

Panama City PDRP Case Study

Introduction

The City of Panama City is situated along the Northern coast of the Gulf of Mexico in Bay County, FL. It is a mid-size city with a population of approximately 37,000 residents. It is joined in the county by the Cities of Callaway, Lynn Haven, Mexico Beach, Panama City Beach, Parker and Springfield. Panama City is the largest in residential population of the eight cities and serves as the county seat. The community as a whole is probably best known by Panama City Beach and its famous beaches. The beach area is considered the tourism epicenter of the county focused on water and beach related industries, while the city's economic focus is mostly industrial, government and retail-related.

Panama City was selected as the first pilot community in Florida's Post-Disaster Redevelopment Planning Initiative. The city was chosen by the Statewide Focus Group due to the fact that it contains many of the components of a typical community in the state that might be a priority for post-disaster redevelopment planning. Panama City is a coastal community, medium in size with an economic focus on both tourism and industry and has recognized historical significance as it contains the community of St. Andrew's, a Waterfront's Florida Partnership Community. This case study documents the planning process taken by the city as well as their relationship with the county during the planning time period of October of 2007 to October of 2008. Both challenges and successes have been included in an attempt to gain from both experiences and apply this knowledge to the development of statewide or best practices with regards to Post-Disaster Redevelopment Planning.

Vulnerability

Like all communities in Florida, Panama City is no stranger to storms, and the City's experience with and vulnerability to these storms is evident in their determination to undertake the post-disaster redevelopment planning process. Over the past few years coastal storms, major flooding, and tornadoes have torn apart neighborhoods and damaged public infrastructure, causing millions in damage. In 1995, Hurricane Opal alone caused \$6 billion in property damages in northwest Florida and in 2004, Hurricane Ivan made landfall, resulting in \$19.2 billion in damages. While Panama City was not directly hit by either of these storms, the proximity of their landfall and the damage received from localized flooding from storm surge, wind and tornadoes was overwhelming. The city has fortunately been spared a direct hit from a major disaster event over the past few years, however as is evident from the proximity of the Opal and Ivan landfalls, this in no way predicts future vulnerability.

The vulnerability analysis for this plan was unique in the fact that it was conducted at a more detailed level that gave a better picture of the vulnerability of the city and what impacts the city may expect from a disaster. While most current hazard vulnerability analyses are completed at the county-level, this analysis took a closer look at the city itself and incorporated information that is not normally required or seen in Hazard Vulnerability Identification and Risk Analyses required in FEMA hazard planning

guidance. This information includes an analysis of the vulnerability of the housing stock, business structures, socio-economic factors and public infrastructure and facilities.

As seen in **Figure 1**, there are many parts in the city vulnerable to storm surge and/or flooding. In fact, of the land within Panama City, 44% is within a storm surge and/or flood zone. This includes important areas such as the downtown area of Panama City and both hospitals located within the county. Much of the retail and industrial corridors located within the city lie within this region. Major industrial employers such as Oceaneering and Eastern Shipbuilding as well as major educational employers like Gulf Coast Community College and many schools fall within these zones. Also located within these zones are big box retailers like Wal-Mart, K-Mart, Home Depot and Publix. These retailers are important because they provide staple goods that would be essential for short and long-term recovery in the community, and they are also considered to be major employers. Also, many of the residential areas are located within these zones and could be subject to flooding and/or storm surge during a coastal storm or localized flooding event.

In addition to flooding and coastal storms, the analysis revealed that there is a high level of risk from wind events, such as tornadoes and tropical storms, due to the age of residential structures within the community. As show in **Figure 2**, a majority of Panama City's housing stock are single-family homes built prior to 2001, when the Florida Building Code was adopted. While some of these homes may adequately stand up to hurricane or tornado force winds, history has shown that homes meeting recent building codes are less likely to sustain damage from a hurricane. The recovery of housing stock following a disaster event is one of the essential components of an effective and successful long-term redevelopment process. The vulnerability of the housing stock directly impacts when people are able to return to their homes, which indirectly impacts the re-opening of business and rejuvenation of the local economy. Knowing the vulnerability of the housing stock can enable the city to plan for temporary housing needs, assist residents with post-disaster repairs and rebuilding and make policy decisions that will result in more sustainable redevelopment.

In addition to the general vulnerabilities of local businesses and residential structures to flooding and coastal storms, this analysis also points out all known vulnerable historical structures, noting that 58% of historical structures located within the city are within a storm surge zone. This is important to note due to the fact that most historic structures have a high risk of sustaining damage due to the lack of modern building codes when they were constructed.

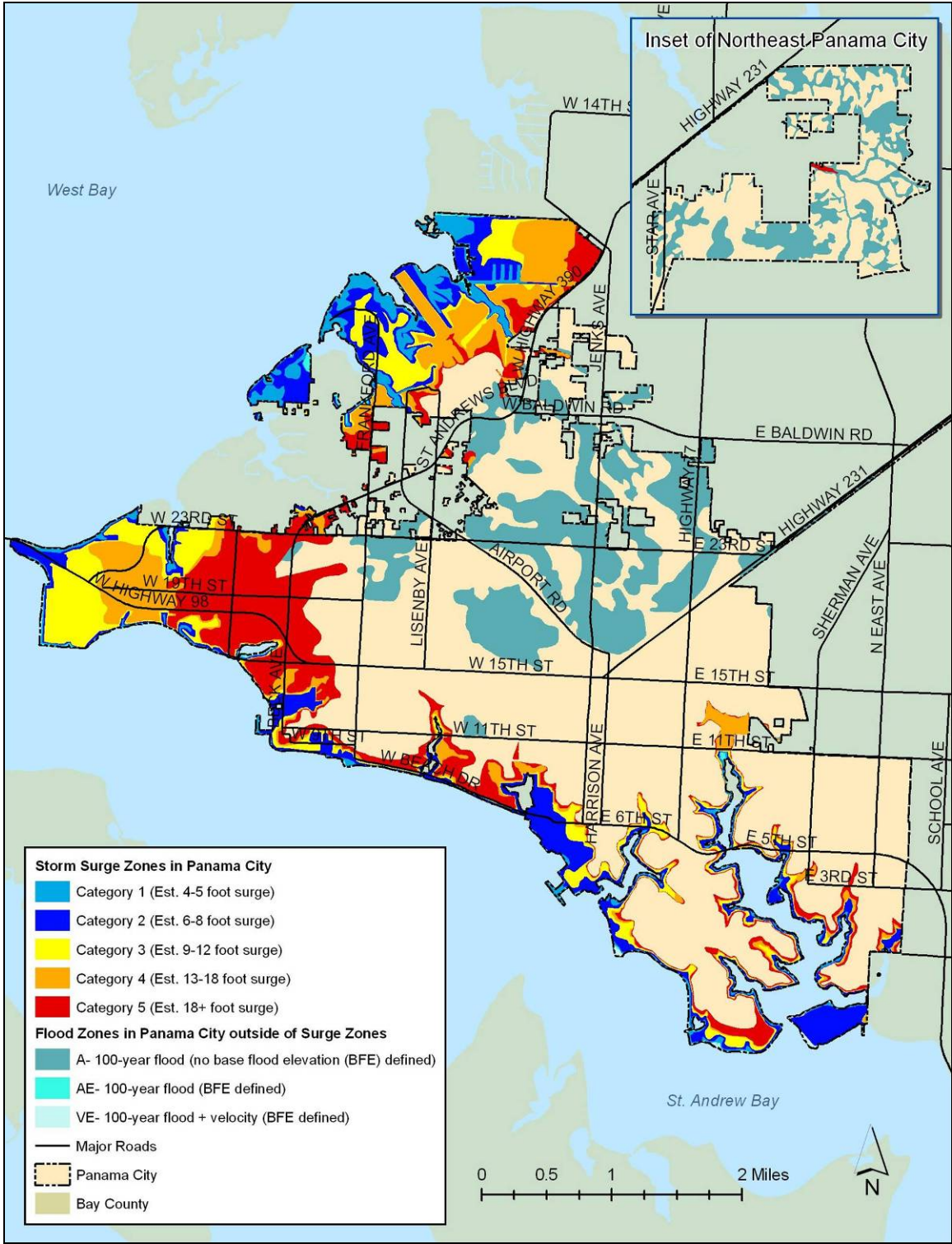


Figure 1. Storm Surge and Flood Zones in Panama City.

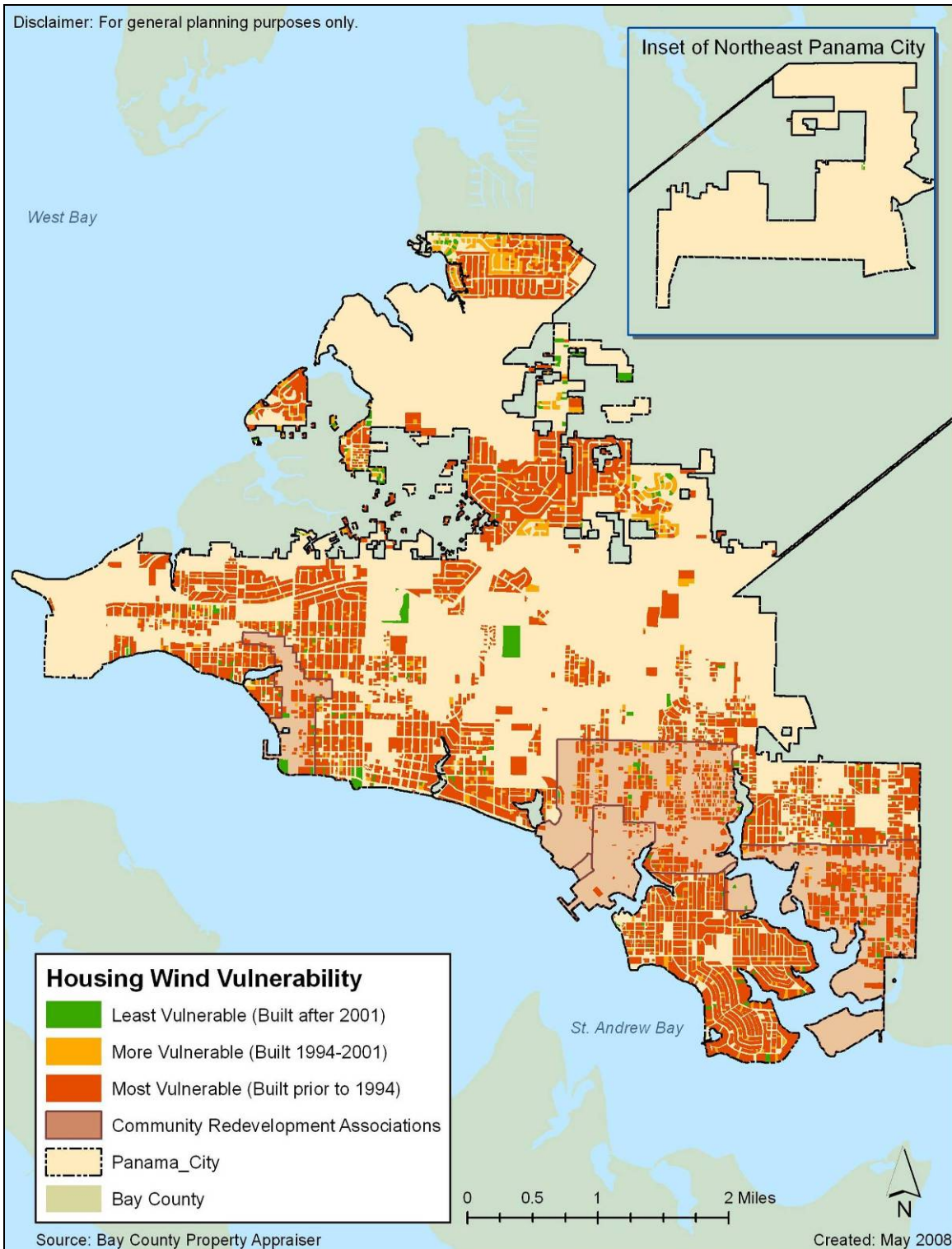


Figure 2. Levels of Wind Vulnerability of Housing Stock in Panama City.

The local economy was also included in this analysis, noting the jobs by industry in Bay County as a whole, the number of major employers located within a storm surge or flood zone, and the correlating number of employees for each vulnerable company or agency and location within the city. Level of wind vulnerable with regards to business structures was also detailed. This analysis may be further expanded upon in the future if more specific data is obtained that helps to develop indicators for potential economic vulnerabilities.

Realizing the disasters have been shown to magnify existing social and economic needs within the community, the city included a socio-economic analysis that details the poverty levels found within the community, as well as the location of those that have high and low percentages of residents living below poverty level. Homeownership rate for minority and elderly populations have also been included to better enable Panama City to address concerns for those with special needs during the recovery process.

Finally, as one of the goals of the Panama City local comprehensive plan is to limit public expenditures in vulnerable areas, public infrastructure and facilities were also examined to determine those to be at high risk for damage. This analysis will allow the community to note which facilities are most vulnerable and decide if pre or post-mitigation actions should take place to minimize the impacts to public facilities.

Unique Factors and Lessons Learned

The Panama City PDRP effort was unique in the fact that it was the first pilot to launch the planning process and the only city to be chosen as a pilot as a part of the statewide initiative. All other Pilot PDRPs were conducted at the countywide level and began as the final drafts of the Panama City plan were being reviewed by the local working group and Statewide Focus Group. The city was also unique in the fact that it was 100% funded as a NOAA project, whereas other participating pilots were required to contribute at least a 25% monetary or in-kind match, as is required by the FEMA Hazard Mitigation Grant Program.

The PDRP Working Group made the decision to include a city as pilot as there was a debate on what level PDRP planning was most appropriate: municipal versus countywide. Since the local comprehensive planning process is conducted at the municipal level, some members of the group thought that if the PDRP were to be included as a component of the local comprehensive plan that it was most appropriate to have a plan curtailed to the individual needs of the city. Others pointed out that since other important plans, including the local hazard mitigation plan (known better as the Local Mitigation Strategy or “LMS” in the State of Florida) and the local Comprehensive Emergency Management Plan (CEMP) were conducted at the countywide level, that this would be the better fit for the PDRP.

The decision to conduct post-disaster redevelopment planning at the municipal level in Panama City, FL produced many challenges for the city, but from these challenges came opportunities to learn about the overall planning process and lead to some major successes for the city as well. The challenges faced by the community included a need for education on the subject of long-term recovery and redevelopment and a need to create a multi-jurisdictional and multi-disciplinary network of plan participants. These challenges were time consuming at the beginning of the planning process and reduced

time available for more detail oriented action planning later in the year-long planning process.

Post-Disaster Redevelopment Planning was a new concept for many participants in the city and county. As this subject integrates many different long-term recovery concepts including mitigation planning, economic redevelopment planning and emergency management, it was found that very little prior coordination on how these efforts interact existed. Working group members were knowledgeable of their own roles and responsibilities in a post-disaster environment, though many responsibilities were not laid out into a written plan, however very few had given thought to how all of their roles might best interact post-disaster to achieve the best long-term recovery results for the city and/or county. Due to the newness of this concept to the city, much time was devoted during the planning process to how these roles and responsibilities could best be coordinated.

This initial coordination and education effort should be noted as an overall success for the county and city as the end result was a better understanding of these roles and responsibilities and how they might interact to recover as quickly and most efficiently as possible. However, due to the amount of time given to education on this topic, it left very little time at the end of the planning process timeline to create pre-disaster and post-disaster actions and left no time for the implementation of these actions. As the Working Group began to understand their roles, these actions became much more evident, but due to grant deadline restrictions there was little time left to begin to implement the plan for the future. More time may have allowed them to get further in the implementation of this planning effort.

One of the main challenges faced by the city was the lack of staff time to dedicate to this effort. The post-disaster redevelopment planning effort is a long involved process that requires a large amount of local staff time and participation, which was simply not available in a city of this size. With the resignation of a staff planner and budget cuts on the horizon, resources were stretched to the max in the city and it was difficult for planners and other Working Group members to give attention to projects that didn't have an immediate regulatory need or didn't result in dire consequences if not completed within a certain timeframe.

In addition to this, many services that play an integral role in the long-term redevelopment of a community were conducted on a county-wide level in Bay County instead of being focused on the individual city. For example, both the emergency management (which includes short-term recovery and mitigation) and economic development planning are conducted at the countywide level. Staff members of countywide organizations participated in the development and review of the planning effort, however, they were hesitant to take on too much responsibility as they had an obligation to the overall county. There was a general theme of concern that by focusing attention on one single municipality, they could be seen as showing favor which may lead to serious political consequences for these agencies if a disaster were to strike the county and bring attention to the pre-disaster efforts in Panama City that were not conducted in other areas of the county.

In addition to the fear of showing favoritism to any one jurisdiction, there was also concern that the City of Panama City may not be as vulnerable as other portions of the county which have a higher risk to storm surge and economic impacts. The

unincorporated areas of Bay County as well as the other municipalities in many ways function together as a whole in terms of the economy and recovery efforts and therefore it was hard to separate the City of Panama City's needs from the others. For example, Tyndall Air Force Base and Panama City Beach are both major economic drivers for the county, however neither are located within Panama City. If Panama City Beach were to suffer damages from a disaster, thus impacting the tourism industry or if Tyndall Air Force Base were to close, it would have a significant impact on the City of Panama City and surrounding communities as well. When focusing on one sole city, it is hard to incorporate these major impacts as it becomes more evident where the lines between the communities blur.

A lesson learned from this challenge is that disasters have regional impacts that go beyond the boundaries of one city. It could even be argued that the impacts are shared among counties as well. As resources are often found on regional levels (counties or even county groups such as regional planning councils), the planning for the long-term redevelopment of areas may be best conducted at the regional level.

It should also be noted however that during the development of the Panama City PDRP the county was undergoing its required updates to the Bay County CEMP and Bay County LMS. Also, a new Bay County Emergency Operations Facility had newly been opened and there seemed to be some uncertainty as to how operations would function in this new environment as they had yet to have a need for emergency activation at the new facility. Ideally, the Panama City PDRP Working Group should participate in the update of both of these facilities in order to ensure that the city is best functioning with the county mitigation and long-term recovery plans.

Result

The successes and challenges that were a result of this planning effort proved to be invaluable to the overall Statewide PDRP Initiative as well as to the city. This planning process did not only test the theory of what level of government should undertake this process, but it also served as a great example for the other countywide pilots that followed shortly in their footsteps.

On October 28, 2008 the Panama City Planning Manager, assisted by the State of Florida Department of Community Affairs representative and the consultant, presented the end results of this planning effort to the Panama City Board of Commissioners and recommended it for adoption and implementation. The Commission unanimously agreed to adopt the plan by resolution and move forward with this planning effort and continue on with implementation, assigning further work on the plan's implementation to city staff. Commissioner Kathryn L. Hanline made the motion for the plan's approval and adoption stating that, "We've always planned ahead, and I've been very proud of that, and I'd like to see us continue to do so."

While the city recognized the importance of this planning effort thus far, the City Manager pointed out that the adoption of this plan commits the city to further working with the established sub-committees and county agencies and possibly other municipalities to carry out the actions needed to prepare an actual operational plan that could further detail the implementation of the plan in the post-disaster environment. The City Commission agreed that the continuation of this effort was important and wanted to further explore the conversion of this document into a countywide document. There was

some concern over whether or not the development of a county-wide PDRP would allow the city to still maintain overall control of their planning efforts and funding that would be available to the county to assist during the short-term and long-term redevelopment process. Staff assured the commission that the conversion of this document to a countywide strategy would only work to ensure that the community was recovering in the most efficient manner and taking advantage of coordination opportunities when available between all municipalities as well as the county.

It is uncertain at this time whether or not the plan will be converted into a countywide document, however, the city is committed to having further conversations with Bay County concerning this opportunity. Past informal conversations have led the city to believe that Bay County may be interested in consolidating this plan with their future Post-Disaster Redevelopment Plan when they decide to undertake this effort.

While the plan received attention from media sources and was presented to various audiences, it has not yet been presented to the public to gauge public opinions and receive input. As a part of the plan, the city developed a detailed public outreach strategy and plans to implement this during the implementation stages of the plan. While undertaking the planning process, committee members did not yet feel as if they had enough information to confidently present this as a working framework for the community as they felt they were not yet informed enough on the outcomes of this process to be able to deliver presentations and answer questions.

The overall success of the City of Panama City's PDRP is that the entire community came together and now has a better understanding of this issue and how they will continue in the future with this effort. The city is pleased that some very hard questions are being asked with regards to both the pre and post-disaster period and is committed to further implementing this effort down the road. As this was the first time community members met to discuss these issues, the overall task was daunting in such a short timeframe as it took many members a while to grasp the concepts and determine how their role best integrates with that of other agencies during the long-term recovery and redevelopment period. The city now has a concrete understanding of this process and a detailed framework to assist them as they are committed to continue this effort in the future.