

<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>NEW ORLEANS/BATON ROUGE, LA</b>	
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:	YEAR
		<b>MARCH</b>	<b>2012</b>
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 <b>APRIL 15, 2012</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 flooding occurred within this hydrologic service area.

*...Copious Rainfall during Stormy March Eroded Soil Moisture Deficits...*

March started with a series of frontal boundaries, periods of showers, and intense thunderstorms over southeastern Louisiana, southwestern Mississippi and coastal Mississippi. During the two-week period from March 5<sup>th</sup> through 18<sup>th</sup>, turbulent weather produced local severe storm damages, along with flash floods, at many locations.

Rainfall totals were modest through March 4<sup>th</sup>, with areal average rainfall totals generally from 0.1 inch to around 0.50 inch, with the greatest rainfall over southwestern Mississippi. Areal rainfall totals for the weather week that ended March 11<sup>th</sup> ranged from 0.2 inch up to 1.25 inches, with the heaviest rains over central and east-central Louisiana, along with southwestern Mississippi. Downpours occurred across parts of Mississippi and Louisiana from March 12<sup>th</sup> through 18<sup>th</sup>, including over the Atchafalaya River Basin. Butte La Rose, LA measured 8.97 inches that week; the areal average rainfall over that part of south central Louisiana was 3.53 inches. Areal average rainfall totals for the rest this area were generally around 0.8 inch.

Widespread thunderstorms produced severe weather during the week of March 19<sup>th</sup> through 25<sup>th</sup> and left the area drenched. Copious downpours and flash floods developed area-wide, with rain totals over 5.0 inches recorded for the week at several locations. The greatest rain totals were 7.70 inches at Grand Isle, LA; 7.66 inches at Thibodaux, LA; and 7.58 inches at Slidell, LA. Areal rainfall averages ranged from 4.95 inches over southeast Louisiana to 5.08 inches of east-central Louisiana. Eventually minor to moderate riverine floods occurred, with the most significant flooding across coastal Mississippi at McNeill, Caesar, Kiln, and Lyman. As the rivers reached moderate flood levels at these locations, several roads became impassable and a few evacuations became necessary.

March closed with one last period of rainy weather. Areal rainfall totals averaged from 0.20 to 0.30 inch area-wide. By March 31<sup>st</sup>, fair weather was established over southeastern Louisiana and southern Mississippi.

**Flooding...**

Minor flooding on the Lower Pearl River that started in February ended at Bogalusa on March 1<sup>st</sup> and at Pearl River on March 2<sup>nd</sup>. Rivers and creeks across the region were below their flood stages from then until mid-March.

Flooding began initially on March 17<sup>th</sup> at Morgan City, LA on the Atchafalaya River. This flooding briefly receded and then recurred on March 18<sup>th</sup>. After widespread rains and strong thunderstorms drenched the entire region, flooding started on March 21<sup>nd</sup> at McNeill, MS on the West Hobolochitto Creek. The next day, flooding developed at Killian, LA on the Tickfaw River; at Robert, LA on the Tangipahoa River; at Bogalusa on the Lower Pearl River; at Gulfport, MS on the Wolf River; and Wortham, MS on the Biloxi River; and at D'Iberville, MS on the Tchoutacabouffa River. By March 23<sup>rd</sup>, flooding developed at Caesar, MS on the East Hobolochitto Creek. Over the next few days until March 27<sup>th</sup>, flooding developed on the Pascagoula River at Graham Ferry, MS; on the Bogue Chitto River at Bush, LA; and on the Jourdan River at Kiln, MS.

Most of these rivers had fallen below their respective flood stages by March 31<sup>st</sup>. Flooding continued into April at

Bogalusa and Pearl River on the Lower Pearl River; on the Pascagoula River near Graham Ferry; and at Morgan City on the Atchafalaya River.

Monthly Reports by Agricultural Region	Areal Average	Departure from Normal
Southwest Mississippi (2 Sites)	6.65	N/A
South Central Mississippi (2 Sites)	4.72	-1.69
Coastal Mississippi	7.02	+0.50
Central Louisiana (2 Sites)	4.88	-0.28
East Central Louisiana	8.33	+2.29
South Central Louisiana (6 Sites)	6.11	+1.11
Southeast Louisiana	8.71	+3.17

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

Butte La Rose, LA	11.56	New Orleans/Algiers, LA	0.24	-5.03
Slidell, LA	11.35 +5.41	New Orleans/Audubon, LA	0.14	-5.14
Terrytown, LA	10.43	Hammond, LA	0.79	-5.39

**Drought...**

At the start of March, soil contents were normal over southwestern Mississippi and the westernmost parishes. Conditions remained abnormally dry (D0) over coastal Mississippi, while soils ranged from abnormally dry to severe (D2) drought levels over the Florida Parishes and just south of Lake Pontchartrain. At the same time, extreme southeast Louisiana remained stricken by extreme (D3) drought.

The heavy rains during the first week of March dramatically boosted soil moisture contents. By March 6<sup>th</sup>, the soil conditions over the Florida Parishes, coastal Mississippi, and extreme southeast Louisiana had all improved. Soil moisture levels ranged from abnormally dry to moderate (D1) drought, with the driest conditions over the coastal zones of Louisiana and Mississippi. By March 27<sup>th</sup>, soil moisture deficits had eroded even more. Soils across the region were normal to abnormally dry, *except for moderate drought conditions (D1) over a small part of Jackson County, Mississippi.* \*

\* **Corrections in Italics.**