

NWS FORM E-5
(11-88)
(PRES. by WSOM E-41)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

HYDROLOGIC SERVICE AREA (HSA)

Midland, Texas

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

REPORT FOR:

MONTH

YEAR

April

2004

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

05/01/04

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)

2 flood stages were reached in this HSA in April.

Dryline events strengthened throughout April, especially the first half of the month, and rainfall was relatively abundant. The month began with the HSA primed for rainfall, with southeasterly surface flow drawing copious amounts of Gulf moisture up the Rio Grande Valley into the region.

On April 2nd, severe thunderstorms developed along a sharpened dryline in Eddy County. In addition to receiving large hail, some streets in Carlsbad were inundated with up to 4' of runoff. This served only to saturate soils there as a larger potential flooding event developed. Computer models consistently adumbrated a sharpening dryline well to the west, abundant low-level moisture east, an incoming negatively-tilted upper-level trough, and a cold front, all timed to coincide over the weekend of April 3rd-4th. All these features portended a major event for the HSA.

Flooding in Eddy County continued into the morning of the 3rd, and flash flooding in Dark Canyon Draw west of Carlsbad resulted in the closure of roadways there. Thunderstorms developed throughout the day further east, and by early evening, had flash flooded US Hwy 62/180 from Hobbs to Seminole in Lea County, as well as St. Hwy 18 from Hobbs to Eunice. This prompted closure of both roads, as well as all other roads leading out of Eunice. Further east, portions of St. Hwy 214 south of Denver City in Gaines County were also barricaded. Meanwhile, thunderstorms trained over Eddy and Reeves Counties throughout the evening. Dark Canyon Road 5 miles east of St. Hwy 137 flooded under 7' of runoff before the storms developed further south into Reeves County, flooding and shutting down portions of FM 2903 between Toyah and Balmorhea. Flooding persisted in Carlsbad, washing away streets and stranding numerous vehicles, especially on Canal Street.

US Hwy 285 between Artesia and Carlsbad was also closed shortly after midnight on April 4th. Flooding continued in Reeves County, closing FM 869 between I-20 and St. Hwy 17.

During this time, runoff turned the normally-dry Permian Salt Draw in Reeves County into a raging torrent. Permian Salt Draw skirts the northeastern edge of Toyah, and Toyah has long been buffered by this draw with an earthen dike of 6-8'. Runoff eventually eroded the dike, breaching approximately 100' of levee and sending a 3-4' flood wave through town. Long-time residents of Toyah claimed it was the worst flood event for the town since the early 1940s. Evacuations were necessary, and the Red Cross was activated. Permian Salt Draw runs southeast and eventually crosses I-20 about 15 miles west of Pecos. Here it eroded the bridge supports of the eastbound lanes, and 2 sections of interstate collapsed. Fortunately, NWS warnings and strong interagency cooperation of various agencies had prompted closure of the interstate. The westbound bridge was weakened as well, but did not collapse. Fortunately, no casualties resulted.

Carlsbad continued to flood, and evacuations were needed, particularly along County Rds. 658 and 672 southwest of town. By the time the event was over, approximately 300 residences in the Carlsbad vicinity were evacuated, and Eddy County was declared a disaster area by FEMA. Both Carlsbad below Dark Canyon Draw (CPDN5) and Dark Canyon Draw (DACN5) rose well above flood stage on the morning of the 4th. See accompanying E-3.

Thunderstorms then developed further south as the upper-level trough moved into the area, flooding vehicles in Pecos County. Flooding also developed/continued in Eddy, Reeves, Lea, Ward, Gaines, Andrews, Ector, and Midland Counties. This continued into April 5th as far east as Howard, Scurry, and Mitchell Counties.

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

| | |
|---------------------------|-------|
| Hobbs, Lea County | 5.27" |
| Artesia, Eddy County | 5.31" |
| Queen, Eddy County | 6.61" |
| Brantley Dam, Eddy County | 6.70" |

The average of all stations reporting was 2.40".

Midland International Airport received 1.89" of precipitation for the month. Normal for the month of April is 0.73". Total for the year is 4.07", 1.81" above normal.

Due to the abundant rainfall for April, much of the HSA has had a reprieve from drought, at least temporarily. Conditions range from moderate in the Guadalupe Mountains to near normal over the Permian Basin, Lower Trans Pecos, and much of the Big Bend.

Reservoir levels across the HSA are averaging 47% of conservation capacity, around 1% higher than in March. Champion Creek Reservoir remains the lowest, at about 9% capacity, while Brantley Reservoir is the highest, at around 90% capacity. The flood threat remains low.

River products issued:
RVS = 4 FLW = 2 FLS = 13

Shifts worked: 9

cc:mail: DOA IBWC-ELP IBWC-PRS SWFED USGS-CNM USGS-SJT
cc:email: HIC W/SR2 W/SR3 W/SR-ABQ W/SR-ELP W/SR-FWR W/SR-LBB W/SR-MAF W/SR-SJT