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: **FEBRUARY** 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 **MARCH 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)

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

…Flooding Developed over Southeastern Louisiana and Southern Mississippi in February 2014…
…Starting February 5, 2014, responsibility for parts of the Atchafalaya River Basin will transfer to National Weather Service Forecast Office at Lake Charles, Louisiana…

Below normal rainfall persisted into early February over southeastern Louisiana and southern Mississippi. For the weather week that began in late January and ended on February 2nd, areal rainfall totals averaged near 0.5 inch or less.

During the week from February 3rd though February 9th, a large area of low pressure produced considerable precipitation over the entire region, including some frozen precipitation. Periods of copious rain occurred and rain amounts over 2.0 inches fell at many locations. The heaviest rainfall during this period occurred across central Louisiana, east-central Louisiana, and southwest Mississippi. At Gloster, MS, 4.18 inches fell on February 3rd alone. Flash floods developed from Baton Rouge east to St. Tammany Parish. For the week, areal-average rain totals ranged from 0.61 inch across extreme southeast Louisiana up to 1.51 inches over east-central Louisiana.

A series of storm systems impacted the region from mid-February through the end of the month. By February 16th, significant rains had fallen over the southern parishes of Louisiana and across southern Mississippi. In Louisiana, Carville measured 3.15 inches; Morgan City had 3.10 inches; and Bayou Sorrel Lock had 3.05 inches during the week from February 10th through 16th. Widespread rainfall totals over 2.0 inches occurred. For that period, areal-average rain totals ranged from 1.44 up to 2.35 inches.

Convective rainfall and severe weather developed with two weather systems during the following week, primarily from February 21st through 23rd. The heaviest rains spread east from central Louisiana into coastal Mississippi. By February 23rd, Biloxi, MS had measured 3.51 inches and Clinton, LA had recorded 3.20 inches. Areal-average rain totals for the week ranged from 1.11 inches over extreme southeast Louisiana up to 2.77 inches over coastal Mississippi.

A cold front moved south across Louisiana and Mississippi starting February 24th and impacted the region through the remainder of the month. Most of the heavier downpours occurred on February 26th, when many locations measured amounts of 1 inch to 2.84 inches. Areal-average rainfall totals for the region generally ranged from 1.5 to 2.84 inches.

Flooding…
Minor flooding developed on the Lower Pearl River at Bogalusa, LA on February 6th and at Pearl River, LA by February 9th. The Lower Pearl River remained in flood throughout the month. Minor flooding briefly developed on the Biloxi River at Lyman, MS on February 12th.

For much of February, the rivers were able to handle the copious downpours that occurred across the entire region. However, by February 21st, the heavy rainfall pushed several rivers in Mississippi and Louisiana into flood. In Mississippi, flooding started on the Bogue Chitto River at Tylertown and eventually reached major flood levels. Minor flooding developed on the Tangipahoa River at Osyka. In Louisiana, flooding started on the Tickfaw River at Liverpool and eventually reached moderate levels. Minor flood conditions developed on the Tangipahoa River at Kentwood and on the Bogue Chitto River at Franklinton.

From February 22nd through 24th, minor flooding started on the Tangipahoa River at Robert; on the Bogue Chitto River near Bush; and on the Amite River near Denham Springs and Bayou Manchac Point. Flood waters receded across all Louisiana and Mississippi by February 26th, with the exception of the Lower Pearl River.

Monthly Reports by Agricultural Region	**Areal Average**	**Departure from Normal**
Southwest Mississippi (1 Site)	13.88	+ 4.18
South Central Mississippi (1 Site)	9.44	+ 3.77
Coastal Mississippi	7.96	+ 2.63
Central Louisiana (2 Sites)	9.33	+ 4.04
South Central Louisiana (6 Sites)	5.76	+ 1.88
East Central Louisiana	8.52	+ 3.20
Southeast Louisiana	5.26	+ 0.38

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

Gloster, MS	13.88		Baton Rouge/Concord, LA	10.49	+ 4.82
Waveland, MS	11.17	+ 5.86	St. Francisville, LA	10.10	+ 5.04
Convent, LA	11.02		Clinton, LA	9.99	+ 4.73

Drought…

At the start of February, only extreme southeastern Louisiana and coastal Mississippi had normal soil moisture contents. All other regions were abnormally dry, as soil moisture rapidly declined. By February 4th, moderate drought (D1) conditions had spread into Wilkinson and Amite Counties in Mississippi, as well as over much of southeastern Louisiana. Normal soil moisture contents only lingered over the extreme southern portions of Terrebonne, Lafourche, Jefferson, and Plaquemines Parishes and most of coastal Mississippi.

Heavy rainfall over the region allowed soil moisture contents to steadily improve after February 11th. By the end of the month, soil moisture was at normal levels over all areas, other than a small portion of the Atchafalaya River Basin.

Note:

Starting February 5, 2014, reports pertaining to the Atchafalaya River Basin within Avoyelles, St. Landry, St. Martin, Iberia, and St. Mary Parishes will be provided by the National Weather Service Forecast Office at Lake Charles, Louisiana. Reports pertaining to the eastern portion of the Atchafalaya River Basin will remain the responsibility of the National Weather Service Forecast Office at New Orleans/Baton Rouge, LA.