NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) **NWFO New Orleans/Baton Rouge, LA**
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH **APRIL** YEAR **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 **May 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.

…Dry Weather Continued over Southeastern Louisiana and Southern Mississippi in April…

Scattered showers and thunderstorms developed April 3rd and 4th over southeastern Louisiana, southwestern Mississippi and coastal Mississippi, as a frontal boundary crossed the region. More precipitation developed on April 7th and 8th. Areal average rain totals were generally less than 0.20 inch for the week ending April 4th. Areal average rain totals for the week ending April 11th were less than 0.40 inch across the region.

After a few days of cooler, drier air, isolated showers developed on April 15th. A weak cold front helped focus convection for the next three days. Still, most locations measured no rain during the week ending April 18th. Areal average rain totals were less than 0.15 inch.

On April 19th, an area of low pressure, situated along the Louisiana coast, produced widespread, light rain. High pressure and cooler, less humid weather returned for the next three days. Then, the weather deteriorated, as a strong, upper-level low pressure area moved across the plains into the Midwest on April 23rd and 24th. The cold front and squall line associated with this system produced widespread severe weather, including tornadoes, over Louisiana and Mississippi. Isolated precipitation amounts of 2.0 to 3.0 inches developed with this system. Areal average rain totals ranged from around 0.25 inch up to 1.29 inches, which occurred over southeast Louisiana.

By April 26th, two low pressure systems were impacting the weather over the region. Scattered rainfall occurred, though totals were generally less than a tenth of an inch. By April 30th, another cold front approached the region and triggered scattered showers and thunderstorms that lasted into the first days of May. Areal average rainfall totals as April ended were generally less than 0.15 inch.

Flooding…

In late March, the Atchafalaya River rose above flood stage at Morgan City, LA, due to heavy rainfall and routed water from the Mississippi River. Minor flooding continued until April 27th and briefly redeveloped on April 30th. Minor flooding occurred on the Mississippi River at Red River Landing, LA, from April 1st through 17th.

Monthly Reports by Agricultural Region	**Areal Average**	**Departure from Normal**
Southwest Mississippi (2 Sites)	0.79	N/A
South Central Mississippi (2 Sites)	2.26	-3.47
Coastal Mississippi	1.31	-3.83
Central Louisiana (2 Sites)	0.62	-4.78
East Central Louisiana	1.71	-3.90
South Central Louisiana (7 Sites)	0.79	-4.03
Southeast Louisiana	1.25	-3.49

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

Woodville, MS	0.30	-5.85	St. Francisville, LA	0.55	-5.45

Drought…

Soils conditions were abnormally dry (D0) by April 6th over southeastern Louisiana. Until that time, conditions were normal over most of southern Mississippi. By April 13th, soil conditions had deteriorated to abnormally dry over southwestern Mississippi. Through April 20th, soil conditions remained normal over coastal Mississippi.