

01

National Weather Service Storm Data and Unusual Weather Phenomena

Flood



July 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estim Dan Property	nated nage Crops	Character of Storm	July 2004
OKLAHOMA, Wester	n, Cent	ral and Southea	<u>st</u>							
Beckham County Erick	01	0030CST			0	0			Hail(0.75)	
Greer County 4 W Willow	01	0100CST			0	0			Hail(1.00)	
Comanche County 3 W Medicine Park	01 Wind v	0610CST was measured by th	e Oklahoma :	mesonet.	0	0			Thunderstorm Wi	nd (MG52)
OKZ016	Custer									

The first significant heavy rainfall and flood event of July occurred during the late evening of June 30 and early morning of July 1 as a large complex of thunderstorms moved through western Oklahoma. Multiple thunderstorms tracked over the same areas and dumped heavy rains of 2 to 5 inches over the region with the highest totals falling just north of Clinton, OK in Custer County. Rainfall reports in the Clinton area included 4.5 inches 3 miles west of Arapaho, 3.5 inches 6 miles west-southwest of Arapaho, and 3.1 inches 1 mile north of Clinton.

0

The subsequent heavy runoff produced flooding along the Washita River and some of its tributaries in Custer County. At 7:30 am CST on July 1, Beaver Creek overflowed its banks and covered Arapaho Street to depths up to 3 feet near the northeast side of Arapaho, OK. In addition, Barnitz Creek overflowed its banks at 1:30 pm CST 2 miles north-northwest of Clinton, and covered 28th Street to a depth of one foot. The area of flooding was approximately 1 mile northwest of the confluence of Barnitz Creek with the Washita River.

The heavy runoff from Barnitz Creek was eventually routed downstream into the Washita River and produced minor to moderate flooding along the Washita River in Custer and Washita counties on July 1. Runoff from Beaver Creek also contributed to the flooding. At the river gage site one mile north of Clinton on U.S. Highway 183, the Washita River crested at 20.1 feet, 2.1 feet above flood stage, at 3:00 pm CST on July 1, and was above flood stage from 9:00 am CST to 8:00 pm CST on July 1. Mainly rural flooding was observed as some croplands along the Washita River were briefly covered by floodwaters, but areas of the Nance Rotary Park and a softball field were also inundated for several hours during the afternoon of July 1.

	01 05	2230CST 0330CST	0	0	Flood			
OKZ007>008-010>011- Grant - Kay - Woodward - Major - Dewey - Stephens 015-039								
Custer County Custer City	01 Hail w	2130CST as reported by KWTV Channel 9.	0	0	Hail(1.75)			
Custer County 2 N Custer City	01	2058CST	0	0	Hail(0.88)			
Caddo County Gracemont	01	0825CST	0	0	Hail(1.00)			

Storm total rainfall amounts of 2 to 4 inches on June 29-July 1 over the North Canadian River basin eventually produced river flooding near Seiling on July 1-2 affecting southeast Woodward, Dewey, and Major counties. Minor rural flooding occurred along the North Canadian River 3 miles north of Seiling, OK at the river gage site. The North Canadian River crested at 11.2 feet, 0.2 feet above flood stage, at 11:00 pm CST on July 1, and was above flood stage from 10:30 pm CST on July 1 to 4:30 am CST on July 2

Meanwhile, rainfall totals of 2 to 3 inches in south central Kansas and north central Oklahoma during the evening of July 2 and the early morning of July 3 produced minor flooding along the Chikaskia River in northeastern Grant and Kay counties. At the river gage site 1 mile northeast of Blackwell, the Chikaskia River crested at 29.8 feet, 0.8 feet above flood stage, and remained above flood stage from 6:00 pm CST on July 2 to 4 am CST on July 3. In addition, the Chikaskia River crested above flood stage at the river gage site near Braman, OK, which is upstream of the Blackwell site in northwestern Kay County. The Chikaskia River near





Time Path Path Number of Estimated Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

OKLAHOMA, Western, Central and Southeast

Braman crested at 6.0 feet, 1 foot above flood stage, at 9:00 am CST on July 2, and remained above flood stage from 2:00 am CST to 10:00 pm CST on July 2.

Heavy rainfall total of 2 to 3 inches on June 30-July 1 also produced flooding in south central Oklahoma in Stephens County. Runoff from these rains caused Mud Creek to overflow its banks and produce minor flooding in eastern Jefferson County on July 2-5. Mud Creek crested at 23.1 feet, 3.1 feet above flood stage, at 8:00 am CST on July 4 at the USGS river gage site near Courtney, OK. Mud Creek remained above flood stage from 9:30 am CST on July 2 to 3:30 am CST on July 5.

	Mud Creek remained above flood stage from 9:30 am CST on July 2 to 3:30 am CST on July 5.								
Dewey County 7 SE Seiling	01	2250CST	0	0		Hail(0.88)			
Grady County 10 E Amber	02	0655CST	0	0		Hail(0.88)			
Mcclain County Payne	02	0725CST	0	0		Hail(0.88)			
Mcclain County Payne	02	0725CST	0	0		Thunderstorm Wind (EG52)			
Garvin County 1 SW Stratford	02 Two is	0740CST nch diameter tree limbs were downed.	0	0	0.10K	Thunderstorm Wind (EG52)			
Pontotoc County 3 SW Ada	standi	0815CST ing injured 3 people at the corner of Ming in the back of a dump truck loading rear tire of the truck.							
Mcclain County 6 W Byars	02	1807CST	0	0		Hail(0.75)			
Pottawatomie County Asher	02	1828CST	0	0		Hail(0.75)			
Mcclain County Byars	02	1830CST	0	0		Hail(2.50)			
Pottawatomie County 2 N Asher	02	1830CST	0	0		Hail(1.75)			
Garvin County 3 N Stratford	02	1850CST	0	0		Hail(1.25)			
Garvin County Stratford	02	1858CST	0	0		Hail(1.00)			
Harmon County 9 N Gould	03	0025CST	0	0		Hail(0.88)			
Jackson County 2 W Altus	03	0030CST	0	0		Hail(0.75)			
Kiowa County 3 W Hobart	03	0030CST	0	0		Hail(0.75)			
Harmon County 2 E Gould	03 Elm tr	0040CST ee limbs 9 to 10 inches in diameter were	0 snapped off.	0	0.10K	Thunderstorm Wind (EG61)			
Comanche County Lawton	03 Repor	0045CST ted by KSWO Television Station.	0	0		Thunderstorm Wind (MG57)			
Jackson County 5 ESE Duke	03	0045CST	0	0		Hail(0.75)			





Location	Data	Time Local/	Path Length	Path Width (Yards)	Numb Pers Killed	sons	Estimated Damage	July 2004
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
OKLAHOMA, West	ern, Cent	tral and South	<u>east</u>					
Tillman County 4 S Tipton	03 Wind	0110CST was measured by	the Oklahoma	Mesonet.	0	0		Thunderstorm Wind (MG64)
Jackson County 5 ESE Elmer	03	0115CST			0	0		Thunderstorm Wind (EG52)
Tillman County Frederick	03 Wind	0122CST was measured by	KFDR ASOS.		0	0		Thunderstorm Wind (MG56)
Tillman County Frederick	03 Wind	0129CST was measured by	KFDR ASOS.		0	0		Thunderstorm Wind (MG56)
Tillman County 3 W Grandfield	03 Wind	0140CST was measured by	the Oklahoma	Mesonet.	0	0		Thunderstorm Wind (MG52)
Ellis County 3 N Catesby	04	1815CST			0	0		Thunderstorm Wind (EG52)
Harper County 8 SW Laverne	04	1820CST			0	0		Hail(0.88)
Harper County Laverne	04	1825CST			0	0		Hail(1.25)
Harper County Laverne	04	1825CST			0	0		Hail(1.75)
Harper County 8 SW Laverne	04	1910CST			0	0		Hail(1.25)
Harper County Laverne	04	1917CST			0	0		Hail(1.00)
Harper County Laverne	04	1941CST			0	0		Hail(1.00)
Harper County Laverne	04	1942CST			0	0		Hail(1.75)
7 W Arnett	04	2150CST			0	0		Hail(0.88)
Ellis County 7 W Arnett	04	2150CST			0	0		Thunderstorm Wind (EG52)
OKZ010	Wood 05	ward 0015CST 0020CST			0	0		High Wind (MG50)
							vind gust of 58 mph.	The wind speed was measured by the
Alfalfa County 8 NE Amorita	05	0115CST			0	0		Thunderstorm Wind (EG52)
Woodward County 11 N Mooreland	05	0210CST			0	0		Hail(1.25)
Woodward County 11 N Mooreland	05	0215CST			0	0		Hail(1.25)
Kay County 5 NE Newkirk	05	0220CST			0	0		Thunderstorm Wind (EG56)





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perse Killed	ons	Estimated Damage Property Crops	July 2004 Character of Storm
OKLAHOMA, Wester				(Tards)	Timed	mjared	rioperty Ciops	Character of Storm
Woods County Alva	05	0250CST			0	0		Thunderstorm Wind (EG56)
Woods County	05	0250CS1			U	U		Thunderstorm wind (EG50)
Alva	05	0300CST			0	0		Hail(1.00)
OKZ021	Beckh 05	0455CST 0520CST			0	0		High Wind (MG53)
	Strong	g winds caused by	a heatburst g	usted as high	as 61 mph,	four miles 6	east-southeast of Eri	ck.
Garfield County 7 S Hayward	05	1640CST			0	0		Hail(0.88)
Logan County Marshall	05	1645CST			0	0		Hail(1.00)
Noble County 9 WSW Perry	05	1700CST			0	0		Hail(0.75)
Garfield County 6 SSE Hayward	05	1735CST			0	0		Hail(0.88)
Noble County 9 WSW Perry	05	1735CST			0	0		Hail(0.88)
Garfield County 7 S Hayward	05	1803CST			0	0		Hail(0.88)
Garfield County Garber	05	1835CST			0	0		Hail(1.25)
Garfield County Fairmont	05	1855CST			0	0		Hail(1.75)
Garfield County 4 WSW Covington	05 Hail w	1915CST was reported by K	WTV Channe	19.	0	0		Hail(2.50)
Garfield County 4 ENE Hillsdale	05	1928CST			0	0		Hail(2.00)
Grant County 8 WSW Pond Creek	05	1928CST			0	0		Hail(2.00)
Garfield County Kremlin	05	1930CST			0	0		Hail(2.50)
Garfield County 3 E Hillsdale	05	1952CST			0	0		Hail(2.50)
Garfield County Kremlin	05	2000CST			0	0		Hail(2.00)
Alfalfa County 2 N Cherokee to Cherokee	inches Lambe	north central Ok	lahoma. Rain a County. Ru	fall totals of noff from th	4 inches we ese rains pr	ere reported roduced fla	west of Cherokee,	Flash Flood ms produced heavy rainfall of 2 to 4+ OK and 3.5 inches was recorded near Cottonwood Creek near Cherokee and
Alfalfa County Great Salt Plains La	05	2100CST			0	0		Hail(1.00)





		Time Local/	Path Length	Path Width	Numb Pers		Estimated Damage	July 2004
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
OKLAHOMA, West	ern, Cen	tral and South	east					
Garfield County Kremlin	05	2100CST			0	0		Hail(0.75)
Woods County Alva	05 Hail v	2100CST was reported on the	ne north side o	f town.	0	0		Hail(1.25)
Woods County Alva	05 Hail v	2100CST was reported on the	ne south side o	f town.	0	0		Hail(1.00)
Alfalfa County Burlington	05	2200CST			0	0		Hail(0.75)
Woods County 2 ESE Alva	05	2200CST			0	0		Hail(1.25)
9 W Cherokee	05	2245CST			0	0		Hail(2.50)
Alfalfa County 7 W Ingersoll Alfalfa County	05	2245CST			0	0		Hail(1.75)
9 W Cherokee	05	2300CST			0	0		Hail(0.88)
Woods County 2 ESE Alva	05 Stron	2340CST g winds caused tr	ees 2 feet in di	iameter to be	0 uprooted as	0 well as n	0.50K umerous tree limbs do	Thunderstorm Wind (EG61) owned. Windows were also broken.
Harper County 1 SW Buffalo	05 Wind	2355CST was measured by	the Oklahom	a Mesonet.	0	0		Thunderstorm Wind (MG53)
Harper County 1 SW Buffalo	06 Wind	0000CST was measured by	the Oklahom	a Mesonet.	0	0		Thunderstorm Wind (MG75)
Harper County Buffalo	06 Nume	0000CST erous tree limbs, u	up to a foot and	d a half in dia	0 meter, were	0 downed.	1K	Thunderstorm Wind (EG69)
Harper County 14 S Buffalo	06 Tree l	0030CST limbs 2 to 3 inche	es in diameter o	downed.	0	0	0.10K	Thunderstorm Wind (EG52)
Woodward County 8 W Woodward	06 Wind	0034CST was measured by	/ KWWR AW	OS.	0	0		Thunderstorm Wind (MG54)
Woods County 16 NNE Freedom	06 Wind	0035CST was measured by	the Oklahom	a Mesonet.	0	0		Thunderstorm Wind (MG72)
Woods County 16 NNE Freedom	06 Wind	0040CST was measured by	the Oklahom	a Mesonet.	0	0		Thunderstorm Wind (MG67)
Woods County 16 NNE Freedom	06 Wind	0045CST was measured by	the Oklahom	a Mesonet.	0	0		Thunderstorm Wind (MG61)
Major County 19 N Chester	06	0100CST			0	0		Thunderstorm Wind (EG52)





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed	er of ons Injured	Estimated Damage Property Crops	Character of Storm	July 2004
OKLAHOMA, Wester	n, Cent	ral and Southe	east						
Woodward County Quinlan	06	0100CST			0	0		Thunderstorm Wir	nd (EG52)
Alfalfa County 1 SSW Cherokee	06 Wind	0115CST was measured by	the Oklahoma	a Mesonet.	0	0		Thunderstorm Win	
Woodward County 6 SE Mutual	06	0115CST was measured by			0	0		Thunderstorm Win	nd (MG54)
Woods County 3 SW Alva	06 Wind	0120CST gust was measure	ed by the KAV	/K AWOS. V			1 at the Alva airport. Spster into one hangar	Thunderstorm Win Several hangars were he door	
Dewey County Vici	06	0125CST			0	0		Thunderstorm Win	nd (MG70)
Alfalfa County Burlington	06 Nume	0130CST rous trees were do	owned.		0	0	1.5K	Thunderstorm Win	nd (EG56)
Alfalfa County Cherokee	06 Nume	0130CST rous tree limbs ac	ross the town	were blown	0 down.	0	5K	Thunderstorm Win	nd (EG52)
Alfalfa County 1 SSW Cherokee	06 Wind	0130CST was measured by	the Oklahoma	a Mesonet.	0	0		Thunderstorm Win	nd (MG54)
Alfalfa County Great Salt Plains La	06 A tree	0130CST one foot in diame	eter snapped a	nd tree limbs	0 6 to 8 inch	0 es in diam	1K neter were downed.	Thunderstorm Win	nd (EG65)
Dewey County 5 E Vici	06 Tree li	0130CST imbs 2 inches in d	liameter were	downed.	0	0	0.10K	Thunderstorm Win	nd (EG52)
Woods County 2 W Capron	06 An 8 i	0130CST nch tree snapped	and tree limbs	5 to 6 inche	0 s in diamete	0 er were do	0.50K wwned.	Thunderstorm Win	nd (EG61)
Alfalfa County 1 SSW Cherokee	06 Wind	0135CST was measured by	the Oklahoma	a Mesonet.	0	0		Thunderstorm Win	nd (MG56)
Grant County 1 SW Medford	06 Wind	0200CST was measured by	the Oklahoma	a Mesonet.	0	0		Thunderstorm Win	nd (MG52)
Kingfisher County 13 WSW Kingfisher	06 An oil M22		n over, killing	g one man wl	1 no was on th	0 ne derrick	10K during the thundersto	Thunderstorm Wirm. The derrick fell on t	
Grant County 1 SW Medford	06 Wind	0205CST was measured by	the Oklahoma	ı Mesonet.	0	0		Thunderstorm Win	nd (MG52)
Garfield County Enid	06 Strong	0230CST g winds were repo	rted on west s	ide of town.	0	0		Thunderstorm Win	nd (EG52)





		Time Local/	Path Length	Path Width	Numbe Perso		Estimated Damage	July 2004
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
OKLAHOMA, Wester	n, Cent	ral and South	<u>east</u>					
Kay County Tonkawa	06 A tree	0255CST was downed.			0	0	0.50K	Thunderstorm Wind (EG52)
Kay County 1 NE Tonkawa	06	0300CST			0	0		Thunderstorm Wind (MG52)
Comanche County Lawton	06 Wind	0449CST was measured by	the KLAW A	.SOS.	0	0		Thunderstorm Wind (MG50)
Comanche County 2 W Pumpkin Center	06	0450CST ower poles were d			0	0	2.5K	Thunderstorm Wind (EG56)
Mcclain County 3 E Dibble	06	0505CST			0	0		Hail(1.00)
Stephens County Duncan	06 Power	0509CST	ed on north si	de of town.	0	0	1K	Thunderstorm Wind (EG56)
Stephens County Duncan	06 Power	0520CST	ed.		0	0	1K	Thunderstorm Wind (EG56)
Washita County 3.5 NNE Bessie		2320CST g winds caused ar commercial build						Thunderstorm Wind (EG61) ster County line. A barn was destroyed,
Greer County 8 N Mangum	06	2350CST			0	0		Hail(0.88)
Jackson County 2 S Blair	07	0010CST			0	0		Hail(0.88)
Greer County 7 N Reed	07	0022CST			0	0		Hail(1.75)
Kiowa County 2 W Snyder	07	0045CST			0	0		Hail(0.88)
Jackson County 4 NE Altus	07	0050CST			0	0		Hail(1.00)
Jackson County 1 W Altus	07	0058CST			0	0		Hail(0.88)
Jackson County 3 S Altus	07 Wind	0100CST was measured by	the Oklahoma	a Mesonet.	0	0		Thunderstorm Wind (MG51)
Jackson County 3 S Altus	07 Wind	0105CST was measured by	the Oklahoma	a Mesonet.	0	0		Thunderstorm Wind (MG52)
Jackson County 3 S Altus	07 Wind	0120CST was measured by	the Oklahoma	a Mesonet.	0	0		Thunderstorm Wind (MG54)
Greer County 6 SW Mangum	07	0130CST			0	0		Hail(1.00)





July 2004 Time Local Path Length Path Number of Estimated Width Persons Damage OKLAHOMA, Western, Central and Southeast **Jackson County 5 ESE Elmer** 07 0135CST 0 0 0.10KThunderstorm Wind (EG52) Tree limbs 2 inches in diameter were broken. **Cleveland County** 0139CST **Noble** 07 0 0 Hail(1.00) **Beckham County** 3 SE Erick 07 0200CST 0 0 Hail(1.00) **Caddo County** 0200CST 0.50KThunderstorm Wind (EG61) 7 ENE Anadarko 07 0 Tree limbs 3 to 4 inches in diameter were downed. **Grady County** 07 0208CST Hail(1.25) 2 E Middleberg 0 0 **Grady County** 2 E Middleberg 07 0208CST 0 Thunderstorm Wind (EG56) 0 **Canadian County** 3 SE Union City 07 0211CST O Hail(0.88) 0 **Mcclain County** 0215CST 0 2 SSW Blanchard 07 0 Hail(1.00) **Mcclain County** 2 SSW Blanchard 0231CST Hail(1.25) **Cotton County Temple** 07 0330CST 0 0 Hail(0.75) **Seminole County** Little 07 0355CST 0 0 Hail(0.88) **Seminole County** 07 Thunderstorm Wind (EG52) 4 S Sasakwa 0500CST O 0 **Pontotoc County** 07 0607CST 0 Hail(0.88) 3 S Ada 0 **OKZ030** Pottawatomie 0 0 Flood Strong thunderstorms dropped isolated storm total rainfall amounts of 2 + inches in west-central Pottawatomie County during the early morning hours of July 7, and produced short-lived river flooding along the Little River. Minor rural flooding occurred along the Little River 5 miles south of Tecumseh, OK at the river gage site. The Little River crested at 12.8 feet, 1.8 feet above flood stage, at 8:30 am CST on July 7 and was above flood stage from 7:00 am CST to 1:00 pm CST on July 7. **Ellis County** 1 E Catesby 08 2355CST Hail(1.00) 0 0 **Washita County** 4 WNW Bessie 1300CST 0 Thunderstorm Wind (MG61) Wind was measured by the Oklahoma Mesonet. **Garfield County** Enid 23 1345CST 20K Thunderstorm Wind (EG61) Strong winds blew the roof off a pet hospital near the intersection of Van Buren and West Chestnut **Cleveland County** Norman 23 1400CST 0.10KThunderstorm Wind (EG56) Tree limbs of approximately 3.5 inches in diameter from a healthy tree were downed approximately 1.5 miles east of the University





Time Path Path Number of Estimated July 2004
Local/ Length Width Persons Damage
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

OKLAHOMA, Western, Central and Southeast

of Oklahoma main campus.

Garfield County

Enid 23 1400CST 0 0 Flash Flood 1600CST

Strong to severe thunderstorms dumped heavy rains over Garfield County, and produced both nuisance flooding and some flash flooding in the area during the afternoon of July 23. Flash flooding and street flooding was reported on the east side of Enid, which stranded some motorists. A street along the entrance to Vance Air Force Base also flooded briefly during this time.

Grant County 1 W Deer Creek	23	1450CST	0	0		Thunderstorm Wind (EG52)
Kay County 5 E Braman	23	1510CST	0	0		Hail(0.75)
Kay County 2 SW Blackwell	23	1513CST	0	0		Thunderstorm Wind (EG65)
Kay County 2 NW Blackwell	23	1515CST	0	0		Thunderstorm Wind (EG52)
Kay County 4 SSE Blackwell	23	1525CST	0	0		Thunderstorm Wind (MG56)
		was measured by the Oklahoma M		U		Thunderstorm wind (WG50)
Kay County Blackwell	23 A brad	1532CST Iford pear tree was downed.	0	0	0.50K	Thunderstorm Wind (EG52)
Greer County 6 N Mangum	23	1812CST	0	0		Hail(0.88)
Marshall County 5 E Kingston	24	1600CST	0	0		Thunderstorm Wind (EG52)
Bryan County Mead	24	1610CST	0	0		Thunderstorm Wind (EG52)
Murray County 6 SW Davis	29	0200CST 0800CST	0	0		Flash Flood

During the late evening and early morning of July 28-29, multiple rounds of thunderstorms produced rainfall totals of 3 to 6 inches over parts of Murray county in south central Oklahoma. The heavy rainfall produced flash flooding and nuisance flooding in several places, including in the Arbuckle Mountains in Turner Falls Park near Davis, OK. Up to 6 inches of rain fell in the area, and Turner Falls Park was closed for at approximately 24 hours beginning at 2:00 am CST on July 29 as water levels in some streams and creeks including Honey Creek were raised 1 to 4 feet in some places. Floodwaters covered some roads during the event, and about 120 campers were unable to use their vehicles due to the high water. Two picnic tables were washed away, and the strong currents and high waters also covered beaches and closed two swimming areas in the park.

Murray County Sulphur to 5 S Sulphur

29 0300CST 0 0 Flash Flood 0 0 Flash Flood

Multiple rounds of thunderstorms produced rainfall totals of 3 to 6 inches over parts of Murray county in south central Oklahoma. The Chickasaw National Recreation Area near Sulphur, OK saw flash flooding during the early morning of July 29, as a low water bridge in the park was covered with floodwaters and debris. In addition, Shepherd Lane west of Sulphur was closed after a tinhorn along the roadside washed out and created a large hole in the road.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perse Killed		Estimated Damage Property Crops	July 2004 Character of Storm
OKLAHOMA, Wester	n, Cent	ral and South	<u>neast</u>					
Ellis County 5 NW Arnett	30	1730CST			0	0		Hail(1,25)
Ellis County 6 E Arnett	30	1735CST			0	0		Hail(1.00)
Roger Mills County 5 ESE Roll	30	1900CST			0	0		Hail(0.88)
Roger Mills County 3 N Sweetwater	30	2012CST			0	0		Hail(1.00)
TEXAS, Western Nort	<u>h</u>							
Wichita County 3 W Burkburnett	03	0150CST			0	0		Thunderstorm Wind (EG56)
Wichita County 2 WNW Burkburnett	03 Metal	0152CST roofs were dama	aged near the in	ntersection of	0 f Highway 24	0 40 and Fa	1.5K rm to Market Road 369	Thunderstorm Wind (EG56)
Wichita County Burkburnett	03 A meta	0153CST al roof was dama	aged on Coppe	r Road.	0	0	1K	Thunderstorm Wind (EG56)
Wichita County Sheppard Afb	03 Wind	0205CST was measured by	y the KSPS AS	SOS.	0	0		Thunderstorm Wind (MG53)
Clay County 1 WNW Jolly	03 A car v	0225CST was blown off th	ne road on Higl	hway 287.	0	0	2K	Thunderstorm Wind (EG65)
Clay County Bellevue	03 Power	0300CST poles were dow	ned.		0	0	2K	Thunderstorm Wind (EG61)
Wichita County Sheppard Afb	06 Wind	0635CST was measured by	y the KSPS AS	SOS.	0	0		Thunderstorm Wind (MG52)
Wilbarger County 5 N Vernon	07	0154CST			0	0		Thunderstorm Wind (MG54)
Wilbarger County 5 N Vernon	07 A hang	0157CST gar at the Wilbar	ger County air	port was hea	0 vily damage	0 d.	10K	Thunderstorm Wind (MG63)
Wichita County Sheppard Afb	07 Wind	0322CST was measured by	y the KSPS AS	SOS.	0	0		Thunderstorm Wind (MG51)
Clay County Henrietta	07	0415CST			0	0		Hail(0.75)
TXZ087>090	Knox - 28 30	Baylor - Archo 0500CST 0000CST	er - Clay		0	0		Flood

The most significant heavy rainfall and flooding event of the month occurred on July 27-30. During this period a strong, slow-moving upper level system moved through Texas, producing multiple rounds of thunderstorms along and near a quasi-stationary front in north Texas and southern Oklahoma during the two-day period on July 27-25.

Rainfall totals for the 48-hour period ending at 6:00 am CST on July 29 reached 2 to 4+ inches in a wide swath that included most of





Time Path Path Number of Estimated July 2004

Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

TEXAS, Western North

western north Texas and south central Oklahoma. The hardest hit areas included the Brazos River basin in Knox and Baylor counties, and parts of the Wichita and Little Wichita River basins in Knox, Baylor, Archer, and Clay counties

Storm total precipitation amounts of 4.5 to 7+ inches were observed in the southern halves of these three Texas counties, and some rainfall totals up to 10 inches were reported. Some of the highest totals measured included: Westover, TX - 9.15 inches; Goree, TX - 8.50 inches; Red Springs 1E, TX - 8.3 inches; Scotland, TX - 8.12 inches; Benjamin 4W, TX - 7.79 inches; Seymour, TX - 7.50 inches; Millers Creek Reservoir - 7.12 inches; Archer City, TX (coop site) - 6.62 inches; and Knox City - 6.0 inches. Unofficial storm total amounts of 10 inches were reported in the Archer City and Bomarton, TX areas.

The subsequent heavy runoff produced by these rains generated flash flooding and riverine flooding in western north Texas and flash flooding in south central Oklahoma. Minor to moderate rural flooding occurred along the Brazos River in Knox and Baylor counties on July 28-30 after the Brazos River basin received rainfall amounts of 2 to 3+ inches. The Brazos River at Seymour, TX crested at 14.9 feet, 2.9 feet above flood stage, at 10:30 pm CST on July 29, and remained above flood stage from 12:00 pm CST July 28 to 12:00 am CST on July 30.

Moderate to major rural flooding occurred along the South Wichita River in Knox County near Benjamin, TX on July 28-29. The South Wichita River crested at 16.8 feet, 4.8 feet above flood stage, at 11:45 am CST on July 28, and remained above flood stage from 5:00 am CST on July 28 to 9:00 am CST on July 29. This flood crest was the third highest crest of record at the USGS gage site.

Further downstream below the confluence of the South Wichita River with the Wichita River, moderate to major rural flooding occurred along the Wichita River in Baylor County near Seymour, TX and just upstream of Lake Kemp on July 28-29. The Wichita River crested at 16.84 feet (flood stage unknown) at 11:45 am CST on July 28. This flood crest was the fifth highest crest of record at the USGS gage site. The heavy runoff from the Wichita and South Wichita Rivers was beneficial for the Wichita Falls area as the reservoir levels at Lake Kemp rose several feet.

The Little Wichita River basin in Archer and Clay counties also saw significant rises during late July. The reservoir levels increased at both Lake Kickapoo and Lake Arrowhead. Moderate to major flooding occurred along the Little Wichita River in Archer County between Lake Kickapoo and Lake Arrowhead near Archer City, TX on July 28-30. The Wichita River crested at 25.21 feet (flood stage unknown) at 2:00 pm CST on July 29. This flood crest was the tenth highest crest of record at the USGS gage site.

Minor rural flooding occurred along the Little Wichita River in Clay County near Henrietta, TX on July 29. The Little Wichita River crested at 18.5 feet, 1.5 feet above flood stage, at 2:30 am CST on July 29, and remained above flood stage from 6:00 pm CST on July 28 to 3:00 pm CST on July 29.

Numerous highways and roads in Knox, Baylor, Archer and Clay counties were closed by floodwaters during the event, and a list of some of these roads/locations by county follows:

Knox County

U.S. Highway 82 (just west of Benjamin, TX)

U.S. Highway 277 (just east of Goree, TX)

Texas State Highway 222 (1 mile west of Knox City, TX)

Texas State Highway 6 (5 miles north of Knox City, TX)

Baylor County

U.S. Highway 82 (1, 3, and 7 miles west of Seymour, TX)

U.S. Highway 183/283 (5 miles south of Seymour, TX)

U.S. Highway 277 (west of Dundee, TX)

Farm-to-Market Road 1152 (2-3 miles southwest of Bomarton, TX)

Farm-to-Market Road 2070 (4 miles north of Bomarton, TX)

Texas State Highway 114 (several location between Seymour and Westover, TX

Archer County

Texas State Highway 79 (4 miles south of Archer City, TX)

Texas State Highway 25 (northwest and east of Archer City, TX)

Texas State Highway 174 (near Windthorst, TX)

Farm-to-Market Road 210 (west of Archer City, TX)

Farm-to-Market Road 2178 (10 miles southwest of Archer City, TX)

Farm-to-Market Road 2581 (5 miles southeast of Archer City, TX)

U.S. Highway 281 (near Scotland, TX)

Farm-to-Market Road 172 (near Scotland, TX)





Time Local/ Length Width Persons Damage
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

July 2004

Killed Injured Property Crops Character of Storm

TEXAS, Western North

Clay County
Texas State Highway 79 (near Byers, TX)
Farm-to-Market Road 171 (near Byers, TX)
Farm-to-Market Road 172 (between Bluegrove and Lake Arrowhead, TX)