

NWS FORM E-5 (11-88) (PRES. by NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Midland, Texas
	MONTHLY REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR: MONTH August YEAR 2016
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283	SIGNATURE J. DeBerry In Charge of HSA	DATE September 15, 2016

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

An X inside this box indicates that no river flooding occurred within this hydrologic service area.

The upper level ridge prevalent throughout summer over West Texas and Southeast New Mexico began breaking down early in August. As a result, hydrologic event were slightly more numerous than usual.

On August 12th, thunderstorms developed over the Permian Basin, flooding several roadways in and around Midland in Midland County. Storms then moved into Gaines County, where floodwaters closed U.S. Highway 180 in Seminole. A high water rescue was reported on the east side of town.

On the 21st, training thunderstorms developed over Carlsbad in Eddy County, resulting in significant street flooding of 2' or more of runoff in some places, necessitating numerous road closures. A 6-7' flood wave moved down Dark Canyon, closing C.R. 408 and other roads at the mouth of the canyon.

On August 23rd, thunderstorms over Pecos County inundated State Highway 18 with 2-3' of floodwater from 15 miles north of Fort Stockton to the Pecos River. Several water rescues were reported.

On the 28th, training thunderstorms developed over Lea and Gaines Counties, dumping over 5" of rainfall in some places overnight. The axis of heaviest precipitation extended from southwest Lea to northeast Gaines Counties. Numerous reports of roadway flooding, closures, and water rescues were reported in the vicinity of Hobbs, Jal, and Seminole. This event carried over into the 29th, when rainfall developed southeast into Andrews County. Numerous road closures were reported in and around the city of Andrews.

On August 30th, convection redeveloped over Southeast New Mexico. Arroyos flooded in and around Maljamar in Lea County, as well as Carlsbad and Artesia in Eddy County, closing numerous roadways. Dark Canyon ran with 20-25' of floodwater.

Overall, the early breakdown of the upper ridge allowed for abundant rainfall during August, especially over Southeast New Mexico and adjacent areas of West Texas. The Big Bend and other areas along the Rio Grande saw ample rainfall as well, which resulted in elevated flows on the river for much of the month. Final radar estimates for the month suggest that over 15" of rain fell in isolated areas of southeast Eddy County. Rainfall in excess of 600% of normal was observed over areas of Southeast New Mexico, the northwest Permian Basin, and the southern half of Brewster County.

Precipitation amounts from area ASOS's:

City	ASOS ID	August	July
Carlsbad, NM	CNM	6.93"	0.34"
Fort Stockton	FST	1.76"	1.05"
Guadalupe Pass	GDP	4.17"	0.40"
Midland Int'l	MAF	3.20"	0.24"
Odessa	ODO	3.52"	0.52"
Terrell County	6R6	3.30"	0.33"
Wink	INK	0.61"	0.23"

Precipitation amounts from area AWOS's:

City	AWOS ID	August	July
Alpine	E38	5.06"	0.53"
Artesia, NM	ATS	5.54"	0.02"
Big Spring	BGP	0.02"	0.08"
Gaines County	GNC	6.05"	0.29"
Hobbs	HOB	2.46"	0.00"
Marfa	MRF	4.61"	1.34"
Midland Airpark	MDD	0.28"	0.61"
Pecos	PEQ	3.47"	0.08"
Snyder	SNK	1.21"	0.71"

Some other locations in the HSA that received notable amounts of precipitation for August were:

Queen, Eddy County	8.59"
Chisos Basin, Brewster County	10.29"
Caprock, Lea County	10.49"
The Bowl, Culberson County	10.74"

100 locations reported rainfall for the month of August, for an HSA average of 4.15".

Normal August precipitation for Midland International Air and Space Port is 1.84". Total precipitation for the airport for the year ending September 1st was 10.34", or 0.62" above normal.

Rain in August generally kept the drought at bay in West Texas and Southeast New Mexico. As of August 30th, in Southeast New Mexico, northwest Eddy County and northern Lea County were in moderate drought. The rest of Southeast New Mexico was abnormally dry or out of drought. In West Texas, abnormally dry conditions existed in a few small areas, but otherwise no drought conditions were noted.

Reservoir levels across the HSA averaged 54.7% of conservation capacity as of September 1st:

Reservoir (County, State)	August Conserv Cap (%)	July Conserv Cap (%)
JB Thomas (Scurry, TX)	63.7	65.0
Colorado City (Mitchell, TX)	23.9	24.9

Champion Creek (Mitchell, TX)	24.7	25.3
Natural Dam Salt Lake (Howard, TX)	48.6	48.6
Moss Creek (Howard, TX)	67.0	68.0
Brantley (Eddy, NM)	74.0	51.0
Avalon (Eddy, NM)	50.0	43.0
Red Bluff (Reeves, TX)	85.8	81.1

Non-Routine Products Issued for August:

Flash Flood Watches (FFA): 15
Flash Flood Warnings (FFW): 28
Flash Flood Statements (FFS): 14
Flood Advisories/Statements (FLS): 103
Flood Warnings (FLW): 18

Total Non-Routine Products Issued: 178

**cc: email: COE ABQ, HIC, IBWC ELP, IBWC PRD, LCRA, NWS ABQ, NWS EPZ, NWS LBB,
NWS MAF, NWS SJT, SRH, TAMU, TCEQ, USGS CNM, USGS SJT, WGRFC**