



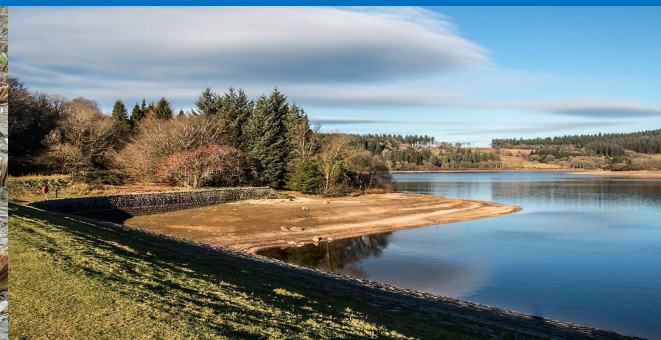
# Drought Information Statement for Southeast Texas

Valid September 3, 2023

Issued By: NWS Houston/Galveston

Contact Information:

- This product will be updated September 8, 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/hgx/DroughtInformationStatement> for previous statements.



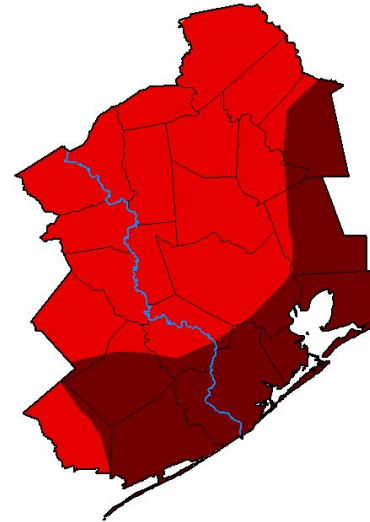


# U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for Southeast Texas

- DROUGHT CONDITIONS HEADLINE/KEY MESSAGE
- Drought intensity and Extent
  - **D4 (Exceptional Drought):** Liberty, San Jacinto, Polk, Chambers, Harris, Galveston, Brazoria, Fort Bend, Colorado, Wharton, Matagorda, Jackson
  - **D3 (Extreme Drought):** Burleson, Brazos, Madison, Houston, Trinity, Walker, Grimes, Washington, Austin, Waller, Montgomery
  - D2 (Severe Drought):
  - D1 (Moderate Drought):
  - D0: (Abnormally Dry):

## U.S. Drought Monitor Houston/Galveston, TX WFO



**August 29, 2023**  
(Released Thursday, Aug. 31, 2023)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.00	100.00	100.00	100.00	99.99	35.28
<b>Last Week</b> 08-22-2023	0.00	100.00	100.00	100.00	99.99	17.18
<b>3 Months Ago</b> 05-20-2023	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> 01-01-2023	84.11	15.89	6.96	0.00	0.00	0.00
<b>Start of Water Year</b> 09-27-2022	32.19	67.81	21.97	4.76	0.83	0.00
<b>One Year Ago</b> 08-30-2022	1.18	98.82	74.24	27.76	8.86	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

David Simeral  
Western Regional Climate Center



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

Image Caption: U.S. Drought Monitor valid 8am EDT August 29, 2023.





# Recent Change in Drought Intensity

Link to the latest [1-week change map](#) for Southeast Texas

- Four Week Drought Monitor Class Change.
  - Drought Worsened: Across portions of Colorado, Wharton, Fort Bend, Harris, Liberty, Chambers, Galveston, Brazoria, Matagorda, and Jackson counties.
  - No Change: Rest of the region.
  - Drought Improved: None.

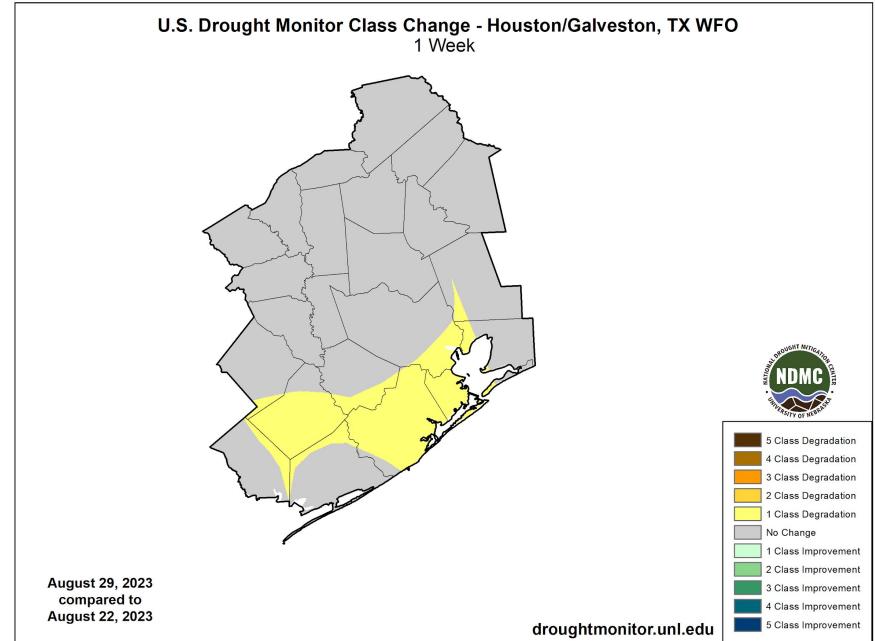


Image Caption: U.S. Drought Monitor 1-week change map valid 8am EDT August 29, 2023.



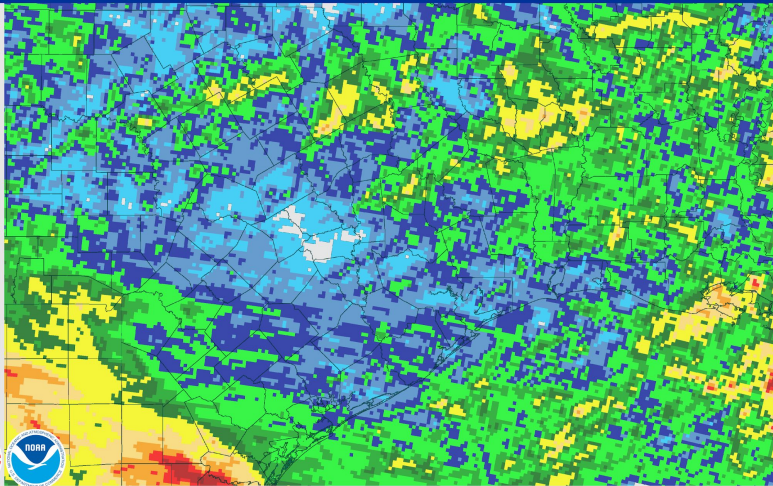


# Precipitation

- Generally little to no rain has fallen in the last month, so rainfall totals remain about three to five inches below normal.

September 03, 2023 30-Day Observed Precipitation

Created on: September 03, 2023 - 22:43 UTC  
Valid on: September 03, 2023 12:00 UTC



September 03, 2023 30-Day Departure Precipitation

Created on: September 03, 2023 - 22:43 UTC  
Valid on: September 03, 2023 12:00 UTC

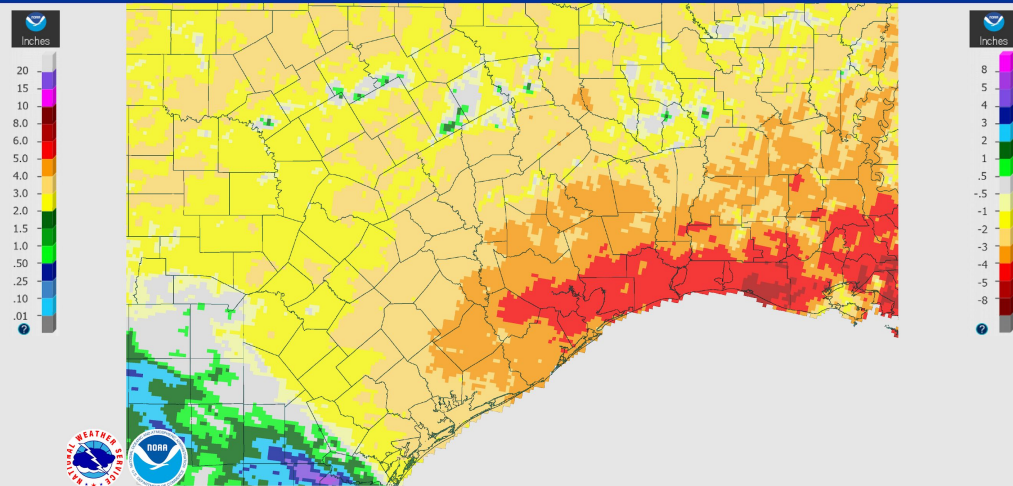


Image Captions:

Left - Precipitation Amount for Southeast Texas  
Right - Percent of Normal Precipitation for Southeast Texas  
Data over the past 30 days ending September 3, 2023

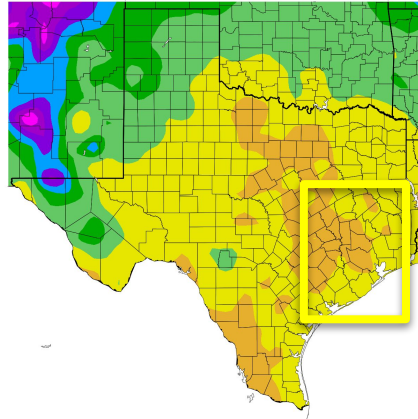




# Temperature

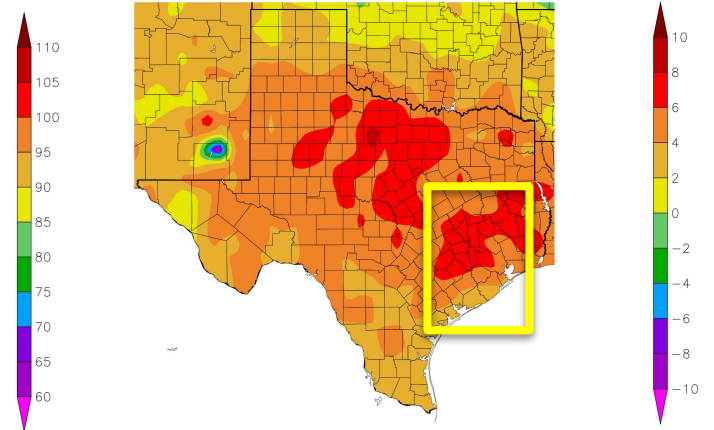
- The extreme heat over the last month averaged around two to five degrees above normal.
- This summer has been the hottest on record for Southeast Texas.

Temperature (F)  
8/4/2023 - 9/2/2023



Generated 9/3/2023 at HPRCC using provisional data.

Departure from Normal Temperature (F)  
8/4/2023 - 9/2/2023



NOAA Regional Climate Centers<sup>23</sup> 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 September 2, 2023





# Summary of Impacts

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

## Hydrologic Impacts

- Various communities across Southeast Texas have imposed Stage 1 to 3 water restrictions.

## Agricultural Impacts

- In Jackson County, it has been reported that there is grass and forage loss through the county. Ranchers have begun feeding cattle due to dry pastures. Producers are also reporting disaster loss level cotton yields due to the lack of precipitation and high temperatures in during the growing season.

## Fire Hazard Impacts

- Extremely dry fuels has led to numerous wildfires to develop across the area, especially in the Piney Woods area.

## Reservoir Levels (as of September 3, 2023):

- Somerville Lake: 71.4%
- Lake Conroe: 91.2%
- Houston County Lake: 85.7%
- Livingston Reservoir: 85.8%
- Lake Texana: 74.2%
- Lake Houston: 95.9%
- Gibbons Creek Reservoir: 76.3%





# Hydrologic Conditions and Impacts

- Streamflows near Harris County remain near normal, but the rest of the region is reporting below normal to much below normal streamflows.

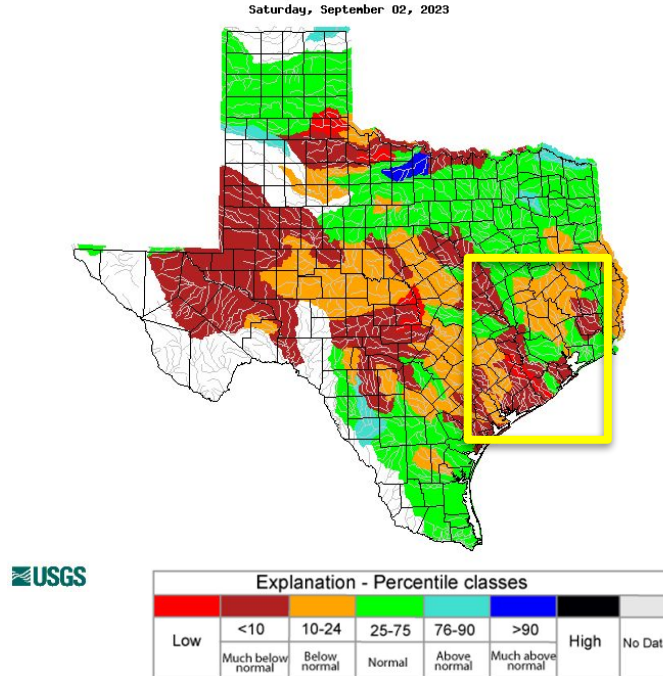


Image Caption: USGS 7 day average streamflow HUC map valid September 2, 2023

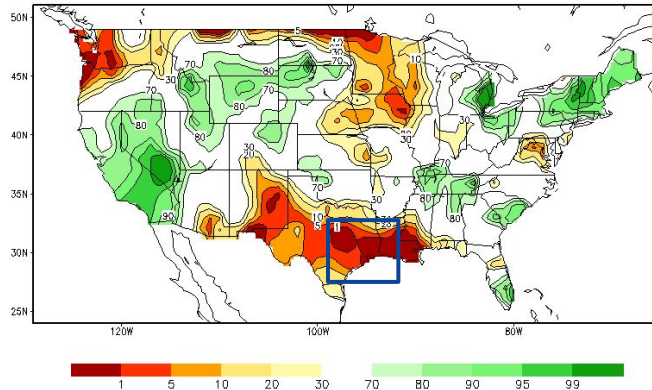




# Agricultural Impacts

- Soil moisture remains in the lowest percentile across most of Southeast Texas.

Calculated Soil Moisture Ranking Percentile  
SEP 02, 2023



Crop Moisture Index by Division  
Weekly Value for Period Ending AUG 26, 2023  
Short Term Need vs. Available Water in a Shallow Soil Profile

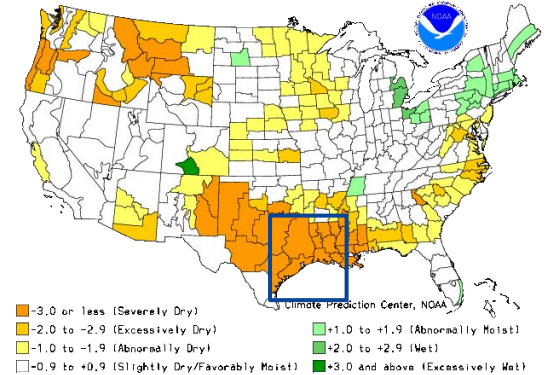


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid September,

Right: [Crop Moisture Index by Division](#). Weekly value for period ending August 26, 2023









# Seven Day Precipitation Forecast

- Some isolated showers and thunderstorms are possible across the next week generally producing less than half an inch of precipitation.

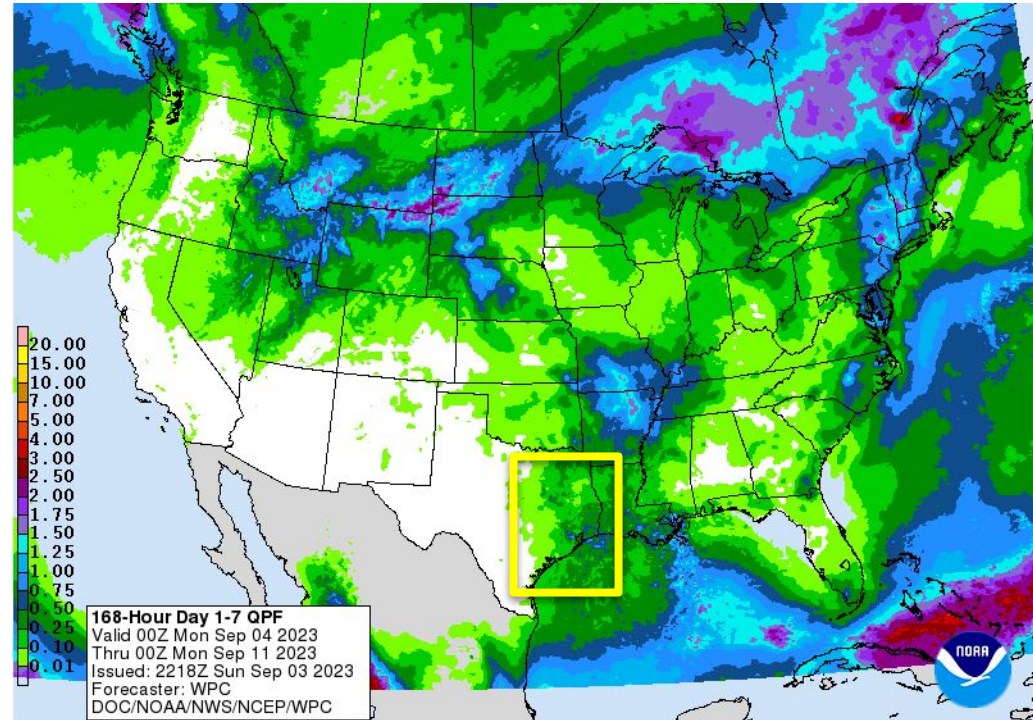


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid MONTH DAY YEAR to MONTH DAY YEAR





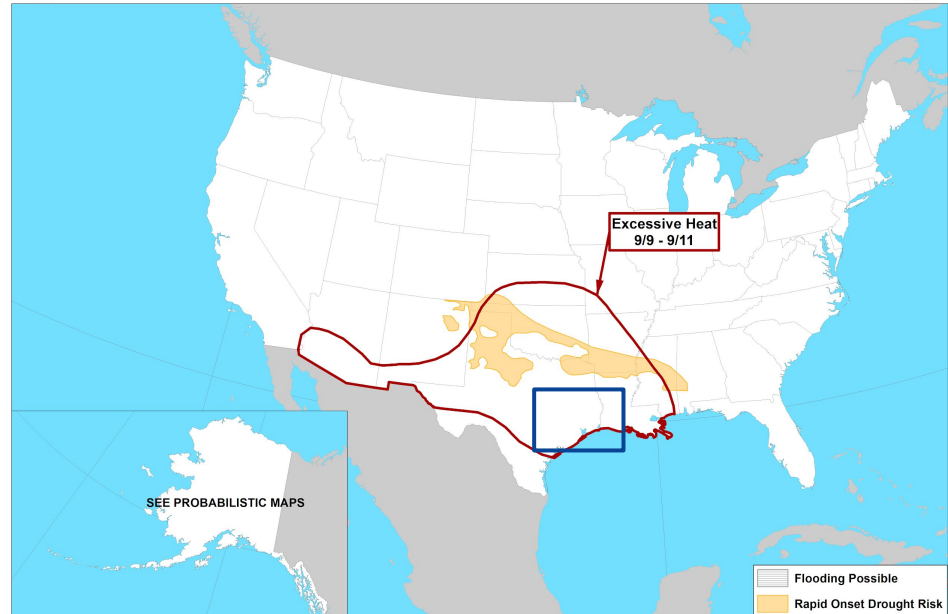
# Rapid Onset Drought Outlook

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

- Excessive heat will remain an issue through the next week.
- Since the area is already in drought, the risk of rapid onset drought is low.



Day 8-14 U.S. Hazards Outlook  
Valid: 09/09/2023-09/15/2023



Climate Prediction Center  
Made: 09/01/2023 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 Month DD to DD.





# Long-Range Outlooks

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

- For September, above normal temperatures and below normal precipitation is favored.

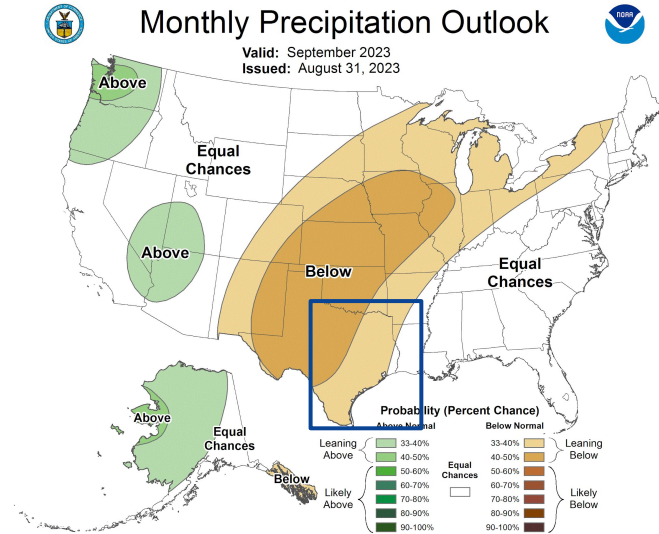
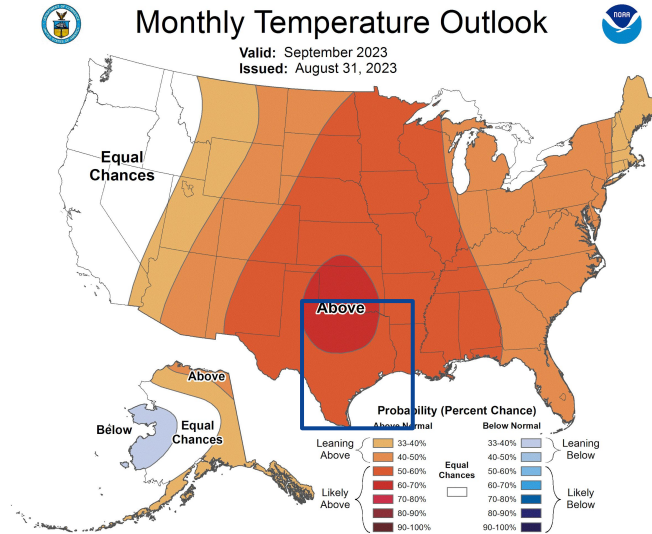


Image Captions:

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

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

Valid September 2023





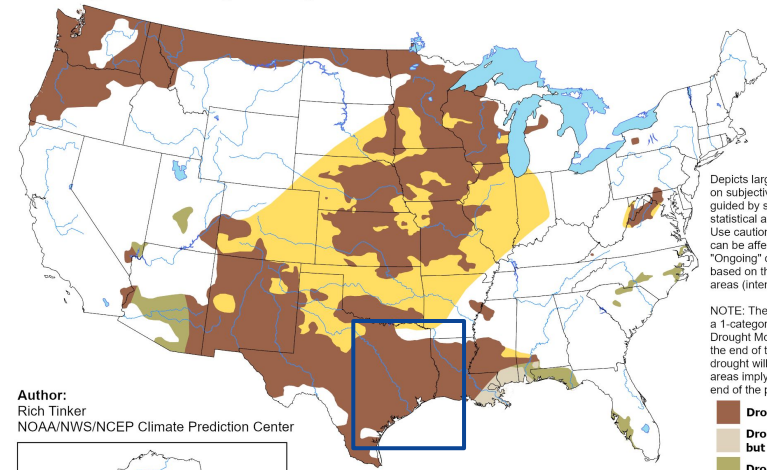
# Drought Outlook

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

- With the hot and dry weather continuing, drought will persist through September, and likely worsen.

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

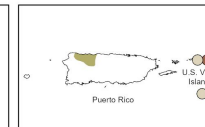
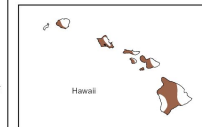
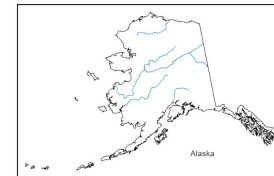
Valid for September 2023  
Released August 31, 2023



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:  
Rich Tinker  
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 August 31, 2023 valid for September 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  
Houston/Galveston