= Tropical Storm Barbara (2007) =

Tropical Storm Barbara was the first tropical cyclone to make landfall during the 2007 Pacific hurricane season . The second storm of the season , Barbara developed from a small low pressure area on May 29 about 235 miles (380 km) southeast of Acapulco , Mexico . The system drifted southward before turning to a steadily eastward motion , and quickly intensified into a tropical storm . Increased wind shear weakened Barbara , though it re @-@ organized to attain peak winds of 50 mph (85 km / h) before moving ashore just west of the border of Mexico and Guatemala . It rapidly weakened over land , and on June 2 the National Hurricane Center discontinued advisories on the storm . Despite expectations that the storm would attain hurricane status , Barbara moved ashore as a small , weak tropical storm . It produced locally heavy rainfall and gusty winds , and in most locations damage was minor . However , in southern Mexico , the rainfall destroyed large areas of cropland , with crop damage totaling 200 million pesos (2007 MXN , $ 55 million 2007 USD) . In El Salvador , four people were killed by storm @-@ induced floods .

= = Meteorological history = =

A tropical wave moved off the coast of Africa on May 14 , which is believed to have been the impetus to Barbara . The wave axis crossed Central America on May 25 and emerged into the eastern North Pacific Ocean the next day . Interacting with the Intertropical Convergence Zone , a broad surface low pressure area developed within the area on May 27 , and as it drifted northward the system maintained limited and disorganized convection . On May 29 , convection increased and became concentrated near the low pressure center , and banding features developed in its eastern semicircle as the circulation became better defined . It is estimated the system formed into Tropical Depression Two @-@ E at 1800 UTC on May 29 about 115 miles (185 km) southeast of Puerto Escondido , Oaxaca . Upon becoming a tropical cyclone , the depression was stationary in an area with warm sea surface temperatures , very light wind shear , and favorable upper @-@ level conditions .

In the hours after becoming a tropical cyclone , the deep convection associated with the depression decreased , though it again increased later in the day . A ragged rainband developed in the southeastern quadrant of the circulation , and based on increased Dvorak numbers and improved presentation on satellite imagery , the National Hurricane Center upgraded the depression to Tropical Storm Barbara on May 30 while it was located about 115 miles (185 km) south of Puerto Escondido . This marked only the third time on record that two storms formed in May in the basin , after 1956 and 1984 . Initially , Barbara was forecast to intensify to attain hurricane status and reach winds of 85 mph (135 km / h) .

The storm drifted southward and later eastward due to northerly flow behind a mid- to upper @-@ level trough in the Gulf of Mexico . With well @-@ defined outflow and warm sea surface temperatures , Barbara became better organized as tightly curved bands of convection developed near the center . However , by May 31 , increased wind shear and less inflow deteriorated the definition of the circulation , causing the storm to weaken . By later that day , the system contained a very small circulation within a large @-@ scale trough , and early on June 1 it was downgraded to tropical depression status . Later in the day , convective banding features re @-@ developed , and after a QuikSCAT overpass indicated a well @-@ defined circulation in the system , Barbara was again upgraded to tropical storm status . The storm reached peak winds of 50 mph (85 km / h) and turned to the northeast as it tracked through a break in a ridge extending from the southwest Gulf of Mexico . Banding features continued to organize , and shortly before moving ashore a low @-@ level eye feature developed . At about 1300 UTC on June 2 , Barbara made landfall just west of the border between Mexico and Guatemala . The center quickly deteriorated to tropical depression status over the mountainous terrain of extreme southeastern Chiapas , and Barbara dissipated within twelve hours of moving ashore .

= = Preparations and impact = =

Early in the duration of the cyclone , the National Hurricane Center recommended for interests along the coast of southwestern Mexico to monitor the progress of the storm . Upon regaining tropical storm status on June 1 , the governments of Guatemala and Mexico issued a tropical storm watch from Sipacate , Guatemala to Barra de Tonala , Mexico . Later , as the track became more apparent , the watch was replaced by a tropical storm warning , and a tropical storm watch was extended westward to Salina Cruz , Mexico . Officials in Mexico allocated emergency funds for southern regions of Chiapas and Oaxaca in preparation for a potential flooding disaster . At least 1 @,@ 400 people were evacuated in Chiapas to emergency shelters .

The outer rainbands of the storm first began affecting Guatemala and southeastern Mexico late on June 1 . In Mexico , the peak 24 @-@ hour rainfall total was 4 @.@ 96 inches (126 mm) in Huixtla , and across southeastern Mexico , the rainfall led to above normal levels in many rivers . An automatic surface station in Puerto Madero , Mexico recorded sustained winds of 36 mph (58 km / h) with gusts of 53 mph (85 km / h) shortly after landfall . In most locations , damage from the storm was minor , limited to downed light posts , some damaged roofs , and a brief power outage . However , winds and rains from the storm caused moderate to severe crop damage in the mountain range of southern Chiapas . About 35 sq. miles (90 km ²) of banana crops were destroyed , with about 4 sq. miles (10 km ²) of coffee damaged . The passage of the storm also resulted in damage to cocoa beans , mango , coconut , and other vegetables , with crop damage totaling about 200 million pesos (2007 MXN , $ 55 million 2007 USD) . As a result of the crop damage , the government of Mexico provided 108 million pesos (2007 MXN , $ 10 million 2007 USD) in financial aid to the affected farmers .

In Ocos , Guatemala near the border , winds from the storm destroyed the roofs of about a dozen palm huts , forcing over 100 residents to evacuate . The winds also downed hundreds of trees near the coastline . Heavy rainfall from the storm led to river flooding ; the island of Ocos was separated from the mainland after the bridge was washed away . Heavy rains along the periphery of the storm triggered significant flooding in El Salvador which killed at least four people .