

Drought Information Statement for Eastern Missouri/Western Illinois

Current Status, Impacts, and Outlook

Issued By: NWS WFO St. Louis, MO

Contact information: nws.stlouis@noaa.gov





U.S. Drought Monitor

Latest U.S. Drought Monitor Map

- Drought intensity and Extent
 - D3 Extreme Drought: northern Shelby county in Missouri.
 - D2 Severe Drought: Knox, Lewis, southern Shelby, Marion, Monroe, Ralls, northern Audrain, far western Pike, far western Boone, and northern Moniteau counties in Missouri and far southwestern Adams county in Illinois

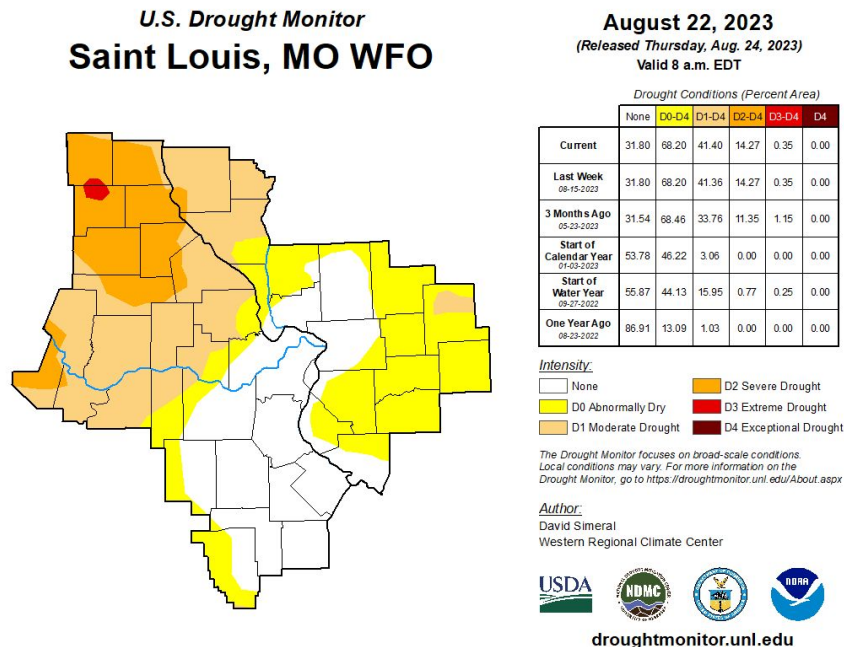


Image Caption: U.S. Drought Monitor valid 8am EDT August 22nd.





Recent Change in Drought Intensity

- Four Week Drought Monitor Class Change.
 - **Drought Worsened**: No areas.
 - **No Change**: Small areas in northeast Missouri and south-central Illinois.
 - **Drought Improved**: Much of the area.

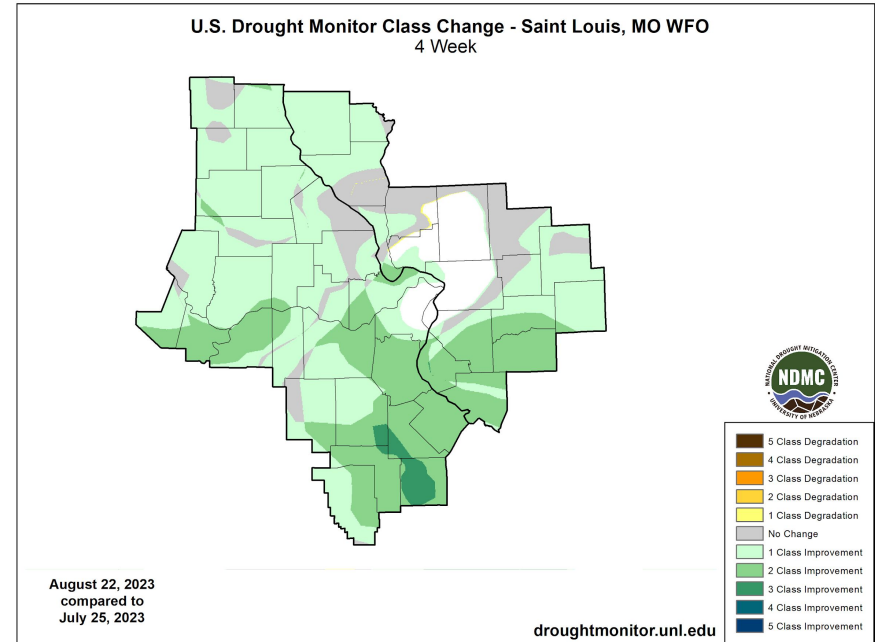


Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT August 22nd.

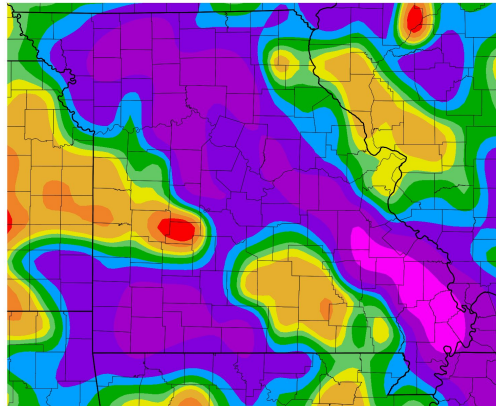


Precipitation

Main Takeaways

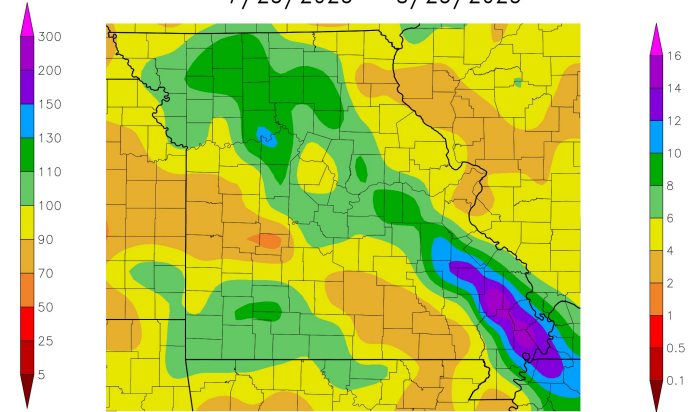
- Very wet weather has occurred over parts of central and southeast Missouri where 200-300+% of normal fell.
- However, there were some dry areas, including parts of northeast Missouri and west-central Illinois where 70-90% of normal rain was observed over the past 30 days.

Percent of Normal Precipitation (%)
7/25/2023 – 8/23/2023



Generated 8/24/2023 at HPRCC using provisional data.

Precipitation (in)
7/25/2023 – 8/23/2023



NOAA Regional Climate Centers 8/24/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:

Left - Precipitation Amount for Missouri and western Illinois
Right - Percent of Normal Precipitation for Missouri and western Illinois
Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending August 23, 2023





Summary of Impacts

Hydrologic Impacts

- Low pond levels continue

Agricultural Impacts

- Poor pasture conditions (big improvements though over the past 3-4 weeks)
- Poor corn and soybean conditions (improvements though noted in soybeans recently)
- Very low/poor hay supply
- Low stock water supplies

Fire Hazard Impacts

- There are no known impacts at this time.

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

Main Takeaways

- Low ponds
- Potential for navigation issues in the weeks/months ahead on the big rivers (especially Mississippi)

Impacts

Prior heavy rainfall earlier this month led to a rapid improvement on area streamflows. A majority of the area has normal to above normal flows. Only about 5-10 stations across the area are below normal.

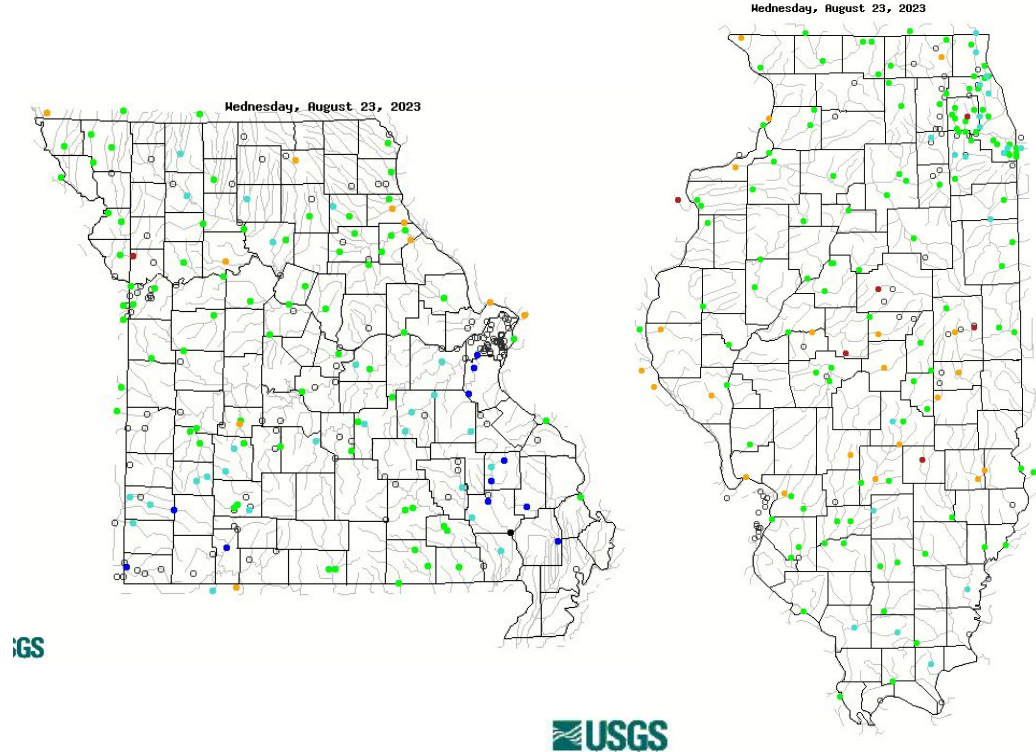


Image Caption: USGS 7 day average streamflow HUC map valid August 23, 2023





Agricultural Impacts

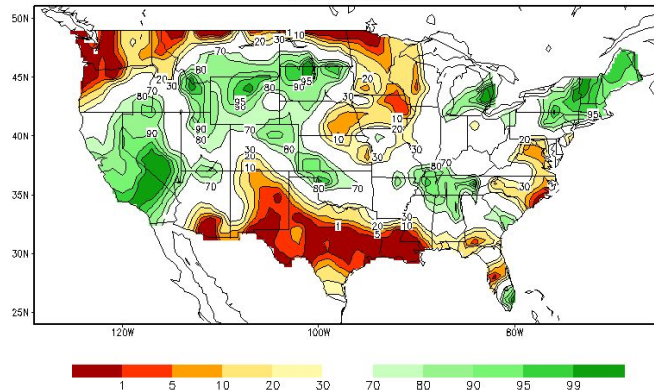
Main Takeaways

- Poor pasture conditions
- Poor corn crop
- Very low hay supply
- Low stock water supplies

Impacts

- In Missouri,
 - Pasture conditions: 15 percent very poor, 26 percent poor.
 - Corn: 13 percent very poor, 23 percent poor.
 - Soybeans: 6 percent very poor, 16 percent poor.
 - Hay supply: 45 percent very short, 29 percent short.
 - Stock water supplies: 12 percent very short, 27 percent short.

Calculated Soil Moisture Ranking Percentile
AUG 23, 2023



Crop Moisture Index by Division
Weekly Value for Period Ending AUG 19, 2023
Short Term Need vs. Available Water in a Shallow Soil Profile

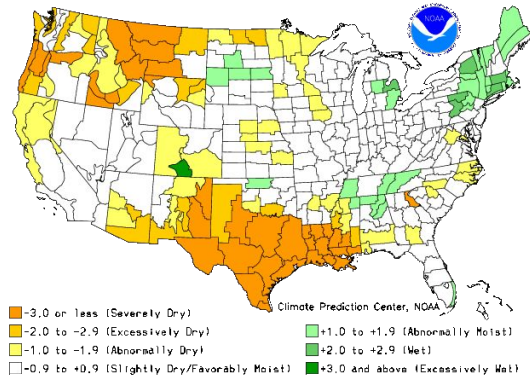


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid August 23, 2023

Right: [Crop Moisture Index by Division](#). Weekly value for period ending August 19, 2023



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
St. Louis, MO



Seven Day Precipitation Forecast

- Next 7 days:
 - Another dry week is forecast as we conclude the month of August.
 - Some renewed deterioration in drought conditions is likely, at least in the short term.

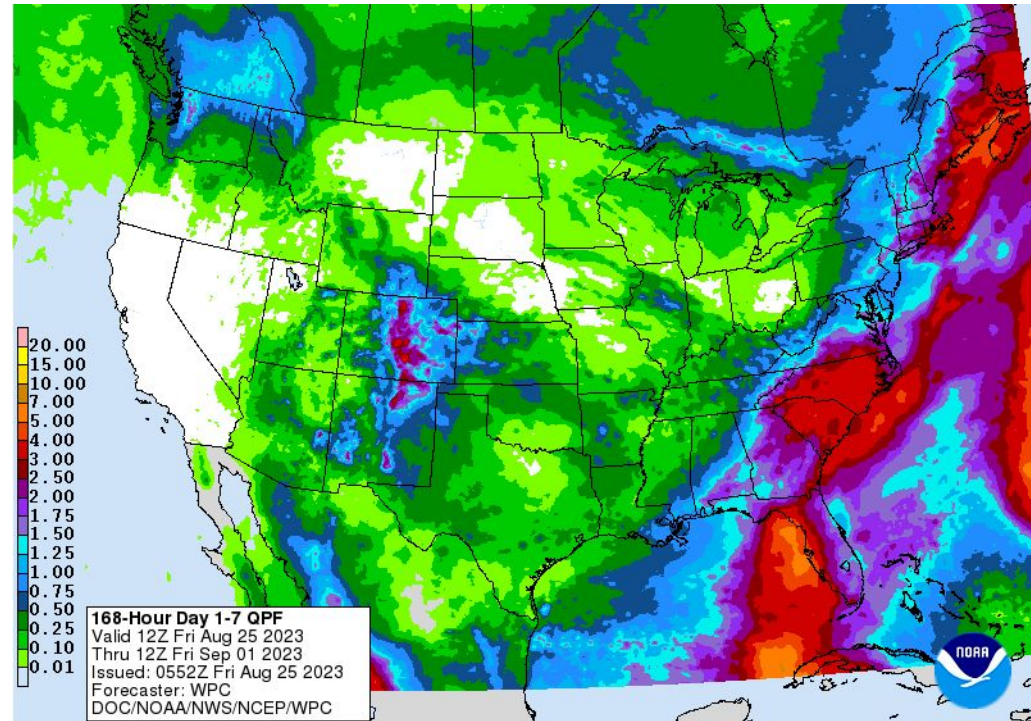


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Friday August 25 to September 1



6-10 Day Outlook

Temperature and Precipitation Outlook

Main Takeaways

- Below to well-below normal rainfall is forecast over the 6-10 day period.
- Near to slightly below normal temperatures are also favored.

Possible Impact

Expansion/deterioration in drought conditions are possible due to the dry forecast.

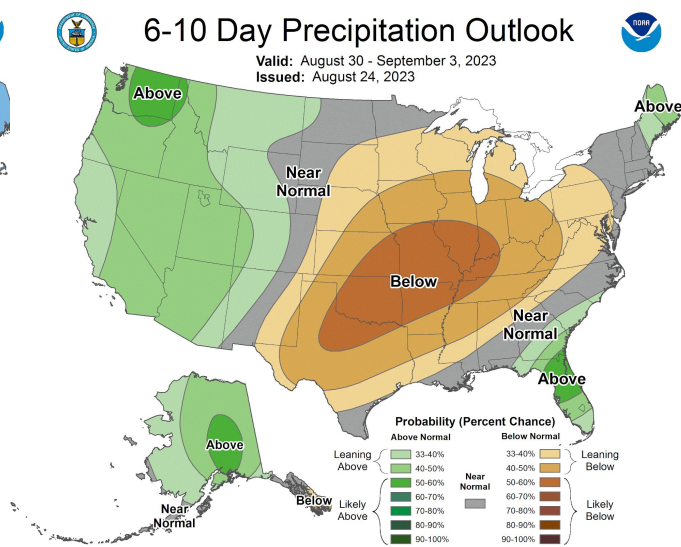
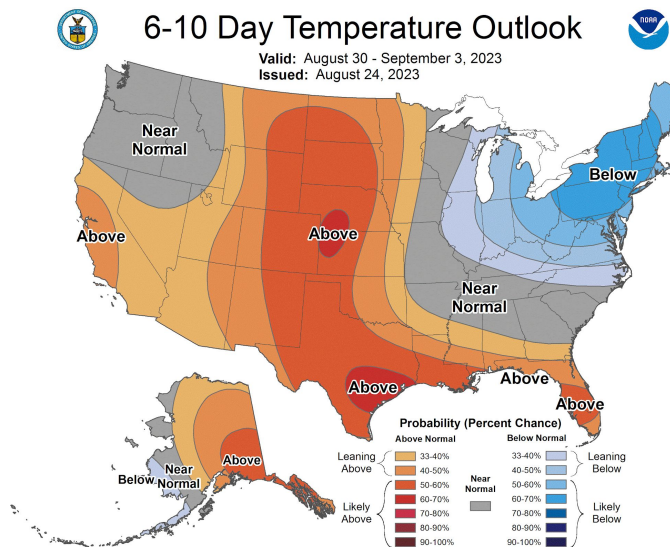


Image Captions:

Left - [Climate Prediction Center 6-10 Day Temperature Outlook.](#)

Right - [Climate Prediction Center 6-10 Day Precipitation Outlook.](#)

Valid August 30 to September 3.



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
St. Louis, MO



8-14 Day Outlook

Temperature and Precipitation Outlook

Main Takeaways

- Below normal rainfall is forecast in the 8-14 day period.
- Above normal temperatures are also favored.

Possible Impact

If a warm and continued dry pattern sets up, drought conditions may worsen.

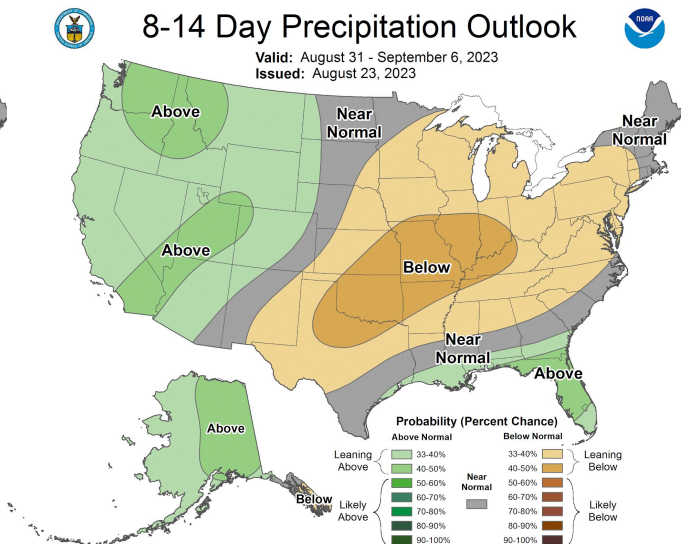
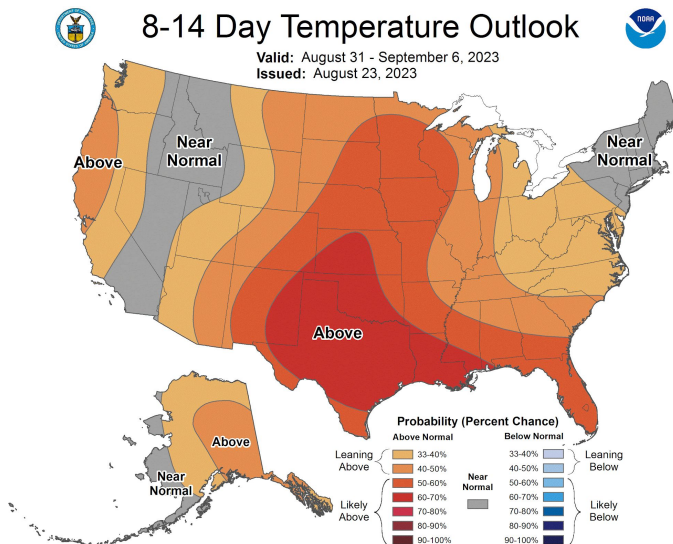


Image Captions:

Left - [Climate Prediction Center 8-14 Day Temperature Outlook](#).

Right - [Climate Prediction Center 8-14 Day Precipitation Outlook](#).

Valid September 1 to 7.



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
St. Louis, MO



Monthly Climate Outlook

Monthly Temperature and Precipitation Outlook

Main Takeaways

- Generally near normal temperatures are favored.
- Near normal rainfall is also predicted for the month of September.

Possible Impact

Likely little change to drought conditions across the area.

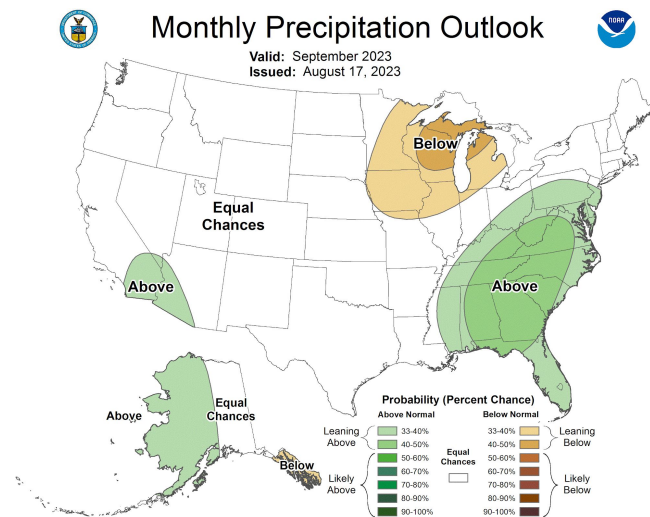
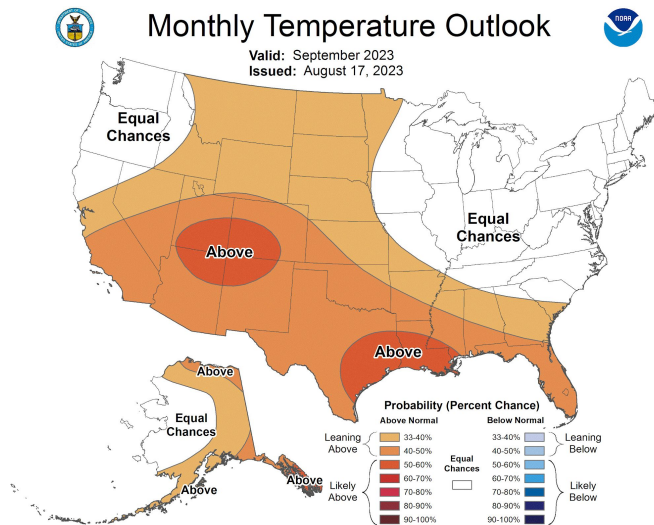


Image Captions:

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

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

Valid September 2023.



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
St. Louis, MO



Seasonal Climate Outlook

Seasonal Temperature and Precipitation Outlook

Main Takeaways

- Near normal temperatures are favored for meteorological fall.
- Near normal precipitation is also forecast.

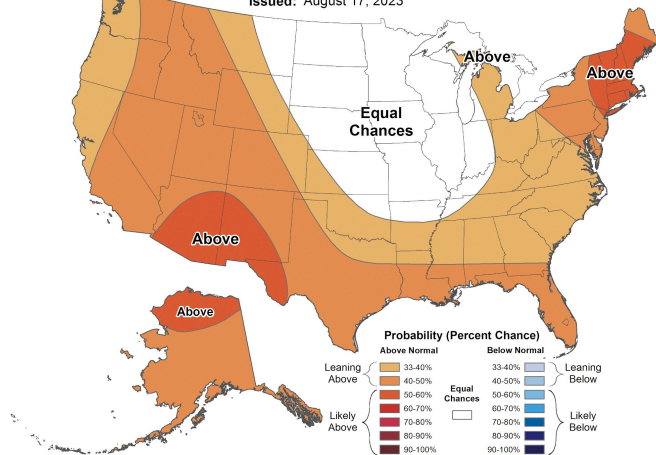
Possible Impact

Likely little change to drought conditions.



Seasonal Temperature Outlook

Valid: Sep-Oct-Nov 2023
Issued: August 17, 2023



Seasonal Precipitation Outlook

Valid: Sep-Oct-Nov 2023
Issued: August 17, 2023

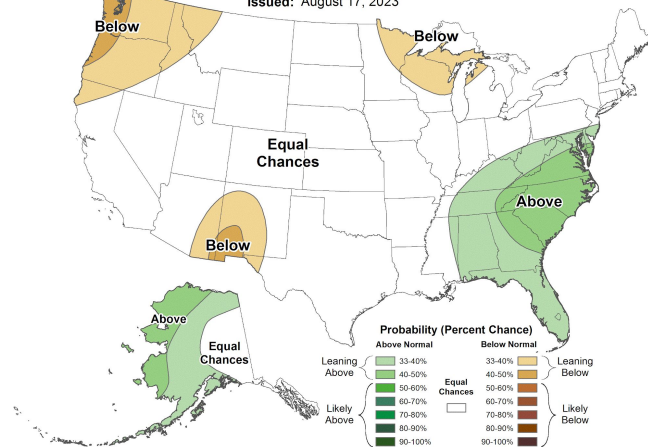


Image Captions:

Left - [Climate Prediction Center Seasonal Temperature Outlook](#).
Right - [Climate Prediction Center Seasonal Precipitation Outlook](#).

Valid September through November 2023.



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
St. Louis, MO