Storm Data and Unusual Weather Phenomena - March 2009

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
TEXAS, South Panhandle				
(TX-Z026) CHILDRESS, (TX-Z032) COTTLE, (TX-	Z037) DICKENS, (TX-Z038) KIN 03/01/09 00:00 CST	IG, (TX-Z043) KE	NT, (TX-Z044) STC 0	DrewALL

10M

Despite a wet summer and early fall of 2008, precipitation was scarce over the west Texas South Plains region from late October 2008 through March 2009. Severe (D2) drought developed over the Rolling Plains during late January and persisted through March. A round of light precipitation fell over the Rolling Plains on 13-14 March, but only provided one quarter to three-quarters of an inch at most locations. Thus these rains did little to curb the ongoing drought, with most communities across the eastern South Plains and Rolling Plains at only 15% to 25% of their long term precipitation averages during the November-December-January-February-March time frame. This follows the driest December-February period on record across the state of Texas.

03/31/09 23:59 CST

Soils and grasses across the Rolling Plains remained very dry during March, and conditions had precluded the planting of some cool season crops including winter wheat. Local agricultural officials report that many South Plains cotton farmers planted wheat following last spring's cotton losses which were brought on by persistent blowing dust and hail. Most, if not all, of those wheat crops were lost during the recent drought.

State agricultural officials estimate that cattle losses related to the drought will exceed \$1 billion statewide. Only a fraction of those losses occurred in the South Plains region with most of the land usage locally being for cotton production. Local cotton experts remain optimistic that soil moisture profiles remain favorable following the September-early October rains, but suggest that normal springtime rainfalls will be critical to the success of the upcoming season's cotton crops.

The drought situation presented a high fire danger, and at least one major wildfire occurred in Hockley County on the 5th and another small but damaging fire occurred in Lubbock County on the 17th. Both fires occurred within D1 (Moderate) drought conditions. By the end of March, twenty South Plains region counties had declared burn bans.

The total economic impact across the South Plains region in March was estimated at \$10 million, with damages totaling \$15 million since the onset of severe (D2) drought in January 2009.

(TX-Z034) HOCKLEY			
	03/05/09 13:15 CST	0.10M	Wildfire
	03/05/09 20:00 CST	0	

Strong southwesterly winds promoted warm and dry weather and an ongoing drought to produce favorable conditions for wind-driven wildfires during the afternoon hours of the 5th. Sustained wind speeds between 35 and 40 mph with gusts near 50 mph downed a power line near an oil well pump jack, and sparked the spread of a grassland wildfire. Five area fire departments battled the blaze for nearly seven hours as it charred 2,000 acres and damaged some oil field equipment and utility poles and lines. No injuries were reported. Total damages were estimated near \$100,000.

(TX-Z021) PARMER, (TX-Z024) BRISCOE, (TX	-Z026) CHILDRESS			
	03/13/09 06:00 CST	0	Winter Storm	
	03/13/09 18:00 CST	0		
(TX-Z022) CASTRO, (TX-Z023) SWISHER, (TX	-Z025) HALL, (TX-Z027) BAILEY, (TX-Z	2029) HALE, (TX-Z030) FL	OYD, (TX-Z031) MOTLEY	
	03/13/09 06:00 CST	0	Winter Weather	
	03/13/09 18:00 CST	0		

Following a stretch of unseasonably warm temperatures, a Canadian cold front pushed southward through the plains on the 10th. The cold post frontal airmass remained entrenched over west Texas through the 13th. During the morning hours of the 13th, a storm system approaching from the west caused warm air to override a deepening low-level post frontal cold dome. This resulted in sufficient lift and moisture for rain, freezing rain, and eventually snow.

Snow accumulations topped Winter Storm levels at isolated locations over the extreme southern Texas Panhandle, while most communities across the northern South Plains received light dusting accumulations. Residual warm ground temperatures helped area roadways to remain ice-free, so no serious impacts or damages were reported.

A list of reported snow accumulations follows: 5 inches at Rhea (Parmer County), 4 inches at Kirkland (Childress County), 4 inches at Silverton (Briscoe County), 3 inches at Floydada (Floyd County), 3 inches at Friona (Parmer County), 2 inches at Antelope Flat (Briscoe County), 2 inches at Kress (Swisher County), 1 inch at Childress (Childress County), 1 inch at Flomont (Motley County), 1 inch at Muleshoe (Bailey County), 1 inch at Northfield (Motley County), 1 inch at Plainview (Hale County), 1 inch at

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		Injuries	Crop Dmg	

Summerfield (Castro County), and 1 inch at Tulia (Swisher County).



Snow covered this Texas Farm to Market Road 15 miles northeast of Plainview (Hale County) on the 13th. Photo courtesy: Chad Casey.

03/17/09 14:00 CST 0.10M Wildfire 03/17/09 16:00 CST 1 0	(TX-Z035) LUBBOCK			
03/17/09 16:00 CST 1 0	03/17/09 14:00 CS	т	0.10M	Wildfire
	03/17/09 16:00 CS	ST 1	0	

Breezy winds and warm temperatures promoted very dry relative humidities near 10% over the central South Plains during the afternoon hours of the 17th. While wind speeds were below critical fire weather values, a discarded cigarette sparked a grass fire that damaged an apartment complex in Lubbock. Local fire officials attributed the fire's rapid spread through a small patch of grassland to the dry and breezy weather and to the ongoing drought in creating cured fuels receptive to burning. A firefighter was injured fighting the blaze. Damages to the apartment complex were estimated to approach \$100,000.

(TX-Z021) PARMER, (TX-Z024) BRISCOE			
03/2	27/09 06:00 CST	50K	Winter Storm
03/2	27/09 22:00 CST	0	
(TX-Z022) CASTRO, (TX-Z023) SWISHER, (TX-Z025) HA	LL, (TX-Z027) BAILEY, (TX-Z028) LAMB, (TX-Z029) HALE, (T	X-Z033) COCHRAN
03/2	27/09 06:00 CST	50K	Winter Weather
0.2/5	27/09 22:00 CST	0	
03/2	27/09/22.00/031	0	

A dangerous blizzard struck portions of the U.S. Southern Plains on the 27th. The storm resulted in numerous road closures and other

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Location	Date/Time	Deaths &	Property &	Event Type and Details
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serious public impacts as between 25 and 30 inches of wind blown snow blanketed portions of the Texas and Oklahoma Panhandles, southwestern Kansas, and northwestern Oklahoma. While snow accumulations were dramatically less over the extreme southern Texas Panhandle and the northern South Plains, the area was impacted by the periphery of this major winter storm.

Near blizzard conditions resulted in several road closures and automobile accidents over the northern half of the west Texas South Plains during the morning hours of the 27th. Northwesterly winds sustained at speeds between 25 and 35 mph with gusts near 50 mph caused blowing snow which briefly reduced visibilities to near zero along U.S. Highway 60 in Parmer County and along Interstate 27 in Swisher County. Snow drifts in Parmer County reportedly reached 2 to 3 feet in depth. Travel problems, including serious accidents, were reported in Hall County. Damages attributed to the storm across the west Texas South Plains were estimated to approach \$100,000. No injuries, however, were reported.

A list of reported storm total snow accumulations follow: 4 inches at Bovina (Parmer County), 4 inches at Silverton (Briscoe County), 3 inches at Farwell (Parmer County), 3 inches at Happy (Swisher County), 3 inches at Turkey (Hall County), 3 inches at Vigo Park (Swisher County), 2 inches at Antelope Flat (Briscoe County), 2 inches at Caprock Canyons State Park (Briscoe County), 2 inches at Easter (Castro County), 2 inches at Estelline (Hall County), 2 inches at Memphis (Hall County), 2 inches at Morton (Cochran County), 2 inches at Olton (Lamb County), 1 inch at Abernathy (Hale County), 1 inch at Lakeview (Hall County), 1 inch at Muleshoe (Bailey County), 1 inch at Nazareth (Castro County), 1 inch at Plainview (Hale County), and 1 inch at Tulia (Swisher County).



Photograph of blowing snow in Plainview, Texas during the morning of March 27, 2009. Photograph taken by Richard Porter of the Plainview Daily Herald.

03/30/09 13:20 CST 03/30/09 13:20 CST

(TX-Z034) HOCKLEY

0 0 High Wind (MAX 53 kt)

Strong southwest to west winds blew across the western half of the west Texas South Plains during the afternoon hours of the 30th, creating critical fire weather conditions. A brief and isolated severe wind gust up to 61 mph was recorded by the Texas Tech University West Texas Mesonet station near Levelland. No damage was reported.

Storm Data and Unusual Weather Phenomena - April 2009

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
TEXAS, South Panhandle				
(TX-Z038) KING, (TX-Z043) KENT, (TX-	7044) STONEWALL			
(1A-2030) KING, (1A-2043) KENT, (1A-				
(1X-2036) KING, (1X-2043) KENT, (1X-	04/01/09 00:00 CST		0	Drought

The month of April saw an overall improvement in an ongoing severe (D2) long-term drought which commenced over much of the west Texas Rolling Plains in January 2009.

Despite a wet summer and early fall of 2008, precipitation was scarce over the west Texas South Plains region from late October 2008 through the first half of April 2009. Severe (D2) drought developed over the Rolling Plains during late January and persisted through April.

Severe (D2) drought was ongoing over Childress, Cottle, Dickens, Kent, King, and Stonewall Counties at the beginning of April. An increase in the coverage and intensity of rainfall was noted with increased thunderstorm activity over much of west Texas by mid April, however, and widespread heavy rains occurred during a severe weather outbreak on the 16th. The increased precipitation had a major impact in ending drought conditions over most of the Rolling Plains, and by the end of April, severe (D2) drought had receded to include only Kent, King, and Stonewall Counties where long term precipitation totals during the

November-December-January-February-March-April time frame remain at only 30% to 40% of climatic averages. The U.S. Drought Monitor, however, indicated an expanding area of intensifying extreme (D3) drought over western north Texas at the end of the month, just east of the Rolling Plains region.

Area grasslands were very dry during early April, and the ambient fire danger was extreme. A series of high wind events contributed to a few episodes of widespread wildfire activity across the Southern Plains during the first week of April. At least four significant wildfires developed over the local area on the 2nd and 4th. These fires destroyed one home and damaged oil field equipment. Increased rainfall and warming overnight temperatures, however, contributed to green-up and a decrease in ambient fire danger by mid April.

Following the failure of winter wheat crops in previous months, agricultural impacts were relatively minimal in April. Conditions precluded the planting of some cool season crops including winter wheat. Local cotton experts remain optimistic that soil moisture profiles remain favorable following the September-early October rains, but suggest that normal springtime rainfalls will be critical to the success of the upcoming season's cotton crops.

State agricultural officials estimate that cattle losses related to the drought will exceed \$1 billion. Only a fraction of those losses occurred in the South Plains region with most of the land usage locally being for cotton production.

The total economic impact across the South Plains region in April was estimated at \$3 million, with approximately \$18 million dollars of economic loss occurring locally since the onset of severe (D2) drought conditions in January 2009.