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) **NEW ORLEANS/BATON ROUGE, LA**
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH: **JULY** YEAR: **2014**
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE KENNETH GRAHAM METEOROLOGIST-IN-CHARGE DATE **AUGUST 15, 2014**

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)

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

…Unusually Strong Cold Fronts Produced Significant Weather in July …

Warm, humid air from the Gulf of Mexico fueled summer convection over southeastern Louisiana and southern Mississippi. Isolated thunderstorms developed during the week, primarily over east-central Louisiana. Across that area, local amounts over 1 inch were reported and the areal-average rain total for the week was 0.16 inch. Little to no rainfall developed elsewhere through July 6th.

Very unstable air remained over the region from July 7th through July 13th, as a frontal boundary lingered to the north. By July 8th, Carville, LA had measured 4.80 inches of rain over a two-day period. The front slid into central Mississippi on July 11th and then gradually retreated and dissipated. This boundary focused thunderstorm development over the entire region. As a result, many locations measured 1.0 to 3.5 inches of rain, primarily from July 9th to July 12th. By the end of the week, Carville received 6.88 inches of rainfall, while 4.26 inches fell at Slidell Airport (ASD) and Weather Office (LIX). Areal-average rain totals for the week generally ranged from 2.0 to 2.5 inches.

An unusual, summer cold front produced copious rains region-wide by July 20th. The boundary sank south on July 15th and eventually lingered along the Gulf Coast until July 17th. By July 19th, the boundary had shifted north again into central Louisiana, where it regained strength by July 21st. The greatest rainfall amounts recorded during the week (in inches) were: Port Allen, LA (7.65); Baton Rouge/Concord, LA (7.52); and Bayou Sorrel Lock, LA (7.47). At these locations, the rain measured was over 6.0 inches above the seasonal normal. Areal-average rainfall totals for the week ranged from 1.46 inches across coastal Mississippi up to more than 5.0 inches across parts of central Louisiana.

With another boundary stalled along the Gulf Coast, copious rains developed again during the following week. The heaviest rainfall occurred from July 21st to 23rd across the southeastern Louisiana and coastal Mississippi. During the week, Boothville, LA measured 5.56 inches over a two-day period and finished the week with 6.57 inches. Areal-average rain totals for the week ending July 27th ranged from 0.35 inch up to 2.20 inches over extreme southeast Louisiana. Spotty rainfall developed over the last days of July with local amounts around 0.5 inch or less.

Monthly Reports by Agricultural Region	**Areal Average**	**Departure from Normal**
Southwest Mississippi	N/A	N/A
South Central Mississippi (1 Site)	3.62	- 1.94
Coastal Mississippi	3.85	- 2.94
Central Louisiana (2 Sites)	7.10	+2.30
East Central Louisiana	5.75	+0.53
South Central Louisiana (6 Sites)	7.48	+1.68
Southeast Louisiana	6.05	-0.68

Extreme Rainfall for the Month (Inches and Departure from Normal)

Baton Rouge/Concord, LA	11.30	+5.10	Carville, LA	11.25	+5.81

Drought…

Soil moisture contents were at normal levels across southeastern Louisiana and southern Mississippi during July.