



July 2004 Time Local/ Path Length Path Number of Estimated Persons Width Damage **NEW MEXICO, Southeast** Lea County 4 N Tatum 06 2028MST 0 0 0 0 Hail(1.75) Thunderstorms developed during the evening of the 6th over northern Lea County. This storm evolved into an organized line of severe storms before it moved into west Texas. Golfball size hail was reported by workers at an oil rig north of Tatum. **Eddy County** 4 W Artesia 07 1550MST Thunderstorm Wind (MG62) A thunderstorm wind gust of 71 MPH was recorded by the Artesia Airport ASOS from a thunderstorm downburst. The New Mexico State Police reported a traffic accident along U.S. Highway 82 near the airport, but it was unclear if the incident was related to the severe winds. Otherwise, no damage was reported. **Eddy County** Carlsbad to 07 1635MST Hail(1.00) 5 SE Carlsbad Several reports from storm spotters indicated nickel to quarter size hail along a swath from Carlsbad to Otis. The hail persisted in Carlsbad for ten minutes. **Eddy County** Thunderstorm Wind (EG52) 3 SE Carlsbad 07 1635MST 0 A spotter estimated a thunderstorm wind gust to 60 MPH along U.S. Highway 285 between Carlsbad and Otis. No damage was reported. Lea County 24 WNW Jal 07 0 50K Thunderstorm Wind (EG57) Severe thunderstorm winds blew down at least two utility poles in southwestern Lea County. One pole landed on the roof of a rural residence causing extensive damage to the home. Large tree limbs also were broken from the winds Strong to severe thunderstorms affected the plains of southeastern New Mexico during the late afternoon and evening of the 7th. These storms produced large hail and damaging winds. The most significant damage occurred in southwestern Lea County. **Eddy County** 2000MST 2130MST 12 SSW Queen to 7 SSW Carlsbad Flash Flood 10 Strong thunderstorms produced very heavy rainfall over southern Eddy County during the evening of the 10th. Local law enforcement officials reported flash flooding that resulted in high water flowing over several roadways. Portions of County Road 418 were inundated by flood waters south of Queen. Rural roads also were flooded on Washington Ranch in the same area. Dark Canyon Road was covered by at least a half foot of flowing water just west of Highway 62/180 southwest of Carlsbad. Lea County 4 NNE Tatum Hail(0.75) The public reported pea to penny size hail northeast of Tatum. Lea County 2235MST Thunderstorm Wind (EG52) Tatum 18 0 0 15K 0 Severe winds blew a fifty-five gallon drum across a local highway. The drum impacted a Sheriff's Department cruiser. The vehicle sustained significant damage but the deputy was not injured.

An isolated severe thunderstorm affected northern Lea County late in the evening on the 18th. Large hail and damaging thunderstorm winds were reported near Tatum.



Eddy County

17 WNW Carlsbad to

10 NW Carlsbad

25

0930MST

National Weather Service Storm Data and Unusual Weather Phenomena



Flash Flood

75K

0

July 2004 Time Local/ Path Length Path Number of Estimated Width Persons Damage **NEW MEXICO, Southeast** Lea County Jal 24 0 0 0 0 Flash Flood Thunderstorms produced very heavy rainfall as a cold front swept south across the plains of southeastern New Mexico during the afternoon of Saturday the 24th. Flash flooding affected parts of southern Lea County where over a foot of flowing water filled the streets of Jal. The flash flooding conditions experienced in Jal marked the onset of a prolonged heavy rain event over southeastern New Mexico and west Texas. The front swept southwest across the area during the overnight hours, and widespread heavy rainfall erupted over the region during the early morning of Sunday, July 25th. **Eddy County** 4 NNE Queen to 7 ENE Queen 25 0700MST 0 1 25K 0 Flash Flood 2045MST Fifteen hour rainfall totals along the Texas and New Mexico border over Guadalupe Mountains National Park (generally over the Texas portion of the mountain chain) exceeded four inches at several observing stations. Runoff along steep mountainous terrain through numerous canyons and draws combined with additional thunderstorm development over the adjacent plains of Eddy County to result in life threatening flash flood conditions. The first reports of flash flooding were received around 07:00 MST Sunday, July 25th when rural residents north of Queen said Dark Canyon Draw was flooding several secondary roadways. A motorist, an elderly man, became trapped by raging flood waters at Sitting Bull Falls northeast of Queen sometime between 07:00 and 08:00 MST. Forced to climb on top of the car to escape the rising flood waters, the gentleman remained isolated for several hours. Members of the Queen Fire Department finally reached the trapped driver shortly after 11:00 MST and moved him to the safety of higher ground. Hypothermic and suffering exposure injuries, the victim was airlifted to a medical facility for treatment. Emergency officials and storm spotters continued to report flash flooding along Dark Canyon Draw and Last Chance Canyon through the afternoon and evening. Several rural roadways remained closed for the remainder of the day as water rushed through low water crossings. **Eddy County** 5 SW Carlsbad 25 Storm spotters reported flash flooding that resulted in flowing water crossing Hidalgo Road southwest of the city.





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

NEW MEXICO, Southeast



A truck driver was airlifted to safety from raging flood waters along Rocky Arroyo by a U.S. Army rescue helicopter flying out of Fort Bliss, Texas, on the afternoon of Sunday, July 25th. The victim was treated at a nearby hospital for minor injuries. Photo courtesy: Joel Arnwine/Eddy County Division of Emergency Management.

As runoff and additional heavy rainfall continued, flash flood conditions began to spread northeast across Eddy County along the many draws, creeks, and arroyos. By 09:30 MST local officials reported that Rocky Arroyo was flooding U.S. Highway 285 with four to six feet of flowing water northwest of Carlsbad. The typically narrow low water crossing inundated over 100 yards of the federal highway. Later reports confirmed that Rocky Arroyo also was flooding major highways west of the city. At 14:10 MST, over eight feet of flowing water covered State Highway 137 west of Carlsbad

At 15:25 MST emergency officials responded to the site of a distressed driver near the upper part of Rocky Arroyo at County Road 406 ten miles west-southwest of Carlsbad. There emergency officials worked to rescue a truck driver that became stranded in rushing flood waters. An hour later, the trucker was lifted to safety by a military rescue helicopter from Fort Bliss. He was treated at a Carlsbad hospital for minor injuries.

Eddy County Carlsbad

25 2030MST 0 0 100K 0 Flash Flood 26 0100MST

At 20:30 MST an automated river gauge recorded an eight foot flood wave propagating down Dark Canyon Draw and approaching Carlsbad. This wave was the result of runoff and excessively heavy rains over the Guadalupe Mountains and adjacent plains during the course of the previous twenty-four hours. By 21:10 MST several low water crossings in the city were flowing with flood waters four feet deep and seventy-five to 100 yards wide. This threatened homes and property in parts of the city. Local officials reported water running above the curbs in most city streets at 22:15 MST. Damage was minimal and no injuries were reported.

NMZ028 Eddy County Plains

25 2045MST 0 0 0 Flood 26 1100MST





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

NEW MEXICO, Southeast



Water continued to flood the city streets of Carlsbad through Monday monring, the 26th. These flood waters were slow to recede following a flood wave that entered the city from Dark Canyon Draw late Sunday evening. Photo courtesty: Divid Guiliani/Carlsbad Current - Agnus Newspaper.

Flood waters were slow to recede across Eddy County following the significant flash flood event on Sunday, July 25th. Hours after rainfall had ended across the area and runoff through area draws and canyons had crested, low water crossings remained inundated on numerous primary and secondary highways and roadways. Reports indicated these water crossings became passable by midday.

Eddy County 4 NE Queen

27 0505MST 0 0 0 0 Flash Flood 0 900MST

An early morning round of thunderstorms on the 27th aggravated the saturated conditions across southwestern Eddy County. Flash flooding along Dark Canyon Draw resulted and County Road 408 was inundated by flowing water

TEXAS, West

Pecos County 8 W Bakersfield

1 1418CST 0 0 0 0 Hail(0.88)

A left moving anticyclonic supercell thunderstorm moved north across eastern Pecos County on the afternoon of the 1st. This storm produced large hail as it crossed Interstate 10. A motorist reported nickel size hail west of the Bakersfield.

Dawson County 9 NNW Lamesa to 12 NNE Lamesa

04 1840CST 0 0 0 700K Hail(1.00)

An isolated supercell tracked across northern Dawson County during the early evening hours on Independence Day. Local officials reported that penny to quarter size hail covered the ground along Farm to Market Road 1054 north of Lamesa and along U.S. Highway 87 between eight and ten miles north-northeast of the city. Farmers reported significant damage to cotton crops in the area with approximately 10,000 acres lost.

Local media and agricultural officials reported that hail damage to cotton crops began near Farm to Market Road 1064 just east of Punkin Center and cut a wide swath across crop lands to just east of Arvana Gin. The Dawson County Extension Agent noted that crops in irrigated circles were beaten down to stalks and that crops in drylands were wiped out completely.





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

TEXAS, West

Ector County

Odessa to 05 1706CST 0 0 0 Hail(0.88) 8 W Odessa 1725CST

Several reports of penny to nickel size hail were received from the Odessa and West Odessa area.

Brewster County

 $14 \ NE \ Study \ Butte \qquad 05 \qquad 1800 CST \qquad \qquad 0 \qquad 0 \qquad 5K \qquad 0 \qquad Thunderstorm \ Wind \ (EG61)$

A large water tank was blown over by severe thunderstorm winds near the Terlingua Ranch Lodge east of State Highway 118.

Ector County

Pleasant Farms 05 1808CST 0 0 0 Hail(0.88)

Isolated severe thunderstorms developed over the central Permian Basin and Big Bend of west Texas during the late afternoon and evening hours of the 5th. Numerous reports of large hail were received from Ector County as storms affected areas from Odessa and West Odessa to Pleasant Farms. A severe storm in southern Brewster County damaged a large water storage tank

Dawson County Midway to 5 SE Sparenburg

05 1730CST 0 0 0 500K Hail(1.75) 1840CST

For the second consecutive day, damaging hail destroyed cotton crops in Dawson County. An isolated supercell thunderstorm developed over eastern Dawson County during the late afternoon of the 5th. This storm produced large hail that destroyed cotton crops as it propagated south across southeastern Dawson and eastern Martin Counties. The initial report of large hail was received in the community of Midway where nickel size stones began to fall around 17:30 CST. Golfball size hail was later reported along U.S. Highway 87 between Midway and Sparenburg. Cotton farmers along Farm to Market Road 828 reported complete crop losses near Sparenburg.

Martin County

4 ENE Flower Grove to 05 1840CST 0 0 450K Hail(1.75) 5 NNE Stanton 2035CST



An isolated supercell thunderstorm tracked south across parts of Dawson and Martin Counties in the west Texas Permian Basin on the evening of the 5th. Large hail from this slow moving storm resulted in nearly a million dollars worth of damage to local cotton crops. The above photo shows the





July 2004 Time Local/ Path Length Path Number of Estimated Damage Width Persons TEXAS, West storm over Martin County as seen at sunset northeast of Midland. Photo courtesy: National Weather Service - Midland/Odessa, Texas. The Dawson County supercell moved south across eastern Martin County. Reports of nickel to golfball size hail were received along a swath from near the rural community of Brown to Lenorah. Extensive damage occurred to cotton crops, especially in the northeastern parts of the county. The path of the damaging hail ended several miles north of Stanton, where pea size hail was reported shortly before 21:00 CST. **Dawson County** 14 SE Lamesa Flash Flood 05 Runoff and additional thunderstorm activity over southeastern Dawson County resulted in localized flash flooding. High water inundated the intersection of U.S. Highway 87 and Farm to Market Road 828. **Martin County** Lenorah 05 Flash Flood Rural streets and State Highway 176 were submerged by flowing flood waters in and around Lenorah. **Reeves County** 15 SE Pecos 06 0 Hail(0.75) Penny size hail was reported along Farm to Market Road 1450 southeast of Pecos. Winkler County Wink 06 0 0 Hail(1.75) Several reports were received of golfball size hail in Wink. Winkler County 1 SW Wink to 2 NE Wink 25K 250K 06 0 Hail(2.50) Public and media reports indicated that tennis ball size hail broke windows out of vehicles and caused damage to melon crops near Wink. **Gaines County** 13 SW Seminole to 13 S Seminole 1909CST Hail(0.88) 06 A pair of severe storms produced large hail in southern Gaines County. Emergency management officials reported nickel size hail along Farm to Market Road 181 in southwestern Gaines County. Nickel size hail also was reported along U.S. Highway 385 south of Seminole. **Gaines County** 13 SW Seminole Hail(0.88) Nickel size hail was reported on Farm to Market Road 181. **Scurry County** 0015CST 0020CST 07 Thunderstorm Wind (EG57) Dermott Severe thunderstorm winds broke large tree limbs at a rural residence near Dermott. The strongest wind gusts were estimated to approach 65 MPH. **Borden County** 7 E Gail 07 0020CST 0 0 Thunderstorm Wind (MG52) Large tree limbs were broken by severe thunderstorm winds. A rural resident of eastern Borden County measured a 60 MPH wind gust with a home weather station. Mitchell County 1 W Colorado City to Colorado City 07 0050CST 0055CST 0 5K Thunderstorm Wind (EG52)



14 S Ft Stockton to 18 S Ft Stockton

National Weather Service Storm Data and Unusual Weather Phenomena



July 2004 Time Local/ Path Length Path Number of Estimated Width Persons Damage TEXAS, West Scattered thunderstorms affected the west Texas Permian Basin and Upper Trans Pecos region during the evening of the 6th. The most significant damage from this activity occurred in Winkler County where giant hail damaged vehicles and melon crops near Wink. An organized linear complex of storms tracked southeast across the eastern Permian Basin shortly after midnight LST. Severe thunderstorm winds broke large tree limbs and blew a car off of a local highway as regional radars depicted a bow-shaped echo moving southeast across Dawson, Scurry, and Mitchell Counties. **Reeves County** S Verhalen to SW Verhalen 0 0 Hail(0.88) 09 1605CST Multiple reports of nickel size hail were received from the vicinity of Verhalen. Reeves County 09 1648CST 0 0 10K 0 Hail(1.75) Toyah A second severe storm produced large hail over Reeves County. Multiple reports from the public and the broadcast media indicated pea to golfball size hail fell in Toyah for a twenty minute period. Scattered thunderstorms erupted over the west Texas Upper Trans Pecos region during the late afternoon of the 9th. A few of these storms became severe over Reeves County and produced hail up to the size of golfballs. **Jeff Davis County** 2 WNW Ft Davis 1445CST 10 Hail(0.75) Penny size hail was reported along State Highway 118 **Jeff Davis County** 4 WNW Ft Davis to 1 WNW Ft Davis 0 Flash Flood 10 Very heavy rainfall resulted in flash flooding at Fort Davis State Park and along State Highway 118. A National Weather Service cooperative observer reported three inches of rainfall during a short time period just west of Fort Davis. **TXZ074** Davis / Apache Mountains Area 0 Landslide Local emergency management officials reported that very heavy rainfall and flash flooding in Fort Davis State Park resulted in a rock slide along State Highway 118. Ten boulders, 300 to 400 bounds each, fell from a steep embankment onto the highway three miles west-northwest of Fort Davis. Officials driving along the state route encountered the rock slide as it was in progress and were able to block traffic. Strong to severe thunderstorms produced very heavy rainfall over the Davis Mountains during the afternoon of the 10th. Large hail, flash flooding, and a rock slide that covered a state highway with large boulders resulted from the storms. Thanks to timely action from local officials, no damage or injuries were reported **Pecos County**

Thunderstorms and very heavy rainfall caused flash flooding along U.S. Highway 385 south of Fort Stockton. Local officials reported over one foot of water flowing over the highway at several locations between fourteen and eighteen miles south of the city

Flash Flood

0





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

Time Location Path Path Width Persons Damage
(Yards) Killed Injured Property Crops Character of Storm

TEXAS, West

Scurry County Snyder

24 1337CST 0 0 30K 0 Flash Flood

A cold front approached the northern Permian Basin of west Texas during the afternoon of the 24th. The front interacted with a tropical airmass over the region and resulted in scattered thunderstorm development. Very heavy rainfall over Snyder caused flash flooding in city streets. Fire department officials reported minor flooding that began shortly after 13:30 CST. Conditions then rapidly deteriorated with high water rescues of stranded motorists conducted by 14:00 CST.

The flash flood event in Snyder on the afternoon of Saturday, July 24th kicked off an extensive flash flooding episode across west Texas and southeastern New Mexico. Widespread heavy rainfall erupted over the region during the early morning hours Sunday, July 25th as the cold front swept south.

Culberson County Guadalupe Pass to Pine Spgs

4 2000MST 0 0 0 Heavy Rain 5 1100MST

Thunderstorms and very heavy rainfall developed late Saturday along the advancing frontal boundary. This convection produced fifteen hour rainfall totals between three and five inches over the steep terrain of the Guadalupe Mountains. Runoff from the mountainous areas through numerous draws and canyons combined with additional storms over the adjacent plains of Eddy County, New Mexico resulting in life threatening flash flood conditions there on Sunday, July 25th

Flash Flood

Terrell County
15 NNE Dryden to
32 NNE Dryden

25 0430CST 0 0 1.1M 0

A bridge on State Highway 349 was condemned by Texas Department of Transportation officials after flash flooding along Dry Creek severely damaged the structure early Sunday, July 25th. Over eighteen feet of water raged through the creek and washed away concrete and earthen embankments leaving a single concrete pillar to support the bridge. The bridge's structure also was cracked in several locations. Photo courtesy: National Weather Service - Midland/Odessa, Texas.





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

TEXAS, West

A large complex of thunderstorms erupted over southeastern Pecos County, northeastern Brewster County, and much of Terrell County during the pre-dawn hours Sunday. Terrell County received the heaviest rainfall, with KMAF 88D Doppler radar estimates that totaled seven to nine inches over rural portions of north-central Terrell County between 03:00 and 12:00 CST. Widespread and damaging flash flood conditions resulted across the west Texas Lower Trans Pecos.

This heavy rainfall and its associated runoff produced flash flooding along Dry Creek and Independence Creek. Local officials reported that a wall of water that measured eighteen feet in height propagated down Dry Creek in the pre-dawn hours. The debris-filled flood waters severely damaged a bridge on State Highway 349 twenty-five miles north-northeast of Dryden. By midday an earthen and concrete embankment on the north end of the bridge was washed away, and the structure was cracked in several locations. Only a single concrete pillar and a thin layer of asphalt prevented a complete collapse.

In addition to the extensive damage sustained to the bridge, large segments of State Highway 349 also were washed away between the intersection of Farm to Market Road 2400 and Dry Creek as water rushed through low lying areas and small tributaries. Stretches of pavement measuring 100 feet in length were stripped away. At 16:20 CST local officials reported more than three feet of water flowing over Big Canyon Bridge fifteen miles north of Dryden. Later reports indicated that the bridge did not sustain significant structural damage.

Raging flood waters also deposited huge mounds of mud and gravel up to four feet deep over the highway. With a lull in thunderstorm activity during the mid afternoon, flash flooding along State Highway 349 generally receded by 15:00 CST. Road crews worked for days to remove the vast amount of debris and damage that resulted from the flood waters

Terrell County 28 NE Dryden

25 0500CST 1200CST 0 0 0 Flash Flood

Flash flooding impeded operations at the Terrell County Gas Plant Sunday morning when employees became stranded due to water that flowed through the plant's secondary road network. At 06:00 CST plant workers reported a rainfall measurement of 4.50 inches. Heavy rain continued to fall at the plant through early afternoon.

Pecos County

2 ENE Sheffield to

25 0530CST 1800CST 0 0 130K 0 Flash Flood

Heavy rainfall farther north over eastern Pecos County resulted in a crest of twenty feet along the Pecos River just east of Sheffield around 06:00 CST. This crest combined with the continuation of heavy rainfall caused extensive flash flooding in rural areas east and southeast of the city.

Shortly before 16:00 CST travelers on Interstate 10 witnessed a pickup truck and a camper trailer floating beneath the Pecos River bridge. A search downstream by local authorities ensued, but many rural location across along the river were inaccessible due to extensive flooding. It was later determined that the pickup and camper trailer were swept into the Pecos River by flash flooding on the Pecos River Ranch near Sheffield. The vehicle and trailer were vacant when they were overtaken by raging flood waters, and were ultimately found many miles down river near the Rio Grande. Several head of cattle also were killed in the flood waters

Terrell County 36 NE Dryden

Dryden 25 0600CST 0900CST

0 200K 0 Flash Flood





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, West



The Chandler Ranch headquarters suffered extensive damage on Sunday, July 25th when two large flood waves moved south along the Pecos River and initiated flash flooding of the adjacent low lying areas. Large trees were uprooted, debris destroyed a swimming pool, and several structures sustained damage including cracked foundations. Photo courtesy: National Weather Service - Midland/Odessa, Texas.

The first of two flash floods along the Pecos River in northeastern Terrell County occurred just before sunrise. Runoff from the Dry Creek flood that damaged State Highway 349 emptied into the Pecos River from the lower portion of Independence Creek. The Chandler Ranch headquarters, located in a flood plain adjacent to the merger of Independence Creek and the Pecos River, sustained serious damage.

Ranch residents described a large "wall" of water that swept through the flood plain and inundated the headquarters. Large trees were uprooted by the currents. A swimming pool was destroyed by debris carried in the raging water. Several structures, including a permanent residence, were severely damaged. Damage to the headquarters was aggravated by a second significant flood wave that propagated down the Pecos and produced another round of flash flooding on the grounds late Sunday evening

TXZ082 Terrell

25 0630CST 0 0 100K 0 Flood 26 1500CST

Flood waters from the swollen Dry Creek isolated thirteen workers from the Grey Wolf Drilling Company. The men were stranded on an "island" for almost thirty-six hours at an oil well site twenty-two miles northeast of Dryden. A helicopter rescue was attempted around 14:00 CST Sunday, but adverse weather conditions restricted rescue operations. The workers were not seriously injured when they walked to safety around 15:00 CST on Monday, July 26th. Minor flood damage to oil field equipment occurred

Flash Flood

Terrell County 39 NNE Dryden to 26 NW Dryden

25 0900CST 0 0 300K 0 2000CST





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

TEXAS, West



Large mounds of mud, gravel, and other debris were deposited over Farm to Market Road 2400 and State Highway 349 in northern Terrell County by raging flash floods on Sunday, July 25th. Some debris piles required days of work by road crews to remove. Photo courtesy: National Weather Service - Midland/Odessa, Texas.

Flash flooding along Independence Creek inundated the intersection of State Highway 349 and Farm to Market Road 2400 in northern Terrell County. A local newspaper reported that flood waters stranded a pair of motorists at the intersection. Emergency crews from Iraan (Pecos County) responded and conducted swift water rescues to bring the couple to safety

Dangerous flash flood conditions along Independence Creek, Farm to Market Road 2400 and its intersection with State Highway 349 corresponded to a flood wave measured along the creek at the Chandler Ranch, several miles east-southeast of the intersection. At 09:45 CST a gauge registered a crest of eighteen feet. Independence Creek empties into the Pecos River on the northeast side of the Chandler Ranch property. The ranch headquarters suffered severe damage as a series of waves swept down the Pecos River and produced flash flooding of low lying areas.

Following the rescue of stranded motorists, emergency officials closed Farm to Market Road 2400 and State Highway 349 south of Sheffield. Water along Farm to Market Road 2400 began to recede shortly after 18:00 CST. State Highway 349 remained closed for an extended period of time due to extensive damage along Dry Creek. Texas Department of Transportation crews worked for several days to remove large pieces of vegetation and other debris from the highways.

Pecos County Sheffield to 3 SW Sheffield

25 1000CST 0 0 0 Flash Flood 2000CST

State Highway 349 was closed from Sheffield south into Terrell County after Pecos County emergency officials successfully rescued motorists from flood waters near the intersection of Farm to Market Road 2400. Intermittent flash flooding along the route also made travel hazardous across Pecos County.

Pecos County
53 SSE Et Stockton

53 SSE Ft Stockton 25 1003CST 0 0 15K 0 Flash Flood



4 N Study Butte to 6 E Study Butte

National Weather Service Storm Data and Unusual Weather Phenomena



July 2004 Time Local Path Length Path Number of Estimated Width Persons Damage TEXAS, West 1315CST Local officials reported at least one stranded vehicle inundated by flood waters on U.S. Highway 90 near the Longfellow Ranch headquarters. Emergency officials conducted a high water rescue to retrieve the motorists from the stalled car. **Terrell County** Flash Flood 3 W Sanderson to 10 W Sanderson 1003CST 1330CST 25 Law enforcement officials from Sanderson reported intermittent flash flooding that inundated U.S. Highway 90 from Sanderson to the Pecos County line. **Pecos County** 6 SE Ft Stockton to 41 SE Ft Stockton 1135CST Flash Flood 1600CST Flash flooding along U.S. Highway 285 rendered that highway impassable in Pecos County. Local officials reported intermittent flood waters that inundated the route at several locations from Fort Stockton to the Terrell County line **Terrell County** 36 NE Dryden 25 26 2100CST 0030CST 100K 0 Flash Flood A second wave of convection developed over the Lower Trans Pecos region Sunday evening. The additional rain combined with the saturated conditions and standing water to quickly result in another round of flash flooding. The Chandler Ranch headquarters was impacted by a second large flood wave that propagated down the Pecos River and produced flash flooding. This event damaged several structures, including the foundation of a primary ranch residence which was cracked by the force of the flood waters. No injuries were reported. **Ward County** 6 ENE Monahans 25 0718CST Flash Flood A second focus for thunderstorm development and heavy rainfall evolved over the west Texas Upper Trans Pecos region early Sunday. This activity slowly tracked east into the western Permian Basin. Isolated occurrences of flash flooding resulted from this complex of heavy rainfall. Officials at Monahans Sandhills State Park reported that nearly a half foot of water flowed over secondary road. **Ector County** 25 0847CST 0 0 10K Flash Flood Odessa Vehicles were stranded by high flood waters at the intersection of West County Road and 22nd Street. Over two feet of flowing water made portions of Tom Green Avenue impassable. Between one and two feet of water also inundated U.S. Highway 385 near Odessa College. **Brewster County** 1 SE Study Butte to 3 WSW Study Butte 0 Flash Flood During the mid morning hours Sunday, infrared satellite imagery depicted rapid cooling of cloud top temperatures over the southern Big Bend as thunderstorm activity increased. This activity resulted in flash flooding across portions of the national and state parks. State Route 170 was inundated by high water at several locations when Terlingua Creek and Long Draw flooded near Study Butte. **Brewster County**

The National Park Service and the local media reported that flash flooding along Alamo Creek resulted in flowing water that

Flash Flood





July 2004 Time Local/ Path Length Path Number of Estimated Persons Width Damage TEXAS, West inundated State Route 170 east of Study Butte. In addition, flash flooding of low lying areas resulted in hazardous driving conditions along State Highway 118 north of the city. **Brewster County** 25 NE Alpine 0945CST 0 Flash Flood 25 Repeated waves of thunderstorm activity trained across the far northern parts of Brewster County and southern Pecos County Sunday morning. An Alpine radio station reported flash flooding on U.S. Highway 67 making it impassable due to high water on the Pecos and Brewster County line near Hovey. **Pecos County** 22 SW Belding 25 0945CST Flash Flood An Alpine radio station reported flash flooding that made U.S. Highway 67 impassable due to high water on the Pecos and Brewster County line near Hovey. In summary, widespread heavy rainfall and flash flooding over west Texas on Sunday, July 25th resulted in nearly \$3 million worth of damage. The hardest it area was the west Texas Lower Trans Pecos region in the vicinity of Terrell County. Extensive damage occurred along Texas State Highway 349. Several waves of flash flooding along area rivers and creeks threatened structures and motorists. No injuries or fatalities resulted from event. **Brewster County** 1945CST 2100CST Flash Flood 21 NE Alpine 27 Convection once again erupted over the Big Bend and Davis mountain during the late evening of Tuesday, July 27th. As this activity increased in coverage and spread northeast across west Texas, another round of widespread flash flooding unfolded. The first reports were received shortly before 20:00 CST when the Texas Department of Public Safety reported flash flooding that caused water to inundate U.S. Highway 67 fifteen miles northeast of the U.S. Highway 90 intersection. The flood waters left debris on the highway that had to be removed by road crews. **Pecos County** 3 NE Coyanosa to 7 NNE Coyanosa 2200CST 2330CST 0 Flash Flood An ambulance crew traveling between Coyanosa and Monahans reported flash flooding that caused high water to flow over Farm to Market Road 1776 in several locations between Coyanosa and the Pecos/Ward County line. **Ward County** 15 SSW Monahans to 13 SSW Monahans 27 Flash Flood An ambulance crew traveling between Coyanosa and Monahans reported flash flooding that caused high water to flow over Farm to Market Road 1776 in several locations. **Brewster County** 1 NW Alpine to 8 NNW Alpine 27 28 Flash Flood 0030CST Local law enforcement officials reported intermittent flash flooding along State Highway 118 between Alpine and the Jeff County line. **Jeff Davis County** 2230CST 14 SE Ft Davis to 10 SE Ft Davis 27 28 0 Flash Flood Local law enforcement officials reported intermittent flash flooding along State Highway 118 Fort Davis and the Brewster County





July 2004 Time Local/ Path Length Path Number of Estimated Persons Width Damage TEXAS, West **Brewster County** Alpine 28 0 0 10K 0 Flash Flood Heavy rainfall and excessive runoff resulted in flash flooding along Alpine Creek. Police officers barricaded several city streets as flood waters inundated the roadways. Water levels in some locations climbed to three feet. Damage was reported to be minimum, but several houses were threatened. **Howard County** Big Spring to 3 N Big Spring 0045CST 0330CST 15K Flash Flood 28 0 Flash flooding conditions developed rapidly in Big Spring. At 00:45 CST the Big Spring Police Department reported over one foot of water flowing over the Interstate 20 service road. Numerous other city streets also were closed due to flash flooding, including Parkway and Alamesa Streets east of Sixth Street. At 02:13 CST a vehicle was swept off of U.S. Highway 87 north of Big Spring. Fire Department Personnel rescued the driver and no injuries resulted. **Presidio County** 13 E Marfa 28 0200CST 0300CST Flash Flood Officials reported flash flooding that briefly resulted in the closing of U.S. Highway 90 just west of Paisano Pass. **Gaines County** 8 E Seminole 0224CST 0430CST Flash Flood 28 The Gaines County Sheriff's Office reported flash flooding that resulted in high water over U.S. Highway 180 east of Seminole. **Dawson County** O Flash Flood Lamesa to 17 NNE Lamesa 28 Dawson County officials reported intermittent flash flooding that resulted in water covering U.S. Highway 87 between Lamesa and the Lynn County line. **Terrell County** Dryden to 28 NNE Dryden 28 0600CST Flash Flood Workers at the Terrell County Gas Plant reported high water covering portions of State Highway 349 between Dryden and the gas plant. Strong thunderstorms erupted over west Texas late in the evening on Tuesday, July 27th. This activity produced very heavy rainfall that resulted in flash flooding across the region through Wednesday morning. **Terrell County** 38 N Dryden to 26 NW Dryden 1620CST 1800CST Flash Flood 28 Law enforcement officials reported high water flowing over Farm to Market Road 2400 in several locations across northern Terrell County **Scurry County** Snyder 29 0108CST 0300CST Flash Flood

Emergency officials in Snyder barricaded several city streets due to flash flooding

Residual shower and thunderstorm activity persisted over west Texas until the unusually moist tropical airmass was finally shunted east of the region late on the 29th. Thunderstorms that developed were very efficient rain producers, and flash flooding remained an occasional threat through the period.





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

TEXAS, West

Gaines County
2 N Seminole to
Seminole

29 1445CST 0 0 20K 0 Thunderstorm Wind (MG63)

A downburst resulted in severe thunderstorm winds near Seminole during the afternoon of the 29th. The West Texas Mesonet site just north of Seminole recorded a wind gust of 73 MPH. Police Department officials estimated 80 MPH winds in the city. Reports indicated several power poles and lines were blown down by the winds. In addition, large tree limbs also were broken and at least one large tree was uprooted. A lack of structural damage suggested that the strongest winds may not have occurred within the city limits