

<b>NWS FORM E-5</b> (11-88) (PRES. by NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA) <b>WFO Midland, Texas</b>
	<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>	REPORT FOR: MONTH <b>July</b> YEAR <b>2013</b>
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283	SIGNATURE <b>J. DeBerry</b> In Charge of HSA	DATE <b>August 15, 2013</b>

*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.

July saw another month of relatively abundant rainfall, mainly from an unusual retrograding upper-level storm system that moved east to west through the region from July 14-19. This system entrained tropical Gulf moisture as it moved west, bringing warm rain processes to West Texas and Southeast New Mexico. All but the Presidio Valley and Big Bend Area saw appreciable rainfall, with up to 6" of rainfall in some places during this time. However, rainfall was widely dispersed over time and place, so flash flooding was minimized. Runoff ran through Dark Canyon in Eddy County, and a few roads at the mouth of the canyon were barricaded for the better part of a day due to inundated portions.

On 20 July, the focus for convection shifted south to the Rio Grande and Rio Conchos watersheds. Abundant rainfall on both sides of the Rio Grande led to minor flooding on the river through the July 22<sup>nd</sup>, from above Presidio in Presidio County downstream to Boquillas in Brewster County.

The Rio Grande went into flood again on July 27<sup>th</sup>, mainly due to releases from Luis Leon Reservoir in Chihuahua, Mexico, that flowed down the Rio Conchos. The Rio Grande went into minor flood from Presidio International Bridge (PRST2) to Lajitas (TGAT2), and was still in flood as of 1 August.

Finally, on July 30<sup>th</sup>, thunderstorms developed in the Permian Basin, flooding roadways in and around Odessa in Ector County with up to 1' of runoff and stranding vehicles.

Precipitation amounts from area ASOS's:

City	ASOS ID	July	June
Carlsbad, NM	CNM	4.61"	0.54"
Fort Stockton	FST	1.58"	0.06"
Guadalupe Pass	GDP	1.76"	1.14"
Midland Int'l	MAF	0.98"	0.85"
Odessa	ODO	1.60"	0.43"
Terrell County	6R6	1.47"	1.10"
Wink	INK	1.36"	0.55"

Precipitation amounts from area AWOS's:

City	ASOS ID	July	June
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Alpine	E38	0.95"	1.43"
Artesia, NM	ATS	1.18"	0.15"
Big Spring	BGP	2.65"	1.94"
Gaines County	GNC	2.28"	0.16"
Hobbs	HOB	0.03	M
Marfa	MRF	2.07"	2.21"
Midland Airpark	MDD	0.66"	0.12"
Pecos	PEQ	0.81"	0.53"
Snyder	SNK	2.12"	1.73"

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

Carlsbad Caverns National Park, Eddy County	6.28"
Dark Canyon, Eddy County	6.36"
Hope, Eddy County	6.53"
The Bowl, Culberson County	7.07"

103 locations reported rainfall for the month of July, for an average of 2.64".

Normal July precipitation for Midland International Airport is 1.82". Total precipitation for Midland International Airport for 2013 ending August 1<sup>st</sup> was 3.39", or 4.49" below normal.

Due to July rains, drought conditions have improved slightly. As of July 23<sup>th</sup>, in Southeast New Mexico, only northwest Eddy County is in exceptional drought. The rest of the county, as well as Lea County, was in extreme to moderate drought. In West Texas, exceptional drought in the Western Low Rolling Plains had diminished, and was restricted only to northeast Gaines and northwest Dawson Counties. Exceptional drought remained unchanged in the Permian Basin, confined mainly to Ector and Midland Counties. The rest of the Western Low Rolling Plains and Permian Basin were in extreme to moderate drought. The rest of West Texas ranged from severe drought to abnormally dry.

Reservoir levels across the HSA averaged 29.3% of conservation capacity as of August 1<sup>st</sup>:

Reservoir (County, State)	July Conserv Cap (%)	June Conserv Cap (%)
JB Thomas (Scurry, TX)	1.6	1.8
Colorado City (Mitchell, TX)	30.3	31.3
Champion Creek (Mitchell, TX)	8.4	8.5
Natural Dam Salt Lake (Howard, TX)	48.6	48.6
Moss Creek (Howard, TX)	61.0	62.0
Brantley (Eddy, NM)	15.0	12.0
Avalon (Eddy, NM)	54.0	38.0
Red Bluff (Reeves, TX)	15.6	13.5

### **Non-Routine Products Issued for July:**

Flash Flood Watches (FFA): 9

Flash Flood Warnings (FFW): 10  
Flash Flood Statements (FFS): 12  
Flood Warnings (FLW): 8  
Flood Statements (FLS): 66

**Total Non-Routine Products Issued: 105**

**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**