

= 1940 Louisiana hurricane =

The 1940 Louisiana hurricane caused record flooding across much of the Southern United States in August 1940 . The second tropical cyclone and hurricane of the annual hurricane season , it formed from a frontal low off the west coast of Florida on August 3 . Initially a weak disturbance , it moved generally westward , slowly gaining in intensity . Early on August 4 , the depression attained tropical storm intensity . Ships in the vicinity of the storm reported a much stronger tropical cyclone than initially suggested . After reaching hurricane strength on August 5 south of the Mississippi River Delta , the storm strengthened further into a Category 2 hurricane with maximum sustained winds of 100 mph and a minimum barometric pressure of 972 mbar (hPa ; 28 @.@ 71 inHg) at 0600 UTC on August 7 . The hurricane moved ashore near Sabine Pass , Texas later that day at peak strength . Once inland , the storm executed a sharp curve to the north and quickly weakened , degenerating into a tropical storm on August 8 before dissipating over Arkansas on August 10 .

Reports of a potentially destructive hurricane near the United States Gulf Coast forced thousands of residents in low @-@ lying areas to evacuate prior to the storm moving inland . Offshore , the hurricane generated rough seas and a strong storm surge , peaking at 6 @.@ 4 ft (1 @.@ 95 m) on the western edge of Lake Pontchartrain . The anomalously high tides flooded many of Louisiana 's outlying islands , inundating resorts . Strong winds caused moderate infrastructural damage , primarily in Texas , though its impact was mainly to communication networks along the US Gulf Coast which were disrupted by the winds . However , much of the property and crop damage wrought by the hurricane was due to the torrential rainfall it produced in low @-@ lying areas , setting off record floods . Rainfall peaked at 37 @.@ 5 in (953 mm) in Miller Island off Louisiana , making it the wettest tropical cyclone in state history . Nineteen official weather stations in both Texas and Louisiana recorded 24 @-@ hour rainfall totals for the month of August as a result of the slow @-@ moving hurricane . Property , livestock , and crops ? especially cotton , corn , and pecan crops ? were heavily damaged . Entire ecosystems were also altered by the rainfall . Overall , the storm caused \$ 10 @.@ 75 million in damages and seven fatalities .

= = Meteorological history = =

In early August , an extratropical trough moved off the coast of South Carolina and Georgia , with a stationary front extending from it . A weak low @-@ pressure area began to develop at the southern end of the front just offshore of Jacksonville , Florida . Initially , the storm had an open center of circulation and remained a frontal low as it moved southwestward across Florida , and thus was not considered a fully tropical system at the time . Upon entering the Gulf of Mexico , however , observations indicated that the disturbance developed a closed center of circulation . As a result , the storm was analyzed to have developed into a tropical depression off the western coast of Florida at 1200 UTC on August 3 . At the time , weather reports revealed a definite cyclonic rotation , though the depression had a shallow minimum barometric pressure of 1012 @.@ 5 mbar (hPa ; 29 @.@ 90 inHg) . Moving west @-@ southwest , the depression steadily intensified and attained tropical storm intensity at 0000 UTC on August 4 . Late that evening , the tropical storm executed a slight northward curve . Strengthening continued into the following day , and ships in the storm 's vicinity began to report a much stronger storm than was previously suggested . A ship reported the first gale @-@ force winds associated with the storm at 2100 UTC on August 4 . The S.S. Connecticut observed force 11 winds , the strongest wind measurement associated with the storm as recorded by vessel . A minimum pressure of 995 mbar (hPa ; 29 @.@ 39 inHg) was analyzed for the system at 0600 UTC on August 5 based on an observation from a nearby ship .

At 1800 UTC on August 5 , the storm strengthened to hurricane strength , the first tropical cyclone of the season to do so . At the time , the hurricane was moving very slowly westward , allowing it to strengthen despite its close proximity to land . The hurricane reached Category 2 intensity by 0600 UTC on August 7 . The storm made landfall at peak intensity at around 2100 UTC later that day near Sabine Pass , Texas . At the time , the hurricane had maximum sustained winds of 100 mph (160 km / h) , with the storm 's maximum winds extending out 10 mi (15 km) from its center . A

weather station in Sabine Pass recorded a barometric pressure of 972 mbar (hPa ; 28 @. 71 inHg) , which was analyzed to have been the lowest pressure measured in association with the storm . After moving inland , the storm immediately curved northward and began to gradually weaken . At 0600 UTC on August 8 , the cyclone weakened to tropical storm strength while situated over East Texas , and later degenerated to a tropical depression by 1200 UTC the following day . The depression persisted into Arkansas , where it transitioned into a trough of low pressure at 1800 UTC on August 10 after its center of circulation lacked the well @-@ defined closed circulation characteristic of tropical cyclones .

= = Preparations and impact = =

Upon reaching hurricane strength off the United States Gulf Coast , hurricane warnings were issued for coastal regions from Lake Charles , Louisiana to Sabine Pass , Texas on August 7 . Storm warnings were placed for areas east of Lake Charles to Grand Isle , Louisiana and areas west of Sabine Pass to Velasco , Texas . Offshore vessels were also warned of the storm in areas between Bay St. Louis , Mississippi and Galveston , Texas . At the time , the hurricane was forecast to make landfall slightly east of Port Arthur , Texas . In Texas , these warnings were delivered to residents via factory whistles . Evacuation procedures also began as a result of the approaching storm . The Spindletop near Beaumont , Texas and other nearby oil fields were evacuated . Coastal cities near Port Arthur , Texas were also evacuated by state highway police . Evacuees took shelter in refitted schools nearby . In the New Orleans , Louisiana area , several thousand residents were evacuated in advance of the storm . On Delacroix Island , Louisiana , 1 @, @ 000 residents evacuated . Rail and airline operations were halted as a precautionary measure , but were later resumed after the storm passed . All storm warnings were ceased by midnight on August 8 .

Even before making landfall , the hurricane caused extensive damage in Louisiana , due in part to the hurricane 's slow speed and close proximity to the state coast . Winds as high as 60 mph (100 km / h) brushed the coastline , causing extensive damage . Storm surge pushed coastal waters to near @-@ record heights , inundating low @-@ lying areas . Near Morgan City , Louisiana , 19 people went missing after going on a fishing trip ; they were later found marooned at Atchafalaya Basin . The schooner J.W. Clise was abandoned during the storm 135 mi (215 km) south of the Mississippi River Delta , though its crew was also later rescued . Storm surge peaked at 6 @. 4 ft (1 @. 95 m) above @-@ average in western portions of Lake Pontchartrain . A bridge crossing Thunder Bayou , which extended west of the lake , was washed out by the waves . Similarly , a station at Calcasieu Pass reported a storm surge 4 @. 8 ft (1 @. 46 m) high . Conservation officials feared the disturbance would disrupt the seafood and muskrat production . After the storm , it was estimated 75 @, @ 000 muskrats were killed by the storm 's effects . Offshore , Grand Isle was inundated by the strong waves . Around Houma , sugar cane crops were damaged . The hurricane was the strongest to impact Cameron since the tenth hurricane of the 1886 Atlantic hurricane season ; strong gusts peaked at 70 mph (115 km / h) , disrupting communication lines , thus isolating the city from other locations in the state . The high tides inundated town streets under 2 ft (0 @. 6 m) . Other areas extending from western Louisiana to Mobile , Alabama reported communication disruptions . In New Orleans , strong winds uprooted signboards and blew debris across the city streets . Several houses in Shell Beach and Delacroix Island were leveled by strong winds .

Due to the storm 's slow movement just offshore the Louisiana coast , the hurricane became the wettest tropical cyclone in state history , with numerous locations reporting record rainfall across the state . Of the state 's ten highest official rainfall measurements associated with tropical cyclones , the two highest were measurements taken during the hurricane . Precipitation peaked at 37 @. 5 in (953 mm) on Miller Island . For any given 20 @, @ 000 mi² (50 @, @ 000 km²) area of Louisiana , the maximum rainfall averaged 12 @. 1 in (307 @. 3 mm) . Thirteen official weather stations in the state reported monthly 24 @-@ hour rainfall total records . The highest of these was in Crowley , where 19 @. 76 in (501 @. 9 mm) of precipitation fell on August 9 ; the station would record 33 @. 71 in (856 @. 2 mm) of rain over the course of the storm . The

torrential rainfall submerged the city under 2 ft (0 @. @ 6 m) of floodwater . In Cameron , the storm dropped 21 in (533 mm) of rain was reported . In St. Landry Parish , bayous flowed over their banks , causing refugees to evacuate to Opelousas . In the Acadiana region of southern Louisiana , the resulting floods were considered worse than the floods that resulted from the Sauv 's Crevasse in 1927 . There , whooping crane populations were severely impacted by the rainfall , and only one was known to be alive by 1947 . The floods inundated roughly 2 @, @ 000 @, @ 000 acres (800 @, @ 000 hectares) of land in Louisiana . Much of the lowland areas remained underwater until October 1940 . As a result , cotton and corn crops experienced significant losses , as well as pecans . Livestock also saw large losses . Impassable areas caused by rising floodwaters prevented firefighters from extinguishing a fire which burned down much of the Shell Oil Company 's offices and supply warehouses in the town of Iowa . Across the state , the hurricane caused \$ 9 million in damages , though only six fatalities resulted , relatively less than most storms of similar scale . The low death count was attributed to large evacuation procedures which underwent prior to the storm , as well as guidance provided from the newly opened Weather Bureau east of Lake Charles .

In East Texas , where the hurricane made landfall late on August 7 , strong winds were felt across the region . Sustained winds of 80 mph (130 km / h) were widespread , with occasional gusts peaking in excess of 90 mph (145 km / h) . In Port Arthur , a barometer recorded a minimum pressure of 978 mbar (hPa ; 28 @. @ 87 inHg) , establishing a new record for the lowest pressure measured by the particular weather station . The same station recorded 5 @. @ 87 in (149 @. @ 1 mm) of rainfall . Elsewhere in Port Arthur , strong winds caused significant damage to local oil refineries , with slight to moderate damage to other homes and businesses . Six people were injured in the city . Property damage in Jefferson County , containing Port Arthur and nearby suburbs , was estimated at \$ 1 million . The city 's communication and power service was cut during the storm . A weather station near Sabine Pass recorded a similarly low pressure of 973 mbar (hPa ; 28 @. @ 74 inHg) . In Sabine Pass , strong winds unroofed houses , uprooted trees , and destroyed billboards . At the nearby Ged Oil Field , four wooden oil derricks were blown down . In Beaumont , three people were injured due to flying window and structural debris . Further inland , the hurricane produced considerable rainfall , though relatively less than in Louisiana . Six weather stations in the state set new 24 ? hour precipitation records for August . A measurement of 6 @. @ 99 in (177 @. @ 4 mm) on August 8 in Kirbyville was the highest of these records . However , maximum rainfall in the state was estimated to be in excess of 10 in (255 mm) . The rice crop was particularly damaged by the rainfall . In Jefferson County , crop damage was estimated between \$ 450 @, @ 000 ? \$ 500 @, @ 000 . In Texas , the hurricane caused \$ 1 @. @ 75 million in damages and resulted in one fatality .