

## Weather Review: Louisiana, 2002

Two distinct weather features marked the 2002 weather year for the Bayou state: the return of drought conditions for much of Louisiana during the first half of the year and an unusually active run of tropical weather for the last half.

For 2002, statewide rainfall averaged near 66 inches, roughly five inches above the long-term mean. With the exception of a few northwestern parishes, most of Louisiana finished 2002 with above-average totals. But these annual numbers fail to tell the entire story, as much of the state was plagued by drought during the spring and early summer. Indeed, rain totals through the first half of 2002 were below normal for all but a few parishes, with “mild to moderate drought” affecting much of the state during May and June. Although summer showers and tropical storms eliminated soil-water shortages across the southern half of the state, sections of central and northern Louisiana suffered through the entire growing season with significant moisture deficits.

Four named tropical systems made landfall along the Louisiana coast in 2002, the greatest number of landfalls in a single season since modern records began. In addition, near back-to-back landfalls by *T.S. Isidore* and *Hurricane Lili* rank among the shortest intervals between two Louisiana landfalls in history. More importantly, estimated property and agricultural losses attributed to these two tropical systems, coupled with unusually wet weather for parts of the state during October, approach \$1 billion!

**January:** Rainfall was one to three inches below normal for most of the state, with temperatures running 3 to 4 degrees Fahrenheit above the mean. Though mild from a monthly perspective, several brief Arctic air masses impacted the state, with at least two freeze events extending to the coastal marshes, and lows dipped into the mid to upper teens for several northern parishes.

**February:** February rains were one to three inches below the norm across most of Louisiana, with monthly temperatures running 2 to 4 degrees Fahrenheit below average. Hard freezes extended across 70 to 80 percent of the state, and many northern parishes recorded morning freezes on ten or more dates, including lows again dipping into the teens at month’s end.

**March:** March rainfall was generally near normal, running from five to seven inches across most of the Bayou state. Monthly temperatures were on the cool side, averaging 1 to 3 degrees Fahrenheit below the mean for most parishes.

**April:** April was a “warm and dry” month. Statewide rainfall averaged under four inches and was one to two inches below normal for most parishes, with monthly temperatures averaging near 70 degrees, almost 4 degrees above the monthly mean. Although severe weather was reported across the state on April 7-8, the remainder of the month was relatively quiet.

**May:** The spring drought intensified, as May statewide rainfall averaged only 2.4 inches, less than half of the monthly normal. While the monthly temperatures averaged near normal, the first ten days of the month were unusually sunny and warm. Afternoon highs reached the upper 80s and lower 90s during that period, driving evaporation rates higher than normal and further depleting already low soil-water levels.

**June:** The April-May drought continued to plague much of the state through June. Although most southern parishes reported rains totaling five to seven inches, in the northern half of the state rains were commonly under four inches and failed to provide substantial relief from the moisture deficits of the first five months of the year.

**July:** July rainfall ranged from three to seven inches across Louisiana, with most parishes reporting near normal to slightly above normal rainfall. Summertime heat and humidity combined to push Heat Index values (‘feels like’ temperatures) into the 100’s, prompting numerous *Heat Advisories* across the state. Although showers and thunderstorms generated pockets of wind damage and local flooding across much of southern Louisiana, these same storms also provided sufficient rain to greatly ease moisture shortages for many southern parishes.

**August:** August rainfall demonstrated a typical summertime gradient for the Pelican State, ranging from under three inches for northwestern sections of the state to seven inches or more near the coast. Areas of southeastern Louisiana experienced brief, minor flooding as a result of rains produced by short lived *T.S. Bertha*, but that system failed to deliver any meaningful moisture to the northern half of the state.

**September:** September was a “wet” month for much of south Louisiana, thanks to tropical storms *Fay*, *Hanna*, and *Isidore*. While monthly rains averaged only one to four inches across most of the northern half of the state, September totals typically ranged from six to ten inches across many southern parishes, with parts of southeast Louisiana reporting well above 20 inches of rain for the month!

**October:** October is normally among the driest months of the year, but such was not the case in 2002. An unusually wet weather pattern set up during the latter half of October, adding to the flooding woes for many parishes still dealing with the recent run of tropical activity. Statewide October rainfall averaged almost 12 inches, close to three times the norm, with some parts of Louisiana experiencing the wettest October ever.

**November:** Flooding problems continued across much of south Louisiana into November, as October’s stormy weather pattern continued into the first third of the month. Although statewide rainfall averaged near the norm of five inches, isolated pockets of seven to ten inch monthly totals were scattered about the state. November average temperatures were generally two to three degrees below normal, averaging from the low 50’s (north) to near 60’s (southeast).

**December:** A series of frontal events resulted in locally severe weather and a wetter than normal December for most parishes. Rain of eight to ten inches or more for many areas of the state prolonged the flooding problems experienced along a number of Louisiana waterways.