

= Hurricane Paine ( 1986 ) =

Hurricane Paine contributed to one of the most significant flooding events in Oklahoma history . The 16th tropical storm and 8th hurricane of the 1986 Pacific hurricane season , Paine formed on September 28 off the southeast coast of Mexico . It moved around a ridge , later turning to the north and brushing the Baja California Peninsula . By that time , Paine had attained peak winds of 100 mph ( 155 km / h ) , but it weakened slightly before hitting the Mexican state of Sonora . The remnant moisture combined with a cold front to produce heavy rainfall in the south @-@ central United States .

In Mexico , Paine produced rainfall along much of the coastline , with maxima in inland Oaxaca , Jalisco , and Sonora where it moved ashore . Prior to the arrival of the remnants of Paine in the United States , there was an extended period of heavy rainfall , which caused at least 10 deaths , forced thousands of people from their homes , and resulted in heavy flooding damage . The moisture from Paine produced the highest daily rainfall for any station in Oklahoma . Severe river flooding occurred along the Osage and Arkansas Rivers . The overall flooding event caused \$ 350 million in damage , of which half came from crop losses .

= = Meteorological history = =

The origins of Hurricane Paine were from a system that entered the eastern Pacific Ocean through Central America on September 27 . By the next day , it organized into Tropical Depression 27 while located about 185 miles ( 300 km ) southwest of the coast of Guatemala . With a high pressure system to its north , the depression moved generally westward at first , although an approaching upper @-@ level trough influenced a more northerly track . The depression slowly organized while paralleling the Mexican coastline , and it was upgraded to Tropical Storm Paine on September 30 , while the storm was about 350 miles ( 565 km ) west @-@ southwest of Acapulco .

Tropical Storm Paine quickly intensified after it was first upgraded to a tropical storm . Late on September 30 , a NOAA reconnaissance plane flew into the storm , one of two cyclones in the basin that warranted aircraft data , the other being Hurricane Newton . The plane observed sustained winds of 82 mph ( 133 km / h ) , and as a result , Paine was upgraded to hurricane status . As it neared the Baja California Peninsula , the hurricane turned more northward , and late on October 1 reached peak winds of 100 mph ( 155 km / h ) , while located just offshore of the southern tip of Baja California . Hurricane Paine did not intensify further due to the presence of mid @-@ level wind shear , as well as insufficient moisture in the air ; nevertheless , it was located over an area of 82 @. @ 9 ° F ( 28 @. @ 3 ° C ) water temperatures . The outer eyewall moved across Cabo San Lucas , and the resultant land interaction was believed to have slightly weakened the inner core of the hurricane .

After reaching its peak intensity , the hurricane turned north @-@ northeastward , making landfall near San José , Sonora with winds of 90 mph ( 145 km / h ) . Paine rapidly dissipated over land , although the remnants continued northeastward across Mexico into Texas and the south @-@ central United States . Moisture from the system combined with an advancing cold front , producing heavy rainfall over Oklahoma and southeastern Kansas .

= = Impact = =

As a tropical cyclone , Paine brought rainfall to most of Mexico , including heavier amounts along the coastline and interior northern Oaxaca . The highest total in the country was 12 @. @ 01 inches ( 30 @. @ 5 cm ) in Apazulco , Jalisco . Light precipitation fell in the southern portion of the Baja California Peninsula , and where Paine moved ashore , upwards of 7 inches ( 18 cm ) fell across its path . In the area around where it made landfall , strong winds knocked down trees and caused disruptions to city services .

In the south @-@ central United States , the remnants of Paine dropped moderate to heavy rainfall in regions that already received above normal rainfall . Isolated locations in Texas , northern

Oklahoma , and southeastern Kansas received over 10 inches ( 25 @. @ 4 cm ) of precipitation , and the highest total in the United States was 11 @. @ 35 inches ( 28 @. @ 8 cm ) at Fort Scott , Kansas . Moderate rainfall extended northeastward through Missouri and Illinois . In Barnsdall , Oklahoma , a station recorded 10 @. @ 42 inches ( 26 @. @ 5 cm ) on September 29 , which was the highest daily precipitation for any station in the state . In combination with previous storms , some locations received over 20 inches of rainfall in an 8 @- @ day period , which produced severe river flooding along the Osage and Arkansas Rivers . The flooding resulted in record discharge rates along many streams and creeks , while many reservoirs were nearly filled to capacity . The Mississippi River in St. Louis reached the fifth highest flood stage on record .

Prior to its arrival , flooding across the central United States killed six people , forced thousands of people from their homes , and left at least \$ 76 million in damage ( 1986 USD ) . Additional flooding from Paine exacerbated the situation ; the flooding affected 52 of the 77 counties in Oklahoma , which resulted in a total of \$ 350 million in damage , half of which from agriculture . The remnants of Paine brought about the end of the extended period of rainfall , which overall had forced 55 @, @ 000 people from their homes , including 1 @, @ 200 in East Saint Louis , Illinois where a floodgate broke . It was described as one of the worst floods in Oklahoma history .