

# 2022 Annual Climate Summary

## Top 4 - Memorable Events

Weather Forecast Office  
Albuquerque, NM  
Issued January 8, 2023 12:16 AM MDT



### Major Winter Storm



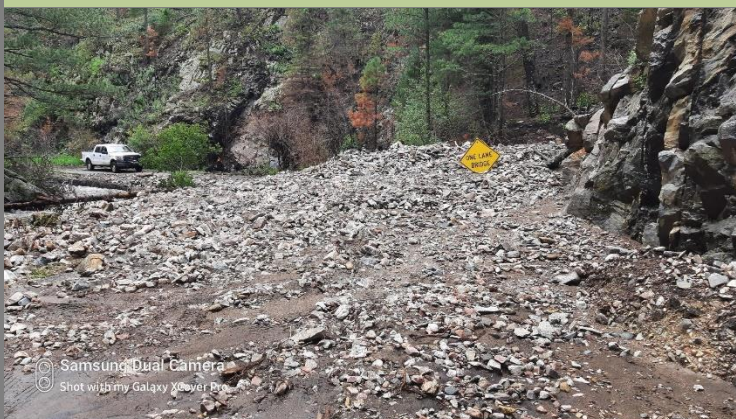
February 2-3<sup>rd</sup> | Traffic Jam Big-I  
Courtesy of NMDOT

### High Winds & Extreme Fire Weather



April 12<sup>th</sup> | Hermit's Peak Fire  
Courtesy of Inciweb

### Monsoon Flash Flooding



McBride Burn Scar | July 29<sup>th</sup>  
Courtesy of Ira Pearson

### Pecos River Flooding



August 20-21<sup>st</sup> Courtesy of Karen Sanders





A strong winter storm strengthened as it crossed the Rocky Mountains and interacted with a strong surge of Arctic air that invaded eastern and central NM from February 1<sup>st</sup> through the 4<sup>th</sup>. February 2<sup>nd</sup> in particular saw heavy snow amounts ranging from 2 to 8 inches at lower elevations to 1 to 2 feet above 9,000'. Whiteout conditions from heavy snow caused severe travel conditions, but the extreme cold allowed for icy roadways that exacerbated the already dangerous road conditions. This storm was indirectly responsible for four fatalities via automobile accidents; two at Sandia Peak, one in Los Lunas, and another near Santa Rosa.

Full Report:



Heavy snow in Taos, NM  
©D'Garrity Valdez



Interstate Accident | Photo from: NMDOT

Location	Snow Amount
Taos Ski Area	37"
Canon Plaza 11NNW	21"
5WNW Eagle Nest	21"
Red River	18"
Chama 12.9 SE	17.4"
Canjilon 7E	17"
Cuba 9E	16.5"
Sandia Park	16.4"
Gascon	12"



I-25 @ La Cienega | Photo from:  
Santa Fe New Mexican

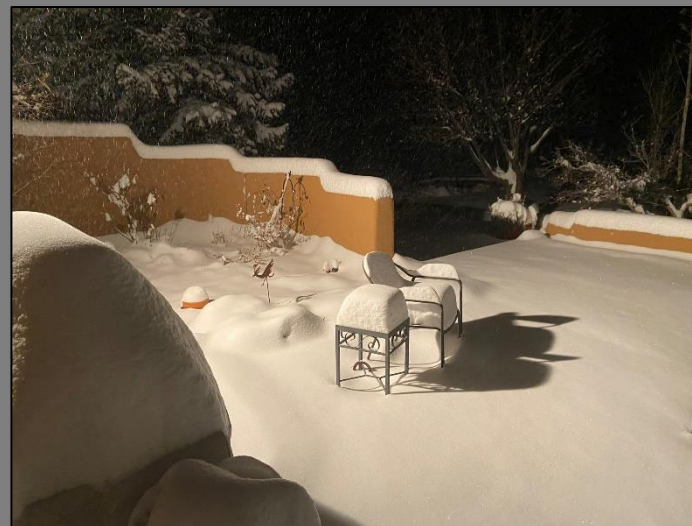


ABQ Sunport Whiteout Conditions  
NWS Albuquerque Webcams

Wind chill temperatures were dangerously cold with this winter storm. The combination of frigid cold temperatures with brisk winds resulted in wind chill values well below zero across large portions of NM. The coldest readings were reported across northeast NM and within mountain valleys. Taos reported a bone chilling  $-35^{\circ}$  wind chill temperature. The actual air temperature fell to  $-30^{\circ}$  at Angel Fire and  $-28^{\circ}$  at Eagle Nest.

Full Report:

Location	Min Wind Chill
Moriarty	$-35^{\circ}$
Taos	$-33^{\circ}$
Clayton	$-23^{\circ}$
Mills	$-21^{\circ}$
Corona	$-21^{\circ}$
Sedan	$-20^{\circ}$
Endee	$-20^{\circ}$
Santa Fe	$-18^{\circ}$
Vaughn	$-18^{\circ}$
Raton	$-18^{\circ}$
Clovis	$-18^{\circ}$
Tucumcari	$-13^{\circ}$



Heavy snow in Chilili, NM  
Bill Simms



Snow in Albuquerque, NM  
Zander Garden via Facebook



Heavy snow in Jemez Springs, NM  
©TaltyRobinson via Twitter





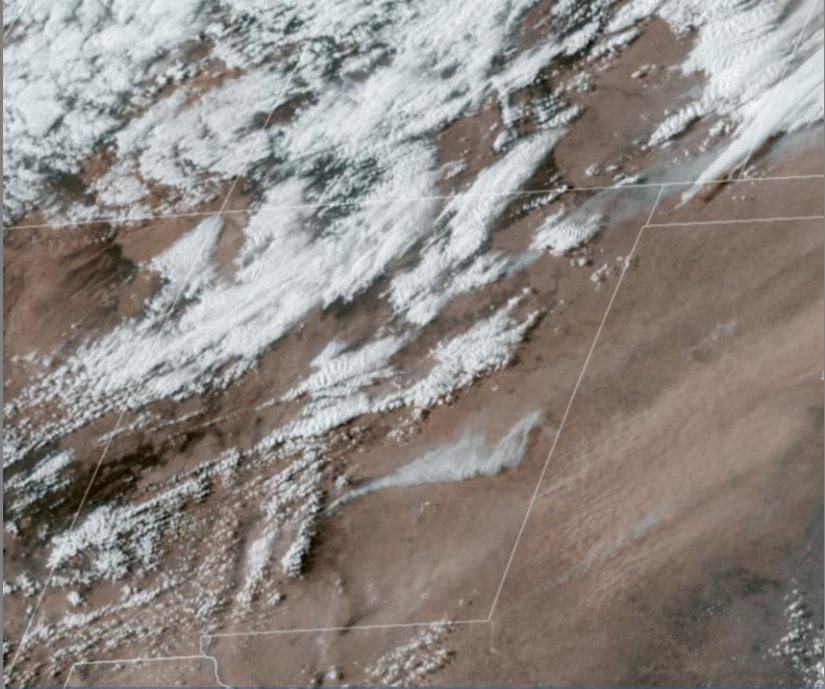
The combination of a strong jet stream and a deep low pressure system produced high winds across all of northern and central NM. Winds peaked on April 12<sup>th</sup> and many areas measured wind gusts in excess of 58mph, with Ruidoso and nearby areas being the hardest hit with several hours of wind gusts of 70 to 80mph. With exceptionally dry conditions also present, this fueled the start for the McBride Fire which prompted evacuation orders and was responsible for the deaths of two citizens.

Extreme fire weather conditions and dust storms were widespread across central and eastern NM April 12<sup>th</sup>. Several other fires got their start that day including the Big Hole Fire near Belen, and the Nogal Canyon Fire near Capitan. Widespread blowing dust reduced visibility all along the TX border stretching eastward into the TX Panhandle.

Location	Peak Wind Gusts (mph)
Ruidoso 1NNW	80
Nogal 5NW	77
Red River 8S	72
Sierra Blanca Airport	71
Clayton Municipal Airport	70
Santa Rosa Airport	69
Las Vegas Airport	69
Clines Corners	69
Tucumcari Airport	64
Gallup Airport	62
Albuquerque Sunport	61
Vaughn 4E	61
Raton Crews Airport	60
Magdalena 10SSE	60
Dunken 2NE	59
Carrizozo 6NE	59
Estancia 2WSW	59
Angel Fire Airport	58
Madrid	58
Encino 6W	58



McBride Fire April 13<sup>th</sup> | Carrizozo Volunteer FD



GOES-East Imagery of smoke and blowing dust





Location	Gust (mph)
Red River 8S	93
Raton Crews Airport	81
Magdalena 10 SSE	75
Las Vegas Airport	74
Capulin 3S	72
Farmington Airport	71
Gallup Airport	70
Bloomfield	70
Santa Fe Airport	70
Clines Corners	70
Sierra Blanca Airport	68
Clayton Airport	68
Albuquerque Sunport	64



Cook’s Peak Fire April 22<sup>nd</sup> | Courtesy of Tom Bird



Downed tree in southeast ABQ  
Courtesy of Chez Shay

Another high wind event impacted all of northern and central New Mexico on April 22<sup>nd</sup>. Widespread high wind impacts, blowing dust, and extreme fire weather behavior resulted in gusts of 60 to 70mph with peak gusts reaching 80 to 90+mph across northern NM. A site near Red River saw a peak gusts of 93mph!

Dust storms resulted in areas stretching from Farmington to Gallup to Santa Fe. Multiple road closures resulted from the near zero visibility, including along I-25 near Algodones and the Kewa Pueblo, and U.S. Highway 491 near Gallup. Multiple car accidents occurred.

Meanwhile, the Hermit’s Peak/Calf Canyon and Cook’s Peak saw extraordinary growth from the combination of high winds, dry conditions, and unstable atmosphere. Both fires grew by 38,341 and 48,672 acres respectively in just one day! Fire warnings were issued due to the imminent danger the fires had on nearby communities.



Dust storm near Kewa Pueblo | Courtesy of Russell Contreras





HPCC burn scar flash flooding near Maestas Canyon on July 1<sup>st</sup> | Courtesy of Alberta Maez

Fire	Flash Flood Warnings	Flash Flood Events
Hermit’s Peak/Calf Canyon	82	58
McBride	13	9
Cerro Pelado	28	1
Cook’s Peak	10-15 (estimate)	1
Black Fire	80	1



McBride burn scar flash flooding along Gavilan Canyon Rd. July 20<sup>th</sup> | Courtesy of Ira Pearson



HPCC burn scar flash flooding in Rociada July 29<sup>th</sup> | Courtesy of Staci Matlock

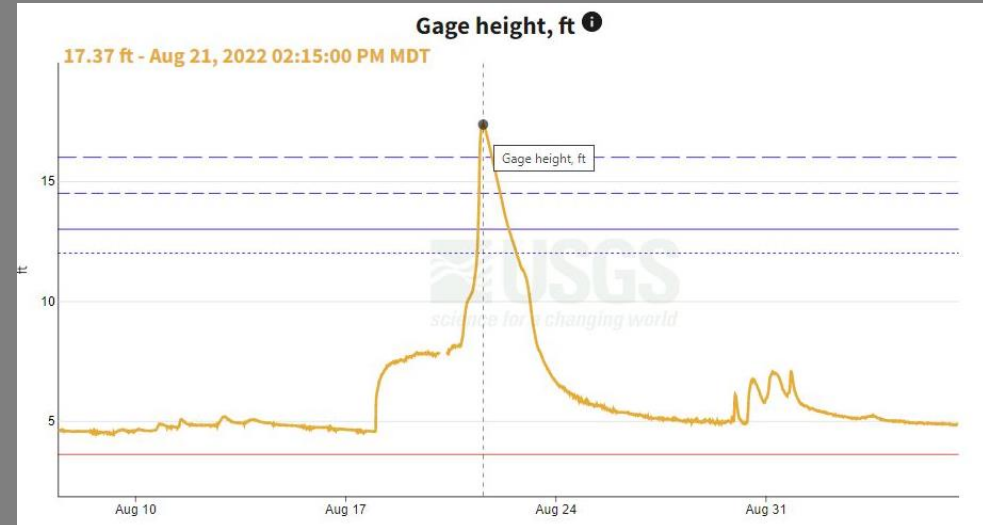
The historic wildfires across the state resulted in large areas that were and still are very susceptible to flash flooding during the summer. Burned soils created a hydrophobic surface that rainfall runoff cannot penetrate easily. This increased runoff then picks up ash and burned vegetation to create debris flows capable of washing out anything in its path.

Daily onslaughts of debris flows and flash flooding was observed within and just below the Hermit’s Peak/Calf Canyon (HPCC) and McBride burn scars this summer. Most of the reports within the HPCC burn scar focused in the Holman to Cleveland and Gascon to Rociada areas. Nearly all of the reports within the McBride burns car occurred along Gavilan Canyon Road. The Cerro Pelado and Cook’s Peak burn scars each saw one report of flash flooding.

Rainfall thresholds for flash flooding can be very low, sometimes as much as a 0.10” to 0.25” of rain can cause flash flooding. This was especially true in the HPCC burn scar.

Please see the 2022 Monsoon Season storymap for more detailed and in-depth information: <https://storymaps.arcgis.com/stories/534274d801ad4f7998fa40468bb9421c>





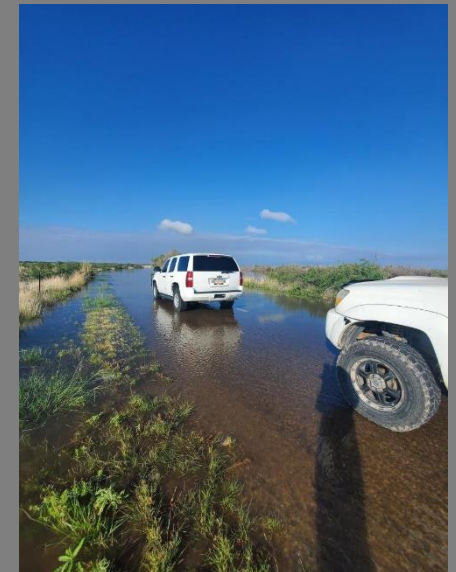
**The ACME river gauge along the Pecos River in northern Chaves County reached a record height of 17.37' on Aug. 21<sup>st</sup>**



**Pecos River northeast of Roswell August 21<sup>st</sup>**  
Courtesy of Karen Sanders



**Pecos River Highway 380 August 21<sup>st</sup>**  
Courtesy of Karen Sanders



**Pecos River Highway 380 August 21<sup>st</sup>**  
Courtesy of Karen Sanders

A slow moving disturbance, rich with subtropical moisture finally tracked over New Mexico on August 20th producing widespread light to moderate rainfall. This resulted in rises on area rivers and streams across southern and central NM. The worst of which occurred along the Pecos River in northern Chaves County south of Fort Sumner from a band of moderate to heavy rainfall that trained over the same location for many hours. Radar estimates were as high as 8 to 9 inches within 24 hours in this area. For the month, this 1-day amount was 300 to 500 percent of normal!

River flood warnings were issued along the Pecos from Roswell to Hagerman due to the rises on the river. The record height of 17.37' recorded at the ACME river gauge in northern Chaves County was in major flood stage. Thankfully this occurred in an extremely rural area of the county. Despite river levels not reaching action stage from Hagerman to Dexter, impacts were still felt. A vehicle attempting to cross a low-water crossing was washed a half mile downstream near Hagerman. Four people had to be rescued near Bottomless Lakes from a submerged vehicle and from a inundated home. Three others were rescued near Dexter from their trapped vehicle.