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 E		REPORT FOR: MONTH **OCTOBER** YEAR **2015**
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 **NOVEMBER 15, 2015**

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.**

…Tropical Rains Return Depleted Soil Moisture Contents to Normal Levels in October…

Unsettled weather at the start of October, produced spotty rainfall across southern Mississippi and southeastern Louisiana. Some rain developed by October 11th, though amounts were generally light and mostly over southwest Mississippi. Little to no rainfall occurred across southeastern Louisiana and coastal Mississippi for the weather week that ended on October 11th.

Two weak cold fronts crossed the region after October 12th. Spotty rain fell across the Florida Parishes, across the Coastal Parishes, and across coastal Mississippi. Most locations measured no rain. Areal-averaged rainfall amounts were generally 0.01 inch through October 18th.

After spotty storms on October 21st, unstable weather, fueled by the remnants of Hurricane Patricia, induced strong thunderstorms on October 24th and 25th. Several locations measured over 2.0 inches of rain during the week, with isolated amounts over 3.0 inches reported. Areal-averaged rainfall totals ranged from around 0.6 inch to near 2.4 inches.

The stormy weather continued after a low pressure area developed over the Gulf of Mexico and tracked across the region on October 26th and 27th. Efficient storms produced copious rains with widespread amounts over 8.0 inches measured across the region. Clinton, LA had 10.80 inches and Livingston, LA measured 10.35 inches on October 26th. A series of boundaries moved through by October 29th. The third front stalled along the Gulf Coast with more heavy rainfall. By the end of the week, many locations had rainfall totals over 8.0 inches. Areal average totals were generally from near 5.0 inches up to 6.35 inches across southeastern Louisiana and southern Mississippi.

Flooding…

From October 25th, copious rainfall impacted the area's rivers. Flooding developed that day on the Comite River at Joor Road. By October 26th, flooding started in Mississippi along the Buffalo River at Woodville and along the Tangipahoa River at Osyka. In Louisiana, flooding developed along the Tickfaw River at Montpelier and at Liverpool and continued for several days. Flooding ended at Woodville, MS on October 26th.

By October 27th, flooding started on the Tickfaw River at Holden; on the Tangipahoa River at Robert; and on the Amite River at Denham Springs. Through the next few days, the flooding also developed on the Amite River at Bayou Manchac Point, Little Prairie, and French Settlement. All flooding has receded by October 31st, except at French Settlement where flooding continued into November.

Monthly Reports by Agricultural Region	**Areal Average**	**Departure from Normal**
Southwest Mississippi (2 Site)	10.33	N/A
South Central Mississippi (1 Site)	11.54	+ 7.79
Coastal Mississippi	4.30	+ 0.53
Central Louisiana (2 Sites)	10.70	+ 5.94
East Central Louisiana	8.78	+ 4.55
South Central Louisiana (5 Sites)	9.04	+ 4.34
Southeast Louisiana	6.43	+ 1.97

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

Baton Rouge Airport (BTR), LA	15.13	+10.43	Livingston, LA	11.60	+ 6.89
Carville, LA	13.22	+ 8.12	Baker, LA	11.36	+ 6.26
New Roads, LA	12.06	+ 7.42	Liberty, MS	11.16	
Pine Grove Fire Tower, LA	11.57	+ 6.61	Clinton, LA	11.11	+ 6.23
McComb Airport (MCB), MS	11.54	+ 7.79			

Drought…

Moderate Drought (D1) conditions persisted over southwest Mississippi and much of southeastern Louisiana at the start of October. Abnormally Dry (D0) conditions were briefly established over the River Parishes and coastal Mississippi, after heavy rainfall late in September. Isolated areas had normal soil conditions.

From October 6th through October 20th, soil moisture contents greatly deteriorated to Severe Drought (D2) conditions across much of southern Mississippi and the Florida Parishes. Moderate Drought and Abnormally Dry conditions lingered only along the Gulf Coast and extreme southeast Louisiana.

Remnant moisture from Hurricane Patricia helped fuel rainfall late in October. The sustained drought conditions across southern Mississippi and southeastern Louisiana eroded, as soil moisture contents returned to normal levels across the entire region by October 27th.

Along with other information sources, data and reports are routinely mined from the following:

NOAA National Weather Service
NOAA Southern Regional Climate Center
Louisiana Office of State Climatology
Mississippi Office of State Climatology
Harrison County Emergency Management Agency
United States Geological Survey
United States Army Corps of Engineers
St. Tammany Parish Office of Engineering
USDA/National Drought Mitigation Center
Mississippi and Louisiana CoCoRaHS