



Southwest Weather Bulletin

Autumn-Winter 2006-2007 Edition

National Weather Service El Paso/Santa Teresa

Heavy Rains and Flash Floods Devastate Western Texas and Southern New Mexico

After near record drought conditions during the winter and spring, the summer monsoon struck with a historic vengeance across western Texas and southern New Mexico. From July through mid September 2006 a series of shower and thunderstorm clusters with torrential rainfalls brought destructive flooding to much of the region, especially to El Paso Texas and surrounding locations. In addition flooding destroyed or severely damaged areas around Alamogordo, Hatch, Silver City and Truth or Consequences. The Rio Grande reached its highest level since 1912 with the Gila River also rising to near flood stage.

Severe thunderstorms also struck parts of the borderland this summer with one long-lived supercell thunderstorm producing a tornado and golf ball-sized hail around Las Cruces. By mid September the 2006 monsoon was the wettest on record for much of the region with up to 30 inches of rain falling in the El Paso Metropolitan Area. Damage from flooding was estimated at over 200 million dollars across western Texas and southern New Mexico resulting in portions of the region being declared a Federal Disaster Area.

The good news is no deaths or serious injuries were reported from the floods.



On Aug 1 2006 torrential rains produce widespread flash flooding and major damage across El Paso including the Shadow Mountain area above.

Spring and Summer 2006 Weather Highlights

May 14: Severe thunderstorms produce quarter-size hail around Timberon and hail the size of ping pong balls damages cars and roofs over portions of El Paso.

May 15: Thunderstorms bring heavy rains and small hail across Grant County including the Silver City area.

May 31: Severe thunderstorms strike El Paso County with one inch-diameter hail at Clint and quarter-size hail at Socorro.

June 1: Severe thunderstorms drop one inch-diameter hail and heavy rains with street flooding across Truth or Consequences.

Continued on page 2.

National Weather Service El Paso/Santa Teresa

Meteorologist-In-Charge - Bill Alexander

Warning Coordination Meteorologist – John Fausett

Science Officer – Val Macblain

Newsletter Editor-Writer/Senior Forecaster – Joe Rogash





On June 22 torrential downpours severely flood portions of Alamogordo with 10th Street becoming a raging river. (Photographed by Michael Becker Alamogordo Daily News)

Weather Highlights Continued

Downpours Bring Major Flash Flooding to Alamogordo

June 22: Thunderstorms dump up to four inches of rain over northern Otero County causing major flash flooding across Alamogordo. Rains turn streets into raging rivers with homes and buildings flooding, property and infrastructure damaged and some vehicles being washed away. Water reaches window-level on a few streets forcing evacuations in some neighborhoods. Serious flooding also occurs at Boles Acres and Marble Canyon with total damage estimated at two million dollars.



Abbott Street and Boyce Avenue in Alamogordo after the June 22 heavy rains. (Photographed by J.B. Schneider Alamogordo Daily News)



On May 13 this weak tornado moves across Alamogordo. (Photographed by Clay Carmichael)



An arroyo floods near Silver City during the heavy rains of May 15. (Photographed by Jill Thomison)

Deadly Storms Strike the Borderland

On July 6 thunderstorms with torrential rains move across the borderland causing death and destruction. A high precipitation supercell develops over Jaurez Mexico causing major flooding which kills six people. The storm moves northward into El Paso and Santa Teresa where heavy rains flood roads over western portions of the city.

Elsewhere flooding is widespread over Hatch, Anthony, and Chaparral. High waters wash out bridges around Hatch after the La Placitas arroyo overflows. Lightning strikes also cause power outages with over 10,000 El Paso residents without electricity.

July 8: Thunderstorms with heavy rains move across Sierra County with almost three inches of rain falling over portions of Truth or Consequences. Road washouts and flooding occur along Highway 51.

Further south severe thunderstorms drop golf ball-size hail and flood streets over Luna County around Deming.

July 13: Thunderstorm high winds bring blowing dust to the Deming, Lordsburg and Columbus areas with low visibilities forcing the closure of Highway 11. Other storms produce heavy rains and street flooding around the Organ and Moongate communities in Dona Ana County.

July 14: Severe thunderstorms produce 70 mph winds at White Sands Missile Range.

July 15: Severe thunderstorms with heavy rains bring quarter-size hail to Fabens and widespread street flooding and small hail to portions of the El Paso Metropolitan area.



May 19 thunderstorms produce this small tornado near Las Cruces. (Courtesy of Jack Diven Photography)



On July 6 this high precipitation supercell brings heavy rains and major flooding to Jaurez Mexico before moving into the El Paso and Santa Teresa areas. The floods kill at least six people in Jaurez. (Photographed by Heather Bishop)

July 26: Thunderstorms with heavy rain move across areas of Grant County with flooding of Maude's Canyon Creek around Santa Clara. The high waters force evacuations and damage a few buildings in the Santa Clara vicinity.

July 27: Evening thunderstorms wash out roads around Hueco Tanks, Clint and eastern El Paso. Lightning strikes also cause power outages across El Paso.



Blowing dust and low visibilities occur over Santa Teresa and west El Paso when strong thunderstorm winds blow across the area on June 22. (Photographed by Joe Rogash NOAA/NWS)

Floods and Mudslides Plague Region

During the afternoon of July 28 strong thunderstorms drop heavy rains over areas of Grant and western Sierra County causing widespread flooding across the region. Over three inches of rain fall on portions of the Silver City area with creeks and arroyos overflowing and causing serious flooding around San Vincente. Widespread street flooding brings road closures through much of Silver City, including the downtown area. Percha Creek overflows in western Sierra County after heavy rains fall in the Hillsboro vicinity.

Strong thunderstorms with heavy rains develop over El Paso County Texas during the evening of the 28th with activity continuing into the early morning hours of the 29th. Torrential downpours break a levee in Clint with a deluge of water and mud damaging homes and motor vehicles. Heavy rains and high waters also flood homes, businesses and streets across Montana Vista and Horizon City.

July 30: Streets flood across east El Paso where evening thunderstorms dump two to three inches of rain.

July 31: Slow moving thunderstorms with more very heavy rains cause widespread flooding across sections of El Paso and Dona Ana Counties. Rockslides and debris shut down Trans Mountain Road through the Franklin Mountains. Street flooding also closes some El Paso roads while water submerges cars in Santa Teresa.



Over three inches of rain fall around Silver City on July 28 flooding the San Vincente area. (Photographed by Jim Marshall)



Mudslides partially bury a car and truck in Clint during the heavy rains of July 28-29. (Photographed by John Fausett NWS/NOAA)



Very heavy rains on July 28 cause the Percha Creek to overflow near Hillsboro. (Photographed by Russ Bowen)



High waters submerge cars in Santa Teresa after the heavy rains of July 31. (Photographed by Mark Lambie/El Paso Times)

TORRENTIAL RAINS BRING DEVASTATING FLASH FLOODS TO THE EL PASO METROPOLITAN AREA



This shower and thunderstorm complex remains almost stationary over west El Paso and surrounding areas for about seven hours bringing the worst flooding in the city's history. (Photographed by Joe Rogash NWS/NOAA)

On August 1 a trough of low pressure moves slowly across southern New Mexico and western Texas while extremely moist and weakly unstable air flows into the region. With the wind speeds aloft weak, this weather pattern generates widespread rain showers and a few thunderstorms over western El Paso and southern Dona Ana Counties during the early morning with storms becoming almost stationary and dumping heavy rains through the morning and early afternoon. As a result probably the worst flooding on record occurs around the El Paso Metropolitan Area with three to eight inches of rain falling.

The deluge forces arroyos and streams to rapidly overflow with streets becoming raging torrents of water. The floodwaters severely damage or destroy homes, businesses and other property and overturn or carry away motor vehicles. Many roads are closed including Interstate 10 leaving the El Paso vicinity literally cut off for several hours.

In west El Paso rushing waters demolish a Blockbuster Video store and damage a number of homes and businesses around Thunderbird and Mesa. Elsewhere in west El Paso homes, businesses and vehicles suffer severe damage or destruction around Donaphan St., Shadow Mountain, Silver Springs and Mesa Hills. Northeast El Paso is also hard hit with widespread flooding requiring emergency water rescues and evacuations.

The entire village of Vinton Texas is evacuated as arroyos overflow, streets flood and water rises to almost five feet in some neighborhoods. Front end loaders are used to

Continued on page 6)



The August 1 2006 deluge severely floods and damages much of west El Paso including the Thunderbird and Mesa area where rushing waters destroy this eighteen-wheeler.



August 1 flooding at Donaphan and Frontera in west El Paso.



Numerous vehicles are submerged or washed away by floodwaters over west El Paso and surrounding communities.



Water rescue in Canutillo

evacuate Vinton residents to higher ground. Extensive flooding also damages or destroys much of Canutillo where high waters inundate homes and close roads. The floods will make portions of Canutillo declared permanently uninhabitable by public safety officials.

In southern Dona Ana County, Sunland Park, Anthony, La Union and Santa Teresa experience heavy rains with flooded streets and property damage. High running floodwaters force 1,200 Sunland Park residents to evacuate as the Rio Grande overflows its banks after reaching highest levels since 1912.

South of the border Jaurez Mexico also suffers severe flood damage resulting in mass evacuations and rescue operations.

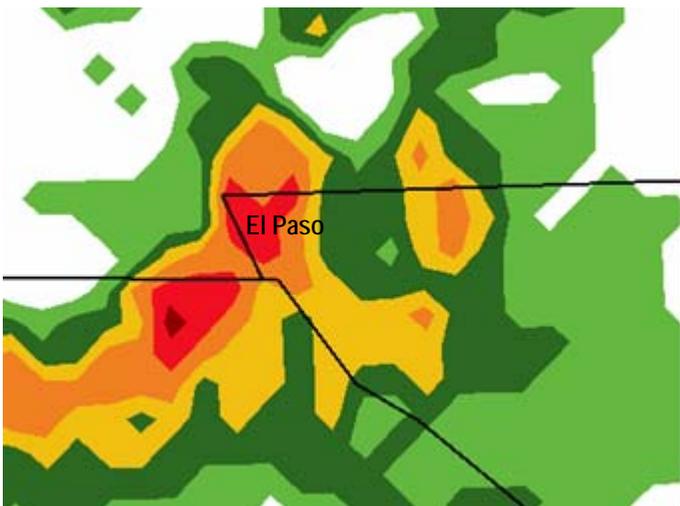
By afternoon a state of emergency is declared across the area with soldiers and helicopters from Fort Bliss providing much needed rescue assistance.



Rapidly moving floodwaters demolish a Blockbuster Video building in west El Paso.



August 1 flooding destroys or damages much of Canutillo. (Photographed by Ruben Ramirez/El Paso Times)



Weather radar image at 915 AM August 1 2006 for the El Paso Metropolitan Area. Red and dark orange colors indicate heaviest rainfalls.



The Rio Grande overflows along Country Club Road in El Paso. (Photographed by Joe Rogash NWS)



Torrential August 1 rains also flood and seriously damage much of Jaurez Mexico.



Flooding in the Silver Springs area of El Paso.

August 3: Early morning thunderstorms with heavy rains rumble through El Paso and Dona Ana counties with one to two inches of rain falling within two hours. As a result more flooding occurs around El Paso, Santa Teresa and Sunland Park. High waters pour into several homes and businesses over sections of El Paso with the flooding around a four block area of Saipan and Reynolds Streets especially severe. Numerous roads are again closed including Interstate 10. Flooding also occurs across much of west El Paso.

During the late afternoon thunderstorms with torrential rainfalls flood streets and close roads over areas of Las Cruces and the town of Dona Ana. Further west heavy rains flood portions of Grant County around Bayard, Hurley and Santa Clara.



Strip mall flooding on Donaphan Street in west El Paso. (Photographed by Joe Rogash NWS)

Historic Storms Continue

August 4: Late afternoon thunderstorms with torrential downpours again deluge portions of El Paso County. At least 600 people are evacuated from central El Paso, Vinton, Socorro and Westway as streets flood, arroyos overflow and water from the Ft. Bliss Dam spills into neighborhoods. In central El Paso homes near Gateway Boulevard and Pershing Drive are flooded with water over three feet deep in some houses.

August 6: Thunderstorms drop two to three inches of rain around Columbus NM with highways 9 and 11 closed due to flooding. In Otero County, heavy rains cause minor flooding around Alamogordo and Boles Acres.

August 10: Floodwaters force evacuations in Santa Clara in Grant County.

August 11: Severe thunderstorms strike Hidalgo County with golf ball-sized hail falling at Antelope Wells.



El Paso police and firefighters evacuate residents from Durazno Avenue after the heavy rains of August 4 flood their neighborhood. (Photographed by Victor Calzada/El Paso Times)



August 10 flooding at Santa Clara. (Courtesy Silver City Daily Press)



Emory Road in west El Paso. (Joe Rogash NWS)



Mulberry Street in west El Paso. (Joe Rogash NWS)

August 12: Hudspeth County thunderstorms produce two inches of rain in an hour and small hail causing street flooding around Dell City.

August 13: Three to four inches of rain fall in northern Otero County with resultant floods damaging homes in Mayhill and closing Highway 82. To the west heavy rains also wash out roads in the San Juan area of Grant County.

August 14: Heavy Rains fall over much of southern New Mexico during the afternoon and early evening. In Grant County flooding occurs at Rock House Canyon and around Wind Canyon with Highway 180 under water west of Silver City. In Sierra County heavy rains flood Highway 152 while to the east, streets and arroyos flood over portions of Alamogordo.



High waters from heavy rains breach the Las Placitas Arroyo three times in the summer of 2006 resulting in widespread flooding and damage in Hatch and surrounding areas. (Photographed by Norm Dettlaff/Las Cruces Sun-News)

Major Flooding Strikes Hatch

August 15: Afternoon and evening slow moving thunderstorms deluge southern New Mexico and western Texas. In Dona Ana County heavy rains and resultant high waters breach the levee of the Las Placitas Arroyo causing floodwaters to pour into the village of Hatch. Four foot-deep waters flood downtown Hatch damaging homes, businesses and motor vehicles. Almost all of Hatch's 1600 residents are forced to evacuate.

Elsewhere in New Mexico heavy rains flood streets and arroyos around Deming, Columbus, Santa Clara, and Cliff with Highway 9 closed around Columbus.

In western Texas two to three inches of rain fall across portions of El Paso with a few streets and arroyos flooding.

August 16: Heavy rains drench region yet again. Homes and streets flood over sections of El Paso and Montana Vista with the Rio Grande overflowing. Lightning knocks power out across the Montana Vista area.

In southern New Mexico heavy rains also flood homes and streets and cause arroyos to overflow over portions of Alamogordo and Boles Acres. In some locations water rescues and evacuations are needed. Further south an earthen dam is washed out over southern Dona Ana County flooding Highway 28. Heavy rains also flood western portions of Deming.

August 17: Two to three inches of rain fall around Hurley in Grant County causing street flooding and road closures.

August 19: Early morning thunderstorms bring one to two inches of rain around west El Paso, Santa Teresa and Sunland Park with more street flooding and road closures.

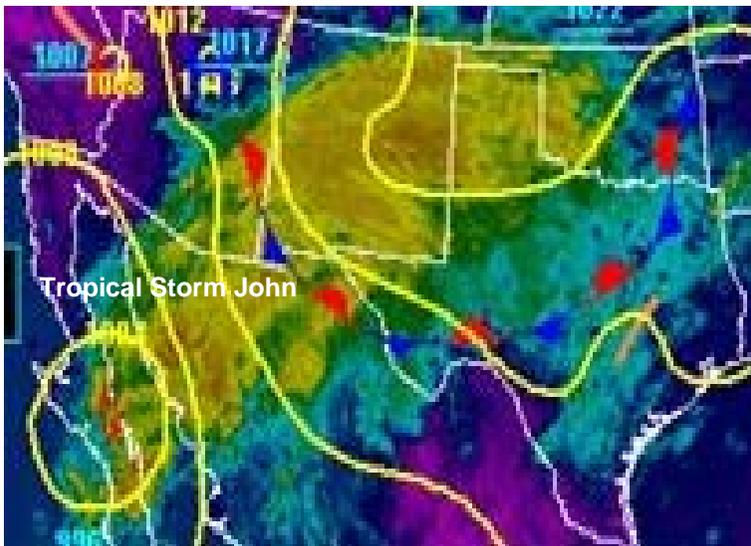


August 19 early morning downpours again flood areas of west El Paso. (Photographed by Charlotte Rogash)

August 21: Evening thunderstorms drop two to three inches of rain around Truth or Consequences. Area streets are flooded with water spilling into the high school.

In Dona Ana County heavy rains again breach the Las Placitas Arroyo with floodwaters closing Highways 185 and 187 near Hatch.

August 22: Heavy rains across northern Otero County cause rock and mudslides over Tularosa Canyon near Mescalero. High waters in James Canyon also force evacuations at Mayhill.



September 3 2006 weather satellite photo showing moisture from Tropical Storm John flowing over a cold front into New Mexico and western Texas.



Sunland Park firefighters attempt to stop a home from falling into a sinkhole caused by the heavy rains and floods brought by Tropical Storm John in early September. (Photographed by Rudy Gutierrez/El Paso Times)

Floods and Severe Thunderstorms Continue Into Late Summer

August 25: One to two inches of rain fall around Hillsboro with floodwaters closing Highway 187.

August 27: Severe thunderstorms produce strong winds which blow the roofs off several houses around Fabens.

August 28-29: During the late evening and early morning hours up to five inches of rain fall over the Uvas Valley from persistent slow moving thunderstorms. Water runoff from the storms flows south and floods Interstate 10 between Las Cruces and Deming with water up to three feet deep on the highway. As a result Interstate 10 is closed for much of August 28 causing massive traffic jams and travel disruptions. The Rio Grande also overflows near Mesilla.

August 31: Thunderstorms with heavy rains cause flash flooding over northeast El Paso with water rescues near Mesa and Valley Road.

September 11: Severe thunderstorms pound east El Paso with nickel-size hail falling.



On August 28 Interstate 10 is closed between Las Cruces and Deming after torrential overnight rains flood the highway. (Photographed by Bruce Bradley/NWS)

Tropical Storm John Drenches Region

September 1-4: Moisture from Tropical Storm John streams northward into southern New Mexico and western Texas while a surface cold front moves through the region. This weather pattern generates strong thunderstorms September 1st with periods of moderate rainfall continuing the next three days. Over southern Dona Ana and El Paso Counties three to eight inches of rain fall in the four day period.

Once again the rains damage homes, flood streets and force people to evacuate their neighborhoods. Sunland Park is especially hit hard as soil erosion along the Rio Grande threatens homes and property. A concrete drainage pipe malfunction in Sunland Park triggers a mudslide with water flowing into houses and bringing further property destruction. High waters also force the closure of Interstate 10 around El Paso on September 4th.

Tornadic Thunderstorm Slams Las Cruces Area

During the afternoon of September 13, a high precipitation supercell develops near Interstate 10 in western Dona Ana County and moves eastward along the highway into the Las Cruces area. The storm dumps golf ball-sized hail and heavy rains along Interstate 10 and over Las Cruces and the town of Mesilla with at least one tornado touching down.

The hail was especially destructive with widespread damage to roofs, skylights, motor vehicles and vegetation. Strong thunderstorm winds also damage property and buildings over western Las Cruces and flash flooding occurs around New Mexico State University and along portions of Interstate 10, which is closed by police during the storm. Total storm damage is estimated at over 10 million dollars.



On September 13 this high precipitation supercell thunderstorm moves into the Las Cruces area producing a tornado and large hail. (Photographed by Norm Dettlaff/Las Cruces Sun-News)



The September 13 supercell thunderstorm also drops torrential rainfalls over the Las Cruces vicinity with flooding around New Mexico State University. (Photographed by Dr. Deborah Bathke/NMSU)



Tornado over western portions of Las Cruces. (Photographed by Brandon Quinones)



Wind damage at Las Cruces Fairground. (Photographed by John Fausett/NWS)



Large hail strips pine cones off of trees in Las Cruces. (John Fausett/NWS)

A DESERT NO MORE

From July to September 2006 El Paso International Airport measures 15.01 inches of rain making the 2006 monsoon officially the wettest on record. In addition a few public or cooperative observers measure over thirty inches of rain around the borderland as much of the southwestern United States including western Texas, New Mexico and Arizona experience record rainfalls. The wet weather brings extremely dense vegetation growth with the once barren sands covered by flowers and an abundance of green plants.



Wildflowers in bloom over Santa Teresa.
(Joe Rogash/NWS)



West El Paso along Franklin Mountains.
(Joe Rogash/NWS)



Despite the rain and clouds there are a number of hot dry days in June and early July resulting in early summer dust devil activity. (Photographed by Charlotte Rogash)

Spotters...Please call the National Weather Service If You Observe:

Tornado or Funnel Cloud...Report Time, Location and Movement

Hail...1/2 Inch or Larger

**Damaging Winds...Damage To Buildings, Motor Vehicles, Trees, Power Lines
And Other Structures**

**Flash Flooding...Flooding Of Streets and Buildings , Or If Rivers, Streams And
Arroyos Flood Or Overflow**

**Heavy Rains...1/2 Inch of Rain In Less Than 30 Minutes Or At Least 1 Inch Of
Rain In Less Than 2 Hours**

Blowing Dust...Whenever Blowing Dust Reduces The Visibility To Less Than 2 Miles.