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Fire & Flood: How the Lessons of the Past can Apply to the Present to Build the Future

A Thesis

Submitted to the Graduate Faculty of the University of New Orleans in partial fulfillment of the requirements for the degree of

Master of Urban and Regional Planning

by

Jared E. Munster

B.S. Urban Studies and Planning, University of New Orleans, 2004

December 2006

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Dedication

To my family, my friends, my partner, and my City.

"Chère Nouvelle Orléans, patrie de ma jeunesse, berceau de quelques-uns de mes ancestres, tombeau d'un grand nombre de ceux que j'ai aimés. Je demande à Dieu de te protéger, de te garder, de te bénir"

- Hélène D'Aquin Allain (1868)

("Dear New Orleans, home of my youth, cradle of many ancestors, tomb of many I have loved. I ask of God to protect, to preserve and to bless thee")

Acknowledgements

First and foremost, I would like to thank my thesis committee, Dr. Marla Nelson, Ph.D. (chair), Dr. Pat Haughey, Ph.D., and Mr. Stephen Villavaso, FAICP, J.D. for helping to bring this thesis from an idea to a completed project.

I must also thank the archivists of both the Williams Research Center of the Historic New Orleans Collection (Ms. Siva M. Blake especially), and the University of New Orleans Library Louisiana Collection for their assistance in finding the somewhat obscure records that were utilized in the preparation of this thesis.

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Abstract

On August 29, 2005 the most destructive natural disaster to ever befall the United States made landfall initially near Buras, Louisiana and then ultimately near the mouth of the Pearl River. The associated storm surge caused New Orleans' protective levee system to fail, inundating the City with brackish floodwaters for weeks on end. This was not the first time the City of New Orleans was crippled by disaster. In 1788 and 1794, the city suffered two major fires; the first burning 856 buildings and the second 212. These were significant losses in a city that had a building stock of approximately 1,000 buildings before the events. By recognizing the lessons learned in the earlier reconstructions of New Orleans, we can gain a better understanding of the rebuilding process that may forever effect the physical and cultural environments in the City of New Orleans.

Chapter I

Introduction

In the aftermath of Hurricane Katrina, much has been said about the potential for resilience in the City of New Orleans. It is important to note that since it was founded in 1718, the City has faced large scale disasters and emerged from them to steadily grow and develop into bustling metropolitan area, becoming the New Orleans of myth and legend. This thesis will examine the Great Fires of 1788 and 1794, both of which consumed vast areas of New Orleans; in comparison with the events of Hurricane Katrina in 2005.

The purpose of this thesis is to investigate the events and recovery of the eighteenth century fires and to examine the lessons that can be learned for the Post-Katrina rebuilding of New Orleans. While it is impossible to directly compare the lessons learned or the disasters, the primary intent is to show general trends that occurred in the rebuilding of the City in the eighteenth century and how those trends can inform those currently faced with recovery challenges in the City of New Orleans.

There are numerous parallels between the disastrous fires of 1788 and 1794 and Hurricane Katrina. Among these being the methods of governmental response and the shifting footprint of the city, or at least the potential for shifting. Beyond these similarities are the actual scenarios

that were presented to the populace in the days, weeks and months following the occurrence of the disasters.

The first portion of this document recounts the fires of the late eighteenth century; the physical destruction, the response of the government, and the patterns of redevelopment in New Orleans' Vieux Carré and the development of the surrounding area. This is followed by a look at the significance of the disasters on the development of the city, both culturally and physically. Finally, I will compare the effects of the fires of 1788 and 1794 on the initial development of New Orleans and the rebuilding thereafter, to the catastrophic events of Hurricane Katrina and the subsequent recovery and rebuilding of a Great American City at the dawn of the twenty-first century.

Much of this document is dedicated to providing the history of New Orleans, specifically the events surrounding the fires and the response of the city leaders in the aftermath. Through the many histories of New Orleans that have been produced over the years, there has not been much attention paid to these catastrophic events that occurred only seventy years after the establishment of the city. The Fire of 1788 has received more attention in history, but the Fire of 1794 is generally either grouped with the first fire or only mentioned in passing. One goal of this thesis is to give attention to these disasters, and to explore how the lessons learned from fire can parallel the lessons that should be learned from flood.

Of the many histories of New Orleans that were reviewed in preparation for this project, the most extensive coverage was provided by Henry Castellanos' *New Orleans As It Was*, and this coverage consisted of the inclusion of the letter Governor Miro wrote to the King of Spain in the immediate aftermath of the Fire of 1788 to demonstrate the immense need of the colony's inhabitants.

The key source of investigating the governmental response to these disasters was found in the records of the Cabildo, which was the governing council in New Orleans under the Spanish regime. These records served as the 'minutes' of the Cabildo meetings, and the official record of what was happening in the colony. The benefit of finding this primary source information was that it revealed the actions of the Cabildo, recorded for posterity, and the correspondence between the colony and officials of the Crown, all entered into this official record. This allowed the researcher to not only gain a better understanding of the Cabildo, but also the limitations that the officials of New Orleans were faced with. These records were translated from the original Spanish by the Works Progress Administration in 1939.

Hurricane Katrina ravaged New Orleans on August 29, 2006 just over a year before the final preparation of this document. With that being said, there is very little literature available relating to governmental response, other than the reports prepared by the government itself. Also,

history has not had a chance to truly see the implications of decisions that were made, and continue to be made that will forever steer the course of the City of New Orleans. Statements made relating to the current state of affairs in New Orleans come from these governmental sources, as well as from the personal experience of living in Post-Katrina New Orleans.

Chapter II

The Fire of 1788

The date was March 21, 1788; in the private chapel of colonial treasurer Don Vicente José Nunez. His residence, at the corner of Toulouse Street and Chartres Street (then Conde Street) became the epicenter of the destruction that was to ensue. The fire began at 1:30 pm, when an unattended candle fell into the lace dressings on his altar. Within five hours, eight hundred fifty-six (856) buildings were destroyed in a colonial city that was comprised of approximately 1,000 buildings on March 20, 1788 (Castellanos, 238; King, 129).

While it has been determined that the fire started because of the carelessness of one individual, the destruction is primarily attributed to ceaseless southerly-to-southeasterly wind. According to the official account of the fire by Governor Miro "a wind from the south, then blowing with fury, thwarted every effort to arrest [the fire's] progress" (Castellanos, 238). At the time of the fire, the City government had in its possession two water pumps to be used for combating fire, and six grappling hooks. The two pumps were destroyed by the fire, and the six grappling hooks were not found among the debris (Cabildo, 21). During this period, contrary to popular belief, the buildings and residences in New Orleans were not built within close proximity to one another. The expeditious spreading of the

fire can be attributed to the gale-force winds and wooden construction (O'Connor, 32-33).

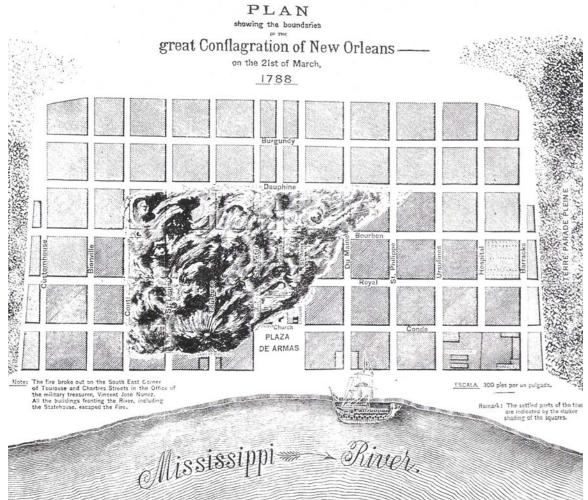
Approximately eighty percent (80%) of the colonial city had been reduced to ashes in a matter of hours. Among the structures lost were the parochial church, the presbytery, municipal buildings, military barracks and the public jail. The Ursuline Convent, Royal Hospital, Custom House and the Governor's building were among those saved from the fire. The buildings that survived the blaze did so more by a matter of positioning than through any active fire-fighting efforts of the population. Those structures along the levee and to the west of Conti Street were out of the path of the wind-blown flames that consumed the rest of the colony (Castellanos, 238-9; O'Connor, 33). Also destroyed in the blaze were twenty-one bridges in various locations throughout the city (Cabildo, 29).

As part of the letter sent by Governor Miro to the King of Spain, there was a rough illustration of the fires destruction. Figure 2.1 shows a refined version of that map which was dispatched to the King of Spain. The darker squares represent those areas that had been developed with structures built upon them. The lighter shaded squares are areas that had not been developed but were included in Pauger's original plan for the City. This illustration better represents the extent of the destruction wrought by this fire than words describing the boundaries. While the destruction was

limited to roughly half of the area of the City, eighty percent (80%) of the

settled area was destroyed (Castellanos, 241).

Figure 2.1: Plan showing the boundaries of the great Conflagration of New Orleans on the 21st of March, 1788.



Source: The Historic New Orleans Collection

Amazingly, no lives were lost in the fire. The Gazette des Deux-Ponts printed a first hand account of the fire in August of 1798, in which the devastation of the fire was described as "an affliction so cruel and so general, the only thing that can diminish out grief, is that not a man perished" (King, 129).

Response to the Fire of 1788

On the evening of March 21, 1788, as the flames subsided, the work of recovery and aid began. Governor Miro related his relief efforts to His Majesty, the King of Spain Charles III (Carlos III, Rey de España). In his detailed account of the disaster he states:

To alleviate in part their immediate wants, camping tents were distributed to those who applied for them and we agreed to distribute daily one ration of rice, on your Majesty's account, to every one, without distinction, who solicited the same. The number of these persons amounts to 700 who will continue to be provided for during the continuance of their extreme necessities (Castellanos, 241-2).

Governor Miro goes on to report that those families whose homes were not destroyed by the fire had taken it upon themselves to house family and friends that were left homeless. Between these acts of compassion and the provisions supplied by the Royal Government, there was not one person left without shelter in the aftermath of the blaze (Castellanos, 242).

The next action taken by the Governor was to dispatch three ships to Philadelphia. The Governor withdrew 24,000 pesos from the Royal Treasury in New Orleans in order to purchase supplies that would be needed for the rebuilding of the City. Provisions, nails, medicines and other "articles of first necessity" were to be purchased and brought back to New Orleans as quickly as possible. Also ordered from Philadelphia were 3,000 barrels of flour, to ensure that famine would not follow the fire (Castellanos, 242).

Governmental Response

In the days following the disastrous fire of 1788, the residents began to rebuild their once-thriving community. The Cablido, which was essentially the city council of the Colony, gathered for the first time after the disaster on March 26, 1788, at the home of Governor Miro. During this meeting, two urgent matters were considered by the council. First, the Cabildo approved the continuation of providing rations to those left homeless and hungry by the disaster. The items to be provided to families were expanded to include the necessary materials for building a small "cottage of pickets" in order to get people out of tents and back into somesort of home. The third aspect of this same piece of legislation was the appointment of two members of the Cabildo to canvas the city to assess the needs of the citizens that remained encamped around the city. The Cabildo members selected for this task were Don Francisco Pascalis de la Barre and Don Juan Arnoul (Cabildo, 13 - 14).

The second item of business addressed in this extraordinary session of the Cabildo was the public jail. The jail was burned extensively in the fire, and being that a jail is vital to the public safety, the Cabildo elected to place the Chief-Constable in charge of the repairs to the facility, and allowed him to make use of the City Funds, just over 7,000 pesos, to resolve this dilemma. The Cabildo elected two of its own members to

inspect the repairs made to the facility; Don Carlos de Reggio and Don Rodolfo Joseph Ducros were selected for this purpose (Cabildo, 14).

The following day, March 27, 1788, the Cabildo again convened to forward the resolutions of the previous day to the Intendant General of the Province without waiting for a list of those in need to be attached. It was felt that this would enable the government to act more quickly in aiding the residents that were left homeless by the fire (Cabildo, 15).

The response by the Intendant General, dated March 27, 1788 and ordered to be entered into the Cabildo Archives agreed with the Cabildo's request to provide rations to the residents of the community for as long as necessary, but declined to provide for the construction of barracks or cottages to meet the housing needs of the residents. He entrusted the Assistant Attorney General of the colony to investigate the best way for the King to aid in the recovery and rebuilding of the community (Cabildo, 17).

Assistant Attorney General Juan Bienvenu submitted his report to the Cabildo on April 3, 1788; it was approved and entered into the record of the Cabildo at their regular meeting on April 4. Three separate issues were raised in the letter of Assistant Attorney General Bienvenu: 1) reestablishment of commerce; 2) rebuilding loans; 3) scarcity of money.

The Assistant Attorney General, realized that the City's merchants losses would compound the losses to the City by limiting the amount of goods available for sale, and in some cases making necessary items

impossible to purchase; to reconcile this situation he proposed opening up trade in the Gulf of Mexico to ships of other nations in order to ensure that the supply of goods required to rebuild the community would be available. The current practice of the Spanish Empire was to prohibit ships sailing under any flag but that of Spain from entering the waters of the Gulf. The merchants of New Orleans requested that they alone be allowed by the Spanish government to enter into any port to import goods into the colony; however, the farmers, and other non-merchants saw this as a way for the merchant class of the city to control all commerce within the Colony. Rather than allowing merchants to travel to any port and purchase goods for resale in New Orleans, the Assistant Attorney General proposed to open the waters of the Gulf of Mexico to the ships of other nations for a period of ten (10) years. Under this proposal, these foreign vessels would have to raise the Spanish flag and pay the six percent (6%) Custom House Duty imposed in New Orleans (Cabildo, 18-19).

With the Intendant General of the Province not willing to provide for the construction of cottages or barracks for the homeless of New Orleans, it was proposed that the Crown provide rebuilding loans to those families left destitute. The loan would be issued in proportion to what would be required to rebuild their homes and provide for clothing and other necessities. The loans would be backed by using the homes to be

constructed as a guarantee against default, and would be repaid within ten (10) years (Cabildo, 19).

The scarcity of money was not caused by the fire specifically, but was certainly magnified by it. Due to Spain's wartime monetary needs, regular currency had been replaced by credit certificates. These certificates and the bank notes that followed them caused prices for goods in the City to increase due to the exchange costs of doing business with these documents. It was requested that His Majesty remove from commerce the credit certificates and bank notes, and replace them with numerary currency to reenergize the local economy (Cabildo, 20).

At the Cabildo meeting of July 4, 1788, discussion turned to the construction of a new Cabildo building, as the previous one was destroyed in the fire. It was decided that the City would seek royal permission to place their new government building on the public square at the center of town, with a Public Market on the first floor, and the government chambers above. The Cabildo elected the Royal Ensign, Don Carlos de Reggio and the Chief Constable, Don Francisco Pascalis de la Barre to draft plans which would reflect the request, for His Majesty's consideration (Cabildo, 31).

Once the government building (The Cabildo) was constructed at the public square, Governor Miro proceeded to address the issue of the damaged public jail. He ordered that a "calaboza" be constructed behind

the Cabildo. Grace King describes the calaboza as "a grim two-story construction surrounded by walls of massive thickness, and filled with little cells and dungeons..." (King, 135). Near this prison the military arsenal of the city was rebuilt (King, 135).

The next significant building to appear was a hotel for the Governor of the province, this was placed at the corner of Toulouse Street and the levee. In the place of the small wooden cottages that had once served as the homes of the City's residents, grand Spanish style soon emerged. Brick and stucco replaced wood, and iron-work, balconies and galleries became commonplace. This became the style of the day; however, some structures were rebuilt more in the form of their pre-fire ancestors (King, 136).

Fire Protection

When the Cabildo convened on April 18, 1788, the issue of fire protection was at the top of the agenda. The council unanimously agreed to ask Governor Miro to write a letter to the Captain General of the Province, Senor Don Joseph de Espleta, to request the delivery of four pumps to be used in fighting another fire. It was agreed that these pumps would be the best defense for the city in the case of another conflagration such as the one that had occurred three weeks prior. In the same session, it was decided that the City should have sixty leather buckets made, for the purpose of extinguishing a fire (Cabildo, 21). Also ordered for the purpose

of protecting the community from another disastrous fire were "two hooks with a chain attached to each about fifteen feet long and its corresponding rope, and six hooks with long wooden handles" (Cabildo, 21).

When the Cabildo convened on May 9, 1788, one of their first acts that day was to purchase a new bell to be placed in the Government House, to alert the citizens of emergencies or other important events. The fire, which took place on March 21, 1788, is also known as the Good Friday fire; in keeping with Catholic tradition, church bells must remain silent on that day. It so happened that the bell in the Government building was out of commission, which left no bells that could be sounded to alert the residents of the City to the fire (King, 130). It is for this reason that the Cabildo found it necessary to expedite the purchase and installation of a new bell (Baron, 287).

Governor Miro was replaced by Governor Carondelet in 1791; the first time fire prevention is explicitly mentioned in the records of the Cabildo is 1792. At this time, the Spanish Colonial Government provided for not only fire buckets to be made available, but also provided fire engines and divided the city into four "wards." Once the city was divided, there was a police commissioner that was made responsible for taking command of the fire engines and organizing fire protection (O'Connor, 36 - 7).

Private Initiative

The most significant aid in rebuilding came from the benevolence of Don Andres Almonaster y Rojas. Almost immediately after the fire devastated the City of New Orleans, Almonaster came forward with an offer to rebuild the City's school house. This school was the first public school in New Orleans, originally established in 1772 to teach Spanish. After the successful completion of the school house, Almonaster decided to undertake many other civic rebuilding projects to expedite the recovery of the community.

The second project Almonaster offered to fund was the reconstruction of the parish church. This project was completed at a cost of \$50,000. Almonaster went on to replace the old charity hospital with a \$114,000 structure that was named "Charity Hospital of St. Charles" in honor of His Majesty, the King of Spain. His civil works projects went on to include the construction of a "convent for the Capuchins" (The Presbytere) and a town hall (The Cabildo). He also added a chapel to the Ursuline convent (King, 132 - 3).

Following the devastation of 1788, the residents of New Orleans began to look for an area to start expanding their City. It was at this time that Bernard Gravier gained control of a portion of land that bordered on the Colonial City. This area, originally named Ville Gravier was located just upstream from the original city, and after the fire of 1788 this land was

divided into lots and sold. He was aided in these efforts by Don Carlos Laveau Trudeau, a Spanish Royal surveyor. This new suburb, or Faubourg, became the first area into which the traditional city of New Orleans would expand (McCaffety, 2002). After the Louisiana Purchase in 1803, Americans began to populate this area of the City. This led the Faubourg Ste. Marie, as Ville Gravier was renamed in honor of his wife's Patron Saint, to be known more commonly as the "American Sector" (Garvey, 80).

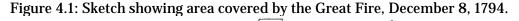
Chapter III

The Fire of 1794

New Orleans was once again ravaged by flames in 1794. Despite the preparation and efforts of the city government, this was another uncontrollable blaze that left a large segment of the City totally destroyed. On December 8, 1794 children were playing near a hay store on Royal Street and accidentally caused a fire to start in that facility. The fire raged for approximately three hours, and by the time it was extinguished, 212 structures had been burned (Garvey, 50). This fire was not nearly as extensive as the Fire of 1788, but nonetheless several thousand people were left homeless (Castellanos, 311).

One may ask why, after the Fire of 1788 the City was not better prepared to fight another conflagration; the answer to that lies in training. The new fire-fighting equipment and pumps purchased after the Fire of 1788 were in fact, utilized during this catastrophe, but due to insufficient training with the equipment, the efforts of the firefighters were futile. The fire-fighting pumps of that era were difficult to operate, and having not had the ability to gain experience with large fires, the firemen were learning as they worked. The firemen and the commissioners in charge made a valiant effort to control the fire, but circumstance worked against them, and again the City was left with a large tract of ashes (O'Connor, 37).

The map in Figure 4.1, drawn by Georgia B. Drennau in 1941, as part of the Historic American Building Survey in Louisiana, shows the outline of the fire that consumed much of the City. The details of this map were drawn from the letter of Governor Carondelet to the King of Spain. The wind was blowing from the north to northeast, and contributed greatly to the rapid spreading of the fire. This was similar to Governor Miro's account of the Fire of 1788, described in Chapter 2.





Response to the Fire of 1794

It was after the devastation that occurred in 1794 that the residents of the city truly embraced the architectural changes that had been encouraged after the fire of 1788. Homes would now be constructed of brick with common firewalls between them. This produced the French Quarter look that still exists today, and is known around the world (Reeves, 2006).

Governmental Response

Just as in 1788, one of the first issues regarding the fire that the Cabildo officially addressed was the need to repair the Royal Jail. This was first addressed during the meeting of the Cabildo on December 12, 1794. The jail was not destroyed during the fire; therefore, only repairs were needed to bring the facility back to a useful state (Cabildo, 177).

Two requests were made of the Cabildo at this time, by Juan Bautista Labatut the Attorney General: 1) to tear down the straw huts that had been built as emergency shelter after the fire of 1788 and 2) to have engineers inspect those houses near the plaza that were built of combustible material in order to prevent another large-scale fire from sweeping through the City (Cablido, 178).

The straw huts to which the Attorney General was referring were constructed as emergency housing for those left homeless by the Fire of

1788. These structures were built on the property of the Capuchin Fathers, and were allowed to serve as temporary housing for up to two years following the first fire. These huts were eventually sold to other persons, and by 1794, none of those originally granted the special permits by the Cabildo were residing in the small huts (Cabildo, 177 - 8).

These small huts, originally meant to serve as temporary housing, were still present six years later, and were a cause of concern because within a week of the Fire of 1794 one of these huts burned, and was in very close proximity to the other huts of the same variety. It was feared that one of these structures would be the cause of yet a third great fire. The Cabildo agreed with the Attorney General, and ordered that these huts be destroyed, after first giving the current tenants one month to find alternative housing (Cabildo, 178).

The Attorney General's second request was also granted. It was ordered that the small houses built along the sides of the public plaza be inspected for safety. These houses belonged to Don Andres Almonaster y Rojas, a member of the Cabildo and prominent resident of the City. The concern was raised regarding this property because the houses were built of a combustible material and were located very close to one another. The Cabildo agreed with the Attorney General's assessment of the situation and ordered that the houses be inspected and, if necessary, rebuilt in

accordance with the recommendations made by the engineers (Cabildo, 178 - 9).

In a letter dated December 19, 1794 Attorney General Labatut addresses the concerns of the residents of New Orleans to the Cabildo, and asks, in turn, that these concerns and requests be forwarded to the King of Spain. The requests made in this letter reflect those requests made of His Majesty following the Fire of 1788. This letter requested the King provide one million pesos in rebuilding loans, and that import duties be reduced to six percent (Cabildo, 181 - 2).

The one million peso loan would be provided to citizens in order to reconstruct their homes, and would be divided proportionally so that those previously occupying larger homes would be able to rebuild their largerthan-average homes. By accepting the government loans to rebuild, the residents would have to agree that their new homes would meet certain criteria. The home, regardless of size, must be built of brick, and must be topped with either a flat roof or a tile roof; these criteria were set in place in attempt to reduce the risk of another fire sweeping through large sections of the City (Cabildo, 181).

Just as was offered after the Fire of 1788, the loans provided by the Crown for rebuilding would be guaranteed by the house built with the money; however, this time, there was the additional guarantee of all of a borrower's assets, up to the amount of the loan. The mortgage would be

offered on a ten-year term, but payment would not be required for the first two years (Cabildo, 181).

The second request made in the Attorney General's letter to the Cabildo was that His Majesty allow the import duties collected in New Orleans to be lowered to six percent. This was seen as a way to aid the City's recovery, while at the same time providing an incentive to commerce that was sorely needed after the disaster. Many stores, shops and other retail establishments were destroyed in the Fire of December 8, 1794, and by allowing the lowering of import duties, the shopkeepers and merchants would be more able to restock their businesses and provide the goods that the residents of the City desperately needed and desired (Cabildo, 180 - 2).

The letter from the Attorney General of the Province was presented to the Cabildo during their December 19, 1794 meeting. Upon reviewing the document, the council voted unanimously to approve the document. Approval by the Cabildo allowed the Colonial Governor of New Orleans to forward the letter to the King of Spain in a direct appeal for aid (Cabildo, 182).

Fire Protection

In 1795, the Cabildo levied a Chimney Tax to pay for fire-fighting equipment and the personnel to operate it. This tax provided approximately 4,000 pesos a year in revenue to be used for protecting the

City from future fires. This tax not only paid for fire protection, but also fire prevention. This tax provided for master bricklayers to inspect chimneys around the city, these men were paid two pesos a day for their service to the City. A portion of this fund also provided gas lamps to be placed around the City for added safety at night (Din, 96).

Around this same time, a type of fire insurance came into being. Several volunteer fire brigades formed throughout the City and through donations to their cause, building owners were given a particular mark to display on their building. The display of this mark would provide preferential fire protection to those persons able to afford the donation. Preferential treatment was given during general fires only, if there were one building burning, the brigade would report regardless of whether the property displayed the mark. Unfortunately for those unable or unwilling to make the required donation, most fires at that time were general fires, and therefore the building displaying the mark would receive concentrated fire-fighting efforts (Garvey, 56).

In 1804, the Council was presented with a report from a Fire Committee with recommendations for improving fire protection throughout the City. It was recommended that a foreman and a fire company of fifteen men be attached to each of the four engines that were placed in the City's four wards. This report was presented to the Council on April 7, 1804; by April 11, the appointed foremen of these fire

companies presented the Council with lists of proposed company members. The lists were accepted by the Council, and on that same day a committee was formed for the sole purpose of honoring the requisitions of the newly formed fire companies (O'Connor, 38).

Perhaps the most significant policy shift that came about after the Fire of 1794 was that the Cabildo passed an ordinance requiring all buildings over one story in height to be constructed of brick. This requirement greatly influenced not only what materials were used in the rebuilding of the City, but also the architectural style in which it was done. Prior to the Fire of 1794, much of the architecture reflected the French culture that predominated in the City. In the rebuilt City, "the wide and shallow hipped roof, galleried townhouse perfected in the French period gave way vertical, long and narrow Spanish-style townhomes, many with overhangs, iron work and mezzanines" (Reeves, 2006). This brought to New Orleans a look and feel that was distinctly more Spanish than French. The effect that these new standards had on the City was to reflect the Spanish holdings in the Caribbean, upon which much of the new architecture was based (Garvey, 50).

Private Initiative

Just as the fire of 1788 spurred the development of Faubourg Ste. Marie, the 1794 fire amplified the growth of the City. It was a combination

of factors, fires of the Vieux Carré and increasing population, which caused several new suburbs to arise around the historical core of New Orleans.

One of the first of these new suburbs was the Faubourg Marigny. The area is named for Bernard Xavier Phillippe de Marigny de Mandeville who, along with his guardian Solomon Prevost had the Marigny plantation, located just downriver from the Vieux Carré divided into parcels and sold. Marigny was considered a minor when he inherited his family's fortune in 1803; therefore, any action taken regarding the property had to be approved by his appointed guardian (Reynolds, 2005).

In order to be allowed to offer the parcels of his plantation for sale, he first had to seek the approval of the City Council. Once this approval was granted, the first lot in the newly created Faubourg Marigny was sold in September 1805. By the end of the year, thirty more parcels had been sold, and by 1811 over 150 households called this area home. The parcels measured thirty feet by one hundred feet, on average; making it possible to construct not only single family homes on these properties, but also doubles (Reynolds, 2005)

Another area that began to rapidly develop in the late 1790's to early 1800's was the Faubourg Tremé. In 1794 the Carondelet Canal, which ran through the plantation of Claude Tremé, was completed. This made the land owned by Mr. Tremé very valuable as an industrial corridor. Some residential development took place at this point, but it was not until the

Girod Canal was completed in 1822 that Tremé was able to be completely drained of water and allowed to develop. Once the land was cleared and made ready for residential development, the City laid out the street pattern in 1826. Within ten years of the street pattern being fixed, the Tremé neighborhood was almost completely developed (City Planning Commission, 1999).

At this time, the boundaries of New Orleans were also pushing further upriver into what would be known as the Garden District and Uptown. The development beyond Faubourg Ste. Marie officially began in 1806 when Madame Marguerite Delord-Sarpy decided to have surveyor Barthelemy Lafon subdivide her plantation into parcels to be sold. Before Lafon's work was done, Madame Delord-Sarpy sold her property to Armand Duplantier. Mr. Duplantier, with the help of Lafon created the Faubourg Annonciation. This is the area that is commonly known now as the Lower Garden District (Starr, 16).

Fire Prevention

Having learned the valuable lessons of the fires of 1788 and 1794, the City Council of New Orleans passed an ordinance on January 31, 1807 that laid out all city regulations regarding fire prevention. This ordinance was commonly known as the "Bucket Ordinance" because one of the key regulations was that every home and business was to have at least two

buckets to be used for fighting fires. The ordinance was comprised of three titles: Title I: Precautions against Fires; Title II: Firemen and Sapeurs; Title III: Aid in Case of Fire (O'Connor, 39 - 43).

Title I of the ordinance required that a number of conditions be met by the residents of New Orleans. The provision of buckets was chief among them; all homes and businesses were required to have two fire buckets on their premises at all times, and also required that those buckets be suspended in "a conspicuous place." Landlords were to provide tenants with their buckets, and when vacating a property, if the buckets were not returned to the landlord in good condition, the tenant would have to replace them. This ordinance also provided that if buckets were not obtained by a homeowner within six months, the City would provide buckets to the homeowner at cost. One other aspect of Title I applied to all residents of New Orleans and the Faubourgs. There was to be a well dug on every property in the city. The minimum dimensions of the wells were to be at least ten feet deep and four feet in diameter (O'Connor, 40).

The ordinance went on to detail where the City's fire engines were to be housed and what other fire fighting equipment would be kept with them. Four engines were to be housed at City Hall along with various and sundry other equipment. A large sign was to be placed on the peristyle of City Hall that read "Dépôt des Pompes" in both English and French. The rest of the City's fire engines were to be placed at various locations around

the City. One would be placed in each quarter of the city, one in the Faubourg Ste. Marie, and one in the play-house. Again, these locations would also be used to store fire-fighting equipment, such as ladders and hooks that would be useful in saving the City from another disaster. Each of these locations was to be labeled with a sign similar to the one at City Hall, so that all residents would know where to find the appropriate equipment in the case of a fire (O'Connor, 42 - 3).

Title II effectively created the first Fire Department in New Orleans. The City Council ordered that companies of firemen be attached to each of the pumps in the city. A foreman and an assistant foreman would be provided for each company; each large pump would receive an additional eighteen firemen and the smaller pumps would each receive ten. All companies were to be administered by a Captain and two Lieutenants, these men would remain in touch with City Hall and would provide the City's instructions to the foreman of each company. Title II also provided for the services of "sapeurs." By the duties listed in the ordinance, these sapuers would be workmen "accustomed to use the axe, such as carpenters, joiners, wheelwrights, blacksmiths and ironworkers" (O'Connor, 43). These men would be appointed by the mayor, and would serve when needed by the fire companies (O'Connor, 43).

Title III details the actions that are to be expected of the City officials and the residents in case a fire were to occur. Residents were expected to

shout "Fire!" and report to City Hall to report the incident. By reporting to City Hall, the guard on duty would ring the bell to summon fire fighters and city officials to City Hall or another designated location, such as an engine house. To be sure that someone of authority is present in the case of a fire, the mayor appointed a "Commissaire annuel" for each district in the City and each of the faubourgs. This man would possess the authority of the Mayor, if the mayor were to be absent in an emergency. If the Mayor were present, the Commissaire would assist him in matters directly affecting that district. It was also provided in Title III that to encourage the expeditious service of the fire companies, the City would award fifty dollars to the first company to arrive with its engine at the scene of a fire (O'Connor, 43 - 4).

Chapter IV

The Significance of Disaster

New Orleans on the Rebound

The resilience of New Orleans, as a place and as an idea is amazing. Vale and Campanella's (2005) recent book entitled "The Resilient City" chronicles the destruction and reconstruction of a number or World Cities. It is noted that between the years of 1100 and 1800 only forty-two cities were abandoned entirely because of disaster (Ibid, 3). The vast majority of cities is rebuilt and generally emerges from disaster in a better situation than before. American cities have shown amazing resilience in the past 230 years, San Francisco, Chicago and Washington were all severely burned; Galveston was nearly obliterated by a hurricane and numerous communities across the nation have been ravaged by their own unique series of events. What makes New Orleans stand out in this crowd? This is of great interest today and the question has been asked: is there only so much resilience that one city can muster (Vale, 3)?

Within the relatively short lifespan of the City of New Orleans, the city has endured numerous disasters that have left the City in the unique and undesirable position of debating the merits of reconstruction. Two of the most significant were, arguably, the fires of the late eighteenth century. Perhaps it is because these events were not truly natural disasters, but man

made. There is no evidence showing a debate over the rebuilding of New Orleans after the large scale destruction seen in 1788 and 1794. The residents picked up the pieces of their city and their lives and strived to make New Orleans a better place than it had been before.

At this point in the development of New Orleans, the involvement of the national government was more direct than cities experience in the present system of government. The person charged with the day-to-day administration of the colony was the Royal Governor, appointed by the King of Spain; this allowed for direct appeals to His Majesty in cases such as fires that destroyed large portions of the city as was demonstrated by Governor Miro in his post-fire letter to the King of Spain in 1788 (Castellanos, 238 – 44). The direct involvement of the Royal Government in the affairs of the colony significantly aided the recovery of the City after both fires. At the request of the Royal Governors of New Orleans, the Royal Treasury made available loans to the colonists to help them rebuild their lives. These loans, as was previously discussed, were very low interest and allowed colonists to place the home they promised to build as collateral (Cabildo, 19).

Also at issue at this time was the value of the Mississippi River to trade, not only for the Spanish, but for French and American hunters and traders. Prior to the fire of 1788, the Spanish decreed that any non-Spanish ship would have to obtain a permit from a Spanish official before

entering the Mississippi River. Beyond that restriction, a complete inventory of cargo and prices (for resale) would have to be provided to the government. If the prices were deemed to be too high, the ship would not be allowed to unload at New Orleans. The final restriction stated that when the ship left the City, at least one third of out-going cargo had to be products of the colony (Eakin, 138). After the fires, trade became less restricted, but remained under the control of the Spanish authorities. Any ship would now be allowed to enter into the Mississippi, provided that it raise the flag of Spain and pay a six percent duty at port (Cabildo, 18-19).

The less restrictive trade policies put in place in the aftermath of the fires aided the recovery of the city in two distinct ways: the rebuilding of the economy and the rebuilding of lives. The economy would be bolstered by this plan for two reasons. First, by allowing the ships of any nation to sail to the Port of New Orleans, local merchants would have the ability to restock the warehouses that had been reduced to ashes. This would, therefore, allow merchants to reopen for business and provide the much needed materials required for rebuilding an entire city (Cabildo, 18-19).

The second economic incentive that drove this plan forward was the imposition of the six percent Custom House Duty to be paid by all ships utilizing the port, this duty would allow for the Royal Treasury to recoup the losses it suffered in the conflagration. An additional benefit of allowing

ships to utilize the port was that this action was seen as a way to prevent smuggling goods into the City from the Gulf of Mexico (Cabildo, 18-19).

The second reason for the implementation of this less restrictive policy was to help the colonists rebuild their lives after the enormous catastrophe. By opening the port to ships of other nations, colonists were able to purchase clothing and rebuild their homes more expeditiously than if only Spanish ships had to provide all materials. The Cabildo noted that those suffering the greatest loss were the merchants, but at the same time "a great many of [New Orleans'] inhabitants have been reduced to the most miserable conditions" (Cabildo, 19).

The late nineteenth century proved not to be the worst time for such a disaster to occur. It was just at this time that New Orleans started to experience rapid growth; not only insofar as new colonists from Europe, but also with people migrating from the newly established United States and other European colonies in the "New World." In 1788, the same year as the first fire, the colonial government had conducted a survey, and it was determined that the population of New Orleans was just over five-thousand persons. The entire colonial province boasted a population of 42,611 (Saxon, 150).

Within twenty years of the first fire, New Orleans was completely reshaped, not just in its built form, but also in the way in which it

functioned. Lyle Saxon described the effects of the fires eloquently in his

book Fabulous New Orleans:

The city that fell before the flames was a congested French community of wooden houses, badly arranged and irregular. A stately Spanish city rose in its stead. ... The City which rose from its ashes was of brick and plaster, with arches of heavy masonry and roofs of tile. There were barred windows and long, dark corridors. Large fan-shaped windows looked down into courtyards which held banana trees, oleanders, and parterres of flowers. Houses were built flush with the sidewalks; and balconies railed with delicate wrought iron, overhung the streets (Saxon, 150).

The first settlement beyond the boundaries of the original city took place in the aftermath of the Fire of 1788. Perhaps it was a fear of another disaster, or perhaps it was simply a timely coincidence; but, what is known is that immediately after the Fire of 1788, the shape of New Orleans was forever changed. Once the Faubourg Ste. Marie was approved the expedient growth of New Orleans began. Within a quarter century of the first fire, New Orleans was the largest American City west of the Appalachian Mountains, and was still growing. The population of New Orleans in 1803 was estimated to be between 8,000 and 12,000 persons, no more accurate estimates are available (Campbell 1921, 415). Regardless of what the population was in 1803, there was a significant increase in population in the first years of American Territorial government. In the 1810 United States Census, the first census conducted after the Louisiana Purchase, New Orleans had a population of nearly 17,000 people (US

Census Bureau, 2). To demonstrate the relative size of New Orleans to other western American Cities, in 1810 the City of St. Louis had a population of approximately 1,400 people (US Census Bureau, 2).

The growth of New Orleans in the late nineteenth century is, of course, not attributable to the fires that ravaged the city. Rather, the City, like many others across North America and the fledgling United States, was experiencing rapid growth. It seems that the fires served as a starting point in the physical growth and redevelopment of the area. As was articulated in the quote by Lyle Saxon, New Orleans became a 'modern' city in the wake of the fires. Since large tracts of land were cleared and required rebuilding, this was the chance to ensure that development followed some sort of standardized guidelines (Garvey 50 - 51).

The rapid resurrection of New Orleans from its ashes is due primarily to the region's rapid growth at that point in history. Americans were beginning their westward expansion, and the Mississippi River would play a key role in that expansion. By 1800, well over 250,000 immigrants, farmers and explorers had left the confines of the new United States and ventured into the Ohio and Kentucky Territories, and into Spanish Louisiana. These adventurous pioneers relied heavily on the Mississippi River for trade with both European colonies and the east coast cities of the United States. It was a combination of this exploratory spirit and the necessities of trade that brought thousands of new residents to

southeastern Louisiana and New Orleans at the close of the eighteenth century (Muzzy, 139 – 41).

The Significance for Posterity

A historical look at the City of New Orleans cannot be attempted without a brief look at how the place came to be. In 1718 brothers Pierre Le Moyne, Sieur de Iberville and Jean Baptiste Le Moyne, Sieur de Bienville established the Colony of New Orleans at the present location of the Vieux Carré. This was a location that was selected more for its strategic position than its environment. The bend in the river gave the colony an advantage in identifying vessels approaching the area from either direction (Garvey, 17-20). The colony remained French until it was ceded to Spain under the Peace of Paris, signed in 1763, marking the ending of the Seven Years' War (Wall, 53).

It turned out that the great fires that ravaged the City gave the Spanish their only opportunity to levy any influence on the development of the city. The Spanish officially took control of the Colony in late 1765. His Majesty appointed Antonio de Ulloa to serve as the governor of the Louisiana territory. The Spanish regime only took control as far as titles are concerned. The residents of New Orleans remained French throughout the Spanish period (Wall, 55). Edwin Adams Davis remarked in his *History of Louisiana* that "seldom in history has a dominant power been so

lenient with colonials of another nationality, and seldom has a ruling nationality been so completely dominated and assimilated by that held under control" (Garvey, 41).

In the aftermath of the fires, the Cabildo enacted ordinances regulating the building standards that created the relatively standard outward appearance that is recognized as the "New Orleans French Quarter" around the world. French Colonial architecture was wood-based, and had already proved to be insufficient for ensuring public safety in the community; this led to the importation of the Caribbean-Spanish style of architecture that is the most readily apparent mark left by the Spanish on Louisiana (Garvey, 42).

It was also at this time that the culture of the New Orleans area was shifting from the traditional French that had persisted throughout the Spanish period. . Interestingly, while under Spanish rule little Spanish culture was injected into the New Orleans way-of-life. It was the massive influx of Americans at this time and others migrating into the colony that had the social; and cultural influences that we recognize today.

Although the Spanish controlled the City of New Orleans from 1765 until 1803, there is little Spanish culture that is present in the region. This is primarily attributed to a difference in colonial practices between the French and Spanish. When the French began to colonize New Orleans as a city rather than a military outpost, the men would bring their wives and

children to the colony, thus preserving their heritage. The Spanish, however, only sent men into the colony for many years. These single men would then marry into the Creole and French families and adopt the culture and language more familiar to their new families (Garvey, 41).

The Americans, having adopted the concept of Manifest Destiny, began flowing into the City during the 1790's. The rate at which these "foreigners" entered into the City is unknown; however, in 1801 Don Juan Manuel de Salcedo, the last Spanish governor of Louisiana issued a decree prohibiting Americans from receiving any land grants in the Colony. This was seen as a way to dissuade the "designs of the Americans." Salcedo also suspended the right of deposit for American shipping, and refused to designate another site where cargo could be placed (King, 153). These actions were resented by the United States; it was felt that the Americans had the right, by the law of nature, to utilize the Mississippi (King, 153 – 4). Grace King's *New Orleans: The Place and The People* contains an unattributed quote that reflects the sentiments of the American nation:

The Mississippi is ours, by the law of nature. Our rivers swell its volume and flow with it to the Gulf of Mexico. Its mouth is the only issue which nature has given to our waters, and we wish to use it for our vessels. No power in the world should deprive us of our rights. If our liberty in this matter is disputed, nothing shall prevent our taking possession of the capital, and when we are once masters of it we shall know how to maintain ourselves there. If Congress refuses us effectual protection, we will adopt measures which our safety requires, even if they endanger the peace of the Union and our connection with the other States. No protection, no allegiance (King, 154).

The Americans in the Ohio Valley had begun to depend on the Mississippi as a trade route after the acceptance of Pickney's Treaty in 1795. It was this treaty that secured the Right of Deposit for American shipping in New Orleans. The treaty only secured the right for three years, but the right was not rescinded until Governor Salcedo saw that the American influence in the city was becoming too strong in 1802 (Wall, 80).

Unbeknownst to the Spanish Colonial authorities and the citizens, New Orleans was ceded back to France on October 1, 1800 through the Treaty of San Ildefonso. France would not formally take command of the City for another three years. Following the Treaty, the United States decided that in order to guarantee trade through the mouth of the Mississippi, the City of New Orleans would have to be American. In 1803, the United States purchased the entire Louisiana Territory from Napoleon, including the Isle of Orleans (Wall, 80-3).

Chapter V

Comparison to Katrina

The worst natural disaster in American History

On August 29, 2005, Hurricane Katrina made landfall initially near Buras, Louisiana and proceeded across marshland and low-lying areas of Louisiana to make final landfall near the mouth of the Pearl River (NOAA, 3). Although it came ashore as a Category 3 storm on the Saffir-Simpson Hurricane Scale, Katrina is the costliest storm to ever strike the United States, and is one of the five deadliest storms on record. Katrina is regarded as "one of the most devastating natural disasters in United States history" (NOAA, 1). Widespread destruction was suffered from southeastern Louisiana to Florida's panhandle; the most concentrated damage was in Louisiana and on Mississippi's Gulf Coast. (NOAA, 1)

Hurricane Katrina caused chaos and destruction everywhere in New Orleans. The storm surge caused levees to fail throughout the City of New Orleans, inundating the City with brackish waters, essentially making the City an extension of Lake Pontchartrain. The failed levees caused extensive flooding throughout eighty percent of the city. Figures 5.1 and 5.2 are satellite images of southeastern Louisiana; the top picture was taken on August 30, 2005 the lower picture on August 27, 2005. The extent of the flooding in New Orleans can clearly be seen in Figure 5.1 (NASA).

Figures 5.1 and 5.2: A pair of images from the NASA Terra Satellite. Figure 5.1 shows the massive flooding in New Orleans, taken August 30, 2005. Figure 5.2 shows how New Orleans appears normally, taken August 27, 2005.

Figure 5.1



August 30, 2005





Table 5.1

Disaster Comparisons and Contrasts		
Fire	Flood	
Comparison		
80% of the built environment of New Orleans was destroyed.	80% of New Orleans' land area was innundated with brackish flood waters	
Contrasts		
The fires were spontaneous disasters that caused the residents to relocate for the duration of the event.	The flooding was a byproduct of hurricane, which was a predictable event causing large-scale evacuations in preparation for the event.	
The damage caused by the fires was limited to the time of the event itself. Allowing for rebuilding and relief efforts to come online immediately.	The destruction following Hurricane Katrina were caused by a series of events and weeks of standing water, preventing relief, recovery or rebuilding efforts from beginning.	
The population of New Orleans was available to respond to the disaster and to begin recovery operations as soon as disaster conditions ceased.	The population of New Orleans was spread across the United States, thus placing the full burden of clean-up on the government and preventing citizens from participating in their own recovery.	

Parallels to Rebuilding in 1788 and 1794

There are numerous parallels between the great fires of 1788 and 1794 and Hurricane Katrina in 2005, the most obvious among them being that in 1788 eighty percent (80%) of the city was consumed by flames and in 2005 that same percentage of the city was consumed by water.

Governments have always had a responsibility to their citizens for such things as defense in times of war and to ensure well being in times of crisis. These obligations are made clear in governmental responses to completely different disasters that span almost 220 years. Housing, sustenance and ability to rebuild are the primary factors that a victim of disaster would likely be most concerned with. Secondary, and less immediately pressing factors are how, where and what to rebuild.

There seems to be a standard series of responses that a government sets into motion in the aftermath of disaster, the immediate needs of housing and food are the first to be addressed. Soon thereafter, the government must begin the process of helping people put their lives back together.

On the night of March 21, 1788, within hours of the city being decimated by a ferocious blaze, the military was busy distributing military field tents to ensure that every resident of New Orleans had a roof over their heads as night approached. Many of the citizens of the colony were left with only the clothes on their backs, the royal governor understood his obligation as the King's representative in the colony; he was to ensure the survival of the colonists and New Orleans itself (Castellanos, 241-2). In the wake of Hurricane Katrina, the Federal Emergency Management Agency (FEMA) began the task of ensuring that those most affected by the disaster were taken care of. This included shelter, ranging from large public shelters with hundreds of evacuees to individual hotel rooms for families with nowhere else to go.

Unlike the immediate response offered by the Royal Government, FEMA was not on the ground in the immediate aftermath of the event.

This difference could be attributed to two distinct variations between the events: the type of government and type of disaster. In 1788, the Royal Government of the colony was an absolute power while the United States has varying strata of governmental authority. The Spanish Administration had the capability to utilize all resources under their control to ensure that immediate needs were met; the complex nature of modern government has caused government response time to slow dramatically. There is no question that the sheer magnitude of Hurricane Katrina's devestation overwhelmed the government's response capabilities; however, in the years following the September 11, 2001 terrorist attacks on the United States, there has been a push to ready governments at all levels for a catastrophic event. Four years of preparation and planning for disasters was tested, and the end result demonstrated in the extreme events of the Louisiana Superdome and Ernest Morial Convention Center in the days following Hurricane Katrina where thousands of New Orleanians were left destitute without such basic provisions as food and water.

As the City of New Orleans filled with storm surge, thousands of American citizens were virtually abandoned by their government for days while issues such as who has control and who has responsibility was worked out. Rather than allowing the agency with the necessary resources to evacuate the remaining residents of the City, the government bickered

amongst themselves about who should be doing the work, instead of who could.

The other distinct difference affecting the governmental response to Katrina was the very nature of the disaster. Fires and floods have distinctly different aftermaths; in the case of the Fires of 1788 and 1794, the disaster struck with no warning, and the only way to remain safe was to get out of the path of the spreading flames. This meant that while the city would have been virtually empty during the event, the citizens and government of the City would have returned as soon as the flames were extinguished. In 2005, vast swaths of the City were filled with brackish floodwaters for as much as three weeks, inhibiting both the rescue effort and the importation of relief goods.

As the City of New Orleans began to rebuild in the eighteenth century, the Royal government saw that the economy of the area was devastated. This meant that there would not only be no economic activity, but also there would be no way for people to find the money to rebuild their lives. In order to fund the reconstruction of the city, the Cabildo requested an interest-free loan from the His Majesty that would place the house that was to be rebuilt as collateral, since few in the colony had anything left upon which they could leverage a loan. These loans would be provided in relation to how much money would be necessary to rebuild a home comparable to the one destroyed. While there are no records

available that provide specific loan-qualifying details, the records of the Cabildo indicate that this loan was specifically for "those who absolutely lack the means and resources to do so" (Cabildo, 19). Today, this monetary aid has been provided primarily by two federal agencies, the Small Business Administration (SBA) and FEMA, as well as the newly formed Road Home program created by the State of Louisiana to aid uninsured and underinsured homeowners rebuild their lives and their communities.

In 1788 and 1794, the royal loans were provided to those most in need after the conflagrations that consumed large swaths of the City of New Orleans. The problem faced in the wake of Hurricane Katrina is how to repeat that process. Under a myriad of federal regulations that have been designed in a piecemeal fashion through the years, there are qualifying conditions that must be met in order to receive a disaster recovery loan through the SBA. Many of the areas most heavily impacted by the hurricane were low-to-moderate income areas, where the residents likely did not have flood insurance, nor do they possess the resources to rebuild. Those fortunate enough to possess insurance have been systematically receiving lower settlements that they are likely entitled to, but due either a lack of awareness of settlement options or a long standing distrust of government many African-Americans in the most heavily damaged areas have not challenged the assessments of their insurers (Callimachi, 2006). Another item that these people do not possess is the

ability to meet the qualifying conditions set forth by the federal government. This means that those actually benefiting from the SBA loan program are those needing such assistance the least.

The Federal Emergency Management Agency (FEMA) is another agency tasked with helping to rebuild the lives of those affected by the hurricane. The programs administered by FEMA are done so far more liberally than those of the SBA, while this allows for those most in need to get greater assistance, it also opens the door for fraud. In the immediate wake of Hurricane Katrina, FEMA opened its coffers to the New Orleanians spread throughout the fifty-states. Immediate disaster assistance grants were made to virtually any applicant haling from a federally declared postal code; there have also been housing allowances provided to allow for 'temporary housing' in either apartments or hotels. Under the Stafford Act which governs the operations of FEMA, permanent housing solutions are not allowed within the scope of FEMA's mission. It has been well established that fraud occurred on a mass scale following Hurricane Katrina. It is estimated that tens, possibly hundreds of millions of dollars were misdirected through disaster fraud to those unaffected by the Hurricane (Kutz, 2006).

Another present day parallel to the Spanish Administration's loan program is the State of Louisiana's Road Home program. The goal of this program is to help everyone displaced because of Hurricane Katrina either

come home, or stay where they are – whichever they choose. The funding for this program is from a Congressional Appropriation of seven and a half billion dollars that is earmarked for assisting homeowners recover from uninsured losses. The *Road Home* so far is promising to be a rough one. The State originally estimated that 123,000 homeowners would qualify for funding and that grants would be up to \$150,000. In the first eight weeks of the program's existence, they report that approximately 33,000 people have registered; of that "only 255 homeowners have been told how much money they qualify for, an average of \$41,582 apiece" (Krupa, 2006 a).

In response to the devastating conflagrations that consumed the City, the Cabildo ordered that all structures be built of brick, rather than the wood that was more common in the area. This order shaped the Vieux Carré into what the "French Quarter" is known as today. A number of responses to Hurricane Katrina have been implemented that will have a lasting effect on what the City will look like as we move into the future. During a Special Legislative Session of the Louisiana Legislature, the state formally adopted the *International Construction Codes, 2006* as the official building code for the State of Louisiana. This enhanced regulation was designed to bring buildings to a higher standard concerning vulnerability to wind damage, and durability. This change will not likely have the same type of impact as a policy-based shift in building materials since these changes deal more with the function than the form of buildings.

However, other changes in the subsequent months will have a greater effect on the actual appearance of the City (LPJA, 2005).

As to not risk the loss of potential FEMA funding or enrollment in the National Flood Insurance Program for the City and its residents, the Council of the City of New Orleans passed Ordinance Number 22354 M.C.S. in August of 2006. This ordinance amended the city's Base Flood Elevation as determined by the National Flood Insurance Program. The affected changes require that all homes in the City be a minimum of three feet higher than the height of the curb in front of the house, or at the level of the Advisory Base Flood Elevation, whichever is higher. This will have an impact on both the recovery and the aesthetics of the community. It should be noted that the ordinance does waive compliance for all districts and buildings under the jurisdiction of any of the City's historic preservation agencies (City of New Orleans, 2006).

The requirements of this ordinance and the new flood maps apply specifically to those structures with greater than fifty percent (50%) damage. This would be considered 'substantial damage' which is defined as "repairs costing more than 50 percent of the cost to completely rebuild the home" (Thevenot, 2006). Those buildings with less than 50% damage would not be required to adhere to the more stringent standards enacted in the wake of Katrina, rather they would be allowed to remain at the Base Flood Elevation in effect at the time of construction. For those structures

build before the City enrolled in the National Flood Insurance Program in 1975, as long as the damage to the property was less than the 50% threshold that has been set in place, the property would simply be grandfathered into the program. Many questions remain about the future insurability of properties with less than 50% damage from the hurricane; it is possible that future purchasers of the property will be unable to get flood insurance unless they agree to bring the property up to modern elevations (Thevenot, 2006).

New Orleanians have actively been seeking to reduce damage estimates to avoid the costly process of raising or razing their homes to comply with these new standards. As residents approach the City to obtain the proper rebuilding documentation, they are also appealing the initial damage assessments of their properties. By reducing damages to less than 50% of replacement cost, the city is allowed to issue construction permits and let homeowners proceed with rebuilding their lives. This is likely o be a smart move on the part of the city in terms of rebuilding and repopulating, but the effect of public safety and property protection may be detrimental in the long term. The standards for granting appeals in many cases is as simple as bringing in photographs and stating that only 'moderate' rather than 'substantial' work would be required. The City of New Orleans and FEMA are at odds over the justifiability of this practice, FEMA contends that by allowing residents to rebuild, the City will expose

them to future flooding, while the City maintains that the flooding was caused "by catastrophic - - and preventable - - failure of the flood protection system, not because home elevations were too low" (Meitrodt, 2006 a).

The implementation of this ordinance will require creative solutions if the architecture of New Orleans is to be maintained in the rebuilding of the City. What seems likely to occur is that New Orleans will either find itself with a city full of homes built over garages, or a drastic change in the way that homes are being built. Older New Orleans architecture did integrate flood protection in the form of being raised several feet off of the ground to allow for the flooding that was common before the levee system was built to protect the region. As levee protection came to be almost certain, homes were beginning to be built slab-on-grade; this made construction more timely and efficient, but does not allow for lifting to be brought in compliance with the City's new flood maps. While the picturesque New Orleans of postcard fame seems to be protected from this fate, many mid-twentieth century homes are being lost. These are structures that were historic in their own rights, but the cost and level of difficulty may be too high for some homeowners to accept.

Table 5.2

Response & Recovery Comparisons		
Fire	Flood	
Low interest loans were granted to victims of the disasters to rebuild their homes and their lives	FEMA and the SBA have loan and grant programs designed to aid in the rebuilding of homes and businesses in the disaster areas.	
	Louisiana has created the Road Home program, funded by a \$7.5 billion Congressional Appropriation to help Louisiana homeowners rebuild or relocate.	
In 1788, the Spanish officials encouraged colonists to rebuild using brick and slate/tile roofs rather than wood homes with thatch or wood shingles. After the Fire of 1794, these changes became mandatory.	In the 2005 Extraordinary Session of the Louisiana Legislature, the <i>International</i> <i>Construction Codes, 2006</i> was adopted as the baseline building code for the State of Louisiana.	
	The New Orleans City Council approved the Advisory Base Flood Elevation maps as provided by the National Flood Insurance Program. These elevations require that all structures more than 50% damaged be raised to either the base flood elevation or three feet higher than the adjacent curb – whichever is higher.	
The fires caused the City's footprint to enlarge, this was driven both by the desire of people to deconcentrate from the confines of the Vieux Carré and the influx of immigrants from Europe and the newly formed United States.	While the long term effects of Hurricane Katrina are yet to be seen, there is sure to be some effect on the City's footprint. New Orleans has been losing population for decades, and this even has enhanced that process.	
	It is likely that regardless of the long term population size, the shape of the city will reflect those areas that remained dry throughout the events of Katrina. This means that areas such as New Orleans East and Gentilly will be less populated, while density increases along the natural levee of the Mississippi River.	

Significant Differences between 1788 and 2005

There are numerous differences between the situations faced by the City of New Orleans of 1788 and 1794 and the City today. Factors such as population growth and the perceived importance of the area will contribute to or detract from the ability of the city to rebound as it did in the wake of the disasters of the eighteenth century.

It is troublesome to compare the overall climate surrounding the rebuilding efforts across the centuries. In the late eighteenth century, there was a period of significant growth in the region surrounding New Orleans, as we have previously discussed. This growth led to the creation of several Faubourgs surrounding the Vieux Carré. In 1788 and 1794, the Vieux Carré was the only area impacted by the disasters, but it should be noted that it was also the only settled area of what would become metropolitan New Orleans.

When Hurricane Katrina roared ashore in 2005, The City of New Orleans had been losing population on a consistent basis for in excess of 25 years. For example, the US Census Bureau estimates that the City lost approximately 45,000 people between 2000 and 2005 (US Census, New Orleans Fact Sheet). This negative growth will likely be a severe detriment to the rebuilding efforts in the City of New Orleans.

For decades, the population of New Orleans has been in decline. Failing public schools and climbing crime rates are two factors among many driving people out of the City and into the suburbs of Jefferson and St. Tammany Parishes. These areas on the outskirts of New Orleans were seen as havens to the middle-class whites that fled the City. Social, economic and racial segregation remained realities in New Orleans long

after the Civil Rights era of the 1960's, not in a governmentally ordained fashion, but in practice. Although the City of New Orleans was more integrated more than many American cities before Katrina, there remained white neighborhoods, black neighborhoods and specific areas for the rich and poor of all races. It is these aspects of New Orleans that should be seriously addressed in the rebuilding of the City of New Orleans.

Just as Colonial New Orleans learned how to improve upon the past in the wake of disaster, so must modern New Orleans. In the eighteenth century, the city leaders mandated that homes be built in a fire-resistant way, to prevent the recurrence of major disasters; in the twenty-first century we must also look to what changes can be made to prevent repeating the past.

With nearly a year having passed since Hurricane Katrina, the most positive guess at the current population of New Orleans is approximately 250,000 (Russell, 2006). Prior to the Hurricane, the City population was estimated to be just above 437,000, which means that even in the best of estimations, nearly 200,000 people have chosen, or not been able to return to the City after more than one year of exile (US Census; Russell).

It should also be noted that in the cases of the fires of 1788 and 1794, the residents of the City were simply left vast numbers of homes destroyed, not vast numbers of homes destroyed and a depopulated city. The full population of the city was participating in the clean-up that followed each

blaze, and the rebuilding of their city was a necessity to life. Tents were distributed to account for the immediate needs of the population, but homes were quickly rebuilt to provide a permanent residence. Hurricane Katrina removed nearly 100% of the population of New Orleans, by either voluntary or forced evacuation; regardless, there were no citizens present for a month or more to force the immediate recovery of their communities.

In many circumstances, the residents have taken matters into their own hands, and have led the rebuilding efforts in the City. This bottom-up charge for rebuilding simply took much longer to get started than it did in 1788. For weeks, and in some cases months, the residents of severely damaged communities were barred from returning to their neighborhoods, leaving the government with the job of both coordinating and performing the recovery tasks. In the environment that was present in Post-Katrina New Orleans, the prevailing opinion was that the public would get in the way of efforts to clean up the community. It is not being suggested that the City erred in keeping citizens away from the dangers of the overwhelmingly flooded metropolis, but simply that there is no one better qualified to clean up a neighborhood than its residents.

In recent months, the long term recovery for communities has fallen to neighborhood groups that feel their government has failed them. Now that residents are back, they are looking for ways to revive their neighborhoods, and bring back the community with which they were once

so familiar. In 1788, the "planning" as we refer to it today was controlled by the Colonial Government, the citizens were crucial to accomplishing the actual rebuilding. Today, many neighborhoods have undertaken their own planning efforts to ensure the continued viability of their communities. Many proposals have been made for the city as a whole, but none have been adopted.

As a part of the City's *Bring New Orleans Back Final Report* the Urban Planning Committee included a brief "Why Rebuild?" analysis. This document somewhat overly simplified the reasons to consider rebuilding New Orleans, but it remains an interesting item to note. The Committee lists such things as historical and cultural value, petroleum and petrochemical production, natural resources such as fisheries and game, and the economic and production value of the Port of New Orleans (BNOBC, 2)

More important than the reasons to rebuild is the necessity behind such statements being included in a document that is supposed to provide a foundation for the recovery of an American City. It is impossible to know if these same debates were waged in 1788 or 1794, but given the historical context that the disasters occurred in, it is highly unlikely.

The situation being faced by New Orleans today is far different from what she endured two centuries ago. In the late eighteenth century, the North American continent was still being settled, the United States of

America was an upstart nation that challenged their European rule and was beginning to expand its borders westward. Today, the United States is the last remaining super-power and is defending its interests, influence and borders in dramatically different ways.

New Orleans was established as a strategic location for the defense of "the Mississippi River, all the land drained by the river, and all its tributaries" as was claimed by René-Robert Cavelier, sieur de La Salle in 1682 for France (Eakin, 73). By 1788, the City of New Orleans was seventy years old, and was had become a hub for transportation and trade along the Mississippi River. The location, for commerce and defense was critical to maintaining control over the River and the inland interests of the thenpossessors of the territory, Spain. Had the City been abandoned after either of the catastrophic fires of the eighteenth century, the Spanish would have essentially abdicated their claim to the territory, since there would no longer be a practical way to exert control.

As we progress into the twenty-first century, the location of New Orleans, or even the existence thereof, is not nearly as apparent to her home nation as in 1788. The presence of a line of defense is not necessary to ensure territorial possession and travel along the Mississippi River; however, The Port of New Orleans remains a hub for commerce, America's natural resources travel from the North, and foreign goods from the South.

Many throughout the nation have argued that the rebuilding of New Orleans is no more than an exercise in futility, since such an event is likely to happen again, maybe not next year, or the year after but at some point in the future. Perhaps the multi-billion dollar investment that will be required of the federal government would be better spent on using the power of eminent domain to simply vacate the city, but only time will truly tell. New Orleans does sit below sea-level, in its lowest parts up to fifteen feet below sea level, and it is sinking. So, it could be said that the government is throwing money into a bottomless pit that gets deeper every day. This is not the first catastrophic event to have befallen this city, nor will it be the last, but the answer does not lie in abandonment, but rather in protection.

Response & Recovery Contrasts	
Fire	Flood
In the 1700's, all assistance and decisions were local – there was no way for the City to have even asked for help in a timely fashion This disaster occurred at a time of rapid growth and expansion, allowing for the rapid recovery of devastated areas and growth into new ones.	By relying on the state and federal government to provide this assistance, vital time was lost in both providing help to those stranded at shelters and those trapped throughout the city by rising floodwaters. Prior to Hurricane Katrina, New Orleans was losing population. This disaster is likely to enhance this loss. In August,2005 the population was estimated at 437,000 residents, in November, 2006 the population estimate is
In the late eighteenth century into the early nineteenth, New Orleans, like all of America was seeing rapid immigration from many areas, especially Europe.	~200,000. Since Hurricane Katrina, there has been a rapid influx of Latin American workers into New

Table 5.3

Cultural and Social Differences

When the fires consumed the City of New Orleans in the eighteenth century, the city was at a turning point in its social and cultural development. After nearly a century of domination by France and Spain, the population was becoming more diverse, and the cultural landscape was being modified to reflect that diversity. In the late eighteenth century, Louisiana saw an influx of population in the form of the Acadians, exiled from Canada and resettling in the bayous of Louisiana. Towards the end of the eighteenth century, the City saw its population grow as a result of the migration of immigrants from around the world. Many free people of color began to arrive from the Caribbean at the same time that Americans were starting to settle the area around New Orleans as a strategic trading post. Also immigrating in this era were those of European descent, such as Germans and the Irish (Wall, 70-71).

As was previously discussed, for many years preceding Hurricane Katrina, New Orleans was a city that was hemorrhaging population. Since Katrina, however, the City has seen a new wave of immigration, nearly to the scale of that seen in the eighteenth and nineteenth centuries. In the four months immediately following Hurricane Katrina over 100,000 Hispanic people migrated to the Gulf Coast in pursuit of employment. These migrant workers seem to hail from all parts of Latin America, with many coming specifically from Mexico. So many in fact, that the Mexican

government is exploring the possibility of reconstituting the now-dormant Mexican consulate in New Orleans (Waller, 2006).

Immigrants from Latin American nations have come to New Orleans seeking employment; these people – for better or for worse – are willing to put in long hours for low pay. Most of the population that has found its way to New Orleans is male, and it is believed that many may migrate out of the City as work wanes and the City gets back on its feet. There should be no doubt that at least a portion of this population will remain in New Orleans, and start a new chapter in her urban development.

In the late eighteenth and early nineteenth century, American and European immigration forever changed the way New Orleans looked and behaved. As the Americans came from the north to utilize the Mississippi as a trade route, they began settling to take advantage of the relative closeness to the mouth of the river and the natural deepwater port that was New Orleans. German and Irish immigrants made their way to the City around the same time that they began flowing into other sections of North America.

The Germans and Irish "formed the city's white lower classes" (Lewis, 45) and were the primary original inhabitants of the Faubourg Marigny. This settlement pattern had more to do with the separation of cultures than anything else, the Creole population of New Orleans, residing in the Vieux Carré, wanted nothing to do with these newly arrived people,

nor did the immigrants want anything to do with the existing population. The language division certainly exacerbated the divide between the inhabitants and immigrants, and this same divisive settlement pattern progresses still today. In the mid-twentieth century, New Orleans saw an influx of Vietnamese immigrants; this group still exists in cultural enclaves around the metropolitan area, the most predominant of which are the Versailles and Village de L'est subdivisions in New Orleans East, an area heavily damaged by Katrina's floodwaters. This group has not only remained closely bound over as much as three generations, but has become a force in post-Katrina politics, and a model of cooperative community rebuilding.

It is too soon to determine if the next wave of New Orleans immigrants will follow this same pattern. The difference in this situation is that this group moved to the city en masse, and has found housing wherever it was available. However, this housing is generally highly priced and rental, meaning that as the newly arrived Hispanic immigrants to New Orleans make the decision to commit to the City, there may be a growing trend of Spanish-speaking people forming communities in redeveloping areas. With the scale of devastation in areas like New Orleans East and the Lower Ninth Ward, there is no way to guess conclusively who will reside in these areas in the coming years, and how they will be reshaped. Although both suffered severe damage, the Lakeview and Gentilly communities seem

to have a higher rate of return than is being seen in the other heavily damaged areas of the City. Residents in these areas are more likely not only to have had insurance, but also to have had adequate insurance to return their homes to pre-disaster conditions.

Disaster has a way of changing both form and function in a community. Prior to the disastrous fires, most buildings in the City were made of wood. After these disasters, the Cabildo created a fire code to prevent large scale disasters from again consuming the community. Structures changed from wood to brick construction, with roofing of slate rather than wood or thatch. This was seen as a key measure in protecting the citizens and the Royal investment in rebuilding. Another measure that was seen as crucial to the lasting survival of eighteenth century New Orleans was the deconcentration of the Vieux Carré. In the wake of the first fire, the Faubourg Ste. Marie was created just upriver from the old city, and after the second fire the Faubourg Marigny was established downriver.

As New Orleans moves on from the devastation of Hurricane Katrina, we are seeing significant shifting in how we recreate the built environment of the community to reflect the lessons and needs of the twenty-first century. For years, New Orleans has relied on the flood protection system that was supposed to protect it from becoming an American Venice. This assumption was physically demonstrated in the

shift from the raised construction of the earlier centuries to the slab-ongrade construction of the mid-twentieth century. Slab homes were as much a product of rapid suburbanization as pre-fabricated construction. While not debating the concept of slab-on-grade and pre-fabricated construction methods, these may not have been the best path to follow in the New Orleans area. Earlier building styles incorporated open areas under homes to allow for flooding in the unpredictable environment of New Orleans. Whether this was accomplished by using pilings or brick 'chain-walls' the result was in keeping homes safe from the street flooding that was common before pumping systems and outfall canals became the norm.

As New Orleans is reconstructed, older homes are being raised to prevent repetitive loss by flood even if not required to do so by the newly enacted flood standards. There is ongoing debate nationally and locally regarding the action and policy decisions being made in the reconstruction of New Orleans. To the City's defense, it is hard to make policies to adequately protect citizens when those above are controlling the resources. The devastation was caused by a failure of the federally-funded hurricane protection levees, not the storm itself; and until a decision is made from Washington, D.C. regarding the future of hurricane protection in New Orleans, local leaders are left to making best-guess decisions on what fate the future may hold.

New architecture, while reflective of the unique style of New Orleans, is being designed with flood-loss control in mind. How New Orleans will look in ten years is open to debate. Many people want to retain the appearance of New Orleans architecture as the city reconstitutes itself, but others want to see more innovative design options made available in the community. Immediate housing is necessary to spur the redevelopment of communities, and people cannot be expected to live in their FEMAprovided travel-trailers until permanent housing can be found. Factorybuilt modular housing has become one option on the rebuilding smorgasbord. These homes are being designed to both be elevated and be complementary to more traditional forms of New Orleans architecture. Many residents are weighing their rebuilding options. Modular homes are being offered at lower prices and in much less time than traditionally built homes, but the sacrifice is in having a standardized design, both internally and externally (Meitrodt, 2006 b).

New Orleans has a history, and a certain aura that surrounds her neighborhoods. This atmosphere is created as much by the physical as the human characteristics of individual communities. There seems to be a preoccupation in New Orleans with trying to put everything back to where it was on August 28, 2005, without addressing the reality of what occurred on August 29. New Orleans is a different city, and this reality needs to be recognized and embraced; however, the residents of New Orleans need not

let the rushing floodwaters wash away that which makes the community unique. Not only has debate circulated around the architectural future of New Orleans, but on the function of that architecture as well.

The city in its original, organic form was reflective of what has become known as "new urbanism." Over the years New Orleans, like other cities, adopted the suburban, car-dependent model of development. Many would like to see New Orleans return to its original shape, rather than rebuilding the stretches of suburbia were indicative of development in the Post World War II era around New Orleans. This shift in form would coincide with the shift in functionality and architectural styling. In many areas across the Gulf Coast, including New Orleans, self-proclaimed "urban designers" have tried to recreate the ambiance of Magazine Street but with the promises of retailers like the The Gap and Williams-Sonoma populating these storefronts instead of neighborhood pizzerias and used record shops. While the ideas of mixed use corridors serve the functions of bringing more people to higher grounds and increasing walkability these changes will, in many places, cause the urban fabric of the City to be compromised in a more serious way than the storm that brought them about (MacCash, 2005).

Architecturally, the city needs to look to find a modern compromise of blending the past and the present. Much ado has been made about the need to build sustainable, green communities to bring us into the future.

Such recommendations have based their suggestions on how communities survived in the past. With the technological innovations of the past century, we have surrendered the knowledge of how to live without airconditioning and the other amenities of daily life in 2006. High ceilings and double-hung windows were a staple of New Orleans and Caribbean architecture in the past, these two particular features allowed buildings to remain at a comfortable temperature during even the most intense of summer days. The compromise that must be made would particularly involve maintaining the features of the past that can help us weather another storm, while not making the City of New Orleans look like it's an extension of Disneyland. The difference between true New Orleans architecture and mass produced variations on it are noticeable to anyone who has come across some recent New Orleans developments.

The footprint of the city has been a hot-button issue since the Urban Land Institute (ULI) made the infamous "shrinking footprint" recommendation to the Bring New Orleans Back Commission in November of 2005. In this report, ULI recommended that the redevelopment of New Orleans be focused on the natural levees along the Mississippi River and other naturally higher ground in the City. This proposal left vast tracts of green space throughout the City to serve as floodplain area as well as parkland. While this may have been a rationalized approach to the rebuilding of a devastated community, this proposal allowed for no

consideration for the property owners whose houses were slated to be parkland (Urban Land Institute, 2005).

As the city approached the year 1800, fire had consumed most of the original city of New Orleans and how these disasters physically shaped the city became clearer with every passing day. The boundaries of New Orleans were expanding, not only to meet the needs of the growing immigrant population, but because the concentration of the Vieux Carré was seen as risk factor in the prevention of another sweeping conflagration.

While the suggestion is not being made that concentrating the city will prevent catastrophic flooding, what is being suggested is that future development will likely be in those areas located on the natural levee of the Mississippi, which received no flooding during Hurricane Katrina. Figure 5.3 (page 67) illustrates the area where future development is primarily being encouraged. Local leadership is encouraging people to rebuild and repopulate all areas of the city, including those areas east of the Industrial Canal. From the rebuilding proposals that have been drafted for the City, the naturally higher ground near the Mississippi River provides at least a sense of safety from floods that may be lacking in other parts of the community.

The City of New Orleans has taken the position of letting the market drive what areas will be revived. By allowing the market to drive the where the city places its limited resources, people are given a greater opportunity to

determine where they want to resettle, be that in their formerly flooded neighborhoods or on the higher ground of the levee. This policy could result in favoring those areas with the economic ability to rebuild en masse, leaving those in areas with lower rates of return with sub-standard city services. Over the course of the fifteen months since Hurricane Katrina's wrath struck the City, officials have been unable, or unwilling to make decisions regarding the future of specific areas. The result of the Unified New Orleans Plan, which is slated to be a city-wide compilation of neighborhood plans, is expected by the early part of 2007, if adopted this plan will allow residents to make an informed decision about the future of their own communities, and will aid the City in deciding where to place resources.

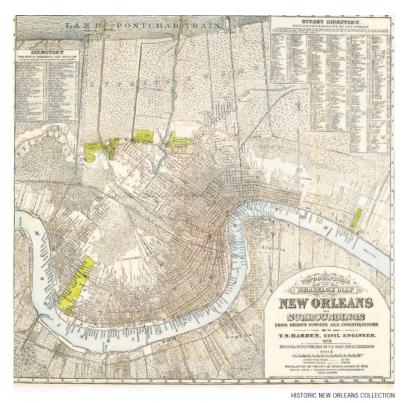
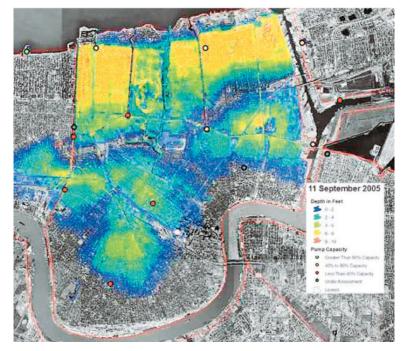


Figure 5.3: 1878 New Orleans footprint versus 2005 flood depths.

Almost every place that was uninhabited in 1878 flooded in 2005 after Katrina.



Source: The Times-Picayunne, November 3, 2005

Chapter VI

Conclusion

What Can History Teach Us?

There are numerous lessons that should be learned from the past experiences of New Orleans. The history of disaster recovery in general would not help this city in the same way that the history of New Orleans can guide the direction that the City should take from this point. New Orleans is a unique, organic community in that it started off as a small French settlement in 1718 in the most unlikely and unwelcoming of locations and grew to encompass the history and traditions of people from around the world that have made their way there. Even in the melting pot that is America, New Orleans has maintained its own personality. As a community, New Orleans has not adopted the generalized mainstream traditions and celebrations that are found throughout the vast nation of which it is a part, but rather it has retained its own ideas and forced those entering to accept the New Orleans way rather than bending to the ways of the outside.

Through the years New Orleans has been required to fall in line with outside forces, but even compliance with these policies New Orleans has done it her own way. In the late eighteenth century the Spanish Administration required that traditional New Orleans building style of

wood be abandoned and brick used in its place; in response New Orleans absorbed these Spanish building styles and made them its own. It is doubtless that a similar process will be repeated in the twenty-first century; the new building codes and flood elevations will also likely be amalgamated into the unique fabric that is New Orleans. The disasters of 1788 and 1794 were substantially different from that of 2005, but in many ways the same. Both relocated large portions of the population; both, by their very nature, have left deep scars in the social and cultural fabric of the community; and both have affected the course of future events of a Great American City.

Disasters force change that is a fact that cannot be escaped regardless of the uniqueness of a community. What the uniqueness does aid in is how gracefully that community can pick itself up and look to the future with its head high. New Orleans is just such a place. The disastrous events of two hundred years ago may exist on the margins of history, but remembering their lessons would benefit us today. There are numerous factors that guide the direction in which a city is moving at any given time, but rarely do those factors converge into one historical turning point. March 21, 1788 and August 29, 2005 were certainly two of those rare occasions.

Life has become far more complicated in the interim two centuries between the disasters, but certain truths hold true. We have seen that over the centuries, a government's responsibility to its citizens has stayed

relatively constant. Food and shelter for victims of disaster is, and should be, a top priority; but the true government impact comes as the community begins to rebuild. The first action taken is to attempt to prevent a reoccurrence of the event. In 1788 this included the creation of building codes to require brick rather than wood construction, and in 2006 the raising houses to comply with redrawn Base Flood Elevation maps, the construction of flood-gates and improved pumping systems, and more stringent building codes.

Following mitigation measures set in place by the government, and agencies such as FEMA and the National Flood Insurance Program, the community must now come together and determine collectively where they would like to be in the future; the most critical element that must be present is the determination to restore their community; not specifically the physical aspect, but the social and cultural ones.

No one knows how New Orleans will recover from Katrina, but what is sure is that she will. The footprint may be larger or smaller, Tchoupitoulas may be pronounced with more if a Spanish accent, and perhaps Calliope will be pronounced more like the steam-instrument than a hybrid melon. What is certain about the future of this great, iconic city is that there are brighter days ahead, and that by learning from past events we will not have to endure those hardships again. There will always be hurricanes, but there are also still fires; the key is knowing how to

minimize the effect of the disaster. Through exploring the past, we can learn the value of ancestral knowledge and how to overcome adversity be it in the form of Fire or Flood.

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