

The Great Galveston Hurricane of 1900

Junior Division
Group Documentary Chancellor
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Paper: 500

When choosing a topic, we made sure to pick an event that happened in Texas, since that was required by our Texas History class. We chose our topic, "The Great Galveston Hurricane" by searching important events that happened in Texas. After going through many websites we saw that the deadliest natural disaster in American history, occurred in Galveston, Texas. This immediately caught our eye as a possible topic. After looking deeply for reliable sources and for information that interested us, we decided this qualified as a great topic for the NHD theme.

As we first began our research, we were introduced to multiple databases by our teachers and librarians. Since our district paid for these databases, we quickly took full advantage of those resources. However, this was just one of the ways we conducted our research. We also took a field trip to Bibliotech, where we also had even more resources to choose from, and while we were there, we got Bibliotech cards so that we could access their books about our topic. We had went to the San Antonio Public Library as well, and we collected and used a total of five books in all. While skimming through the books, we wrote down important facts and quotes. Many of our photos that we used also came from these books.

When choosing our presentation style, we wanted to pick something that would be different than previous presentations we do in our other classes. We also wanted a presentation style that involved technology and could teach us a new skill. We also felt that a documentary would best show the disaster that happened after the hurricane. While doing the making and editing of the video we used iMovie which was provided to us by our school. To record our voice, we were able to get a hold of a highschool

teacher that had access to good microphone that we could use. However, we came across a problem when redoing our documentary for state. We were over the time limit, and had to cut out the less important information. After a day or two of plucking through our old documentary, we were finally able to put what we needed to, to make the new documentary for state.

The Galveston Hurricane of 1900 relates to the NHD theme in all three ways; encounter, exchange, and explore. The thriving city of Galveston encountered a major hurricane. The city of Galveston was left defenseless after being hit by the worst hurricane in American history. The Galveston hurricane affected the exchanges of the people of the community. But not only did the people of Galveston come together, but the country also came together to help each other. It also encouraged the government to explore new ways to assist victims of natural disasters. The government thought of many strategies to make sure that this disaster could never happen again.

Annotated Bibliography

Primary

Books

Greene, Casey Edward, and Shelly Henley Kelly, eds. *Through a Night of Horrors: Voices From the 1900 Storm*. N.p.: Rosenberg Library, 2000. Print.

We used this book, because it gave us valuable information from the citizens and survivors of the hurricane. Many weather reports from the U.S. Weather Bureau were provided in the book which we used to help us learn about the events leading up to the hurricane.

Letters, memoirs, and oral histories from the survivors also helped us get information from the citizens point of view of what happened.

Images/ Photographs

A home lies in ruins at 15th Street and Avenue K following The 1900 Storm. Digital image. The 1900 Storm. City of Galveston 1900 Storm Committee., n.d. Web. 20 Jan. 2016.

This photo shows the wreckage after the hurricane. We used this in our documentary when describing the hurricane and its destruction.

[Aftermath of 1900 Galveston Storm, Locating Storm Victims]. 1900. Galveston, Texas. The Portal to Texas History. Web. 03 Jan. 2016.

This source depicts an image after the hurricane hit. The picture shows a wagon full of dead victims from the storm, with the wagon surrounded by the wreckage of the storm.

We used this in our documentary to show the recovering stages. The people of Galveston had been searching for bodies, and this picture perfectly captures that.

Barges Transporting The Deceased For Burial at Sea. Digital image. *Rosenberg Library*. N.p., n.d. Web.

This image depicts multiple ships in the sea, dropping the deceased in the water (or burying them at sea). We used this in our documentary when talking about how there were a lot of deaths after the hurricane, and how all of the dead had to be gotten rid of before disease set in.

Clara Barton. Digital image. *Biography*. N.p., n.d. Web.

This photo is one of Clara Barton. Clara Barton was the sort of leader of the Red Cross. We used this in our documentary when talking about the Red cross, and Clara Barton's impact on it.

Cremation of Victims' Bodies. Digital image. *Rosenberg Library*. N.p., n.d. Web

In this photo there are piles of wood and rubble with a victim buried under it. This gives that viewer the sick truth that most of the citizens had to face.

Damage in Residential Area. Digital image. *Rosenberg Library*. N.p., n.d. Web.

This photograph was taken of one of the many relief groups that came down from Houston to help assist the people of Galveston. This particular relief group was searching for any survivors and for any diseased in a populated residential area. We used this in our documentary when talking about Houston relief groups aiding the rebuilding of Galveston.

Dead Gangs. Digital image. *EBSCOhost*. N.p., n.d. Web.

This photograph shows a family recovering their dead from the wreckage of the storm. We used this in our documentary when explaining how the families lost many of their loved ones in the storm.

Destroyed House. Digital image. *The 1900 Storm*. City of Galveston 1900 Storm Committee, n.d. Web.

In this image, a house is badly damaged, however it is not completely destroyed. This overturned house is surrounded by large amounts of wreckage. We used this in our documentary when talking about how a third of the island's structures were badly damaged while the rest were completely destroyed.

Destroyed Railroad Tracks on Harborside. Digital image. *Rosenberg Library*. N.p., n.d. Web

This image depicts a common train railroad that led through the city of Galveston. In this photograph you can observe a part of the inner city that wasn't hit as badly as the rest of the island. We used this in our documentary when discussing the aftermath of the storm.

[1894 Grand Opera House Photograph #3]. 1900. Galveston, Texas. *The Portal to Texas History*. Web. 19 Dec. 2015. Digital image.

In this photo, it shows a 1894 opera house that had most of its seating (and stage) destroyed. This image helped support the idea of how bad the wreckage of the hurricane was. This photograph also really helps visualize how something so big and grand as that opera house, was so easily torn through. A body lies half buried among the ruins at 21st Street and Avenue O in Galveston.

First Baptist Church Side View. Digital image. *Rosenberg Library*. N.p., n.d. Web.

In this image, a church is shown destroyed, half of it laying on the ground surrounding it. We used this in our documentary explaining how fast the wind speeds picked up to.

Galveston Grade Raising. Digital image. *The 1900 Storm*. N.p., n.d. Web.

This photo shows piles of sand being pumped out of pipes on to the ground. The photo shows the hardship that was spent recovering the city to make sure that something this

tragic wouldn't happen again. We used this photo when explaining the process of the grade raising of the city.

Galveston hurricane 1900 statue. Digital image. *EBSCOhost*. N.p., n.d. Web.

This photograph shows a daytime version of a statue that was built to honor the hurricane's victims, as well as its survivors. We used this in our documentary when talking about how Galveston honored people involved in the 1900 hurricane.

Galveston 1900 Hurricane Memorial Statue. Digital image. *EBSCOhost*. N.p., n.d. Web.

This image depicts a statue at night that was built in remembrance on the hurricane and its victims. We used this in our documentary when talking about how there was a memorial statue built to honor the survivors, and those who died in the storm.

Galveston Seawall. Digital image. *Texas Almanac*. N.p., n.d. Web.

This photo shows different angles of the seawall after it was finished. We used this picture for the viewer to help visualize what it looked like.

Galveston Seawall 1887 Plan. Digital image. *Texas State Library*. N.p., n.d. Web.

This picture was of the seawall that was planned to be built in 1887, but was later brushed aside since they didn't have enough money to cover it. We used this in our documentary when talking about previous efforts made to help protect the city of Galveston.

Houses lie together in a mountain of timber at 19th Street. Digital image. *The 1900 Storm*. City of Galveston 1900 Storm Committee., n.d. Web. 20 Jan. 2016.

This photo shows a destroyed neighborhood of houses with piles of wood covering the ground. We used this photo when explaining how destructive the category 4 hurricane was.

Laying the First Railroad Track. Digital image. *Rosenberg Library*. N.p., n.d. Web.

This photograph shows volunteers from the community helping rebuild a popular railroad so that more supplies could be shipped in. This was also the first railway track out of Galveston since the storm. We used this in our documentary when talking about the communities efforts to rebuild the city.

Man Identifying His Wife By Her Rings. Digital image. *Rosenberg Library*. N.p., n.d. Web.

This photo depicts a man identifying his wife by the rings on her fingers. This also shows a distant land filled with nothing but rubble with the occasional house every once and awhile. We used this in our documentary when talking about how the storm had left a beaten city after it was over.

1900 Weather Bureau Office. Digital image. *Net Nebraska*. N.p., n.d. Web.

This photo is of the United States Weather Bureau's Director at his desk. We used this in our documentary when talking about the U.S. Weather Bureau and their relations to Cuba in the 1900's.

Recovery Efforts. Digital image. *EBSCOhost*. N.p., n.d. Web.

This photo depicts a group of people working together to clear up the debris. It shows how people in the community came together to help the recovery efforts. We used this in our documentary when describing how the community had to get up after the storm, and come together to help each other rebuild.

Removing The Jewelry of Victims East Beach. Digital image. *Rosenberg Library*. N.p., n.d. Web.

In this photograph, you can see a group of men standing around a dead body, scavenging it for any valuables it had. This was because they needed any money they could get to help pay for the rebuilding process. We used this in our documentary when talking about what the community had to do in the recovery of the island.

Ruins of Grand Hotel. Digital image. *Rosenberg Library*. N.p., n.d. Web.

In this image there is group of men in the wreckage of a hotel. This group of men were one of the many groups part of the Red Cross that had came down to help with the rebuilding after the disaster. We used this when talking about the Red Cross and how their help with this disaster helped them get more publicity, which essentially helped make them what they are today.

Severalhouses lie torn and scattered near 16th Street and Avenue M. Digital image. *The 1900 Storm*. City of Galveston 1900 Storm Committee, n.d. Web. 20 Jan. 2016.

This photo that was captured, depicts a fallen house in the background, with wreckage covering the area around it. We used this in our documentary to show more wreckage caused by this disaster.

Smiling Boy In Rubble. Digital image. *EBSCOhost*. N.p., n.d. Web.

In this photo you can see a young boy sitting on some of the fallen wood from a building. We used this our documentary when talking about how during the recovery efforts people didn't have much time to mourn since the boy was smiling, he was very relatable to the idea.

Storm surge moved this house at 19th Street and Avenue N and 1/2 nearly 30 yards. Digital image. *The 1900 Storm*. City of Galveston 1900 Storm Committee., n.d. Web. 20 Jan. 2016.

In this photo a house is surrounded by rubble, we used this in our documentary when explaining the aftermath of the hurricane. Having visual aids like this helps the viewers understand what a forceful storm can do to miles of houses.

St. Patrick's Catholic Church Collapsed. Digitalimage. *EBSCOhost*. N.p., n.d. Web.

This photograph shows of three children picking up rubble after the storm. We used this in our documentary as one of the two very first images displayed in the documentary.

The bodies of storm victims are laid out in rows. Digital image. *The 1900 Storm*. City of Galveston 1900 Storm Committee., n.d. Web. 20 Jan. 2016.

In this photo victims lay in rows after being found from under the piles of rubble. This also shows the horrible truth that other photos from the aftermath do not show.

35th and Avenue R. Digitalimage. *Rosenberg Library*. N.p., n.d. Web.

This image shows a large amount of people looking for anyone who might of survived the storm. This was part of the relief groups sent down to Galveston to help them recover. We used this in our documentary when talking about how different relief groups were sent down to Galveston to help them rec<>ver.

Weather Bureau Office. Digitalimage. *Net Nebraska*. N.p., n.d. Web.

In this photo, you can see the 1900 Weather Bureau's staff all sitting around an oval table. We used this in our documentary when talking about the U.S. Weather Bureau.

Willis Moore. Digital image. *EBSCOhost*. N.p., n.d. Web.

This picture was taken of Willis Moore while he was the director of the United States Weather Bureau. We used this in our documentary when talking about how Willis Moore affected the decisions of the Weather Bureau regarding the hurricane.

Newspaper Articles

"A Storm Relic." *Bryan Morning Eagle* [Bryan, Texas] 22 Oct. 1901: n. pag. *Chronicling America*. Web.

In this newspaper article, it talks about how a wrecked vessel from the Galveston storm was found in a port in New York. This helped us understand just how bad the storm really

was. It was able to blow a whole steam ship from a port in Galveston, to the port in New York.

"Galveston Hurricane (1900)."- *The New York Times*. N.p.,n.d. Web. 20 Jan. 2016.

This website has many newspaper articles from the New York Times about the disaster that had happened in Galveston. Information on the after effects of the hurricanes were provided in the many articles. These also gave us the perspective of the people at that time.

"Stricken Galveston." *Brenham Daily Banner* [Galveston, Texas] 12 Sept. 1900, 1st ed.: n.pag.

The Portal to Texas History. Web

In this website, it talks about how daily life was after the storm. It says that for a while, it was nothing but constant clean up, and searching for their loved ones. This source also talks about how the state handled the situation, sending supplies to Galveston on a regular bases. We used this in our documentary when talking about what happened with the community after the storm.

"The Warnings of Galveston." *EIPaso Dally Herald* 09 Oct. 1900, Lasted.:n. pag. *Chronicling*

America. Web.

In this newspaper article, it talks about Galveston's previous hardships. From the Native Americans, to the constant threat of hurricanes, Galveston never got a break. We used this to kind of help us gather background information on Galveston.

Video Clips

Search for Bodies. Dir. Thomas Edison. N.d. *The 1900 Storm*. City of Galveston 1900 Storm

Committee. Web.

In this video, it shows citizens and relief groups pulling and moving piles of wood, to look for any bodies that were covered by the rubble. This video was shot by Thomas Edison's

assistant using 1 out of the 4 cameras that existed in that time period. We used this video clip when explaining the recovery efforts made by relief agencies.

Panorama at the Tremont Hotel. Dir. Thomas Edison. N.d. *The 1900 Storm.* City of Galveston 1900 Storm Committee. Web.

This clip shows the destruction of the city in the form of a video. We used this when talking about the all of the structures that were destroyed.

Weather Report

United States. National Oceanic and Atmospheric Administration (NOAA). United States Weather Bureau. By Isaac M. Cline. N.p.: n.p., n.d. *Special Report of the Galveston Hurricane of September 8, 1900.* United States Weather Bureau, 4 Feb. 2004. Web. 20 Jan. 2016.

On this website we found a weather report from Isaac M. Cline that gave us valuable information about the hurricane, and its casualties. We used this in our documentary to give us valuable information about the hurricane, and the amount of casualties that was caused because of it.

Secondary

Books

Anderson, T. Neill. *Horrors of History: City of the Dead.* Watertown, MA: Charlesbridge, 2013.

Print.

This book had many interesting pictures and had several recorded encounters from some of the survivors of the storm. This helped us in several ways. It helped us to understand how the storm happened through the victim's eyes, as well as helping us understand what photos to choose to put into our documentary.

Bixel, Patricia Bellis, and Elizabeth Hayes. Turner. *Galveston and the 1900 Storm: Catastrophe and Catalyst*. Austin: U of Texas, 2000. Print.

We used this book, because it also provided us a detailed story of the events before, during, and after the hurricane. Many photos of the thriving city before the hurricane were showed, this helped us pick photos for our documentary. The aftermath photos also helped us learn the visual part of the story too.

Green, Nathan C. *Story of the 1900 Galveston Hurricane*. Gretna, LA: Pelican Pub., 2000. Print.

We used this book because it gave us a more detailed story about what had happened before and after the hurricane. It also gave us personal stories from some of Galveston citizens, Isaac M. Cline, a newspaperman, a priest, and some of the author's experiences from the storm. A map of Galveston and a newspaper article from the Galveston News from a few days after the storm was also provided in the book.

Larson, Erik. Isaac's *Storm*. New York: Vintage, 1999. Print.

Isaac's Storm helped us understand the events that occurred before, during, and after the hurricane. We found the basic events that happened, and after we understood them, we went and read deeper into each occurrence.

Raker, Al. *The Storm of the Century: Tragedy, Heroism, Survival, and the Epic True Story of America's Deadliest Natural Disaster: The Great Gulf Hurricane of 1900*. N.p.: n.p., n.d. Print.

We used this book to help understand the relationship between Cuba and United States at the time in which the hurricane struck. This book also has a lot of information about the previous economy and city development of Galveston. The book also explained why the hurricane did not go into the recurve effect and it talks about all of the mistakes that Moore

made. We primarily used this in our documentary when we talked about the city before the hurricane hit.

Stephens, A. Ray., and William M. Holmes. *Historical Atlas of Texas*. Norman: U of Oklahoma, 1989. Print.

This book had some needed information regarding the hurricane. The book told us another rough estimate on how many people perished from the storm, and also how high the flooding got. We used this to help us compare the estimated population lost with other estimates we found to make a reasonable estimate of how many lives were really lost in the storm. We also compared the height of the flooding reported in the Atlas, to the height reported in other sources to find an average height of the flooding.

Databases

Raker, Al. "Blown Away. (Cover Story)." *American History* 50.4 (2015): 28-37. Academic Search Complete. Web. 3 Jan. 2016.

This website describes the very poor relationship between the Weather Bureau and Cuba. It also talks a lot about Willis Moore, the Washington, D.C. Director. We used this when talking about Willis Moore, and when explaining how the Weather Bureau just shrugged off/ignored Cuba's warning. We also used multiple photos for this source, to help the viewer visualize what happened in Galveston those days.

Sealy, Edward Coyle. "Galveston Wharves." *Texas State Historical Association*. N.p., 15 June 2010. Web.

This source talks about how Galveston was a large port in the United States, and how Galveston had many exports, making it the fifth most important port in the U.S. This information also supports the idea of how important Galveston was. We used this

information in our documentary, showing how Galveston was booming with business, and rapidly growing with success before the Hurricane.

Ramos, Mary G. "Galveston's Response to the Hurricane of 1900." *Galveston's Response to the Hurricane of 1900*. N.p., n.d. Web. 03 Jan. 2016.

This source has quality information about the aftermath of the hurricane, and Galveston's response to it. This site explains what the city of Galveston added to the island to help prevent further massive disasters. One of these safety precautions, was the sea wall that was put up on the waterfront after the storm. We used this in our documentary when explaining the building of the sea wall.

Images

Artwork of Terror during the Hurricane. Digitalimage. *EBSCOhost*. N.p., n.d. Web.

This drawing shows of many things many things. However, we felt that this was a good introduction to our documentary because it depicts not only how bad the damage was, but how the families had to react, having nothing but another family member if they were lucky, and even then you can see how unprepared they were for an event such as the hurricane. We used this in our documentary as the title image, being shown around the beginning of the documentary.

Bradford, Marlene. *Texasescapes*. N.p., n.d. Web. 20 Jan. 2016.

This image shows a map of Galveston in the 1900's. This helps the viewer get an understanding of the area in which Galveston is located. We used this in our documentary to show where the hurricane would hit, (Galveston).

Cuba and United States Flag. Digital image. *Jose Gabriel Fuentes*. N.p., n.d. Web.

This image shows the U.S. flag alongside the Cuban flag. We used this in our documentary when explaining how the Cuban and U.S. Weather Bureau have partnered up with each other since the storm, and have made sure to communicate about anything that happens weather related in the Gulf.

Galveston Seawall. Digital image. *The Real Galveston*. N.p., n.d. Web.

This photo depicted what Galveston had planned for the 1887 seawall to look like. We used this in our documentary when we talked about the proposal for the 1887 seawall, and how it was denied.

Map of Cuba. Digital image. *Operation World*. N.p., n.d. Web.

In this source, there is a picture that depicts Cuba, and its surroundings (the Caribbean). In this picture, Cuba is colored orange, and is more of a close-up image of Cuba and its surroundings. We used this in our documentary to show Cuba close-up.

Map of Galveston. Digital image. *Rosenberg Library*. N.p., n.d. Web.

This map shows multiple things such as where people were safer than others, and where the city grade raising happened. We used this in our documentary when talking about the different locations in the city, and how the downtown area of Galveston was safer than any other part of the island.

Sterner, Ray, and Steve Babin. "Hurricane #1." *University of Maryland*. N.p., n.d. Web. 20 Jan. 2016.

This image is of a partial map of the United States, with the path of the hurricane shown through multiple colors, represented on the map key next to it. The key shows which color means how severe the storm was. We used this in our documentary when we talked about the hurricane just passing Cuba.

United States And Cuba Flag. Digital image. *CNN*. N.p., n.d. Web.

This photograph shows a person holding both a U.S. and Cuban flag in one hand. We used this in our documentary when discussing how both Weather Bureaus are now in a partnership of sorts.

Weather Bureau 1870 Sign. Digital image. *Tom Knuppel*. N.p., n.d. Web.

This photo is of the Weather Bureau's badge. We used this image when talking about the Weather Bureau and its data exchanges with Cuba.

Worldwide Map of Cuba. Digital image. *Maps*. N.p., n.d. Web.

This website shows a picture that we used. This picture is of Cuba from distant view, or a world view. Here, Cuba is represented in the color of red, and you can see that Cuba is just about in between/ off to the side of North America and South America. We used this in our documentary to show where Cuba was located around the southern part of the United States.

Interview

Greene, Casey Edward. "Galveston Hurricane 1900." Personal interview. 18 Mar. 2016

In this interview, we interviewed Casey E. Greene, a scholar at the Rosenberg library, about the Galveston Hurricane of 1900. He told us much needed information, as well as giving us many sources to use. We mainly used his interview in our documentary when talking about how Texans didn't have time to sit around and mourn, they had to get up and take care of business, and that's just the way Texan's spirit was.

Music

Funeral March. Cond. Chopin. N.d. *YouTube Audio Library*. Web.

We used this music during our section of events that we labeled the "After". Since it has a mournful sound to it, we figured it would be perfect to describe the total destruction and lives lost from the storm.

Mystery 1. N.d. *Imovie*. Web. 20 Jan. 2016.

We used this sound effect in the very beginning of our documentary, because it had an tragic, grating, offsetting sound to go along with the photos of disaster.

Newborn. N.d. *Imovie*. Web. 20 Jan. 2016.

We used this music during the before part of the hurricane, because it had a classic old world quality to it. We thought that the piano playing in the background would complement the photos.

Woodum, Harry. *Defining Moments*. Soundzabounds, n.d. *Soundzabound*. Web. 20 Jan. 2016.

We used this music because it is haunting just like the storm. The music was in the background when we were talking about how severe the hurricane was and the after effects of it.

Online Sources

"Galveston City History." *Galveston County Museum*. N.p., n.d. Web. 01 Jan. 2016.

In this website, there are several photos that we used in our documentary. One photo shows a large boat docked on a port. We used this photo when we were talking about the exports in Galveston. Another photo, is that of the sea wall, which is shown next to a large building in the city, that was built after the hurricane, as part of the recovery process. We used this image in our documentary when explaining the building of the sea wall, as this picture helps the viewer visualize the actual size of the structure.

"Galveston." *County of Galveston*. Galveston County Museum, n.d. Web. 20 Jan. 2016.

We used two photos from this website, when explaining that the Galveston Port was very important. A photo of a parade happening in downtown Galveston, and a photo of a boat in the harbor.

"The New York Times." *Hurricane Tips From Cuba*. N.p., n.d. Web. 18 Feb. 2016.

This article talks about the relationship between U.S. and Cuban meteorologists. It explains how up until the 70's and 80's, Cuba and the U.S. didn't help warn each other of weather in the Gulf of Mexico. We used this in our documentary when talking about modern day weather relations with Cuba.

"The New York Times." *U.S. and Cuba Work Together on Storms*. N.p., n.d. Web. 18 Feb. 2016.

This article talks more in depth about the weather relationship of the U.S. and Cuba. In the article, it explains how the relationship has evolved over time. Cuba needs the data that the U.S. can gather with its air crafts, while the U.S. needs Cuba's observations. We used this in our documentary when talking about the weather relationship between these two countries.

"The 1900 Storm: Galveston, Texas." *The 1900 Storm: Galveston, Texas*. N.p., n.d. Web. 29 Dec. 2015.

This article talks about the Red Cross association in the 1900's. It gives the idea that the Red Cross became what they are today because of the Galveston Hurricane. This source also describes that a women of the community built an orphanage after the hurricane, to help assist children of the storm. We used this in our documentary to help provide the idea that the Red Cross was really discovered in the wake of the storm. We also used the example of the women helping out the community when talking about the exchanges of the community.

Wikle, Thomas A. "Galveston Hurricane." *Salem Press Encyclopedia* (2015): *Topic Overviews* 6-12. Web. 9 Dec. 2015.

In this website, it tells of the approximate timing of both the hurricane, and the waves of the hurricane in which it hit. So, given this information, it was more of a help to understand when the hurricane hit, and when the people of Galveston were experiencing the actual hurricane, and its stages. We used these approximate times in our documentary when explaining the duration of the hurricane.