| NWS Form E (04-2006) (PRES. BY NWS I | -5 NATIONAL OCEANIC Instruction 10-924) | U.S. DEPARTMENT OF COMMERCE ATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION 24) NATIONAL WEATHER SERVICE | | HYDROLOGIC SERVICE AREA (HSA) NWFO New Orleans/Baton Rouge, LA | |
|--|---|---|---|---|---------------------|
| MONTHL | Y REPORT OF HYDRO | LOGIC CONDITIONS | | REPORT FOR: MONTH FEBRUARY | YEAR 2011 |
| TO: | - Hydrologic Information Center, W/OS31 NOAA's National Weather Service | | | SIGNATURE Kenneth Graham, Meteorologist-In-Charge | |
| | 1325 East West Highway Silver Spring, MD 20910-328 | /)-3283 | - | DATE MARCH 15, 2 | 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).

 \mathbf{X} An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Cold and Relatively Dry Weather Spread over the Region in February...

On February 1st, a front slowly crossed Louisiana and eventually Mississippi, with periods of rainfall and severe weather. High pressure produced frigid conditions over the region after February 2nd and wintry precipitation developed on February 3rd and 4th. High pressure again dominated the weather on February 5th and 6th, with widespread freezing conditions over the region. Areal rainfall totals were generally from 0.90 inch to 1.80 inches.

Very cold weather continued into the second week of February. The frigid air produced several freezes. A series of frontal boundaries moved across the region and yielded areal average precipitation totals up to 0.50 inch.

"La Nina" type weather became established over the region, as high pressure dominated the weather. For the week ending February 20^{th} , generally warm and dry conditions persisted. Areal rainfall amounts were less than 0.02 inch.

A cold front moved across southeastern Louisiana and southern Mississippi late on the 24th and 25th, and then stalled along the coast on February 26th. Most of the rain occurred on the 24th and 25th. By the 27th, strong southerly flow again dominated the weather, which allowed more heat and humidity to push into the region from the Gulf of Mexico. Areal rainfall for the week ending February 27th ranged from 0.10 to 0.30 inch.

As February ended, a cold front traveled over the region. Only spotty, light rainfall developed on February 28th.

| Monthly Reports by Agr | icultural Re | gion | Areal Average | Departure from Normal |
|---------------------------|--------------|------------|----------------------|-----------------------|
| Southwest Mississippi (2 | 2 Sites) | | 2.91 | N/A |
| South Central Mississipp | oi (2 Sites) | | 1.68 | N/A |
| Coastal Mississippi | | | 2.84 | -2.71 |
| Central Louisiana (3 Site | es) | | 2.64 | -2.70 |
| East Central Louisiana | | | 2.13 | -3.19 |
| South Central Louisiana | (7 Sites) | | 1.67 | -3.13 |
| Southeast Louisiana | | | 1.79 | -3.09 |
| Extreme Rainfall for the | Month (Inc | hes and De | parture from Normal) | |
| Franklinton, LA | 4.24 | -1.36 | Paradis, MS | 1.50 -4.05 |
| Poplarville, MS | 3.49 | -2.23 | Bay St. Louis, MS | 0.03 -5.32 |
| Angie, LA | 3.47 | | Killian, LA | 0.02 |
| | | | | |

Drought...

As February started, normal to abnormally dry soil conditions were established over much of the Lower Mississippi and Atchafalaya River Basins. Moderate drought (D1) covered the remainder of the region, except severe drought (D2) conditions persisted over northern Pearl River County and southeastern Walthall County in Mississippi. Conditions deteriorated by February 22nd, as severe drought spread over all of coastal Mississippi and the remainder of the region experienced abnormally dry to moderate drought conditions. By the end of February, severe drought had spread into east-central and southeast Louisiana.