NWS FORM E-5	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	HYDROLOGIC SERVICE AREA (HSA)	
(PRES. by NWS Instruction 10-924)  NATIONAL WEATHER SERVICE		NEW ORLEANS/BATON ROUGE, LA	
MONTHLY	REPORT OF HYDROLOGIC CONDITIONS	REPORT FOR: MONTH AUGUST	YEAR <b>2015</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  SEPTEMBER 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.

...Hot, Dry Weather Caused the Erosion of Soil Moisture in August Despite Local Heavy Rains...

As July ended, an unusual summer cold front pushed through Louisiana and Mississippi, bringing periods of heavy rainfall and severe weather. By August 1st, fair weather returned behind that system.

High pressure became established over Louisiana and Mississippi. Hot, dry conditions persisted through August 9<sup>th</sup>, though isolated rainfall developed over southeast Louisiana and southern Mississippi. On August 5<sup>th</sup>, 3.00 inches fell at Ocean Springs, MS. Where showers occurred, areal average rainfall totals ranged from 0.25 to 0.75 inch.

Scorching weather began to moderate from August 10<sup>th</sup> though August 16<sup>th</sup>, as a cold front crossed the Lower Mississippi River Valley. Most locations had some rain during the week, though heavier amounts occurred across east central Louisiana. Isolated two-day totals of 2.44 inches occurred at Slidell and at Norwood. Areal average rain totals ranged from 0.25 to 1.36 inches.

The unstable weather continued into the next week, as a weak system lingered along the Gulf Coast. For several days, the frontal boundary wavered over southeastern Louisiana and southern Mississippi. Widespread rainfall occurred during the week, especially on August 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup>. The greatest rain totals during the week occurred at Plaquemine, where 5.97 inches fell, and at Galliano, where 3.72 inches fell. Areal average rain totals for the weather week were generally 2.0 to 2.25 inches.

On August 24<sup>th</sup> and 25<sup>th</sup>, another cold front produced light rain at a few locations. Behind the front, cooler, dry air filtered into Mississippi and Louisiana. Areal average rainfall amounts through August 31<sup>st</sup> were less than 0.1 inch.

## Flooding...

During July, Red River Landing, LA and Baton Rouge, LA crested at moderate flood levels, while Donaldsonville, LA had minor flooding. Flooding on the Mississippi River ended at Red River Landing, Baton Rouge, and Donaldsonville by August 13<sup>th</sup>.

Monthly Reports by Agricultural Region	Areal Average	Departure from Normal	
Southwest Mississippi (1 Site)	2.12	N/A	
South Central Mississippi (1 Site)	1.77	- 3.59	
Coastal Mississippi	4.23	- 1.92	
Central Louisiana (2 Sites)	3.88	- 1.58	
East Central Louisiana	2.95	- 3.05	
South Central Louisiana (5 Sites)	5.08	- 0.47	
Southeast Louisiana	3.28	- 3.25	

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

Plaquemine, LA	8.36	+3.43	Picayune, MS	5.98	+0.12
Carville, LA	8.28	+3.20	LSU Ben Hur Farm, LA	5.70	+0.34
Ocean Springs, MS	6.67	- 0.30	Baton Rouge Airport (BTR), LA	5.30	- 0.52

## Drought...

By the beginning of August, soil moisture had declined to Abnormally Dry (D0) levels over extreme southeastern Louisiana. Soil moisture profiles continued to deteriorate across the entire region during August. By the end of the month, most regions in Louisiana had Moderate Drought (D1) conditions, while Abnormally Dry (D0) conditions became established over southwest Mississippi and most of coastal Mississippi.

## 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