

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)	
		NWFO NEW ORLEANS/BATON ROUGE, LOUISIANA	
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH JULY	YEAR 2004
		SIGNATURE Paul S. Trotter, Meteorologist-In-Charge	
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		DATE August 15, 2004	

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)

...High Pressure Dominated July with Generally Drier than Normal Conditions...

As June ended on a wet and stormy note, July began with heavy rainfall and severe thunderstorms over much of southeastern Louisiana and southern Mississippi. For the first four days of the month, areal average rainfall ranged from 0.5 inch in south-central Louisiana and southern Mississippi to over 1.5 inches over parts of southeast Louisiana.

From July 5 through July 11, high pressure developed over the Lower Mississippi River valley. The airmass was still unstable and scattered thunderstorms developed. Several incidents of severe weather, including tornadoes, funnel clouds, hail and flash floods occurred. Areal rainfall amounts averaged from 1.0 inch to around 1.6 inches across southeast Louisiana. Areal rainfall averaged .5 inch to 1.0 inch in southern Mississippi.

High pressure persisted from July 12 until around July 17. Most the rainfall during the week occurred as an unseasonably strong cold front pushed into southern Louisiana and through southwestern Mississippi over the weekend. The scattered thunderstorms that occurred produced areal average rainfall amounts that ranged from 0.25 inch to near 1.0 inch, well below the normal for southeastern Louisiana and southern Mississippi.

With the strong cold front well off the Gulf coast by July 19, high pressure again dominated the weather over the Lower Mississippi River valley. Through July 25, isolated thunderstorms occurred over the southern parishes and south Mississippi. The high pressure pattern began to break down on July 24 as another cold front moved from Arkansas into Louisiana and Mississippi. However, the overall pattern was not conducive to producing any significant rainfall through July 25. Areal average rainfall amounts ranged from 0.34 inch over east central Louisiana to 0.88 inch over south central Louisiana. Little to no rainfall fell over southern and coastal Mississippi.

On July 26, another cold front made its way through southeastern Louisiana and southern Mississippi and served as a focusing mechanism for thunderstorm development. Scattered storms developed across the region. After the front moved through the area, temperatures and humidity decreased significantly. The front pushed into the Gulf of Mexico on July 27, stalled, and then lifted north as a warm front on July 28. With the warm front, southerly flow off the Gulf of Mexico dominated the weather for the rest of the week. In the humid airmass, scattered thundershowers developed daily. The heaviest rainfall occurred on July 31, when an intense downpour of about 1.5 inches in Jefferson Parish produced flash flooding, particularly over the Harahan area. Otherwise, areal rainfall amounts were generally 0.68 inch to near 1.5 inches over the region.

Rainfall values over southern Louisiana were well below normal, as shown:

Area	July Areal Average	Departure from Normal
East Central Louisiana	2.83	-3.15
South Central Louisiana	5.49	-1.33
Southeast Louisiana	6.32	-0.65