



National Weather Service

Storm Data and Unusual Weather Phenomena



September 2004

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

NEW MEXICO, Southeast

Lea County

| | | | | | | | | | |
|--------------|-----------|----------------------------|--|--|----------|----------|----------|----------|--------------------|
| Hobbs | 04 | 2100MST 2200MST | | | 0 | 0 | 0 | 0 | Flash Flood |
|--------------|-----------|----------------------------|--|--|----------|----------|----------|----------|--------------------|

A line of thunderstorms moved across the southeastern plains of New Mexico during the late evening hours of the 4th. Local officials reported flash flooding in Hobbs. High water flowed through several city streets and some intersections were impassable.

Eddy County

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|------------------------------------|-----------|----------------------------|--|--|----------|----------|----------|----------|--------------------|
| 4 N Queen to 8 NE Queen | 21 | 1334MST 1745MST | | | 0 | 0 | 0 | 0 | Flash Flood |
|------------------------------------|-----------|----------------------------|--|--|----------|----------|----------|----------|--------------------|

Storm spotters reported "significant" flash flooding along Last Chance Creek. Flood waters along the swollen creek crossed parts of Canal Street with more than five feet of flowing water.

Lea County

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|---------------|-----------|----------------------------|--|--|----------|----------|------------|----------|--------------------|
| Eunice | 21 | 1530MST 1645MST | | | 0 | 0 | 25K | 0 | Flash Flood |
|---------------|-----------|----------------------------|--|--|----------|----------|------------|----------|--------------------|

Eunice law enforcement officials reported flash flooding that inundated city streets and resulted in several stalled vehicles. High water rescues of stranded motorists were conducted on Main Street. No injuries were reported.

Lea County

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|-------------------|-----------|----------------|--|--|----------|----------|------------|----------|---------------------------------|
| 1 S Eunice | 21 | 1530MST | | | 0 | 0 | 15K | 0 | Thunderstorm Wind (EG61) |
|-------------------|-----------|----------------|--|--|----------|----------|------------|----------|---------------------------------|

Severe thunderstorm winds damaged a trailer home just south of Eunice. A large tree also was uprooted.

Strong to severe thunderstorms affected southeastern New Mexico during the afternoon and evening of the 21st. Very heavy rainfall from this activity resulted in localized flash flooding. Thunderstorm winds also damaged a homestead near Eunice

Lea County

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|----------------------|-----------|----------------|--|--|----------|----------|----------|----------|---------------------------------|
| 2 W Lovington | 22 | 2147MST | | | 0 | 0 | 0 | 0 | Thunderstorm Wind (MG50) |
|----------------------|-----------|----------------|--|--|----------|----------|----------|----------|---------------------------------|

A line of strong to severe thunderstorms moved across the plains of southeastern New Mexico during the evening of the 22nd. An anemometer at the Lovington Airport measured a 58 MPH thunderstorm wind gust as the storms passed. Half inch diameter hail also was reported by the airport staff.

Lea County

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|--------------------------------------|------------------|----------------------------|--|--|----------|----------|----------|----------|--------------------|
| Monument to 3 W Lovington | 26 27 | 0230MST 1500MST | | | 0 | 0 | 0 | 0 | Flash Flood |
|--------------------------------------|------------------|----------------------------|--|--|----------|----------|----------|----------|--------------------|

A prolonged period of widespread heavy rainfall began over the plains of southeastern New Mexico late on Saturday the 25th. By the early hours of Sunday the 26th, extensive flash flooding was occurring in Lea County. At 02:30 MST high water was reported flowing over State Highway 483 seven miles south of Lovington. Additional flash flooding occurred along a corridor from Lovington to Monument through early Monday the 27th.

Before daybreak Sunday morning, flash flooding caused high water to inundate State Highway 8, four miles north of Monument. A swollen draw near monument also produced flash flooding that covered several secondary roadways with flowing water.

Showers and thunderstorms continued to move northwest over Lea County during the afternoon and early evening hours. Numerous roads and highways in the vicinity of Lovington were affected by flash flooding by 20:00 MST. Flood waters submerged U.S. Highway 82 from Lovington to three miles west of the city.

A short-lived break in convective activity occurred during the late evening. Flash flooding continued, however, as runoff maintained flash flooding conditions over U.S. Highway 82 near Lovington.

Bands of showers and thunderstorms redeveloped by midnight MST over southern and central Lea County. This activity aggravated the flash flooding near Lovington along U.S. Highway 82 and caused additional flash flooding that affected several secondary roadways.

Moderate to occasionally heavy rainfall continued over central Lea County through early morning on Monday the 27th. At 12:00 MST local officials reported that U.S. Highway 82 west of Lovington remained closed due to flowing water. Flooding there receded by mid afternoon Monday.



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NEW MEXICO, Southeast

one mile southeast of Artesia. Lakewood Road also was inundated by flash flooding between U.S. Highway 285 and Lakewood. In addition, the heavy rainfall caused small creeks and draws to swell. Eagle Draw in Artesia rapidly filled with flood waters and threatened U.S. Highway 82 by 12:00 MST. No reports of injuries or significant damage were received.

Eddy County

21 W Carlsbad

| | | | | | | | | | |
|-----------|----------------|--|--|--|----------|----------|----------|----------|--------------------|
| 26 | 1320MST | | | | 0 | 0 | 0 | 0 | Flash Flood |
| 27 | 0030MST | | | | | | | | |

Flash flooding along Rocky Arroyo, northwest of Carlsbad, resulted in three to four feet of flowing water over New Mexico State Highway 137, six miles southwest of the U.S. Highway 285 intersection.

Although heavy rainfall ended over Eddy County by 19:00 MST, runoff into Rocky Arroyo caused "significant" flash flooding to persist along County Road 401 through midnight MST Monday. The roadway was inundated by flowing water two miles west of New Mexico Highway 137.

Lea County

12 WNW Jal

| | | | | | | | | | |
|-----------|----------------|--|--|--|----------|----------|----------|----------|--------------------|
| 27 | 1515MST | | | | 0 | 0 | 0 | 0 | Flash Flood |
| | 2000MST | | | | | | | | |

Another round of showers and thunderstorms produced heavy rainfall over southern Lea County on the morning of Monday the 27th. Flash flooding along State Highway 128 was reported by the Jal Police Department. High water flowed over the highway twelve miles west of Jal.

In summary, flash flooding became widespread across southeastern New Mexico on Sunday the 26th and persisted into Monday the 27th. Doppler radar estimated three day rainfall totals exceeding eleven inches across portions of Lea County by late Monday. The excessive rainfall caused flash flooding that inundated many area roadways. Motorists became stranded by flood waters in both Eddy and Lea Counties Sunday. No injuries were reported.

Eddy County

**12 NW Carlsbad to
2 SW Carlsbad**

| | | | | | | | | | |
|-----------|----------------|--|--|--|----------|----------|----------|----------|--------------------|
| 27 | 0515MST | | | | 0 | 0 | 0 | 0 | Flash Flood |
| | 0800MST | | | | | | | | |

Although heavy rainfall had temporarily ended over Eddy County, runoff from previous rains over the Guadalupe Mountains resulted in another flood wave that propagated though Dark Canyon Draw. Flash flooding in several Carlsbad neighborhoods resulted. County Road 408, Hidalgo, Radio, and Boyd Streets were all closed in the city's southwest side due to high water.

In addition, runoff through Rocky Arroyo made portions of New Mexico State Highway 137 and U.S. Highway 285 briefly impassable.

Eddy County

**3 SW Carlsbad to
17 ESE Carlsbad**

| | | | | | | | | | |
|-----------|----------------|--|--|--|----------|----------|----------|----------|--------------------|
| 29 | 2153MST | | | | 0 | 0 | 0 | 0 | Flash Flood |
| 30 | 1400MST | | | | | | | | |

Thunderstorms and heavy rainfall again developed over portions of southeastern New Mexico late on the 29th. Flash flooding was reported along Dark Canyon Draw from the area just south of Carlsbad, to Loving, to New Mexico State Highway 128 in eastern Eddy County. The first reports indicated three feet of flood waters flowing across County Road 408 at 21:53 MST. A fifty foot stretch of the road was submerged. Several streets that run into the side of Carlsbad were barricaded by local officials due to high water. Higby and Ogden Roads also were closed near Loving by 23:10 MST.

Runoff and occasional heavy rainfall continued to produce flash flooding at the same locations through the night. By 03:48 MST the Eddy County Sheriff's Office reported that flooding had spread east to New Mexico State Highway 128 in eastern Eddy County. Reports throughout the early morning hours of the 30th indicated little change in the flash flood threat with numerous roadways that remained submerged by high water.

Rainfall over the county ended by 10:00 MST. Runoff of the earlier heavy rains continued to result in flash flooding conditions,



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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

NEW MEXICO, Southeast

however, through early afternoon.

Lea County

| | | | | | | | | | |
|--------------|-----------|----------------|--|--|----------|----------|----------|----------|--------------------|
| Hobbs | 29 | 2325MST | | | 0 | 0 | 0 | 0 | Flash Flood |
| | 30 | 0300MST | | | | | | | |

The Hobbs Police Department reported that flash flooding caused high water to rendered several city streets impassable

Eddy County

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|----------------|-----------|----------------|--|--|----------|----------|----------|----------|--------------------|
| Artesia | 30 | 0745MST | | | 0 | 0 | 0 | 0 | Flash Flood |
| | | 0930MST | | | | | | | |

Local officials reported that numerous city streets were inundated by high water as a result of flash flooding.

Showers and thunderstorms repeatedly tracked over portions of southeastern New Mexico late on the 29th and early on the 30th. With saturated ground conditions in place after recent flooding rains, isolated flash flooding quickly developed across parts of Eddy and Lea Counties.

Eddy County

| | | | | | | | | | |
|---------------------|-----------|----------------|--|--|----------|----------|----------|----------|-------------------|
| 2 N Lakewood | 30 | 1425MST | | | 0 | 0 | 0 | 0 | Hail(0.75) |
| | | 1535MST | | | | | | | |

An isolated supercell thunderstorm developed over northern Eddy County during the afternoon hours of the 30th. This storm produced large hail as it affected the Lakewood area along U.S. Highway 285.

Eddy County

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|-------------------------------------|-----------|----------------|--|--|----------|----------|----------|----------|--------------------|
| 2 N Lakewood to Carlsbad | 30 | 1435MST | | | 0 | 0 | 0 | 0 | Flash Flood |
| | | 1630MST | | | | | | | |

Flash flooding affected several city streets in Carlsbad and U.S. Highway 285 between Carlsbad and Lakewood after a round of strong to severe thunderstorms tracked across the area producing very heavy rainfall. Over one foot of water flowed out of several fields and crossed secondary roadways north of Carlsbad.

TEXAS, West

Ector County

| | | | | | | | | | |
|---------------|-----------|----------------|--|--|----------|----------|----------|----------|--------------------|
| Odessa | 01 | 1450CST | | | 0 | 0 | 0 | 0 | Flash Flood |
| | | 1512CST | | | | | | | |

Several reports were received from the public and a local newspaper reporter of urban flooding in Odessa during the afternoon of the 1st. Over six inches of water was reported flowing through the intersection of Second and Jackson Streets in downtown, and more than a foot of water crossed the intersection of Sixteenth and Harless on the city's southwest side. The strong thunderstorm that produced a burst of heavy rainfall over the city quickly dissipated and the flooding receded within half an hour.

Ector County

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|-------------------------------------------------|-----------|----------------|--|--|----------|----------|----------|----------|--------------------|
| 1 ENE Gardendale to 3 ENE Gardendale | 01 | 1720CST | | | 0 | 0 | 0 | 0 | Flash Flood |
| | | 1830CST | | | | | | | |

A second thunderstorm persisted for nearly an hour over State Highway 158 in northeastern Ector County during the evening of the 1st. Doppler radar estimates indicated that up to two inches of rain fell just northeast of Gardendale. At least one foot of water inundated several secondary roads.

Scattered convection develop over the west Texas Upper Trans Pecos and the western Permian Basin late on the 1st. Two isolated strong thunderstorms produced very heavy rainfall over Ector County and resulted in localized flash flooding



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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

TEXAS, West

Midland County

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|-------------------------------|-----------|----------------------------|--|--|----------|----------|----------|----------|--------------------|
| 1 S (Maf) Midland Intl | 23 | 1955CST 2130CST | | | 0 | 0 | 0 | 0 | Flash Flood |
|-------------------------------|-----------|----------------------------|--|--|----------|----------|----------|----------|--------------------|

National Weather Service employees encountered half a foot of running water over the Interstate 20 service road on the south side of Midland International Airport.

An isolated severe multicell thunderstorm produced large hail and damaging thunderstorm winds as it propagated northwest across Midland County. The vicinity of Midland International Airport was hardest hit by the storm with quarter size hail and damaging winds.

Ector County

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|---------------|-----------|----------------------------|--|--|----------|----------|------------|----------|--------------------|
| Odessa | 25 | 0910CST 1200CST | | | 0 | 0 | 30K | 0 | Flash Flood |
|---------------|-----------|----------------------------|--|--|----------|----------|------------|----------|--------------------|

A broad complex of showers and thunderstorms moved northeast over the west Texas Permian Basin on the 25th. As heavy rainfall from this activity spread over Odessa, dangerous flash flooding conditions developed rapidly in the city streets. At 09:10 CST fire department personnel conducted high water rescues at the intersection of Tanglewood and Pembroke. Numerous roadways across the city were quickly closed due to flood waters. Motorists also were rescued from stalled vehicles near the intersection of Tom Green and University Avenue. No injuries were reported.

Midland County

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|-----------------------------------|-----------|----------------------------|--|--|----------|----------|-------------|----------|--------------------|
| Midland to 4 E Midland | 25 | 0947CST 1230CST | | | 0 | 0 | 100K | 0 | Flash Flood |
|-----------------------------------|-----------|----------------------------|--|--|----------|----------|-------------|----------|--------------------|

Storm spotters, law enforcement officials, and the local media reported several instances of flash flooding across Midland. At 10:00 CST Texas Department of Public Safety troopers and Midland Fire Department personnel rescued a woman and three children from a vehicle submerged in three feet of water near the intersection of West Industrial Avenue and South Midland Drive.

Shortly before 10:30 CST rescue crews assisted stranded motorists on Illinois Avenue and at the intersection of Midkiff Road and Wadley Avenue. At 11:00 CST an elderly driver was rescued from a vehicle submerged in six feet of flowing water near Midland College. Flood waters reportedly covered the trunk and hood of the sports utility vehicle and entered the cab. Fire crews anchored a safety line across Wadley Avenue to reach the distressed motorist.

In addition, over a foot of water covered the Loop 250 access road between Thomason and State Highway 191 near Grandecom Stadium. Over two feet of water covered the Interstate 20 access road at the intersection of Farm to Market Road 1130. Two traffic accidents on Interstate 20 in Midland were indirectly related to the wet weather when cars lost control on the wet pavement. One such accident resulted in an injured motorist. No injuries or fatalities resulted from the flash flooding.

Scurry County

| | | | | | | | | | |
|---------------|-----------|----------------------------|--|--|----------|----------|----------|----------|--------------------|
| Snyder | 25 | 1439CST 1630CST | | | 0 | 0 | 0 | 0 | Flash Flood |
|---------------|-----------|----------------------------|--|--|----------|----------|----------|----------|--------------------|

Local officials reported that flash flooding resulted in high water running down Avenue E in Snyder. The street was closed to traffic.

Brewster County

| | | | | | | | | | |
|--------------------|-----------|----------------|--|--|----------|----------|----------|----------|-------------------|
| Study Butte | 25 | 1630CST | | | 0 | 0 | 0 | 0 | Hail(1.00) |
|--------------------|-----------|----------------|--|--|----------|----------|----------|----------|-------------------|

Isolated strong to severe thunderstorms erupted over the mountainous terrain of southwest Texas during the afternoon hours of the 25th. The National Park Service reported quarter size hail near Study Butte.

Convection was widespread over west Texas on the 25th. The initial activity decreased from west to east during the afternoon hours,



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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

TEXAS, West

but not before resulting in very dangerous urban flash flooding across portions of the Permian Basin. Isolated strong to severe thunderstorms erupted again by late afternoon over the mountainous regions of the state. One storm produced large hail near the Big Bend National Park.

Jeff Davis County

**10 WSW Ft Davis to
16 W Ft Davis**

| | | | | | | | | | |
|-----------|----------------|--|--|--|----------|----------|------------|----------|--------------------|
| 26 | 0755CST | | | | | | | | |
| 27 | 0500CST | | | | 0 | 0 | 10K | 0 | Flash Flood |

Very dangerous flash flooding conditions developed rapidly on the morning of the 26th across Jeff Davis County. At 07:55 CST the Fort Davis Fire Department reported two persons stranded by flood waters in Short Canyon, thirteen miles north-northeast of Fort Davis. The fire department also reported that work was underway to rescue two additional stranded campers in Madera Canyon, ten miles west-southwest of the McDonald Observatory.

Rescue crews were able to bring the campers in Madera Canyon to safety shortly before noon CST. Additional flash flooding was reported along Olympia Creek, where water up to six feet in depth inundated Texas Highway 118 for 200 yards between Fort Davis and the Fort Davis State Park. The intersection of Texas Highways 118 and 17 also was submerged by flowing flood waters

Flooding along Olympia Creek was reported to have receded by mid afternoon. A second flood wave, however, raged through the creek and inundated the same portion of State Highway 118 north of the Fort Davis around 16:45 CST. The water again receded making the highway passable by 19:35 CST.

Dangerous conditions persisted through much of the night in rural Jeff Davis County near Short Canyon. Two people remained isolated at a deserted ranch house near Wild Rose Pass by raging flood waters. The individuals were airlifted to safety via a helicopter rescue just before dawn on the morning of the 27th. No serious injuries or damage was reported.

Brewster County

**20 S Alpine to
Terlingua**

| | | | | | | | | | |
|-----------|----------------|--|--|--|----------|----------|----------|----------|--------------------|
| 26 | 0825CST | | | | | | | | |
| | 1400CST | | | | 0 | 0 | 0 | 0 | Flash Flood |

A trained spotter reported flood waters crossing State Highway 118 twenty miles south of Alpine at 08:25 CST. Flash flooding also inundated numerous rural secondary roadways at Terlingua Ranch near State Highway 118 in southern Brewster County.

Before the heavy rainfall ended across Brewster County during the late afternoon, additional flash flooding was reported near Terlingua. Law enforcement officials reported that several low water crossings there flooded and several local highways were impassable.

Reeves County

**9 NNW Orla to
Orla**

| | | | | | | | | | |
|-----------|----------------|--|--|--|----------|----------|------------|----------|--------------------|
| 26 | 1030CST | | | | | | | | |
| | 1900CST | | | | 0 | 0 | 25K | 0 | Flash Flood |

At 10:30 CST residents in Orla reported high water that inundated yards and threatened homes. Water in the streets of Orla flowed one foot deep. No major damage was reported.

A National Weather Service Cooperative Observer west of Red Bluff Dam reported flood waters crossing U.S. Highway 285 in northern Reeves County at 10:40 CST. Five to six feet of water was reported flowing over County Road 447 five miles north of Orla at 15:45 CST. At that time, the Red Bluff Dam Cooperative Observer reported a forty-eight hour rainfall total of five inches.

The heavy rainfall ended over most of Reeves County by late afternoon. Runoff continued to result in flash flooding through mid evening. The last report that was received indicated that three feet of water continued to flow over County Road 447 north of Orla at 18:00 CST.



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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

TEXAS, West

Culberson County

Van Horn to
Pine Spgs

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 26 | 1041CST 1700CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

At 10:41 CST National Park Service employees reported flash flooding that resulted in high water over Texas Highway 54 at several locations between Van Horn and Pine Springs. A later report from the National Park Service indicated that the water was flowing up to two feet deep at some locations by 15:15 CST.

Heavy rainfall exited Culberson County by late afternoon. The flash flooding quickly receded along Texas Highway 54, but debris was reported covering portions of the highway, where flooding had occurred at 17:30 CST

Loving County

19 NW Mentone to
1 N Mentone

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 26 | 1100CST 1415CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

Several public reports indicated flash flooding across western Loving County. At 11:00 CST, at least one foot of water was reported flowing over Farm to Market Road 652 in the northwestern parts of the county. Additional flooding was reported at 11:45 CST along County Road 300 one mile north of Mentone, where flowing water up to one foot deep crossed the road

Gaines County

14 W Seagraves

| | | | | | | | | | |
|----------|--------------------|--|--|--|---|---|-----|---|--------------------|
| 26 27 | 1455CST 0100CST | | | | 0 | 0 | 15K | 0 | Flash Flood |
|----------|--------------------|--|--|--|---|---|-----|---|--------------------|

Flash flooding inundated Texas Highway 214 near the Gaines/Yoakam County line. At 14:55 CST a car was washed off of the highway just south of the county line by flowing flood waters. Local emergency officials closed the highway after the driver of the vehicle was brought to safety and it was not re-opened until the water receded after midnight CST.

Ector County

Odessa

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 26 | 1650CST 1930CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

Several city streets were inundated by urban flash floods across the south side of Odessa. More than two feet of water flowed through portions of Tom Green and Muskeegum Streets between 8th and 15th Streets. Parts of 11th and 12th Streets were impassable with nearly three feet of water. The intersection of Meadow and Murphy also was flooded with two feet of flowing water.

Winkler County

1 SW Wink

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 26 | 1650CST 2100CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

Texas State Route 115 was barricaded and closed to traffic through much of the evening due to flash flooding caused by a low water crossing that flooded and inundated the highway near Wink.

Andrews County

20 WNW Andrews to
27 WNW Andrews

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 26 | 1730CST 2000CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

Trained storm spotters reported that flood waters intermittently covered Texas Highway 176 in western Andrews County. Half a foot of flowing water crossed the highway at several locations between twenty and twenty-seven miles west-northwest of the city

Ward County

Monahans

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|-----|---|--------------------|
| 26 | 1734CST 1945CST | | | | 0 | 0 | 25K | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|-----|---|--------------------|

Multiple reports from Monahans indicated that heavy rainfall produced flash flooding that quickly inundated city streets and threatened several residences. Local law enforcement officials reported that city streets remained barricaded at 19:00 CST. Flood waters in the city receded by late evening. No major damage was reported.



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|----------|------|----------------------------|---------------------------|--------------------------|-------------------------------------------|--|------------------------------------------|--|--------------------|

TEXAS, West

Howard County

Big Spring

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|----|--------------------|--|--|--|---|---|------|---|-------------------|
| 26 | 1745CST 1820CST | | | | 0 | 0 | 100K | 0 | Heavy Rain |
|----|--------------------|--|--|--|---|---|------|---|-------------------|

Heavy rainfall caused ponding of water on many driving surfaces near Big Spring. A semi-truck hydroplaned off of Interstate 20 on the north side of the city. A second semi-truck lost control and jack-knifed when the driver tried to avoid a collision with emergency workers responding to the first incident.

Howard County

Big Spring

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|-----|---|--------------------|
| 26 | 1755CST 2000CST | | | | 0 | 0 | 20K | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|-----|---|--------------------|

The Big Spring Police Department barricaded several city streets due to flowing flood waters that resulted from flash flooding. The most significant flooding was reported in the city's northwest side. At 18:43 CST a motorist was stranded in flood waters at the 1400th block of Sixth Street. Northwest Second and Benton Streets also were closed.

Gaines County

15 W Seminole to 13 W Seminole

| | | | | | | | | | |
|----------|--------------------|--|--|--|---|---|---|---|--------------------|
| 26 27 | 1915CST 0030CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----------|--------------------|--|--|--|---|---|---|---|--------------------|

Portions of U.S. Highway 62/180 were impassable due to flowing flood waters west of Seminole. Numerous secondary roads also were inundated in the immediate area.

Dawson County

Lamesa

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 26 | 1950CST 2300CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

Several locations were inundated by flood waters in Lamesa. Flash flooding caused high water to flow through Forest Park and along North Main Street.

Tropical-like rainfall occurred over portions of west Texas during the last weekend in September. On Sunday the 26th, widespread flash floods resulted from heavy rains that accompanied a complex of warm topped convection that propagated slowly from the mountains of southwest Texas and the Big Bend northeast across the Permian Basin.

A sudden onset of dangerous flash flooding conditions at sunrise caught campers by surprise in the Davis Mountains. At least four people were isolated by raging flood waters at two camp sites in rural portions of that county. Campers at one site were stranded for nearly twenty-four hours before a rescue helicopter was used to lift them to safety.

The threat of significant flash flooding spread northeast across the Upper Trans Pecos and the west Texas Permian Basin through the afternoon and evening hours. This resulted in dangerous driving conditions across portions of the area. A car was swept off of a highway by flood waters in Gaines County during the early evening hours. Serious injuries or deaths were narrowly avoided when two semi-trucks lost control and hydroplaned off of a rain soaked Interstate 20 in Howard County. One truck barely missed emergency workers who were attending to the initial accident.

The heavy rainfall began to subside across most of the region by late evening on the 26th. Flash flooding continued in some locations as runoff persisted through much of the night. No injuries were reported across the area.

Gaines County

8 W Seminole to 8 E Seminole

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 27 | 0600CST 1000CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

Before sunrise on Monday the 27th, thunderstorms again initiated over the Permian Basin. Heavy rainfall from this activity quickly led to flash flooding over saturated grounds. Local law enforcement officials reported flash flooding at several locations along U.S. Highway 180 in the vicinity of Seminole. Between one and two feet of flowing water was reported over a half mile stretch eight miles east of Seminole. The intersection of Farm to Market Road 1429 and U.S. Highway 180 also was inundated by flood waters



National Weather Service

Storm Data and Unusual Weather Phenomena



September 2004

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

TEXAS, West

six miles east of the city. High water also made a stretch of the same highway impassable eight miles west of Seminole during the late morning hours.

Gaines County

8 W Seagraves to Loop

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 27 | 0640CST 1230CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

Texas Highway 83 also was affected by flash flooding in northern Gaines County. At 06:40 CST local officials reported flowing flood waters over the highway eight miles west of Seagraves. Hazardous driving conditions spread east along that route through the morning hours as the heavy rainfall slowly propagated east. Up to two feet of water covered the intersection of Texas Highway 83 and U.S. Highway 385 in Seagraves. Impassable conditions also were reported east along Texas Highway 83 near Loop

Borden County

14 W Gail

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 27 | 1010CST 1130CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

The Dawson County Sheriff's Office reported flash flooding along U.S. Highway 180. Up to eight inches of flowing flood waters covered the highway on the Dawson/Borden County line

Dawson County

**4 ESE Lamesa to
16 E Lamesa**

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 27 | 1010CST 1130CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

The Dawson County Sheriff's Office reported flash flooding along U.S. Highway 180 from four miles east-southeast of Lamesa to the Dawson/Borden County line. Portions of the highway were covered by up to eight inches of flowing flood waters.

A pre-dawn round of thunderstorms resulted in another round of flash flooding across the northwestern Permian Basin of west Texas. Several major highways were closed due to high water.

Andrews County

Andrews

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|-----|---|--------------------|
| 27 | 1630CST 1900CST | | | | 0 | 0 | 25K | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|-----|---|--------------------|

Thunderstorms and heavy rain again erupted over west Texas during the afternoon of the 27th. Saturated ground conditions were first aggravated by downpours over Andrews. Urban flash flooding quickly ensued and several vehicles stalled in flooded city streets. The Andrews Fire Department conducted at least one high water rescue. No injuries were reported

Ward County

**20 SSE Monahans to
22 SSE Monahans**

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|--------------------|
| 27 | 2110CST 2330CST | | | | 0 | 0 | 0 | 0 | Flash Flood |
|----|--------------------|--|--|--|---|---|---|---|--------------------|

Trained spotters reported high water flowing over Farm to Market Road 871 in southeast Ward County. Several secondary roadways also were inundated by flood waters.

Ector County

**5 SSE West Odessa to
West Odessa**

| | | | | | | | | | |
|----------|--------------------|--|--|--|---|---|----|---|--------------------|
| 27 28 | 1925CST 1500CST | | | | 0 | 0 | 2M | 0 | Flash Flood |
|----------|--------------------|--|--|--|---|---|----|---|--------------------|



National Weather Service

Storm Data and Unusual Weather Phenomena



September 2004

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

TEXAS, West



An Ector County Streets and Highways Department official redirects traffic at Sixteenth Street and Redondo Avenue where flash flooding along Monahans Draw inundated the highway and nearby homes. Photo courtesy: Mark Sterkel - Odessa American.

A small linear convective complex developed over western Ector County during the early evening hours. The complex persisted and remained nearly stationary for almost two hours. Very intense rainfall fell over Monahans Draw near West Odessa.

The first reports of flash flooding indicated that high water rendered Farm to Market Road 866, Texas Highway 302, and Interstate 20 impassable. Up to six feet of water was reported crossing low lying areas of Farm to Market Road 866 just north of the Interstate 20 junction. Several vehicles became stalled in high water flowing across the interstate, resulting in high water rescues of stranded motorists.

By late evening the swollen Monahans Draw, usually a dry depression, inundated residential areas in West Odessa. The hardest hit areas were near Third and Damascus Streets. The most extensive damage occurred to several trailer parks in the Westcliff, Knox Village, and Manor subdivisions. Rescue crews from three fire departments worked well into the night to remove distressed residents from homes and vehicles that were threatened by high water. One fire engine stalled in the flood waters. Many families were displaced to emergency shelters in other portions of the city and in Odessa. More than forty homes suffered serious damage. Four trailer homes and two permanent homes were destroyed. Another fifteen single family homes experienced major damage from the flood waters.

Thunderstorms dissipated over Ector County shortly before midnight CST. This brought a temporary reprieve from the excessive rainfall. Runoff, however, continued to present a threat of flash flooding through the nighttime hours. As a result local emergency management officials continued to report major flash flooding along Monahans Draw through the night.

During the pre-dawn hours of Tuesday the 28th, another band of showers and thunderstorms moved north across Ector County. Brief heavy rainfall from this activity aggravated the flash flood situation. By 06:35 CST local officials were again at work to evacuate residents near the intersections of Tripp and Twenty-Third Streets and Tenth and Redondo Streets. Between two and three feet of water was reported rushing through those city streets and threatened numerous homes. At least three high water rescues also were conducted to bring stranded motorists to the safety of dry ground.

Rainfall ended over Ector County by 09:00 CST. Significant runoff and associated flash flooding of low lying areas prevented access to much of the city through the early afternoon hours.



National Weather Service

Storm Data and Unusual Weather Phenomena



September 2004

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

TEXAS, West

Ector County

| | | | | | | | | | |
|---------------|-----------|----------------|--|--|----------|----------|------------|----------|-------------------|
| Odessa | 27 | 2000CST | | | 0 | 0 | 30K | 0 | Heavy Rain |
| | 28 | 1200CST | | | | | | | |



Men work to patch damage caused when very heavy rainfall triggered the collapse of a roof of a downtown Odessa business. Photo courtesy Cindeka Nealy - Odessa American.

Heavy rainfall over Odessa during the late evening and overnight hours Monday the 27th and the early morning hours of Tuesday the 28th caused the flat-topped roof of a business to collapse in downtown. Although extensive damage occurred to the business, no injuries were reported.

TXZ061

| | | | | | | | | | |
|--------------|-----------|----------------|--|--|----------|----------|-------------|----------|--------------|
| Ector | 28 | 1500CST | | | 0 | 0 | 250K | 0 | Flood |
| | | 1800CST | | | | | | | |



National Weather Service

Storm Data and Unusual Weather Phenomena



September 2004

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

TEXAS, West



Members of the Midland Fire Department work to aid the driver of a mini-van that stalled in high water following flash flood producing rains on the morning of Monday the 28th. Photo courtesy: Tim Fischer - Midland Reporter-Telegram.

At 08:30 CST running water was reported flowing over the intersection of Loop 250 and Business Interstate 20. The local media reported a vehicle submerged under an overpass at the intersection of Midland Drive and Industrial at 08:45 CST. Fire department crews rescued a woman trapped in a water stalled mini-van on West Industrial Avenue. No injuries were reported

Flash flooding across the central Permian Basin of west Texas resumed during the mid to late morning hours when a band of showers and thunderstorms developed and propagated across the area. Several rural and secondary roadways were inundated by flood waters in Howard County. In addition, dangerous urban flash flooding resulted in at least two submerged vehicles in Midland.

Culberson County
4 S Pine Spgs

| | | | | | | | | | |
|----|--------------------|--|--|--|--|--|--|--|---------------------------------|
| 29 | 1922MST 1923MST | | | | | | | | Thunderstorm Wind (MG50) |
|----|--------------------|--|--|--|--|--|--|--|---------------------------------|

Reeves County
Orla

| | | | | | | | | | |
|----|---------|--|--|--|--|--|--|--|-------------------|
| 29 | 2320CST | | | | | | | | Hail(0.75) |
|----|---------|--|--|--|--|--|--|--|-------------------|

Isolated strong to severe thunderstorms developed over the west Texas Upper Trans Pecos and in vicinity of the Guadalupe Mountains during the late evening hours of the 29th. One thunderstorm produced severe wind gusts near Guadalupe Mountains National Park. An Automated Surface Observation System located at Guadalupe Pass near U.S. Highway 62/180 recorded a peak gust of 58 MPH. A second severe storm produced hail up to the size of pennies in Orla.

Dawson County
10 NNE Lamesa

| | | | | | | | | | |
|----|--------------------|--|--|--|--|--|--|--|--------------------|
| 30 | 0825CST 1000CST | | | | | | | | Flash Flood |
|----|--------------------|--|--|--|--|--|--|--|--------------------|

Convective activity lingered over the northern Permian Basin into the morning hours of the 30th. Local officials reported that flash flooding briefly resulted in over half a foot of water flowing across a portion of U.S. Highway 87 north of Lamesa



National Weather Service

Storm Data and Unusual Weather Phenomena



September 2004

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

TEXAS, West

Reeves County

2 S Saragosa to Saragosa

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|---|---|------------|
| 30 | 1725CST 1726CST | | | | 0 | 0 | 0 | 0 | Hail(1.00) |
|----|--------------------|--|--|--|---|---|---|---|------------|

A Texas Department of Public Safety trooper reported penny to quarter size hail and "high" winds from the intersection of Interstate 10 and Texas Highway 17 north to Saragosa.

Ward County

Grandfalls

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|-----|---|------------|
| 30 | 1817CST 1821CST | | | | 0 | 0 | 25K | 0 | Hail(1.75) |
|----|--------------------|--|--|--|---|---|-----|---|------------|

Law enforcement officials reported quarter to golfball size hail in Grandfalls. Minor damage to vehicles was reported.

Ward County

Grandfalls to 2.5 ESE Grandfalls

| | | | | | | | | | |
|----|--------------------|--|--|--|---|---|-----|---|--------------------------|
| 30 | 1820CST 1822CST | | | | 0 | 0 | 75K | 0 | Thunderstorm Wind (EG65) |
|----|--------------------|--|--|--|---|---|-----|---|--------------------------|



A trailer home was rolled and destroyed by severe thunderstorm winds in Grandfalls on the 30th. Winds associated with a large downburst snapped telephone polls, destroyed two trailers, and caused extensive roof damage to a historic church. Photo courtesy: National Weather Service - Midland/Odessa, Texas.

Strong to severe thunderstorms over Pecos County spawned a left moving (anticyclonic) severe storm that rapidly propagated over the town of Grandfalls. Quarter to golfball size hail was reported in addition to damaging winds. Five power poles were snapped along State Route 11 just southeast of town. In town, an abandon mobile home was rolled by the winds and destroyed while the roof of another mobile home in the southwest portions of the community was blown onto a nearby pickup truck. Several trees were uprooted and a historic church also sustained serious roof damage.

A damage survey conducted by the National Weather Service concluded that the severe winds that produced the damage was uniform in direction, blowing debris from the southwest to the northeast. The damage swath covered an area three miles wide. These observations were consistent with the occurrence of a large downburst, or macroburst.

Thunderstorms erupted along the Davis Mountains in southwest Texas during the afternoon and evening of the 30th. Several of these thunderstorms became severe as they propagated northeast across the Trans Pecos and produced large hail and damaging winds. The most significant impacts from the storms occurred in the community of Grandfalls. Damaging winds destroyed two trailer homes



National Weather Service

Storm Data and Unusual Weather Phenomena



September 2004

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

TEXAS, West

and partially removed the roof on a historic church.