



**NATIONAL
WEATHER
SERVICE**

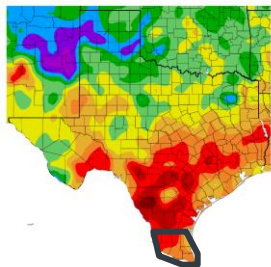
June to August (Summer 2025) Outlook: Perspective for the Lower Rio Grande Valley/Deep S. Texas Region

May 29, 2025

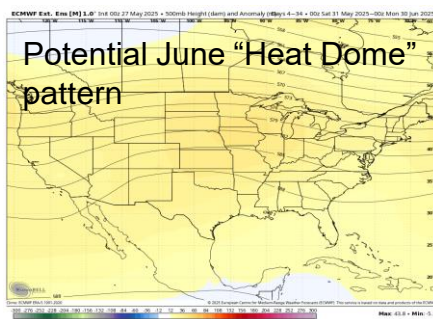
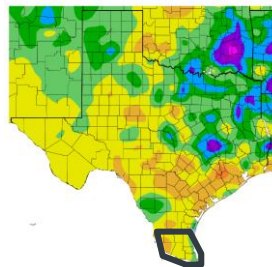
Andrei Evbuoma, Barry Goldsmith, & Rodney Chai
NWS Brownsville/Rio Grande Valley, Texas

Hotter than normal conditions are expected to continue; precipitation odds are a toss-up; heat risk increases with the potential for some occasional flooding; water supply issues remain in focus

Departure from Normal Temperature (F)
5/1/2025 – 5/26/2025



Departure from Normal Precipitation (in)
5/1/2025 – 5/26/2025



Could it look like this in
summer 2025?



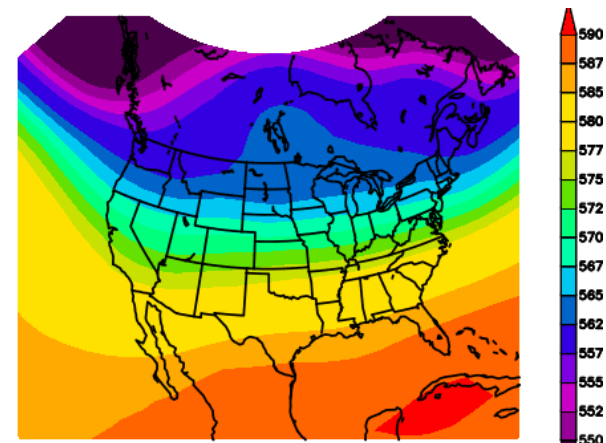
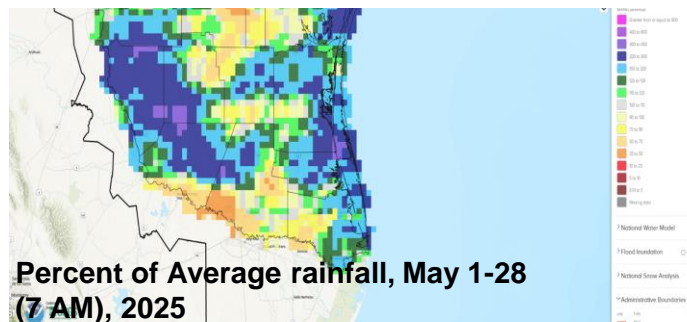
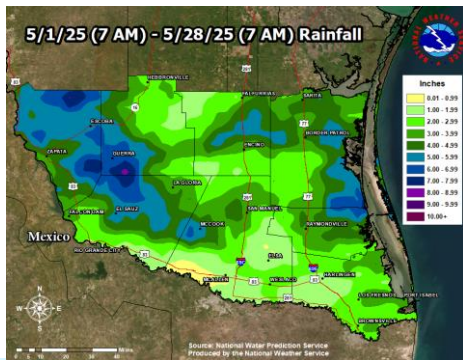
NATIONAL WEATHER SERVICE

Building a Weather-Ready Nation // 1

May 2025: The month finishes amongst the top 10 warmest on record for all three climate sites, with 2024 leading the way as the warmest on record

| Maximum 27-Day Mean Avg Temperature for BROWNSVILLE S PADRE ISLAND INTL AP, TX | | | | Maximum 27-Day Mean Avg Temperature for MCALLEN MILLER INTL AP, TX | | | | Maximum 27-Day Mean Avg Temperature for HARLINGEN RIO GRANDE VALLEY INTL AP, TX | | | |
|---|-------|-------------|--------------|---|-------|-------------|--------------|--|-------|-------------|--------------|
| Rank | Value | Ending Date | Missing Days | Rank | Value | Ending Date | Missing Days | Rank | Value | Ending Date | Missing Days |
| 1 | 87.2 | 2024-05-27 | 0 | 1 | 88.1 | 2024-05-27 | 0 | 1 | 85.5 | 2024-05-27 | 0 |
| 2 | 83.9 | 2025-05-27 | 0 | 2 | 85.6 | 2003-05-27 | 0 | 2 | 84.4 | 2003-05-27 | 0 |
| 3 | 83.6 | 2019-05-27 | 0 | 3 | 85.1 | 2009-05-27 | 0 | 3 | 83.6 | 2006-05-27 | 6 |
| 4 | 83.6 | 2022-05-27 | 0 | 4 | 85.1 | 2018-05-27 | 0 | 4 | 83.2 | 2008-05-27 | 0 |
| 5 | 83.4 | 2003-05-27 | 0 | 5 | 85.1 | 2025-05-27 | 0 | 5 | 83.2 | 2022-05-27 | 0 |
| 6 | 83.1 | 1978-05-27 | 0 | 6 | 84.9 | 2008-05-27 | 0 | 6 | 82.9 | 2000-05-27 | 0 |
| 7 | 83.0 | 2020-05-27 | 0 | 7 | 84.4 | 2017-05-27 | 0 | 7 | 82.6 | 2025-05-27 | 0 |
| 8 | 82.9 | 2018-05-27 | 0 | 8 | 84.1 | 2022-05-27 | 0 | 8 | 82.5 | 2019-05-27 | 0 |
| 9 | 82.4 | 2010-05-27 | 0 | 9 | 84.1 | 2000-05-27 | 0 | 9 | 82.4 | 2009-05-27 | 0 |
| 10 | 82.3 | 1995-05-27 | 0 | - | 84.1 | 1995-05-27 | 0 | 10 | 82.3 | 2002-05-27 | 0 |
| Period of record: 1898-12-01 to 2025-05-27 | | | | Period of record: 1961-01-14 to 2025-05-27 | | | | Period of record: 1952-07-15 to 2025-05-27 | | | |

- A persistent stretch of hotter than normal temperatures from mid to late May aided in all three climate sites finishing amongst the top 10 warmest on record. High temperatures ran from the mid 90s to 100F degrees. Low temperatures ranged from the mid 70s to the lower 80s mid to late May.
- Following a cluster of thunderstorms early on May 28th, region-wide rainfall was generally a little above the 1991-2020 30-year average. Data shown through 7 AM CDT on May 28th (below).



500mb GEOPOTENTIAL HEIGHTS (dam) 16-DAY MEAN FOR:
Mon MAY 12 2025 - Tue MAY 27 2025
NCEP OPERATIONAL DATASET

Top Image: 500mb mean geopotential heights from May 12-May 27, 2025.



Latest data from the **Rio Grande Reservoirs (Texas Share)** continue to indicate 2025 levels are at or below 30 year lows and near records. Total values have increased as of late.

Image: Texas Water Development Board

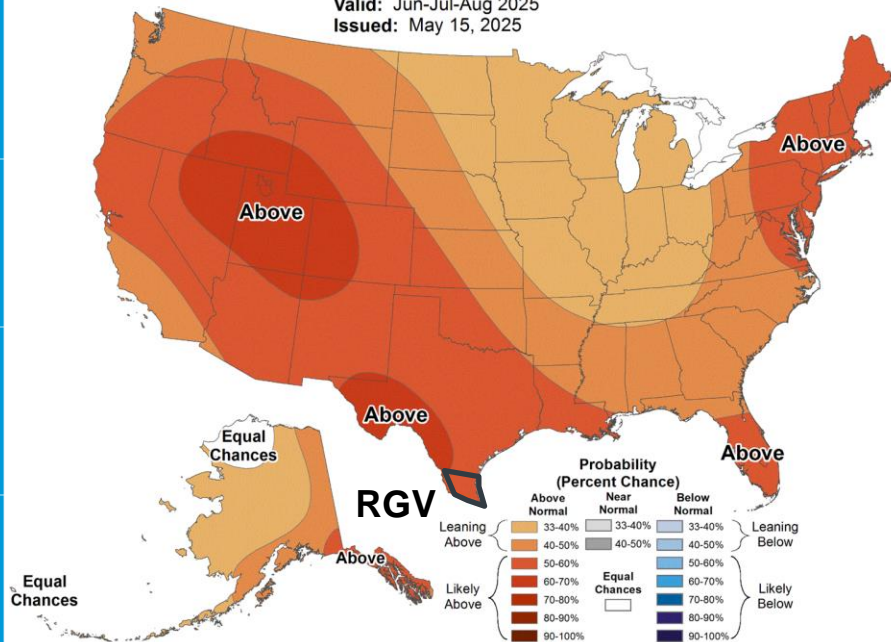


Seasonal Forecast, June – August 2025 USA



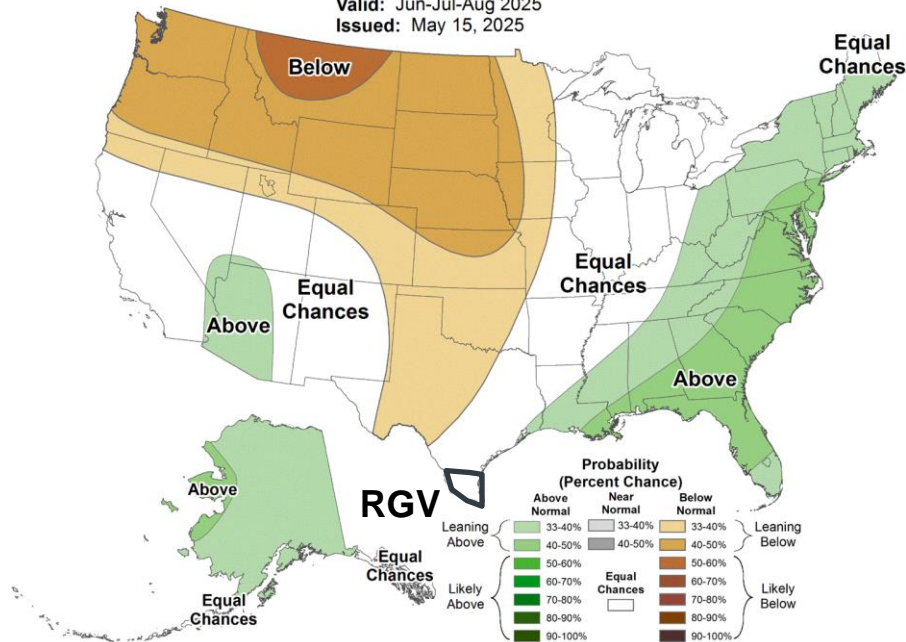
Seasonal Temperature Outlook

Valid: Jun-Jul-Aug 2025
Issued: May 15, 2025



Seasonal Precipitation Outlook

Valid: Jun-Jul-Aug 2025
Issued: May 15, 2025



Key Takeaways: June-August 2025 Outlook

- A **hotter than normal** outlook is favored during the **June-August 2025** timeframe for Deep South Texas and the Rio Grande Valley. Meanwhile, **precipitation remains a toss-up** across much of the region. While there will be many dry days through August, there could be bouts of non-tropical showers and thunderstorms that could keep precipitation surplus/deficit in balance (in some cases).
- Long-range models continue to signal the core of the heat being located from the Texas Big Bend region across the Western U.S., particularly the Desert Southwest and Rockies (at times extending eastward into the Plains) through at least early July. **Heat Risk trends will continue to increase across the Valley and Deep South Texas** due to climatology, but the magnitude of the heat may not be as intense as [2023](#). We'll continue to monitor trends through the summer.
- Occasional rains in April and May have helped to keep drought conditions in check, especially for the Lower Valley. Overall, **drought/dryness and wildfire** concerns remained in control at the end of May. However, hot conditions and high evaporation rates may bring some issues back later in June and July, if rains fail to materialize.
- Falcon Int'l Reservoir remained **near historic lows at the end of May**. **Confidence is near-certain (~100%) on total storage remaining at or near record lows through August**. Only a tropical cyclone's remnants can provide necessary relief.
- Confidence is **medium-high (60-80%)** that temperatures will run normal to **hotter than normal** from June through August. Confidence is **low-medium (30-50%)** on a **drier than normal outcome** for the period. Confidence is **medium (40-50%)** that **drought/dryness** will redevelop over the Rio Grande Valley, and worsen over the Brush Country. by July.
- **Showers and thunderstorms with origins from the tropics could produce heavy rainfall and localized flooding** and should be taken into consideration through the summer season.

The “Why” of the Forecast: ENSO Neutral, soil moisture, long-term trends, and other key climate teleconnections to play a role

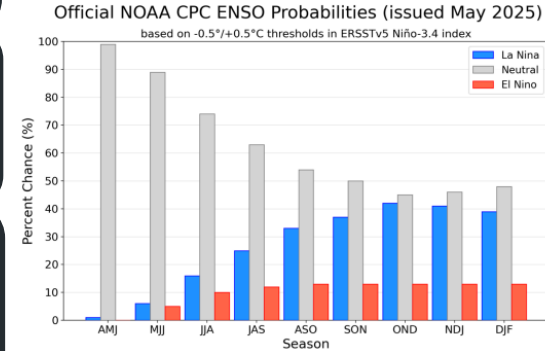
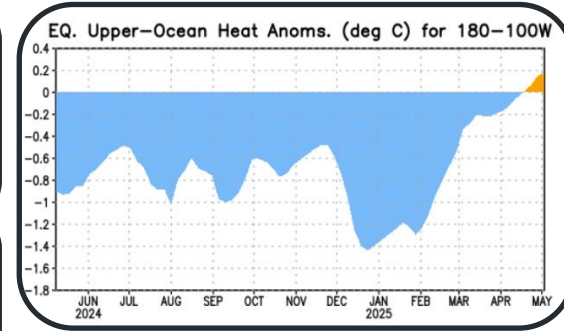
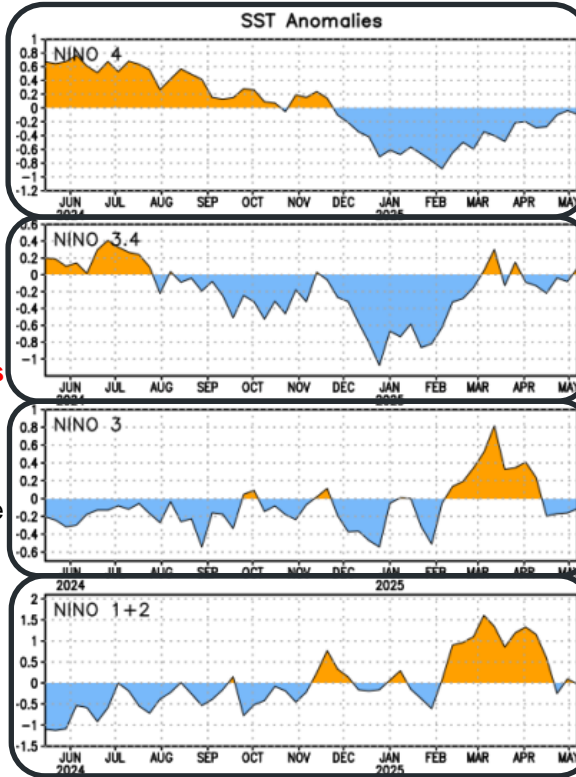
With ENSO Neutral conditions in place, **ENSO will have little influences on our weather and climate pattern going forward**. That said, analogs and long term trends suggest that **hotter than normal temperatures** are favored to continue through July and potentially longer, when transitioning from a La Nina to ENSO Neutral. **As for precipitation odds, it's a toss-up** across much of Deep South Texas.

Given that the ENSO in the tropical Pacific will play less of a role in our weather pattern, the **placement of the jet stream and heat ridge, tropical moisture influx, soil moisture, amongst other weather/climate variables** will serve as **vital roles** in various weather events, such as increased **heat risks** and a few instances of **heavy rainfall/flooding** through mid Summer.

Note: An ENSO Neutral to a La Nina transition towards the end of the year could support a little more rain potential for Deep South Texas and the Rio Grande Valley, which gives credence to the precipitation outlook toss-up through the upcoming Summer Season!

*Above right: Oceanic Niño Index. Values below -0.5 (light blue) for five consecutive 3-month periods indicated La Niña. El Niño (red, +0.5) officially began in April-June 2023, reached strong levels (+1.5) by August-October 2023, strengthened further through November-January, then weakened rapidly through early summer. Neutral conditions arrived for April-June 2024.

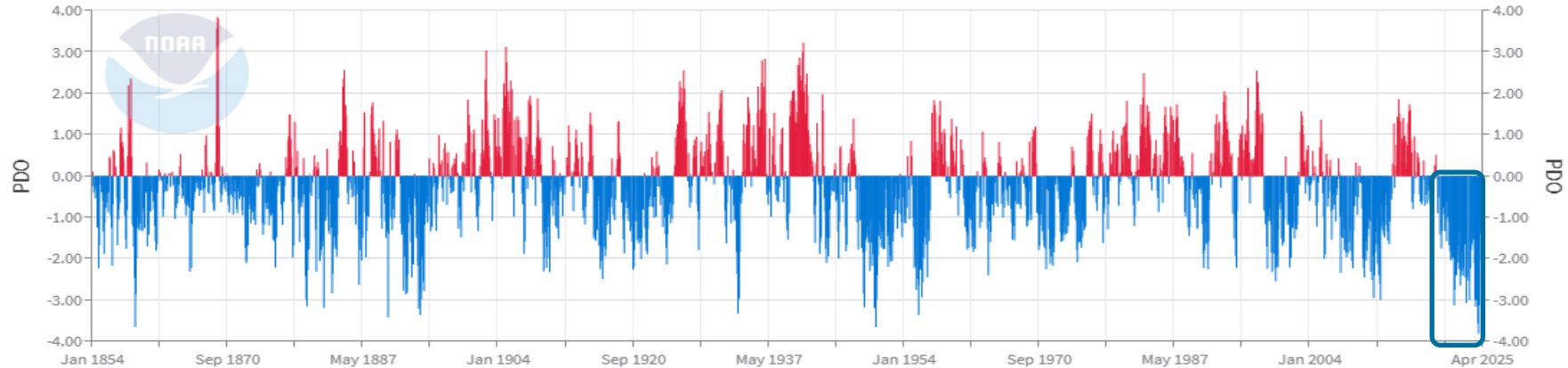
| Year | DJF | JFM | FMA | MAM | AMJ | MJJ | JJA | JAS | ASO | SON | OND | NDJ |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2022 | -1.0 | -0.9 | -1.0 | -1.1 | -1.0 | -0.9 | -0.8 | -0.9 | -1.0 | -1.0 | -0.9 | -0.8 |
| 2023 | -0.7 | -0.4 | -0.1 | 0.2 | 0.5 | 0.8 | 1.1 | 1.3 | 1.6 | 1.8 | 1.9 | 2.0 |
| 2024 | 1.8 | 1.5 | 1.1 | 0.7 | 0.4 | 0.2 | 0.0 | -0.1 | -0.2 | -0.3 | -0.4 | -0.5 |
| 2025 | -0.6 | -0.4 | -0.2 | | | | | | | | | |



The “Why” of the Forecast: Pacific Decadal Oscillation (PDO) remains in Sharp Negative Phase

Pacific Decadal Oscillation (PDO)

January 1854-April 2025

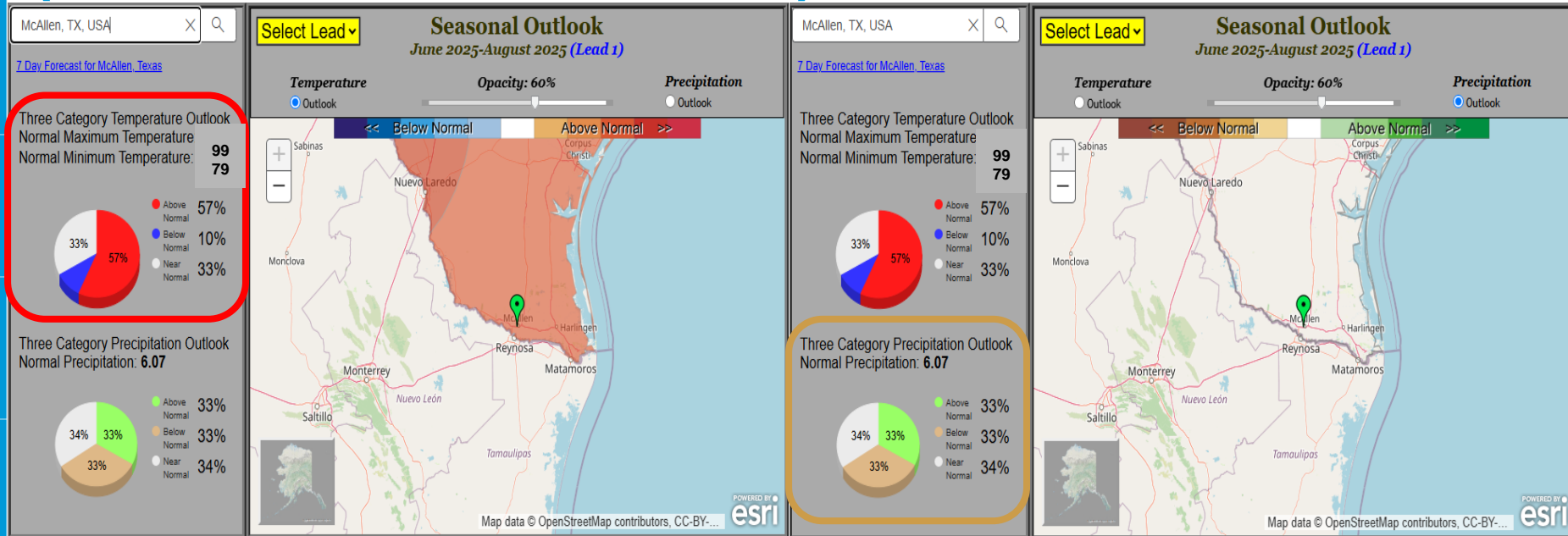


Source: <https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/index/ersst.v5.pdo.dat>

- The 2021-2025 **prolonged and strong negative PDO has persisted**, and should remain the case going into Summer 2025. This **continues to support confidence** for a **hotter than normal pattern to persist through the upcoming summer Season.**
- Despite the sharply negative PDO in place, an ENSO Neutral supports a toss-up (equal chances) in precipitation outcome. Other weather/climate variables will play a vital role in precipitation outcomes into Summer 2025. **Confidence remains high** for a sharply negative PDO to continue through 2025.



The June-August 2025 Outlook: Rio Grande Valley (McAllen as Anchor Point)

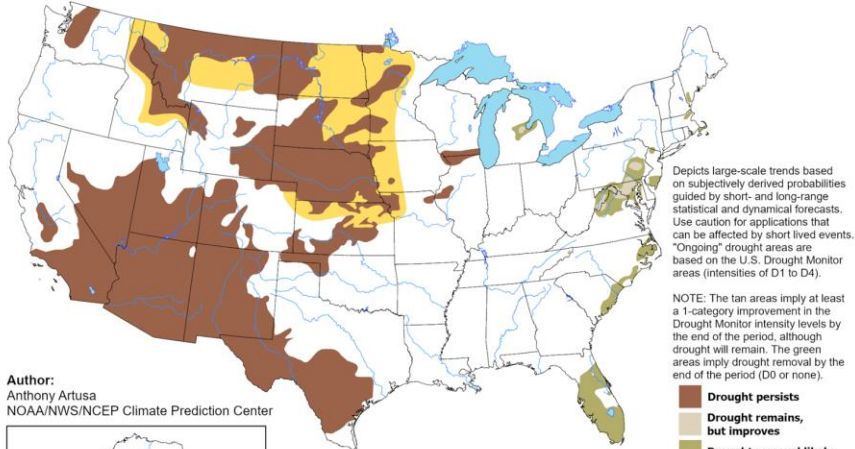


- Temperature:** **Hotter than normal temperatures** will likely persist Jun-Aug (Confidence: Medium-High). RGV averages: Afternoon – Mid to upper 90s through early June; Mid 90s to lower 100s mid-June through August; Wake-up: Mid to upper 70s through early June; Upper 70s mid-June through August.
- Precipitation:** **Toss-up (50/50% shot or equal chances of below, normal, or above) expected Jun-Aug (Confidence: Medium).** RGV averages: 6-7 inches (most in June).

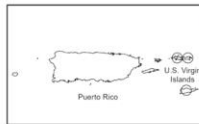
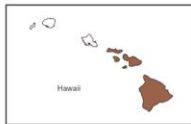
The June 2025 “Droughtlook”

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

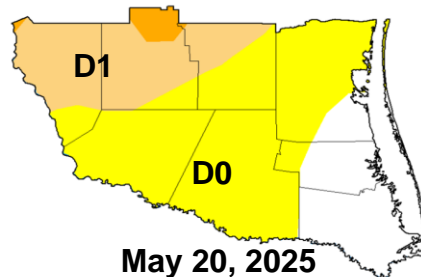
Valid for May 15 - August 31, 2025
Released May 15, 2025



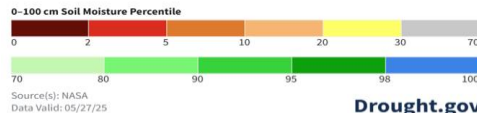
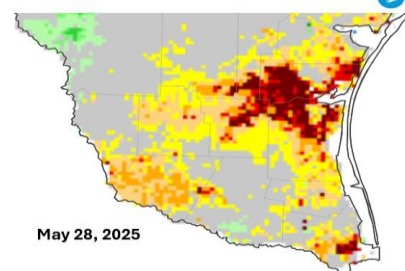
Author:
Anthony Artusa
NOAA/NWS/NCEP Climate Prediction Center



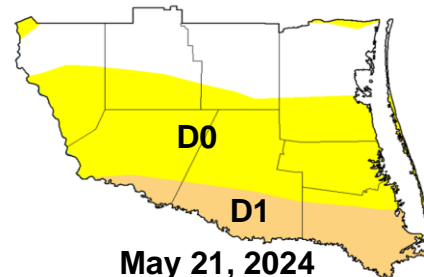
<https://go.usa.gov/3eZ73>



0-100 cm Soil Moisture Percentile



Drought.gov



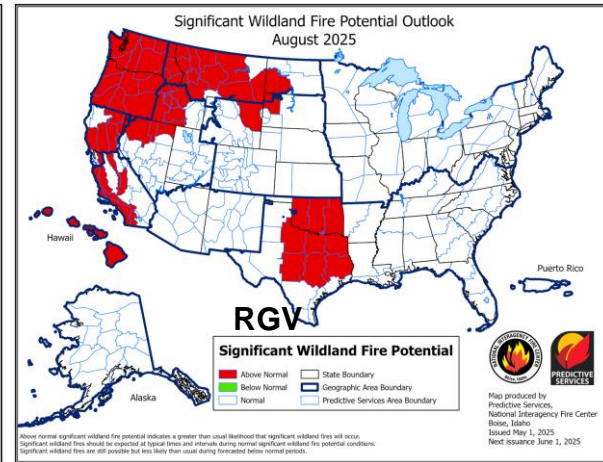
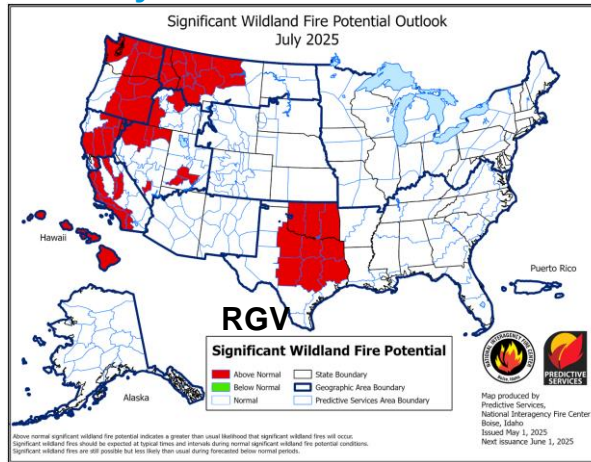
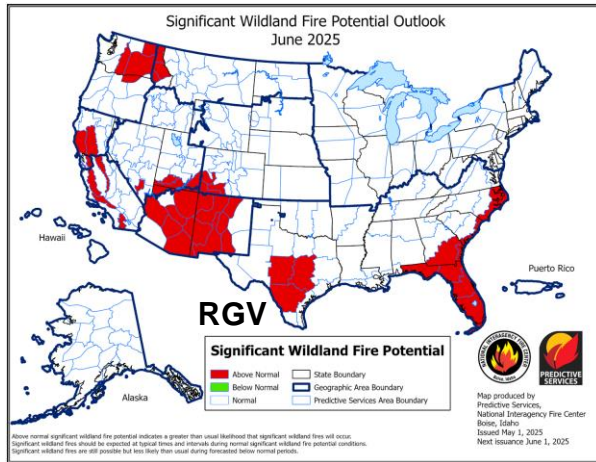
Drought Classification



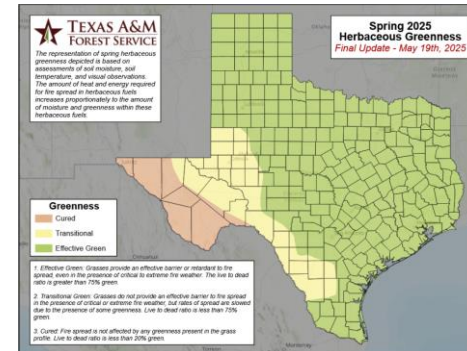
- **Year-over-Year (YoY) drought/dryness** depicts quite the contrast. In 2024, there was dryness focused along the Rio Grande Valley and Plains. This year (2025), the dryness was more focused on the Northern Ranchlands, specifically Zapata and Jim Hogg Counties.
- While the seasonal drought outlook suggests status quo, a hot and drier than average summer would worsen conditions in all areas, with Severe (D2) and Extreme (D3) a possibility, especially west of IH-69C.



Wildfire Concerns Remains Limited Into Early June...but Could Worsen Thereafter With Rain



- There remains **general green** across the region, following the **March 26-28, 2025 drought busting rain storm** and occasional rains in May. That said, wildfire concerns will remain limited in early June, but could return later if transitional conditions return.
- Moisture levels will continue to be largely be dependent on rain and wind. Days with stronger southerly flow could aid initial attack wildfire. As we move deeper into summer, trends should continue to favor higher humidity near the coast but potentially drier conditions along and west of IH-69C/US 281.
- Following the historic late March rains and occasional rains in April and May, fuel moisture will remain moderate to high through mid-June, with moisture levels thereafter dependent on rain and persistence of it.



Spring 2025 Herbaceous Greenness Map for Texas (May 19, 2025). **Note:** **effective green** is in place across Deep South Texas.



Wildfire Prevention Review

- While conditions are stable to begin summer, this may not be the case as we reach late June through mid August if rains are limited. Such a situation would worsen drought and cure fine fuels such as rangeland and brush. There were a number of wildfires in the mid to late summer of 2023 for this reason.
- Continue to focus on **farm, ranch workers, and other persons who might drive hot vehicles** on parched brush on critical/near-critical days – especially on hot, breezy days during a dry spell.



Infographics for Wildfire Prevention

Fire Weather SAFETY TIPS

- Be careful to not drag trailer chains that could cause sparks.
- Do not park on dry grass.
- Avoid outdoor burning and check recently burned piles for flare-ups.
- Clear out dead vegetation from around your home.
- Be careful when welding in dry grass.

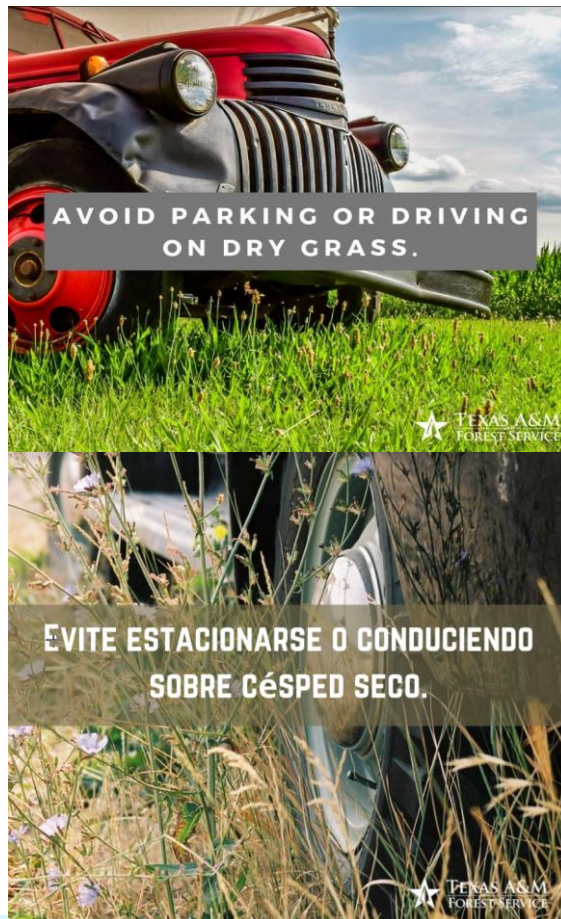


Consejos de Seguridad Contra Incendios

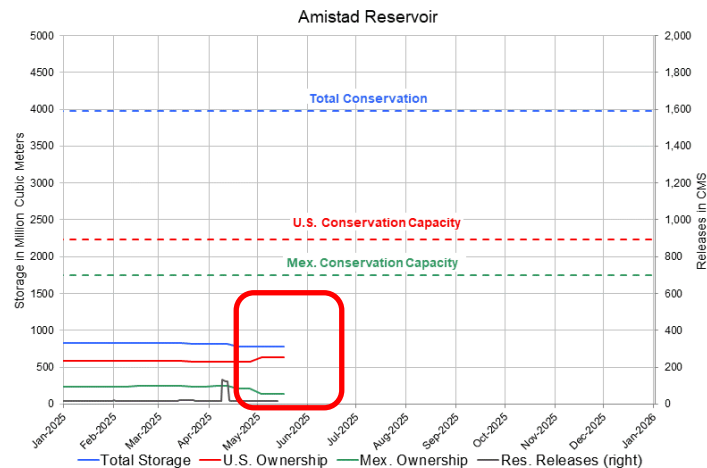
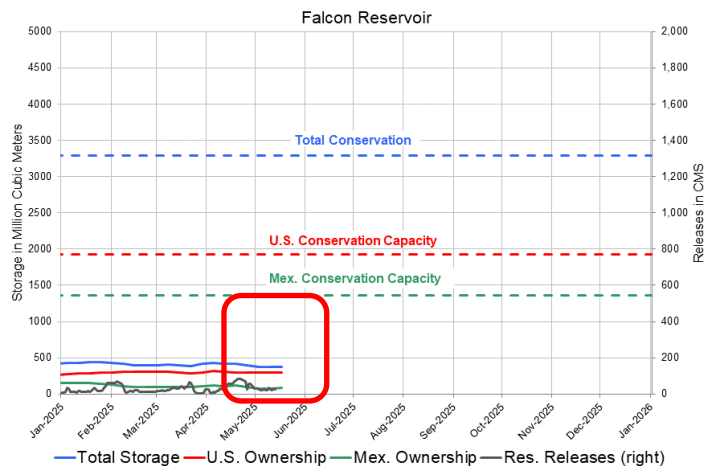
- Tenga cuidado de no arrastrar cadenas de remolque que podrían provocar chispas.
- No se estacione sobre césped seco.
- Evite las quemaduras al aire libre y revise las pilas recientemente quemadas para detectar brotes de fuego.
- Elimine la vegetación muerta alrededor de tu casa.
- Tenga cuidado soldar en hierba seca.



- ~50 in all (20 in Spanish)!
- Thanks to **Texas A&M Forest Service** for Many of These!

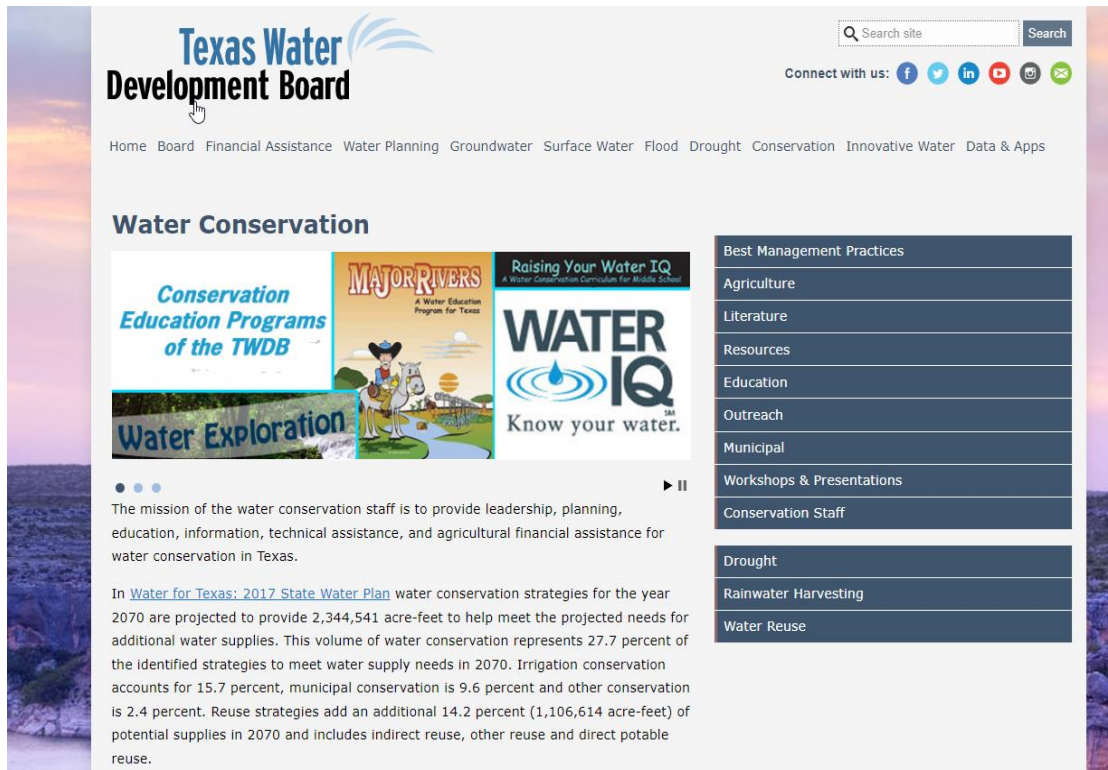


Amistad and Falcon Reservoirs remains at or near Record Lows through the first half of 2025



- Falcon had dropped slightly to **10.9 percent** on May 28 (down from **12.7% in late April**). Levels may not change much through August.
- Amistad also remained nearly steady and slightly above **all-time record lows in late May**. Levels were at **19.4% on May 28th** (nearly the same as **19.5% from late April**). Levels may not change much through August.

Water Conservation is Key Until Further Notice!



The screenshot shows the Texas Water Development Board (TWDB) website. The header includes the TWDB logo, a search bar, and social media links. The main navigation menu lists: Home, Board, Financial Assistance, Water Planning, Groundwater, Surface Water, Flood, Drought, Conservation, Innovative Water, and Data & Apps. The 'Water Conservation' section is highlighted, featuring three educational programs: 'Conservation Education Programs of the TWDB', 'MAJOR RIVERS A Water Education Program for Texas', and 'Raising Your Water IQ A Water Conservation Curriculum for Middle School'. Below these, there is a 'Water Exploration' video player. To the right, a sidebar lists various resources: Best Management Practices, Agriculture, Literature, Resources, Education, Outreach, Municipal, Workshops & Presentations, Conservation Staff, Drought, Rainwater Harvesting, and Water Reuse. The main content area includes a paragraph about the mission of the water conservation staff and a link to the 'Water for Texas: 2017 State Water Plan'.

Texas Water Development Board

Home Board Financial Assistance Water Planning Groundwater Surface Water Flood Drought Conservation Innovative Water Data & Apps

Water Conservation

Conservation Education Programs of the TWDB

MAJOR RIVERS
A Water Education Program for Texas

Raising Your Water IQ
A Water Conservation Curriculum for Middle School

WATER IQ
Know your water.

Water Exploration

The mission of the water conservation staff is to provide leadership, planning, education, information, technical assistance, and agricultural financial assistance for water conservation in Texas.

In [Water for Texas: 2017 State Water Plan](#) water conservation strategies for the year 2070 are projected to provide 2,344,541 acre-feet to help meet the projected needs for additional water supplies. This volume of water conservation represents 27.7 percent of the identified strategies to meet water supply needs in 2070. Irrigation conservation accounts for 15.7 percent, municipal conservation is 9.6 percent and other conservation is 2.4 percent. Reuse strategies add an additional 14.2 percent (1,106,614 acre-feet) of potential supplies in 2070 and includes indirect reuse, other reuse and direct potable reuse.

Best Management Practices

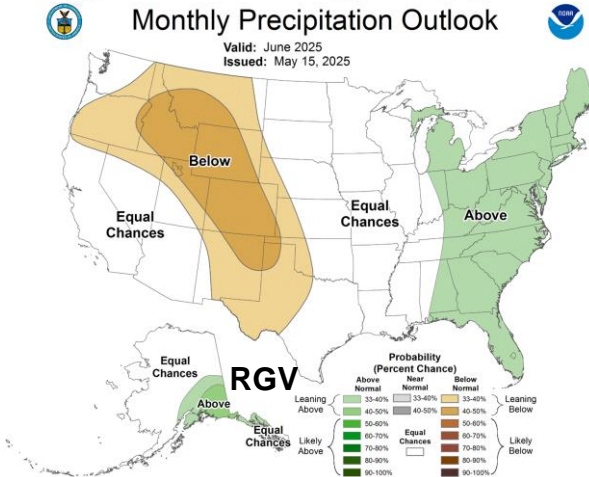
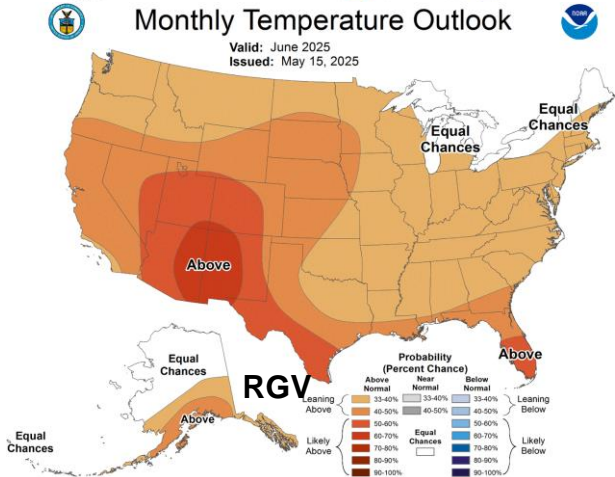
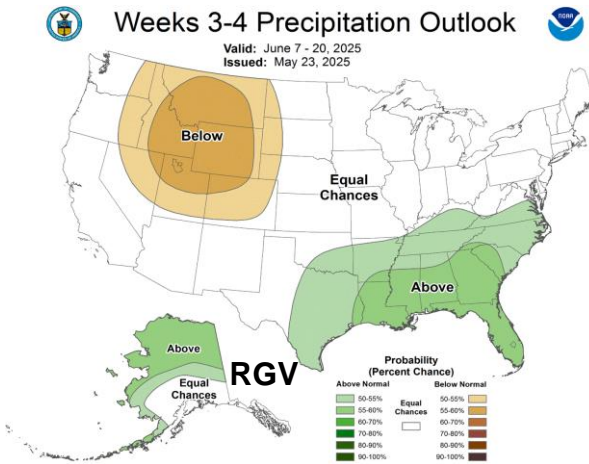
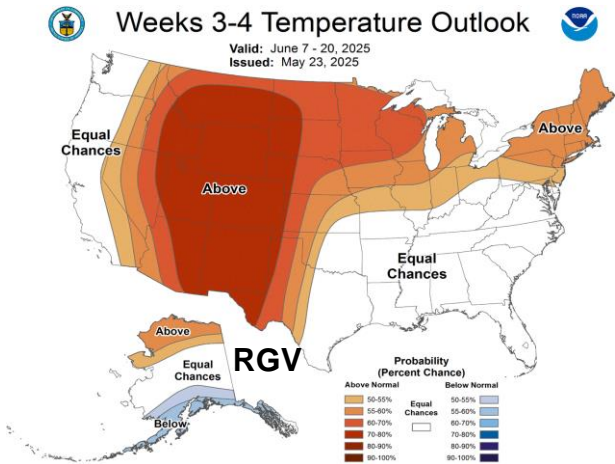
- Agriculture
- Literature
- Resources
- Education
- Outreach
- Municipal
- Workshops & Presentations
- Conservation Staff

Drought

- Rainwater Harvesting
- Water Reuse

- “Stage 2/3” Restrictions continued through spring 2025 and are likely to continue **until further notice** based on inflows from Amistad and Falcon.
- Learn more at the [Texas Water Development Board’s Conservation Page](#)

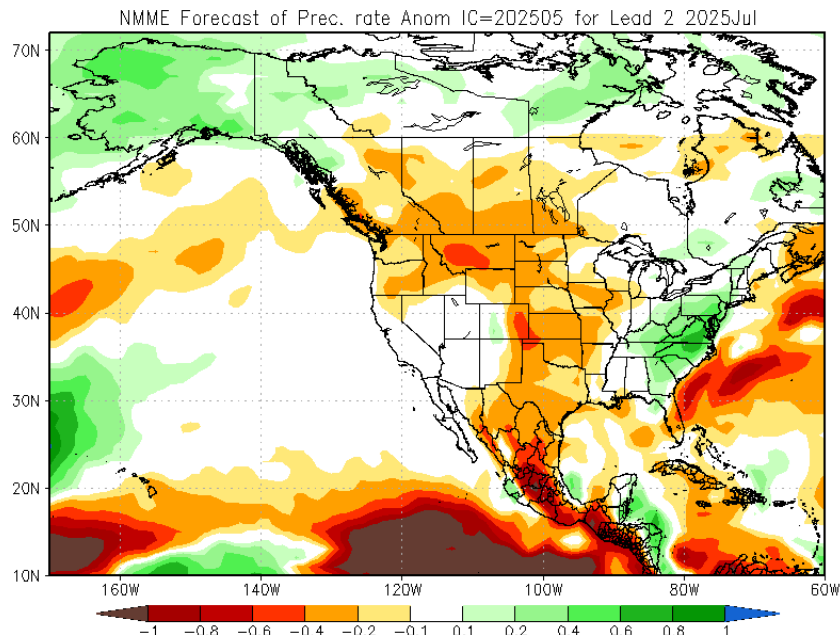
June 2025: Confidence: Medium (50-60%) on Temperature and Low-Medium (30-40%) on Precipitation Trends



- Medium to long-range models are favoring a **normal to hotter than normal** pattern through June. **Precipitation odds remain a toss-up.**
- While there may be many cases of moderate (Level 2) to major (Level 3) **Heat Risk** as we begin to move into the hottest time of the year climatologically (through the month of June), the heat is not expected to be as extreme as 2023 or 2024.
- Furthermore, at this time, we're **not anticipating a Heat Wave with widespread major and extreme Heat Risk through June.** That said, moderate to major **Heat Risk** can still pose a dangerous impact to health and we urged for everyone to take the necessary heat safety measures moving forward.
- Equal chances for above, below, or average rainfall (33.3 percent for each) is the latest forecast. **Some moisture influx and the chance for non-tropical showers and storms will remain in play** as we move into the Summer Season.
- Though precipitation odds are now a toss-up, **heavy rainfall or flooding events can still develop.** Monitor the potential for showers and storms that could produce additional heavy rainfall/flood risks!

Early Look: July 2025

Potential rainfall rate anomaly, July 2025

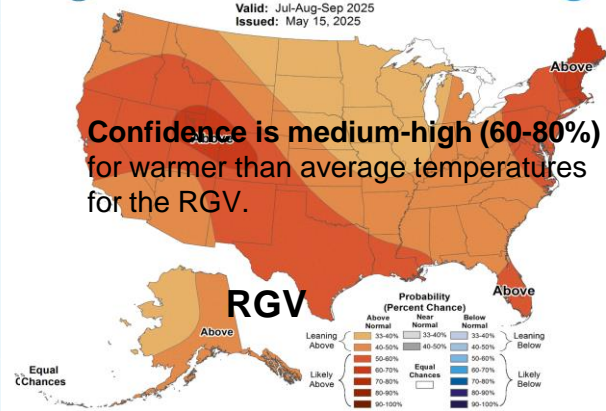


- This model's forecast for July favors a **dry pattern** (note the brown and golden brown colors over the region) taking hold.
- Despite the dry outlook from this model for July, it's important to keep in mind that all it takes is one event to create flash flooding. **Despite there being many dry days this summer, shower and thunderstorm chances will remain in play from tropically-sourced disturbances.** Some of these showers and storms could result in locally heavy rainfall and additional, but local, cases of flash flooding.
- Tropical cyclones are always a wild-card in the Gulf. The two most recent direct hurricane strikes occurred in late July.

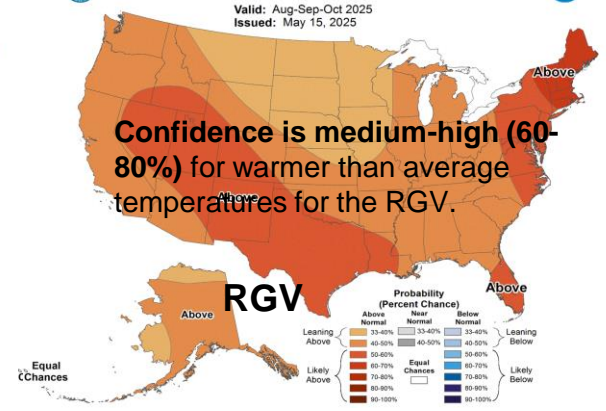
Summer 2025: Hotter than normal trends are favored; Precipitation pattern remains a toss-up



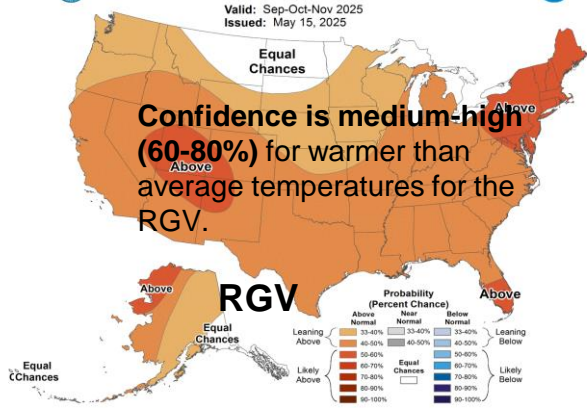
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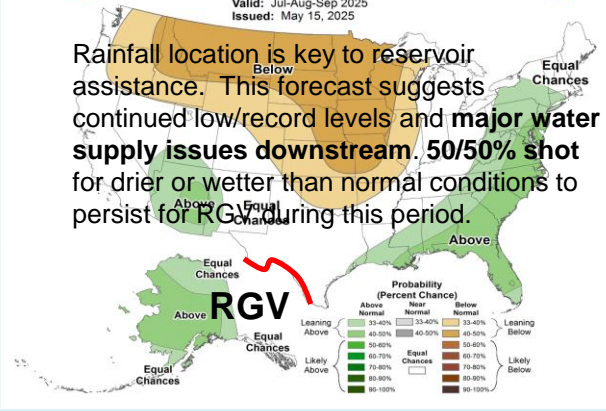
Seasonal Temperature Outlook
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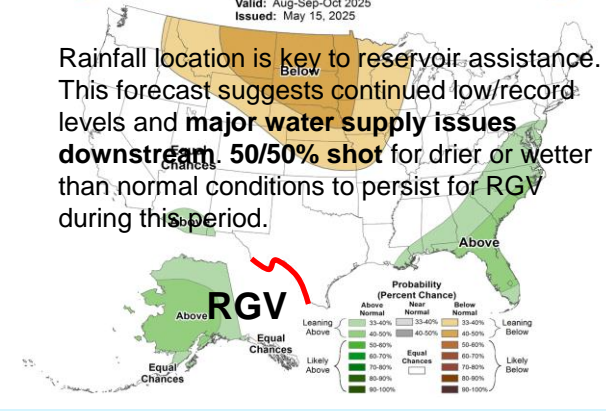
Seasonal Temperature Outlook
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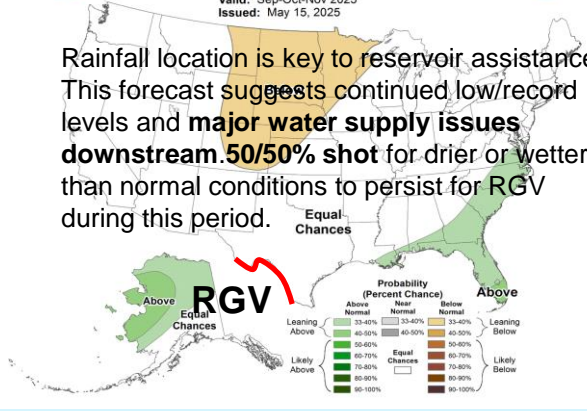
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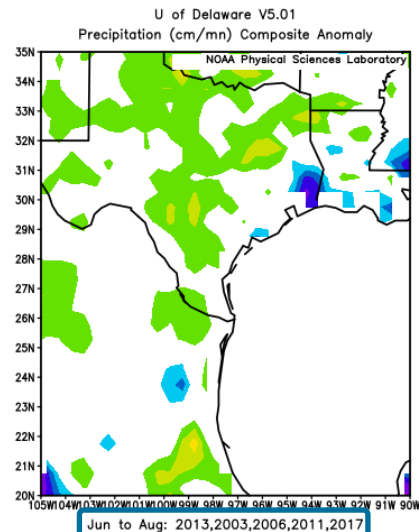
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Valid: Sep-Oct-Nov 2025
Issued: May 15, 2025

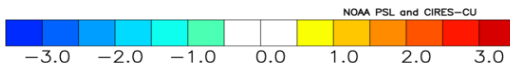
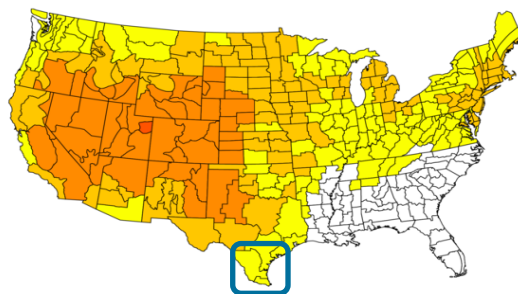


Comparing Similar La Nina to Neutral Episodes mostly within the last 30 years; June-August Periods

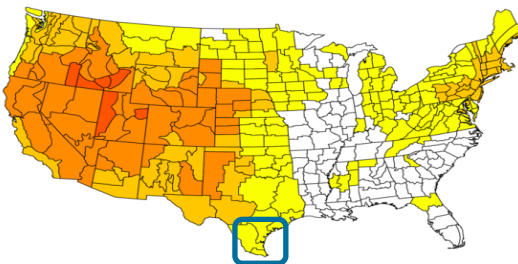


Composite departure from average rainfall for years of similar La Nina to Neutral transition episodes in the June-August window.

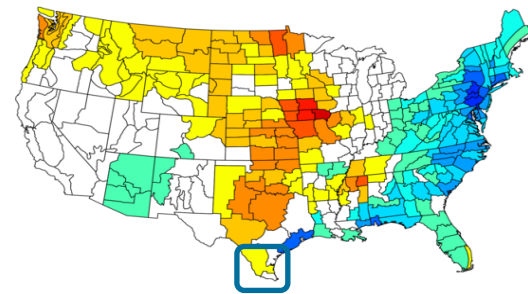
NOAA/NCEI Climate Division Composite Temperature Anomalies (F)
Jun to Aug 2002, 2024, 2022, 2018, 2012, 2013
Versus 1991–2020 Longterm Average



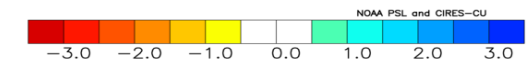
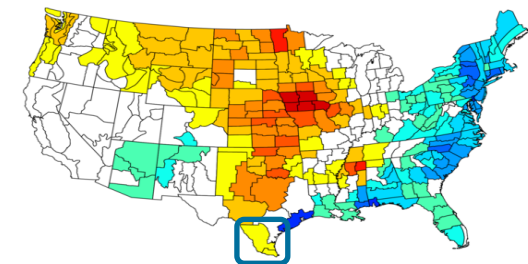
NOAA/NCEI Climate Division Composite Temperature Anomalies (F)
Jun to Aug 2002, 2024, 2022, 2013
Versus 1991–2020 Longterm Average



NOAA/NCEI Climate Division Composite Precipitation Anomalies (in)
Jun to Aug 2024, 2022, 2013, 2018, 2011, 2006, 2017, 2003
Versus 1991–2020 Longterm Average



NOAA/NCEI Climate Division Composite Precipitation Anomalies (in)
Jun to Aug 2003, 2022, 2024, 2011, 2013, 2006, 2017
Versus 1991–2020 Longterm Average



- **Top:** Composite temperature (left) and precipitation (right) anomalies for similar La Nina to Neutral transition episodes leading into June-August, since 1950.
- **Bottom Left:** Same, except the taking out of the 2018 and 2012 seasons.
- **Bottom Right:** Same, except took out 2018 season.



Bottom Lines

- **Hotter than normal** conditions are expected to persist through summer 2025 with ENSO-neutral conditions in place. **Heat risk will remain elevated (mainly moderate to major) through the summer.**
- Sufficient inflows from Mexican and International reservoirs serving the Lower Rio Grande watershed remain unlikely. The **combined share of water in Amistad and Falcon will likely to continue well below Stage 2 and 3 triggers (25% or less) until further notice.** Water conservation, smart irrigation, and rainwater harvesting are **critical actions to continue as we move into the summer.** **Only remnants of a tropical cyclone can help the reservoirs.**
- **Fire weather and drought concerns/issues** are stable to start June, but **could quickly return by late June and continue deeper into summer** if hot, breezy, and rain-free weather dominate - now with additional fuel loads from spring rains.
- **Precipitation odds remain a toss-up.** Energy waves moving from the Gulf/Caribbean could provide ample moisture for efficient rainfall, if they can reach the southern tip of Texas. A strong [“La Canícula”](#) ridge would ensure a dry-dominant pattern, while a late-season ridge centered across the northern Gulf could open the door to better rain chances.
- It's a bit too soon to speculate on summer tropical activity this far out, but an event like [2024's Alberto](#) would provide **beneficial rain in June**. There are some indicators of late summer activity favoring the eastern and central Gulf.