



## 7th-Grade Winner

The Secret of the Seawall - Life After the  
1900 Galveston Hurricane

By Lizzy LaGrone

Texas Middle School



# The Secret of the Seawall – Life After the 1900 Galveston Hurricane

The wind blew strongly and a 15-foot storm surge flooded the island. You could hear the terrified screams as thousands of people were swept away by the water. The city was completely destroyed, with over 3,600 buildings reduced to rubble. This was the scene in Galveston on September 8, 1900. Galveston was just 8.7 feet above sea level, making it very vulnerable to this terrible hurricane. The damage led people to understand that Galveston needed to be improved to better handle future storms. The Galveston Hurricane tested the resilience of the citizens and drove engineers to develop new ways to protect the coast. The effects of this disaster are still felt in Galveston today.

The engineers ended up coming up with 2 major solutions: create a seawall and raise the city's elevation. To initiate this plan, on September 7, 1901, the building of the seawall was approved in court. The lead engineer, Henry Martyn Robert, organized the plans for this massive curved structure. His design was made of concrete, measured 3.3 miles long, 16 feet at its base, 5 feet wide on top, and 17 feet high. The seawall had a total cost of about 1.6 million dollars. Even though the cost was high, it paid off through teamwork and dedication to protect their city.

The second solution was even more unbelievable; they started raising the whole city! Workers used hand-churned jackscrews to lift nearly 2,000 buildings higher above sea level. They worked in quarter-mile sections at a time and used a dike to lift buildings between 5 and 17 feet above ground level. After they lifted the buildings, they flowed in a sand mix from the port nearby. It took days to weeks for this mixture to dry. Wooden walkways and paths were established so citizens could continue their normal lives despite the construction. Imagine surviving a hurricane, then having to navigate precarious wooden paths to work every day. Hopefully, nobody was afraid of heights! Despite the improvements, life during this time wasn't easy, with their loss of homes and difficulties in getting around. Residents had to have perseverance to get through each day. However, the project showcased how people can unite and have the determination to overcome difficult challenges.

Though the major solutions were important, there were still smaller actions that had an impact on the city's rebuilding. First, homes and buildings were rebuilt stronger, often with better materials. Second, streets and drainage systems were improved to handle flooding better. Third, early storm warning systems and communication efforts became more important. Fourth, the city focused more on preparedness and planning for future hurricanes and were more aware of when they were coming. In addition to major engineering projects, smaller improvements helped make Galveston safer and more prepared.

Though the projects were finished, they still had to be tested to see if they actually prevented storms from having such a drastic impact. The seawall and grade-raising projects proved their worth when the 1915 hurricane struck. The hurricane was of similar strength, but only 11 people died compared to the 6,000 in the 1900 hurricane. The damage to buildings and roads was also greatly reduced. This shows that the



engineering projects had successfully protected the city!

The success of the seawall, grade-raising, and other innovative projects not only changed Galveston but also shaped Texas. It made people look at the way they prepared for storms differently. Before the hurricane, Galveston was the leading port, but due to the storm, it gave up its position to Houston. This made places in Texas (specifically Houston) more important. The hurricane gave opportunities for better planning and disaster preparedness that saved many lives today. Better warning systems were developed and gave more people time to prepare for a storm to hit. The hurricane not only changed Galveston but also made Texas approach natural disasters differently, the projects have saved many lives since these improvements. Galveston is now an example of coastal engineering and even has a society whose goal is to keep Galveston's legacy alive (Galveston Historical Foundation). This proves that the projects done by the people of Galveston didn't just affect one city but had a lasting impact.

The hurricane disaster of 1900 led to new innovations that may not have come about without the tragedy. While it caused a lot of harm, it also resulted in positive changes. Engineers created a plan that showed creativity, teamwork, ingenuity, and careful planning. The successful work on this plan not only helped improve safety for everyone but also made a long-lasting difference in how communities prepare for disasters. In conclusion, the experiences from the 1900 hurricane show that tough times can lead to important solutions that protect people. The Galveston Hurricane tested the strength of its citizens and pushed engineers to find new ways to protect the coast. The effects of this disaster are still felt in Galveston and other parts of Texas today.

Sources:

History, Galveston. "Galveston and the 1900 Storm." *Galveston Historical Foundation*, 6 Sept. 2023, [www.galvestonhistory.org/news/the-1900-storm](http://www.galvestonhistory.org/news/the-1900-storm).

National Park Service. "Galveston Hurricane of 1900 (U.S. National Park Service)." *Www.nps.gov*, 30 May 2019, [www.nps.gov/articles/galveston-hurricane-of-1900.htm](http://www.nps.gov/articles/galveston-hurricane-of-1900.htm).

"Galveston and Texas History Center at the Rosenberg Library." *Galvestonhistorycenter.org*, 2026, [www.galvestonhistorycenter.org/archive/exhibits/seawall/index.html](http://www.galvestonhistorycenter.org/archive/exhibits/seawall/index.html).

"Hurricanes: Science and Society: 1900- Galveston." *Hurricanescience.org*, [www.hurricanescience.org/history/storms/1900s/Galveston/index.html](http://www.hurricanescience.org/history/storms/1900s/Galveston/index.html).

"Galveston Seawall and Grade Raising." *Www.asce.org*, [www.asce.org/about-civil-engineering/history-and-heritage/historic-landmarks/galveston-seawall-and-grade-raising](http://www.asce.org/about-civil-engineering/history-and-heritage/historic-landmarks/galveston-seawall-and-grade-raising).

"Henry Martyn Robert (U.S. National Park Service)." *Nps.gov*, 2023, [www.nps.gov/people/henry-martyn-robert.htm](http://www.nps.gov/people/henry-martyn-robert.htm). Accessed 26 Mar. 2026. Lowman Education, Social Studies: Unit #10, Day 3, Notes. 2025.

