

Drought Information Statement for Deep South Texas

Valid October 15, 2023

Issued By: NWS Brownsville/Rio Grande Valley, TX Contact Information: sr-bro.webmaster@noaa.gov

- This product will be updated October 27, 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/bro/DroughtInformationStatement for previous statements.



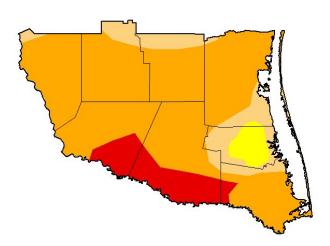




Drought Intensity and Extent

- Extreme Drought (D3) conditions now only cover 11% of Deep South Texas, generally across the upper to mid Rio Grande Valley.
- Severe Drought (D2) conditions now cover over 72% of Deep South Texas, including most of the ranchlands and most of the remainder of the RGV.
- Moderate Drought (D1) conditions continue across portions of the northern ranchlands, Willacy, southern Kenedy, and northern Cameron counties.

U.S. Drought Monitor Brownsville/Rio Grande Valley, TX WFO



October 10, 2023

(Released Thursday, Oct. 12, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2		D4
Current	0.00	3.48	13.25	72.05	11.22	0.00
Last Week 10-03-2023	0.00	0.00	8.96	52.33	38.70	0.00
3 Month's Ago 07-11-2023	44.39	31.50	24.11	0.00	0.00	0.00
Start of Calendar Year 01-03-2023	42.76	14.71	42.53	0.00	0.00	0.00
Start of Water Year 09-26-2023	0.00	0.00	8.96	52.33	38.70	0.00
One Year Ago 10-11-2022	47.72	52.28	0.00	0.00	0.00	0.00

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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droughtmonitor.unl.edu



U.S. Drought Monitor for Deep South Texas valid on October 10, 2023





Recent Change in Drought Intensity

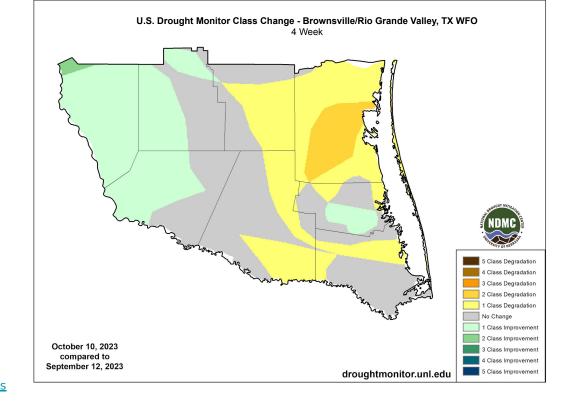
Latest U.S. Drought Monitor Class Change

Four Week Drought Monitor Class Change

- Drought worsened across eastern portions of Deep South Texas, including a 2 class degradation across central Kenedy County and 1 class degradation across the mid Rio Grande Valley.
- There has been no change in drought condition across portions of the ranchlands and both the upper and lower Rio Grande Valley.
- Drought improved by 2 classes across northern Zapata, and by 1 class above the remainder of the brush country and portions of Willacy County.

Image Caption:

<u>U.S. Drought Monitor 4 Week Change Map for Deep South Texas</u> Valid on October 10, 2023





Daily Climate Summary: BRO | HRL | MFE

- The first frontal boundaries of the year aided by robust tropical moisture have brought beneficial rainfall to most of Deep South Texas.
- Most of the Rio Grande Valley has received less than 75% of normal rainfall over the past 30 days.
- Over the <u>past 90 days</u>, most of Deep South Texas has received less than 75% of normal rainfall, while most of the RGV has received 50% of normal rainfall or less.

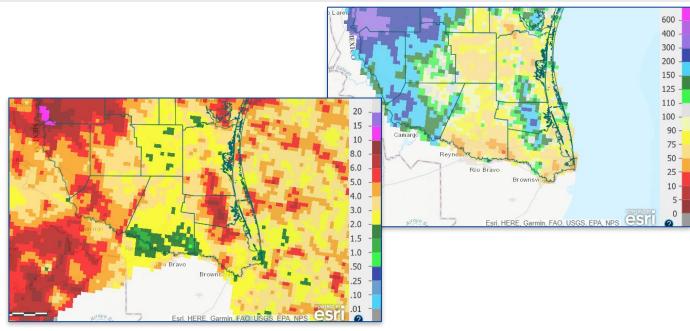


Image Captions:

Left: Deep South Texas Precipitation (Last 30 Days)

Right: Deep South Texas Percent of Normal Precipitation (Last 30 Days)

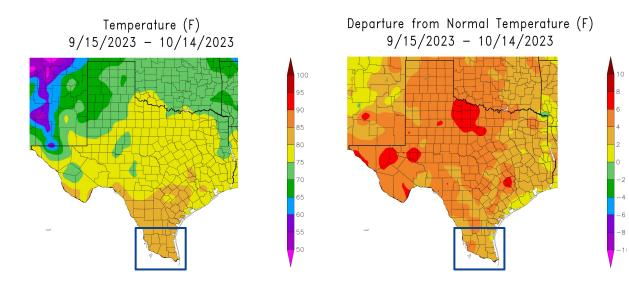
Data Courtesy Advanced Hydrologic Prediction Service (AHPS)

Valid on October 15, 2023



Daily Climate Summary: BRO | HRL | MFE

- Average Maximum Temperatures over the past 30 days across Deep South Texas have remained above normal, ranging between 90-100 degrees.
- Average Minimum Temperatures over the past 30 days across
 Deep South Texas have remained slightly above normal, ranging between 70-75 degrees.
- Slightly below normal highs and lows early this week warm toward normal by mid-week, with near normal lows into next weekend and above normal highs in the low 90s from Thursday through Sunday, October 22nd.



I 10/15/2023 at HPRCC using provisional data.

NOAA Regional Climat 10/15/2023 at HPRCC using provisional data.

NOAA Regional Climat

Image Captions:

Left: Average Temperatures (Last 30 Days)
Right: Departure from Normal (Last 30 Days)
Data Courtesy High Plains Regional Climate Center

Valid on October 14, 2023

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

National Weather Service Brownsville/Rio Grande Valley, TX



View or Submit: Condition Monitoring Observer Reports (CMOR) | Drought Impacts Reporter

Hydrologic Impacts

 Streamflows remain much below normal across most basins in Deep South Texas, and water levels at Falcon Lake Reservoir are still near historical lows for the second year in a row.

Agricultural Impacts

- Please see the latest <u>Crop and Weather Report</u> from Texas A&M AgriLife.
- Soil moistures have diminished to well below normal, generally less than the 10th percentile. Crop moistures into early October have also diminished, now severely dry across the Rio Grande Valley.

Fire Hazard Impacts

- Wildfire activity has continued to diminish into October and near normal wildland fire activity is expected through the month of November.
- Burn bans remain in effect for all of Deep South Texas.

Drought Mitigation Actions

- Please refer to your municipality and/or water provider for mitigation information.
- TCEQ Known Municipality Restrictions
- Selected Municipality Restrictions: as of October 15, 2023

Hidalgo County

Agua Sud:

McAllen Public Utility:

Sharyland WSC:

City of Hidalgo:

City of Pharr:

City of Weslaco:

Stage 2

Stage 2

Stage 2

Stage 2

Cameron County

Laguna Madre: Stage 3
Brownsville PUB: Stage 2





Hydrologic Conditions and Impacts

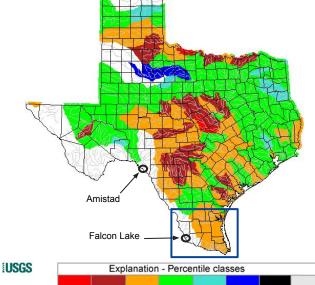
Current Amistad Reservoir Data | Current Falcon Lake Reservoir Data

- Streamflows over the past 7 days have diminished to much below normal as waterways have not been replenished from rainfall.
- Much of the streamflow across Deep South Texas is between the 10th and 24th percentile for this time of year (orange shading on the map).
- Texas water share values at Falcon Lake have remained near historical lows for the second year in a row.

Reservoir	Pool Elevation* (ft)	Current Elevation* (ft)	Percent Full*	
Amistad	1117.00	1065.11	31.5%	
Falcon Lake	301.10	257.71	8.8%	

Percent Full*	1 Month Ago	3 Months Ago	1 Year Ago	
Amistad	34.5%	37.7%	44.9%	
Falcon Lake	9.5%	14.9%	15.3%	

^{* =} Current Texas Water Share



Saturday, October 14, 2023

	Expl	anation	- Perce	ntile cla	asses		
Low	<10	10-24	25-75	76-90	>90	High	
LOW	Much below normal	Below normal	Normal	Above normal	Much above normal	nign	No Data

Image Captions:

Left: TWDB Reservoir conditions as of October 15, 2023

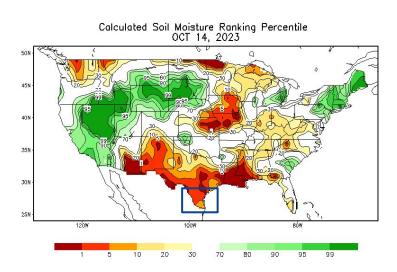
Right: <u>USGS 7 Day Streamflows for Texas</u> valid October 14, 2023





Latest Crop and Weather Report from Texas A&M AgriLife | Climate Prediction Center (CPC) Drought Page

- Soil moistures have diminished across all of Deep South Texas, with much of the area showing well below normal soil moisture.
- Crop moisture indices diminished over the first week of October, returning to severely dry values across the Rio Grande Valley.



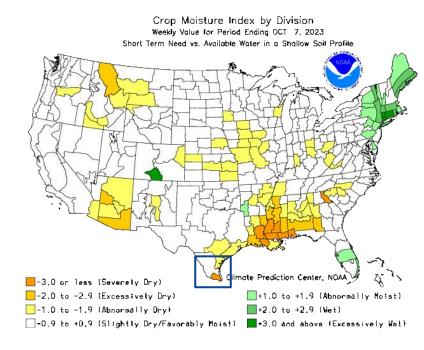


Image Captions:

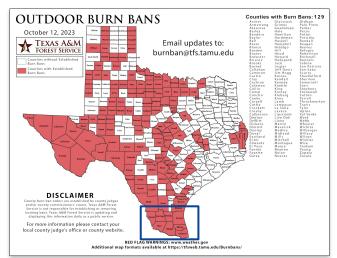
Left: <u>CPC Calculated Soil Moisture Ranking Percentile</u> valid October 14, 2023 Right: <u>CPC Weekly Crop Moisture Index by Division</u> valid October 7, 2023





National Interagency Coordination Center (NICC) Wildfire Potential Outlooks

- Keetch-Byram Drought Index values have improved across most of Deep South Texas, with values above 600 remaining across the mid to upper Rio Grande Valley.
- Near normal wildland fire potential is expected through the remainder of October, and outlooks suggest normal wildland fire potential is expected through January 2024.
- Burn bans are in effect for all of Deep South Texas.



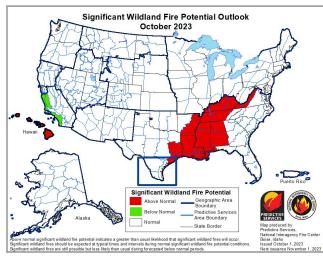


Image Captions:

Left: TAMFS Texas Counties Burn Ban Map for October 12, 2023

Right: Significant Wildland Fire Potential Outlook for October, 2023





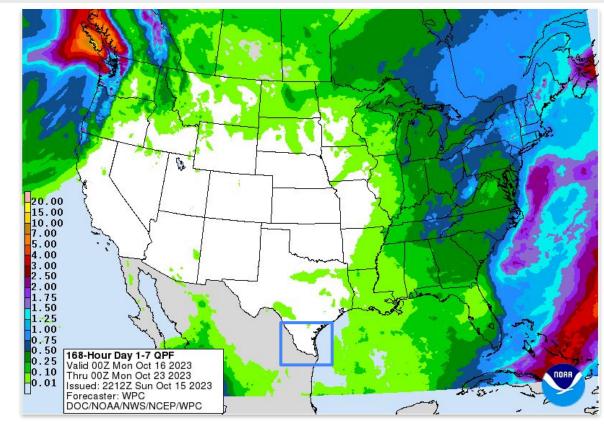
Seven Day Precipitation Forecast

Climate Prediction Center 6-10 Day Precipitation Outlook | WPC Precipitation Forecasts

- Generally no rainfall is expected through the next 7 days, ending next Sunday, October 22nd.
- Overall, rain chances through Wednesday, October 25, are near normal across Deep South Texas.

Image Caption:

Weather Prediction Center 7-Day Precipitation Forecast Sunday Eve, October 15 to Sunday Eve, October 22

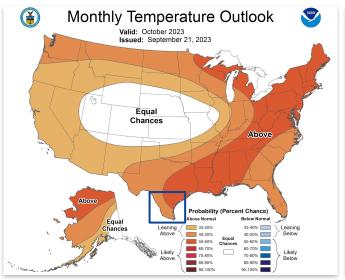




Long-Range Outlooks

CPC Seasonal Temperature Outlook | CPC Seasonal Precipitation Outlook

- On average, temperatures are leaning above normal across Deep South Texas through the month of October.
- On average, an equal chance of above or below rainfall is possible across Deep South Texas through the month of October.
- Through December, both temperatures and precipitation chances are leaning above normal across Deep South Texas.



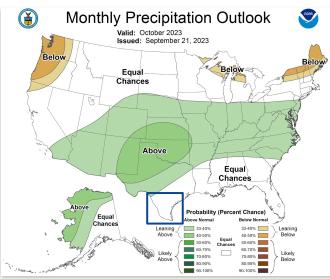


Image Captions:

Left - Climate Prediction Center Monthly Temperature Outlook

Right - Climate Prediction Center Monthly Precipitation Outlook

Valid October 2023



Climate Prediction Center | Monthly Drought Outlook | Seasonal Drought Outlook

- Drought is expected to remain but improve across most of Deep South Texas through the month of October.
- Drought is expected to remain, but improve across most of Deep South Texas through December.
- Drought removal is likely across the portions of the northern ranchlands and and inland Willacy County October through December.

Image Caption:

Climate Prediction Center Seasonal Drought Outlook Released September 30, 2023 Valid September 30 through December, 2023

