



Southwest Weather Bulletin

Fall-Winter 2011-2012 Edition

National Weather Service El Paso-Santa Teresa

Record Drought, Heat, High Winds and Wildfires Hit the Borderland

Periods of westerly winds and high pressure combined to bring record drought conditions to southern New Mexico and western Texas through the winter, spring and early summer period of 2011. Total precipitation over El Paso from January through June 2011 was only .36 inch making it the driest half-year on record with most other locations also experiencing extremely dry weather. In addition no rain fell at El Paso International Airport for a record 118 consecutive days. Temperatures were well above normal from June through August making it the warmest summer on record for El Paso and other areas across the Borderland. There were also 50 days when El Paso's temperature soared to at least 100 degrees. As a result significant wildfires burned portions of New Mexico, Texas and indeed much of the southwestern United States.

Monsoon moisture and associated rains arrived in late June. Overall the



Record drought conditions and warm temperatures contributed to this large wildfire which burned property and forced evacuations around Ruidoso in June. (Erik Bearer Ruidoso News)

rainfall was spotty during the summer as high pressure aloft often inhibited thunderstorm development. Thus while some locations experienced heavy rains and flooding, other areas such as west El Paso and Santa Teresa, saw a continuation of drought conditions.



National Weather Service El Paso/Santa Teresa

Meteorologist-In-Charge – Jesse Haro

Warning Coordination Meteorologist – John Fausett

Science Officer – Val Macblain

Newsletter Editor-Writer/Senior Forecaster – Joe Rogash



Seasonal Weather Highlights



**Wildfire burns near Silver City on May 8.
(Terrance Vestal Silver City Sun News)**

May 2011: Major wildfire burns over 50,000 acres across southwestern New Mexico including portions of Grant County and the Gila Wilderness.

May 10: Windy with gusts to 68 mph over northeast El Paso and gusts around 45 to 55 mph elsewhere.

May 17: Windy across the region with gusts to 77 mph at St. Augustine Pass and gusts around 45 to 55 mph elsewhere.

May 18: Windy again with gusts to 62 mph over northeast El Paso and gusts around 45 to 55 mph elsewhere.

May 19: Windy for the third consecutive day with gusts to 55 mph at Lake Mescalero and gusts around 50 mph over El Paso.

May 24: Winds gust to 80 mph over St. Augustine Pass with gusts from 40 to 50 mph most other locations.

May 29: Another windy day with gusts from 50 to 60 mph over much of the region.



Smoke from May 2011 wildfires near Gila Hot Springs. (Kim Reck Butz NWS/NOAA)



**Wildfires burning across the Gila Wilderness.
(U.S. Forest Service)**



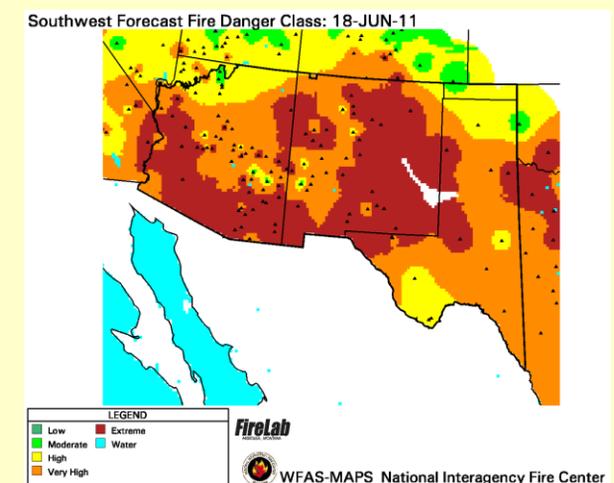
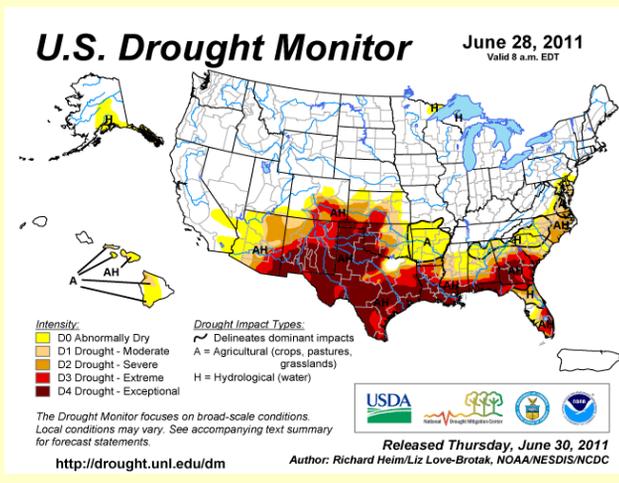
Warm dry weather conditions allowed the Balloon Festival to take place at Santa Teresa on May 30. (Charlotte Rogash)

June 2011: A hot and mostly dry month for southern New Mexico and western Texas. El Paso has an average high temperature of 101 for the month with the city reaching at least 100 degrees 21 days. Smoke from area wildfires also drift into much of the region resulting in periods of poor unhealthy air quality and reduced visibilities.

June 1: A trace of rain falls at El Paso Airport ending a record string of 118

consecutive days without precipitation. Severe thunderstorms also move across portions of the area producing wind gusts to 72 mph near Holloman Air Force Base, 66 mph at Northrup Landing Strip in Dona Ana County, and 61 mph over El Paso.

June 2: Severe thunderstorms produce 65 mph wind gusts over southern Otero County and 61 mph gusts at El Paso. El Paso also hits 102 degrees to tie a record.



For much of the spring and early summer of 2011 extreme to exceptional drought conditions over Texas, New Mexico and eastern Arizona resulted in a very high to extreme wildfire danger.

June 4: Strong to severe thunderstorms move across Otero County. Two inches of pea-sized hail accumulate and streets flood around Mayhill.

June 19: An unseasonably strong low pressure system brings hot and windy conditions. Temperatures are around 100 degrees across much of the lowlands and winds gust to 64 mph at Silver City with gusts around 50 to 60 mph over portions of El Paso and Dona Ana Counties.

July 1: Evening severe thunderstorms produce 70 mph winds at Santa Teresa.

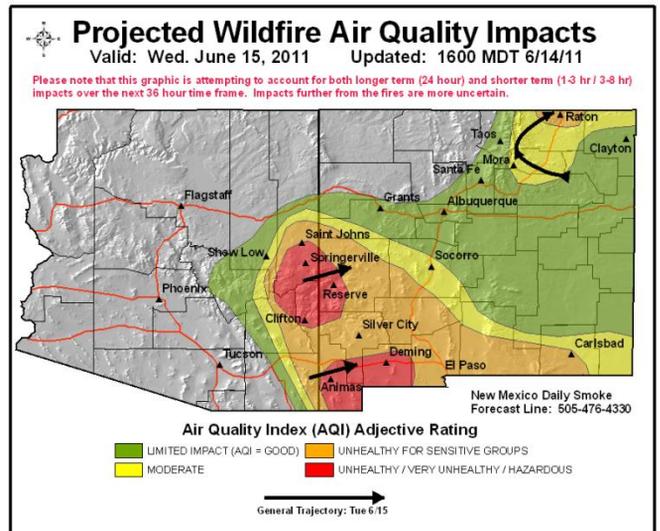
July 3: Strong thunderstorms move across Dona Ana and Otero Counties with marble-sized hail falling at Cloudcroft.

July 11: Showers and thunderstorms produce 4 inches of rain in the Silver City area.

July 13: Torrential rains fall across northeastern Otero County with 5.5 inches measured over Cloudcroft and 2 to 3 inches of rain falling around Mayhill and Silver Lake. The heavy rains flood portions of Cloudcroft including the high school and water treatment plant and force numerous road closures.

Elsewhere an inch of rain falls over west El Paso and near Rincon NM. A small landspout tornado is also observed in open desert from the NWS office at Santa Teresa.

July 22: Thunderstorms drop 2 inches of rain over Sacramento NM.



Smoke from regional wildfires resulted in poor unhealthy air quality across southern New Mexico and western Texas in June 2011.



Strong thunderstorms moved into the Las Cruces area on July 13. (Jeff Passner)



On July 13 this small landspout tornado developed near Santa Teresa. (Jason Laney NWS/NOAA)

July 24: Showers and thunderstorms with heavy rains strike much of the area with over 2 inches of rain falling on portions of Grant County. In Grant County major street flooding occurs near Silver City while at Santa Clara streets flood and water overflows from Twin Sisters and Cameron Creeks. An inch of rain also falls at Mimbres flooding portions of Highway 35.

July 26: Widespread thunderstorms with heavy rains and high winds hit the region. One storm brings 2.5 inches of rain in 40 minutes to Radium Springs causing minor flooding. Heavy rains also flood Highway 59 near Poverty Creek in Sierra County. Further south a severe thunderstorm with a wet microburst produces a 78 mph wind gust at El Paso Airport causing minor damage. Heavy rains also flood several streets around El Paso.

July 28: A severe thunderstorm produces 63 mph wind gusts over El Paso while other storms flood sections of Tornillo.



July 24 heavy rains brought flooding near Silver City. (Shantelle Harrison)



Thunderstorm winds blew this wall of dust into the El Paso area on July 11. (Lance Tripoli NWS/NOAA)



Strong thunderstorm over El Paso on the night of July 26. (Misti Hymas El Paso Times)



A thunderstorm with high winds and heavy rains moves near Santa Teresa on August 17. (John Fausett NWS/NOAA)

July 31: A late afternoon thunderstorm drops golf ball-sized hail over Hurley NM.

August 2011: Warmest August on record for El Paso.

August 4: An inch of rain falls in 30 minutes at Talavera near Las Cruces.

August 5: Thunderstorms dump an inch of rain over portions of Luna County causing flooding near Deming Aerostat.

August 11: Thunderstorms with heavy rains flood streets over Dona Ana county around Las Cruces and Mesquite.

August 13: Showers and thunderstorms bring 1.4 inches of rain to Radium Springs and minor flooding to Cloverdale in Hidalgo County.

August 17: Showers and thunderstorms produce 60 mph wind gusts along with 2.3 inches of rain and flash flooding over El Paso. 2.8 inches of rain are also reported 1 mile south of St. Augustine Pass.



A severe thunderstorm moves across southern Otero County on August 21. (Greg Lundeen NWS/NOAA)



There were 50 days in the summer of 2011 where El Paso's temperature hit at least 100 degrees.

Sep 14: Thunderstorm winds blow the roof off of a house near Animas in Hidalgo County while penny-sized hail falls over Silver City.

Sep 15: Moist unstable air flows into southern New Mexico and western Texas while an upper level disturbance with strong winds aloft moves into the region. As a result severe thunderstorms develop and move west to east across the Borderland. Storms first drop hail the size of golf balls over Animas before developing rotation and producing funnel clouds as they move across Luna County south of Deming.

The storms continue their eastward movement into Dona Ana and El Paso counties where they cause wind gusts to 67 mph at both El Paso and Chaparral with trees and power lines blown down at Canutillo. Winds are also measured at 58 mph at Santa Teresa and penny-sized hail falls at El Paso. Streets also flood over sections of El Paso and near Horizon City.

Further north severe thunderstorms move across Sierra and northern Otero Counties producing golf ball-sized hail at Truth or Consequences and flooding at La Luz.

Sep 16: Severe thunderstorms drop 1 inch diameter hail near Tularosa.

Sep 21: Severe thunderstorms produce 58 mph wind gusts at Holloman Air Force Base.



Supercell thunderstorm moving across Luna County on September 15. (Mike Hardiman NWS/NOAA)



September 15 supercell moving into western Dona Ana County. (Mike Hardiman NWS/NOAA)



National Weather Service radar image of the severe thunderstorms occurring on September 15.



May 24 sunset over Santa Teresa. (Joe Rogash 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