Storm Data and Unusual Weather Phenomena - February 2014

Location Date/Time Deaths & Property & Event Type and Details Injuries Crop Dmg

TEXAS, South Panhandle

(TX-Z021) PARMER, (TX-Z022) CASTRO, (TX-Z023) SWISHER, (TX-Z024) BRISCOE, (TX-Z025) HALL, (TX-Z026) CHILDRESS, (TX-Z028) LAMB, (TX-Z029) HALE, (TX-Z030) FLOYD, (TX-Z031) MOTLEY, (TX-Z032) COTTLE, (TX-Z033) COCHRAN, (TX-Z034) HOCKLEY, (TX-Z035) LUBBOCK, (TX-Z036) CROSBY, (TX-Z037) DICKENS, (TX-Z038) KING, (TX-Z039) YOAKUM, (TX-Z040) TERRY, (TX-Z041) LYNN, (TX-Z042) GARZA, (TX-Z043) KENT, (TX-Z044) STONEWALL

02/01/14 00:00 CST 0 Drought

02/28/14 23:59 CST 0

February saw little changes in long term drought conditions with only one major winter storm as the only precipitation event and wildly varying temperatures. Hall County, which has remained in moderate (D1) drought conditions since July 2013 was degraded to severe (D2) drought. Bailey County remained in D1 conditions and Garza county dropped to D1 due to the winter storm. Elsewhere, conditions ranged from D2 to exceptional (D4) drought conditions.

The month of February saw wild temperature swings as well as a major winter storm. This winter storm was the only precipitation across the region during the entire month. Up to one foot of snow in a 24-hour period was observed across the southern Rolling Plains and southeastern South Plains on February 2nd. The lack of measurable precipitation throughout the rest of the month prevented the region from realizing any major improvements to drought conditions. Although temperatures actively varied throughout the month between very warm periods and arctic cold fronts, the average monthly temperatures were below seasonal averages. Temperatures at Lubbock and Childress were -2.0 and -5.6 degrees, respectively. Both the Lubbock and Childress stations recorded one daily record maximum and a record minimum, further indicative of the variable temperatures. Keetch-Byram Drought Index Values remain nearly unchanged. The area saw values between 400 and 500 with some spots reaching between 500 and 600 over the Rolling Plains.

Despite fuels being primed for wildfire activity by the end of the month, only one wildfire was reported. Cool and moist conditions for the first part of the month kept energy release component (ERC) values low. However, ERC values increased by the end of the month with increasing temperatures and very dry conditions. The region has not reached peak wildfire season, so a lack of wildfires is not unusual for February. Furthermore, soil moisture amounts were highly variable due to the areas that received snow versus those that did not.

Economic losses due to drought through February since the drought began were estimated near \$3.0 billion.

(TX-Z024) BRISCOE, (TX-Z025) HALL, (TX-Z026) CHILDRESS, (TX-Z029) HALE, (TX-Z030) FLOYD, (TX-Z033) COCHRAN, (TX-Z035) LUBBOCK, (TX-Z039) YOAKUM, (TX-Z040) TERRY

02/02/14 00:00 CST 0 Winter Weather 02/02/14 10:00 CST 0

(TX-Z031) MOTLEY, (TX-Z032) COTTLE, (TX-Z036) CROSBY, (TX-Z037) DICKENS, (TX-Z038) KING, (TX-Z041) LYNN, (TX-Z042) GARZA, (TX-Z043) KENT, (TX-Z044) STONEWALL

Late in the evening of February 1st, an open trough approached West Texas from far northern Mexico. Unseasonably deep moisture and strong lift ahead of this trough resulted in a nearly stationary band of moderate to heavy snow from near O'Donnell (Lynn County) northeast to Paducah (Cottle County) shortly after midnight on February 2nd. Lift and instability were so great at times that several cloud-to-ground lightning strikes accompanied this intense band of snow. Snowfall rates in this thundersnow were estimated to be between two and three inches per hour. By 0200 CST, the Sheriff's Office in Post reported treacherous roads and several vehicles in the ditch along Highway 84 from intense snow with visibilities of 50 to 75 feet. This heavy snow band slowly exited the Rolling Plains shortly after daybreak, but not before producing a large snow swath measured between six and ten inches deep. Occasionally gusty north winds during the storm produced some snow drifts up to a couple feet. Dozens of minor vehicle accidents were reported, particularly in Garza, Crosby and Dickens Counties. The high liquid content of the snow (1/2 to 1 inch in many places) provided a modest improvement in the area's long-standing severe drought.

Snowfall totals from NWS cooperative weather observers include:

10.0 inches at Post (Garza County), Lake Alan Henry (Garza County), Guthrie (King County), Spur (Dickens County), Dickens (Dickens County), and Grow (Cottle County), 9.0 inches at Dumont (King County), 7.5 inches at Paducah (Cottle County), 6.0 inches at Jayton (Kent County), 5.0 inches at Roaring Springs (Motley County), 4.8 inches at White River Lake (Crosby County), 4.0 inches at Tahoka (Lynn County), Crosbyton (Crosby County), Aspermont (Stonewall County), and Matador (Motley County), 3.0 inches at Morton (Cochran County), Estelline (Hall County), and Childress (Childress County), 2.5 inches at Plains (Yoakum County), 1.5 inches at Lubbock (Lubbock County), 1.8 inches at Brownfield (Terry County), 1.5 inches at Silverton (Briscoe County), 1.4 inches at Plainview (Hale County), and 1.0 inches at Floydada (Floyd County).

Page 1 of 2 Printed on: 05/03/2014

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details	
TX-Z042) GARZA					
	02/03/14 21:00 CST		0	Winter Weather	
	02/04/14 07:30 CST		0		
noving northeast out of norther ery light snow amounts from th	occurred on the evening of the third into th n Mexico. Abundant low level and near sur ne far southern panhandle into the South PI northbound side of US Highway 84 at the in injured.	face moisture con ains and Rolling I	tributed to freezin Plains. Icy roads ir	g drizzle as well as some n Garza County caused a	
TX-Z021) PARMER. (TX-Z022) C	ASTRO, (TX-Z023) SWISHER, (TX-Z024) BR	ISCOE. (TX-Z025)	HALL. (TX-Z026) (CHILDRESS	
	02/05/14 17:00 CST	, (17, 2020)	0	Winter Weather	
	02/06/14 03:00 CST		0		
·	erative weather observers include: unty), 2.0 inches at Childress (Childress Co	unty), 2.0 inches	at Vigo Park (Swis	her County), 1.5 inches at	
·	nch at Dimmitt (Castro County), Memphis (I	=	= :	2.5	
TX-Z032) COTTLE					
	02/09/14 21:30 CST		0	Winter Weather	
	02/10/14 04:30 CST		0		
ront. During the evening hours, rround 0100 CST on the tenth, a	slow moving cold front moved into the Roll light freezing drizzle and freezing fog bega van traveling through Cottle County, a few ing several individuals. There were no fatal	nn to form creating miles west of Pa	g patchy black ice ducah, encountere	on area roadways. At ed black ice which resulted	
TX-Z027) BAILEY					
	02/18/14 15:30 CST		0	Wildfire	
	02/18/14 18:30 CST		0		
County near the Texas/New Mex	oined with strong westerly winds and very c ico state line on the afternoon of the 18th. e 19th. No major response was required wi	The wildfire was e	extinguished on the	e 18th but several flare	
(TX-Z026) CHILDRESS					
	02/20/14 06:06 CST		0	High Wind (MAX 54 kt)	
	02/20/14 06:06 CST		0		
	02/20/14 06:06 CST				
-	therly winds during the early morning hours irport recorded a wind gust to 62 mph at 06		automated surfac	e observation system	
ASOS) at Childress Municipal A	herly winds during the early morning hours		automated surfac	e observation system	
	herly winds during the early morning hours		automated surfac	e observation system High Wind (MAX 51 kt)	

Strong westerly winds behind a Pacific cold front briefly reached damaging levels in parts of Garza County on the morning of the 28th. By 0840 CST, a Texas Tech University West Texas mesonet station near Graham had measured a peak wind gust of 59 mph. Winds of similar magnitude toppled two trees in Post and also blew a swimming pool over a fence and into the middle of a road.

02/28/14 09:00 CST

Page 2 of 2 Printed on: 05/03/2014