



Southwest Weather Bulletin

Fall-Winter 2010-2011 Edition

National Weather Service El Paso-Santa Teresa

Warm Dry Late Spring Weather is Followed by Stormy Monsoon Over the Borderland

Westerly winds brought warm mostly dry weather to southern New Mexico and far western Texas in May with a series of upper level troughs causing periods of breezy to windy conditions. But by early June high pressure aloft covered the southern Rockies resulting in hot record high temperatures along with little or no rainfall.

Toward the middle of June however the desert heat low became established over Arizona causing easterly winds which transported moist unstable air into the Borderland. Thus more active weather develops in late June and especially in mid-July when upper-level disturbances generated thunderstorms with heavy rains, hail and damaging winds.

While high pressure aloft resulted



Thunderstorm winds cause severe damage around Gila NM on July 19.
(Mike Hardiman NWS/NOAA)

in mostly dry weather over the El Paso area in August, it remained rather wet and stormy across southern New Mexico. Then in mid September an upper level low pressure system produced much needed heavy rains around El Paso. In late September high pressure aloft ended the 2010 monsoon with early autumn warm and dry weather through almost all locations.



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Spring-Summer Seasonal Weather Highlights



Heavy rains cause flooding in the Hatch-Rincon NM area on July 11. (Norm Dettlaf Las Cruces Sun News)

May 2: Windy with gusts around 50 mph across the region.

May 10-11: Windy each day with gusts around 50 mph.

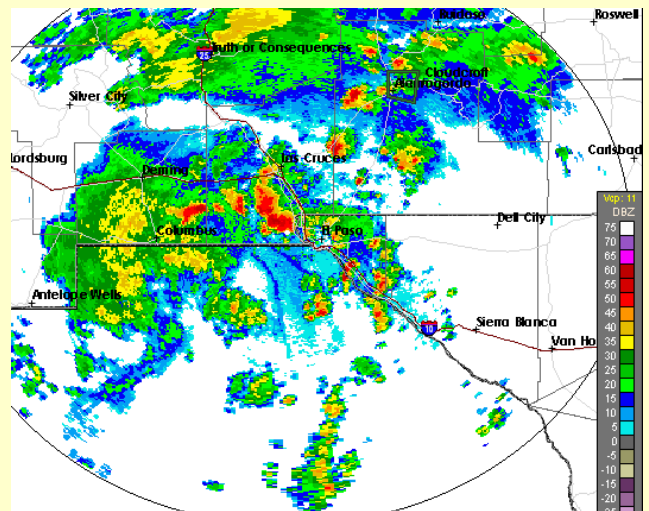
May 26: Severe thunderstorms drop golf ball-size hail at Sierra Blanca TX.

May 27: Thunderstorms bring nickel-size hail to Cloudcroft NM.

June 2010: A hot month across the Borderland with El Paso reaching at least 100 degrees on 14 days. Two heat-related deaths are reported.

June 5: El Paso hits 106 to set a record high temperature for the day.

June 6: Another hot day as El Paso's temperature soars to 110 degrees to set a new record. The intense heat also generates severe thunderstorms across the region.



Radar image showing flood-producing thunderstorms during the afternoon of July 11.

Thunderstorm winds gust to 84 mph at El Paso causing 4 soldiers to become injured when their field tent collapses. Strong thunderstorms with heavy rains and hail also move across Otero and Hudspeth Counties.

June 7: Thunderstorms produce wind gusts near 50 mph around El Paso, Las Cruces and Truth or Consequences.



Thunderstorms with heavy rains flood portions of west El Paso on July 24. (Vanessa Monsisvais El Paso Times)

June 24: Severe thunderstorms produce wind gusts to 60 mph over El Paso while dime-size hail falls at Lake Roberts NM.

June 28: Thunderstorms dump heavy rains over El Paso with water rescues required after roads become flooded. In addition winds gust over 60 mph across portions of the city. Widespread thunderstorms also cause heavy rains over much of southern New Mexico.

July 2: Thunderstorms drop almost an inch of rain at Williamsburg NM.

July 10: An inch of rain falls just north of Silver City.

July 11: A deep southerly flow transports abundant moisture into the area while an upper level disturbance enters from the west. This weather pattern generates showers and thunderstorms with torrential rains from late morning through the evening. Over 4 inches of rain fall near Anthony TX with 2 to 3 inches around Santa Teresa and west El Paso. High water floods West Canal Road Bridge in Hatch. In the Radium Springs and Rincon area floodwaters push cars off the road near Highway 187 and Santiago Peak Road.



West El Paso after July 24 heavy rains. (Vanessa Monsisvais El Paso Times)



Strong thunderstorms with heavy rains near Las Cruces on July 24. (Jeff Passner)

Destructive Microburst Strikes Gila New Mexico



Trailer destroyed by high winds. (Mike Hardiman NWS/NOAA)

During the afternoon of July 19 a severe thunderstorm hits Gila New Mexico, producing extreme damaging wind gusts along with small hail and heavy rains. The greatest damage was along a one mile-long swath where wind speeds reached almost 90 mph.

On the south side of Gila the winds



Pine tree blown down. (Mike Hardiman NWS/NOAA)



Winds also destroy a pole barn. (Mike Hardiman)

overturned and destroyed a new trailer while another mobile home suffered significant damage when the roof was blown off.

A large pole barn was destroyed and damage occurred to other buildings and property in the vicinity. In addition the winds uprooted a pine tree and flattened vegetation.



Gila NM property damage. (Loretta Brown)

July 12: Heavy rains and flooding force a truck into a creek near Cliff NM in Grant County.

July 14: An inch of rain falls in only 20 minutes at 16 Springs NM in northeast Otero County.

July 15: Severe thunderstorms drop one inch-diameter hail near Las Cruces while 1.25 inches of rain fall in 40 minutes north of Silver City.

July 20: Heavy rains and small hail fall over Silver City with lightning strikes causing power outages across the area.

July 21: Severe thunderstorms with heavy rains move across Luna and Grant Counties. Wind gusts of 60 mph damage a hangar at Columbus Airport while rains flood portions of Highway 11. In addition almost 2 inches of rain flood rural areas near Deming. In Grant County a drainage ditch overflows and floods a street in Hurley and about 2 inches of rain are measured at Buckhorn.



During the evening and early morning hours of July 25-26 torrential rains flood portions of Las Cruces. (Diana Alba Las Cruces Sun News)



Thunderstorms with heavy rains in the Las Cruces area on July 25. (Jeff Passner)



**Thunderstorms with heavy rains move over west El Paso on July 31.
(Joe Rogash NWS/NOAA)**

July 22: Two inches of rain fall near Radium Springs in Dona Ana County causing rural flooding.

July 23: Thunderstorms with heavy rains and small hail flood buildings in downtown Hatch NM. Street flooding is also reported over Deming and across Highway 187 near Kingston and Caballo State Park.

July 24. Thunderstorms produce almost 2 inches of rain in less than an hour over portions of west El Paso flooding several areas. The floodwaters also damage the historic Rosa's Cantina restaurant.

July 25-26: Evening and early morning showers and thunderstorms dump torrential rains across the Las Cruces area. New Mexico State University records a record 3.36 inches of water with numerous buildings, homes and streets flooded around Las Cruces, Mesilla and Dona Ana. Floodwaters



Thunderstorm with heavy rains fall around Las Cruces on July 31. (Jeff Passner)

damage at least 6 buildings at NMSU. Several water rescues occur when vehicles stall on flooded roads.

Further north in Sierra County, heavy rains flood streets and buildings around Truth or Consequences and Poverty Creek, where 1.3 inches of rain fall in an hour. Finally 1.3 inches of rain are measured near Silver City.

July 28: Showers and thunderstorms drop 2 inches of rain over McGregor Range in southwestern Otero County.

July 29: Showers and thunderstorms with torrential rains move across portions of the Borderland. 1.5 inches of rain fall in 30 minutes 6 miles north of Silver City. Flooding also occurs across Highway 11 north of Columbus. Minor street flooding is reported around Mimbres and Deming. In west Texas, roads and canals flood in the Fort Hancock vicinity.

July 30: Heavy rains fall over Hudspeth County with 1 to 2 inches of rainfall flooding roads around Dell City.

July 31: Showers and thunderstorms produce over an inch of rain around Las Cruces and Silver City. 12.21 inches of rain is also recorded for the month at Cloudcroft NM which is double their July average.

August 1: Heavy rains and flooding damage Forest Road 150 at Rocky Canyon in the Gila National Forest.

August 4: An inch of rain falls in 20 minutes at Poverty Creek. Heavy rains also cause minor flooding at Mimbres.

August 12: A severe thunderstorm produces wind gusts to 65 mph at Las Cruces with heavy rains and small hail also occurring over portions of El Paso and near Silver City.

August 13: Severe thunderstorms strike the Fabens TX area. High winds blow down 4 light poles with hail also reported.



Large hail falls over Animas NM on August 15. (Shannon Lasher)



On August 24 thunderstorms drop heavy rains across Dona Ana County. (Daniel Vasquez)

August 15: Nickel-size hail and minor wind damage occur near Animas NM when evening severe thunderstorms move across Hidalgo County.

August 16: Showers and thunderstorms deluge Grant County. Three inches of rain fall 5 miles west of Silver City with 1 to 2 inches elsewhere in the vicinity. Several streets are closed in Silver City due to flooding.



Severe thunderstorm developing over El Paso on September 15. (Dave Novlan NWS/NOAA)

August 18: 1.5 inches of rain fall in an hour at Radium Springs.

August 23: Heavy rains flood Highway 13 near Mayhill NM while penny-size hail falls over El Paso TX.

August 24: Thunderstorms dump 2 inches of rain near Radium Springs flooding streets while almost an inch of rain falls in 30 minutes at Dona Ana. Further north heavy rains cause rock slides near Alamogordo.

August 27: Almost an inch of rain falls in an hour at San Lorenzo NM.

August 30 : Thunderstorms drop almost an inch of rain over Las Cruces.



This thunderstorm produces large hail over El Paso on September 15. (Lance Tripoli NWS/NOAA)

September 13: Showers and thunderstorms with heavy rains strike portions of Dona Ana and El Paso Counties. Some streets flood in El Paso while over an inch of rain falls at La Mesa.

September 15: Severe thunderstorms with quarter-size hail and heavy rains hit east El Paso. Two families are forced out of their homes after the roofs collapse.

September 21: Over an inch of rain falls near Dona Ana NM.

September 22-23: Portions of east El Paso flood as up to 2 inches of rain fall. A woman is rescued after floodwaters sweep her car from the road.



Flooding over El Paso after the heavy rains of September 13. (Mark Lambie El Paso Times)



September 22-23 heavy rains flood portions of east El Paso. (Vanessa Monsisvais El Paso Times)



Cactus flowers in bloom at Santa Teresa. (Charlotte Rogash)



Sunrise over Santa Teresa. (Greg Lundeen NWS/NOAA)

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.

Snow Amounts Greater Than An Inch