

**MONTHLY REPORT OF HYDROLOGIC CONDITIONS**

REPORT FOR:

MONTH

YEAR

**DECEMBER**

**2014**

TO: Hydrometeorological Information Center, W/OH2  
NOAA / National Weather Service  
1325 East West Highway, Room 7230  
Silver Spring, MD 20910-3283

SIGNATURE

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METEOROLOGIST-IN-CHARGE

DATE

**JANUARY 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.

*...Drought Conditions Worsened until Mid-December and Eased by Late December...*

Generally dry conditions exacerbated the drought levels across the region during the first half of December. Soil moisture contents eroded across southeastern Louisiana and southern Mississippi through December 14th. At the start of the month, a weak cold front pushed south across the region. The boundary stalled along the Gulf Coast from December 2<sup>nd</sup> to December 4<sup>th</sup> and then retreated north as a warm front. Isolated showers occurred, though amounts were light. By December 7<sup>th</sup>, areal-average rain totals were less than 0.1 inch. A couple of frontal boundaries moved across the region through December 14<sup>th</sup>, with no rain measured.

After December 15<sup>th</sup>, dramatic weather changes helped ease drought conditions area-wide. A strong cold front induced convection across southern Mississippi and southeastern Louisiana throughout the week. The frontal boundary eventually stalled along the Gulf Coast, as another strong low pressure system pushed east across the Gulf of Mexico. Widespread, heavy rain developed, though rain amounts were lighter over southwest Mississippi. Many locations across southeastern Louisiana and the Mississippi Coast measured rain amounts of over 2.0 inches on December 19<sup>th</sup> and 20<sup>th</sup>. For the weather week that ended December 21<sup>st</sup>, areal-average rain totals ranged from around 1.18 inches over south-central and southeast Louisiana to over 2.7 inches across the Mississippi Gulf Coast and central Louisiana. Areal-average rain totals were around 1.0 inch over southwest Mississippi.

Another strong cold front swept through Louisiana and Mississippi on December 23<sup>rd</sup>, bringing heavy rainfall to southeastern Louisiana and southern Mississippi, with severe weather. This weather system induced rain amounts over 1.5 inches at several locations on December 23<sup>rd</sup> and 24<sup>th</sup>. Yet another cold front produced more widespread rains across Louisiana and Mississippi on December 27<sup>th</sup> and 28<sup>th</sup>. Isolated rain totals over 2.0 inches occurred, with the heaviest rains over east-central, south-central, and southeast Louisiana. Areal-average rain totals ranged from 1.96 inches to well over 3.0 inches across east-central Louisiana and coastal Mississippi for the weather week that ended December 28<sup>th</sup>.

Stormy weather continued until December 29<sup>th</sup> across southeastern Louisiana and coastal Mississippi. Rainfall totals were generally from 0.05 inch to 0.5 inch, though Reserve measured 1.68 inches on December 29<sup>th</sup>. Clear weather dominated the last two days of December 2014.

Monthly Reports by Agricultural Region	Areal Average	Departure from Normal
Southwest Mississippi	N/A	N/A
South Central Mississippi (1 Site)	4.98	- 0.46
Coastal Mississippi	3.43	- 1.56
Central Louisiana (2 Sites)	5.35	- 0.26
East Central Louisiana	5.33	- 0.09
South Central Louisiana (6 Sites)	5.25	+0.21
Southeast Louisiana	4.06	- 0.98

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

Mt. Hermon, LA	8.95	+3.77	Baton Rouge/Sherwood, LA	7.57	+2.05
Livingston, LA	8.78	+3.24	Sun, LA	7.36	+2.24
Talisheek, LA	8.62	+4.04	St. Francisville, LA	7.22	+1.17

**Drought...**

Soil moisture contents were at Abnormally Dry (D0) levels over most of southeastern Louisiana early in December. Moderate drought (D1) conditions persisted along the Mississippi Gulf Coast and into parts of Pearl River and Walthall Counties, along with St. Tammany, Washington, and Tangipahoa Parishes in Louisiana. Normal soil moisture contents remained over most of southwestern Mississippi and over all or part of Pointe Coupee, West Feliciana, East Feliciana, St. Helena, West Baton Rouge, East Baton Rouge, Livingston, and Iberville Parishes in Louisiana.

Soil moisture contents decreased severely and drought conditions spread over the entire region by mid-December. Severe Drought (D2) conditions became established over extreme southeast Louisiana and parts of east-central Louisiana, along with coastal Mississippi by December 16<sup>th</sup>. Moderate Drought (D1) conditions covered most other parts of the region.

Rain accumulations during the second half of December were significantly above normal. After the copious rainfall that occurred late in the month, drought conditions eased over southeastern Louisiana and southern Mississippi. By the end of December, Moderate Drought (D1) conditions lingered only over extreme southeast Louisiana and parts of coastal Mississippi. Other areas had normal to Abnormally Dry (D0) soil moisture levels.