NWS FORM E-5         U.S. DEPARTMENT OF COMMERCE           (11-88)         NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION           (PRES. by NWS Instruction 10-924)         NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) NEW ORLEANS/BATON ROUGE, LA	
MONTHLY REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR: MONTH YEAR APRIL 2013	
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 MAY 15, 2013	

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.

## ... Heavy Rainfall and Floods Developed over Southeastern Louisiana and Southern Mississippi...

Widespread rainfall occurred as a cold front moved across southeastern Louisiana and southern Mississippi during the first days of April. When that boundary lingered along the Gulf Coast, amounts over 3 inches were measured at several locations across southeastern Louisiana. For the weather week ending April 7<sup>th</sup>, areal average rainfall totals ranged from around 1.20 inches over southern Mississippi to 2.61 inches across extreme southeastern Louisiana.

After a brief period of fair weather, a series of strong weather systems moved across the region by April 14<sup>th</sup>. Starting on April 11<sup>th</sup> localized heavy rainfall and periods of severe weather occurred, which included flash floods. Fair weather on April 12<sup>th</sup> and 13<sup>th</sup>, gave way to another round of heavy rainfall by April 14<sup>th</sup>. In Louisiana, New Roads measured 6.56 inches, while 6.24 inches of rain fell at St. Francisville during the week. Many other locations measured between 2 and 5 inches of rain, well above normal. Areal average rain totals for the weather week ranged from 2.46 inches over parts of south-central Louisiana to 3.06 inches over extreme southeast Louisiana.

With southeast winds pumping moisture into the region, stormy conditions continued into the next week with significant rainfall on April 15<sup>th</sup>. On April 18<sup>th</sup> and 19<sup>th</sup>, a cold front produced yet more rainfall, which ended on April 20<sup>th</sup>. With below normal rainfall over the region for the week, areal average rain totals ranged from 0.33 inch over parts of central Louisiana to 1.70 inches over extreme southeast Louisiana.

Starting April 23<sup>rd</sup>, the weather became stormy again, as a strong cold front pushed through the region. Periods of heavy rainfall and severe weather occurred, with local rain totals of 2 to 4 inches across southeastern Louisiana. Flash floods developed in Baton Rouge and New Orleans, as well as over parts of St. Tammany Parish. The front stalled along the Gulf Coast and then tracked north. By April 28<sup>th</sup>, unsettled weather redeveloped and continued through the end of April. Areal average rainfall totals for the weather week ending April 28<sup>th</sup> ranged 0.72 inch over coastal Mississippi to 1.87 inches over extreme southeast Louisiana. Local heavy rainfall occurred on April 29<sup>th</sup> and 30<sup>th</sup>, mainly over southeastern Louisiana. Rain amounts for the two-day period generally ranged from near 0.5 inch to well over 2.0 inches over the southernmost locations.

## Flooding...

At the start of April, heavy rainfall induced minor flooding along the Atchafalaya River at Morgan City, LA. Intermittent periods of flooding continued at that location through April 12th. By April 3<sup>rd</sup>, minor flooding started on the Lower Pearl River in Louisiana at Bogalusa; flooding ended at Bogalusa by April 8<sup>th</sup>.

The heavy rains during mid-April pushed the Atchafalaya River above flood stage again at Morgan City on April 14<sup>th</sup>. Minor flooding also developed on the Tickfaw River at Liverpool, LA; and on the West Hobolochitto Creek at McNeill, MS. By April 15<sup>th</sup>, minor flooding started on the Tangipahoa River at Robert, LA and on the Lower Pearl River at Bogalusa. After April 16h, minor flooding developed on the Amite River at Denham Springs, LA and on the Lower Pearl River at Pearl River, LA. The rivers were below flood stages at all locations by April 20<sup>th</sup>.

The Atchafalaya Rive rose above the flood stage again on April 23<sup>rd</sup> at Morgan City. Minor flooding continued at that location through the remainder of April and into May.

Monthly Reports by Agricultural Region	Areal Average	Departure from Normal
Southwest Mississippi (1 Site)	6.97	N/A
South Central Mississippi (1 Site)	6.34	+1.46
Coastal Mississippi	8.68	+4.09
Central Louisiana (2 Sites)	8.91	+3.50
East Central Louisiana	7.84	+2.23
South Central Louisiana (7 Sites)	5.41	+1.75
Southeast Louisiana	11.07	+6.33

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

New Orleans/Algiers, LA	14.09 +9.27	New Orleans Lakefront, LA	12.05	
Terrytown, LA	13.29	Houma, LA	12.04	+7.58

## Drought...

Until mid-April, a very small region of abnormally dry (D0) soil conditions persisted over extreme southeast Louisiana, particularly over Plaquemines Parish. All other agricultural districts had normal soil moisture contents. From April 16<sup>th</sup> through the end of the month, all regions had normal soil moisture conditions.