

**MONTHLY REPORT OF HYDROLOGIC CONDITIONS**

REPORT FOR:  
MONTH            YEAR  
**MAY            2010**

TO: Hydrologic Information Center, W/OS31  
NOAA's National Weather Service  
1325 East West Highway  
Silver Spring, MD 20910-3283

SIGNATURE  
**Kenneth Graham, Meteorologist-In-Charge**

DATE  
**June 15, 2010**

*When no flooding occurs, include miscellaneous river conditions below the small box, 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.

***...Typical Spring Weather over Southeastern Louisiana and Southern Mississippi in May...***

A front bore down on Louisiana by May 1<sup>st</sup>, but the system did not cross into Mississippi until May 2<sup>nd</sup>. This system triggered widely scattered showers and thunderstorms across the region. Rainfall totals were generally small. Isolated locations measured over 1.0 inch across parts of southeastern Louisiana and coastal Mississippi.

Periods of turbulent weather produced rain totals over 2.0 inches at several locations during the week ending May 9<sup>th</sup>. The heaviest rains fell May 3<sup>rd</sup> over east-central and southeast Louisiana, along with coastal Mississippi. Very little rain occurred over south central Louisiana and southwest Mississippi. Areal rainfall totals for the week ranged from less than 0.10 inch over some areas to 0.83 inch over the parishes of southeast Louisiana.

Fair weather dominated the region until an upper-level disturbance helped focus thunderstorm development starting May 14<sup>th</sup>. The upper-level disturbance, along with a strong cold front, produced episodes of heavy rainfall and strong thunderstorms, many severe, over the region. On May 15<sup>th</sup>, the unsettled weather pattern continued with widespread, copious rainfall. At Bayou Manchac, 4.80 inches were recorded and at LSU-Ben Hur in Baton Rouge, 4.0 inches fell. Several other locations measured between 2.0 and 4.0 inches of rain. Areal rainfall totals for the week ending May 16<sup>th</sup> ranged from 1.38 inches over east-central Louisiana to around 1.50 inches over much of the region.

Weather disturbances throughout the remainder of May produced thunderstorms, some of them severe, across the region. With abundant moisture from the Gulf of Mexico, copious rainfall developed in some storms, mainly over east-central and southeast Louisiana and over coastal Mississippi. Areal rainfall totals for the week ending May 23<sup>rd</sup> ranged from around 0.25 inch up to near 1.50 inches. Areal rainfall totals for the week ending May 30<sup>th</sup> ranged from around 0.50 inch up to around 1.25 inches.

**Flooding...**

Minor flooding occurred during the first three days of May on the Atchafalaya River at Morgan City, LA, due to heavy rainfall and routed water from the Mississippi River. Minor flooding developed on the Biloxi River at Lyman, MS on May 3<sup>rd</sup> and ended May 4<sup>th</sup>.

Heavy rainfall during mid-May caused flooding in Louisiana and Mississippi. The rains, along with routed water from the Middle Mississippi River and Ohio River, briefly caused new flooding on May 11<sup>th</sup> on the Atchafalaya River at Morgan City. Minor flooding resumed on May 12<sup>th</sup> at Morgan City and continued into June. Minor flooding occurred briefly on the Lower Mississippi River at Red River Landing, LA on May 16<sup>th</sup>. Flooding resumed on May 17<sup>th</sup> and continued into June. In Mississippi, the heavy rains caused minor flooding on May 16<sup>th</sup> and 17<sup>th</sup> on the Biloxi River at Lyman and on the Tchoutacabouffa River at D'Iberville.

<b>Monthly Reports by Agricultural Region</b>	<b>Areal Average</b>	<b>Departure from Normal</b>
Southwest Mississippi (2 Sites)	2.68	N/A
South Central Mississippi (2 Sites)	2.88	-2.32
Coastal Mississippi	9.07	+3.33
Central Louisiana (2 Sites)	4.01	-1.17
East Central Louisiana	4.38	-1.24
South Central Louisiana (7 Sites)	3.58	-1.35
Southeast Louisiana	5.73	+0.60

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

Ocean Springs, MS	14.33	Biloxi, MS	10.82	+5.45	
Terrytown, LA	10.62	New Orleans Audubon	10.58	+5.51	
New Orleans/Algiers, LA	1.60	-4.41	Woodville, MS	0.97	-4.82

**Drought...**

Soils conditions were abnormally dry (D0) over southeastern Louisiana and over southwestern Mississippi at the start of May. With the continued dry weather, soils deteriorated to moderate (D1) drought conditions around the Atchafalaya River Basin of southeastern Louisiana by May 11<sup>th</sup>, while the remainder of the region stayed abnormally dry. Soils improved to normal conditions by May 18<sup>th</sup> across the coastal areas of St. Bernard, Plaquemines, Jefferson, Lafourche, and Terrebonne Parishes. By the end of May, moderate drought conditions existed across southwestern Mississippi, across much of the Florida Parishes, and over the northern portion of the Atchafalaya River Basin. Soil conditions were generally near normal over coastal Mississippi throughout May.