July to September Outlook: Perspective for the Lower Rio Grande Valley/Deep S. Texas Region

NATIONAL WEATHER SERVICE

June 26, 2025

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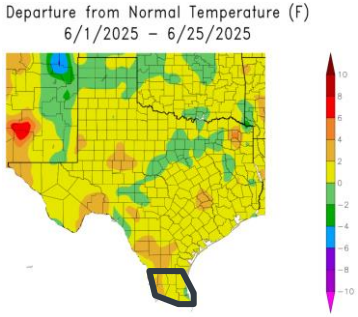
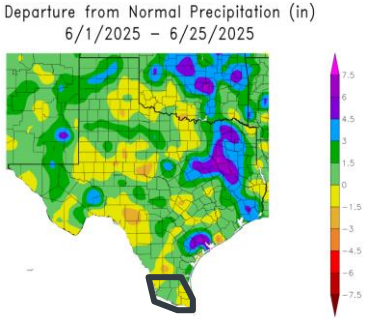
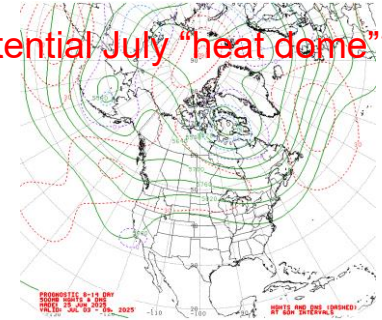
NWS Brownsville/Rio Grande Valley, Texas

Normal to hotter than normal conditions are expected to continue; precipitation odds remain a toss-up; heat risk, precipitation trends, and water supply issues remain in focus





Potential July "heat dome"?



June 2025: The northern edge of a “La Canicula” heat ridge centered over central Mexico resulted in a torrid start to June before waning, ultimately contributing to a Top 10 Hottest June for Brownsville and McAllen

Maximum 25-Day Mean Avg Temperature for BROWNSVILLE S PADRE ISLAND INTL AP, TX

Click column heading to sort ascending, click again to sort descending.

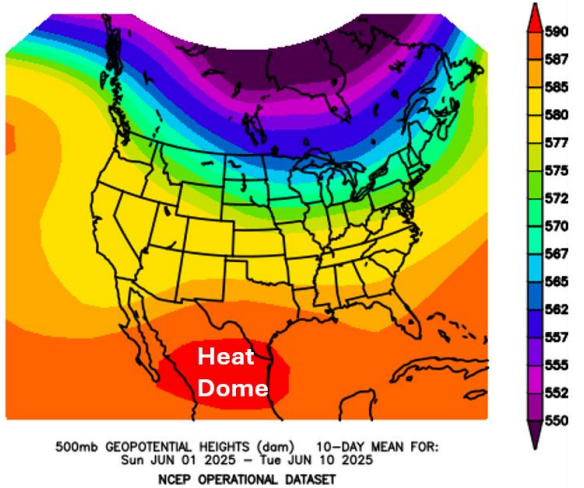
Rank	Value	Ending Date	Missing Days
1	88.5	2024-06-25	1
2	87.4	2019-06-25	0
3	87.1	1998-06-25	0
4	86.9	2018-06-25	0
5	86.9	2025-06-25	0
6	86.8	2023-06-25	0
7	86.4	1980-06-25	0
8	86.1	2022-06-25	0
9	86.0	2012-06-25	0
10	85.9	2001-06-25	0
Period of record: 1898-12-01 to 2025-06-25			

Maximum 25-Day Mean Avg Temperature for MCALLEN MILLER INTL AP, TX

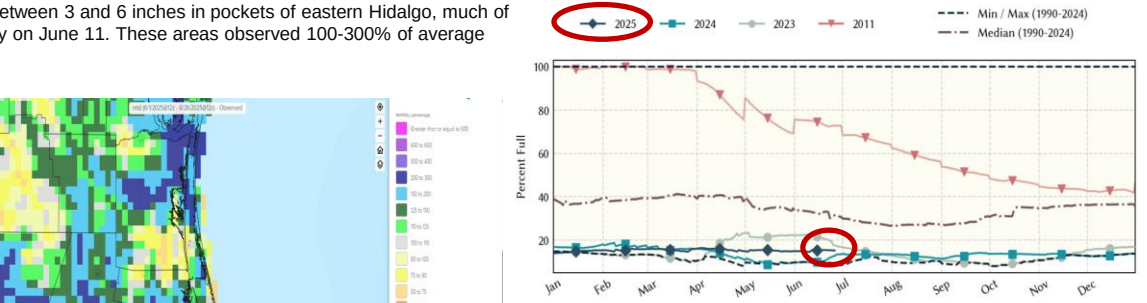
Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	90.1	1998-06-25	2
2	89.7	2017-06-25	0
3	89.0	2024-06-25	0
4	88.8	2018-06-25	3
5	88.7	2019-06-25	0
6	88.1	2025-06-25	0
7	88.1	2023-06-25	0
8	87.9	2003-06-25	0
9	87.9	2009-06-25	0
10	87.5	2008-06-25	0
Period of record: 1961-01-14 to 2025-06-25			

- A persistent stretch of hotter than normal temperatures through June 19th allowed June 2025 to likely finish among the top 10 warmest on record through the 26th for most RGV locations. High temperatures ran from the mid 90s to 100F degrees. Low temperatures ranged from the upper 70s to lower 80s through mid June, dropping a little in late June.
- Rainfall was a mixed bag in June, with a thunderstorm complex dropping between 3 and 6 inches in pockets of eastern Hidalgo, much of Kenedy, and Willacy on June 16, and similar rains in Starr and Zapata early on June 11. These areas observed 100-300% of average rainfall for the month.

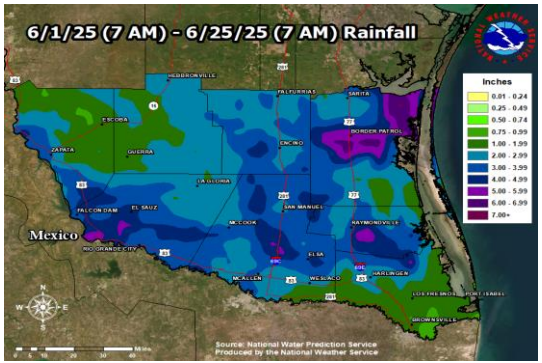


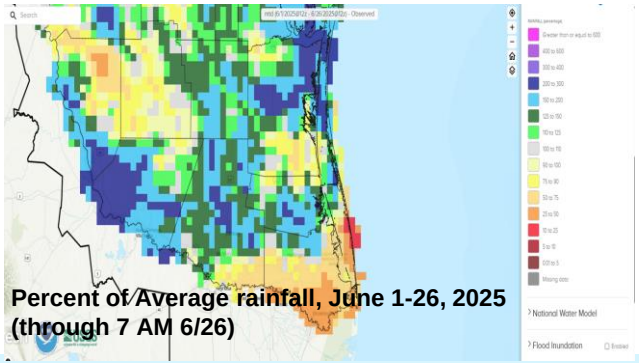
Top Image: 500mb mean geopotential heights from June 1-10, 2025. Early June heat contributed to a top 10 hottest June on record this year for Brownsville and McAllen.



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.

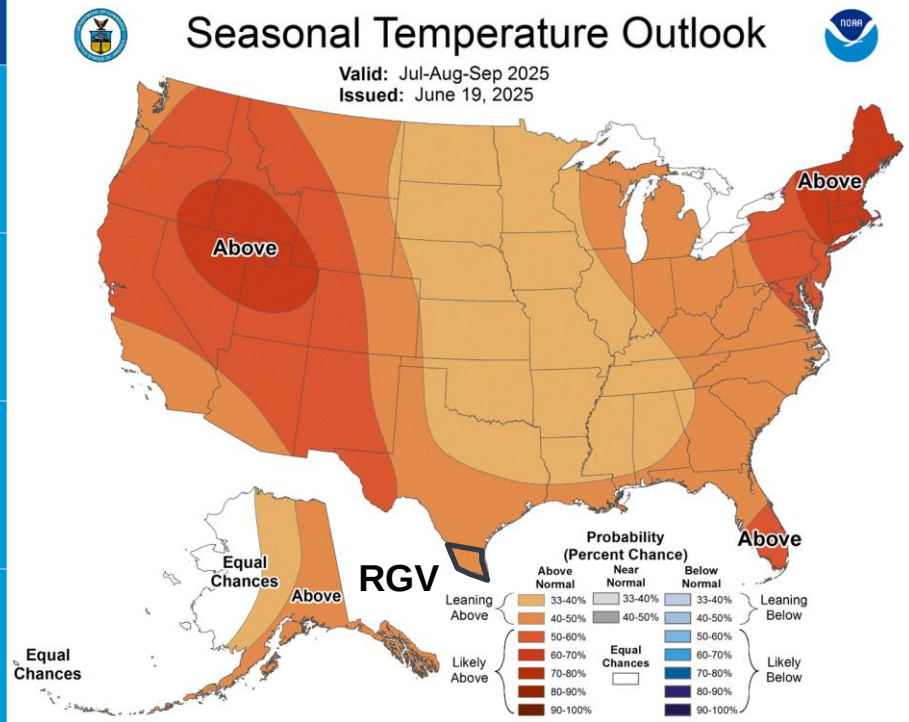
Image: Texas Water Development Board

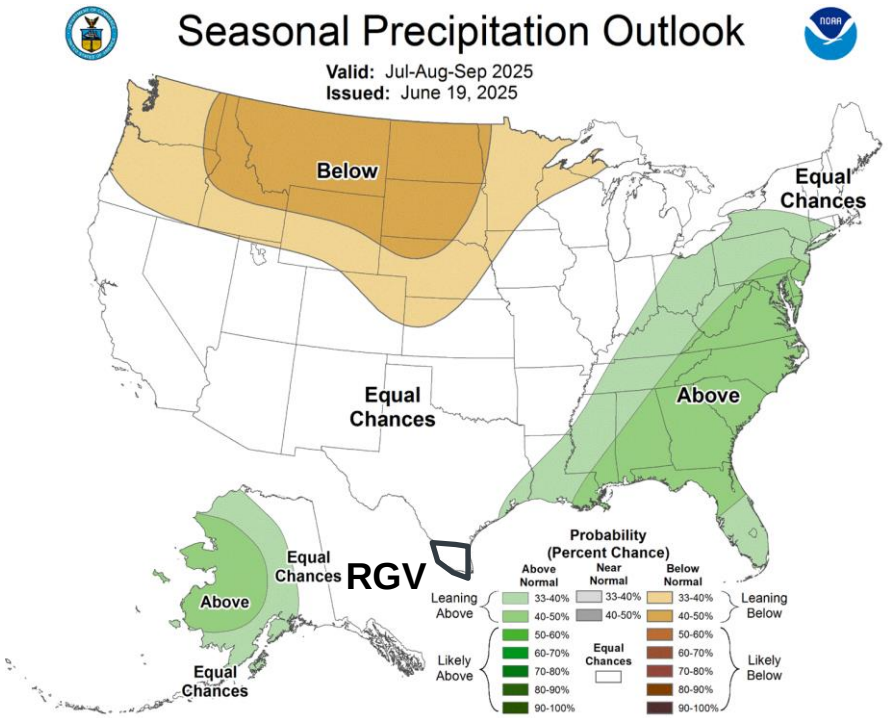




Percent of Average rainfall, June 1-26, 2025 (through 7 AM 6/26)

Seasonal Forecast, July – September 2025 USA





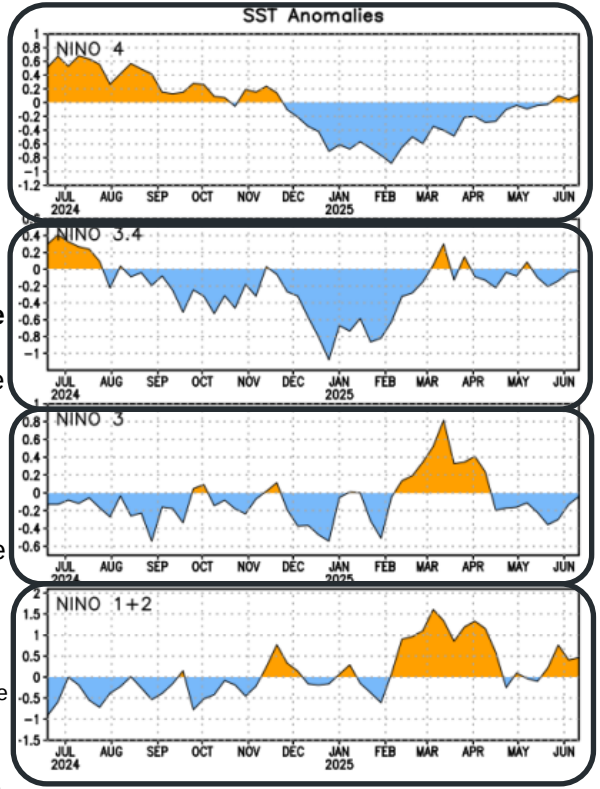
Key Takeaways: July-September 2025 Outlook

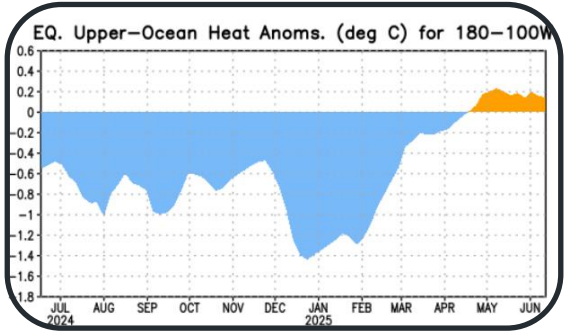
- A **hotter than normal** outlook is favored during the **July-September 2025** timeframe for the Rio Grande Valley and Deep South Texas Ranchlands. **Precipitation remains a toss-up** across much of the region. However, confidence is beginning to lean towards a drier pattern/outcome developing through August as the heat ridge is expected to establish itself over the Desert Southwest region. **Note:** September is normally our wettest month of the year!
- Long-range models continue to indicate the **core of the heat** establishing itself over the Western U.S., particularly the Desert Southwest and Rockies (at times extending eastward into the Plains including Texas) through at least early August. **Heat Risk concerns will remain on the table across the Valley and Deep South Texas** as we move into the peak climatological period. However, the magnitude of the heat may not be as intense as 2023. We'll continue to monitor trends through the summer.
- Rains through the first half of the year have helped to keep drought conditions in check, especially for the Lower Valley. As a result, **drought/dryness and wildfire** concerns have remained in control at the end of June (much of the region is not in a drought - see slide 8 for more information). However, hot conditions and high evaporation rates **may bring some issues back later in July and August**, if meaningful rains fail to materialize.
- Falcon Int'l Reservoir remained **near historic lows at the end of June**. **Confidence remains near-certain (~100%) on total storage remaining at or near record lows through September. Only rainfall production from the remains of a tropical cyclone can effectively address the deficit.**
- Confidence remains **medium-high (60-80%)** that temperatures will run **normal to hotter than normal** from July through September. 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 August**.
- **Showers and thunderstorms with origins from the tropics producing heavy rainfall and localized flooding** should still be taken into consideration through the summer season.

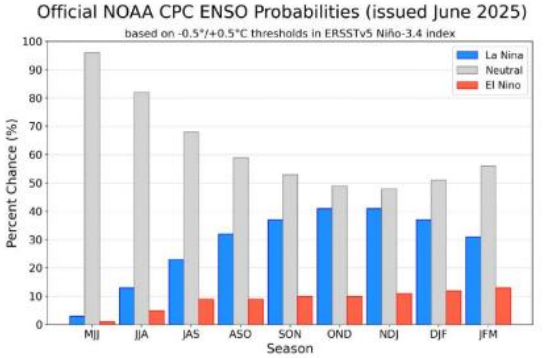
The “Why” of the Forecast: ENSO Neutral, soil moisture, long-term trends, and other key climate teleconnections to play a role

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	-0.1								

- With ENSO Neutral conditions remaining in place, **ENSO will continue to have little influence on our weather and climate pattern going forward**. That said, analogs and long term trends continue to suggest that normal to **hotter than normal temperatures** are favored to continue through September and potentially longer, when transitioning from a La Nina to ENSO Neutral. **As for precipitation odds, it remains a toss-up** across Deep South Texas.
- Given that ENSO in the tropical Pacific will play less of a role in our weather pattern, the **placement of the 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 instances of **heavy rainfall/flooding** through the remainder of Summer.
- **Note:** An ENSO Neutral trending towards a La Nina 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 Summer Season!

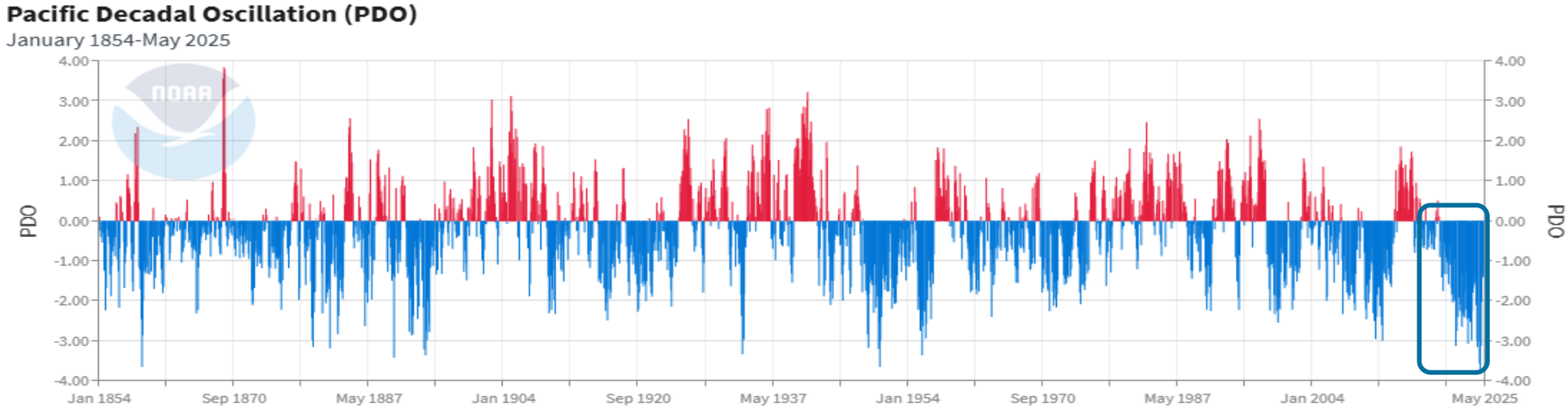






*Above right: Oceanic Niño Index. Values below -0.5 (**light blue**) for five consecutive 3-month periods indicated La Niña. El Niño (**red,** +0.5) officially began in April-June 2023, reached strong levels (**+1.5**) by August-October 2023, strengthened further through November-January, then weakened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

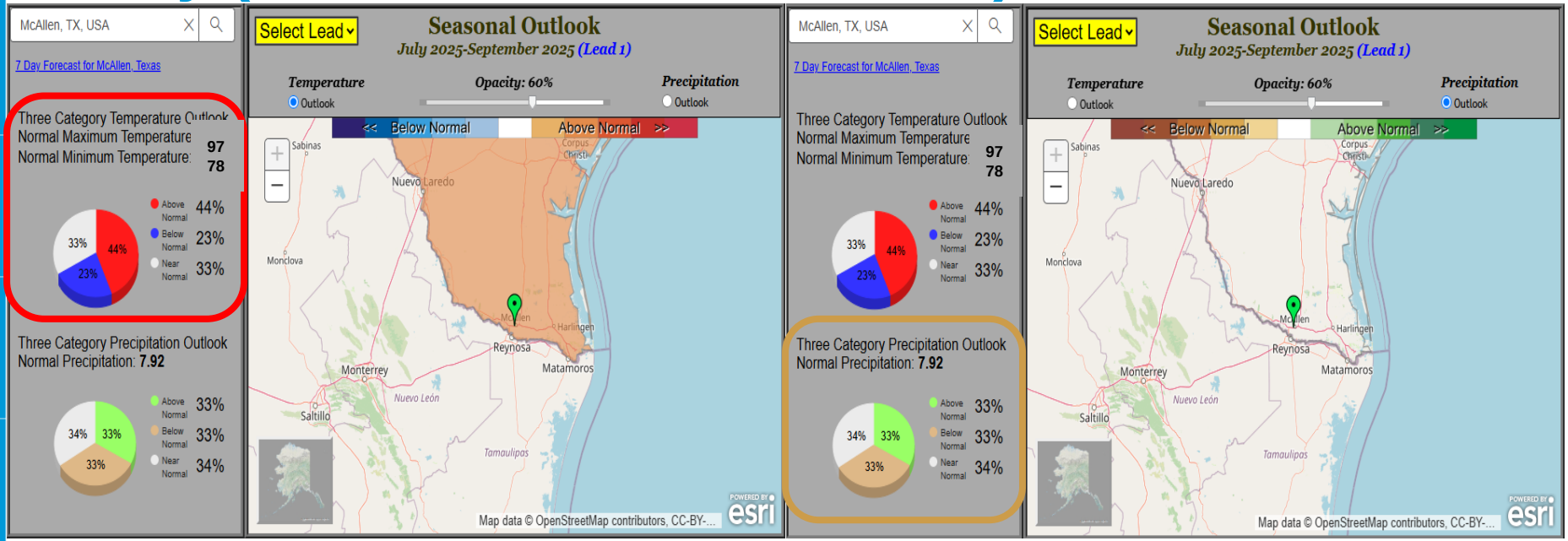
The “Why” of the Forecast: Pacific Decadal Oscillation (PDO) remains in Sharp Negative Phase



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

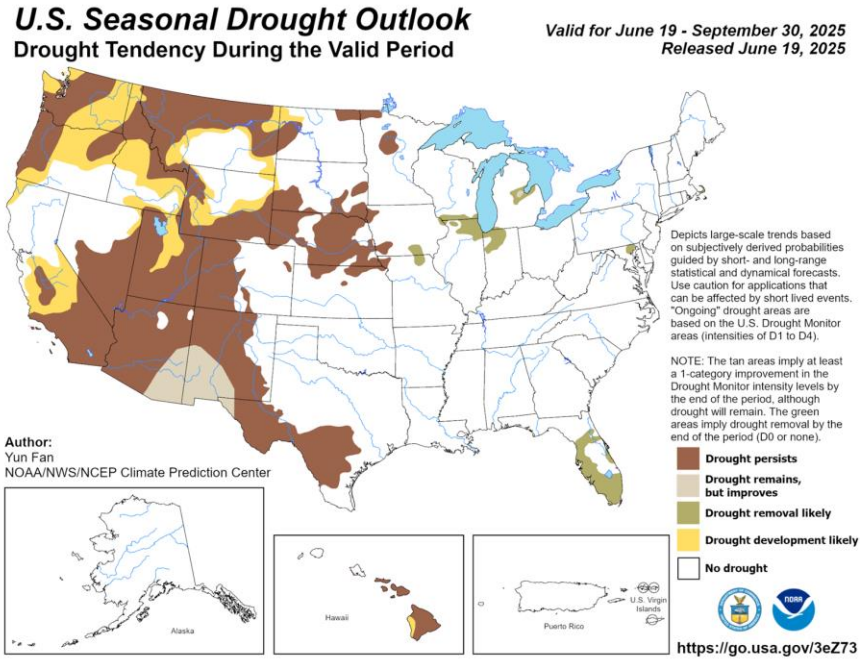
- The 2021-2025 **prolonged and strong negative PDO has persisted**, and should remain the case through Summer 2025. This **continues to support confidence** for a **hotter than normal pattern to persist through the Summer Season.**
- Despite the sharply negative PDO in place, an ENSO Neutral supports 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.

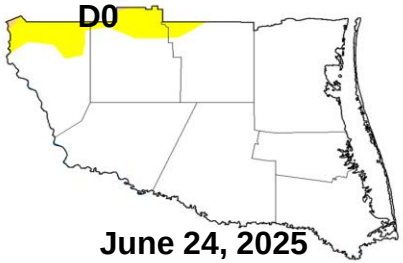
The July-September 2025 Outlook: Rio Grande Valley (McAllen as Anchor Point)

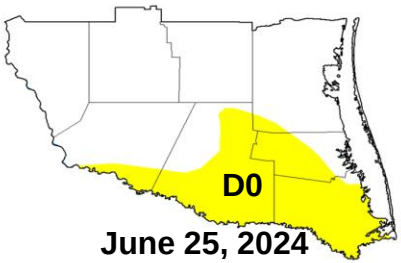


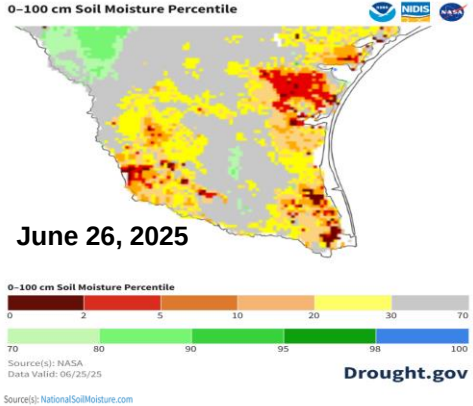
- **Temperature:** **Hotter than normal temperatures (a 44% chance of above average, a 23% chance for below average). Confidence: Medium-High)** RGV averages: Afternoon – Upper 90s to lower 100s July-early September; 90 to 95 end of September. Wake-up: 77 to 80 July-early September, 70s end of September
- **Precipitation:** **Toss-up (33% chance of above, average, or below). Confidence: Medium.** RGV averages: 8.5-10 inches (most in September).

The June 2025 “Droughtlook”



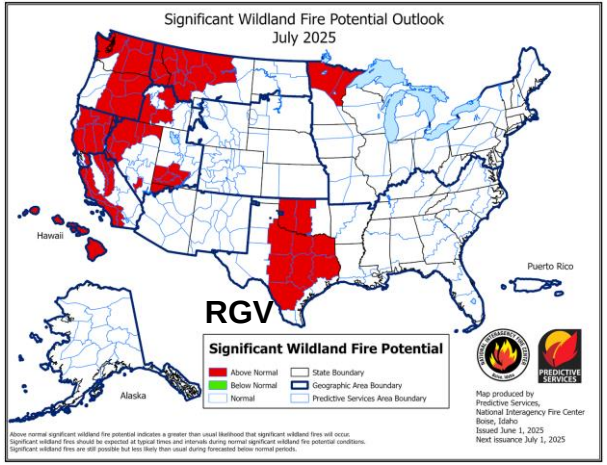


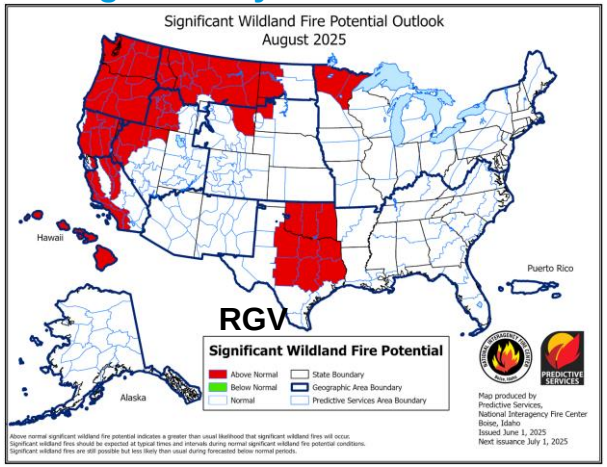


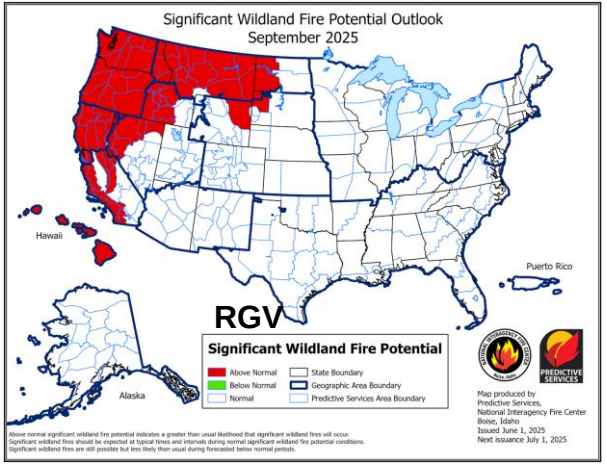


- **Year-over-Year (YoY) drought/dryness** shows <u>some similarities</u>. Both 2024 and 2025 show little to no drought across the region. In 2024, there was dryness (D0 Drought) focused along the Rio Grande Valley and Plains. This year (2025), the dryness is more focused on the Northern Ranchlands, specifically northern Zapata and Jim Hogg Counties.
- **While the seasonal drought outlook suggests no changes in either direction (wet or dry), we will keep close watch on the weather pattern and precipitation trends going forward!** A hot and drier than average July and August would worsen conditions in all areas, with Moderate (D1) and Severe (D2) potentially being introduced in areas particularly west of IH-69C (25-40% chance).

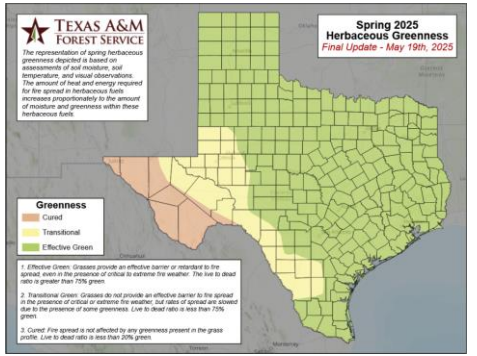
Wildfire Concerns Remains In Check Going Into July…but Could Worsen Later This Summer without Rain







- There remains **general green** across the region, in large part thanks to the **March 26-28, 2025 drought busting rain storm** and occasional rains April-June. That said, wildfire concerns will remain limited through at least the first half July, but could return later if rain fails to materialize and 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 through June, fuel moisture will remain **moderate to high through mid-July**, with moisture levels **thereafter dependent on rain and persistence of it**.

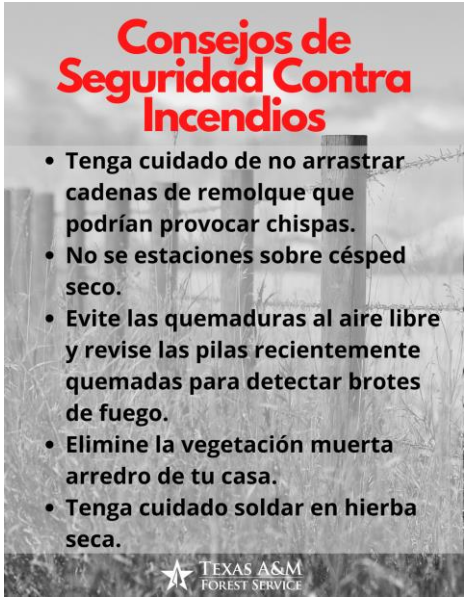


Spring 2025 Herbaceous Greenness Map for Texas (May 19, 2025). **Note:** **effective green** is in place across Deep South Texas.

Wildfire Prevention Review

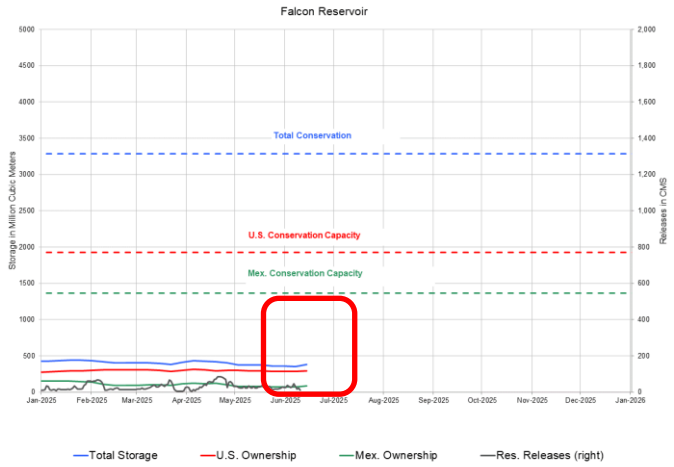
- While conditions are stable to begin summer, this may not be the case as we reach mid-July through mid/late August if rains are limited. Such a situation would worsen drought and cure fine fuels such as rangeland and brush. There were a number of wildfires in the mid to late summer of 2023 for this 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.

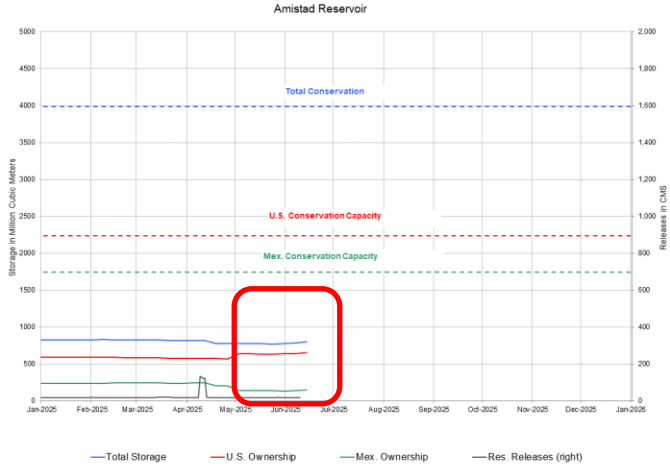
Infographics for Wildfire Prevention



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

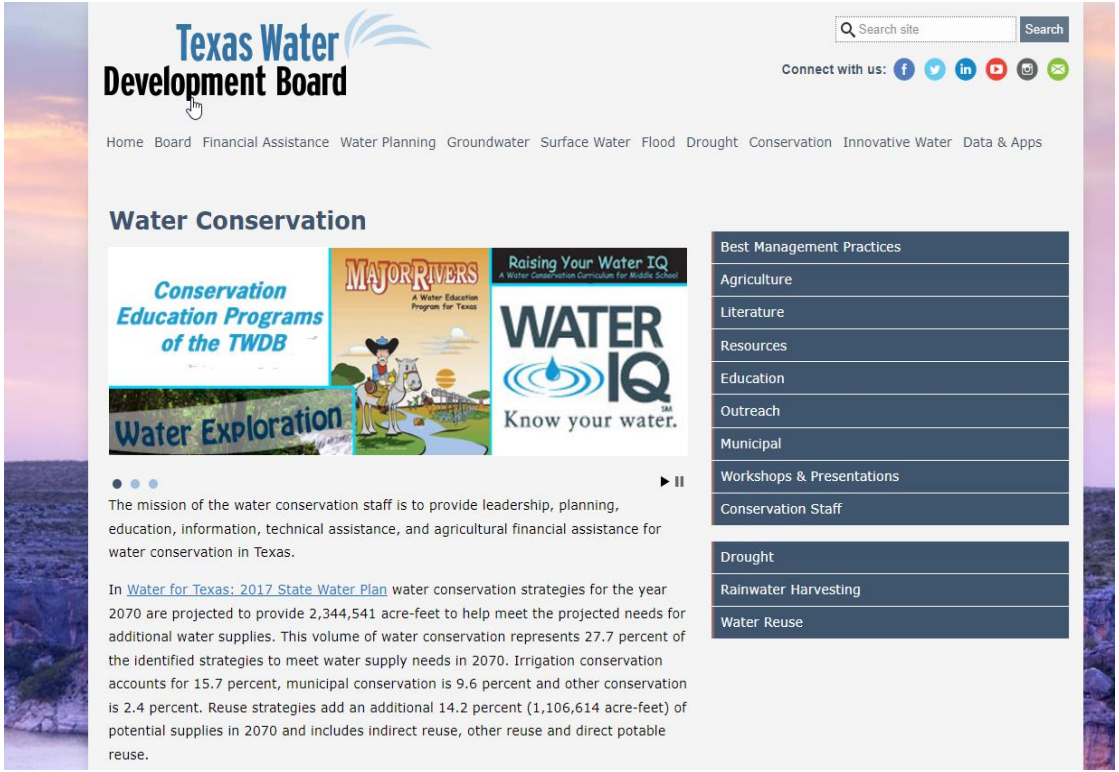
Amistad and Falcon Reservoirs remains at or near Record Lows through the first half of 2025





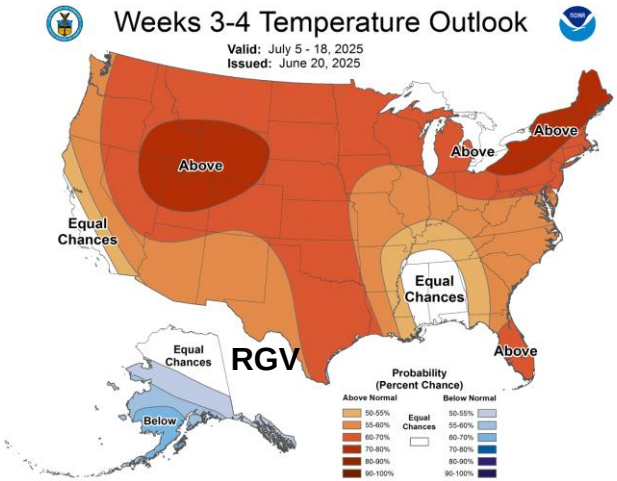
- **Falcon had risen slightly to 11.6 percent** on June 26 (up from **10.9% in late May**). Levels may not change much through September.
- **Amistad also remained nearly steady and slightly above all-time record lows as of late June.** Levels were at **20.2% on June 26th** (slightly higher than the **19.4% from late May**). Levels may not change much through September.

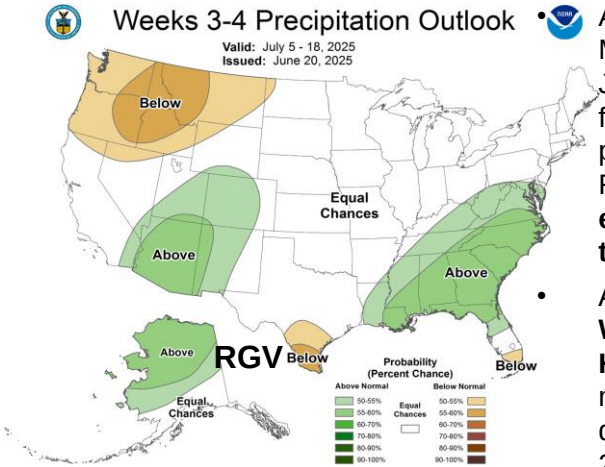
Water Conservation is Key Until Further Notice!

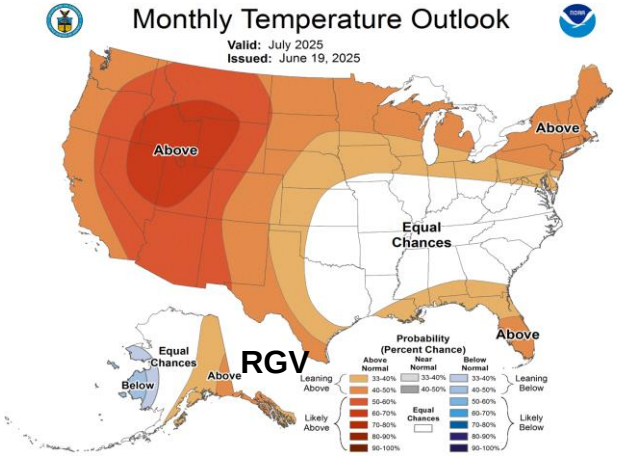


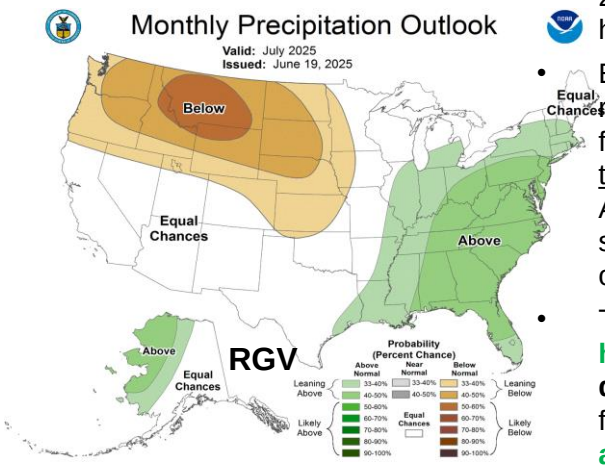
- "Stage 2/3" Restrictions continued through spring 2025 and are likely to continue **until further notice** based on inflows from Amistad and Falcon.
- Learn more at the Texas Water Development Board's Conservation Page

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





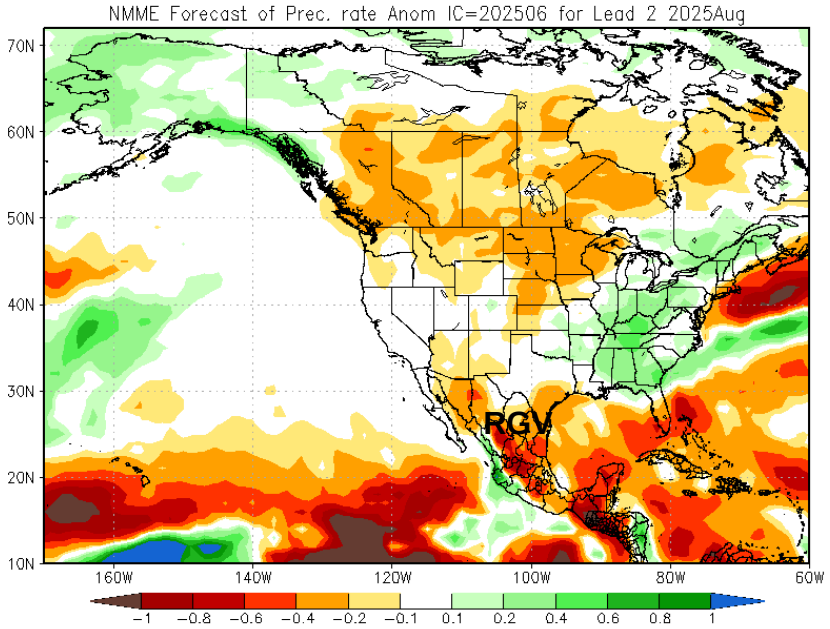




- After a major heat wave impacted the Midwest and Eastern U.S. the third week of June, medium to long-range models are favoring a **normal to hotter than normal** pattern through at least July for the RGV/Deep South Texas as the **heat ridge is expected to retrograde westward back towards the Western U.S. in early July.**
- At this time, we're **not anticipating a Heat Wave with widespread major and extreme Heat Risk through July**. That said, moderate to major **Heat Risk** can still pose a dangerous impact to health, and July-August 2025 should be hotter than 2024 but not as hot as 2023.
- Equal chances for above, below, or average rainfall (33.3 percent for each) is the latest forecast. However, confidence is beginning to lean towards a drier outcome through August as medium-long range models are suggesting the heat ridge establishing itself over the Desert Southwest.
- Though precipitation odds remain a toss-up, **heavy rainfall or flooding events can still develop.** Continue to monitor the potential for showers and storms that could **produce additional heavy rainfall/flood risk**!

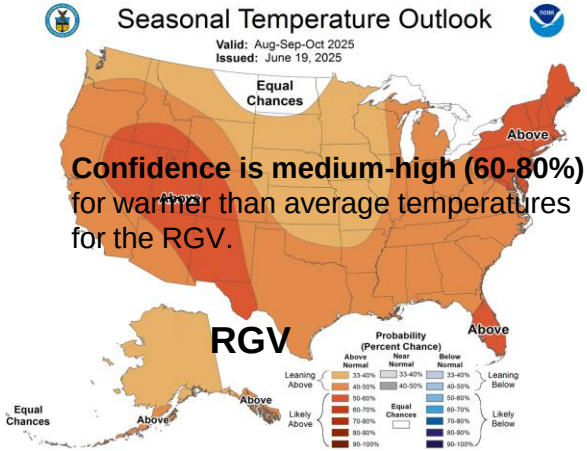
Early Look: August 2025

Potential rainfall rate anomaly, August 2025

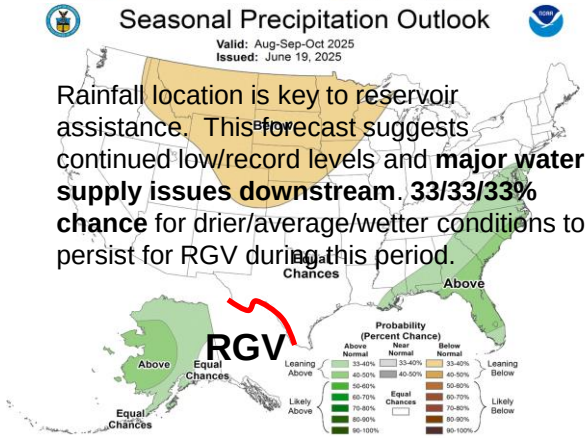


- This model's forecast for August favors a **dry pattern** (note the brown and golden brown colors over the region) continuing.
- Despite the dry outlook from this model for August, it's important to keep in mind that **all it takes is one event to create flash flooding**. Despite there being many dry days this summer, shower and thunderstorm chances will remain in play from tropically-sourced disturbances. Some of these showers and storms could result in 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.

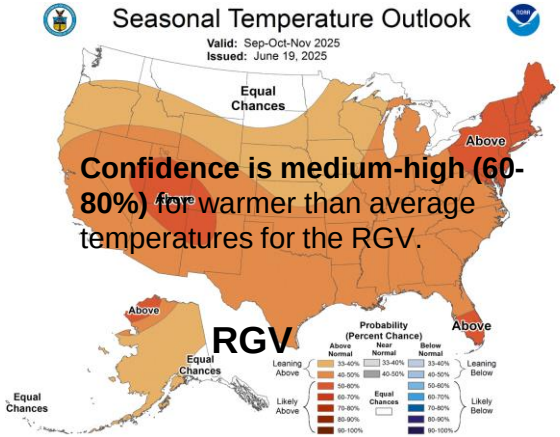
Late Summer through Fall 2025: Hotter than normal trends are favored; Precipitation pattern remains a toss-up



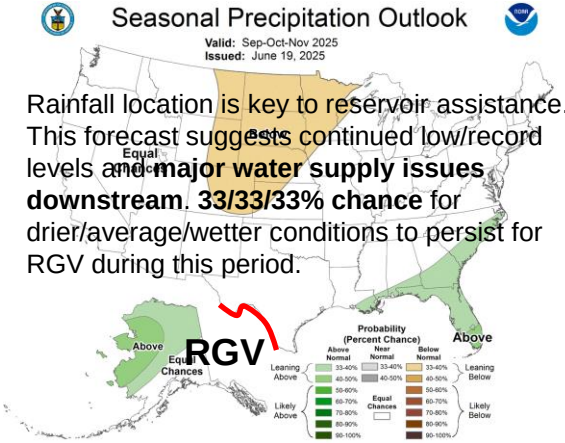
Confidence is medium-high (60-80%) for warmer than average temperatures for the RGV.



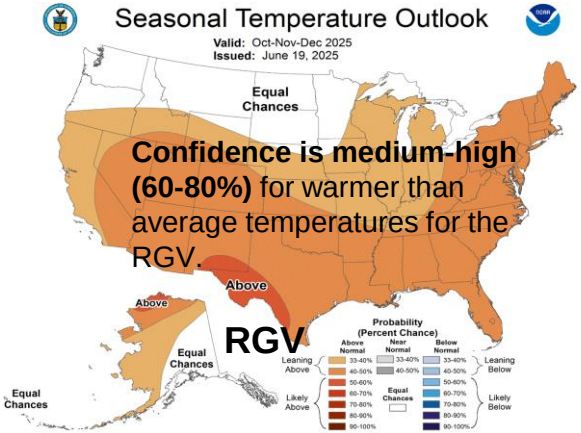
Rainfall location is key to reservoir assistance. This forecast suggests continued low/record levels and **major water supply issues downstream**. **33/33/33% chance** for drier/average/wetter conditions to persist for RGV during this period.



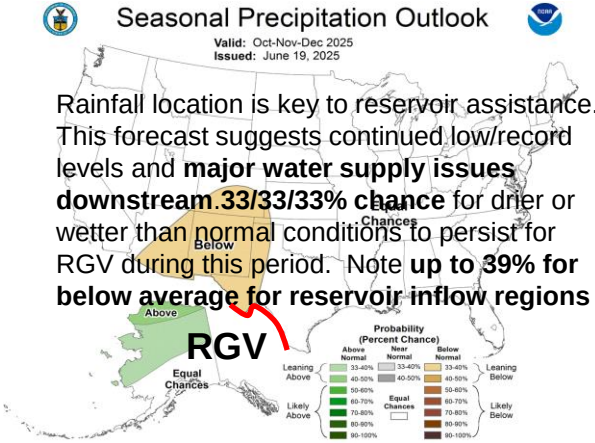
Confidence is medium-high (60-80%) for warmer than average temperatures for the RGV.



Rainfall location is key to reservoir assistance. This forecast suggests continued low/record levels and **major water supply issues downstream**. **33/33/33% chance** for drier/average/wetter conditions to persist for RGV during this period.

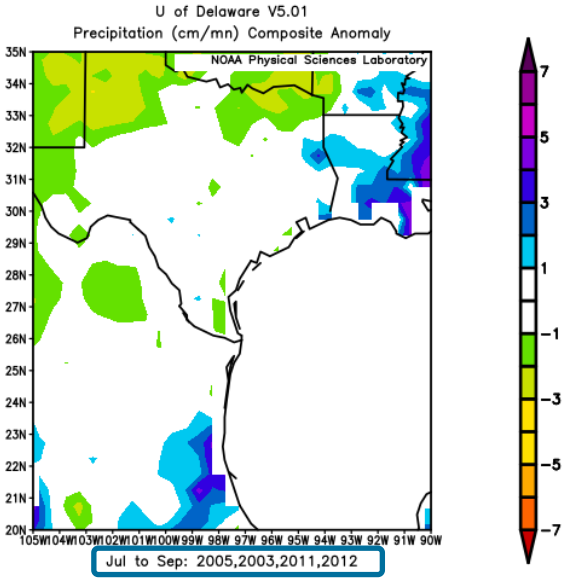


Confidence is medium-high (60-80%) for warmer than average temperatures for the RGV.

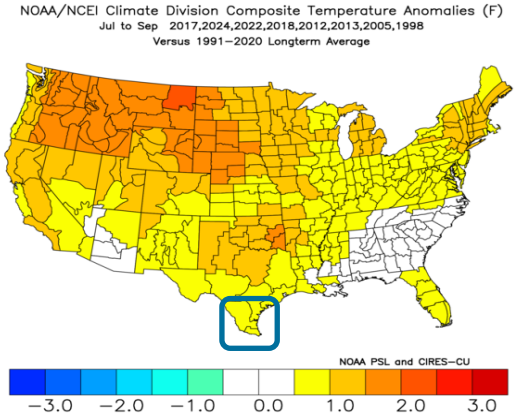


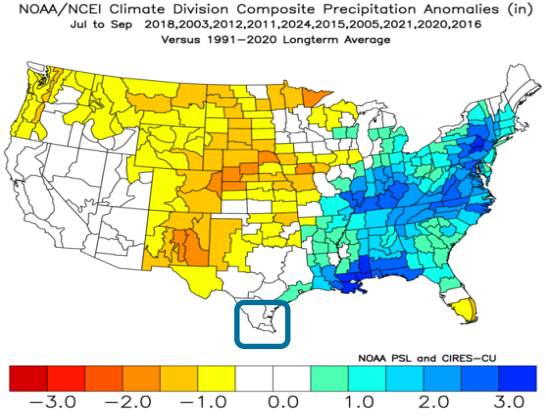
Rainfall location is key to reservoir assistance. This forecast suggests continued low/record levels and **major water supply issues downstream**.**33/33/33% chance** for drier or wetter than normal conditions to persist for RGV during this period. Note **up to 39% for below average for reservoir inflow regions**

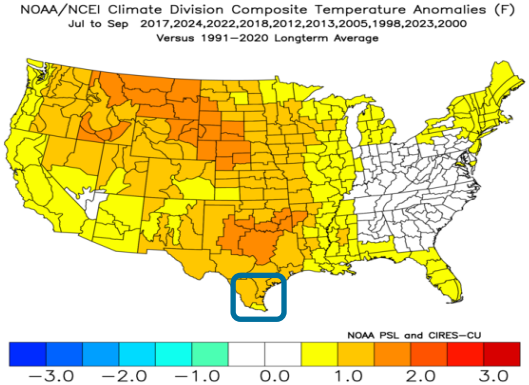
Comparing Similar La Nina to Neutral Episodes mostly within the last 30 years; July-September Periods

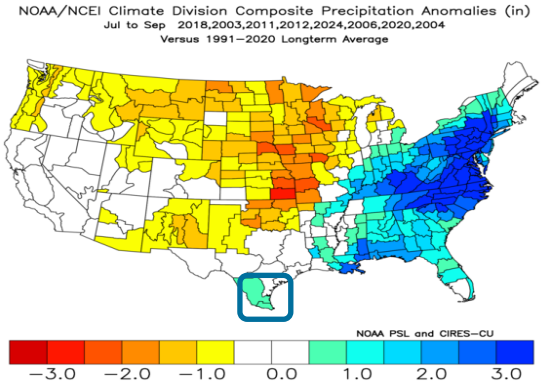


Composite departure from average rainfall for years of similar La Nina to Neutral transition episodes in the July-September window.









- **Top:** Composite temperature (left) and precipitation (right) anomalies for similar La Nina to Neutral transition episodes leading into July-September, since 1950.
- **Bottom Left:** Same, except added the 2023 and 2000 seasons.
- **Bottom Right:** Same, except took out 2015, 2005, 2021, and 2016 seasons.

Bottom Lines

- **Hotter than normal** conditions are expected to persist through summer 2025 with ENSO-neutral conditions in place. **Heat risk will remain elevated to significant (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** remain stable to start July, but **could quickly return by late July 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.** However, confidence is beginning to lean towards a drier outcome/pattern developing through August given the heat ridge placement to our northwest over the Desert Southwest.
- We will continue to monitor the tropics. There remain indicators of late summer/early autumn activity favoring the eastern and central Gulf - but **we'll need to keep an eye out,** especially in September.