= Hurricane Lane (2006) =

Hurricane Lane was the thirteenth named storm , ninth hurricane , and sixth major hurricane of the 2006 Pacific hurricane season . The strongest Pacific hurricane to make landfall in Mexico since Hurricane Kenna of 2002 , Lane developed on September 13 from a tropical wave to the south of Mexico . It moved northwestward , parallel to the coast of Mexico , and steadily intensified in an area conducive to further strengthening . After turning to the northeast , Lane attained peak winds of 125 mph ($205\ km\ /\ h$) , and made landfall in the state of Sinaloa at peak strength . It rapidly weakened and dissipated on September 17 , and later brought precipitation to southern part of the U.S. state of Texas

Throughout its path , Lane resulted in four deaths and moderate damage . Damage was heaviest in Sinaloa , where the hurricane made landfall , including reports of severe crop damage . Across Mexico , an estimated 4 @,@ 320 homes were affected by the hurricane , with about 248 @,@ 000 people affected . Moderate flooding was reported in Acapulco , resulting in mudslides in some areas . Damage across the country totaled \$ 2 @.@ 2 billion (2006 MXN) , or \$ 206 million (2006 USD , or \$ 218 million in 2010 USD) .

= = Meteorological history = =

A tropical wave moved off the coast of Africa on August 31 , 2006 . It moved westward without development , and entered the eastern Pacific Ocean on September 10 . An area of convection developed along the wave axis , several hundred miles south of the Gulf of Tehuantepec . It moved slowly westward and steadily organized . Convection and banding features organized around a developing center , and the system developed into Tropical Depression Thirteen @-@ E on September 13 . The system continued to organize and strengthened into Tropical Storm Lane early on September 14 about 90 miles (145 km) off the coast of Mexico . Based on a potentially developing anticyclone over the storm and a track over warm water temperatures , the Statistical Hurricane Intensity Prediction Scheme model issued a 46 percent probability for rapid intensification of the storm .

Lane continued to become better organized , with deep convection developing into a central dense overcast and well @-@ defined outflow in the western half of the storm . Late on September 14 , an eyewall began to develop a short distance off the Mexican coastline . Lane continued to strengthen as it turned more to the north @-@ northwest , a motion caused due to the storm moving around the western periphery of a mid @-@ level ridge over Mexico . Based on reports from Reconnaissance Aircraft , Lane was upgraded to hurricane status on September 15 about 40 miles (65 km) west @-@ northwest of Cabo Corrientes , Jalisco . Subsequently it quickly strengthened , and by six hours after it became a hurricane it attained winds of 105 mph (165 km / h) , a Category 2 hurricane on the Saffir ? Simpson scale . Later that day , the 10 mile (16 km) wide eye crossed over the Islas Marías . Early on September 16 , Lane strengthened into a 115 mph (185 km / h) hurricane just 50 miles (85 km) off the coast of Mexico , becoming the sixth major hurricane of the season .

Hurricane Lane continued to organize with its 9 mile ($14~\rm km$) wide eye surrounded by very deep convection , and the storm strengthened further to reach peak winds of $125~\rm mph$ ($205~\rm km$ / h) by midday on September 16. It turned unexpectedly to the northeast , and at $1915~\rm UTC$ on the 16th , Hurricane Lane made landfall in a sparsely populated region of Sinaloa , $20~\rm miles$ ($32~\rm km$) southeast of El Dorado . This made Lane the most intense hurricane to strike Mexico since Hurricane Kenna in the $2002~\rm season$. The combination of the mountainous terrain of Mexico and increasing west @-@ southwesterly wind shear caused the storm to rapidly weaken , and the storm dissipated on September 17. The remnants of Lane later moved into Texas , United States .

= = Preparations = =

Due to Lane 's projected path near the western coast of Mexico, authorities closed ports to small

boats in the cities of Acapulco . Just weeks after Hurricane John took a similar path through the area , several tourists voluntarily left their vacations to fly home . Many residents boarded up buildings and bought hurricane supplies in preparation for the storm . Officials also closed schools across the state of Guerrero . In all , 40 @,@ 400 tourists were evacuated from the Mexican coastline . According to the Secretaría de Gobernación , under which the Mexican Civil Protection Service operates , there were 5 @.@ 5 million homes and 21 million people in 21 states threatened by the system in all of Mexico . As a result , authorities evacuated about 2 @,@ 000 people to emergency shelters .

As Lane came closer to the coastline , all the seaports between Michoacán and Sinaloa were closed , and the Servicio Meteorológico Nacional (Mexico) (National Meteorological Service , in Spanish) warned the general population about the threat of flooding and landslides . When the hurricane made landfall , the government of the state of Sinaloa issued a state of emergency for the municipalities of Ahome , Guasave , Angostura , Salvador Alvarado , Culiacán , Navolato , Elota , San Ignacio and Mazatlán . The arrival of the hurricane forced the closure of several flights at the General Rafael Buelna International Airport in Mazatlán , Sinaloa .

Prior to entering the area, the U.S. National Weather Service issued a Flood Watch for large portions of Texas due to the remnants of Lane.

= = Impact = =

In Acapulco , the storm produced strong waves and heavy rain , leaving coastal streets with up to 16 inches (405 mm) of water . The heavy rainfall flooded 200 houses and caused a mudslide , resulting in the death of a seven @-@ year @-@ old boy . Flooding also occurred at the airport in Acapulco , though service was not interrupted . Offshore , strong waves capsized a boat , leaving one person missing . Heavy rainfall in the port of Lázaro Cárdenas , Michoacán , overflowed a canal , forcing over 500 people to evacuate their homes . 500 acres (2 km2) of crops were destroyed by Lane in Michoacán . Road and airport damage in Colima totaled to about \$ 30 million (2006 MXN , \$ 2 @.@ 7 million 2006 USD) . In Cajón de Peña , Jalisco , rainfall totaled to 7 @.@ 36 inches (187 mm) . One man died in Pueblos Unidos after being knocked over by strong winds . Throughout Jalisco , 109 people had to evacuate their homes due to landslides and heavy rainfall .

In El Dorado , Sinaloa , near where the storm made landfall , the hurricane washed out away roads and destroyed many flimsy homes . Strong winds knocked down electricity towers , trees , and traffic signs , leaving many without power . In Mazatlán , to the southeast of where Lane moved ashore , the hurricane produced strong winds and heavy rains , causing street flooding and power outages . The threat of the hurricane forced the cancellation of an Independence Day Parade . Between Mazatlán and the state capital , Culiacán , the hurricane destroyed a bridge , leaving dozens of trucks stranded . In Culiacán , one person died when he drove his car into a river , while several streets were flooded from the storm . Throughout Sinaloa , several damaged roads left many communities cut off from the rest of the country . Lane caused severe agricultural damage in the state , possibly reaching as high as \$ 600 million (2006 MXN , \$ 55 million 2006 USD) . The hurricane also damaged water treatment facilities and distribution systems in multiple communities , prompting the Secretariat of Health to declare a sanitary alert in Sinaloa . Damage in Sinaloa totaled to around \$ 1 @ .@ 2 billion (2006 MXN) , \$ 109 @ .@ 3 million (2006 USD) .

Throughout Mexico , Hurricane Lane killed four people . An estimated 4 @,@ 320 homes were affected by the hurricane , with about 248 @,@ 000 people affected . Water systems were damaged in nine municipalities , leaving thousands temporarily without water . A total of 19 @,@ 200 miles (30 @,@ 000 km) of roads and highways were damaged to some degree , including some destroyed bridges . In all , the hurricane caused about \$ 2 @.@ 2 billion (2006 MXN , \$ 203 million 2006 USD) in damage in the country . In the United States , the remnants of Lane brought precipitation to southern Texas .

By the day after Hurricane Lane made landfall , most of the evacuated people returned to their homes to begin the cleanup process . Some tourists who remained in the area for the storm continued their vacations , while others tried to leave the area . The federal government declared a state of emergency for nine municipalities in Sinaloa , allowing emergency funds to give relief support to the affected population . Helicopters were used to distribute foods and locate cut @-@ off residents . The government set up three temporary shelters in Mazatlán for 360 people and three shelters in Culiacán for about 1 @,@ 000 affected residents . To prevent the spread of Dengue fever , officials sent epidemiologists to 67 communities , with 18 mobile units and 15 Nebulizer units . By a month after the storm , all roads and highways affected by the hurricane were open for transportation .