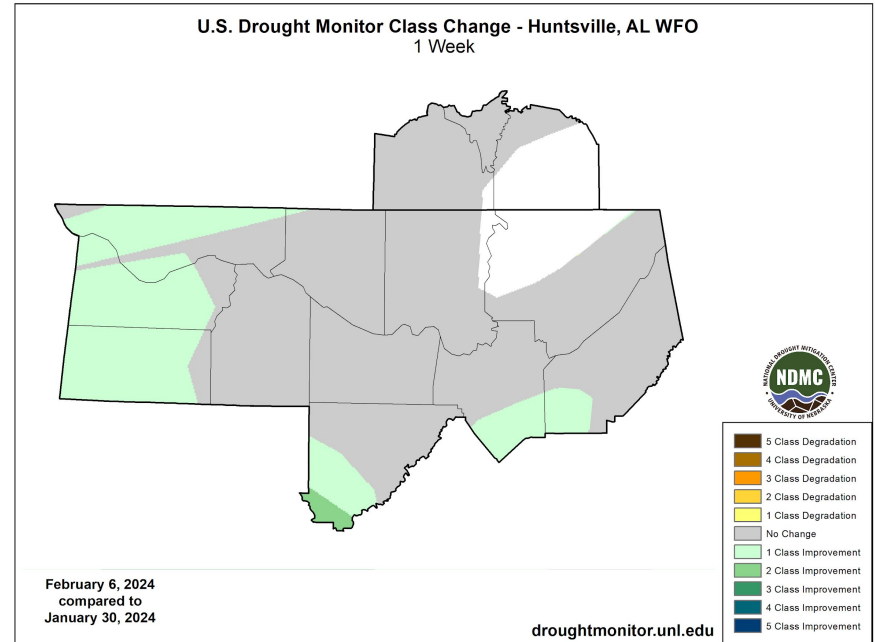
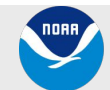


Image Caption: U.S. Drought Monitor 1-week change map valid 7AM CDT Feb 6, 2024.



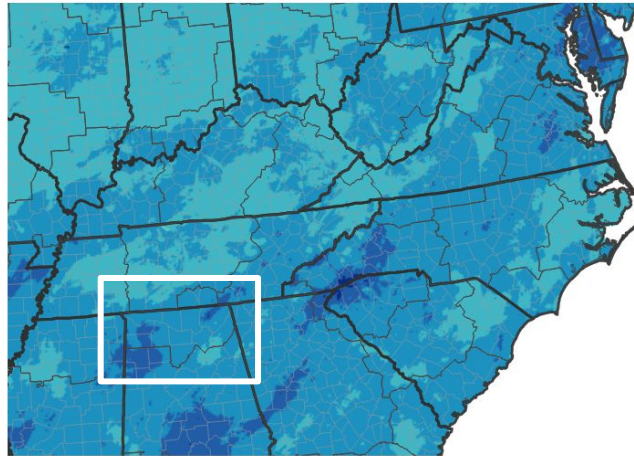


Precipitation - Past 120 Days

Main Takeaways

- Rainfall has ranged largely from 15 to 18 inches over the past 120 days.
- These rainfall amounts are around 70-90% of normal for the past 120 days as shown in the graphic on the right. So, despite recent rainfall increases the area remains relatively dry on 120 day and longer timescales, stretching back into August, 2023.

120-Day Precipitation Accumulations (Inches)



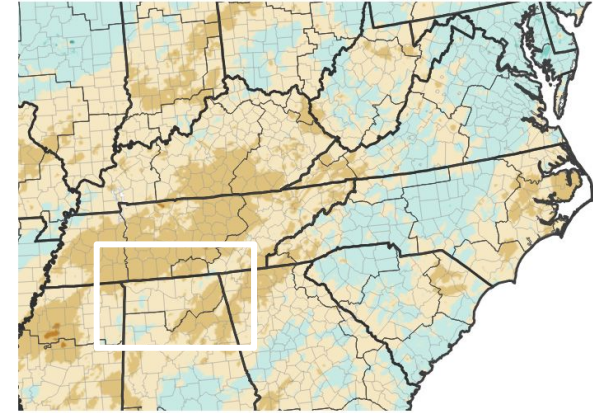
Inches of Precipitation



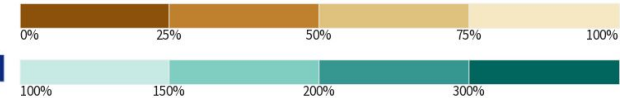
Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov

Last Updated: 02/08/24

120-Day Percent of Normal Precipitation



Percent of Normal Precipitation (%)



Source(s): National Weather Service Multi-Radar Multi-Sensor System; image courtesy of Drought.gov

Last Updated: 02/08/24

Left - 120-Day Precipitation Totals, Right - 120-Day Percent of Normal Precipitation. Data ending February 8, 2024



Summary of Impacts

Hydrologic Impacts

- No hydrologic impacts of note currently, although streamflows fell significantly during the late summer and fall due to the dry weather. Streamflows have experienced periodic rises with heavier bouts of rainfall since about mid-November. Although, some streams remain low for this time of year (Example, Paint Rock River at Woodville with 20th percentile flow), streams overall have begun to make a recovery.
- See next slide for more hydrologic information and streamflows and lake levels.

Agricultural Impacts

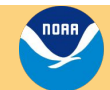
- USDA Crop and Progress Condition Reports late summer into fall noted that operators had been delayed from planting winter wheat crops. Pastures for grazing were reported to be in poor to very poor condition due to the lack of ability to plant grazing grasses in many areas. Please see the 2023 Crop and Progress Condition Reports for [Alabama](#) and [Tennessee](#) from the USDA for more information. (Note: these reports will not be available again until spring.)

Fire Hazard Impacts

- Due to the very dry weather late last summer into the fall, the Alabama Forestry Commission (AFC) was issuing Fire Alerts across the area. On December 4, the 'No Burn' order was lifted across Alabama. Thus, burn permits will be issued as normal. Debris burn permits are currently required in TN counties as usual this time of year. [AFC link](#); [TN Wildland Fire Link](#).

Drought Mitigation Actions

- On January 31, 2024, The Alabama Dept. of Economic and Community Affairs - Office of Water Resources placed Drought Region 1 in a Drought Advisory. Drought Region 3 (which includes Cullman County) is in a Drought Watch.
- Water managers are urged to carefully monitor conditions and encourage the wise and efficient use of our water resources.
- Public water system customers are encouraged to follow their local water system's recommendations regarding water use.
- All other water users should make prudent decisions on their water use to protect available resources
- You can see the latest Alabama Drought Declaration here...
<https://adeca.alabama.gov/wp-content/uploads/DroughtDeclaration.pdf>.
- Please refer to your municipality and/or water provider for any mitigation information in the future.





Hydrologic Conditions

Main Takeaways

- Improvements have occurred in recent weeks due to increased rainfall across the region. At this time, streamflows are generally in the 25-75th percentile.
- Lake/Reservoir levels remain generally near normal.

Additional data:

None at this time to report

14-Day Avg Streamflow Percentiles

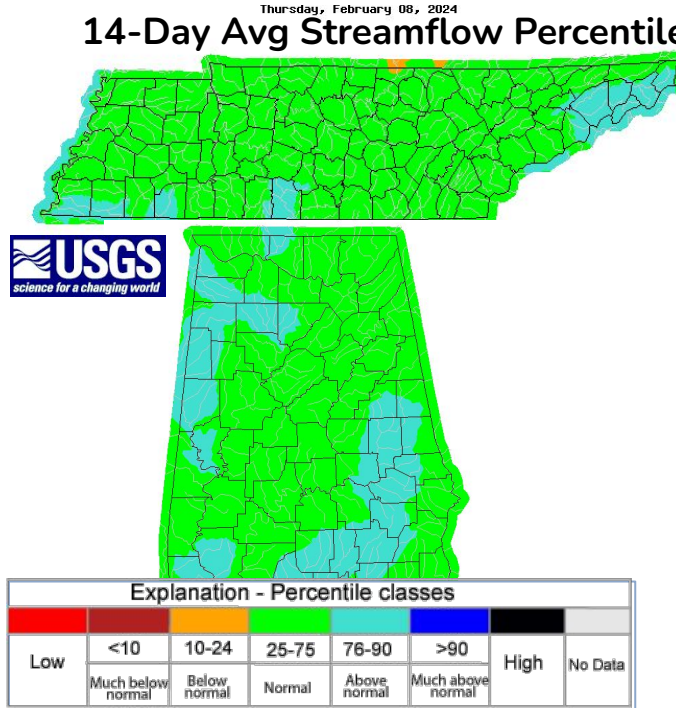


Figure Caption: USGS 14-day streamflow percentiles for Tennessee and Alabama, valid Feb 8, 2024

Lake Stages

Reservoir/ Lake	Pool Elevation (ft)	Current Elevation (ft)	Percent Full
Bear Creek	566	572	>100%
Little Bear Creek	609	609	100%
Cedar Creek	568	568	100%
Tim's Ford	873	877	>100%
Nickajack	633-635	634	Within Operating Range (WOR)
Guntersville	593-594	594	WOR
Wheeler	551-552	551	WOR
Wilson	505-506	506	WOR
Pickwick	408-410	410	WOR
Lewis Smith	502	503	>100%

Table caption: Reservoir conditions as of Feb 8, 2024



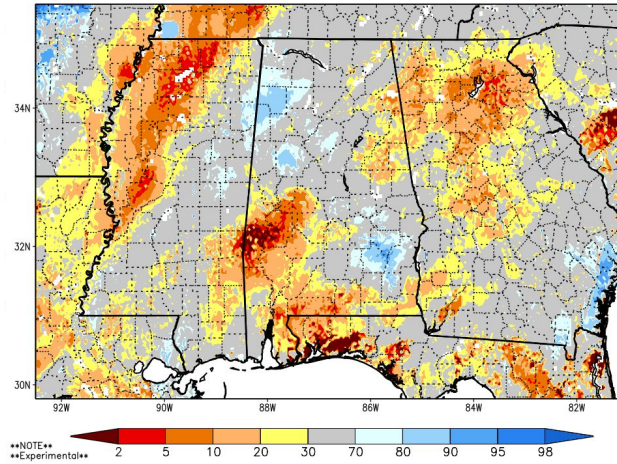


Agricultural Impacts

Main Takeaways

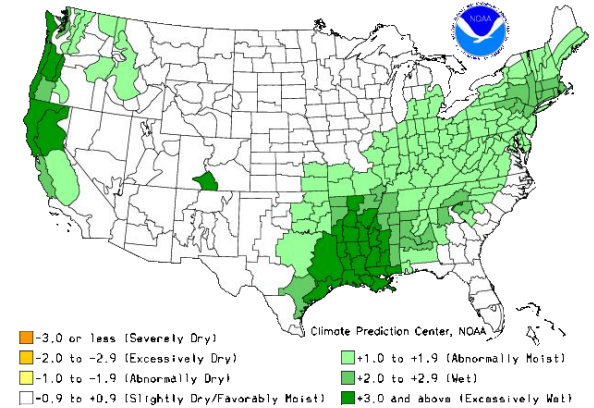
- Soil Moisture values have increased in recent weeks due to increased rainfall, with amounts now nearing normal for this time of year).
- 0-200 cm depth soil moisture percentiles (left image) indicate values largely around the 30th to 70th ranking percentile.
- Meanwhile, the crop moisture index (right image) indicates values are now Abnormally Moist to Wet for the period ending Feb 3rd, 2024.

SPoRT-LIS 0-200 cm Soil Moisture percentile valid 09 Feb 2024



NOTE
Experimental

Crop Moisture Index by Division
Weekly Value for Period Ending FEB 3, 2024
Short Term Need vs. Available Water in a Shallow Soil Profile

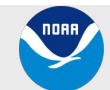


Climate Prediction Center, NOAA

Image Captions:

Left: NASA Short-term Prediction Research and Transition Center 0-200 cm Soil Moisture Ranking Percentile based on a 33-year climatology (1981-2013), Feb 9, 2024

Right: Crop Moisture Index by Division. Weekly value for period ending Feb 3, 2024





Other Impacts

Main Takeaways

- Lack of normal rainfall from late August to mid-November lead to impacts especially to the agricultural industry. Portions of the area are still under a D1 (Moderate Drought) designation due to rainfall deficits extending back into fall, and some streams that have still been relatively slow to respond to inputs of precipitation in the basins.

Impacts

- The overall lack of normal rainfall over the late summer and fall period resulted in very dry soils and lack of necessary grasses and forages for livestock farmers. Numerous reports from around the region over that period indicates that the lack of grass and ability to grow cold season grasses resulted in the need for supplemental hay feeding. Also, stress to livestock was reported due to the dry, hard ground conditions. Farm water resources such as retention ponds had dried up in some locations, resulting in increased hauling of outside water resources. Some producers indicated the need to sell livestock.
- Some reports had indicated increased wildlife foraging near people.

You can go to the [Condition Monitoring Observer Reports](#) page from the National Drought Mitigation Center to see individual reports of drought impacts at various timescales across the region.

Further Drought Mitigation Actions

- All counties in the Huntsville County Warning and Forecast area have been placed as Primary Counties in the USDA Secretarial Disaster Declaration for Drought. To learn more, go to the [USDA Disaster Designation Information](#) web page.





Seven Day Precipitation Forecast

- Next 7 days:

- Around three to four inches of rainfall is expected over the next week, through February 16th.
- Around 1.25 inches of precipitation is normal for this time of year for a weekly period.

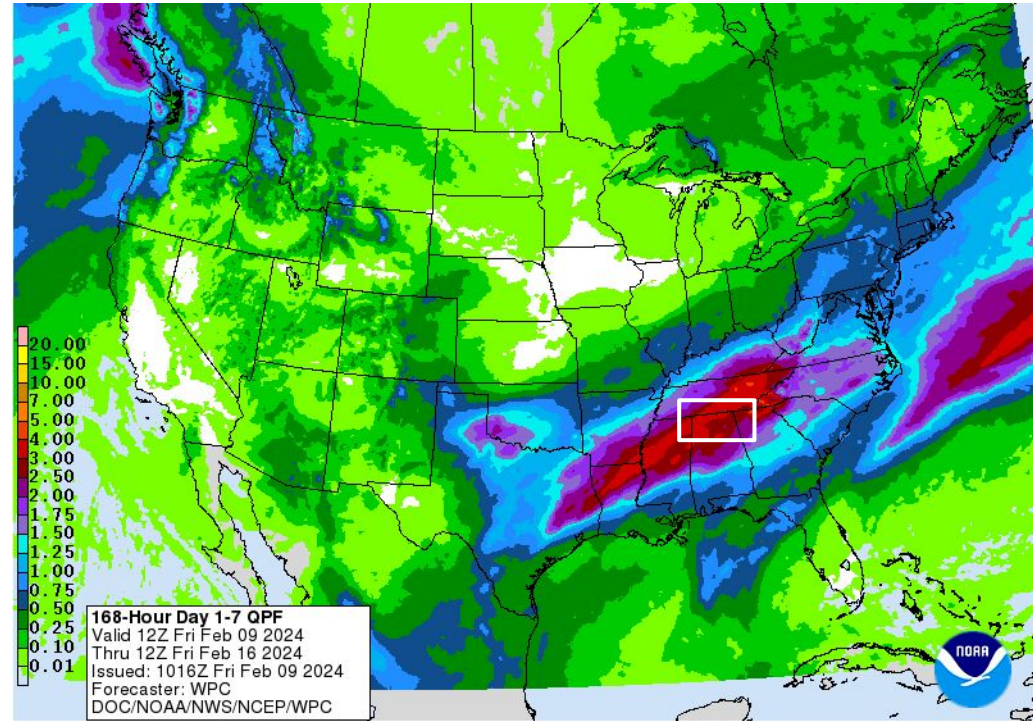
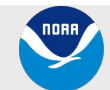


Image Caption: Weather Prediction Center 7-day precipitation forecast valid 7AM Feb 9 – 7AM Feb 16 (CST)





8-14 Day Outlook

Temperature and Precipitation Outlook

Main Takeaways

- Below Normal temperatures are favored for the area.
- Near Normal Precipitation is favored for the area.

Possible Impact

Conditions may be near steady-state or improve slightly during the 8-14 day period.

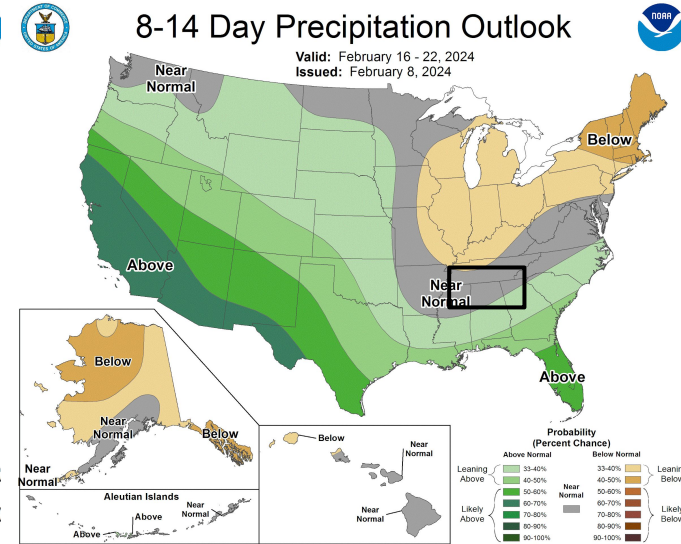
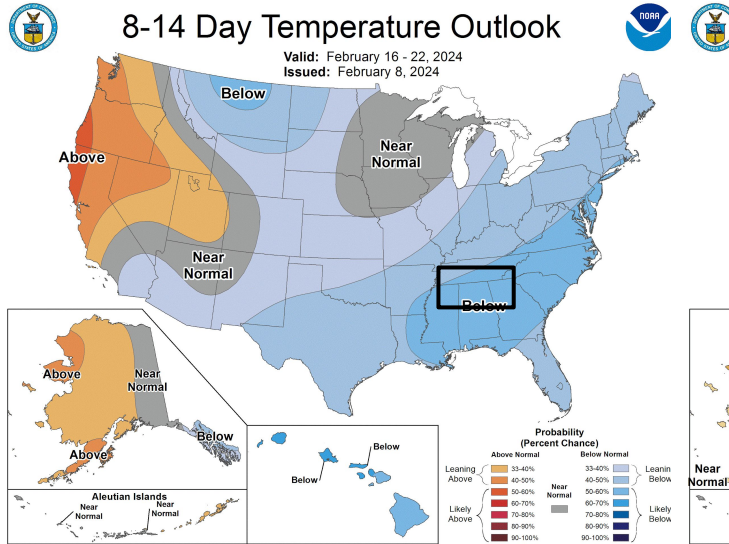
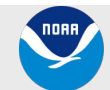


Image Captions:
Left - Climate Prediction Center 8-14 Day Temperature Outlook
Right - Climate Prediction Center 8-14 Day Precipitation Outlook
Valid February 16-24, 2024





Seasonal Outlook (February to April)

Seasonal Temperature and Precipitation Outlook

Main Takeaways

- **Temperatures:** Equal chances for below, near, or above normal temperatures for the Feb-Apr timeframe. However, southeast portions of the area are close to Slight Chance favorability for Near Normal Precipitation.
- **Precipitation:** Above Normal precipitation is slightly favored (33-40% chance) for the area.

Possible Impact

Some continued improvement in drought conditions is possible overall during the February to April period. Although, confidence is not high for specific temperature and precipitation conditions.

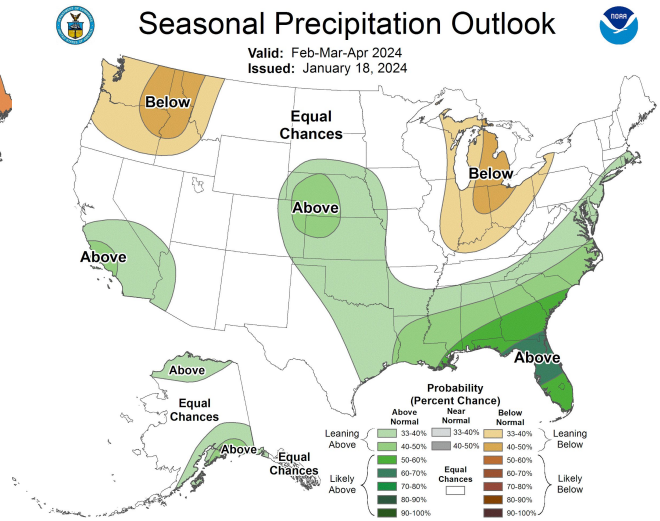
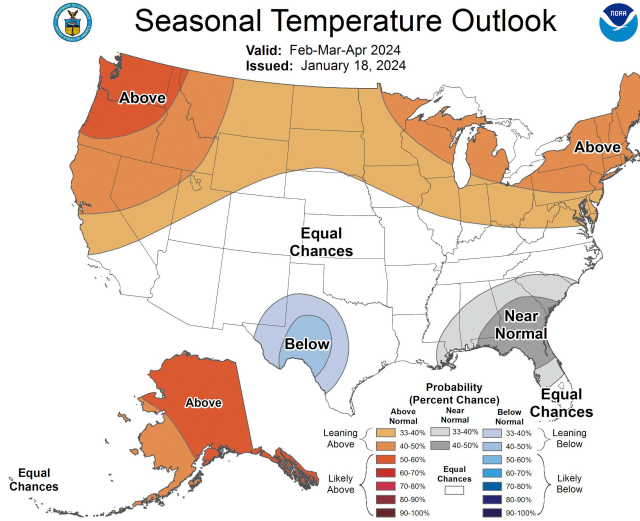


Image Captions:
Left - Climate Prediction Center Seasonal Temperature Outlook.
Right - Climate Prediction Center Seasonal Precipitation Outlook.
Valid February to April 2024





Local Drought Outlook

Seasonal Outlook

Main Takeaways

- As of the latest Seasonal Drought Outlook issued on January 31st, 2024, drought conditions were anticipated to improve across much of northern Alabama during the period, but perhaps linger especially in areas under the D1 and D2 drought designations. However, recent and upcoming rainfall over the next few days may allow for earlier than expected improvements in drought conditions.

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

Valid for February 1 - April 30, 2024
Released January 31, 2024

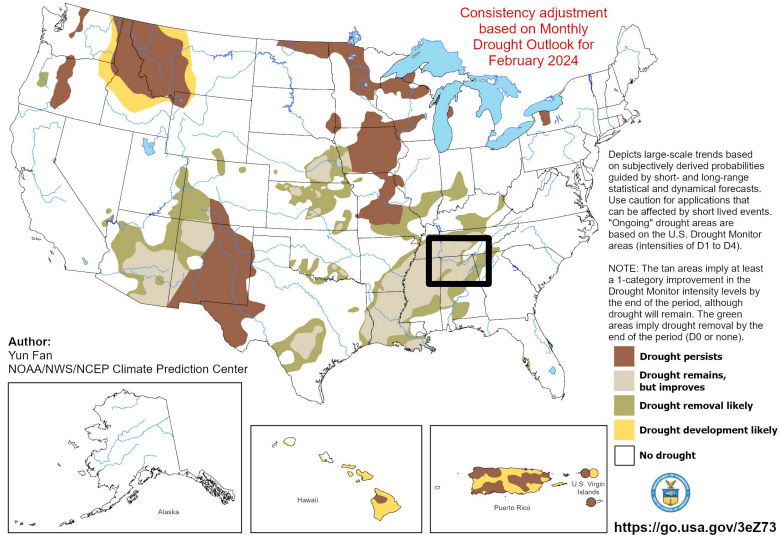


Image Caption:

Climate Prediction Center Seasonal Drought Outlook for February 1st – April 30th, 2024, released January 31, 2024 (https://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.png)