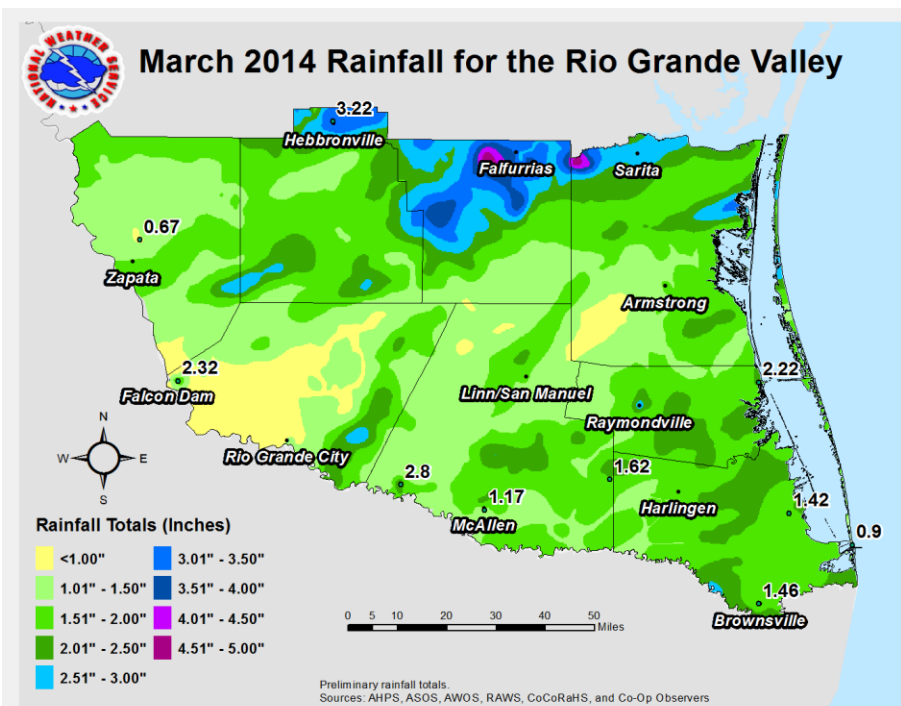




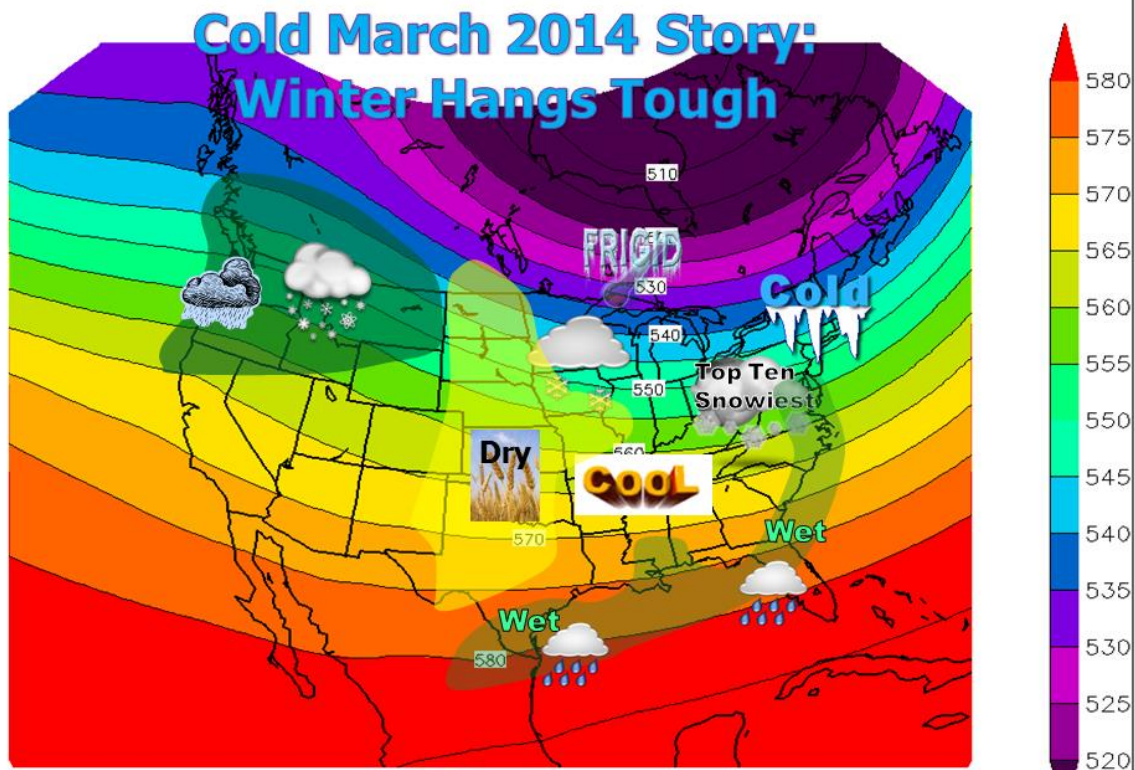
Brownsville was blooming on April 1, 2014!

March 2014: Out Like a Lamb... ...but Plenty of “Lion” to Go Around for a Cool and Wet Month Overall

Early Rains, Persistent Clouds, Raw Periods Lead to Greenest Spring since 2010



A fifth consecutive month with significantly below “normal” temperatures, generally running 3.5° to nearly 5°F under the 1981-2010 average, combined with rainfall generally between 1 and 2.5 inches across the Valley and 1.5 to 3+ inches (left) across the northern ranchlands to [eliminate the last of the drought by the 11th](#). The atmospheric steering pattern (top of next page) that plagued the northern half of the U.S. east of the Front Range of the Rocky Mountains with persistent fridity and occasional snow since November 2013 refused to let go in March 2014. Temperatures were six to twelve degrees below average in most of these areas. Warm and generally dry weather dominated the West.



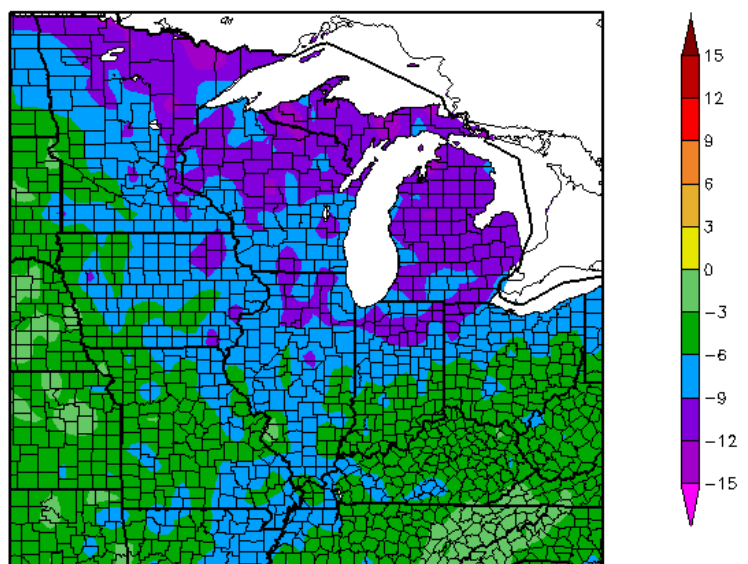
500mb GEOPOTENTIAL HEIGHTS (dam) 31-DAY MEAN FOR:
Sat MAR 01 2014 – Mon MAR 31 2014
NCEP OPERATIONAL DATASET

Above: Steering pattern at around 18,000 feet (black lines) with general weather conditions overlaid. [A single atmospheric event between March 8-10](#) produced up to twice the monthly average rainfall across the Valley and parts of South Texas; otherwise, the state began drying out and drought intensified in most areas along and west of IH 35.

The Lion Roars: From the RGV to the Midwest

Winter Texans, who typically begin migrating back to their homes in Illinois, Indiana, Iowa, Michigan, Minnesota, Michigan, North Dakota, Wisconsin, and the Canadian prairies from Alberta to Ontario in March found little reason to get an early start. Many locations from the Minnesota Arrowhead through northern Wisconsin and the Upper Peninsula of Michigan had yet another top-ten coldest month on record; nearly all locations in these states fell within the coldest 20% of all Marches on record, dating back to the late 1800's in many cases. Average temperatures in most areas were some nine to fifteen degrees below the 1981-2010 bench mark (right). Values were in the teens and 20s, rather than the more "normal" 20s and 30s that define the tail end of astronomical winter and slow start to spring

Departure from Normal Temperature (F)
3/1/2014 – 3/31/2014



March in the Rio Grande Valley started like a lamb, but was overwhelmed by the "lion" when [temperatures crashed around 50 degrees between March 2 and March 3](#). Temperature departures from average quickly fell to 10°F below, and would never recover. A

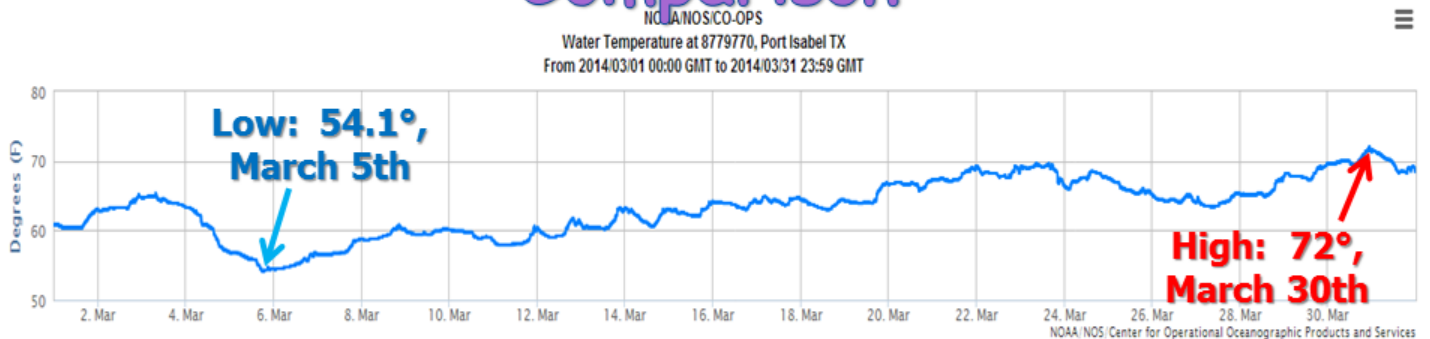
notable cold snap plunged temperatures more than 30 degrees in some areas between March 8th and 9th. Winter had one more cruel joke to play *after* the vernal equinox, when the final full work week of the month brought another raw, misty Monday on the 24th with temperatures failing to reach 60 degrees in Harlingen on a day where “normal” was 82! The lamb of March finally arrived to close the month as temperatures ran a hair above average between the 27th and 31st. That “lamb” fittingly ended the month with temperatures right around normal (lower 80s by afternoon, lower 60s at daybreak).

“Spring” Break Struggles: Different Year, Different Weather

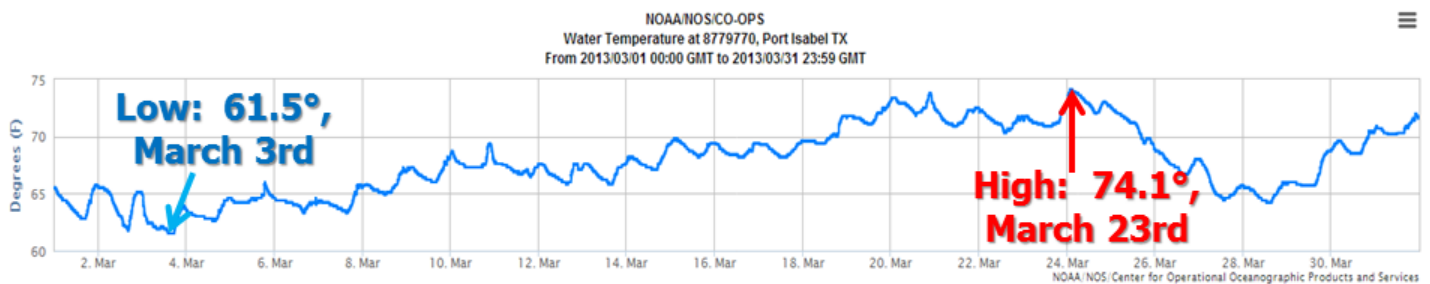
Texas Week (March 9-15) mirrored the fickle but chilly month; Temperatures in the 50s March 9-10 kept most folks indoors before some sunshine popped out for a little while on the 11th. Another surge of north wind on the 12th came dry, with fair mild weather returning by the 13th. Thereafter, light east to southeast flow off the chilled Gulf kept temperatures lodged in the lower 60s, and nightly/morning fog develop and took several hours to burn off on the 15th and 16th before surge of strong north winds gusted to at least 30 mph.

One year made quite the difference. Texas Week 2013 (March 10-16) saw a number of sunny, pleasant days. A warm winter kept bay and beach surf temperatures in the more tolerable upper 60s to around 70 for much of the period. In 2014, the predominant gray and chilly and/or damp conditions were assisted by the much cooler near-shore Lower Texas Gulf waters, which spent an unusual number of days in the upper 50s before finally rising well into the 60s by month’s end. At the Port Isabel tide gage and weather station on the west end of Laguna Madre Bay, water temperatures were more than four degrees warmer in March 2013 than March 2014.

Port Isabel Water Temperature Comparison



March 2014 Average: 63.32°



March 2013 Average: 67.74°

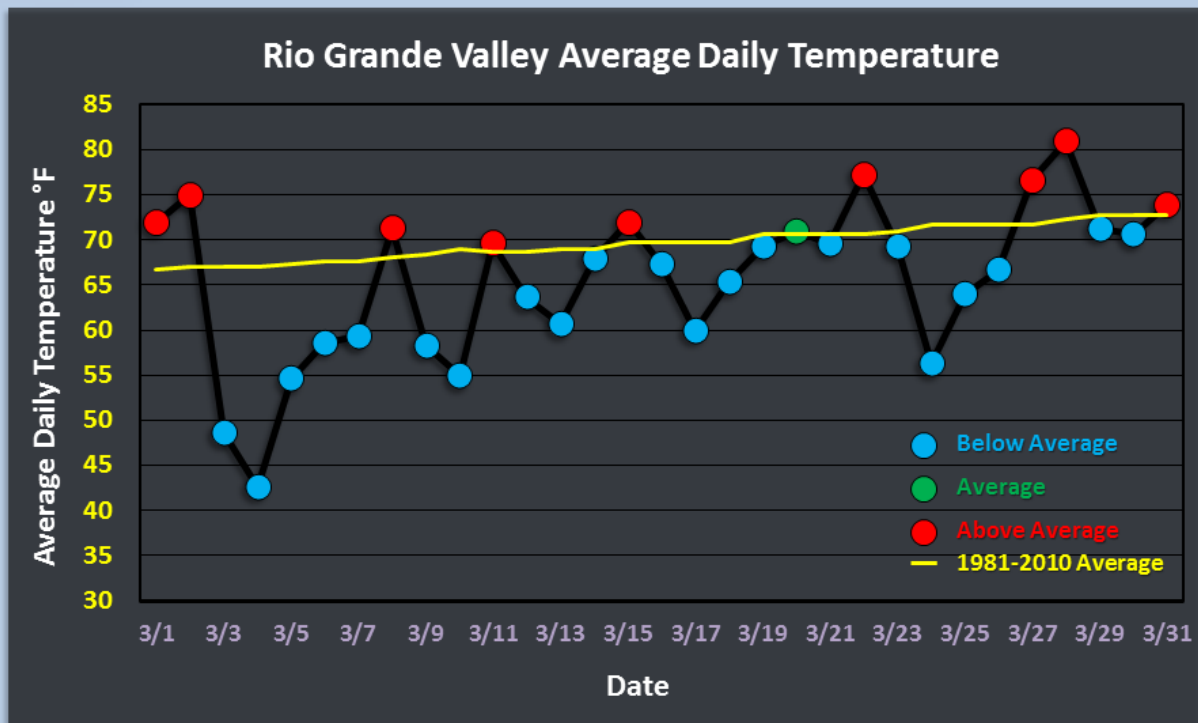
No Record, but Noteworthy

Temperatures across the Valley and the Deep South Texas ranchlands failed to set cold records, but, similar to locations across the Midwest, Mid-Atlantic, and Mississippi Valley, fell into the top 20-30% coldest on record at most locations. The following table shows selected locations, March 2014 average temperature, cold ranking, and comparison with the standing record. All listings adjusted to calendar day; top ten coldest shaded in blue.

Location	Mar. 2014	Cold Rank	Record (year)	Records Since
Brownsville	65.9	27	59.1 (1915)	1878
Harlingen/Cooperative	65.3	18	58.6 (1915)	1912
McAllen/Miller	66.0	5	64.0 (1969)	1961
McAllen/Cooperative	68.1	23	61.9 (1969)	1942
Falcon Dam	65.4	6	62.1 (1969)	1963
Rio Grande City	64.8	14	60.7 (1987)	1897
Port Isabel	66.3	20	61.9 (1932)	1928
Port Mansfield	63.2	8	61.2 (1965)	1958
La Joya/Mission	66.5	18	61.7 (1915)	1911



March 2014: More "Down" than Up

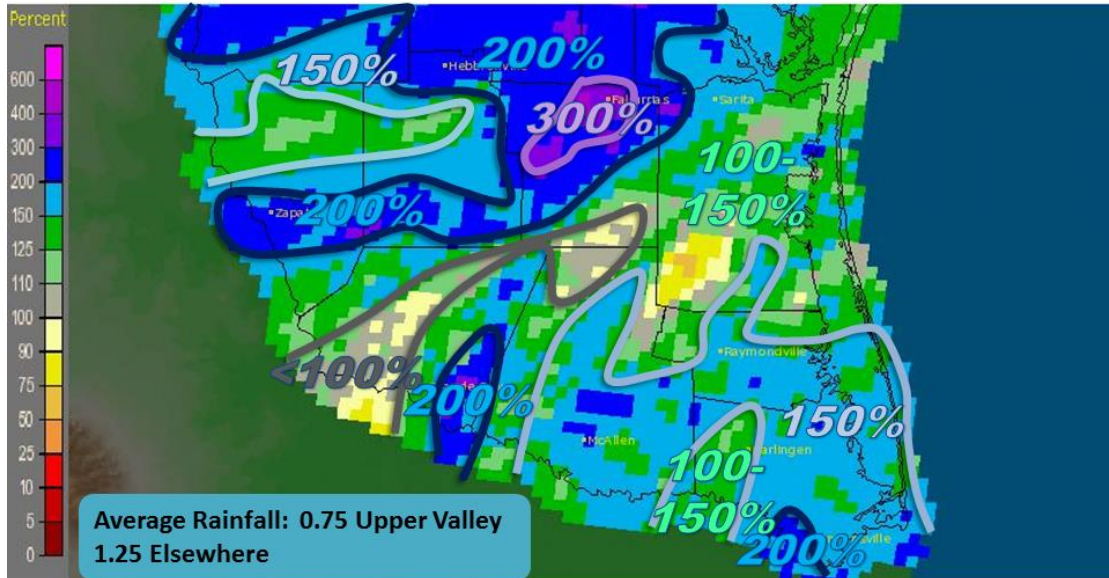


How Green Was My Valley?

One silver lining from the frequent cool/cold, damp March, along with rainfall that finished above average with upwards of 200% monthly rainfall (left) in several locations was the green, lush landscape that followed as the month ended. For many, thick grasses, green brush and trees, and blossoming flowers were the most seen since the spring that followed the [wet El Niño winter of 2009/2010](#). A welcome vista after three consecutive dry, dusty early springs where green was few and far between, and fleeting in many cases.

RGV Precipitation Percent of Normal, March 2014

Brownsville, TX (BR0): March, 2014 Monthly Percent of Normal Precipitation
Valid at 4/1/2014 1200 UTC- Created 4/1/14 21:39 UTC



Above: An Indian Paintbrush in a field of spring flowers at the La Parra Ranch east of Sarita (Kenedy County), Texas, on March 27th, 2014. Photo credit: Jim Campbell, NWS Brownsville/Rio Grande Valley.



Lush, green trees and brush line resacas in Brownsville, April 1, 2014.