2024 Annual Climate Summary

Most Memorable Events





Clayton Whiteout | January 8 **Courtesy Justin Drumm Clayton FR**



Colfax County Snowdrift | January 8 Courtesy Colfax County Sheriff

NWS Albuquerque



Farmington, NM | June 21 **Courtesy Caitlyn Vecillio via Facebook**

Ruidoso Wildfires & Flooding



South Fork Fire & Severe Storm | June 19 **Courtesy Kerry Jones**

Weather Forecast Office Albuquerque, NM Issued January 8, 2025 12:27 PM MST



October Flooding



Roswell | October 20 Courtesy Raelynn Rosy Wilkinson

November Heavy Snow & Blizzard



Angel Fire | November 7 **Courtesy Heidi Watkins**



Location	Snowfall		
Santa Fe SNOTEL	25″		
Escabosa 2 N	14"		
Tres Ritos 3 NW	13"		
Red River	13"		
Taos Ski Valley	12"		
Clayton	11"		
Rociada 8 SW	10"		
Ramah 3.1 ENE	10"		
Eagle Nest	10"		

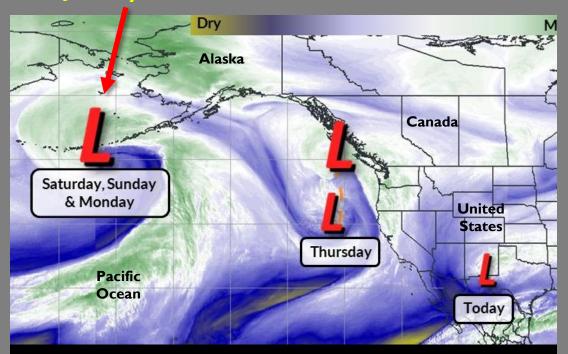
Location	Peak Wind Gust		
Raton Airport	90 mph		
Clayton	67 mph		
Roswell Airpark	62 mph		
Logan	55 mph		
Mills Canyon	52 mph		
Dexter	54 mph		
Vaughn	52 mph		
Laguna	50 mph		

A series of powerful storm systems moved across the eastern Pacific into the western United States during the first and second week of January 2024. The water vapor imagery below from Jan. 2, 2024 highlighted a major storm impacting the Aleutian Islands which would eventually evolve into a blizzard event over NM around January 6-8, 2024. Heavy snow impacted the Sangre de Cristo Mountains and northeast NM where intense winds combined with frigid temperatures to produce life-threatening whiteout conditions and major travel disruptions. A massive pileup on I-40 in eastern NM resulted in one fatality and numerous injuries. Vehicles were stranded in snowdrifts across portions of northeast NM where winds gusted as high as 90 mph with nearly a foot of snow. Several bouts of strong winds continued to impact the region in the wake of this first major storm system, along with very cold temperatures and frigid wind chills.



US 64/87 Jan. 8, 2024 NMDOT

January 7th Blizzard



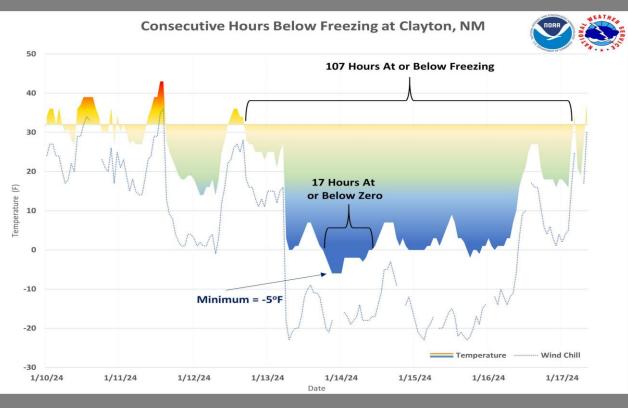
GOES Water Vapor Jan. 2, 2024 View of Blizzard 5 Days Out

Northeast NM Blizzard & Arctic Air (January 6-16, 2024)

By January 12-13, 2024, the combination of strong winds with existing snow cover led to epic snowdrifts along the I-25 corridor between Wagon Mound, Springer, and Raton. The largest drift impacted the area around Springer where the shear size of the drift dwarfed a full-size truck as shown in the photo below. The interstate was closed for several hours while crews worked to clear the drift. In the wake of these strong winds, very cold air surged into eastern NM and resulted in several consecutive days of brutally cold temperatures. Clayton, NM fell below freezing on January 13th and did not warm above freezing until the 17th (107 hours). There were even 17 hours below zero with a record low temperature of -5°. Wind chills values were dangerously cold with several areas from Clovis to Santa Rosa, Raton, and Clayton falling into the -10°s and -20°s.



Location	Min Wind Chill Jan.15
Clayton Airport	-24°
Raton Airport	-21°
Santa Rosa Airport	-14°
Melrose	-12°
Clovis Airport	-11°
Las Vegas Airport	-5°
Santa Fe Airport	-4°



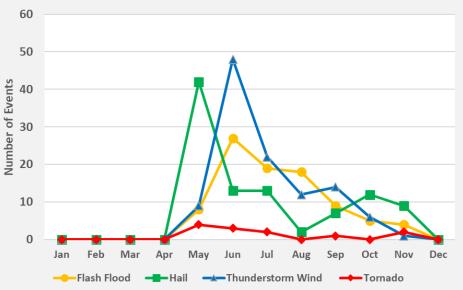
Severe Weather Events



There were several periods of active severe weather during the spring and early summer of 2024, including a few noteworthy events in the fall season. More detailed information on severe weather can be found in the <u>2024 Severe Weather Summary</u>, which is also accessible from the main annual highlights webpage. The chart on the upper right outlines how our severe weather reports were distributed throughout 2024. There is a notable peak in flash flooding, hail, and damaging winds from April through June. A few dates with the more memorable severe weather events include;

May 11th: Jemez Mts tornado, deep hail in Los Alamos, golf ball hail and flooding in Chaves County May 28-29th: Eastern NM tornados, 70mph winds, baseball hail, and flooding around Clovis May 31st: Baseball hail in Elida, 100 mph winds near Tatum, tennis ball hail around Hobbs June 19-21st: Dust storms, wildfires, intense flash flooding, and deep hail in central and eastern NM October 19-20th: Severe flooding in Chaves County and golf ball hail in Tucumcari November 2nd: Severe flooding and large hail in southern Chaves County

NM Severe Weather Events By Month





May 29th tennis ball size hail at Cannon AFB. Photo courtesy of Ruthann Kelly.

Accumulations of pea to penny size hail in Los Alamos. Photo courtesy of @theatomicmom on X.



Hail accumulation and flash flooding near Willard. Photos below by Mike Bischoff, Blue Sky Productions Utah.



2024

June Flooding



Rio del Oso Medanales | June 20, 2024 Courtesy [Find Permission?]



Hot and dry conditions during the first half of June 2024 gave way to a very active weather pattern by the middle of the month. Showers and thunderstorms with very heavy rainfall, large hail, damaging winds, tornados, and flash flooding impacted many parts of the state. Rainfall amounts were very impressive during this period with some locations picking up between 4 and 8" in less than 48 hours. A nearly stationary thunderstorm over the Jemez Mountains led to intense flash flooding along the Rio del Oso and Rio Chama near Espanola. Roads were washed out while flood waters damaged several homes. The crest of 7.95 feet on the Rio Chama near Chamita at 7am on June 20, 2024 was the 8th highest crest on record. The record crest is 11.68 feet on August 14, 1994. Another intense storm near Shiprock washed out portions of U.S. 64 near the AZ border. Farmington also saw widespread street flooding with stranded vehicles. One of the most impressive thunderstorms over the entire year sat over NM-41 near Willard on June 19th with epic flooding from hail and heavy rainfall. Many vehicles were stranded and displayed from the roadway.

ink to Main Hydrology Summary PDF for 2024







Farmington | June 21, 2024 Courtesy Caitlyn Vacillio





June Flooding



Some of the most severe flooding in the region impacted areas around the Hermit's Peak/Calf Canyon burn scar and nearby city of Las Vegas. Many roads, businesses, and hydrologic infrastructure was overwhelmed by rainfall amounts in excess of 7" in just 24 hours above Las Vegas. The Gallinas River at Montezuma peaked at 6.49 feet at 4:25am MDT June 20, 2024, which is the 5th highest crest on record. The peak crest of 9.70 feet occurred on August 2, 1966. The Albuquerque metro area was not left unscathed as many low lying areas of town were flooded from heavy storms on June 29th.



Albuquerque Flood | June 29, 2024 Courtesy Marti Reed via X



Albuquerque Flood | June 29, 2024 Courtesy Roberto Rosales via X

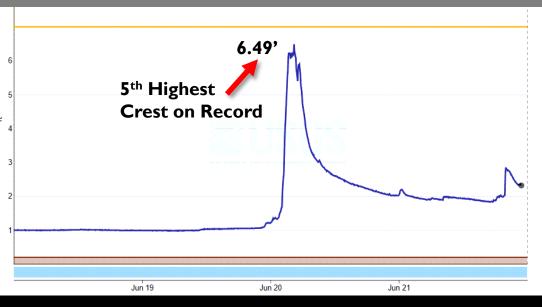
Hagerman Flood | June 26, 2024 Courtesy Jim Tucker

Albuquerque Flood | June 29, 2024

Courtesy John Benavidez via X



Las Vegas Flood | June 21, 2024 Courtesy Mark Rowley NMSP



Gallinas River @ Montezuma USGS Gage Height | June 18 – June 21, 2024

auences

Carrizozo



CIRA GeoColor Imagery | South Fork & Salt Fires June 17, 2024

Capitan

The Ruidoso area was ravaged by wildfires and the subsequent flash flooding during the summer of 2024. The South Fork and Salt Fires were discovered on June 17th within tribal land along the Rio Ruidoso drainage basin south and west of Ruidoso. The South Fork Fire blew up in size within the first two days reaching an estimated 17,600 acres and destroying an estimated 1,400 structures. The Salt Fire grew to nearly 8,000 acres and destroyed an estimated 41 structures. Two lives were lost in the South Fork Fire. Fire growth slowed considerably by the 19th as weather whiplash struck the area. The summer monsoon kicked in furiously and unleashed heavy rainfall, large hail, and flash flooding on the 19th which severely impacted the burn scar. A Fire Warning was in effect while Severe Thunderstorm Warnings and Flash Flood Emergencies were also in effect. Flash flooding and debris flows exacerbated recovery efforts for months. Many of the structures lost were located within the eastern and northeastern portion of the burn area, including areas from Alto to Cellars Canyon, Cedar Canyon, and the upper Rio Ruidoso. These same areas were also damaged by flooding, including areas much farther downstream toward Ruidoso Downs. Even locations along the Rio Ruidoso into Chaves County experienced flooding.

South Fork Fire Plume & Severe Thunderstorm | June 19, 2024 Courtesy Kerry Jones





South Fork Hail | June 19, 2024 Courtesy Tom Bird

South Fork Severe Storm | June 19, 2024 RadarScope Capture via Kerry Jones

South Fork

Ruidoso Wildfires & Flooding

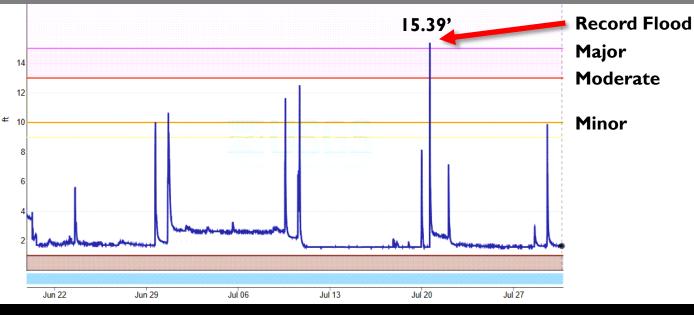


Thunderstorms with intense rainfall produced dramatic scenes of flash flooding across the Ruidoso area. Significant damage to infrastructure was noted along with inundated homes, vehicles, and businesses throughout the summer, especially June and July. The Rio Ruidoso experienced several flood events and a new record crest of 15.39 feet was observed at 3:15pm MDT July 20, 2024. The previous crest of nearly 13.0 feet on July 9th unleashed a disastrous flood wave that inundated many areas along the Rio Ruidoso, including the racetrack at Ruidoso Downs. The

Ruidoso area may be reeling from the effects of the South Fork or Salt Fires for years to come until the combination of mitigation efforts and burn scar healing takes place.



Fern Trail Flash Flood | July 9, 2024 Courtesy Jesus Figueroa via Facebook



Rio Ruidoso @ Ruidoso USGS Gage Height | June 15 – July 31, 2024



Ruidoso Downs Flash Flood | July 9, 2024 Courtesy Jake Canavan

October Flooding

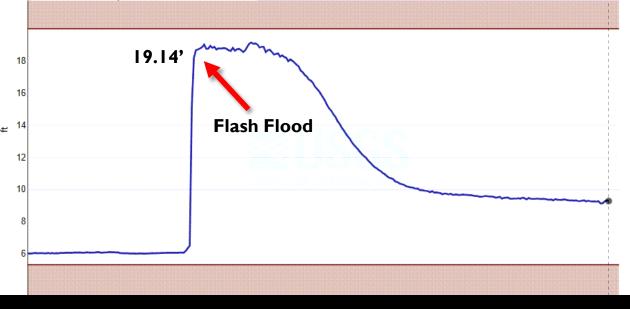


The Rio Hondo at Roswell peaked at 19.14 feet at 3:15am October 20, 2024. A rise of nearly 9 feet occurred in just 15 minutes for a total of 13 feet in roughly 30 minutes! Dozens of vehicles were swept away into nearby drainage channels across the city, especially along the Spring River and the Rio Hondo. Unfortunately, two people were killed in the flood waters. Significant damage also occurred to residences and businesses.

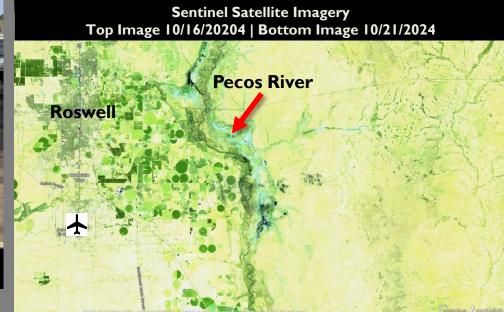
The Sentinel satellite imagery on the right shows the flood inundation with the darker blue and greenish colors.



Roswell | October 20 Courtesy Matthew Fuentes



Rio Hondo @ Roswell USGS Gage Height | October 19-21, 2024



Roswell_Sentinel_FalseColorUrban_10212024 2024-10-21 00:00 - 2024-10-21 23:59, Sentinel-2 L2A, False color (urban)



Significant damage also bet

2024

October Flooding

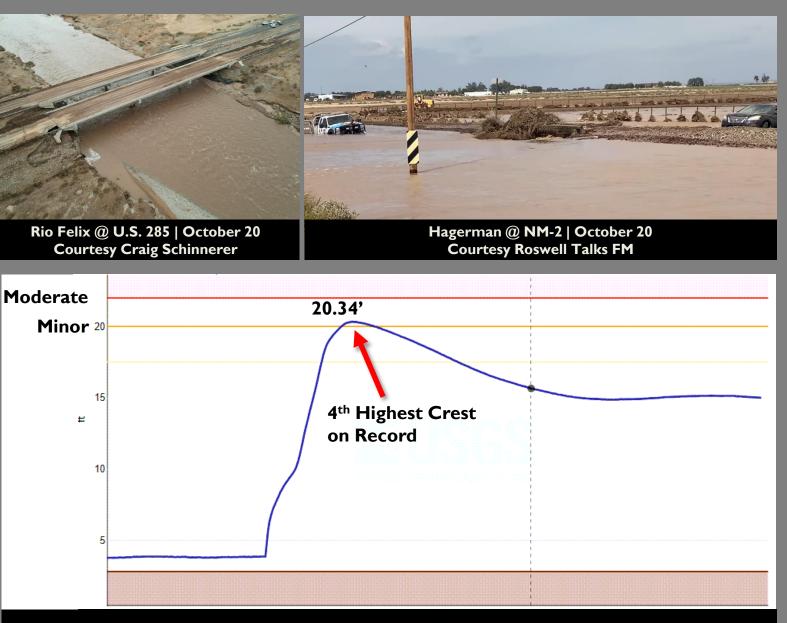


Another surge of subtropical moisture impacted New Mexico in late October with the bulk of the impacts within southern Chaves County. While Roswell was mostly spared from the heaviest rainfall, areas around Hagerman, Dexter, and Lake Arthur were hit hard by flooding. Rainfall amounts from this second batch of rainfall were not the historic amounts that slammed the Roswell area a few days prior but they were plenty heavy to produce widespread areas of standing water and overflowing rivers. Fortunately, there were no fatalities with this event but lots of flood damage was reported to homes, vehicles, and infrastructure.

The Pecos River above Lake Arthur peadked at 20.34 feet at 8:30pm on October 20, 2024. This ws the 4th highest crest on record. The record flood is 21.90 feet on September 24, 1941. Link to Main Hydrology Summary PDF for 2024



Dexter | October 20 Courtesy Gabriel Aguilar



Pecos River @ Lake Arthur USGS Gage Height | October 19-24, 2024

November Heavy Snowfall & Blizzard (November 6-8, 2024)



Location	Snowfall		
Angel Fire 3 E	40"		
Rociada	36″		
Las Vegas	32″		
Los Alamos 6 W	29"		
Estancia 6 WSW	28″		
Folsom 10 ENE	28″		
Cimmarron 1 SE	26″		
Sapello 5 WNW	25″		
Coyote 12 SSE	25″		
Taos Ski Valley	25″		
Tres Ritos 3 NW	25″		
Roy 7 WSW	24″		
Eagle Nest Lake State Park	23″		
Golden 6 S	24"		
Miera 2 ESE	23″		
Placitas 4 ENE	21″		
Fenton Lake State Park	20"		
Sedillo	18"		
Santa Fe 7 SW	15″		
Paradise Hills	8″		

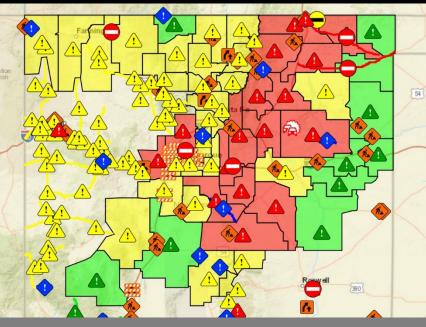
A slow-moving winter storm slammed the region at the beginning of November with multiple days of heavy snow in several areas. Nearly the entire region north and east of Albuquerque picked up one to two feet of snow or more! The GeoColor satellite imagery from November 9th shows the extent of snowfall in white. Travel was severely impacted across parts of NM with numerous road closures and stranded motorists, including those along portions of I-25 and I-40.

The big winner was in the Angel Fire area where 40" fell in 3 days. Temperatures were relatively mild during this event so the type of snow was on the wetter side. This helped to improve soil moisture conditions leading into the very dry stretch of weather through late December.



GOES GeoColor Snow Cover | Nov. 9, 2024

NMDOT Travel Map | Nov. 8, 2024





Stranded on I-40 near Clines Corners | Nov. 8, 2024 Courtesy Rachel Rodriguez

November Heavy Snowfall & Blizzard (November 6-8, 2024)



While no all-time snowfall records were broken across the region, there were several daily records for November. The Villanueva and Golden COOP stations, which have extensive periods of record, both reported record 1-day snowfall amounts of 12" for the month of November. Capulin reported a whopping 18" in 1-day and 26.1" in 2-days!

The map on the right snows the NWS Snowfall Analysis valid on November 8, 2024. Areas in red received greater than 18" of snow for this event while areas in dark red picked up more than 24". Note the areas with lesser snowfall amounts in the Rio Grande Valley near Taos, Espanola, and Albuquerque. These areas were shadowed by the high terrain to their east as drier, stable downslope east winds squeezed through nearby canyons. Folks on the west side of Albuquerque and Rio Rancho picked up near 8" of snow while folks near the Sunport saw only a dusting.

November Records				
Location	1-day	2-day	Period of Record	
Villanueva COOP	12.0"	14.0"	1942-2024	
Golden COOP	12.0"		1903-2024	
Pedernal COOP	9.0"	14.0"	1929-2024	
Capulin COOP	18.3″	26.1"	1995-2024	
Clayton Airport		20.2"	1896-2024	
Pasamonte COOP		16.0"	1910-2024	
Cubero COOP		8.0"	1977-2024	

