# Storm Data and Unusual Weather Phenomena - September 2011

Location Date/Time Deaths & Property & Event Type and Details

Injuries Crop Dmg

### TEXAS, South

(TX-Z248) ZAPATA, (TX-Z249) JIM HOGG, (TX-Z250) BROOKS, (TX-Z251) KENEDY, (TX-Z252) STARR, (TX-Z253) HIDALGO, (TX-Z254) WILLACY, (TX-Z255) CAMERON, (TX-Z256) COASTAL WILLACY, (TX-Z257) COASTAL CAMERON

09/01/11 00:00 CST 0 Drought

09/12/11 23:59 CST 0

Dry conditions and a lack of rainfall across Deep South Texas to start September maintained Extreme to Exceptional Drought from Hidalgo County through the Rio Grande Plains, and northeast to the King Ranch. Moderate to Severe Drought continued in the Lower Valley. Much of the dryland crop losses were likely accounted for through August, as September is typically when arable land is plowed over to ready for the next planting season. There may have been additional livestock impacts but data had not been received as of this writing.

(TX-Z254) WILLACY

09/12/11 15:08 CST 0 Wildfire

09/14/11 17:00 CST 0

The combination of near record heat, days of afternoon humidity below 20 percent associated with dry air driven into the inland portions of the Rio Grande Valley behind Tropical Storm Lee (September 1-4) and to the north of Tropical Storm Nate (September 8-10) set the stage for brush fires to grow quickly across the Lower Rio Grande Valley National Wildlife Refuge near Linn/San Manuel (northwest Willacy County) on September 12th, continuing into September 14th before sufficient containment.

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09/13/11 00:00 CST 0 Drought

09/30/11 23:59 CST 0

Adding insult to injury, extremely dry and near record to record hot temperatures surged across the southern tip of Texas Labor Day weekend behind Tropical Storm Lee along the Louisiana coast, adding further stress to plants and drying out soil. Another wave of hot and dry weather would appear well to the north of Tropical Storm Nate (in the Bay of Campeche) just prior to mid month, ensuring an increase in the agricultural and hydrologic drought across the entire region. Livestock loss/production dollar amounts were unavailable as of this writing.

STARR COUNTY --- FALCON HGTS [26.55, -99.13], 0.6 NW FALCON HGTS [26.56, -99.14]

09/17/11 20:45 CST 0 Heavy Rain

09/17/11 22:30 CST 0 Source: COOP Observer

Slow moving thunderstorms moved into extreme southeast Zapata and southwest Starr County between 930 and 1030 PM, September 17th, initially producing a microburst in Fronton but ultimately dumping nearly 3 inches of rain in some locations before sliding south of the Rio Grande just before midnight. At the Falcon Dam cooperative observing location, 2.80 inches of rain fell, most likely in less than two hours. No significant flooding was reported in the Roma to Falcon Heights area as of this writing.

STARR COUNTY --- 0.9 SSW FRONTON [26.41, -99.09], 0.9 S FRONTON [26.41, -99.08]

09/17/11 21:30 CST 10K Thunderstorm Wind (EG 56 kt) 09/17/11 21:40 CST 0 Source: Broadcast Media

A small but severe thunderstorm, featuring a bow-shape on its front edge and containing small cores of microbursts, raced through southwest Starr County around 1030 PM CDT September 17th. One of those microbursts reached ground.

KRGV-TV-5 reported structural damage in the small community of Fronton (along the Rio Grande). Damage included at least two roofs torn off/peeled back, several fences blown down, power lines blown down, and numerous large mesquite and live oak limbs broken off trees.

A pocket of relatively deep atmospheric moisture combined with a weak upper level disturbance was enough to trigger evening into overnight thunderstorms across the Brush Country and Rio Grande Plains of Zapata, Starr, Jim Hogg, and Brooks County Texas on the 17th. Radar estimated rainfall ranged from 2 to 4 inches, with a couple of pockets of more than 4 inches, from the south end of Falcon Lake northeast into the ranchlands of Jim Hogg and western Brooks County, most falling between 8 and 11 PM.

One storm in southeast Zapata/extreme southwest Starr, produced a pulse microburst which caused notable damage in Fronton.

(TX-Z248) ZAPATA, (TX-Z249) JIM HOGG

09/20/11 00:00 CST 0 Drought

09/30/11 23:59 CST 0

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A complex of thunderstorms, producing an estimated 3 to 5 inches of rainfall, covered southern and central Zapata, northwest Starr, and much of Jim Hogg County late on September 17th, with additional rainfall in Jim Hogg County on the 18th. These rains, falling across the typically "driest" portions of Deep South Texas, brought slight improvement to the long term agricultural and hydrologic drought, moving levels from Exceptional (D4) to Extreme (D3) in large portions of these counties. The conditions would continue through the end of the month, as little additional rain fell but temperatures remained above 100 degrees and humidity dropped into the 20s for the majority of afternoons thereafter.

#### (TX-Z254) WILLACY, (TX-Z255) CAMERON, (TX-Z256) COASTAL WILLACY, (TX-Z257) COASTAL CAMERON

09/27/11 00:00 CST 0 Drought

09/30/11 23:59 CST 0

Lack of significant rainfall during the wettest time of the calendar year in the wettest region of Deep South Texas allowed agricultural and hydrologic drought to increase during the last week of September. Conditions deteriorated from Severe/Extreme to Extreme/Exceptional in most areas by month's end. Additional crop damage was likely insignificant since most lands had been plowed over to ready for the autumn and winter; livestock production/loss dollar values were unavailable as of this writing.

### CAMERON COUNTY --- 0.4 N PORTWAY ACRES [25.93, -97.47]

09/29/11 10:59 CST 1.50K Lightning

09/29/11 10:59 CST 0 Source: Broadcast Media

Lightning struck a radio tower near the Brownsville Public Utilities Board (Brownsville PUB) facility just before noon on September 29th, starting a small blaze in a storage room which was quickly put out by firefighters. Fiber stored in the room were deemed a total loss. Dollar damage was not available as of this writing but assumed to be in the thousands of dollars.

#### ZAPATA COUNTY --- 61.2 W TACUBAYA [26.91, -99.27]

09/29/11 16:40 CST 2K Thunderstorm Wind (EG 43 kt)
09/29/11 16:45 CST 0 Source: Law Enforcement

An off duty inspector for Zapata County reported, and photographed, wind damage to an under construction foam building in Zapata after a vigorous outflow boundary/gust front crossed the area during the late afternoon of September 29th. Winds at nearby Zapata County Airport (Medina) were clocked at 44 mph 5 minutes earlier. Construction type and damage, combined with no nearby reports of more traditional damage (large limbs, roof material, etc.) suggested a pulse gust below 58 mph.

### ZAPATA COUNTY --- 2.0 NNE ZAPATA ARPT [26.91, -99.27], 1.9 NNE ZAPATA ARPT [26.90, -99.27]

09/29/11 19:25 CST 0 Heavy Rain

09/29/11 19:45 CST 0 Source: Law Enforcement

The Zapata County Sheriff's Office reported minor flooding to curb level along State Highway 16 and Federal Highway 83, stretching south toward 9th Avenue. The emergency manager reported 1.75 inches at the fire station; other estimates suggested around 2 inches in less than an hour with the heavy thunderstorm which crossed the city between 8 and 9 PM that evening.

Scattered thunderstorms associated with a weak upper level disturbance produced welcome, but locally heavy, rainfall in Zapata County, along with locally gusty winds across the Rio Grande Plains and Rio Grande Valley as drier, cooler air aloft mixed down to the surface in the form of outflows ahead of many of the storms. Wind gusts ranged from the upper 30s (mph) in Hidalgo County (37 mph, 215 PM) to the upper 40s to lower 50s in Jim Hogg (Hebbronville, 52 mph at 435 PM). Minor damage was reported in Zapata with the outflow, followed by nuisance flooding later that evening.

Earlier in the day, a locally strong storm dropped nearly 3/4 inch of rain at the Brownsville/SPI International Airport on the east side of town; lightning associated with the storm struck near or at the Public Utilities Board, causing minor damage.

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