

<b>NWS FORM E-5</b> <small>(04-2008)</small> <small>(PRES. by NWS Instruction 10-924)</small>	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)	
		<b>NWFO NEW ORLEANS/BATON ROUGE, LA</b>	
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:	
		MONTH <b>JUNE</b>	YEAR <b>2011</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>JULY 15, 2011</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.

***...Residents Endured Floods, Hot Temperatures, Severe Weather, and Drought in June 2011...***

Rounds of showers and thunderstorms moved across southwestern Mississippi, coastal Mississippi, and southeastern Louisiana throughout the month of June. With exceedingly hot temperatures for much of the month and unstable air masses periodically over the region, severe weather outbreaks produced significant wind damage, hail, flash floods, and heavy rainfall over the majority of the counties and parishes.

Several temperature records were tied or broken during June, as an extended period of daytime high temperatures above 100 degrees and very warm minimum temperatures persisted across the southern United States. Despite the steamy, unstable weather, rainfall amounts were generally light for the first week of the month. Average areal rainfall totals for the week ending June 5<sup>th</sup> were 0.10 inch or less. Thunderstorm activity increased during the second week of June. For the week ending June 12<sup>th</sup>, areal rainfall totals ranged from 0.25 to 0.82 inch.

By June 13<sup>th</sup>, high pressure dominated the weather over the region, which led to only isolated thunderstorms for the third week of June. Areal average rainfall amounts were 0.10 inch or less. By June 20<sup>th</sup>, the atmosphere was unstable enough to produce strong thunderstorms. Impressive rain fell over Mississippi and Louisiana from June 21<sup>st</sup> to 23<sup>rd</sup>, with local amounts over 3.0 inches reported at several locations. Areal average rainfall totals ranged from 1.0 inch to 2.10 inches. As the month neared its end, more scattered thunderstorms occurred from June 27<sup>th</sup> through 30<sup>th</sup>. Local rainfall totals were generally 0.05 to 1.0 inch, with heavier amounts over southeast Louisiana.

**Flooding...**

The Mississippi River and the Atchafalaya River both crested during May. However, flooding persisted into June on the Mississippi River over Wilkinson County in Mississippi and around Baton Rouge, Donaldsonville and Reserve in Louisiana. Flooding persisted along the Atchafalaya River at Bayou Sorrel, Myette Point, and Morgan City. By June 7<sup>th</sup>, flooding had ended at Reserve and Myette Point. On June 15<sup>th</sup>, flooding ended at Bayou Sorrel and Donaldsonville.

Though the Mississippi and Atchafalaya Rivers were slowly falling, the operation of the Bonnet Carre' Spillway and Morganza Spillway continued for the first three weeks of June. In concert, the spillways mitigated the severity of flooding at Baton Rouge and prevented the redevelopment of flooding at New Orleans, where the river fell below its flood stage on May 23<sup>rd</sup>. The Army Corps of Engineers (USACE) began closing spillway gates at Bonnet Carre' on June 12<sup>th</sup>; the last gates were closed on June 20<sup>th</sup>. Flooding at Baton Rouge and Red River Landing ended on June 20<sup>th</sup> and June 25<sup>th</sup>, respectively. Flooding ended at Knox Landing, LA and over the western portion of Wilkinson County, MS by June 25<sup>th</sup>. The operation of the Morganza Spillway continued into July, as flooding persisted on the Atchafalaya River at Morgan City well into July.

For information on the flood severity and impacts, please see the Monthly Report of Hydrologic Conditions for May 2011. That information is available at: [http://www.srh.noaa.gov/lix/?n=river\\_sum](http://www.srh.noaa.gov/lix/?n=river_sum)

Southwest Mississippi (2 Sites)	4.01	N/A
South Central Mississippi (2 Sites)	N/A	N/A
Coastal Mississippi	1.91	-3.03
Central Louisiana (2 Sites)	2.29	-2.79
East Central Louisiana	3.54	-1.59
South Central Louisiana (5 Sites)	4.07	-1.58
Southeast Louisiana	2.50	-3.36

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

Stennis (HAS), MS	6.14		Boothville, LA	0.48	-4.01
Donaldsonville, LA	6.03	+0.46	Galliano, LA	1.62	-4.20
McComb (MCB), MS	5.96	+1.10	Oaknolia, LA	0.11	-4.91
Mount Hermon, LA	5.92		Port Allen, LA	0.64	-4.95

**Drought...**

As June began, soil moisture levels dramatically deteriorated. By June 7<sup>th</sup>, severe drought (D2) conditions covered all of southwestern Mississippi, the northernmost part of the Florida Parishes, and parts of Jefferson, Orleans, St. Bernard, St. Charles, Terrebonne, and Plaquemines Parishes. All other areas had extreme (D3) drought conditions.

The deterioration of soil moisture levels accelerated by June 21<sup>st</sup> and persisted through the remainder of the month. Exceptional drought (D4) conditions spread over most of southeastern Louisiana and coastal Mississippi. All other areas experienced extreme (D3) drought.