

National Weather Service Weather Forecast Office
New Orleans/Baton Rouge

High Flows and Flood History on the Lower Mississippi River

Below Red River Landing, LA (1543-Present)

| Year | Dates | Event Highlights |
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| 1543 | | Explorer Hernando Desoto encountered a flood on the river near Memphis, TN that extended over 40 days and likely extended to the lower reaches of the river. Chronicled by Garcilaso de la Vega. [Hoyt; WMO] |
| 1734-35 | December-June | City of New Orleans was inundated for several months [Hoyt] |
| 1788 | July | Severe flooding of the Mississippi River due to a landfalling hurricane's surge. Aid given to Acadian settlers at Fort Bute, Manchac and Baton Rouge. The settlers had arrived in 1785. [theCajuns.com] |
| 1809 | | All of the lower Mississippi River was inundated by flooding. [Hoyt] |
| 1825 | | Last known inundation of New Orleans due to spring flooding. [Hoyt] |
| 1851 | June | Major flooding due to excessive rains in Iowa [Hoyt] |
| 1858 | | Major destruction of private landowner levees [O'Brien] |
| 1859 | | Major destruction of private landowner levees [O'Brien] |
| 1874 | | Inundation and numerous private levee failures [O'Brien] |
| 1882 | March | Lower Mississippi Valley flooded; private levee failures. [Hoyt, O'Brien] |
| 1883 | June | Private levee failures inundate farm lands. [O'Brien] |
| 1884 | February | High flows from Ohio River [Hoyt]; Private levee failures on lower MS River. [O'Brien] |
| 1890 | | Private levee failures inundate farm lands [O'Brien] |
| 1893 | | High flows and levees held. [O'Brien] |
| 1897 | April-May | Baton Rouge crested at 40.65" May 13-15; New Orleans 19.17" on May 13th. [AHPS E-19] |
| 1903 | May | 9th highest crest of record at New Orleans 19.42 feet on May 29th. [AHPS] |
| 1908 | May-July | Lower MS was above flood stage for over 100 days below Arkansas City, AR. [Hoyt] |
| 1912 | March-May | \$70M damage along the MS River [Hoyt], New Orleans 2nd highest crest of record of 21.02 feet on May 11th; Donaldsonville 4th highest crest of record at 33.91 feet on May 10th; Baton Rouge 8th highest crest of record at 43.30 feet on May 11th. [AHPS] |
| 1913 | April-May | High flows with flood crests; Baton Rouge 41.30 feet on May 9th; New Orleans 19.28 feet on May 8th. \$7M damage along the lower MS River. [USACE-MRD; Hoyt] |
| 1916 | February-April | New Orleans 5th highest crest of record at 20.05 feet on March 3rd; Donaldsonville 7th highest crest of record at 32.81 feet on Feb 29th. [AHPS] |
| 1922 | April-May | All time highest stage at New Orleans with a crest of 21.27 feet on April 25th. Donaldsonville 2nd highest crest of record at 34.75 feet on May 16th. [AHPS] |
| 1927 | January-May | The greatest flood in modern history on the Lower MS River! This event due to persistent excessive rainfall on many of its tributaries combined to swell the river across a vast flood plain that spanned 80 miles wide in some locations. This record flood event changed the course of U.S. history by launching then Department of Commerce Secretary, Herbert Hoover, into the national spotlight towards gaining the office of President. This massive flood prompted legislation to mitigate and gain control of the river through erection of levees, flood control projects and spillways to alleviate catastrophic flooding, under the passage of the Flood Control Act of 1928, the authority placed with the U.S. Army Corps of Engineers. This flood caused widespread socio-economic impacts inclusive of mass displacement of people living in the inundated areas, primarily indentured farmers and field workers. This event is still regarded as one of the costliest natural disasters in U.S. history. Red River landing recorded its 2nd highest flood crest of 60.94 ft on May 14th; This is still the record crest at Baton Rouge of 47.28 ft on May 15th; Donaldsonville record crest 36.01 ft on May 15th; New Orleans had two crests; the first at 21.00 ft on April 25th to rank 3rd highest on record, the second 20.50 ft on May 18th to rank 4th highest on record. A crevasse was dynamited in the levee at Caernarvon, LA, 14 miles below New Orleans to save the city from flooding, but at the expense of destructive flooding of St Bernard and Plaquemines Parishes. [Smith&Reed; Hoyt; USACE-MRD; O'Brien, Barry, AHPS] |
| 1928 | | Construction starts on the Bonnet Carre Spillway. Located 23 miles upriver from New Orleans in St. Charles Parish. This gate controlled outlet can divert 250,000 cubic feet of water per second into Lake Pontchartrain. The flow, at full capacity, is twice the flow of Niagara Falls. [USACE-MVN] |
| 1929 | June | Reserve all-time record crest 26.00 feet on June 11th; New Orleans 6th highest crest of record 19.99 feet on June 8th; Donaldsonville 7th highest crest of record 32.81 feet on June 10th; Baton Rouge 10th highest crest of record 42.98 feet on June 10th. [AHPS] |
| 1931 | | Bonnet Carre Spillway is completed. It is comprised of 350 bays which are blocked by large wooden pins that are removed by a crane. The crane moves along a track above the pins. [USACE-MVN] |

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| 1932 | April-May | Reserve 3rd highest crest of record 25.60 feet on May 5th -since tied in 1937 and 1950. [AHPS] |
| 1935 | May-July | Flood crests with Baton Rouge at 38.53 feet on May 6th; Donaldsonville 30.18 feet on May 6th; 21.0 feet at the Bonnet Carre Spillway but not opened. New Orleans did not crest until July 8th at 17.38 feet. [USACE-MRC] |
| 1937 | February-March | This was a rather large flood event since 1927 and was dubbed "The Great Flood of 1937". The Bonnet Carre Spillway would be tested for the first time. The spillway had 285 of the 350 bays opened for 48 days, and crested at 21.9 feet from Feb 27th-Mar 1st. Red River landing 7th highest crest of record at 58.99 feet on Feb 27th; Baton Rouge 5th highest crest of record at 44.48 feet on Feb 28th; Donaldsonville 6th highest crest of record at 33.29 feet on Feb 27th; Reserve 3rd highest crest of record at 25.60 feet on March 5th; New Orleans crested at 19.29 feet on Feb 28th. [USACE; AHPS] |
| 1944 | May | Reserve 6th highest crest of record at 25.30 feet on May 18th; New Orleans 10th highest crest of record 19.38 feet on May 21st. [AHPS] |
| 1945 | March-May | For only the second time in 15 years of existence, the Bonnet Carre Spillway is utilized to stave off a flood at New Orleans. At first only 10 bays were opened. Eventually, all 350 bays were opened for the first time and remained open for 57 days. [USACE-MVD] Red River Landing 5th highest crest of record 59.89 feet on April 29th; Baton Rouge 2nd highest crest of record 45.18 feet on April 29th; Donaldsonville 3rd highest crest of record 34.11 feet on April 29th; Reserve 2nd highest flood of record 25.90 feet on April 28th; Bonnet Carre crested at 22.7 feet on March 22nd; New Orleans 8th highest crest of record 19.78 feet on May 1st. [USACE-MRC, USACE-MVD, AHPS] |
| 1950 | February-May | The MS River at New Orleans would reach its highest flood crest since the completion of the Bonnet Carre Spillway, topping out at 19.98 ft on Feb 10th, ranking 7th highest stage recorded at New Orleans. The crest at Reserve of 25.60 ft is the 3rd highest all time. The Bonnet Carre Spillway had all 350 bays opened for 38 days. Donaldsonville had 9th highest crest at 32.20 ft on March 4th; Baton Rouge 9th highest crest at 42.98 ft on March 4th; Red River Landing 10th highest crest at 57.19 ft on March 4th. [USACE-MVD; AHPS] |
| 1973 | March-May | The largest volume of water to flow down the Mississippi since the 1927 flood, the Bonnet Carre Spillway and the Morganza Spillway are both employed. The Bonnet Carre was fully opened for a record 75 days, from April 7th through June 14th. This was the first time the Morganza Spillway was opened - from April 19th through June 13th. Despite record high flows, stages were not as high as past events. Red River Landing 58.22 feet on May 13th was 9th highest crest of record; Baton Rouge 42.10 feet on May 10th; Donaldsonville 32.30 feet is 10th highest crest of record occurring on April 9th; Reserve had 7th highest crest of record at 24.50 feet on April 8th; New Orleans crested at 18.47 feet on April 7th. Discharge or flow past Baton Rouge peaked at 1,381,000 cubic feet per second on May 13th while flow past the City of New Orleans peaked at 1,257,000 cubic feet per second on April 15th. Discharge through the Bonnet Carre Spillway rose Lake Pontchartrain levels 3 feet above normal, peaking at 14.7 feet depth at mid-lake (normally 11.7 feet). [USACE multiple sources; AHPS] |
| 1975 | April | In what would be the shortest duration for the Bonnet Carre Spillway opening, 225 bays are opened for 15 days. Reserve 8th highest crest of record at 24.00 feet on April 14th. [USACE, AHPS] |
| 1979 | April | For the third time in the 1970s (the most of any decade) the Bonnet Carre Spillway was opened for 45 days with all 350 bays involved at peak. Red River Landing 6th highest crest of record at 59.19 feet on April 23rd. [USACE, AHPS] |
| 1983 | May-June | For the fourth time in only ten years the Bonnet Carre Spillway is opened for 35 days with all 350 bays involved. Red River Landing 4th highest crest of record at 60.52 feet on June 5th; Baton Rouge 6th highest crest of record at 43.90 feet on May 31st; Donaldsonville 5th highest crest of record at 33.30 feet on May 29th; Reserve 11th highest crest of record 23.90 feet on June 6th. [USACE, AHPS] |
| 1997 | March 17-April 18 | Historically high flows with record crest of 62.30 ft at Red River Landing on March 25th; 7th highest crest at Baton Rouge with 43.79 ft on March 26th; 10th highest crest at Donaldsonville with 32.20 ft on March 26th; 9th highest crest at Reserve at 23.99 ft on March 20th; Bonnet Carre Spillway opened 298 of the 350 bays on March 17th to ease a flood threat to New Orleans. The bays were closed April 18th. [AHPS; Trotter et al] |
| 2002 | April | Red River Landing has 8th highest crest on record at 58.60 ft on April 15th [AHPS]. |
| 2008 | April 11-May 12 | Heavy rain in the MS River Valley prompts the opening of the Bonnet Carre Spillway for the first time in 11 years. 160 of the 350 bays are opened for a total of 31 days. The main impacts were to marine traffic on the river, although the rebuilding of levees as a result of Hurricane Katrina in 2005 would also be delayed due to the inaccessibility of the borrow pits in the spillway. Red River Landing 3rd highest crest of record at 60.68 feet on April 24th. [AHPS; USACE] |
| 2011 | Mar 19 - Jun 25 | A large flood crest moved down the Mississippi from a combination of snow melt and heavy spring rains in the Ohio Valley. The Bonnet Carre Spillway was opened on May 9th to alleviate high flow rates past New Orleans. On May 14th, the Morganza Spillway was partially opened to help reduce flows and a flood threat at Baton Rouge. This was only the 2nd time in its existence the Morganza Spillway was utilized. The Bonnet Carre Spillway was in use for 43 days, closed on June 20th. The Morganza Spillway was closed on July 7th, after the forebay was drained. An all-time record crest was established at Red River Landing on May 18th at 63.39 feet. Baton Rouge had its 9th highest crest at 43.13 feet on May 12th. Red River landing went above flood stage on March 19th and did not fall below flood stage until June 25th. [AHPS; USACE] |

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