

Rebuilding after Hurricane Charley: A Look at which Homes Still Need Repairs

By: Lea Schlanger
Mentor: Dr. Beverly Ward
July 24, 2008

Introduction:

On August 13, 2004 (Friday the 13th), Hurricane Charley made landfall in Charlotte County between 3:00pm and 4:00pm in the afternoon. Charley came in as a category 4 hurricane with sustained winds of 130mph and gusts of up to 180mph causing approximately \$14 billion in damage along its path of destruction. That \$14 billion included 10,000 homes completely destroyed and 16,000 homes uninhabitable without major repairs. Thousands more were habitable, but still damaged.

Like in any disaster, millions of dollars of aid came in the form of money, people, and needed items including aid from the Federal Emergency Management Agency (referred to as FEMA from this point forward). With regards to the homes that were damaged in Charlotte County from the 2004 hurricanes, FEMA provided over \$1 billion in household aid. According to the Charlotte Sun newspaper situated in Charlotte County, “For Charley, the average assistance grants ranged from \$2,503 to \$1,118”. This is the problem. \$2,503 to \$1,118 is not enough money to rebuild a home. It is not enough to replace everything in a home. It is not enough to help a person rebuild their life. The goal of relief should be to help the victims of a disaster return their lives to normal.

FEMA and aid are not the only sources that people turn to for help. They also rely on their insurance policies to help bear some if not all of the costs to repair their homes. According to the local newspaper, the Charlotte Sun, 1.6 million insurance claims related to the 2004 hurricanes were filed throughout Florida. On March 18, 2008 the Charlotte Sun ran an article stating that, “Last summer, State Farm Insurance Companies announced that it would not be renewing about 50,000 homeowners policies” and that “most of these houses would be within a

mile of the coast, and State Farm deemed them too great a risk, even after uneventful hurricane seasons in 2006 and 2007". Also, it was reported on June 24, 2005 that, "Allstate Floridian Insurance Co.'s decided to raise homeowners rates by an average of 28 percent" and "wouldn't renew 95,000 residential homeowner policies" due to the cost of the 2004 hurricanes. In addition, according to the Consumer Federation of America, "we saw record profits in 2004 and 2005 despite significant hurricane activity". Ultimately, insurance companies were more worried about their profits than their customers.

The problem behind this research project is that after a disaster people struggle just to satisfy the basic needs of food, water, clothing, shelter, and safety and they need all the help they can possibly get to satisfy those basic needs especially housing. As stated above, people who received FEMA aid received between \$2,503 to \$1,118 to fix their homes and replace what was lost. It was and still is not enough. The story is the same with insurance companies. Even if people were covered by their insurance policy they did not receive the money needed to rebuild. The purpose behind this research is to discover how much money people received from FEMA and insurance companies and how many of the damaged homes are still in need of major repairs after four years.

Problem Statement:

Charlotte County is located on the southwest coast of Florida. As of the 2005 Census it has a population of 157,536 (90 percent urban, 10 percent rural). According to the United States 2000 Census, no less than 48.4 percent of households have at least one person 65 years old or older (Fig. 1) and between 31 percent and 40 percent of the population per area is 65 years old or older (Fig. 2). The average income of the area is between \$35,658 and \$38,970 (Fig. 3) and it has

a poverty rate of 9.7 percent. Ultimately, Charlotte County has a large vulnerable population with an average income that falls within the lower middle economic class. Given the vulnerable population coupled with a low income rate, Charlotte County needs more help after a disaster than many other counties.

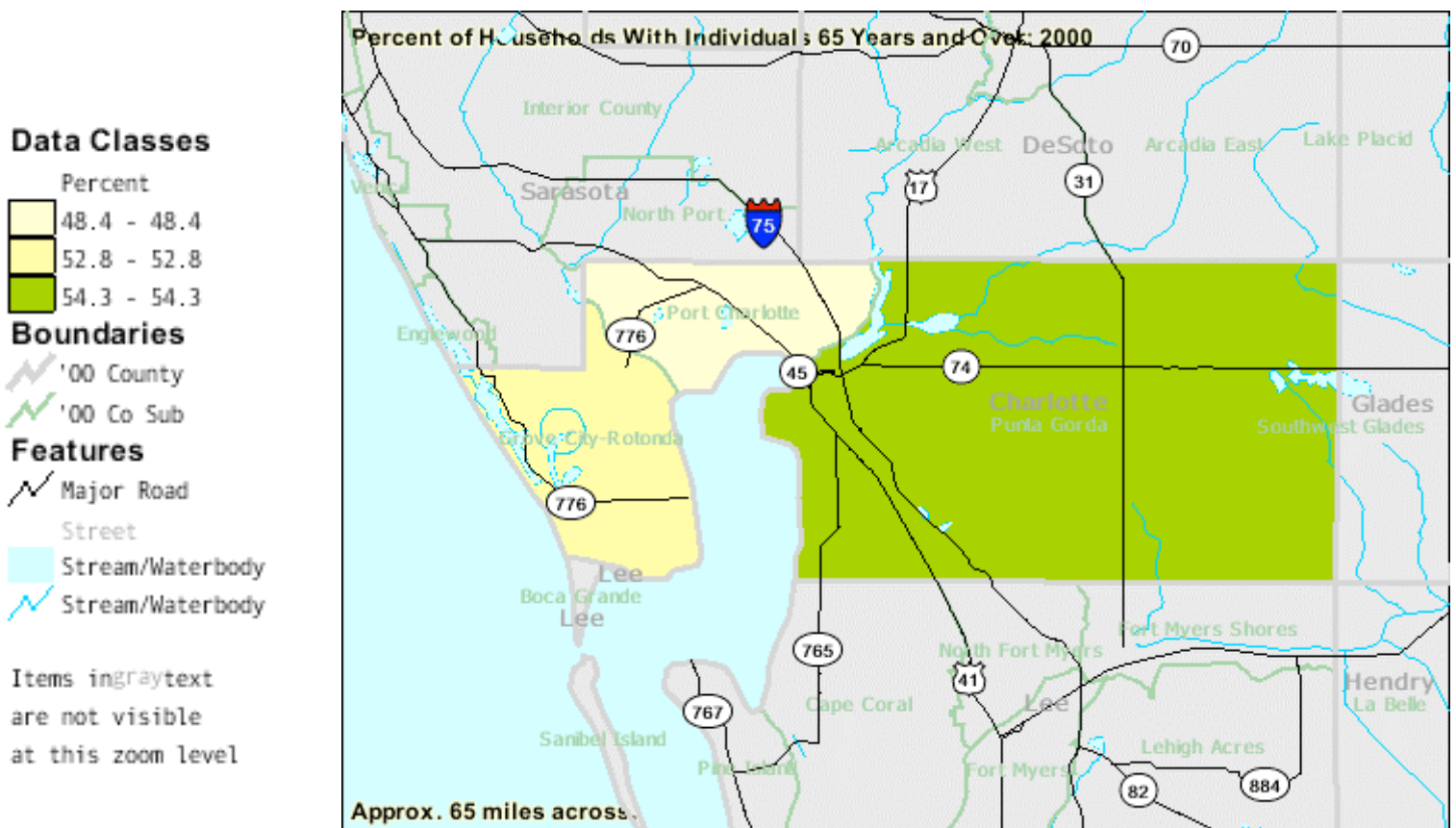







Figure 1





Data Classes

Percent	
	31.9 - 31.9
	37.8 - 37.8
	38.3 - 38.3

Boundaries

-  '00 County
-  '00 Co Sub

Features

-  Major Road
-  Street
-  Stream/Waterbody
-  Stream/Waterbody

Items in gray text are not visible at this zoom level

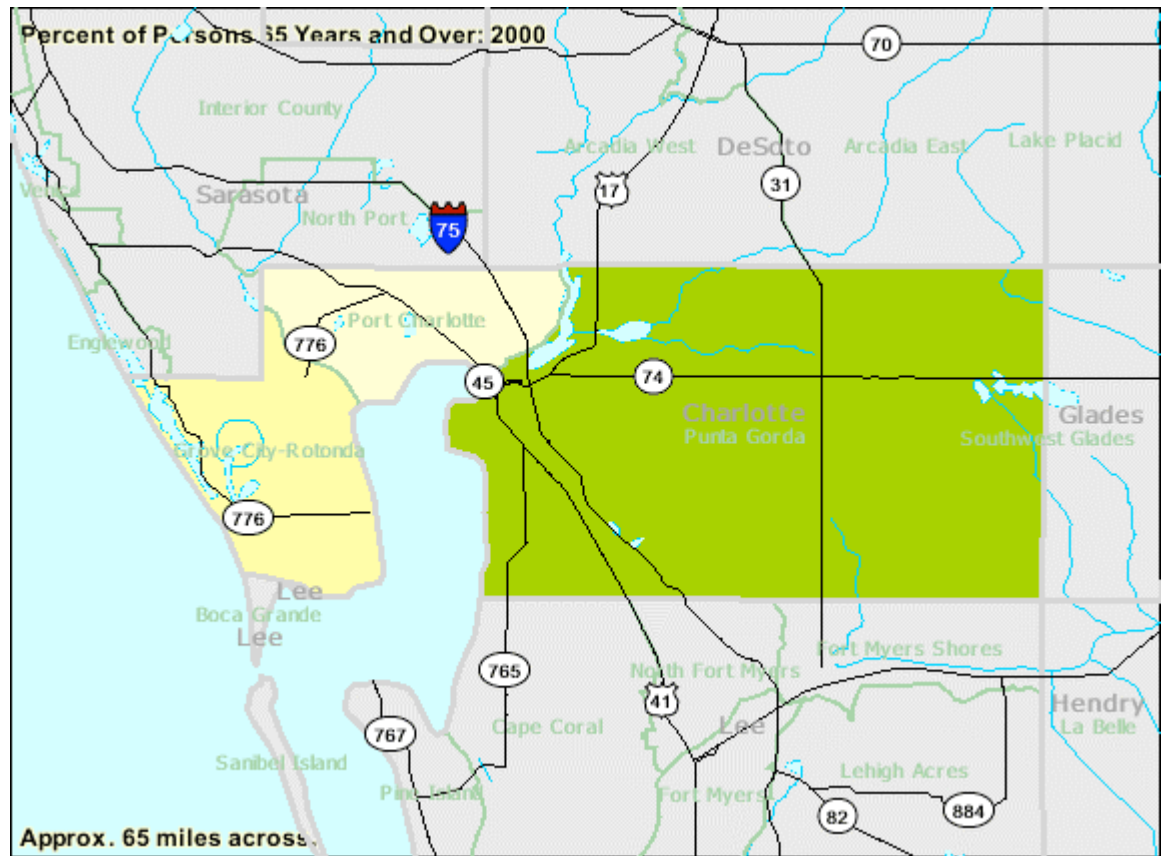


Figure 2

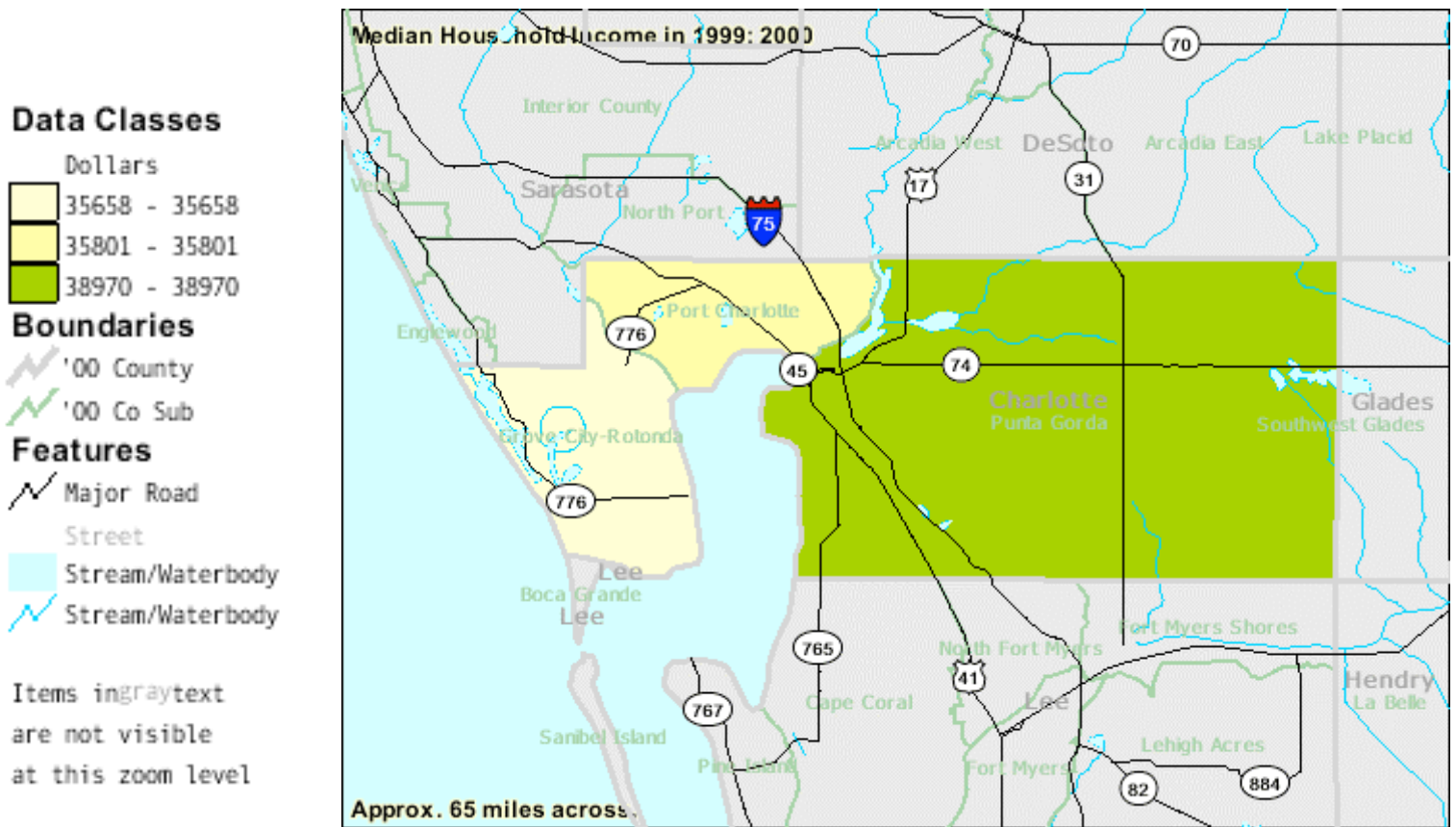


Figure 3

There is another factor in the equation when it comes to financial aid... reasons to deny a disaster victim financial aid. On FEMA's web site www.fema.gov under the "Apply for Assistance" link is a list (http://www.fema.gov/assistance/process/why_not_eligible) of all the potential reasons why FEMA can deny a victim financial aid. Under careful scrutiny, it turns out that many of FEMA's policies are repeats of the same reason, but are listed under different headings. The three reasons listed the most times are: there is a form, signature, and/or proof missing, a victim's insurance should cover the damage, and another resident of the household has already applied for aid (Fig. 4). This is not the whole compilation of why financial aid can be denied but just these few reasons leave enough cracks for people to fall into such as forgetting to document proof of damage amidst the recovery process.

Figure: 4

Why am I not Eligible for Assistance?

Missing information, forms, and/or proof of residence:

- **I69B-Ineligible - Signature not Obtained (90-69B):** The required signature or documents requested has not been provided.
- **IANS - Applicant statement/Authorization (90-69B) not signed:** The required signature or documents requested has not been provided.
- **IDNS-Self-declaration (90-69D) not signed:** The required signature or document requested has not been provided.
- **IISS-Ineligible - Insufficient Substantiation Submitted:** You have not provided enough documentation to support your application for assistance.
- **INP-Ineligible - Not Primary Residence:** You have not provided enough documentation to prove the home that was damaged was the home where you were living at the time of the disaster.
- **INSS-Ineligible - No substantiation submitted:** You have not provided enough documentation to support your application for assistance.
- **IOWN - Ownership Not Provided:** You have not provided enough ownership documentation to prove ownership
- **W69B-Withdrawn - Signature not Obtained (90-69B):** Your application has been withdrawn because we have not received the required signature or documents requested.
- **W69D-Withdrawn - Signature not Obtained (90-69D):** Your application has been withdrawn because we have not received the required signature or documents requested.

Insurance should cover disaster-related losses:

- **IINS - Ineligible due to insurance coverage:** Your insurance should cover your disaster-related losses.
- **IINSI - Ineligible:** All categories have appropriate insurance excluding flood, inspection completed - Your insurance should cover your disaster-related losses.
- **IINSN - Ineligible due to insurance, no inspection completed:** Your insurance should cover your disaster-related losses.
- **INFI-Ineligible - Has Flood Insurance:** Your insurance should cover your disaster-related losses.
- **INI-Ineligible - Ineligible Insurance:** Your insurance should cover your disaster-related losses.
- **INS-Insured:** Your insurance should cover your disaster-related losses.

Another member of the household has already applied:

- **IAW-Ineligible - Assisted with Household Member:** Our records show that another member of your pre-disaster household applied and received help for your losses.
- **IDUPA-Duplicate Application:** Our records show that a member of your pre-disaster household has already registered for help.
- **IDUPL - Duplicate losses awarded under another application:** Our records show that another member of your pre-disaster household has received help for your household's losses.

The victims of Hurricane Charley in Charlotte County had enough problems to face even without the factor of dealing with insurance companies. Even with FEMA aid the income level of the county made fully repairing a house a long and difficult process. Rebuilding should not be a long and difficult process. This research is important because if people had problems obtaining financial aid after Hurricane Charley then similar problems probably occurred in the other 2004 hurricanes and potentially the 2005 hurricanes like Hurricane Katrina.

Methods:

The main question for this research project is “Do disaster victims receive enough financial aid between FEMA and their insurance companies to fully repair their homes?” Other related questions for the research project include: “did the victims of Hurricane Charley receive all of the money they possibly could to rebuild their homes”, “are there loopholes in the system that FEMA and insurance companies took advantage of”, “what role did insurance companies play in distributing funds”, “who was more likely to receive money”, “what were the criteria for how much money people received”, “how many homes still need to be repaired”, “what are the implications of receiving so little money”, and “is there a way of delivering more aid to families who have lost their house?” The researcher’s hypothesis is that while some people do receive enough financial aid to fully rebuild their homes there are still many people who struggle with their finances to repair their homes even years after a disaster.

To answer the research question, the methodology of the research involved gathering statistics and plotting locations on a map. To be more specific, the research project involved gathering data from the Charlotte County GIS web page (http://www.ccgis.com/gis/ftp_download_page.html) on current households in Charlotte County as well as foreclosure data for Charlotte County and FEMA GIS data as to which areas of Charlotte County received damage and how high the damage was. After the data was gathered, two maps were created utilizing the ArcGIS 9 program by ESRI. The first map (Map 1) shows which areas were damaged and how bad the damage was. Then on a separate map (Map 2), the houses that are vacant are plotted. The analysis for the data involves utilizing the selection feature in the ArcGIS 9 program to narrow the tables down to only the vacant residents and

manufactured homes within the damaged areas and retrieving the number of vacancies that meet the above criteria.

Results:

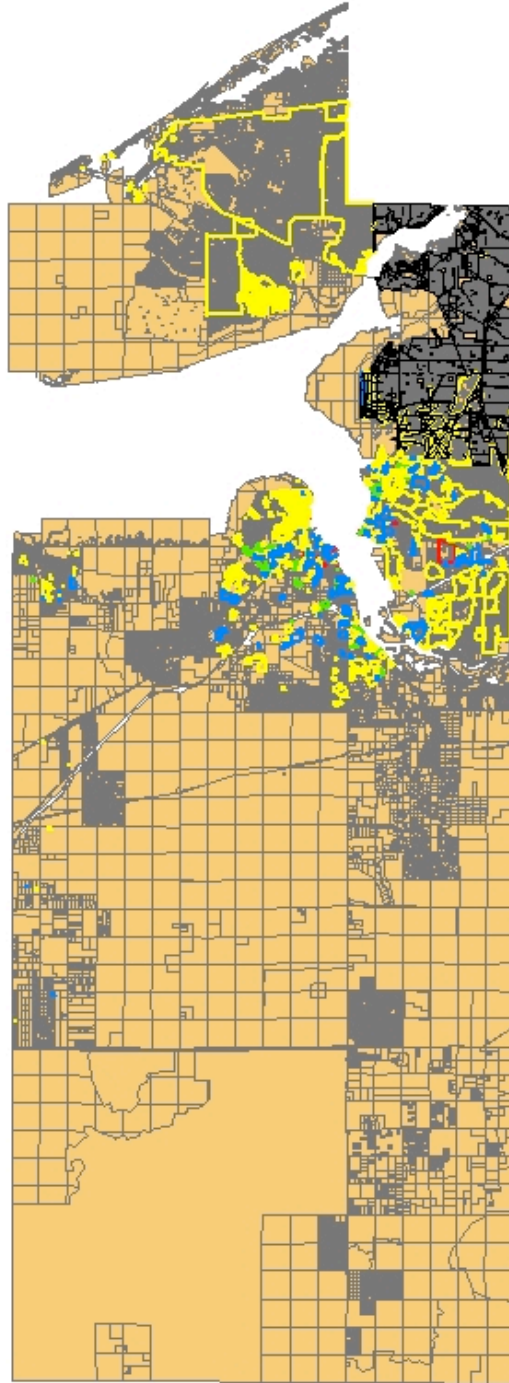
After analyzing tables 1, 2, and 3, it becomes clear that there are still approximately 6705 homes and 41 manufactured homes out of the 26,000 damaged or destroyed homes left vacant after Hurricane Charley within the areas that received damage. As a percentage, 26.92 percent of the damaged or destroyed homes are vacant. However, whether the homes are vacant due to damage from Hurricane Charley or not is unclear. Unfortunately, secondary data on which homes in Charlotte County were damaged or destroyed was unobtainable or non-existent during the period of this study. Further study as to whether the vacant homes are vacant due to hurricane damage or not is required by gathering primary data from each home. In addition to the percentage of homes left vacant in Charlotte County, research into FEMA policies and actions taken by insurance companies after Hurricane Charley reveals that obtaining enough money to repair or rebuild a house is next to impossible. FEMA does not have the funds to help people rebuild and insurance companies are more focused on their profits than providing their customers with the money they need to return their lives to normal.

Conclusion:

As stated above in the introduction, Charlotte County, Florida has a high elderly population (Fig. 2) with an average income between \$35,658 and \$38,970 (Fig. 3). FEMA did not provide enough financial aid and insurance companies cancelled thousands of policies after paying out as little as they could to their clients. What this study implies is if there were so many problems obtaining financial aid after Hurricane Charley, what about after the other 2004

hurricanes? What about the 2005 hurricanes? What about other disasters in general? Continued research on obtaining financial aid after a disaster may lead to best practice studies and changes in policy to make obtaining financial aid easier for disaster survivors.

Map 1



Map 2

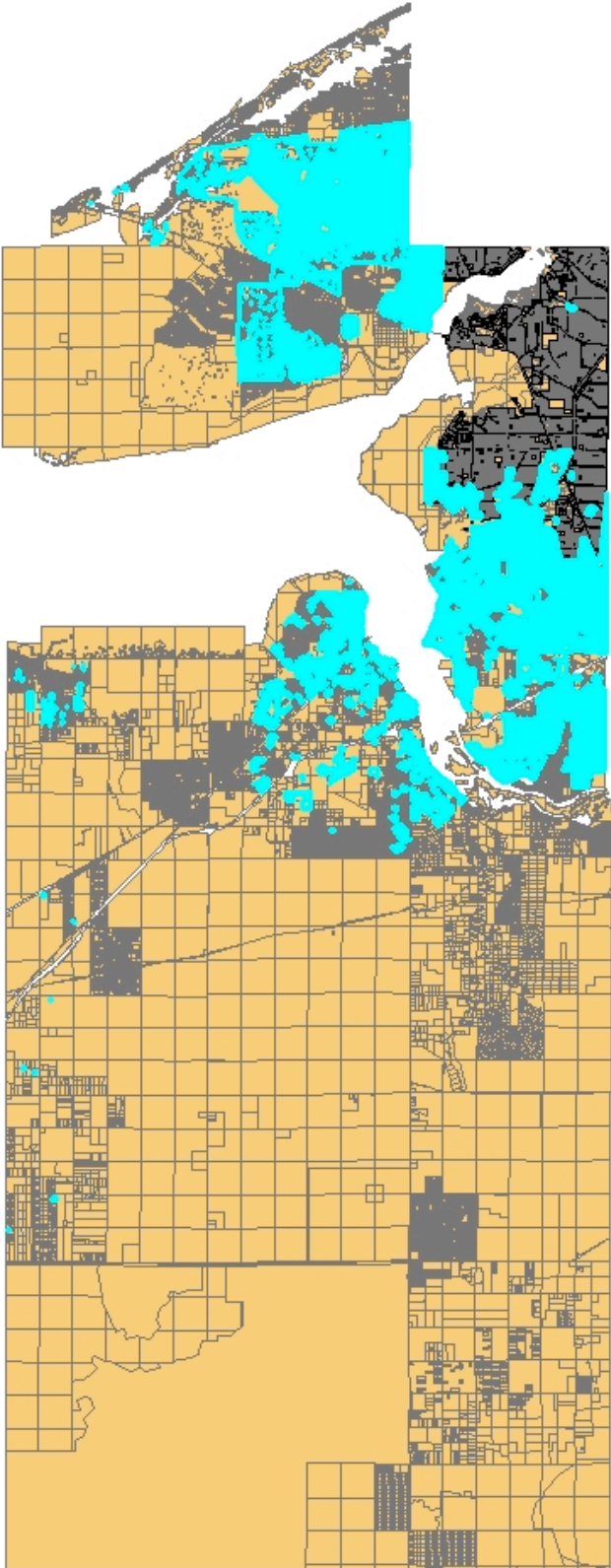


Table 1

Level of Damage	Vacant Residents in Damaged Area	Total Vacancies in Damaged Area
Catastrophic Damage	5	669
Extensive Damage	107	1386
Limited Damage	6363	41466
Moderate Damage	230	4202
Total	6705	47723
No Damage	6186	15117
Total with No Damage	12891	62840

Table 2

Level of Damage	Vacant MH-Resident Owned Parks in Damaged Area	Total Vacancies in Damaged Area
Catastrophic Damage	6	669
Extensive Damage	30	1386
Limited Damage	1	41466
Moderate Damage	4	4202
Total	41	47723
No Damage	0	15117
Total	41	62840

Table 3

Total Vacant Residents	20038
Total Vacant MH-Resident Owned Parks	45
Total Current Florida Residents	96065

References

- (2004, August 13). Retrieved June 10, 2008, from Mouseplanet Web site:
http://www.mpimages.net/mp/compressed/contributed_general/noaa_charlie_map.jpg
- (2004, August 23). Mapping & Analysis Center. Retrieved July 17, 2008, from FEMA Web site: <http://www.gismaps.fema.gov/2004pages/rsdr1539.shtm>
- (2006, March 21). Why am I not Eligible for Assistance?. Retrieved June 12, 2008, from Federal Emergency Management Agency Web site:
http://www.fema.gov/assistance/process/why_not_eligible.
- (2008). Charlotte County, Florida (FL). Retrieved June 12, 2008, from City-data.com Web site: http://www.city-data.com/county/Charlotte_County-FL.html
- (2008, July 2). Geographic Information System. Retrieved July 14, 2008, from Welcome to Charlotte County Florida Web site: http://www.ccgis.com/gis/ftp_download_page.html
- (2008, June 12). American Fact Finder. Retrieved June 11, 2008, from U.S. Census Bureau Web site: www.census.gov
- Allstate rate hike draws fire - Staff and Wire Reports . (2005, June 24). *Charlotte Sun*,
- Census 2000 TIGER/Line® Data. Retrieved July 22, 2008, from ESRI GIS and Mapping Software Web site:
http://arcdata.esri.com/data/tiger2000/tiger_final.cfm?RequestTimeout=500
- Hunter, J. Robert (2007, January 8). Insurers increase profits to record levels by overpricing. Retrieved July 22, 2008, from Consumer Federation of America Web site:
http://www.consumerfed.org/pdfs/White_Paper_Releaseupdate010807.pdf

- Pasch, Richard J., Brown, Daniel P., & Blake, Eric S. Hurricane. National Hurricane Center, Retrieved June 2, 2008, from <http://www.nhc.noaa.gov/2004charley.shtml>.
- Payne, Melanie (2007, October 22). FEMA aid went mostly to the poor - Twice the help after '04 storms still not enough, advocates say. Charlotte Sun, Residents trying to pick up the pieces. (2004, August 22). Charlotte Sun,
- Theiss, Mike (2004, August 13). Ultimate Chase. Retrieved June 7, 2008, from www.ultimatechase.com/.../Hurricane_Charley.htm Web site:
http://images.google.com/imgres?imgurl=http://www.ultimatechase.com/Chase_Accounts/Images/Hurricane_Charley/Charley_Location.jpg&imgrefurl=http://www.ultimatechase.com/Chase_Accounts/Hurricane_Charley.htm&h=351&w=457&sz=149&hl=en&start=49&um=1&tbnid=MsdPkWOQSkVVgM:&tbnh=98&tbnw=128&prev=/images%3Fq%3D%2522%2Bhurricane%2Bcharley%2522%26start%3D36%26ndsp%3D18%26um%3D1%26hl%3Den%26rlz%3D1T4TSHAenUS229%26sa%3DN