

= Hurricane Beatriz (2011) =

Hurricane Beatriz was a Category 1 hurricane that killed four people after brushing the western coast of Mexico in June 2011 . Originating from an area of disturbed weather on June 19 , several hundred miles south of Mexico , Beatriz gradually intensified . Gaining latitude , the system became increasingly organized and reached hurricane status on the evening of June 20 . The following morning , Beatriz attained winds of 90 mph (150 km / h) as it passed roughly 15 mi (20 km) of Mexico . Due to its interaction with land , the hurricane abruptly weakened hours later . Early on June 22 , Beatriz dissipated over open waters . Prior to Beatriz 's arrival in Mexico , hurricane watches and warnings were issued for coastal areas . Hundreds of shelters opened across the states of Colima and Guerrero . Heavy rains from the storm triggered significant flooding along the Sabana River in Acapulco , killing four people . However , the overall effects of Beatriz were limited and the rains were largely beneficial in mitigating a severe drought .

= = Meteorological history = =

On June 16 , 2011 , a trough situated off the southern coast of Guatemala showed signs of possible tropical cyclogenesis . Though located within an area favoring development , the system remained broad and disorganized as it moved slowly west @-@ northwestward . Gradually , convection consolidated around an area of low pressure . On June 18 , a Tropical Cyclone Formation Alert was issued for the system as it was expected to develop into a tropical depression within 24 hours . On the following day , the low further developed and was declared Tropical Depression Two @-@ E by the National Hurricane Center at 1500 UTC . Upon being declared , the depression was located about 335 mi (540 km) south @-@ southeast of Lázaro Cárdenas , Mexico . However , after post @-@ analysis , the depression had actually developed nine hours earlier . Maintaining a west @-@ northwesterly track in response to a subtropical ridge to the north , the depression was forecast to move into a favorable environment , characterized by low wind shear and sea surface temperatures up to 86 ° F (30 ° C) . Three hours after classification , the depression strengthened Tropical Storm Beatriz , the second named storm of the season .

Early on June 20 , convection increased markedly with several overshooting tops (denoted by cloud @-@ top temperatures below ? 80 ° C (? 112 ° F)) appearing on satellite imagery . A notable increase in southerly outflow also took place . As the subtropical ridge north of the storm weakened , Beatriz acquired a more northerly component to its track , bringing the center of the storm closer to Mexico . Convective bands gradually wrapped around the system throughout the day . During the afternoon hours of June 20 , a hurricane hunter aircraft found Beatriz just below hurricane strength , and subsequently , the system was upgraded just a few hours later , while situated roughly 85 mi (140 km) southeast of Manzanillo , Mexico . Early on June 21 , a 23 to 29 mi (37 to 47 km) wide eye developed within the central dense overcast . In light of this , the National Hurricane Center estimated Beatriz to have attained winds of 90 mph (150 km / h) along with a barometric pressure of 977 mbar (hPa ; 28 @-@ 85 inHg) ; however , it was noted that this could be conservative based on estimates of 105 mph (165 km / h) from the University of Wisconsin and the Satellite Analysis Branch .

Throughout the morning of June 21 , Beatriz brushed the coast of Mexico , with the center passing roughly 15 mi (20 km) south @-@ southeast of La Fortuna , Mexico . Centered just off the coast of Mexico , the system interacted with land and began weakening . Hours later , convection rapidly diminished as dry air became entrained in the circulation . In response to quick degradation of the system 's structure , the NHC downgraded Beatriz to a tropical storm . Rapid weakening continued throughout the day and by the evening hours , the storm no longer had a defined circulation . Lacking an organized center and deep convection , the final advisory was issued on Beatriz . The storm 's remnants persisted for several more hours before dissipating roughly 175 mi (280 km) southwest of Cabo Corrientes , Mexico .

= = Preparations and impact = =

Following the classification of Tropical Depression Two @-@ E on June 19 , the Government of Mexico issued a tropical storm warning for coastal areas between Zihuatanejo and Manzanillo . A hurricane watch was also put in place from Tecpán de Galeana to Punta San Telmo . Later that day , the tropical storm warning was upgraded to a hurricane warning and the watch was extended westward to La Fortuna . As Beatriz continued to strengthen , the watches and warnings were extended westward to Cabo Corrientes on June 20 . Early on June 21 , the easternmost advisories were discontinued as Beatriz moved away . Later that morning , all watches and warnings were discontinued in light of Beatriz 's rapid weakening .

In Colima and Jalisco , residents were warned of heavy rains that could trigger flooding and mudslides . Schools across both states canceled classes for June 21 . In Colima , 236 shelters were opened to the public . Additionally , the Mexican Navy was placed on standby for hurricane relief . A total of 980 temporary shelters were opened in Guerrero , many of which were in Acapulco , as many residents were expected to evacuate flood @-@ prone area . An orange @-@ level alert was issued for portions of Chiapas in light of potentially heavy rains . Throughout Western and Southwestern Mexico , the Servicio Meteorológico Nacional (National Weather Service) advised that all air and sea traffic be suspended until the passage of Beatriz .

Across Guerrero , Beatriz produced heavy rain , peaking at 222 @.@ 5 mm (8 @.@ 76 in) in Copala , Guerrero . Several homes across the state were damaged , though none were destroyed . In Acapulco , 380 homes were inundated by flood waters , prompting evacuations in areas built in 1999 to relocate residents after Hurricane Pauline . Several landslides blocked off roads and a 100 m (330 ft) section of a roundabout was destroyed . In the community of Amatillo , three people were killed after being washed away by flood waters . Heavy rains from Beatriz caused the Sabana River to overflow its banks , placing 150 homes across 14 colonias under water . One person drowned in San Agustín after falling in the swollen river . Twenty @-@ seven colonias in and around the city lost power after muddy floodwaters entered a substation . Throughout Oaxaca , at least a dozen homes lost their roofs due to high winds . Portions of Colima , Chiapas , Michoacán and Jalisco experienced heavy rains ; however , in many areas , the rain proved beneficial in mitigating a severe drought .