

= Tropical Storm Emilia ( 2006 ) =

Tropical Storm Emilia was a rare tropical cyclone that affected the Baja California peninsula in July 2006 . The sixth tropical depression and fifth tropical storm of the 2006 Pacific hurricane season , it developed on July 21 about 400 miles ( 650 km ) off the coast of Mexico . It moved northward toward the coast , reaching peak winds of 65 mph ( 105 km / h ) before turning westward and encountering unfavorable conditions . Emilia later turned to the north , passing near Baja California as a strong tropical storm . Subsequently the storm moved further away from the coast , and on July 27 it dissipated .

The storm brought tropical storm force winds and precipitation to the southwestern Mexican coastline . Later , Emilia produced similar conditions in the southern portion of the Baja California peninsula , where its passage caused minor damage and flooding . Moisture from Emilia reached the southwestern United States , producing thunderstorms and flash flooding in Arizona , as well as beneficial rainfall in southern California . No deaths were reported in association with Emilia .

= = Meteorological history = =

The origins of Emilia can be traced to a tropical wave that crossed northern Central America into the eastern Pacific Ocean on July 16 . The system moved westward , developing a well @-@ defined low pressure area about 525 miles ( 850 km ) southwest of Acapulco by July 19 . The next day , its forward motion had shifted to a slow north @-@ northwest track , and with its convection continuing to organize around the low , the National Hurricane Center ( NHC ) remarked on the potential for tropical cyclogenesis . Early on July 21 , its thunderstorm activity organized enough for the NHC to classify it as Tropical Depression Six @-@ E , located to the southwest of Acapulco .

Upon becoming a tropical cyclone , the depression existed in an area of weak steering currents , though a general motion to the north @-@ northwest was influenced by a large subtropical ridge over the southwest United States . The circulation was initially located east of the main convection , due to the presence of wind shear . Convection increased near the center despite the shear , and on July 22 the depression attained tropical storm status about 400 mi ( 650 km ) south of Manzanillo , Colima ; it was named Emilia by the NHC . Around the same time , the storm was developing better @-@ defined rainbands , and with favorable conditions expected , Emilia was forecast to attain hurricane status ; the NHC noted the potential for rapid deepening as the storm passed near southwestern Mexico .

Early on July 23 , the storm briefly became disorganized , with the low @-@ level circulation becoming ill @-@ defined . Around the same time , Emilia passed about 175 mi ( 280 km ) southwest of Manzanillo , which was its closest approach to southwestern Mexico ; it is believed to have caused tropical storm force wind gusts along the coastline . Later that day , after turning west @-@ northwestward , the convection increased markedly as an eyewall began to form . Operationally , it was estimated to have reached winds of 70 mph ( 115 km / h ) , and it was forecast to continue strengthening to attain Category 2 status on the Saffir @-@ Simpson scale . However , the NHC later re @-@ assessed Emilia as reaching peak winds of 65 mph ( 105 km / h ) , since the eye feature was temporary and not well @-@ defined .

Shortly after reaching peak intensity , a sharp increase in wind shear caused Emilia to weaken quickly to winds of 50 mph ( 85 km / h ) . Operationally , the NHC initially continued to assess the storm as with winds of 70 mph ( 115 m / h ) , with hurricane status predicted . However , the decrease in strength became evident on July 24 , when dry air became entrained in the circulation ; at the same time , the convection became limited to the southern semicircle of the storm . On July 25 , the wind shear decreased as the storm turned toward the Baja California peninsula , despite that tropical cyclones affecting the Baja California peninsula in the month of July are rare . Convection increased in coverage , and an eye feature re @-@ appeared early on July 26 as it again attained peak winds of 65 mph ( 105 km / h ) .

Emilia maintained peak winds for about 18 hours , during which it passed about 60 mi ( 95 km ) southwest of Cabo San Lazaro , which is a cape located southwest of Ciudad Constitución on the

southwestern coast of the Baja California peninsula . After brushing the peninsula with its outer rainbands , Emilia turned away from the coast into cooler waters , and subsequently began to weaken rapidly . On July 27 it deteriorated into a tropical depression , and the next day Emilia degenerated into a convective @-@ less remnant low . The low continued westward until turning northward on July 30 , and on July 31 the remnants of Emilia dissipated about 495 mi ( 800 km ) west @-@ southwest of San Diego , California .

= = Preparations and impact = =

As Emilia first approached the southwest coast of Mexico , officials issued a tropical storm watch from Manzanillo to Cabo Corrientes , Jalisco ; the watch was discontinued 30 hours after it was issued . The storm passed the region on July 22 , and is believed to have produced tropical storm force wind gusts along the coastline . A ship recorded 40 mph ( 65 km / h ) winds while Emilia was just off the coast . Further up the coast , in Mazatlán , strong waves from the storm caused beaches to close , while the outer fringes of the storm dropped 4 @.@ 68 inches ( 119 mm ) of precipitation . Inland , the interaction between Emilia and a tropical wave brought increased moisture and precipitation to southeastern and central Mexico .

When Emilia began turning toward the Baja California peninsula , the government of Mexico issued a tropical storm watch from Buena Vista along the Gulf of California to Bahía Magdalena along the Pacific coast . The watch was replaced with a tropical storm warning about 12 hours prior to the closest approach of the storm , and additional warnings were issued along the Pacific coastline as the storm passed . All watches and warnings were discontinued by July 27 . Officials prepared two schools as emergency shelters in Cabo San Lucas , where 100 people stayed during the storm . In the area , the threat of the storm resulted in the closure of several bars and restaurants .

Across the southern portion of the Baja California peninsula , the storm dropped moderate rainfall , with a total of about 5 inches ( 125 mm ) reported in Cabo San Lucas ; the NHC remarked that higher amounts likely occurred in higher elevations . The rainfall caused minor flooding in and around Cabo San Lucas . Along the southern coast of the peninsula , Emilia produced tropical storm force winds ; two stations reported sustained winds of 43 mph ( 69 km / h ) , with one of those reporting wind gusts to 55 mph ( 89 km / h ) . The storm caused minor damage to buildings and utility lines . Waves from the storm left minor damage at several marinas in the region , with several being closed for two days .

The effects of Emilia reached the southwestern United States . In southern Arizona , a surge of moisture from the storm produced scattered thunderstorms , including one severe thunderstorm in Santa Cruz County . The cell dropped heavy rainfall and large hailstones in a short amount of time ; one location reported hail of 1 @.@ 75 inches ( 44 @.@ 5 mm ) in diameter . The rainfall , which totaled several inches in some areas , caused flash flooding , with 8 inches ( 205 mm ) of floodwater reported at one location along Interstate 19 . Thunderstorms in Graham County produced a wind gust of 64 mph ( 103 km / h ) at the airport in Safford . Unsettled conditions persisted across Arizona for about a week . In southern California , the storm dropped light rainfall , which assisted firefighters in containing a wildfire .