



Drought Information Statement for South Central Texas

Current Status, Impacts, and Outlook [Beta Test 2023]

Issued By: NWS Austin/San Antonio, TX

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

July 6, 2023



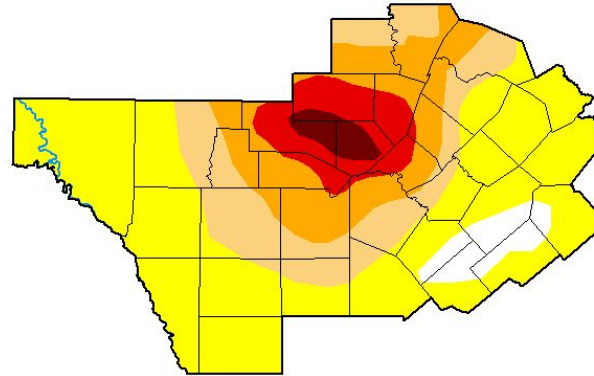


U.S. Drought Monitor

Latest U.S. Drought Monitor Map

- Key Messages:
 - Drought conditions worsened over the past 30 days due to below normal precipitation and above normal temperatures.
 - Outlooks through the remainder of the Summer months support continued expansion of drought conditions.
- Extreme (D3) to Exceptional Drought covers 10% of our region, while 56% of the area is not in drought.

U.S. Drought Monitor Austin/San Antonio, TX WFO



July 4, 2023
(Released Thursday, Jul. 6, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	4.43	51.99	17.97	15.71	7.74	2.16
Last Week 06-27-2023	7.27	49.14	19.37	14.31	7.74	2.16
3 Months Ago 04-04-2023	0.00	0.96	16.92	40.66	21.31	20.16
Start of Calendar Year 01-03-2023	6.21	14.33	40.02	19.13	11.66	8.65
Start of Water Year 09-27-2022	1.55	13.06	33.69	29.92	16.79	4.98
One Year Ago 07-05-2022	0.00	0.00	9.91	16.48	43.77	29.84

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:
Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

Image Caption: [U.S. Drought Monitor](https://droughtmonitor.unl.edu) valid 8am EDT July 4, 2023



Recent Change in Drought Intensity

- Four Week U.S. Drought Monitor Class Change.
 - Drought Worsened: Over portions of the southern Edwards Plateau, Coastal Plains, and I-35 corridor.
 - No Change: Most of the Hill Country, I-35 Corridor, and portions of the southern Edwards Plateau.
 - Drought Improved: No drought improvement was observed.

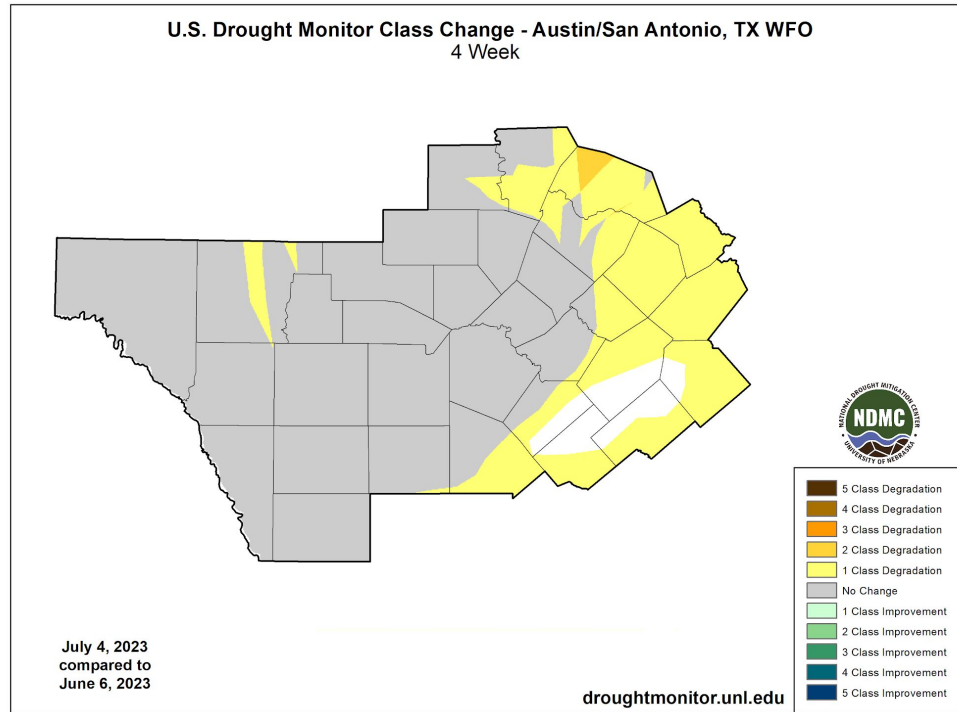


Image Caption: [U.S. Drought Monitor 4-week change map](#) valid 8am EDT July 4, 2023



Precipitation

Main Takeaways

- The majority of South Central Texas saw below normal precipitation for the month of June.
- Locations east of US HWY 281 ended the month with between 2 to 4 inches below their normal rainfall for the month of July.
- Isolated areas across the southern Edwards Plateau and Rio Grande Plains saw near normal to above normal precipitation of the month of June.

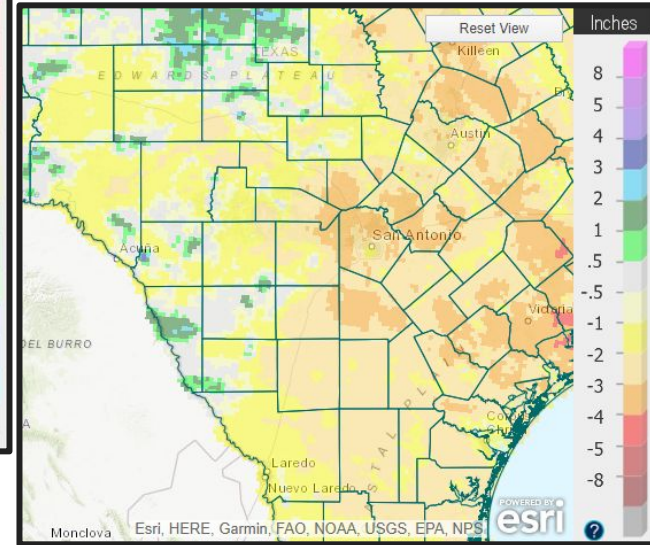
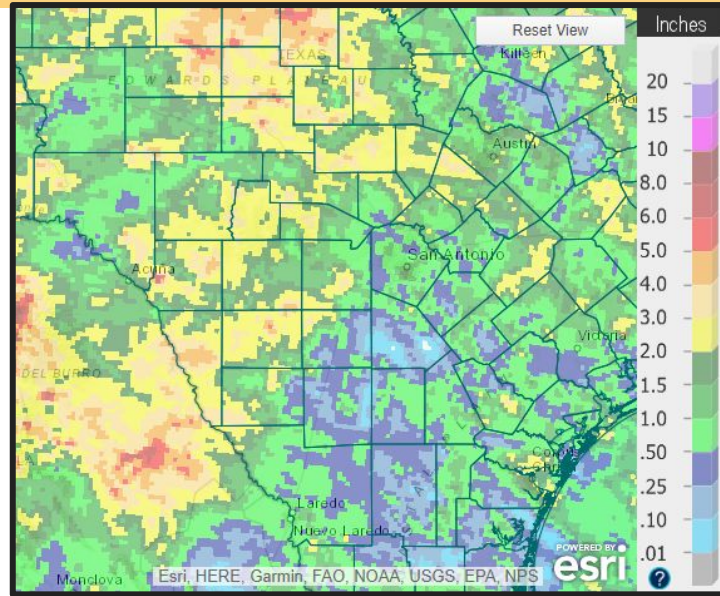


Image Captions:

Left - [Precipitation Amount Map for south-central Texas](#)

Right - [Departure from Normal for south-central Texas](#)

Data Courtesy Advanced Hydrologic Prediction Service (AHPS)

Data over the past 30 days ending July 6, 2023





Summary of Impacts

Hydrologic Impacts

- Streamflows over the past 7 days show normal flow for portions of the Colorado, and Nueces river basins.
- Streamflows were below to much below normal across most of the river basins across the service area.
- See next slide for more details

Agricultural Impacts

- Please see the latest [Crop and Weather Report](#) from Texas A&M Agrilife.
- Soil Moistures have decreased over the past 30 days with much of the area showing below normal soil moisture across much of the area. A portion of the Coastal Plains shows near normal soil moisture.

Fire Hazard Impacts

- Wildfire risk will increase through the summer as grasses are dried out.
- See slide 8 for more details

Other Impacts

- Water recreation is severely impacted on Lake Medina, Lakes Travis and Amistad as well as the Guadalupe River.

Drought Mitigation Actions

- Please refer to your municipality and/or water provider for mitigation information.
- Select [Municipality Restrictions](#) (as of 5/31/2023)
 - Fredericksburg: Stage 3
 - San Antonio: Stage 2
 - Austin: Stage 1
 - Kerrville: Stage 1





Hydrologic Conditions

Main Takeaways

- Streamflows over the past 7 days show normal flow for portions of the Colorado, and Nueces river basins.
- Streamflows were below to much below normal across most of the river basins across the service area.

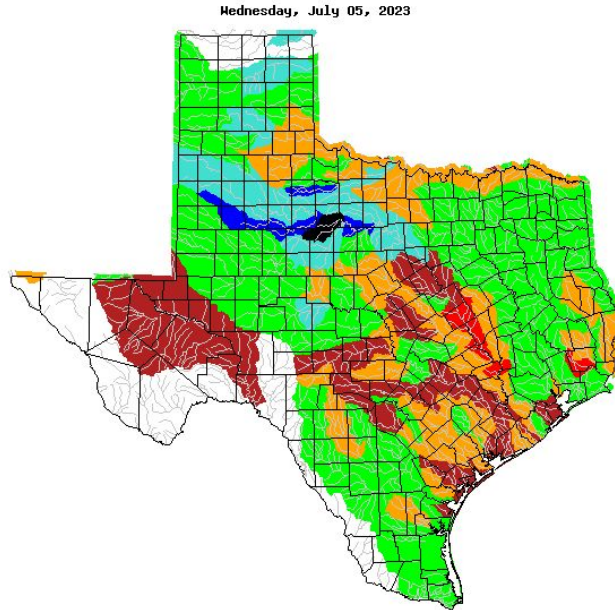


Figure Caption: [USGS 7 day streamflows for Texas](#), valid July 5, 2023

Reservoir	Pool Elevation (ft)	Current Elevation (ft)	Percent Full
Amistad	1117.00	1068.70	38.5%
Medina Lake	1064.2	980.52	5.0%
Canyon Lake	909.00	895.75	73.9%
Granger Lake	504.00	503.78	98.3%
Georgetown Lake	791.00	778.01	61.2%
Lake Buchanan	1020.00	1001.12	60.1%
Lake LBJ	825.00	824.76	98.6%
Lake Marble Falls	738.00	736.36	94.9%
Lake Travis	681.00	637.20	43.1%
Lake Austin	492.9	492.24	96.3%

Table caption: [TWDB Reservoir](#) conditions as of July 5, 2023

Additional data:

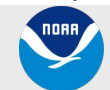
[Edwards Aquifer, Bexar Index Well J-17](#) as **USGS**

of July 6, 2023:

10 day average: 633.7

Historical July Average: 660.1

Departure from Average: -26.5



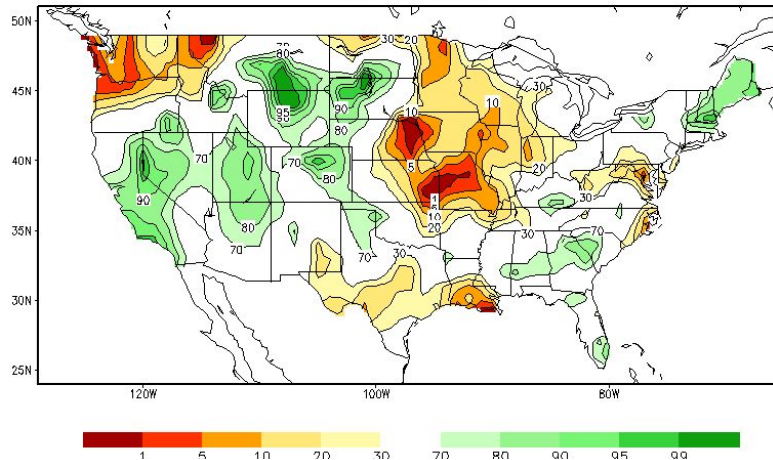


Agricultural Impacts

Main Takeaways

- Soil Moistures have decreased over the past 30 days with much of the area showing below normal soil moisture across much of the area. A portion of the Coastal Plains shows near normal soil moisture.
- Crop moistures are abnormally dry to severely dry across the three crop divisions.

Calculated Soil Moisture Ranking Percentile
JUL 05, 2023



Crop Moisture Index by Division
Weekly Value for Period Ending JUL 1, 2023
Short Term Need vs. Available Water in a Shallow Soil Profile

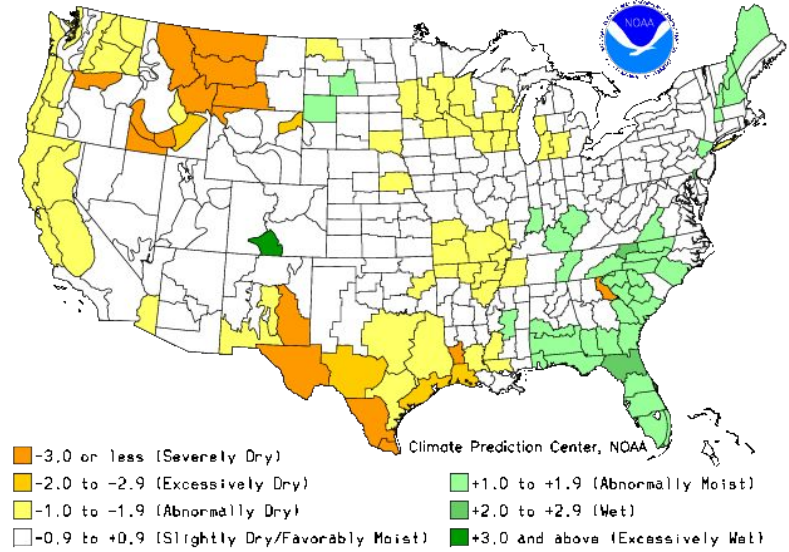


Image Captions:

Left: [CPC Calculated Soil Moisture Ranking Percentile](#) valid July 5, 2023

Right: [Crop Moisture Index by Division](#). Weekly value for period ending July 1, 2023



Fire Hazard Impacts

Main Takeaways

- Keetch Byram Drought Index values are low across portions of the southern Edwards Plateau and Rio Grande Plains with values less than 300.
- Keetch Byram Drought Index values are moderate across the Coastal Plains, I-35 corridor, and Hill Country with values between 400 and 600.

The Texas Forest Service uses the Keetch-Byram Drought Index (KBDI) as a system for relating current and recent weather conditions to potential or expected fire behavior. It is a numerical index calculated daily for each county. Each number is an estimate of the amount of rain, in hundredths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil and 800 a completely dry soil.

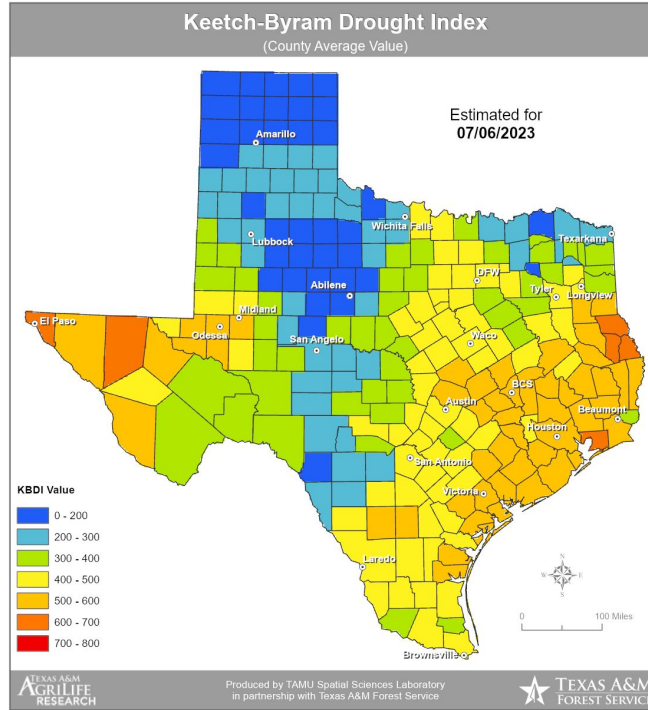


Image Caption: [Keetch-Byram Drought Index \(KBDI\)](#) by county for TX, estimated for July 6, 2023

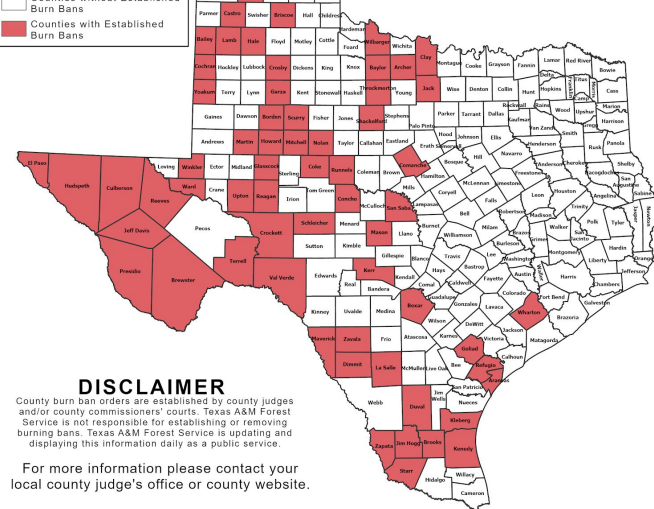
OUTDOOR BURN BANS

July 06, 2023



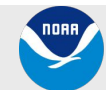
□ Counties without Established Burn Bans
 ■ Counties with Established Burn Bans

Email updates to:
burnban@fs.tamu.edu



RED FLAG WARNINGS: www.weather.gov
 Additional map formats available at <https://tfsweb.tamu.edu/Burnbans/>

Burn bans remain in effect for 6 of our 33 counties as of July 6, 2023. Latest County Burn Ban map available [here](#).





Monthly Outlooks

Monthly Temperature and Precipitation Outlook

Main Takeaways

- There is a strong signal for above normal temperatures across the area for the month of July.
- There are equal chances for at, below, or near normal precipitation across the area for the month of July.

Possible Impact

With above normal temperatures expected for the month, drought conditions would worsen with near or below normal precipitation for the month.

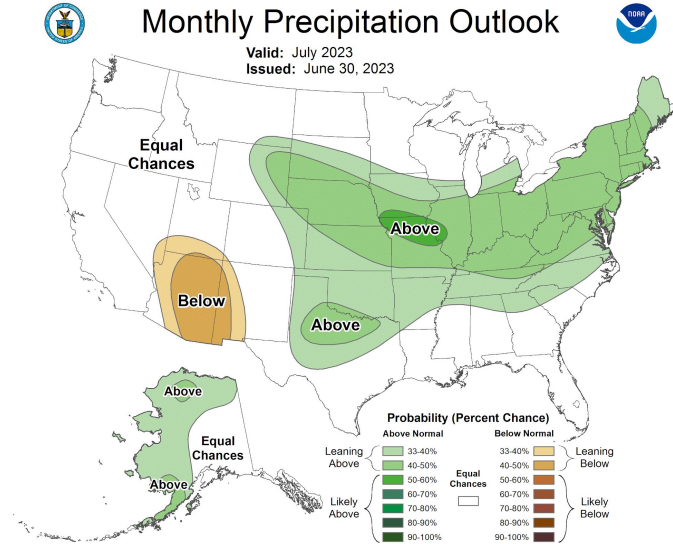
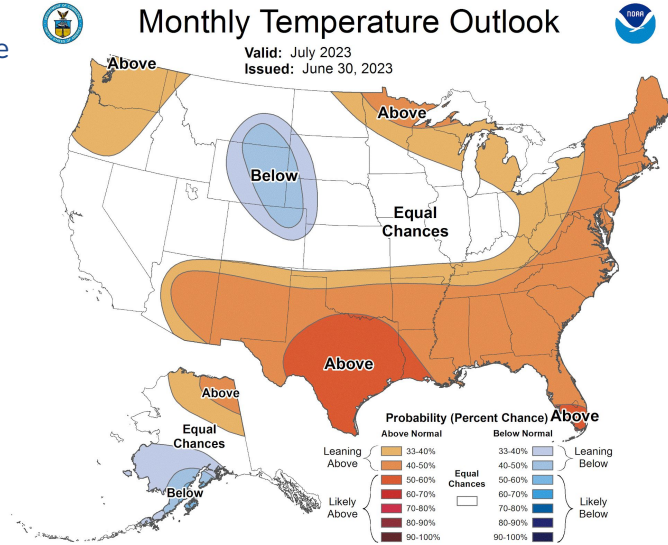


Image Captions:

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

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

Valid July 2023.





Seasonal Outlook

Seasonal Temperature and Precipitation Outlook

Main Takeaways

- Above normal temperatures are likely on average from July through September.
- Equal chances for above, near, or below normal precipitation in July through September.

Possible Impact

Drought conditions could worsen through the summer months given the above normal temperatures.

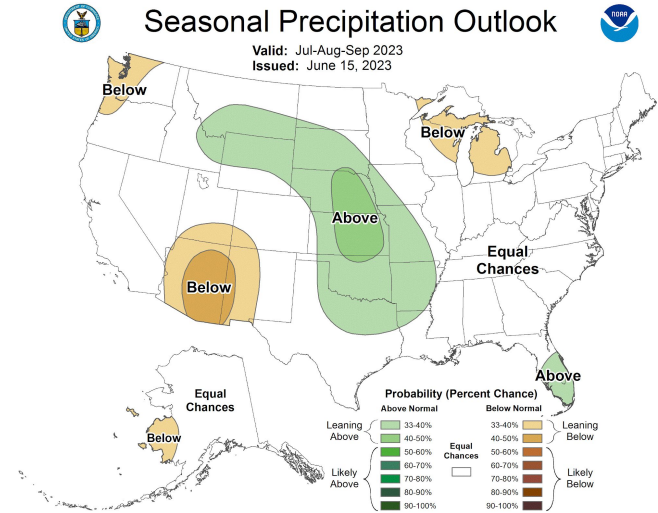
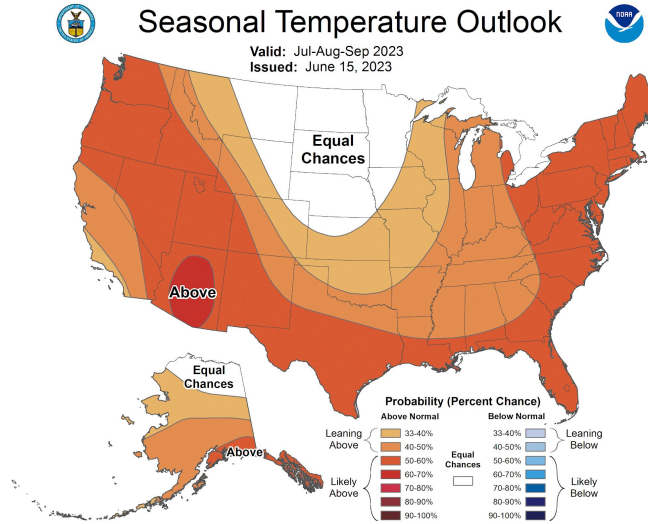


Image Captions:

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

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

Valid July through September 2023





Local Drought Outlook

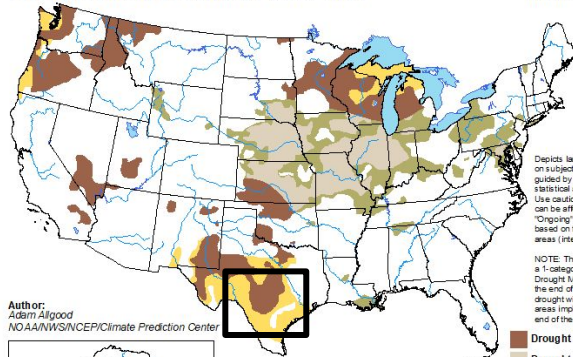
Monthly and Seasonal Outlooks

Main Takeaways

- Drought outlooks show expectation of worsening drought conditions through the remainder of the Summer months.

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

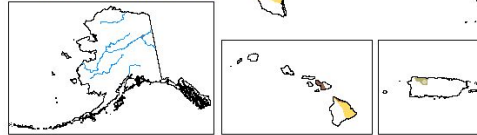
Valid for July 2023
Released June 30, 2023



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 (interfuses 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:
Adem Allgood
NOAA/NWS/NCEP/Climate Prediction Center

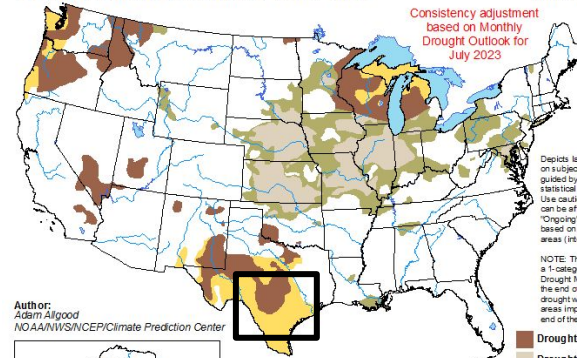


- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely

<http://go.usa.gov/3eZGd>

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

Valid for July 1 - September 30, 2023
Released June 30, 2023



Consistency adjustment based on Monthly Drought Outlook for July 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 (interfuses 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:
Adem Allgood
NOAA/NWS/NCEP/Climate Prediction Center



- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely

<http://go.usa.gov/3eZ73>

Image Captions:

Left - [Climate Prediction Center Monthly Drought Outlook](#) released June 30 and valid for July 2023

Right - [Climate Prediction Center Seasonal Drought Outlook](#) Released June 30 and valid through September 2023

