

## = Effects of Hurricane Isabel in New Jersey =

The effects of Hurricane Isabel in New Jersey in 2003 were overall moderate , limited to fallen trees , two deaths , and \$ 50 million in damage ( 2003 USD , \$ 59 million 2008 USD ) . Hurricane Isabel formed from a tropical wave on September 6 in the tropical Atlantic Ocean . It moved northwestward , and within an environment of light wind shear and warm waters it steadily strengthened to reach peak winds of 165 mph ( 265 km / h ) on September 11 . After fluctuating in intensity for four days , Isabel gradually weakened and made landfall on the Outer Banks of North Carolina with winds of 105 mph ( 165 km / h ) on September 18 . It quickly weakened over land and became extratropical over western Pennsylvania the next day . Several days before Isabel made landfall , there existed uncertainty in where the hurricane would strike . At least one computer model predicted a landfall on New Jersey , and as a result services across the state thoroughly prepared for the hurricane .

Isabel passed 215 miles ( 350 km ) southwest of the state , though its large wind core produced tropical storm force winds across much of the state . The winds downed hundreds of trees and power lines , leaving hundreds of thousands without power . A falling tree killed one person . Hurricane Isabel produced rough waves and a moderate storm surge along the coastline . One person was killed from the rough waves , and at least 50 locations along the Jersey Shore reported beach erosion from the hurricane .

## = Preparations =

44 hours before Hurricane Isabel made landfall on the Outer Banks of North Carolina , the National Hurricane Center issued tropical storm watch for the coastline from Little Egg Inlet southward into the Mid @-@ Atlantic . A day later , the watch was extended northward to Sandy Hook . When Isabel was 26 hours from making landfall , the watches were changed to tropical storm warnings , and 10 hours before it struck land the National Hurricane Center issued a tropical storm warning for the remainder of the New Jersey coastline . The National Hurricane Center also briefly issued a hurricane watch for the New Jersey coastline . While over the western Atlantic Ocean as a Category 5 hurricane , forecasters predicted Isabel would move northwestward and within five days be at a position 170 miles ( 275 km ) south of Cape May as a 115 @-@ mph ( 185 @-@ km / h ) major hurricane . By four days before the hurricane struck land , at least one computer model predicted Isabel would strike New Jersey .

News stations were stationed with crews along the Jersey shore several days in advance of Isabel to provide breaking news and live conditions . Many residents prepared their houses by boarding windows and purchasing emergency supplies . The Sussex County chapter of the American Red Cross advised local high schools to be on stand @-@ by as potential shelters in the event evacuation occurred . Emergency coordinators in several counties were on alert , though none issued evacuations . In preparation for anticipated power outages , the Jersey Central Power and Light company arranged to receive more electrical crews from its parent company , FirstEnergy . Other utility workers from various locations as far as Canada left for the state in the event of power outages .

Several flights in and out of the state were delayed or canceled , and the Cape May @-@ Lewes Ferry canceled travel across the Delaware Bay during the duration of Isabel . In Atlantic City , casino workers prepared for coastal flooding by placing sandbags at boardwalk entrances . New Jersey Transit workers secured its buses , railways , and light rail equipment . To ensure service would remain accessible during and after the hurricane , NJ Transit prepared backup generators , pumps , and chainsaws , with workers inspecting trains and the paths of the lines . FEMA mobilized and dispatched an Urban Search and Rescue Task Force of 28 people to the state for possible rescue duty . Days before the storm made landfall , the Salvation Army prepared food and aid for potentially affected citizens . In anticipation for the effects of Isabel , Governor Jim McGreevey declared a state of emergency , which allowed the Federal Emergency Management Agency to deal with the situation .

= = Impact = =

Isabel produced a storm surge along the New Jersey coastline of up to 6 @. @ 5 feet ( 2 m ) in Cape May . Higher amounts occurred along the Delaware River , peaking in the state at 10 @. @ 6 feet ( 3 @. @ 2 m ) in Burlington . At its closest approach , Isabel passed within about 215 miles ( 350 km ) of the state , and as a result the outer rainbands produced light rainfall . Wildwood along the southeast coast reported 1 @. @ 3 inches ( 33 mm ) of rain , while Lincoln Park in the northern portion of the state recorded 2 @. @ 07 inches ( 52 mm ) of precipitation . The large wind field of the hurricane produced moderate winds across the state . A shoal in the Delaware Bay experienced sustained winds of 54 mph ( 87 km / h ) with gusts to 71 mph ( 114 km / h ) . Cape May reported tropical storm force winds with gusts to 61 mph ( 98 km / h ) , while Newark in the northern portion of the state experienced gusts to 44 mph ( 71 km / h ) .

Hurricane Isabel produced slightly above normal tides and rough surf along the Jersey shore , killing one surfer off of Wildwood Crest . The combination of gusty winds and the heavy surf produced moderate beach erosion along much of the coastline , primarily to beaches facing southeastward . In the Delaware Bay and River area , no significant erosion was reported , though coastal flooding from the hurricane washed out a road and destroyed the deck of a house in Baypoint . In Cape May County waves eroded the beaches by up to 4 feet ( 1 @. @ 2 m ) in Ocean City and Avalon , with several cities experiencing a loss of dunes and geotubes in Whale Beach being exposed . Waves from Isabel in Atlantic County resulted in light damage , minor coastal flooding , and slight beach erosion . The beaches of southern Ocean County experienced a loss of 3 to 4 feet ( 0 @. @ 9 to 1 @. @ 2 m ) of sand , while locations further to the north experienced only minor erosion . Most coastal areas of Monmouth County reported eroded beaches by up to 4 feet ( 1 @. @ 2 m ) , with Union Beach losing about 5 @, @ 000 sq. feet ( 465 sq. m ) of sand .

Moderate wind gusts throughout the state downed hundreds of trees , tree limbs , and power lines . Over 382 @, @ 000 people were without power , one of the worst power outages on record for area utilities . Downed trees and power lines closed major streets and schools in Union County . One downed tree greatly damaged a house in Middletown , and in Hudson County several trees fell onto and damaged cars . A downed tree in Englewood injured a woman when she was struck , and a woman in Independence Township was killed when a fallen tree landed on the vehicle she was driving . Strong winds from Isabel blew out the windows in an office building in East Rutherford , causing injuries to two women when they were struck . Throughout the state , damage totaled to about \$ 50 million ( 2003 USD , \$ 59 million 2008 USD ) .