

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:	YEAR
		DECEMBER	2011
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	
		JANUARY 15, 2012	

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.

...Periods of Heavy Rainfall Lessened Drought Conditions for Some Areas in December...

A series of frontal boundaries crossed southeastern Louisiana and southern Mississippi during the first half of December. Areal average rain totals for the weather week ending December 4th were less than 0.20 inch. Areal average rain totals for the week ending December 11th were generally around 0.30 inch in Louisiana and ranged to around 0.70 inch over southern Mississippi.

The first widespread rain event occurred December 15th and 16th, as a cold front helped focus thunderstorm development over the region. For the week ending December 18th, areal average rain totals were generally around 0.20 inch in Louisiana and ranged to around 0.45 inch over southern Mississippi.

During the following week, return flow pushed moisture north from the Gulf of Mexico, as a frontal boundary stalled along the Gulf coast. Severe weather and heavy rainfall developed from December 20th through 22nd. On Christmas Day, more rainfall occurred across Louisiana and Mississippi. Areal averaged rain totals ranged from around 0.25 inch over southeast Louisiana to near an inch over east central Louisiana and southwest Mississippi.

By December 26th, widespread rainfall occurred as an area of low pressure developed over the northern Gulf of Mexico. As the month ended, another front focused heavy rainfall development. Areal average rain totals for the week ending New Year's Day ranged from around 0.25 inch over southeast Louisiana to around an inch.

Flooding...

Heavy rainfall during mid-December and the contribution of routed water from upstream pushed the Atchafalaya River above the flood stage at Morgan City, LA. After periods of heavy rain during the latter part of December, minor flooding also developed on the Lower Mississippi River at Red River Landing, LA and on the Lower Pearl River at Bogalusa, LA. By December 29th, flooding had ended at Red River Landing, though minor flooding continued at Morgan City and Bogalusa into January 2012.

Monthly Reports by Agricultural Region	Areal Average	Departure from Normal
Southwest Mississippi (2 Sites)	4.40	N/A
South Central Mississippi (2 Sites)	5.22	-0.42
Coastal Mississippi	1.14	-3.84
Central Louisiana (2 Sites)	2.84	-2.60
East Central Louisiana	2.06	-3.15
South Central Louisiana (7 Sites)	2.23	-2.78
Southeast Louisiana	0.98	-3.68

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

Gloster, MS	7.26	New Orleans/Audubon (AUD), LA	0.36	-4.29	
McComb (MCB), MS	6.61	+0.81	Bay St. Louis Naval Air Station, MS	0.30	-4.30

Drought...

At the start of December, moderate drought (D1) conditions stretched across most of southeastern Louisiana and coastal Mississippi. Abnormally dry (D0) conditions lingered over the northern counties and parishes of the region. By December 6th, soil moisture had declined. Moderate drought spread north and severe drought (D2) conditions became established over most of southeastern Louisiana. As the month ended, soil conditions improved to normal levels over southwest and south central Mississippi where copious rainfall occurred in late December. At the same time, extreme drought (D3) conditions became established from Terrebonne Parish northeast to St. Bernard Parish in southeastern Louisiana, where rainfall was scarcer in December.