

= Tropical Storm Trudy (2014) =

Tropical Storm Trudy was a short @-@ lived tropical cyclone in October 2014 that caused significant flooding in southern Mexico . The storm originated from an area of low pressure associated with a monsoon trough near Central America in early October . A slow @-@ moving system , the low eventually consolidated into a tropical depression on October 17 near the Mexican coastline . Favorable environmental conditions aided rapid development of Trudy . Within 15 hours of its designation , an eye formed over the storm 's center . Trudy ultimately achieved its peak as a strong tropical storm with 65 mph (100 km / h) winds as it made landfall just southeast of Marquelia , Mexico . The region 's mountainous terrain quickly weakened Trudy and the cyclone dissipated early on October 19 . Though the cyclone dissipated , its remnant energy later contributed to the formation of Tropical Storm Hanna in the Atlantic .

Prior to Trudy 's landfall , the Government of Mexico issued multiple watches and warnings for the threatened region . Forecasters highlighted the threat of heavy rains and mudslides . Guerrero experienced the greatest effects from Trudy , with landslides and flooding claiming eight lives in the state . Over 4 @, @ 000 people were evacuated in the region . A ninth fatality took place in Campeche .

= = Meteorological history = =

On October 8 , a weak area of low pressure developed within a monsoon trough over the extreme eastern edge of the Pacific basin . Environmental conditions ahead of the system were forecast to become gradually favorable for tropical cyclogenesis . Situated near Costa Rica , scattered convection accompanied the well @-@ defined system . This low became less defined over the following days while remaining in the same general area . The National Hurricane Center (NHC) began monitoring the system for long @-@ term cyclogenesis on October 13 , at which time the low was situated 150 mi (240 km) south of Guatemala . Organization was prolonged and slow ; however , the convergence of a Kelvin wave and a Gulf of Tehuantepec gap wind event on October 15 spurred a significant increase in convection .

Marked structural improvements took place on October 17 and the NHC assessed a high probability of the system becoming a tropical cyclone within 48 hours . That evening , corroborating data from ships , satellite imagery , and scatterometer estimates indicated the formation of a tropical depression by 12 : 00 UTC . With the cyclone located over warm waters of 86 ° F (30 ° C) and within a very moist region with low wind shear , intensification was a certainty as the depression approached Mexico . Uncertainties existed as to how fast the system would move . Some forecast models depicting the system as stalling just offshore for several days , though forecasters indicated that a steady northward movement would lead to dissipation within 48 hours .

Owing to the aforementioned environmental conditions , the depression intensified to a tropical storm by 18 : 00 UTC on October 17 ; it was subsequently assigned the name Trudy by the NHC . Very deep convection blossomed over both the center and accompanying banding features . During the morning of October 18 , a central dense overcast became increasingly defined ; microwave satellite imagery and coastal radars depicted the formation of a 12 to 17 mi (19 to 27 km) wide eye by 03 : 00 UTC . It is estimated that Trudy reached its peak intensity around 09 : 15 UTC on October 18 with maximum sustained winds of 65 mph (100 km / h) and a barometric pressure of 998 mbar (hPa ; 29 @. @ 47 inHg) . Simultaneously the storm made landfall just southeast of Marquelia , or roughly 70 mi (110 km) east of Acapulco . Interaction with the mountainous terrain of Mexico quickly took its toll on Trudy , with the system degrading to a tropical depression by 18 : 00 UTC . The low @-@ level circulation of the depression dissipated early on October 19 , with its mid @-@ level remnants continuing northeastward over Mexico . The remnant system emerged over the Bay of Campeche on October 20 and subsequently developed into Atlantic Tropical Depression Nine ? which later became Tropical Storm Hanna ? on October 22 . Due to the dissipation of its surface low , Trudy and Hanna are considered separate tropical cyclones by the NHC .

= = Preparations and impact = =

Upon the designation of Tropical Depression Twenty @-@ E on October 17 , a tropical storm warning was issued for coastal areas of Mexico between Tecpán de Galeana and Lagunas de Chacahua . Forecasters at the NHC noted that the greatest threat from the system would be torrential rains across Guerrero and Oaxaca that could trigger life @-@ threatening flash floods and mudslides . Rapid organization of the system prompted a hurricane watch to be issued by 09 : 00 UTC on October 18 for areas between Acapulco and Lagunas de Chacahua . This watch was soon discontinued as Trudy failed to reach hurricane intensity before moving inland over Mexico . The tropical storm warning was subsequently allowed to expire by 21 : 00 UTC as Trudy weakened to a depression . In addition to the above watches and warnings , a " yellow " alert was activated for Guerrero on October 17 . Upon abruptly intensifying prior to landfall , a " red " alert was activated for southeastern Guerrero and southwestern Oaxaca while the rest of Guerrero and Oaxaca were placed under an " orange " alert . A total of 35 shelters were opened across eastern areas of Guerrero .

Heavy rains across Guerrero wreaked havoc , causing widespread flooding and damage . A total of 4 @, @ 075 people were evacuated from the most at @-@ risk areas in the state . A further 300 residents were urged to leave as a river threatened to over @-@ top its banks . Wall collapses attributed to the storm resulted in four deaths : three in Ometepec and one in Cochoapa . A landslide in Tlacoachistlahuaca killed two people , while flooding elsewhere killed two people . Road access to 16 towns was cut off and the main road to Acapulco was damaged by landslides and flooding . Approximately 5 @, @ 000 homes were affected by the storm , with 218 damaged by flooding and 6 destroyed . More than 20 @, @ 000 households lost power due to the storm , though the vast majority was restored within a day . A state of emergency was later declared for 35 towns in Guerrero .

Oaxaca experienced similar impacts to Guerrero , with flooding and landslides mostly causing damage to road infrastructure . Notably , a 39 ft (12 m) bridge in San Martín Peras collapsed , leaving several villages isolated . At least 160 ft (50 m) of Mexican Federal Highway 125 was washed away , requiring a repair bill of 8 million pesos (US \$ 532 @, @ 000) . An emergency declaration was made for 100 municipalities in Oaxaca . Trudy was also blamed for one death in Campeche .