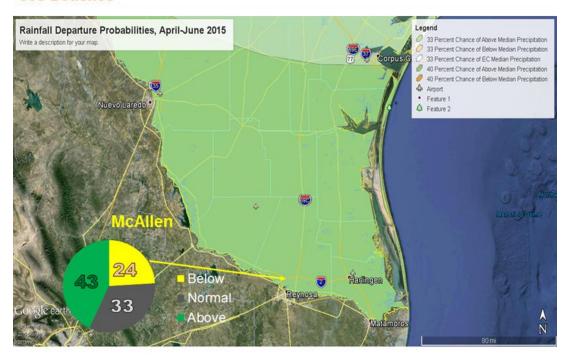


Rio Grande Valley <u>Average Temperature</u> for April - June (based on 1981-2010)

Wake-Up: Upper 60s Ranchlands, Around 70° Elsewhere

Afternoon: Lower 90s Ranchlands, Around 90° Elsewhere except Mid

80s Beaches

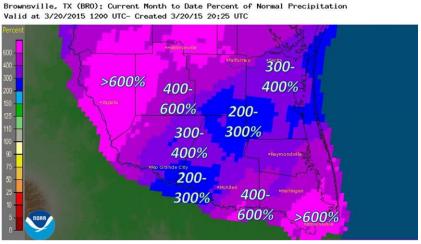


Rio Grande Valley <u>Average Rainfall</u> for April-June (based on 1981-2010) Ranges from 2 to 2 ½ inches

Continued Wet, Somewhat "Wild" Late Spring 2015? RGV May See Combination of Flooding Rain, Wind and Hailstorms into June

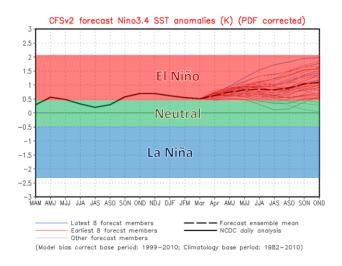
Overview

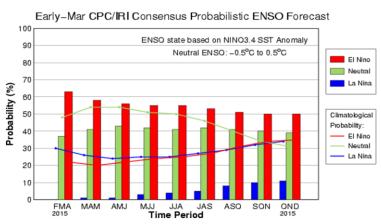
March 2015 exceeded expectations of cool and wet weather for nearly all of the Rio Grande Valley and Deep South Texas ranchlands. By March 20th, nearly every location had received **between two and five times their monthly average** (March averages range from just under an inch for the Rio Grande Plains to about 1 ½ inches toward the Cameron County coast), and temperatures ranged from 3 to 6 degrees below average. The highest percentage of average rainfall was at the corners of the southern tip of Texas; 4 inches or more fell from Zapata through Hebbronville, and across much of Cameron County.



Rio Grande Valley <u>Average Rainfall</u> for March (based on 1981-2010) **0.8-1** Ranchlands; **1-1.5** Inches Elsewhere

The forecast through the end of spring and into early summer indicated a continuation of below average temperatures and above average rainfall. The weather will look much different; after all, arctic-sourced air masses will weaken and recede back toward the North Pole as the sun angle and intensity increases. That same warming sun will combine with a continued pattern that features a prominent subtropical jet stream to bring periodic rain in the form of downpours associated with showers and thunderstorms (below). The additional moisture in the atmosphere and on the ground will maintain a healthy number of cloudy days compared to the more typical hot, dry days that typically dominate April through June; these days will be critical to edge temperatures a few degrees below a typically hot average from late spring into early summer. The confidence in a persistent subtropical jet into May is aided by a weak El Niño, which becomes official at the end of March. (What is Official?)



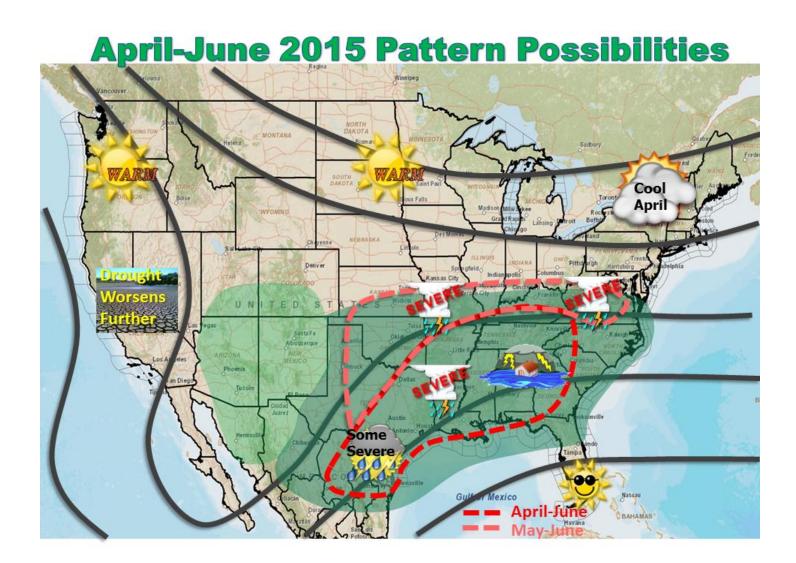


Above: *Left* – Climate Forecast System Observed and Forecast El Niño/Southern Oscillation (ENSO) (anomalies). Solid black line is observed values through early March; dashed line is forecast ensemble mean values through the end of 2015. *Right* – Climate Prediction Center/International Research Institute consensus probability forecast for ENSO through the end of 2015. Each suggest weak El Niño conditions will continue through summer and early fall 2015.

April to June: How It Breaks Down

While confidence is medium to high that late spring and early summer will end up wetter than average, exactly <u>how</u> that translates into weather on the ground is a bit more murky. At face value, one might think the increased probability for above average rainfall and below average temperature would be a recipe for an above average threat for dangerous thunderstorms, including large hail, damaging microburst winds, and even a few tornadoes as the inevitable warm to hot, humid weather arrives as April turns to May, and continues into June. The spring of <u>2012</u>, which featured numerous large hail events and culminated with a <u>week of wind, hail, and even a couple of small tornadoes from May 8 to 15</u>, could repeat in 2015. However, the spring of 2010, which began with a comfortable March but was followed by a wet April punctuated by <u>4 to 6 inches of rain mid-month</u> (killing any chance for an active wildfire season), and concluded with one <u>squall line in mid-May</u>, could repeat in 2015. Time will tell.

Either way, we expect to see some significant weather events – whether flooding rain or wind/hailstorms – in April and May 2015.



Agricultural Woes: Too Much of a Good Thing?

The cool, gray, damp to wet winter and spring has farmers asking "turn off the spigot and bring back the sunshine!" Critical cash crops, particularly cotton and sugar, were struggling under the lack of sunshine, lower humidity, and persistent – and piling up – rains as of late March 2015. Little to no cotton has been planted due to the exceptionally moist conditions across the Valley (below), and sugar cane harvests were severely delayed due to the soaked soil. Winter vegetables also suffered, particularly onions. Each crop listed here requires periodic hot, dry conditions to allow for proper growth and harvesting.

There was a general silver lining: The abundant rainfall benefited ranchers and other livestock managers, as high and thick growth rangeland grasses provide abundant feed for the region's large cattle population. A full report, issued March 18th, was available from Texas Agrilife Today.

Talking Points

- Drought will remain "out" for the Rio Grande Valley through spring and early summer
- There is <u>zero chance</u> for an active wildfire season through June. This could change dramatically in July and August; El Niño summers are typically dry and hot, and with excessive brush and grass (maximum fuel loading), wildfire spread conditions could become an issue in a hurry
- Agriculture may suffer without dry periods featuring warm/hot, sunny days. Such stretches may yet
 come in April and May, but will they be long enough to allow sufficient drying for planting, growth, and
 harvesting? If not, production losses could rival or exceed those during the drought years of 2012 and
 2013.
- Some combination of wind/hailstorms and flooding rainstorms is likely at times between April
 and June. The dominant type of hazard is difficult to handicap, but trends <u>suggest flooding rain is</u>
 favored over wind/hailstorms.
- **Mosquitoes** and other insects will gestate and be out in force with more standing high water than typically seen in spring and early summer.

Scouts Honor: Be Prepared!

Keep the raincoats handy, and make sure your umbrellas are working! In all seriousness, the following tips can help you through early summer 2015:

- For your home:
 - o Check window, door, roof, and floor (foundation) for water and air leaks, and seal them.
 - While there, check for structural stability to withstand wind or hail. This is good practice to get ready for the coming hurricane season, as well.
 - Have a protected room to move yourself, family, and heirlooms should damaging wind or hailstorms be in our future.
 - Check and repair air conditioning systems as soon as possible. Above average humidity will require more usage early, and often..
- For your vehicle: Replace dry-rotted or old windshield wiper blades, check your tires for tread wear and replace, and be sure to check tire air pressure often to ensure a safe ride in the rain.
- For your family: Create and discuss a hazardous weather preparedness plan for dangerous thunderstorms and flooding rain. Ensure the plan has ACES in the deck:
 - Awareness All persons should have ability to keep tuned to weather conditions before, during, and after a hazard
 - Communications Know where each person will be prior to the onset of a hazardous weather event
 - Escape Routes Know the safest way to get to your safe zone (shelter destination). Have alternate routes in mind should damage or flooding cutoff the road(s) normally taken
 - Safe Zone Designate destination(s) protected from wind, hail, or flooding. Multiple locations may be necessary if damage cuts off access to the primary location.
- In areas untreated by mosquito ("vector") control:
 - Wear repellent if outside for any length of time, especially near standing water
 - o Try to be outside during the middle part of the day or when winds are blowing moderately
- Review our **Hazardous Weather Guide** for thunderstorm and tornado safety!
- Flooding can be a threat anytime, including during a rainy spring. Review flood safety, in <u>English</u> and en <u>Español</u>.
- Share our "Slide Guides" for thunderstorm and tornado safety, in English and en Español.