

# Hurricane katrina and its effects on new orleans

[Environment](#), [Disaster](#)



## **Before the Storm**

The tropical depression that became hurricane Katrina formed over the Bahamas around August 23, 2005. By August 28 evacuations were going on across the region. New Orleans was the most at risk. Although half the city lies above sea level, its average elevation is about six feet below sea level and it is completely surrounded by water. The levees along the Mississippi river were strong, but the ones built to hold back other lakes like Pontchartrain and Borgne were much less reliable. Before the storm, officials worried that sure a surge could overtop some levees and cause flooding. But they didn't predict some of the levees might collapse. Neighborhoods that sat below sea level, many which housed poor and vulnerable people were at great risk.

The day before Katrina hit, New Orleans Mayor Ray Nagin issued the city's first ever mandatory evacuation order. He also made it clear that the superdome, a stadium located on high ground, would serve as a "shelter of last resort" for people who were not able to leave the city. By night time, almost 80% of the population had evacuated.

## **Storm Hits**

By the time the hurricane struck it had already been raining pretty heavily for hours. When the storm surge hit (as high as 9 meters in some places) it overwhelmed many of the city's levees and drainage canals. Low-lying places like the Ninth Ward were under so much water that people had to hurry to their attics and rooftops for safety. Eventually, nearly 80% of the city was under some quantity of water. It landed as a category 3 and brought

winds of 100-140 miles per hour. The storm itself caused a lot of damage, but its aftermath was catastrophic. Hurricane Katrina was one of the strongest storms to hit the United States coast within the last 100 years.

## **Aftermath of The Hurricane**

Many people helped and acted heroic in the aftermath. The coast guard rescued about 34, 000 people in New Orleans alone. While many other citizens brought out their boats, offered food and shelter, and did whatever else they could to help their fellow citizens. But, the government seemed to be unprepared for the disaster. The Federal Emergency Management Agency (FEMA) took many days to set up operations in New Orleans, and even seemed to many that they did not have a plan of action. Many officials including the President had no idea of how many people were stranded or missing, how many homes and businesses had been damaged, and how much food, water, and aid was needed.

Many had nowhere to go. The superdome in New Orleans was limited on supplies to begin with and had to lock the doors and stop helping people after they had already accepted 15, 000 more people than they started with. Tens of thousands of people were desperate for food, water, and shelter. It was nearly impossible to leave New Orleans. Especially for people that had no cars or anywhere else to go, they were pretty much stuck. Katrina affected huge parts of Louisiana, Mississippi, and Alabama, but the major damage was in New Orleans. Hundreds of thousands were displaced from their homes and experts estimate that it caused more than \$100 billion in damage.

## **How Katrina Effected the Economy**

Now on to how Katrina effected the economy. Hurricane Katrina cost a large amount of \$125 billion. Insurance covered only \$80 billion of those losses. “ The U. S economy grew 3. 6 percent in the third quarter, July through October. Afterward it plummeted to 2. 6 percent in the fourth quarter, from October to December.” Katrina damaged 19 percent of U. S. oil production. When combined with hurricane Rita that happened soon after, they both destroyed 113 offshore oil and gas platforms. Damaged 457 oil and gas pipelines. That caused oil prices to increase by \$3 a barrel. Gas prices almost reached \$5 a gallon. The U. S. government released oil from the Strategic Petroleum Reserves. Katrina’s impact is reflected in historical oil prices. The hurricane caused \$260 million in damages to the port in New Orleans. The city’s tourism industry generated \$9. 6 billion a year before Katrina. It attracted 7. 1 million visitors each year. It only received 2. 6 million tourists in 2006. Katrina also struck the heart of Louisiana’s sugar industry and destroyed 40% of the crop. The American Sugar Cane League estimated the annual crop valued at \$500 million. This area of Louisiana had 50 chemical plants, producing 25% of the nation’s chemicals. The nearby Mississippi coast was home to 12 casinos, which took \$1. 3 billion each year. The storm also damaged many oyster beds and the local shrimping business’s.

Now let’s move on to the health effects of Hurricane Katrina. The main health effects of Katrina had to do with the amount of water left behind in New Orleans. Outbreaks of West Nile, mold, and endotoxin levels rising were the biggest concerns. The flooding brought all types of bacteria along with it from the open water. The medical centers were either destroyed, over

populated, or had no power for some time. Since there was so much flood water, it was optimal breeding ground for mosquitoes and the water covered everything. So, nothing seemed safe. The water left little clean water to use, buildings completely destroyed, and the public at a loss for words.

## **Clean Up After the Hurricane**

The clean-up for Katrina is still on going. A lot of water flooded the city and some areas that were flooded near New Orleans are still under water. Many of the areas may have just become lakes because the water was going to take long to drain out. New Orleans had to fix many of their water pumps in order to drain the city. This took longer than usual because a lot of their pumps weren't manufactured anymore. The extra time it took to make the repairs meant the dirty water sat in the city even longer. The sitting water meant foundations were weakened and more and more mold was growing, meaning more houses were going to be destroyed. The city was becoming more and more uninhabitable. The levees that kept water out of the city also had to be repaired. When the water was finally pumped out the homes had to be taken care of, the people of the city were put into temporary trailers while their home were reconstructed. Once the homes were cleared and power was restored, the concerns for health went down. Clean water and food were brought in while the plants that filtered the water were being repaired.

## **Katrina's Effects on Rest of the U. S.**

Katrina did hit New Orleans the hardest, but it also did damage to other states. It caused flooding in Southern Florida and damage and extensive

power outages in Miami. From the gulf coast to the Ohio Valley, flood watches were being issued. Parts of Gulfport and Mississippi were under water. Some rain bands from Katrina also produced tornadoes creating more damage. Most of the death toll though was in Mississippi and Louisiana, but a few deaths were also reported in Florida. The entire United States was also affected when the oil rigs in the gulf were found to have suffered major damages, making gas prices go up.

### **Corporate/Celebrity Donations to Katrina Relief**

Corporate donations to support relief efforts in the wake of Hurricane Katrina reached up \$547 million according to USA Today in 2005. 145 companies each pledged \$1 million or more in cash and products since the storm battered the Gulf Coast states of Alabama, Louisiana, and Mississippi. In all, 396 companies donated a total of \$409 million in cash and product. The largest contributors being Walmart, Office Depot, and General Electric. Additionally, U. S. companies collected another \$138 million in contributions from costumers bringing the total to \$547 million. Celebrities also came to the rescue. Julia Roberts, Jaime Foxx, and John Travolta delivered food and medical supplies as part of an effort organized by Oprah Winfrey's foundation, Oprah's Angel Network. Two years after the hurricane Brad Pitt founded a nonprofit housing group named Make It Right. They built 150 energy-efficient houses in the lower ninth ward - the area hardest hit by Katrina.

## **Climate Change**

Was climate change to blame? This question was driven by an emerging public awareness of the changes that global warming might mean for the world's weather including hurricanes. At that time scientists only had few answers. There was evidence that temperatures around the globe had risen and expectations that this would shift weather patterns in the future. In 2005, when Katrina helped increase awareness of climate change the science of what is called "extreme event attribution" was just emerging. Today it is one of the fastest growing fields in climate research. Reliable hurricane records extend back at most a few decades to the beginning of satellite observations. With relatively straightforward events like heat waves, it is simple to use computer models to compare how often an extreme event occurs with and without anthropogenic warming. While the record is too short for any role of warming to be clear yet for trends in hurricane intensity or frequency overall. Some trends could lead towards the warming influence being the problem.

## **Conclusion**

New Orleans has rebuilt stronger flood walls, that are taller and more anchored in their levees than the old ones. Also, this huge gate closes canals off from the lake when storms approach. In all federal and state governments have spent more than \$20 billion on the 350 miles of levees, flood walls, gates and pumps that now encircle New Orleans. While it may be hard to fully prepare for a hurricane to hit, at least scientists have researched and found new ways to give warnings for people to evacuate. Maybe the studies dealing with climate change and global warming can help

give scientists and meteorologists better knowledge to help these cities that are constantly effected. Hopefully people become aware of what is going on in the world, especially dealing with nature and climate. Small changes can be part of the bigger plan to save our planet.