Section 7. Bay County and Municipalities - Additional Data and Analysis

7.1 Introduction

Although it is difficult to predict the costs and potential locations of damage from hurricane winds/tornado, sinkholes, and tsunamis as described in the previous sections, the LMS team determined that those risks are fairly equal for all municipalities and fire districts. However, the land use patterns and geography make some jurisdictions more vulnerable to *flood hazards* than others. In addition, more accurate data is available on flooding and the costs and causes of floods. For this reason, the team was able to provide an individualized risk assessment for each jurisdiction's existing land uses and geographic relationship to the potential flood hazards. This information is detailed on the following pages and includes "land use – flood area" maps for each County Fire District and Municipality. These maps the existing land uses located within each identified hazard area. Also, each of these "land use – flood area" maps is supplemented with data tables that provide the total acreage, number of parcels, and dollar value this is potentially at risk within the Coastal High Hazard Areas, the FEMA designated flood zones, and the mapped Surge Zones.

7.2 Population Assessment

The County's population is categorized as 7 municipal jurisdictions and the unincorporated area of Bay County. The unincorporated area of Bay County has been subdivided into 10 fire districts for ease of reference in this document. The population for each jurisdiction is shown on the charts on the following page.

Bay County's Local Mitigation Strategy is a comprehensive multi-jurisdictional plan addressing the relevant hazards of the 7 incorporated jurisdictions and 10 Bay County unincorporated fire districts. For each incorporated jurisdiction and unincorporated fire district the risk assessment will map and quantify the potential impacts of each natural hazard that has a moderate to high probability of occurring.

Chart 18

Incorporated General Population Counts (pop. from 2008 BEBR census estimates)

Jurisdiction	Population
Callaway	14,656
Lynn Haven	16,614
Mexico Beach	1,331
Panama City	37,457
Panama City Beach	13,453
Parker	4,650
Springfield	8,852

Incorporated Areas Fire Districts (pop. from 2000 census)

Municipality	Population
Callaway	17,593
Lynn Haven	16,372
Mexico Beach	1,017
Panama City	2,752
Panama City Beach	36,417
Parker	4,653
Springfield	8,999

The following 3 municipal fire districts extend beyond the city limits into unincorporated areas of the County:

Chart 19

Incorporated Municipality	Unincorporated Area/Fire District
Callaway	Unincorporated Callaway – East Bay Fire Dist.
Mexico Beach	Unincorporated Mexico Beach Fire Dist.
Springfield	Unincorporated Springfield Fire Dist.

Census data not available for these overlapping districts

Chart 20 Unincorporated Areas / Fire Districts
(pop. from 2000 census)

Bay County Fire District	Population
Entire Unincorporated County	72,294
Bayou George	7,827
Fountain-Greenhills	3,355
Hiland Park	6,542
Northwest Side	4,759
Sandhills	2,031
Southport	6,508
Thomas Drive	15,642
West Bay – Woodville	839
West End	3,540
Youngstown-Bear Creek	1,685

In the following pages, Bay County, section (7A), offers a history of the County, existing plans and studies as they apply to the hazards, a copy of the Floodplain Management Ordinance, CIP, CRS Program, flood hazard data, and other relevant documentation.

Following Section 7A, Sections B - H will focus on each municipal section including a brief introduction to the city, as well as existing plans and studies as they apply to the hazards, a copy of the Floodplain Management Ordinance, CIP, CRS Program, flood hazard and other relevant documentation.

Section 7A. Bay County

7A1. Introduction

Bay County is a coastal county with a terrestrial area measuring approximately 764 square miles in the Florida Panhandle along the Gulf of Mexico. Bay County derives its name from St. Andrew Bay that is part of a large complex of inland surface waters that include St. Andrew Bay, East Bay, West Bay, and North Bay along with their tributaries that include many named bayous and creeks. Bay County's terrain is relatively flat and ranges in elevation from sea level to almost 200 feet in its northern section.

Historical records place Spanish explorers in Florida as early as 1513, with the British and French not far behind. The British had ambitious plans for Florida. First, it was split into two parts: East Florida, with its capital at St. Augustine; and West Florida, with its seat at Pensacola. British surveyors mapped much of the landscape and coastline and attempted to attract white settlers by offering land on which to settle and help for those who produced products for export.

The two "Floridas" remained loyal to Great Britain throughout the War for American Independence. However, Spain—participating indirectly in the war as an ally of France—captured Pensacola from the British in 1781. In 1784, it regained control of the rest of Florida at the end of the American Revolution.

When the British left Florida, Spanish colonists as well as settlers from the newly formed United States came pouring in. Many of the new residents were lured by favorable Spanish terms for acquiring property, called land grants. After several official and unofficial U.S. military expeditions into the territory, Spain formally ceded Florida to the United States in 1821.

Bay County was part of the West Florida region before East and West Florida were merged and became an organized territory on March 30, 1822, under military governor General Andrew Jackson. William Pope Duval became the first official governor of the Florida Territory and soon after the capitol was established at Tallahassee. By an Act of the State Legislature, Bay County was created on July 1, 1913, from parts of Calhoun, Washington, and Walton counties becoming the 49th county in Florida.

The LMS Team extensively reviewed the work and projects completed by the Bay County Planning and Zoning Department, Engineering Department, and the Builders Services Department. These departments assist in achieving the goals of the LMS Plan, and a summary of how these departments serve the LMS is outlined below.

7A2. Review of Existing Plans, Studies, Reports or Technical Information:

(a) How the Bay County Planning and Zoning Department and Comprehensive Plan support the LMS Goals.

The Bay County Planning and Zoning Department assigns a permanent member to the LMS & CRS Teams. This individual serves as the CRS Coordinator for the County, and the LMS Assistant. In this capacity she also assists the LMS Vice-Chair in reviewing Comprehensive Plan and Land Development Regulations for consistency and support of the LMS program. This staff

member also assists the public regarding FEMA map questions, advises on procurement of ECs and when applicable, counsels on the procedures for application to FEMA for a Letter of Map Amendment (LOMA or LOMR-F), and promotes the purchase of flood insurance.

The Bay County Comprehensive Plan strongly supports the Local Mitigation Strategy policies. Broad examples include:

- The Capital Improvements Element supports the avoidance of public expenditures within the Coastal High Hazard Area.
- The Coastal Management Element includes requirements for the Land Development Regulations to include regulations to prohibit development from compounding hazards and their risks.
- The Conservation Element addresses wetland protection, and suggests enforcement for the conservation of these wetlands to be included in the Land Development Regulations.

Further *specific* examples of Comprehensive Plan objectives and policies are grouped into 3 hazard mitigation areas such as storm surge, flood hazard and combined hazard:

Storm Surge

Objective 4.11: Assist and support efforts by FDOT and the MPO toward improving major State highway access into Bay County to provide more effective and efficient transportation movement and hurricane evacuation. (Transportation Element)

Policy 4.11.1: Hurricane evacuation routes are identified and shown on the Future Transportation Map Series

Objective 6.15: Restrict development that will damage or destroy significant dunes (as defined at 62B-33.002(13), F.A.C.) (Conservation Element)

Policy 6.15.1: Developers of beachfront projects shall make every effort to avoid damaging significant dunes. Where such damage is unavoidable, the significant dune must be restored and revegetated to at least pre-development conditions. Mitigation required as a result of a DEP Coastal Construction Permit shall be presumed to satisfy dune restoration requirements.

Objective 7.4: Restrict development that will damage or destroy significant dunes (as defined at 62B-33.002(13). F.A.C.) unless appropriate mitigation measures are undertaken. (Coastal Management Element)

Objective 7.5: Institute beachfront construction standards that will protect coastal resources and minimize the potential for damage caused by coastal storms.

Policy 7.5.1: All development undertaken seaward of the Coastal Construction Control Line (CCCL) shall be in strict compliance with Ch. 62B-33, F.A.C. Other development undertaken within 1500 feet of the CCCL must be undertaken in compliance with the Coastal Zone Protection Act. (§161.55 F.S.).

Objective 7.6: Define and establish the "Coastal High-Hazard Area" (CHHA). (Coastal Management Element)

Policy 7.6.1: The CHHA will be all land area lying within the Category 1 Hurricane Evacuation Zone.

Objective 7.7: Restrict development in the "Coastal High-Hazard Area" (CHHA) and limit public expenditures that subsidize development within the CHHA. (Coastal Management Element)
Policy 7.7.2.: Public subsidy of infrastructure for development in the CHHA shall be limited to the demand that will result from build-out at 15 du/acre. This policy shall not preclude private investment for infrastructure in the CHHA.
Policy 7.7.3: High risk developments such as nursing homes, convalescent centers, hospitals, mobile home parks, subdivisions, or RN parks shall not be located in the CHHA.
Policy 7.7.4: Use local, state, and federal funds as may be available to purchase or lease large tracts of undeveloped land in the CHHA so as to reduce the development potential of these areas.
Policy 7.7.5: The County shall not accept dedications of roads, water and sewer facilities, or other public facilities in the CHHA unless specifically provided for in an enforceable development agreement.

Objective 7.8: Restore eroded or damaged beach and dune systems when financially feasible. (Coastal Management Element)
Policy 7.8.1: Require restoration of damage beach and dune systems as part of new beachfront development projects, and participate in joint federal, state and local beach nourishment projects when financially feasible.
Policy 7.13.2: Capacity of public infrastructure shall not be increased on Coastal Barrier Resources consistent with the Coastal Barrier Resources Act (U.S. Code, Title 16. Chapter 55).

Objective 7.16: The County shall maintain a roadway clearance time for hurricane evacuation of 24 hours for category 4-5 storms. (Northwest Florida Hurricane Evacuation Study, July 1999). (Coastal Management Element)
Policy 7.16.2: Improve coordination between the County and State agencies relative to maintaining or improving hurricane evacuation.

Objective 11.3: Restrict development in the "Coastal High Hazard Area" (CHHA) and limit public expenditures that subsidize development within the CHHA. (CIP Element)
Policy 11.3.1: Residential density in the CHHA will be restricted to a maximum of 15 dwelling units per acres (15du/acre) in areas where adequate infrastructure exists to accommodate that level of development.

Flood Hazard
Objective 5E.10: Establish specific provisions for the regulation of stormwater runoff. (Stormwater Management Sub-Element)
Policy 5D.10.6L: Require evaluation of flooding that may be caused by the development of vacant land adjacent to existing developed areas, including adjacent building lots in subdivisions.
Policy 5E.10.1.1: Prohibit the unauthorized obstruction of natural or man-made drainage ways.
Policy 5E.10.1.7.b: For purposes of flood attenuation, all development projects shall be designed and constructed so as to accommodate the 25-year critical duration storm event as outlined in the FDOT Drainage Manual. This requirement shall not apply to the construction of single-family, duplex, triplex, or quadraplex dwellings and customary accessory uses. (Stormwater Management Sub-Element)

Objective 5E.11: Continue eligibility for and participation in the National Flood Insurance Program (NFIP). (Stormwater Management Sub-Element)

Policy 5E.11.1: The County will continue participation in the NF1P and will use its Flood Damage Prevention Ordinance to reduce the potential for flooding.

Objective 6.7: Conserve and manage natural resources on a system wide basis rather than piecemeal.
Policy 6.7.4: No building or structure can be located closer than thirty feet from a DEP wetland jurisdiction line, mean high water line, or ordinary high water line except for piers, docks or similar structures and an attendant ten foot wide cleared path through the wetland for purposes of providing access to such structure, or wetland crossings required to connect dry, upland parcels. All naïve vegetation, if any exists, will be preserved within the 30-foot setback area. This requirement, including possible alternatives, may be addressed in the Land Use Code.

Objective 6.12: By 2000. institute a program using GIS that will identify lots or parcels containing wetlands based on actual jurisdictional interpretations, and develop a monitoring program to determine loss of wetlands. (Conservation Element)
Policy 6.12.1: The County will use its GIS to institute a wetlands identification and monitoring program.

Objective 6.1.3: Reduce the potential risk to lives and property from flooding by using hazard mitigation strategies and special building construction practices. (Conservation Element)

Objective 6.11: Protect and conserve wetlands and the natural functions of wetlands. (Conservation Element)
Policy 6.11.3.2. Developers will design and construct development projects so as to avoid activities that would destroy wetlands or the natural functions of wetlands.
Policy 6.13.2: The County will use its Local Hazard Mitigation Strategy, when completed, to reduce the potential for flood damage.
Policy 6.13.3: The County will use its Flood Damage Prevention Ordinance to ensure that structures built in flood zones are properly elevated and constructed so as to reduce the risk of flood damage.
Policy 6.13.4: The County will adopt regulations to ensure that new development does not create a flood hazard to existing or downstream development.
Additional regulations for flood mitigation within the unincorporated areas of the County is the requirement of a 1-foot freeboard, meaning that the top of the lowest floor must be one foot higher that the base flood elevation, in all flood zone areas. Those areas not designated by FEMA as a flood zone must construct the lowest floor at least one foot above the crown of the road.

General Other/Combined Hazards
Policy 5D.6.1.4: Temporary C and D landfills may be allowed in Urban and Suburban Service Areas during declared emergencies. (Solid Waste Management Sub-Element)

Objective 6.18: Provide landowners with beneficial use of their property when environmental restrictions cause the loss of full development potential through use of innovative and flexible development strategies. (Conservation Element)
Policy 7.13.2: Capacity of public infrastructure shall not be increased on Coastal Barrier Resources consistent with the Coastal Barrier Resources Act (U.S. Code. Title 16. Chapter 55).

Objective 7.14: By 2001. Establish a comprehensive pre- and post disaster development strategy. (Coastal Management Element)

Policy 7.14.1: The County will establish a comprehensive pre and post disaster redevelopment strategy that will include land purchase, hazard mitigation. building practices and other related considerations. This strategy will be incorporated into this Plan upon completion and approval.
Policy 7.16.1: The County will coordinate with the State Division of Emergency Management (DEM) as specified in Section 252.36. F.S., toward the implementation of the state comprehensive emergency management plan.

7A2 (b) How the Bay County Engineering Department and Stormwater Management Plan Support the LMS Goals:

The Engineering Department's Stormwater Management Group works closely with the public and the Roads and Bridges Department to monitor stormwater problems that may cause flooding from drainage ditches, roads and other sources, and designs and implements solutions to such problems. While the Stormwater Engineer is not a permanent member of the LMS Team, she is available to provide reports and updates to the Team, and has served as a subcommittee advisor as required. She is a permanent member of the CRS Team, and provides the majority of the pertinent studies and reports through the CRS group to the LMS Team. The Engineering Department maintains a website providing information to the public on how to report drainage and stormwater problems. The Stormwater Engineer will assist the Vice-Chair of the LMS team by researching grant opportunities for mitigation projects, maintaining the Master Stormwater and Strategic Stormwater Plans, and by engineering basin studies to improve the FEMA DFIRMS.

7A2(c) The following stormwater mitigation projects have been approved by the Board of County Commissioners and included in the current stormwater CIP:

Chart 20 Approved Year 2010 - 2014 Stormwater Capital Improvements Program Projects

FY 2010 Stormwater CIP					
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Priority Stormwater Projects (erosion, stormwater control): Scotts Ferry Road Bear Creek Road Linger Longer Road Webber Road Tram Road	$450,000	$520,000	$400,000	$350,000	$410,000
Subtotal	**$450,000**	**$520,000**	**$400,000**	**$350,000**	**$410,000**
GIS, Land Acquisition & Engineering (drainage system inventory, easements, pipes): Sunwood Road Pinetree Road		$50,000	$50,000		
Subtotal	**$**	**$50,000**	**$50,000**	**$**	**$**
Projects from Master Storm Drainage Plan: Unincorporated Callaway Basin Study		$200,000			
Subtotal	**$**	**$200,000**	**$**	**$**	**$**
Projects from MSDP Work Plan: S. John Pitts Road Area Drainage Improvement Project			$552,500		
Subtotal	**$**	**$**	**$552,500**	**$**	**$**
Pipe & Major Improvement Projects : Resota Bch Rd Culvert Replacement Industrial Drive & Redwood Ave Outfall Improvement Wildwood Rd Drainage Improvement Beachwood Blvd Drainage Impvmt Sherman Ave Drainage Impvmt East Ave Drainage Impvmt		$400,000	$1,200,000	$620,000	$$450,000 $500,000 $250,000
Subtotal	**$**	**$400,000**	**$1,200,000**	**$620,000**	**$1,200,000**
Total	**$450,000**	**$1,170,000**	**$2,202,000**	**$970,000**	**$1,610,000**

7A2(d). How the Bay County Builders Services Department supports the LMS Goals through the Florida Building Code, Higher Regulatory Standards, and the Floodplain Management Ordinance:

The Bay County Builders Services Department has implemented measures to limit the adverse effects of potential hazards by utilizing high construction standards for all buildings in the County through enforcement of the 2007 Florida Building Code and its 2009 supplements. This department also implements the Bay County Floodplain Management Ordinance which exemplifies higher regulatory standards that meet or exceed FEMA's requirements for buildings in flood zones. In 2009, the CRS and LMS team members reviewed the Bay County Floodplain Management Ordinance and decided that an update was required in order to comply with new definitions of flood terms required by FEMA. That document is included in this section.

The Builders Services Department has been awarded a Building Code Effectiveness Grading Schedule (BSEGS) of 3 for family residential property, and 4 for commercial and industrial property due to the high standards achieved by this organization.

3 Plans Reviewers have passed the Floodplain Management Exam and are recognized as Certified Floodplain Managers, assuring that all development taking place in Special Flood Hazard Areas is built to the highest standards for flood safety.

Members of the Builders Services Department also assist the public with FEMA map questions, establish BFEs for A zones, advise on procurement of Elevation Certificates, and when necessary counsel on the procedures for application to FEMA for a Letter of Map Amendment (LOMA or LOMR-F).

As required by the Floodplain Management Ordinance, this department also coordinates with the CRS and LMS teams in issuing "substantial damage letters" on residential structures that have sustained damage to 50% or more of their market value. When this situation occurs no building permits for repair or improvement can be issued. The Building Official will work with the LMS and CRS teams to attempt to mitigate the residence through acquiring grant funding.

7A2(e) How the NFIP Community Rating System/CRS Program supports the LMS through Public Education and Outreach Programs:

7A2(e)1 Introduction to the Local Flood Hazard as Addressed under the CRS Program

Bay County is highly prone to flood hazards associated with hurricanes, tropical storms, and rainfall with high intensity or duration. Bay County averages about 80 thunderstorm days each year. Since most Bay County flood basins are contained within the County, the threat of flooding is generally based on local rainfall conditions, and is not affected by rainfall from other states, or from upstream areas which are not in the County.

Storm hazards have the potential to seriously impact the general population. All residences near water are subject to flooding during severe rainfall events. Bayous may overflow, wetlands reach their capacity, and lake levels rise up and can inundate surrounding property. Areas such as North Bay, East Bay, and West Bay, are subject to flooding, as are properties surrounding smaller water bodies including Beatty Bayou, Laird Bayou, Bayou George, Callaway Bayou,

Cook Bayou and Pretty Bayou. Econfina Creek, Bear Creek, Crooked Creek, Burnt Mill Creek and Cypress Creek flow through Bay County and are possible sources of flooding during heavy or prolonged rainfall. Because the County is relatively flat, water flows over land and tends to gather in depressed areas. Property that is only slightly lower than the surrounding areas can become a holding pond for storm water. The rapid growth that has occurred in the county over the past 5-10 years has resulted in increased impervious areas such as parking lots, buildings, and driveways, which has increased the potential for flooding.

Many of the property owners in Bay County have been long term residents, and prior to the explosion of growth, were accustomed to a more rural setting where undeveloped land was abundant and solutions to localized flooding were simple. Many residents lived near vacant, wooded areas and did not experience flooding problems since the open spaces and woods absorbed run off from the neighborhood. As more properties become developed, the drainage of these areas changes. Newly constructed residences may be built at a higher elevation than neighboring, older homes; therefore, causing runoff onto the older properties.

While stormwater conveyances transport water from the streets and neighborhoods, there are limitations to their capacity. If ditches are clogged or running full, flooding may occur. This has become more of a problem as residential density increases.

Throughout the history of Bay County, hurricanes and tropical storms have threatened the coastal areas. These events are the most dangerous flood threats to Bay County residents. Not only do hurricanes increase the threat of storm surge flooding, but they can also generate high winds and wave action that further damages properties, and can result in the loss of life. In the past the County has experienced a tropical hurricane, on average, once every 3.5 years. In the past 30 years Bay County has been hit by several major storms:

7A2(e)2 Hurricane History

Hurricane Eloise

In 1975 damage from Hurricane Eloise in Bay County totaled US $50 million (1975 dollars), and is attributed with 4 deaths, all indirectly associated to the storm. (Quarterly Journal of Engineering *Geology & Hydrogeology*; November 1979; v. 12; no. 4; p. 281-290)

Hurricane Kate

In November 1985 Hurricane Kate crossed through the County with over 100 mile an hour winds, though damage to structures and beaches was not considered severe.

(http://redcross.tallytown.com/kate.html.)

Hurricane Opal

Hurricane Opal in October of 1995 caused 125 mile an hour wind gusts, along with estimated seven foot storm surges in the County**.** Bay County sustained the most overall damage in the Panhandle, with damage to 341 coastal structures, due to the high density of development and large number of structures which were not designed and constructed adequately to withstand the

impacts of a major (e.g., 100-year frequency) hurricane. The CCCL for Bay County had not been reestablished prior to Opal, as it had been for the other Panhandle counties; therefore, habitable structures in Bay County were not required to meet the more stringent siting and design standards of the State's CCCL program intended to prevent structural damage caused by a major storm event such as hurricane Opal.

(http://www.floridadisaster.org/BRM/Mit_Success/ms_cccl_buildings_survive_opal.htm.)

Tropical Storm Barry

During Tropical Storm Barry in August 2001, Panama City reported as much as 11 inches of rain, and heavy damage caused by waves, and storm surge was extreme. Storm surges and tides associated with Tropical Storm Barry were 2-3 feet along Bay County beaches. *(http://www.nhc.noaa.gov/2001barry.html)*

Hurricane Ivan

Hurricane Ivan struck in September 2004 causing over 2.5 million cubic yards of sand loss to the beach areas. The erosion impact and structural damage to the County's coastal development was significant, though not severe. The protective buffer of the Panama City Beaches Beach Erosion Control and Storm Damage Reduction Project can be credited with reducing losses to beachfront development. The project, which was completed in April 1999, consisted of the placement of 9 million cubic yards of sand over an approximate 17.5 mile shoreline length. Prior to Ivan, the project area still retained roughly 91% of its original volume. Although a significant volume of sand was lost from the beach area into offshore areas as a result of Ivan, the beach project did the job it was intended to do in providing storm protection to upland development in the Panama City beaches area *(Coastal Planning and Engineering, Inc., Post Ivan Storm report December 2004).*

Hurricane Dennis

Hurricane Dennis of July, 2005 caused flooding to a significant number of homes and businesses along the coast in Bay County in Panama City, Panama City Beach and Lynn Haven (*CNN.com*).

Both Ivan and Dennis caused considerable erosion to the project area, and the erosion losses appear to have been comparable to the losses sustained during Opal of 1995; however, in comparison to the very severe coastal construction damage that was caused by Opal, Ivan and Dennis inflicted only a minor erosion, even though the storm tide conditions were essentially the same. The beach restoration project proved to provide adequate protection. *(Keehn and Armbruster, 2005)*

Hurricane Katrina

Hurricane Katrina of August, 2005 exacerbated the coastal erosion situation. No damage to any structures was reported. *(Coastal Planning and Engineering, Inc., 2005 Hurricane Impact and 2007 Renourishment Project Design Analysis Panama City Beaches, May 2007)*

7A2(e) 3 Flood Safety Property Protection Measures Appropriate for the Hazard

Bay County has implemented specific measures that result in greater protection of properties. The Building Official and two plans reviewers are Certified Floodplain Managers. The Building Department strictly enforces elevation certificate requirements, surveyor's benchmark regulations and other flood safety measures recommended by the NFIP.

To overcome the problem of drainage issues the Land Development Regulations (LDR) require that for new development stormwater run off cannot exceed predevelopment conditions. The LDR also take the local building code above NFIP development standards and require that homes *not* located in the Flood Insurance Rate Map (FIRM) designated flood zones, are elevated

to at least one foot above the crown of the road. Homes built in A and AE zones require one foot of freeboard, meaning the bottom of the lowest floor must be at least one foot above base flood elevation (BFE). Furthermore, the engineering department has strengthened regulations for road construction to improve stormwater conveyance designs and maintenance. Finally, a county wide Stormwater Outfall Identification Plan and Storm Drain Marking Program have been implemented. The purpose of the Stormwater Outfall Identification Plan was to locate and assess all stormwater conveyance pipes in the County, as the County's records did not show all pipes, particularly those less than 36" in diameter. While the NPDES rules require only 36" pipes and larger be accounted for, the group determined they could not effectively calculate water quantity unless all size pipes were noted. The majority of the drain pipes in Bay County are less than 36" in diameter. This program was developed with a $500,000 grant awarded to Bay County and B.E.S.T., a local environmental group. The program was implemented by a team of volunteers with the intent of better understanding the flow of stormwater within the county's basins. The more conveyances the County can identify, the better prepared the stormwater engineering group will be to identify flood hazard potential. The Storm Drain Marking Program was created as a public outreach program with the goal of reaching every resident in the county to inform them of the importance of not dumping in drains, swales, and ditches, nor to allow them to remain clogged with vegetation, and how to report violations. A team of trained volunteers has started the process of distributing informative literature, and the County CRS Coordinator will also be present to answer any questions about flood issues, and schedule appointments for possible flood-proofing and retrofitting. (These programs are more fully described under Outreach Strategy Team Goals).

The Bay County Office of Emergency Management warns the community of approaching hazards through the Emergency Alert System (WFSY 98.5 FM radio, WPAP 92.5 FM radio and WJHG TV News Channel 7). This service provides time for homeowners to take the necessary steps to secure valuable property and to evacuate safely. This service is widely publicized through all media outlets (radio, print and television), frequent Emergency Management, County, Red Cross, and Extension office seminars, as well as the Telephone Book Yellow Pages.

While County regulatory measures offer some degree of protection, outreach programs stress that it is up to the homeowner or renter to take additional measures to ensure that their homes and properties are protected. Through the County CRS outreach programs, homeowners and renters are made aware of the additional safety measures they can take, insurance protection that is available to them, as well as the availability of grant funds. For example, an existing, older structure may be permanently elevated, so that the lowest floor is at least one foot above the base flood elevation. Homeowners are also counseled to locate heating, hot water systems, electrical panels, all components of the electrical system (including the wiring), utilities above the flood level. Repetitive Loss property owners are made aware of grant programs that can assist in elevating the home, buying the property outright, or demolishing and rebuilding the structure.

The primary method of commercial flood-proofing in Bay County is dry flood-proofing. Dry flood proofing includes adding a waterproof veneer to the exterior walls, and sealing all openings to prevent the entry of water (primarily used in commercial buildings). Building a floodwall around doors and garages can also protect against flood damage.

As a final measure, a home that is found to be in a particularly hazardous area may be relocated to an area outside the flood zone. This is most effective method of avoiding flooding. In many cases moving the home to a more upland section of the same property has alleviated flood problems.

Hurricanes bring high winds that damage inland and coastal areas. If the area immediately surrounding a structure contains trees, outbuildings, trashcans, yard debris, or other materials that can be moved by the wind, it will be likely be damaged during a hurricane. Citizens are advised to bring in outdoor possessions, such as lawn furniture, grills and trashcans, or securely tie them down. Fuel tanks should be anchored.

Permanent hurricane shutters provide a long-term means of protecting a home. Temporary methods of securing windows, such as plywood, will protect glass from wind born debris damage, but are time consuming to install with every storm threat. Although the County does not provide direct assistance with these types of measures, citizens can become better informed through additional public education activities. For example, on March 22, 2008, The Friends of St. Andrew Bay sponsored "The Bay Green Expo" at Gulf Coast Community College. This was one of the most well attended "free educational events" ever held in Bay County. The Bay County Extension office invited guest speaker who gave presentations on "Hurricane Hardening for the Home", and "Flood Proofing Measures". The County is also looking into the State funded program, Florida Rebuilds for 2009. Through the State training, local contractors are trained in flood-proofing homes. Homeowners can request a free inspection from one of the certified contractors, who will then recommend specific flood-proofing measures. The homeowner will be eligible for a matching grant from the state (up to $5,000) for retrofitting and preventative flood proofing. In addition, one of the Builders Services inspectors will be trained in 2009 on flood proofing/prevention measures.

Representatives from the My Safe Florida Home Free Wind Inspection Program were in Bay County for approximately six months during 2008. Over 2,000 citizens received free inspections which included roof and window checks.

More specific information on property protection and safety measures utilized by the County can be found, at the Bay County Emergency Services office, Bay County Planning and Zoning (as well as the municipal zoning departments), and the Bay County Libraries reference section. The libraries also provide computers and residents can access the FEMA website as well as the County GIS websites at no charge. The County website contains elevation certificates, the 2002 and 2009 FEMA flood maps, evacuation zone maps, insurance information, properties with LOMAs, and other flood related resources.

7A2(e)4 Flood related public information activities currently being implemented within the community (including those by non-government agencies) (See CRS Activity 330 in the Bay County CRS Coordinator's Manual for more specific information and examples)

The Bay County Planning and Zoning Library and the Bay County Public Libraries currently contain a number of FEMA booklets, brochures, and historic and current FIRMS in the reference section. Public information pages on the topic of flooding, hurricane safety, and other natural disasters are published each year in the Bay County Yellow Pages Phone Book. The Panama City News Herald issues a "Hurricane Guide" every year that shows flood-prone areas in the County, and provides a wealth of other flood related information. At various times during the year, flood protection information is included in the newsletters sent out by individual municipalities, the Chamber of Commerce, and various local companies.

The Bay County Emergency Management/Emergency Operations Center (EOC) provides short countywide presentations to increase flood awareness at local schools, nursing homes, and a

variety of other public and private organizations. The Fire Chief (head of the EOC), a popular local speaker, is frequently hosted on radio and television programs where he explains the flood safety program, and advises where to get additional assistance and information. The Emergency Management organization publishes evacuation maps which are also downloadable from the Bay County Emergency Management website. In addition, that organization publishes a booklet, "A Pocket Guide to Emergency Services in Bay County," which is distributed at a variety of public forums throughout the year. Mexico Beach has an ongoing program of public speaking engagements to distribute this booklets and educate citizens regarding hazard issues and public safety.

The Bay County Builders Services Department offers workshops to builders and developers discussing topics such as determining proper elevations, using FIRMs, the building code, flood problems, etc. (2 courses have been offered to date in 2009 serving over 100 builders and developers).

The Bay County GIS Department provides updated, digitized FIRM maps available online, as well as maps of the surge zones for the County and municipalities. The local media networks provide public service announcements about hurricane safety, and the Red Cross works with the local media to boost preparedness and distributes "Emergency Kits".

7A2(e) 5 Outreach Strategy Team Goals for - Public Information and Outreach

Fortunately, since Hurricane Dennis in 2005 through the current reporting period in December 2009, there have been no major hurricanes or storms affecting Bay County. In February 2008, there was a heavy rainfall event which caused substantial damage to two homes. Mitigation grants have been filed for both properties. During this less intense storm period the CRS Team Members were able to spend more time assessing the goals for the Outreach Strategy, and have completed the "Stormwater Outfall Identification" program. Additional efforts have continued on the Storm Drain Marking Program. The Outreach Strategy also disseminated information throughout the community, and brainstormed new activities for the current LMS reporting period. Despite the very strong and varied public education/outreach program conducted between 2004 through the present, the team had decided that there was still a need to invest more time in planning and implementing one, overall, strategy that would mesh well with the County's existing programs. This goal was reaffirmed for the 2009-2010 reporting period.

The primary goal was to implement an outreach program that included a more far-reaching public education goal to make citizens more aware of the measures they can take to protect their property and play a positive role in flood management in their community. This has become a priority for the Bay County and municipal local governments. As participants in the NFIP (National Flood Insurance Program) and CRS (Community Rating System), there are incentives to improve the availability of flood information by creating a strategy team that coordinates and implements efforts to educate citizens. The Bay County CRS Outreach Strategy Team was initially formed on February 23rd, 2004 with the support of the Bay County Board of Commissioners, the County Manager, and Department Directors, and continues through the present time. The team includes local citizens and stakeholders as well as County employees. Representatives from the Bay County Planning Division (Tita Sokoloff), Builder Services Division (Mike Geralds and Ed Schwoerer), Engineering Division (Josee Cyr), Geographical Information Systems (Jennifer Morgan), Information Systems (Fletta Norcross), Emergency Services (Sid Busick), and Community Outreach (Valerie Lovett), attend the meetings. At least one citizen and a local stakeholder represent the general public. The CRS Coordinator can be

contacted through the Bay County Planning and Zoning Division for more information about the Outreach Strategy Team. Starting in 2010 it is the goal to invite the municipal CRS coordinators, who are primarily the LMS Team members to develop one, overall, CRS program for the county.

During 2009 the Outreach Strategy Team agreed on a number of goals , some of which will be immediately feasible, whereas others are long term, and may take years to accomplish.

During the first meeting of 2009, the team evaluated the outreach projects that were completed in 2008. It was agreed that most of the smaller projects would be continued again as they reached a wide variety of people who are often difficult to contact. For example, the Fire Chief has an extensive list of speaking engagements to discuss local hazards and how to prepare for them. He speaks to citizens groups in nursing homes, and other venues infrequently visited by other CRS projects.

For the base projects, the team decided to continue the "Stormwater Outfall Identification" and the "Storm Drain Marking Program" since they were so successful. Success was measured in terms of in the field citizen contact which gave the opportunity to answer specific questions of homeowners on the spot, inform them of important aspects of localized flooding, and it involved community participation in terms of over 60 volunteers with over 400 hours who assisted in the search for and "GPSing" the location of previously unidentified stormwater conveyances, which was determined to be of primary importance.

I. The Stormwater Outfall Identification and Subsequent Studies

This program was identified as vital to the future efforts and success at managing stormwater within the County. Camp Dresser & McKee, Inc. (CDM) was hired as consultant to B.E.S.T (local environmental group) and Bay County on this project, and performed an extensive data collection and review effort in order to provide a better understanding of the regional issues related to surface water and water quality in the study area. The data collected and reviewed included: geographical information system (GIS) data; existing drainage studies and/or stormwater master plans; identified problem areas (flooding, erosion, and water quality); topographic data; land use data; soils data; watershed and sub-basin delineations; rainfall data; evaporation data; stage and flow data; public land and conservation easements; stormwater system inventory information; existing hydrologic and hydraulic stormwater models; water quality data; existing stormwater permits; septic tank information; point source data, and Federal Emergency Management Agency (FEMA) information. The data presented were used extensively in developing the subsequent portions of this project. In conjunction with the data collection effort, a userfriendly database tool was developed that stores watershed related data that includes rainfall and evaporation data, topographic data, basin and sub-basin delineations, soils data, aerial photography, existing and future land use data, stream gauge data, water quality data, wastewater treatment plant data, septic tank information, stormwater facility and inventory data, National Pollutant Discharge Elimination System (NPDES) data and FEMA Flood Insurance Rate Map (FIRM) data.

Stormwater management options were developed to address the ecological and social aspects previously mentioned. The cost-effectiveness aspect of the plan is two-fold: first, the plan addresses different avenues of funding available for the management options. Secondly, a "conceptual planning level capital cost estimate" for each management option was developed and a benefit-to-cost ratio, where applicable, was provided. CDM developed a methodology with input from BEST and the Stakeholders in order to establish long-term management strategies that are critical to the improvement and sustainability of surface water resources within the watershed. In order to determine where the greatest needs existed in the basin areas in terms of

water quality and quantity, CDM developed an approach to assess the watershed based on the characteristics of each sub-basin within the greater St. Andrew Bay Watershed (SABW). CDM used the sub-basin boundaries as the unit of measure for assessment and prioritization. CDM developed a list of fourteen criteria important to the management of surface waters within the SABW based on Stakeholder feedback.

CDM also developed a long-term water resources management strategy to identify conceptual types of basin management activities that can be pursued by BEST and the local governments to mitigate existing problems (quality and quantity) and provide for long-term flood control and water quality benefits. CDM examined each sub-basin on an individual basis to determine which types of BMPs (both structural and nonstructural) would be appropriate to achieve the long-term goal of improving water quality and addressing existing flooding issues. The recommendations are presented as options and the use of a specific BMP depends on actual site conditions and objectives such as water quality protection, flood control, erosion control, or volume control. In many cases, there are multiple goals or needs for a given project. Additionally, several studies and stormwater master plans have already been developed by several of the local governments to address stormwater management problems within their jurisdictions. This plan is meant to supplement those recommendations previously made and by no means supersedes other studies that have been conducted within the SABW.

II. Storm Drain Marking Program (each municipality conducts their own program, but the guidelines are similar)

Advantages:

A. The outreach information is neighborhood specific. Maps were prepared for each neighborhood showing the location of the storm drains. The maps include aerial views of all the homes in each particular neighborhood. In addition to placing decals on each drain with the message "*No Dumping…Only rain down the drain",* groups of trained volunteers distribute literature to each home that explains the relationship between storm water conveyances and flooding. Additional literature is also provided that explains other hazards. In neighborhoods where there are known flooding problems, a professional from County staff and/or outside specialists is present to discuss mitigation measures with the residents (stormwater engineer, builder services representative, CRS coordinator, Emergency Management representative, etc.), as well as other flood/hazard related issues. Each neighborhood marking event is thoroughly publicized.

B. The repetitive loss properties within each neighborhood are specifically targeted, and a face to face discussion with the appropriate professional can address their concerns.

C. The entire community is involved. This fosters a higher level of awareness, education, and interest to the flood/hazard issue. The program is structured as follows:

1) The CRS coordinator is working with a local environmental group, BEST/Friends of St. Andrew Bay. This organization has a large volunteer base, and issued a "call for volunteer team leaders" for the first trial round of neighborhood programs.

2) Those individuals who responded, have been trained by the CRS coordinator in flood issues, how to use the maps for their particular neighborhood, proper placement of storm drain decals, and how to handle/refer resident's questions.

3) Each trained team leader has since recruited and trained volunteers from his company or organization. The trained groups include the local US Fish and Wildlife office, the

Navy Base, The Garden Club, and a local construction company. The CRS coordinator conducts all team leader trainings, and explains the particular problems of each neighborhood.

4) After each neighborhood program, the team leader completes an evaluation/comments form. This includes referrals for the CRS coordinator to handle, or drainage problems for the Roads and Bridges Department, etc.

The program has been very successful. While not as many of the neighborhoods were covered in 2007 and 2008, as was originally intended (due to the commencement of the Stormwater Outfall Project), more time was spent in each neighborhood. This was due to the high interest level of the neighborhood residents. As well as marking the drains, the volunteers distributed 2 different brochures to each of the homes in the neighborhood. These brochures explain the flooding issues and provide phone numbers to call in the event of problems or questions. Many problems were uncovered and resolved**:** several drain locations had "fallen off" the routine maintenance logs, neighbors had intentionally plugged storm drains, certain residents pumped out their pools into roadways during rain events, etc.

III. Making CRS information more available:

The CRS rating information has been made more readily available to the public. This includes maintaining copies of progress reports at the library and on the web site, as well as making them easily available in various county offices (GIS Department, Builder Services, Planning and Zoning, and the Emergency Operations Center).

The main Bay County Public Library has a wide range of publications on CRS topics, and the primary research librarian, Sandra McQuagge, has been well versed in the CRS program. Public information pages on the topic of flooding, hurricane safety, and other natural disasters are published each year in the Bay County Yellow Pages Phone Book and have been updated for 2009. The Panama City News Herald issues an annual hurricane guide that depicts the flood-prone areas of the County, and provides a wealth of other flood related information. At various times during the year, flood protection information is included in the newsletters sent out by individual municipalities, the Chamber of Commerce, and various local companies.

The Bay County GIS Department provides updated, digitized FIRM maps that are available online. The local television networks and the News Herald provide public service announcements about hurricane safety and the Red Cross works with the local media to boost preparedness and distribute "Emergency Kits". In July, the CRS Coordinator was interviewed on a popular Television News show to discuss the storm drain marking program and the CRS program.

IV Strengthening protective measures offered by the Builders Services Department:

Information related to elevation certificates is easily accessible both on the County website and in the Builder Services office. The County is now conforming to the "wind born debris region" as described in the Florida Building Code. This demonstrates the diligence of the Builder Services Division in addressing flood and other hazard concerns in a manner that results in property protection and consistent enforcement. This effort has increased the confidence in flood protection measures, and should encourage property owners to further the County's efforts by taking additional measures on their own which are recommended in various outreach programs. In addition, contractors and builders have been made aware of the County's

requirements so that they can proceed accordingly in building to the new standards and advise their clients appropriately. This department conducted two workshops this year for a total of 120 builders and developers. The NFIP/CRS program and its requirements were discussed at length. Three Plans Reviewers from this department are Certified Floodplain Managers (CFM), which provides them with a greater knowledge of reviewing development plans in flood prone areas.

V. Diversify and increase the number of target audiences for flood and disaster preparedness information:

The CRS program continues to reach a larger and more diverse group of citizens including elderly citizens, renters, and property owners. Targets for public outreach take into consideration that reaching property owners might not necessarily be reaching a significant portion of citizen subject to flood hazards; therefore, an attempt has been made to increase penetration into a larger number of citizen groups. We have also made an effort to distribute a larger number of brochures to local colleges, senior centers, real estate agents offices, supermarkets, etc. FEMA brochures have been placed at several of the larger condominium complexes that have been subjected to flooding in the past. In addition, the Emergency Management Office has continues talks and presentations to a variety of groups throughout the year. The Bay County Extension Office conducts workshops on flood preparedness and the CRS program.

VI. Coordination between the County and municipalities:
The County CRS Coordinator is exploring a more coordinated effort between Bay County and the municipalities to improve public outreach and eliminate duplication of efforts. This should be considered a long-term goal and may be initiated by communicating with the Local Mitigation Strategy Board. At the August 2009 LMS update meeting it was decided that the CRS Coordinators from each local municipality in Bay County should be part of the LMS Team. The coordinators have had a role in the 2009 update of the LMS Plan.

VII. Intensify Outreach efforts to Real Estate Agents, Bankers/Lenders, and Insurance Agents.
In 2009 the CRS strategy team repeated the process of "blanketing" the offices of Realtors, Lenders and Insurance Agents, which resulted in very favorable contacts and invitations to speak from similar projects in the past. The CRS Coordinator is always available to speak at events for these groups. Once such example is a talk explaining the 2009 FEMA DFIRMS and promoting flood insurance to a Realtor's group in September, 2009, and to the Bay County-Panama City Homebuilders Association in November, 2009. The CRS Team is also in the planning stages of an annual program for real estate agents training them on how to use the County websites to find elevation certificates and determine flood zones.

VIII. Ongoing Outreach projects created to achieve goals:

The following is a list of projects generated by the Outreach Strategy Team:

- The primary goal will be to continue the "Storm Drain Marking Project" (outlined above in the Outreach Strategy 2009 document). [The St. Andrew Bay Watershed Stormwater Master Plan has been completed by the volunteers of the County, and BEST. CDM has completed their final report and recommendations.]

- Inform a more diverse group of residents who may be affected by flooding through the distribution of brochures and by holding special seminars at senior centers, colleges, business groups and other public offices. This may include the use of existing FEMA publications, as

well as brochures, booklets, or information packets created by the County. In 2007 the Emergency Services Department greatly expanded their public information talks to include a wider variety of groups. In addition, Mark Bowen, the Chief has scheduled more appearances on radio and TV talk shows to explain the CRS program, preparation for a storm, emergency evacuation procedures, etc. The chief is continuing with this effort.

- Continue to improve current efforts to educate the public including local contractors, builders, and developers. The Builders Services staff will continue to host presentations at GCCC for contractors and builders (two such workshops were held in 2009). The CRS coordinators are looking into stimulating more interest and involvement from local builders and contractors in flood-proofing/retrofitting techniques, and in trying to generate a "Florida Rebuilds" type program in the County. An employee from the Builders Services Department will take the FEMA Retrofitting class and will assist with the neighborhood outreach "Storm Drain Marking Program" to advise/assist individual homeowners/renters with questions on how to make their home more flood safe.

- Reach a broader audience by requesting that the Gulf Coast Energy Cooperative and/or Gulf Power Company include an article in their monthly magazine distributed to their customers. Other possibilities include messages on the community calendars, and government day at the mall.

- Insert an Insurance Purchase Information document with the TRIM notice (FEMA/ISO will evaluate this project) sent out by the Bay County Property Appraiser's office in order to stimulate County wide interest in the purchase of flood insurance.

- Provide training for damage estimators on FEMA's "Residential Substantial Damage Estimator" software, a program that assists in assessing residential building values, and is used to evaluate a home's market value prior to the damage and for determining the amount of damage following a disaster event. It shows how to rapidly, efficiently, and consistently assess substantial damage. It allows communities to compile a data base of inspected houses as well as help to identify areas that have received repetitive damages. An introductory seminar explaining the program was conducted in 2009, and the CRS/LMS coordinators are assessing methodology to implement the program Countywide.

IX. Outreach Projects to Address Other Hazards

Tornadoes are recognized as another natural hazard that is common to the area, as well as thunderstorms and the accompanying threat hazards due to lightening. These topics are covered online at the FEMA web site and through the Bay County Emergency Services office website and public seminars. The Local Hazard Mitigation Strategy also addresses these topics.

7A2(e)6 Process for Monitoring and Evaluating Projects

The CRS Team generally meets 3 times per year. At each meeting a summary is given of accomplishments made on the "to do list" assigned to team members from the previous meeting. New projects are assigned as old projects are completed. Team members provide information, comments or input to other members through email, telephone, etc. At each meeting team members will bring documents for the others to review and introduce any new information or updates that the team as a whole should be aware of. A progress report is compiled and reviewed by all team members in September, prior to the end of the CRS cycle.

7A2(f) Bay County Floodplain Management Ordinance

ARTICLE II. FLOODPLAINS

Sec. 9-26. Statutory authorization, findings of fact, purpose and objectives.

(a) *Statutory authorization.* The legislature of the state has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the board does ordain as follows:

(b) *Findings of fact.*

(1) The flood hazard areas of the county may be subject to periodic inundation which could result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

(2) These flood losses are compounded by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

(c) *Statement of purpose.* It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Restrict or prohibit uses which are dangerous to life, health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;

(4) Control filling, grading, dredging and other development which may increase erosion of flood damage; and

(5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

(d) *Objectives.* The objectives of this article are:

(1) To protect human life and health;

(2) To minimize expenditure of public money for costly flood control projects;

(3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) To minimize prolonged business interruptions;

(5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

(6) To help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize flood blight areas; and

(7) To ensure that potential homebuyers are notified that property is in a flood prone area.

(Ord. No. 93-02, art. 3, 3-2-93; Ord. No. 04-27, § 3, 8-17-04; Ord. No. 09-19, § 3, 6-16-09)

Sec. 9-27. Definitions.

Unless specifically defined below, words or phases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application.

Accessory structure (appurtenant structure) means a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.
Addition (to an existing building) means any walled and roofed expansion to the perimeter or height of a building.
Appeal means a request for a review of the building official's interpretation of any provision of this article or a request for a variance.
Area of shallow flooding means a designated A0 or V0 zone on a community's flood insurance rate map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
Area of special flood hazard is the land in the floodplain within a community subject to the 100-year flood (which is subject to a one-percent or greater change of flooding in any given year,) as identified on the flood insurance rate map (FIRM), or, with the concurrence of the Federal Emergency Management Agency and the board, as identified on a new map in a future stormwater study conducted by the board, a regional water management agency, or a third party.
Base flood or 100-year flood means the flood having a one percent chance of being equaled or exceeded in any given year.
Base flood elevation means the water-surface elevation associated with the base flood.
Basement means any portion of a building having its floor sub grade (below ground level) on all sides.
Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.
Building. See Structure.
Coastal high hazard area means the area subject to high-velocity waters caused by, but not limited to, hurricane wave wash. The area includes lands designated on a FIRM as zone V1--30, VE or V, inlets which are not structurally controlled and lands seaward of the coastal setback line.
Development means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, and drilling operations or storage of materials.
Elevated building means a non-basement building built to have the lowest floor elevated above the ground level by means of solid foundation perimeter walls, pilings, columns (posts and piers), shear walls or breakaway walls.
Existing construction means any structure for which the "start of construction" commenced before the effective date of the initial floodplain management regulations adopted by Bay County.
Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and with their final site grading or the pouring of concrete pads) is completed before the effective date of the initial floodplain management regulations adopted by Bay County.
Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured

homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters;

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood hazard boundary map (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as zone A.

Flood insurance rate map (FIRM) means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood insurance study is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the flood boundary floodway map and the water surface elevation of the base flood.

Floodplain means those areas within a community susceptible to being inundated by water from a flooding source.

Floodplain administrator is the individual appointed to administer and enforce the floodplain management regulations of the community.

Floodproofing means any combination of structural and non-structural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Functionally dependent facility means a facility which cannot be used for its intended purpose, unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long term storage, manufacture, sales or service facilities.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a building.

Historic structure means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing in the National Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

(3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

(4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

a. By an approved state program as determined by the Secretary of the Interior; or

b. Directly by the Secretary of the Interior in states without approved programs.

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area is not considered a building's lowest floor. Provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this article.

North American Vertical Datum (NAVD) of 1988, means a vertical control used as a reference for establishing varying elevations within the floodplain.

Manufactured home means a building, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

National Geodetic Vertical Datum (NGVD) or mean sea level as corrected in 1929 is the vertical control used as a reference for establishing varying elevations within the floodplain.

New construction means, for floodplain management purposes, any structure for which the "start of construction" commenced on or after the effective date of the initial floodplain management regulations adopted by Bay County. The term also includes any subsequent improvements to such structure.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

Primary frontal dune means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

Principally above ground means at least 51 percent of the actual cash value of the structure is above ground.

Recreational vehicle means a vehicle which is:

(1) built on a single chassis;

(2) four hundred square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light-duty truck; and

(4) Designed primarily not for use as a permanent dwelling, but as, a temporary living quarters for recreational, camping, travel or seasonal use.

Reference feature is the receding edge of a bluff or eroding frontal dune, or if such a feature is not present, the normal high-water line or the seaward line of permanent vegetation if a high-water line cannot be identified.

Repetitive loss means flood related damage sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

Sand dunes mean naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Sixty-year setback means a distance equal to 60 times the average annual long-term recession rate at a site, measured from the reference feature.

Special flood hazard area. See Area of special flood hazard.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (PL 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or

any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structures mean a walled and roofed building that is principally above ground, a manufactured home, or a gas or liquid storage tank.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantially improved existing manufactured home parks or subdivisions is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Substantial improvement means any combination of repairs, reconstruction, rehabilitation, addition, alteration or other improvements to a building taking place during the life of a building in which the cumulative cost equals or exceeds 50 percent of the market value of the building. The market value of the building should be (1) the appraised value of the building prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the building prior to the damage occurring. This term includes structures which structures, which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include any project for improvement of a building required to comply with existing health, sanitary or safety code specifications which have been identified by the code enforcement official or building official and which are solely necessary to ensure safe living conditions.

Thirty-year setback means a distance equal to 30 times the average annual long-term recession rate at a site, measured from the reference feature.

Variance is a grant of relief from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship.

Violation means the failure of a structure or other development to be fully compliant with the requirements of this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this article is presumed to be in violation until such time as that documentation is provided.

Zone of imminent collapse means an area subject to erosion adjacent to the shoreline of an ocean, bay or lake and within a distance equal to ten feet plus five times the average annual long-term erosion rate for the site, measured from the referenced feature.

(Ord. No. 93-02, art. 4, 3-2-93; Ord. No. 04-27, § 3, 8-17-04; Ord. No. 09-19, § 3, 6-16-09)

Sec. 9-28. General Provisions.

(a) *Lands to which this article applies.* This article shall apply to all areas of special flood hazard within the jurisdiction of the board.

(b) *Basis for establishing the areas of special flood hazard.* The areas of special flood hazard identified by the Federal Emergency Management Agency in its flood insurance study dated

September 18, 2002, with accompanying maps and other supporting data, and any revisions thereto, are adopted by reference and declared to be a part of this article.
(c) *Establishment of building permit.* A building permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities.
(d) *Compliance.* No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable regulations.
(e) *Abrogation and greater restrictions.* This article shall not repeal, abrogate or impair any existing easements, covenants or deed restrictions.
(f) *Interpretation.* In the interpretation and application of this article all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under state statutes. Where this article and another ordinance conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
(g) *Warning and disclaimer of liability.* The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the board or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.
(h) *Penalties for violation.* Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be subject to a fine not to exceed $500.00 or by imprisonment in the county jail for a period not to exceed 60 days, or by both such fine and imprisonment. In addition, this article may be enforced pursuant to Ordinance No. 89-11 and Ordinance No. 91-02. Nothing herein contained shall prevent the board from taking such other lawful actions as are necessary to prevent or remedy any violations.
(Ord. No. 93-02, art. 5, 3-2-93; Ord. No. 04-27, § 3, 8-17-04)

Sec. 9-29. Administration.
(a) *Designation of building official.* The building official is hereby appointed to administer and implement the provisions of this article.
(b) *Permit procedures.* Application for a building permit shall be made to the building official on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, locations, dimensions and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities and the location of the foregoing. Specifically, the following information is required:
(1) *Application stage.*
a. Elevation in relation to NGVD or NAVD of the proposed lowest floor (including basement) of all buildings;
b. Elevation in relation to NGVD or NAVD to which any nonresidential building will be floodproofed;
c. Certificate from a registered professional engineer or architect that the nonresidential floodproofed building will meet the floodproofing criteria in subsection 9-30(b)(2);

d. Description of the extent to which any natural watercourse will be altered or relocated as a result of proposed development; and

e. Elevation in relation to means sea level of the bottom of the lowest horizontal structural member of the lowest floor and provide a certification from a registered engineer or architect indicating that they have developed and/or reviewed the structural designs, specifications and plans of the construction and certified that they are in accordance with accepted standards of practice in coastal high hazard area[s].

(2) *Construction stage.* Provide a floor elevation or floodproofing certification after the lowest floor is completed, or in instances where the building is subject to the regulations applicable to coastal high hazard areas, after placement of the horizontal structural members of the lowest floor. Upon placement of the lowest floor, or floodproofing by whatever construction means, or upon placement of the horizontal structural members of the lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the building official a certification of the elevation of the lowest floor, floodproofed elevation, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, in relation to NGVD. Such elevation certificate shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When floodproofing is utilized for a particular building, such certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The building official shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make such corrections required hereby shall be cause to issue a stop work order for the project.

(c) *Duties and responsibilities of the building official/floodplain administrator.* Duties of the building official shall include, but not be limited to:

(Ord. No. 93-02, art. 6, 3-2-93; Ord. No. 04-27, § 3, 8-17-04; Ord. No. 09-19, § 3, 6-16-09)

Sec. 9-30. Provisions for flood hazard reduction.

In all areas of special flood hazard the following provisions are required:

(a) *General standards.*

(1) Copies of all required federal, state, NWFWMD, and local permits shall be submitted as a part of the development permit application.

(2) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;

(3) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state and local ordinance requirements for resisting wind forces;

(4) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

(5) New construction and/substantial improvements shall be constructed by methods and practices that minimize flood damage;

(6) Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

(7) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;

(8) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters;
(9) Onsite waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
(10) Any alterations, repair, reconstruction or improvements to a building which is in compliance with the provisions of this article shall meet the requirements of "new construction" as contained in this article; and
(11) Any alteration, repair, reconstruction or improvements to a building, which is not in compliance with the provisions of this article, shall be undertaken only if said nonconformity is not furthered, extended or replaced.
(b) *Specific standards.* In all areas of special flood hazard, designated A-Zones, undesignated A-Zones (the developer must survey and provide the base flood elevation, and where base flood elevation data has been provided, as set forth in subsection 9-28(b), or subsection 9-29(c)(11), the following provisions are required:
(1) *Residential construction.* New construction and substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, mechanical and utility equipment, and ductwork elevated no lower than one foot above the base flood elevation, or the 100-year flood elevation established by the Florida Department of Environmental Protection, whichever is higher. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection (b)(3).
(2) *Nonresidential construction.* New construction and substantial improvement of any commercial, industrial or nonresidential building (or manufactured home) shall have the lowest floor, including basement, mechanical and utility equipment, and ductwork elevated no lower than one foot above the base flood elevation, or the 100-year flood elevation established by the Florida Department of Environmental Protection, whichever is higher. Buildings located in all A-zones may be floodproofed in lieu of being elevated provided that all areas of the building (including mechanical and utility equipment and ductwork) below the required elevation are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the building official as set forth in subsection 9-29(c)(9).
(3) *Enclosures.* New construction and substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet or exceed the following minimum criteria:
1. Provide a minimum of two openings on different sides of each enclosed area having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
2. The bottom of all openings shall be no higher than one foot above grade; and
3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
b. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

c. The interior portion of such enclosed area shall not be finished or portioned into separate rooms.

(4) *Standards for manufactured homes and recreational vehicles.*

a. All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.

b. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:

1. The lowest floor of the manufactured home, including mechanical and utility equipment and ductwork, is elevated no lower than one foot above the level of the base flood elevation or the 100-year flood elevation established by the Florida Department of Environmental Protection, whichever is higher.

2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above grade.

3. The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.

4. In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, any manufactured home placed or substantially improved must meet the standards of subsection (b)(4)b.1., and 3 above.

c. All recreational vehicles placed onsite must either:

1. be fully licensed and ready for highway use; or

2. The recreational vehicle must meet all the requirements for new construction, including anchoring and elevation requirements of subsection (b)(4) a. or b.1. and 3. above. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect-type utilities and security devices and has no permanently attached structures.

(5) *Floodways.* Reserved.

(6) *Coastal high hazard areas (V zones).* Located within the areas of special flood hazard established in subsection 9-28(b) are areas designated as coastal high hazard areas. These areas have special flood hazards associated with wave wash; therefore, the following provisions shall apply:

a. All buildings or structures shall be located landward of the coastal construction setback line, or if seaward, evidence of a variance from the appropriate state agency.

b. All buildings shall be elevated so that the bottom of the lowest horizontal structural member, including mechanical and utility equipment and ductwork, (excluding pilings or columns) is located no lower than one foot above the base flood elevation or the 100-year flood elevation established by the Florida Department of Environmental Protection, whichever is higher., with all space below the lowest supporting member open so as not to impede the flow of water. Open wood lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action and in accordance with subsection (b)(6) h.

c. All buildings or structures shall be securely anchored on pilings or columns.

d. All pile and column foundations and structures attached thereto shall be anchored to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Water loading values shall equal or exceed the base flood and shall consider wave action. Wind loading values shall be in accordance with the current Florida Building Code.

e. A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in subsection (b)(6) b., c. and d. of this section.

f. There shall be no fill used as structural support. Limited non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from storm surge (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects or wave deflection. The building official shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect and/or soil scientist, which demonstrates that the following factors have been fully considered:

1. Particle composition of fill material does not have a tendency for excessive natural compaction;
2. Volume and distribution of fill will not cause wave deflection to adjacent properties; and
3. Slope of fill will not cause wave run-up, ramping, or deflection.

g. There shall be no alteration of sand dunes or dune vegetation, which would increase potential flood damage.

h. Lattice work or decorative screening shall be allowed below the lowest floor provided they are not part of the structural support of the building and are designed so as to break away, under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are to be used and provided the following design specification are met:

1. No solid walls shall be allowed; and
2. Material shall consist of open wood lattice or insect screening only.

i. If aesthetic lattice work or screening is utilized, such enclosed space shall not be designed to be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.

j. Prior to construction, plans for any buildings that will have open wood lattice work or insect screening must be submitted to the building official for approval.

k. Any alteration, repair, reconstruction or improvement to a structure shall not enclose the space below the lowest floor except with lattice work or decorative screening, as provided for in subsections (b)(6) h. and i.

l. Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of subsection (b)(6) d. are met.

(c) *Standards for streams with established base flood elevation but without floodways.* Located within the areas of special flood hazard established in subsection 9-28(b) where natural streams exist, but where no base flood data has been provided or where base flood data has been provided without floodways, the following provisions apply:

(1) No encroachments, including fill material or structures shall be located within areas of special flood hazard, unless certification by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.

(2) New construction and substantial improvements of buildings shall be elevated or floodproofed to elevations established in accordance with subsection 9-29(c)(11).

(3) Flood openings shall be provided in accordance with subsection (b)3.

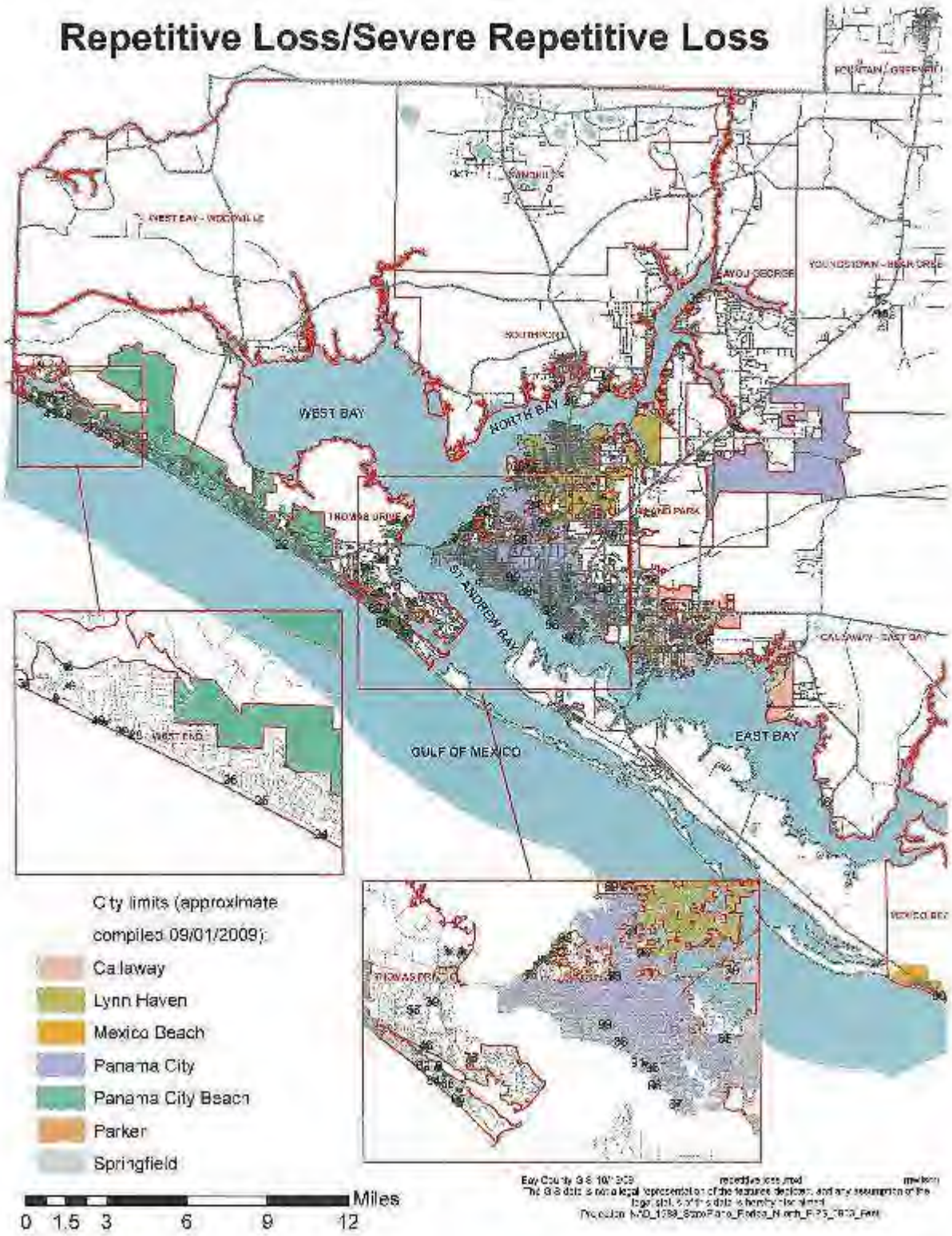
(d) *Standards for subdivision and other development proposals.*

(1) All subdivision and other development proposals shall be consistent with the need to minimize flood damage and shall comply with the requirements of Ordinance No. 90-12 for subdivisions;
(2) All subdivision and other development proposals shall have utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
(3) All subdivision and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
(4) Elevation data for all subdivision and other development proposals shall be included on the site plan and/or final plat for all areas of special flood hazard.
(Ord. No. 93-02, art. 7, §§ A--E, 3-2-93; Ord. No. 04-27, § 3, 8-17-04; Ord. No. 09-19, § 3, 6-16-09)

7A3 Repetitive Loss Properties

Bay County-Unincorporated has 155 RL properties. Specific information regarding the location and costs associated with the flood-related repetitive losses are available ***only*** to the LMS and CRS Team members to facilitate mitigation needs for these properties. Repetitive loss properties are considered confidential and the addresses and claim information are not available to the public. However, a *generalized* series of maps titled, "Repetitive Loss Area Maps", are included in the CRS program files of the County and each municipality, and provide a detailed analysis of each specific area within the county experiencing RLs.

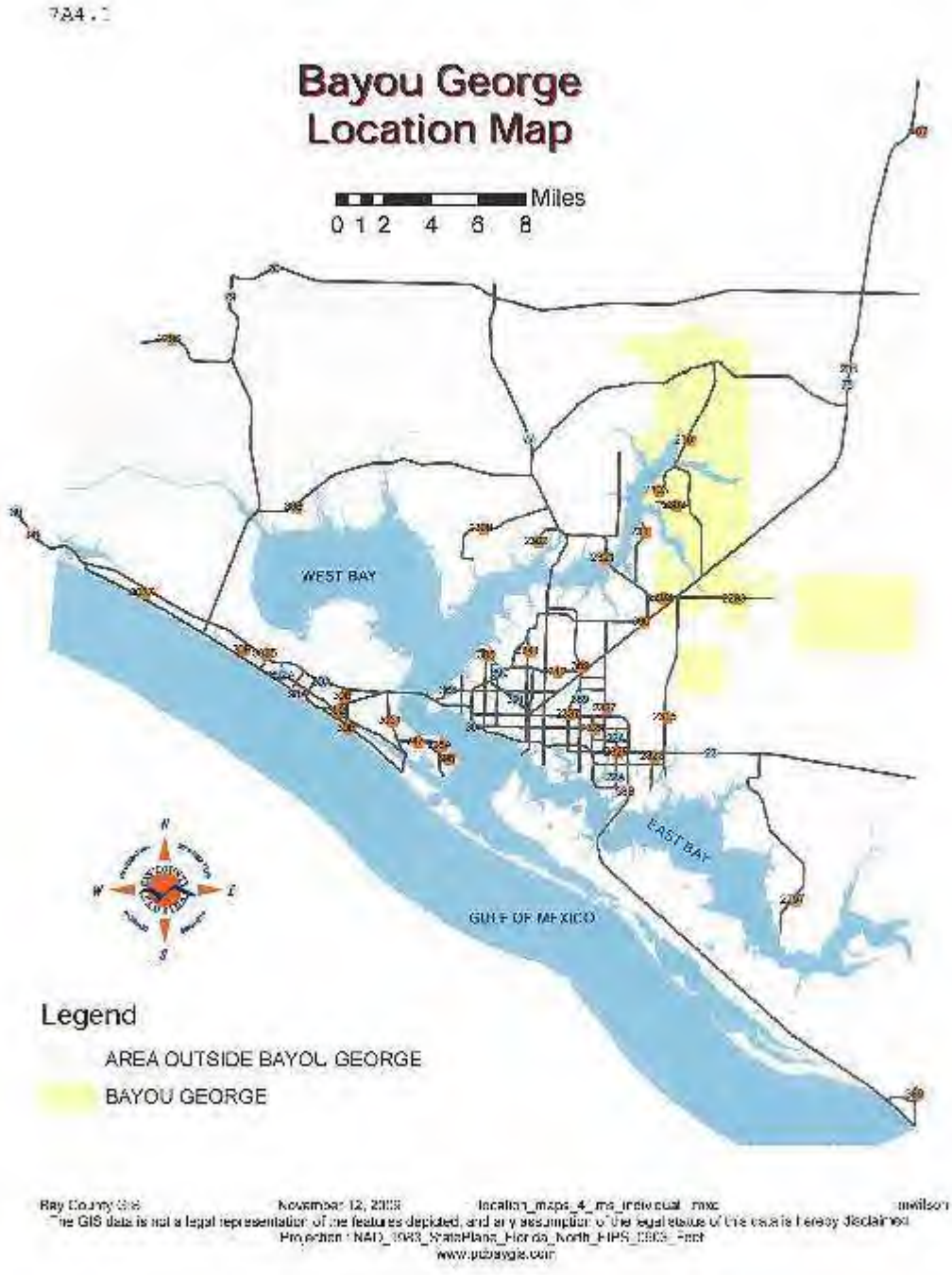
Map 7A3


Repetitive Loss/Severe Repetitive Loss
WEST BAY
NORTH BAY
ST ANDREW BAY
GULF OF MEXICO
EAST BAY
City limits (approximate
compiled 09/01/2009):
Callaway
Lynn Haven
Mexico Beach
Panama City
Panama City Beach
Parker
Springfield
Miles
0 1.5 3 6 9 12

7A4 The following pages provide a map of the location as well as maps of the land values in each Land Use Category, Coastal High Hazard Area, Flood Zones, and Surge Zones for each of the Bay County Unincorporated Fire Districts.

Bayou George	(map numbers 7A4.1 - 7A4.5)
Callaway - East Bay	(map numbers 7A4.6 - 7A4.10)
Fountain-Greenhills	(map numbers 7A4.11 - 7A4.15)
Hiland Park	(map numbers 7A4.16 - 7A4.20)
Northwest Side	(map numbers 7A4.21 - 7A4.25)
Mexico Beach	(map numbers 7A4.26 - 7A4.30)
Sandhills	(map numbers 7A4.31 - 7A4.35)
Southport	(map numbers 7A4.36 - 7A4.40)
Springfield	(map numbers 7A4.41 - 7A4.45)
Thomas Drive	(map numbers 7A4.46 - 7A4.50)
West Bay – Woodville	(map numbers 7A4.51 - 7A4.55)
West End	(map numbers 7A4.56 - 7A4.60)
Youngstown-Bear Creek	(map numbers 7A4.61 - 7A4.65)

7A4.1


7A4.1
Bayou George
Location Map
Miles
0 1 2 4 6 8
WEST BAY
EAST BAY
GULF OF MEXICO
N
S
E
W
Legend
AREA OUTSIDE BAYOU GEORGE
BAYOU GEORGE
Bay County GIS
November 12, 2008
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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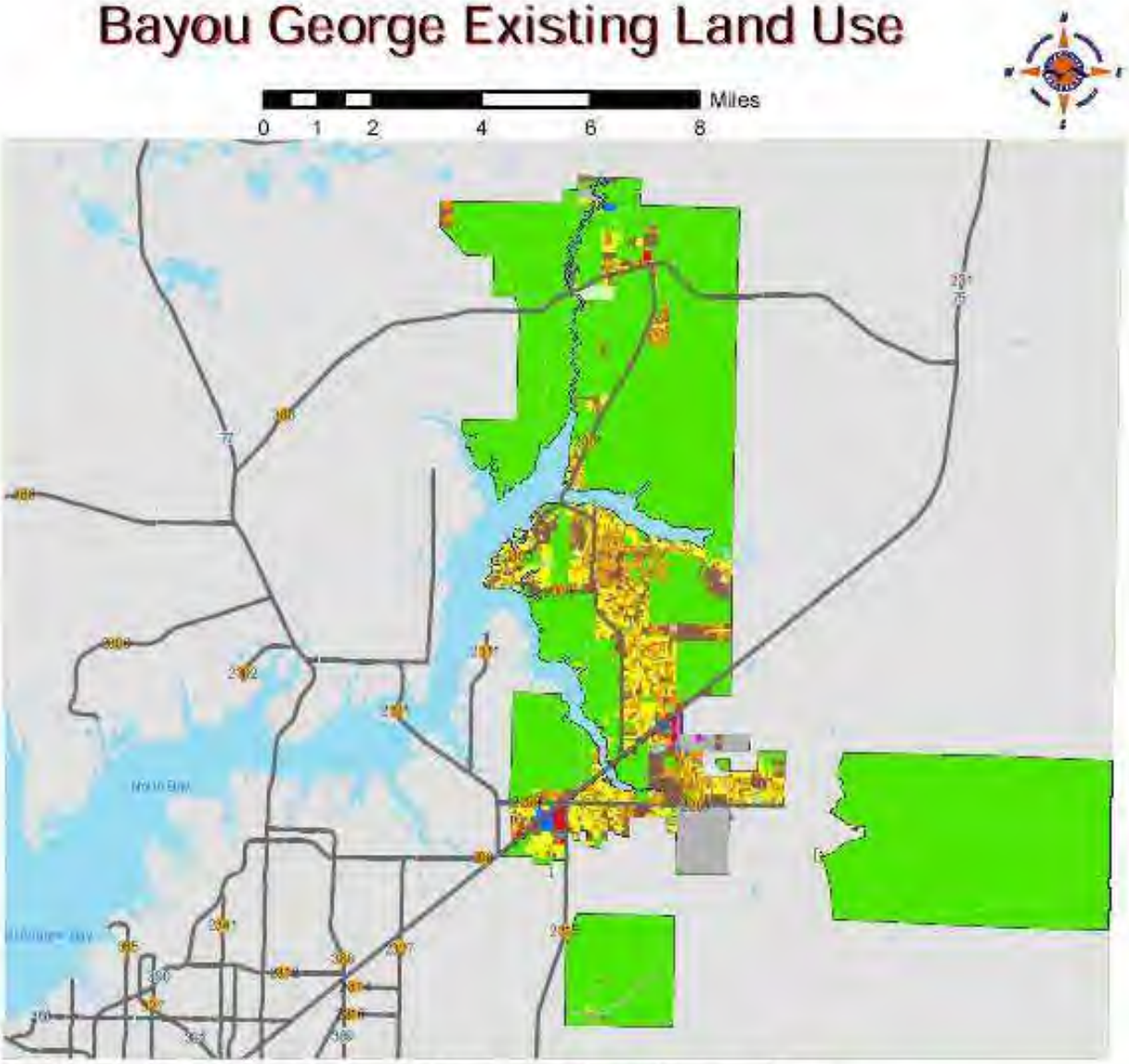
7A4.2

Bayou George Existing Land Use



BAYOU GEORGE	Parcels	Acres	Value ($)
Agriculture	293	36,330.04	$64,582,915
Commercial	60	192.97	9,760,192
Government	36	1,177.19	24,985,266
Industry	8	46.59	8,928,829
Institutional	16	124.71	10,811,454
Mobile Home Residential	1,616	2,202.10	96,877,116
Multi Family Residential	4	5.59	1,267,430
Recreational	6	134.63	2,582,640
Single Family Residential	2,035	4,906.18	257,853,181
Subtotal	4,074	45,120.00	$477,649,023
Vacant	1,536	2,645.43	70,483,658
Total	5,610	47,765.43	$548,132,681

Bay County GIS November 15, 2009 bayougeorge_elu.mxd mwilson
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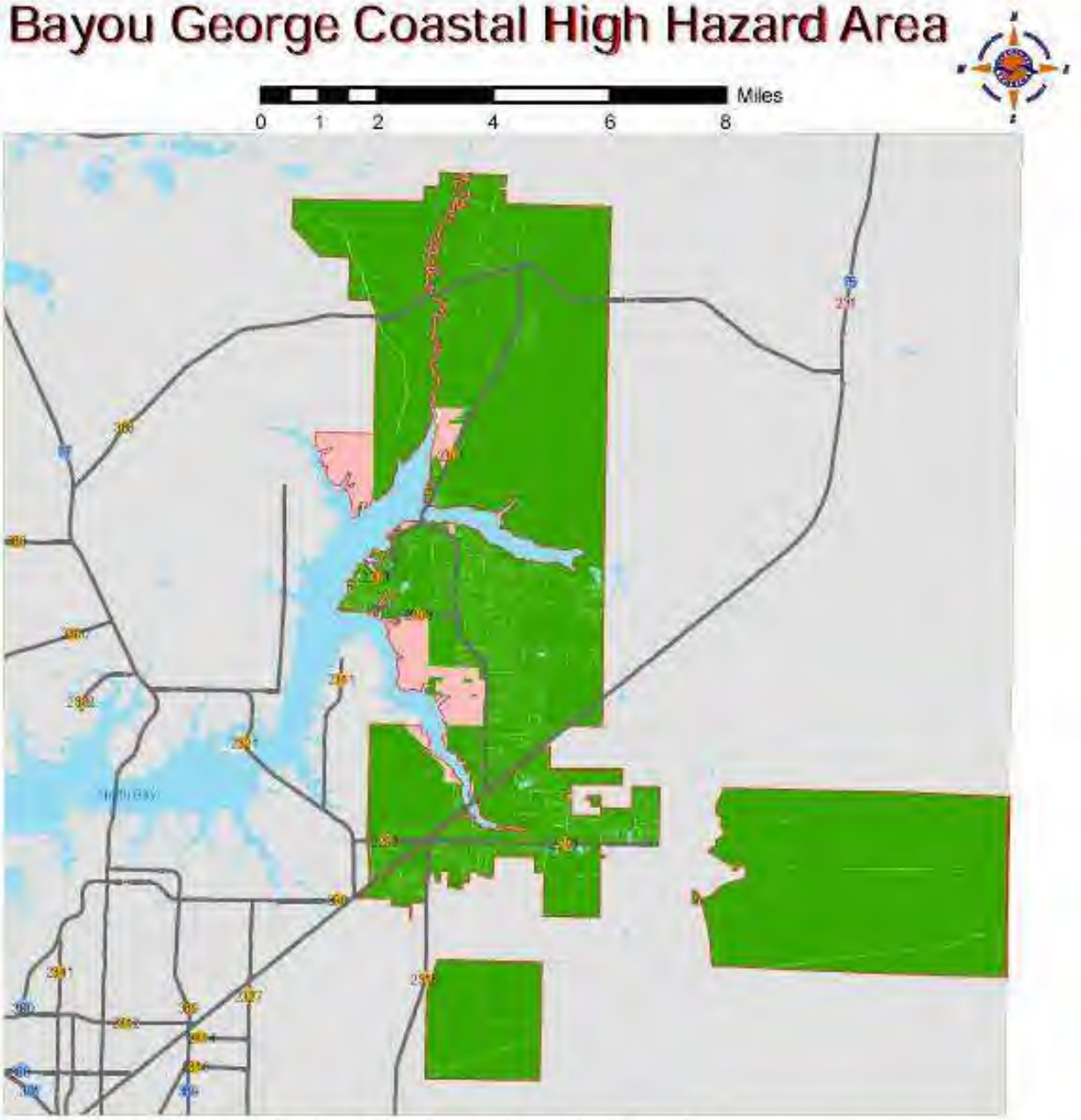
7A4.3

Bayou George Coastal High Hazard Area



BAYOU GEORGE	Parcels	Acres	Value ($)
Agriculture	21	4,620.96	$11,397,182.00
Commercial	2	4.00	186,543.00
Government	2	25.58	30,992.00
Mobile Home Residential	4	2.41	171,450.00
Single Family Residential	22	2,191.99	4,368,798.00
Subtotal	51	6,844.94	16154965
Vacant	6	27.58	591,610.00
Total	57	6,872.52	$16,746,575.00

Legend
- Coastal High Hazard Area with Bayou George
- Parcels Outside Hazard Area within Bayou George
- Parcels Inside Hazard Area within Bayou George
- AREA OUTSIDE BAYOU GEORGE
- BAYOU GEORGE

Bay County GIS November 18, 2009 bayougeorge_chha .mxd mwilson
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7A4.4

Bayou George Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	220	34593.35	$45,420,951	10	17,473.00	$39,626,519			
Commercial	23	149.62	5,753,524	4	8.21	$264,809			
Government	27	1,018.00	34,204,526	10	1036.36	$22,164,592			
High Density Residential									
Industry	2	23.05	4,913,660	1	4.12	$90,885			
Institutional	0	18.86	6,181,055	1	24.64	$184,043			
Mixed Use									
Mobile Home Residential	485	1,877.36	42,023,655	185	290.91	$10,091,006			
Multi Family Residential	1	0.70	116,436	1	0.70	$116,436			
Recreational	3	118.37	1,330,580	3	44.47	$1,664,600			
Single Family Residential	594	3,408.36	85,205,745	344	577.55	$32,123,628			
Subtotal	1485	40,644	198,171,609	667	19,466	93,303,811			
Vacant	666	1,553.31	29,673,229	267	749.70	$21,452,776			
Total	2,151	42,197	$227,844,738	932	20,215	$114,756,587	0	0	0

Bay County GIS November 19, 2009 bayougeorge_flood.mxd mwilson

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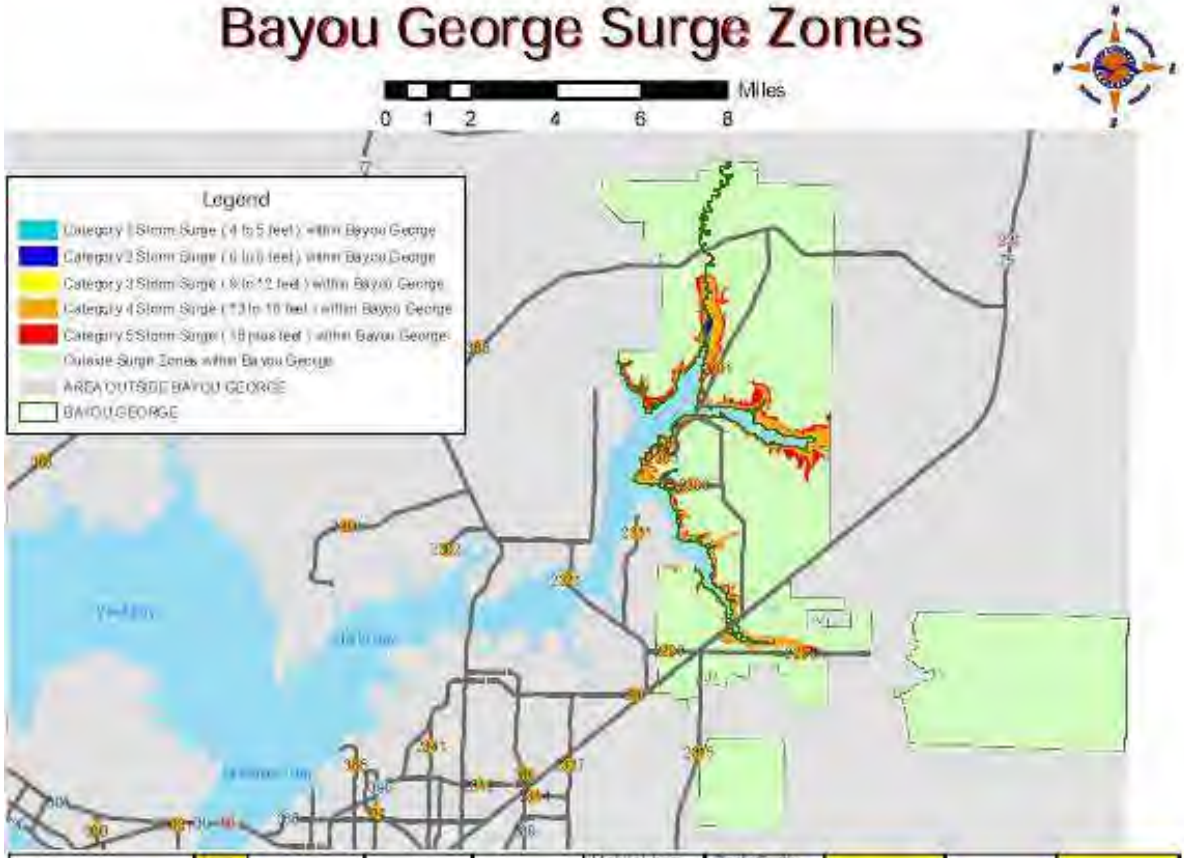
Flood data does not exactly overlay county base data in which the mismatch may be as much as 200 feet. This flood data is for colorful reference only. This data does not replace Hardcopy Flood Insurance Rate Maps (FIRMs) and does not replace on-site survey. Hardcopy FIRMs can be viewed at Bay County Planning. For official flood zone information in unincorporated Bay County, Springfield and Cedar Grove contact Bay County Planning (850)248-8250. In other cities contact the city's planning department.

7A4.5

Bayou George Surge Zones



	Land Use	Agriculture	Commercial	Government	MobileHome Residential	SingleFamily Residential	Subtotal	Vacant	Totals
Category 1 Surge:									
Parcels:		20	2	2	0	24	48	7	55
Acres:		4,654.97	4.61	0.59	1.11	2,163.40	6,824.47	27.75	6,852.22
Value ($):		$11,111,810	$86,500	$0	$0	$26,014,460	$38,213,070	$79,199	$37,119,069
Category 2 Surge:									
Parcels:		35	2	3	8	39	85	24	109
Acres:		6,516.71	4.00	25.66	24.67	2,231.25	8,802.19	121.77	8,923.96
Value ($):		$10,105,375	$86,540	$31,950	$115,243	$8,986,764	$20,485,918	$342,410	$20,828,328
Category 3 Surge:									
Parcels:		35	3	3	27	72	139	28	167
Acres:		6,516.71	4.00	25.66	37.85	2,236.37	8,820.69	123.45	8,944.04
Value ($):		$10,105,375	$86,540	$31,950	$686,077	$10,391,589	$21,944,657	$373,466	$22,318,123
Category 4 Surge:									
Parcels:		66	11	6	69	336	673	211	884
Acres:		9,945.21	6.52	37.67	307.98	2,885.40	12,982.78	377.17	13,359.95
Value ($):		$32,764,279	$86,869	$76,970	$3,432,211	$48,227,940	$84,577,769	$7,955,469	$92,533,238
Category 5 Surge:									
Parcels:		77	11	7	220	438	753	284	1,037
Acres:		11,040.31	6.52	33.60	304.63	2,820.04	14,405.04	484.23	14,889.27
Value ($):		$34,376,838	$86,869	$27,307	$3,174,696	$52,764,420	$90,430,130	$10,448,750	$100,878,880

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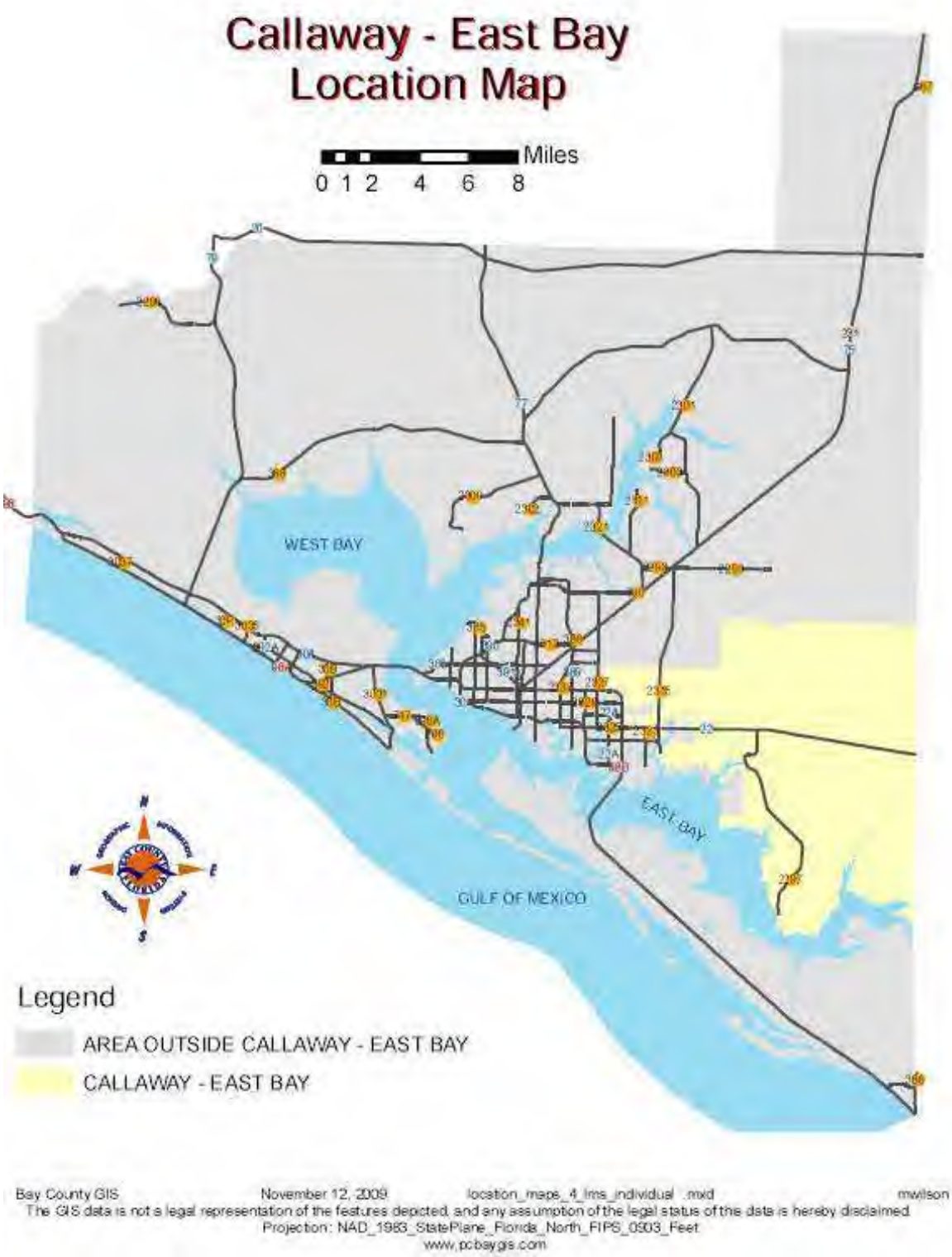
7A4.6



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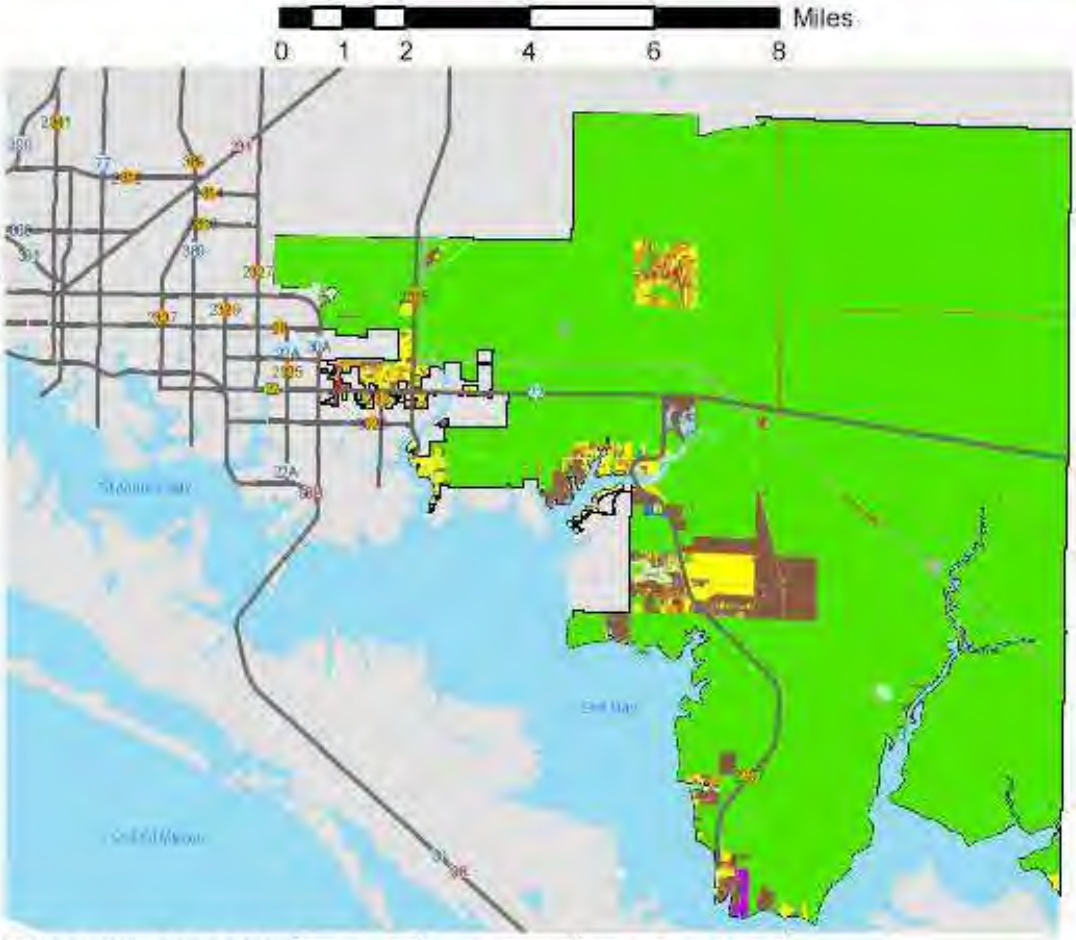
7A4.7

Callaway - East Bay
Existing Land Use



CALLAWAY - EAST BAY	Parcels	Acres	Value ($)
Agriculture	326	56,428.21	$40,127,731
Commercial	49	178.44	6,675,345
Government	38	420.70	703,819
High Density Residential	69	3.89	190,808
Industry	3	88.01	4,604,542
Institutional	5	25.00	1,268,411
Mobile Home Residential	335	428.45	19,980,314
Multi Family Residential	6	3.21	804,260
Recreational	6	56.64	1,459,269
Single Family Residential	1,076	1,635.89	156,145,946
Subtotal	1,913	59,268.44	$231,960,445
Vacant	1,293	2,812.58	110,544,843
Total	3,206	62,081.02	$342,505,288

Bay County GIS November 15, 2009 callaway_eastbay_ elu.mxd mwilson
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Projection: NAD_1983 _StatePlane_Florida_North_FIPS_0903_Feet
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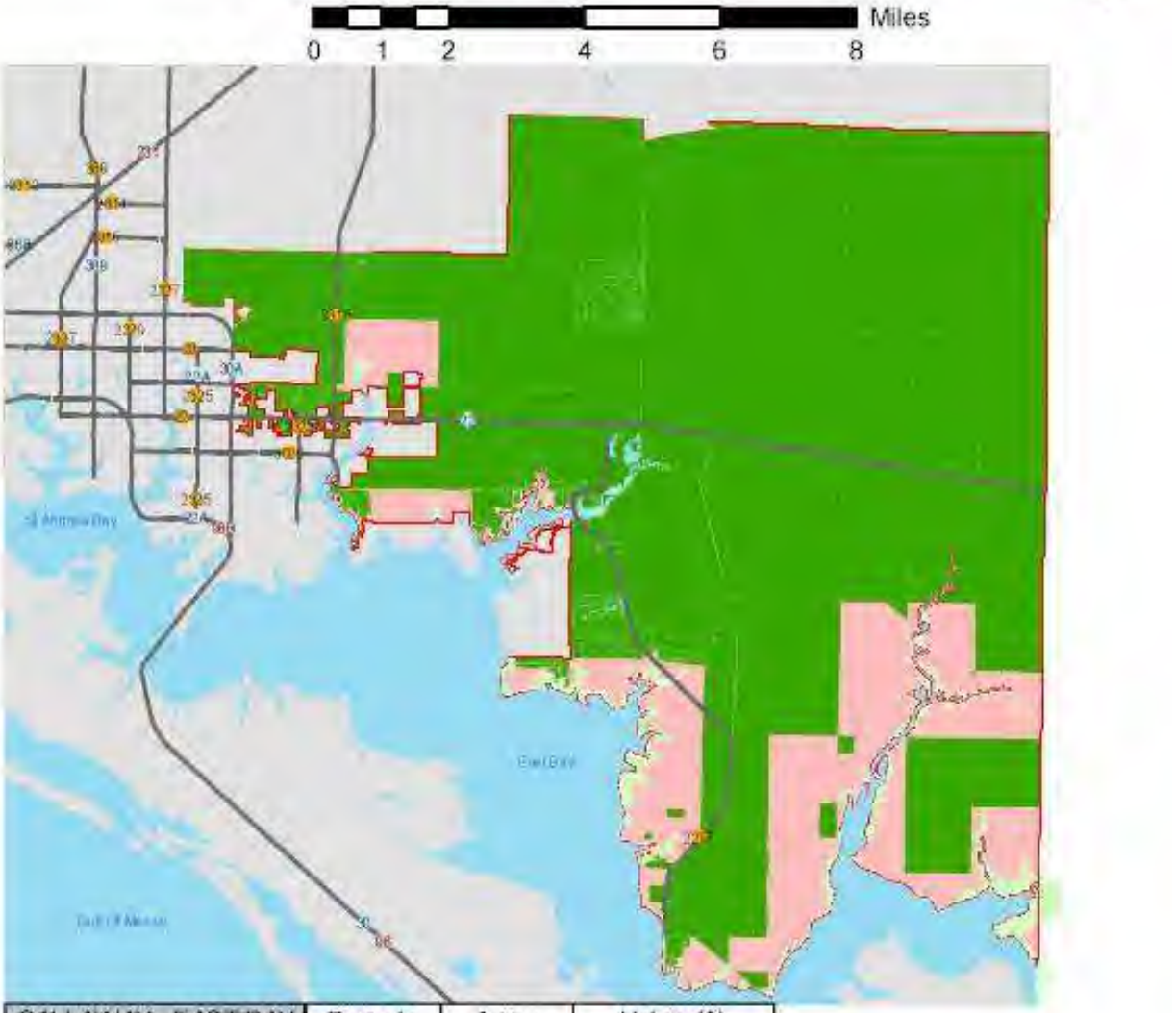
7A4.8

Callaway - East Bay
Coastal High Hazard Area



CALLAWAY - EAST BAY	Parcels	Acres	Value ($)
Agriculture	69	11,005.65	$14,031,179
Commercial	1	1.47	83,894
Government	7	62.04	132,750
Industry	1	73.36	2,105,065
Mobile Home Residential	12	43.33	1,083,122
Recreational	1	0.91	23
Single Family Residential	161	236.90	40,846,856
Subtotal	252	11,423.66	$58,282,889
Vacant	236	397.46	40,436,439
Total	488	11,821.12	$98,719,328

Bay County GIS November 18, 2009 callaway_eastbay_chha .mxd mwilson
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7A4.9

Callaway - East Bay Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	284	55.70	$35,081,117	83	18.70	$23,994,079	26	4.10	$11,261,466.00
Commercial	22	10.60	1,905,503	4	3.83	355,003			
Government	28	38.37	549,715	12	09.06	91,697			
High Density Residential									
Industry	3	88.01	4,004,542	2	83.63	4,210,130	1	73.36	2,105,065
Institutional	2	9.19	091,500	1	2.07	226,308			
Mixed Use									
Mobile Home Residential	164	245.89	6,852,767	28	87.87	2,016,864			
Multi Family Residential	1	0.53	19,825						
Recreational	3	56.22	990,163	2	142	199,025			
Single Family Residential	237	852.09	31,492,769	284	57.35	08,351,052	45	64.66	10,029,849
Subtotal	672	57,019.04	$82,256,270	447	20,555.97	$89,383.86	72	4,288.17	$24,016,400
Vacant	625	2,200.18	47,999,816	486	755.88	58,075,505	33	106.61	5,796,016
Total	1,297	59,299.22	$130,256,086	933	21,311.35	$147,459,702	105	4,374.78	$29,814,416

Bay County GIS — November 6, 2009 — callaway_eastbay_flood.mxd — mwilson

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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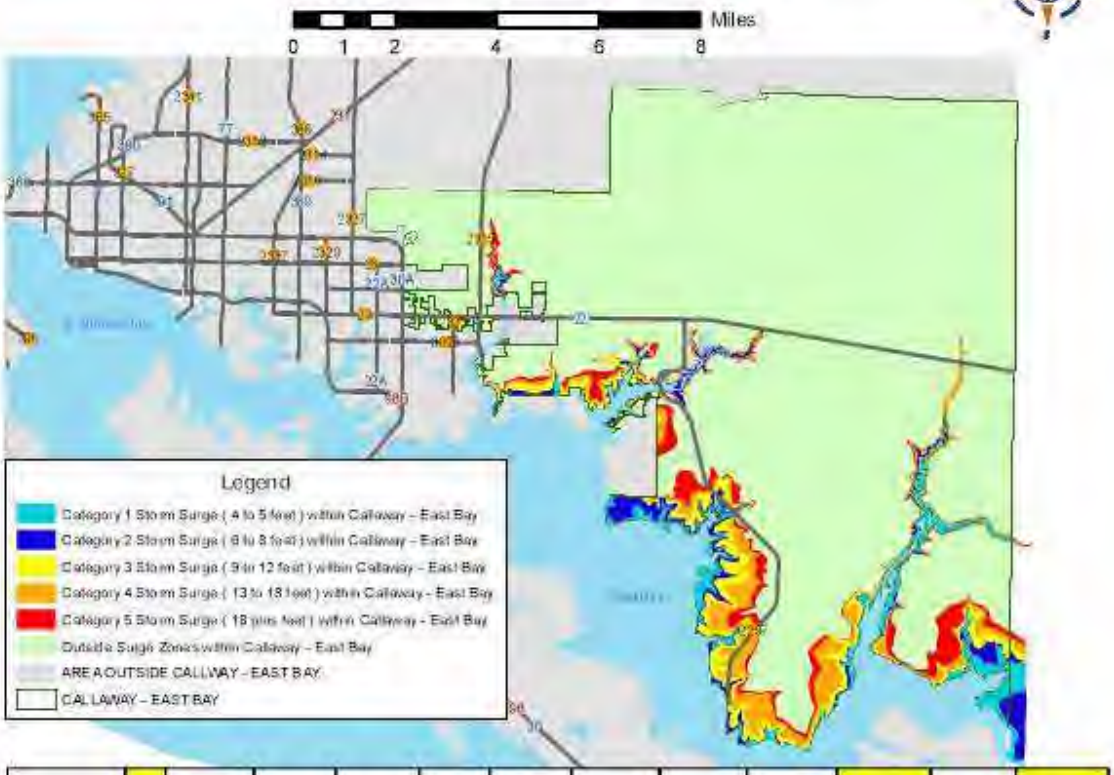
7A4.10

Callaway - East Bay Surge Zones



	Land Use	Agriculture	Commercial	Government	Industry	Institutional	Mobile Home Residential	Recreational	Single Family Residential	Vacant	Total
Category 1 Surge											
Parcels		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
Acres		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Value ($)		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Category 2 Surge											
Parcels		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acres		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Value ($)		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Category 3 Surge											
Parcels		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acres		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Value ($)		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Category 4 Surge											
Parcels		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acres		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Value ($)		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Category 5 Surge											
Parcels		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acres		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Value ($)		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Bay County GIS — November 12, 2009 — callaway_eastbay_surge.mxd — mwilson

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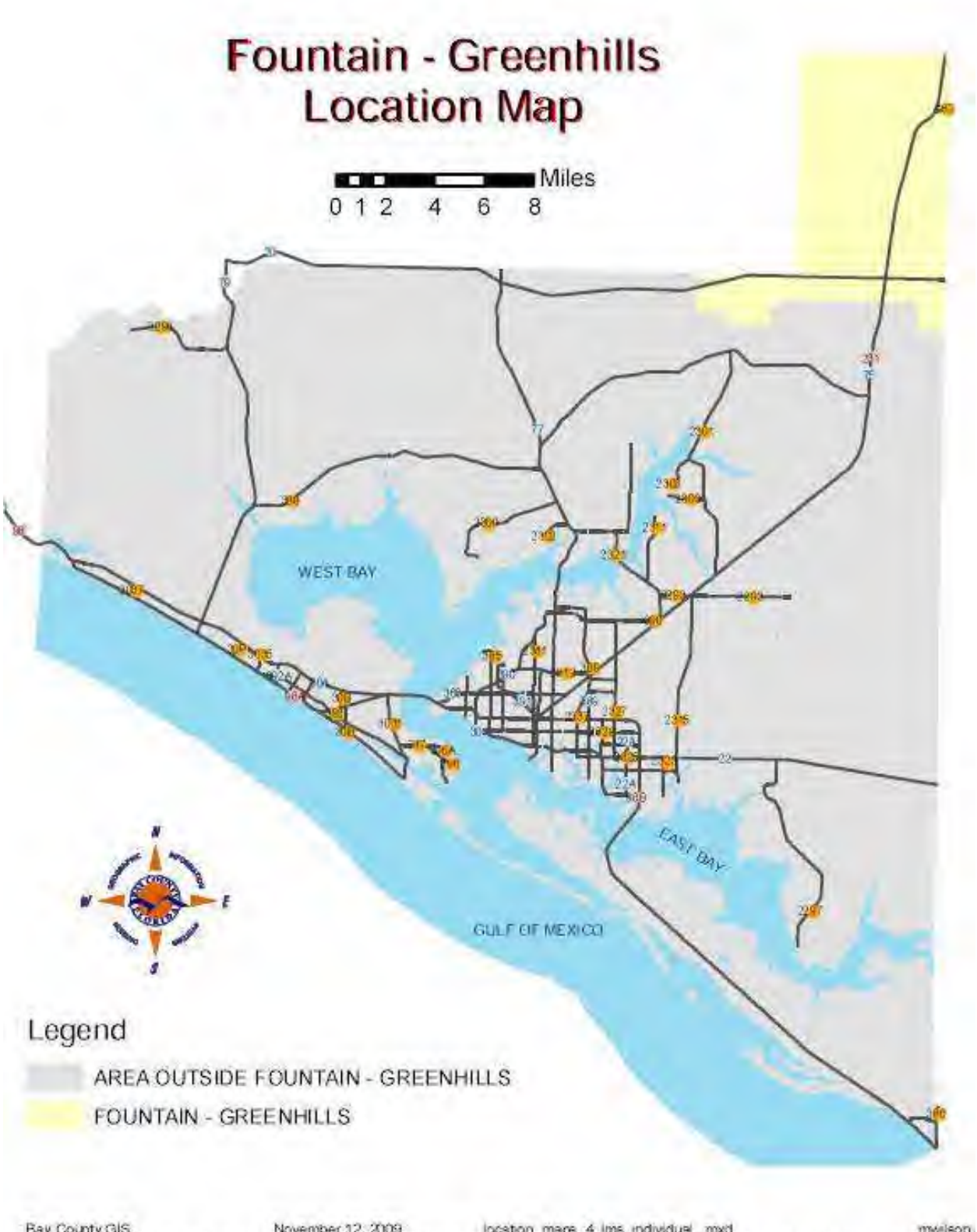
7A4.11



Bay County GIS November 12, 2009 location_maps_4_ims_individual .mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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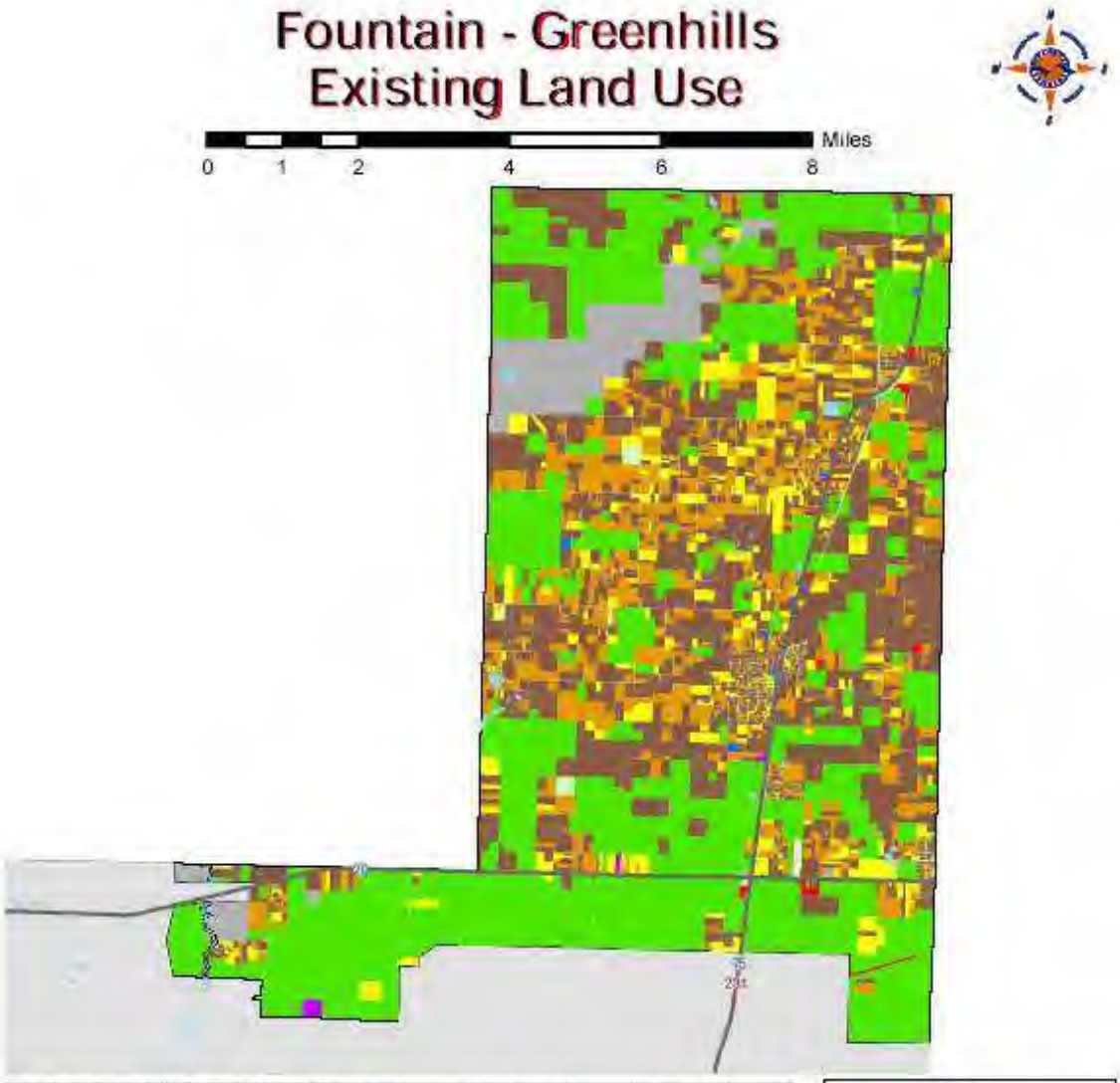
7A4.12

Fountain - Greenhills
Existing Land Use



FOUNTAIN - GREENHILLS	Parcels	Acres	Value ($)
Agriculture	313	17,624.16	$17,321,669
Commercial	34	169.35	2,874,110
Government	67	2,324.20	10,067,382
Industry	5	59.21	416,011
Institutional	13	45.84	2,188,339
Mobile Home Residential	1,168	5,797.13	54,906,828
Recreational	8	125.44	1,081,932
Single Family Residential	475	2,731.18	36,495,634
Subtotal	2,083	28,876.51	$125,351,905
Vacant	3,292	13,374.42	67,187,711
Total	5,375	42,250.93	$192,539,616

Bay County GIS November 18, 2009 fountain_greenhills_ elu.mxd mwilson
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Projection: NAD_1 983_StatePlane_Florida_North_FIPS_0903_Feet
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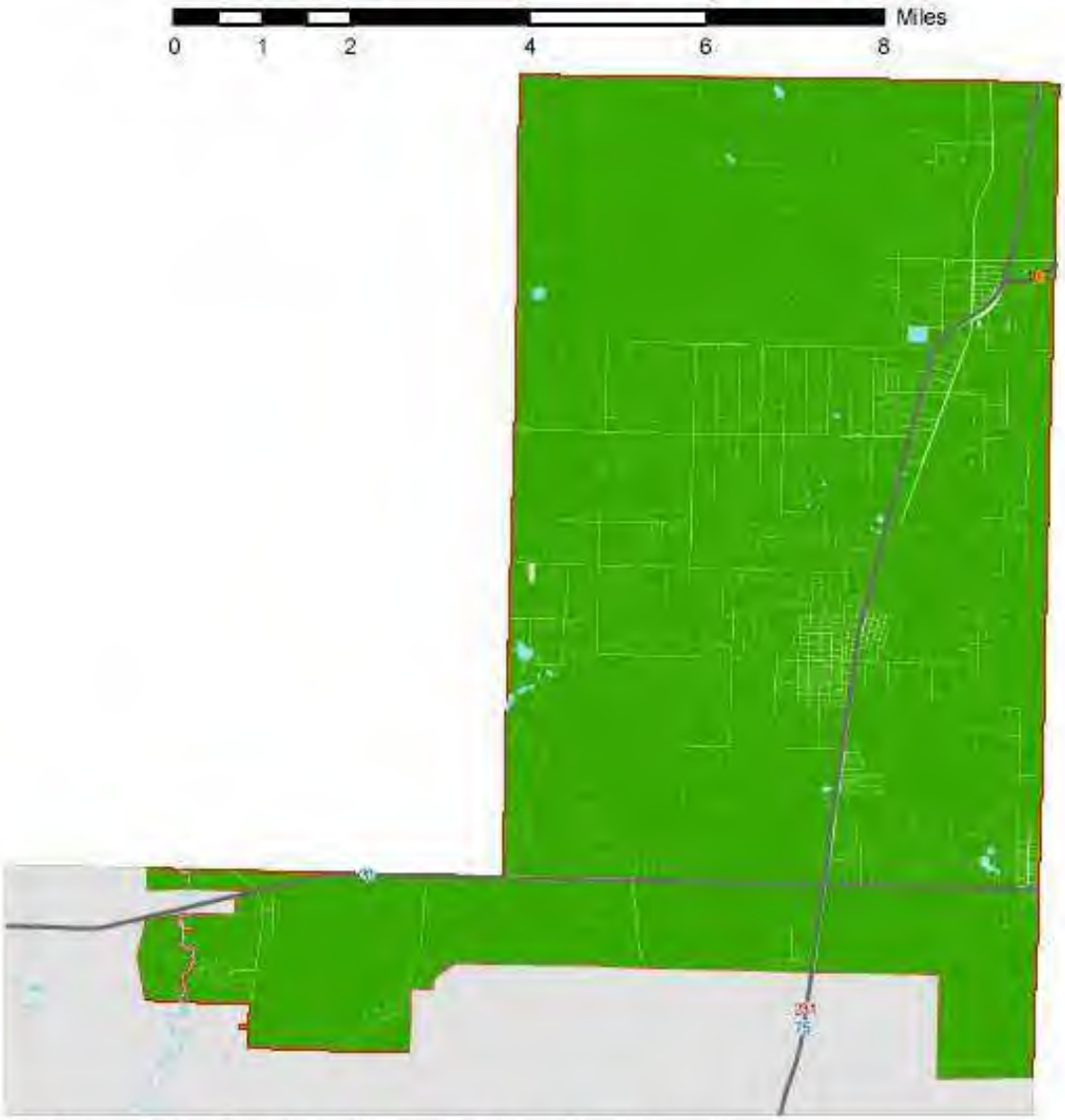
7A4.13

Fountain - Greenhills
Coastal High Hazard Area



FOUNTAIN - GREENHILLS	Parcels	Acres	Value ($)
Agriculture	0	0	$0.00
Mobile Home Residential	0	0	0.00
Recreational	0	0	0.00
Single Family Residential	0	0	0.00
Subtotal	0	0	$0.00
Vacant	0	0	0.00
Total	0	0	$0.00

Bay County GIS November 15, 2009 fountain_greenhills_chha .mxd mwilson
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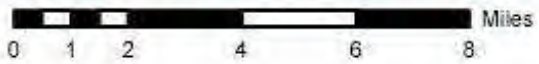
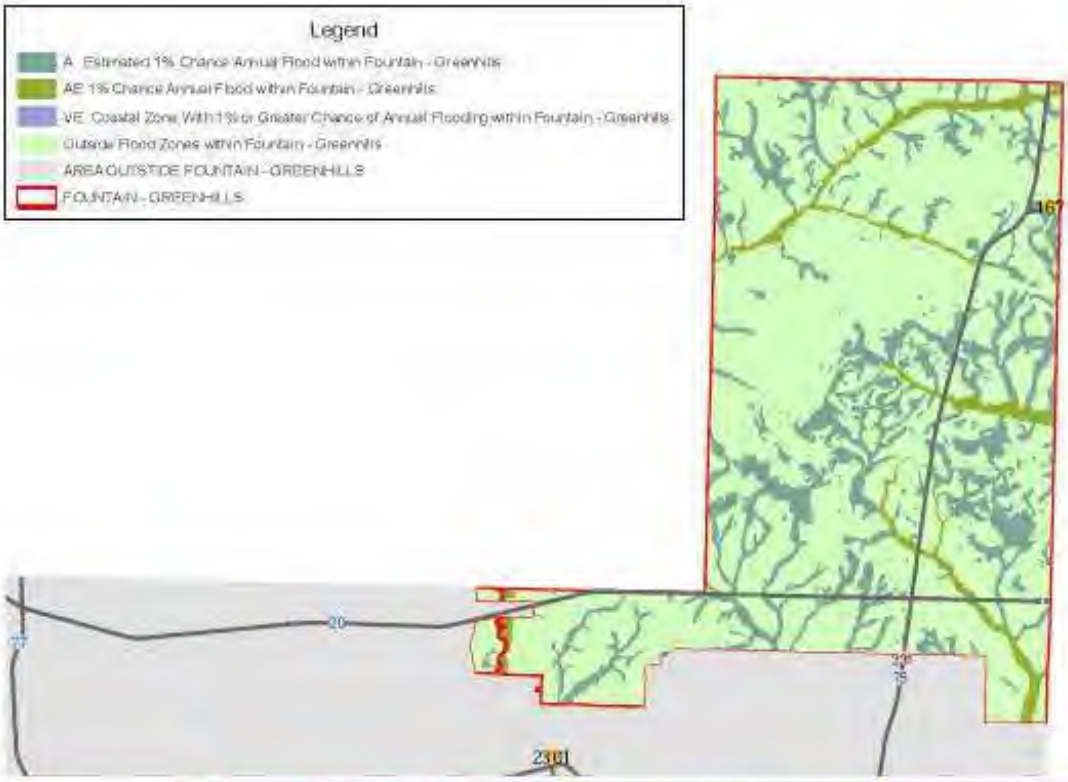
7A4.14

Fountain - Greenhills Flood Zones





	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	208	4437.06	$8,067,975	50	3,690.30	$4,556,089			
Commercial	9	113.58	1,341,231	2	43.67	15,154			
Government	8	1,791.29	4,703,763	28	1754.22	7,277,716			
High Density Residential									
Industry	3	57.25	326,835						
Institutional	4	9.80	652,720						
Mixed Use									
Mobile Home Residential	295	2,546.29	9,282,937	26	298.53	1,562,269			
Multi Family Residential									
Recreational	3	115.43	639,028	3	37.15	418,545			
Single Family Residential	142	1,400.67	11,634,578	25	422.75	2,189,882			
Subtotal	688	20,405.50	$43,649,057	134	6,244.84	$15,962,432	0	0	0
Vacant	968	7,634.45	27,476,091	152	1217.86	4,743,424			
Total	1,656	28,039.95	$71,125,158	286	7,462.70	$20,705,856	0	0	0

Bay County GIS November 6, 2008 fountain_greenhills_flood.mxd mwilson

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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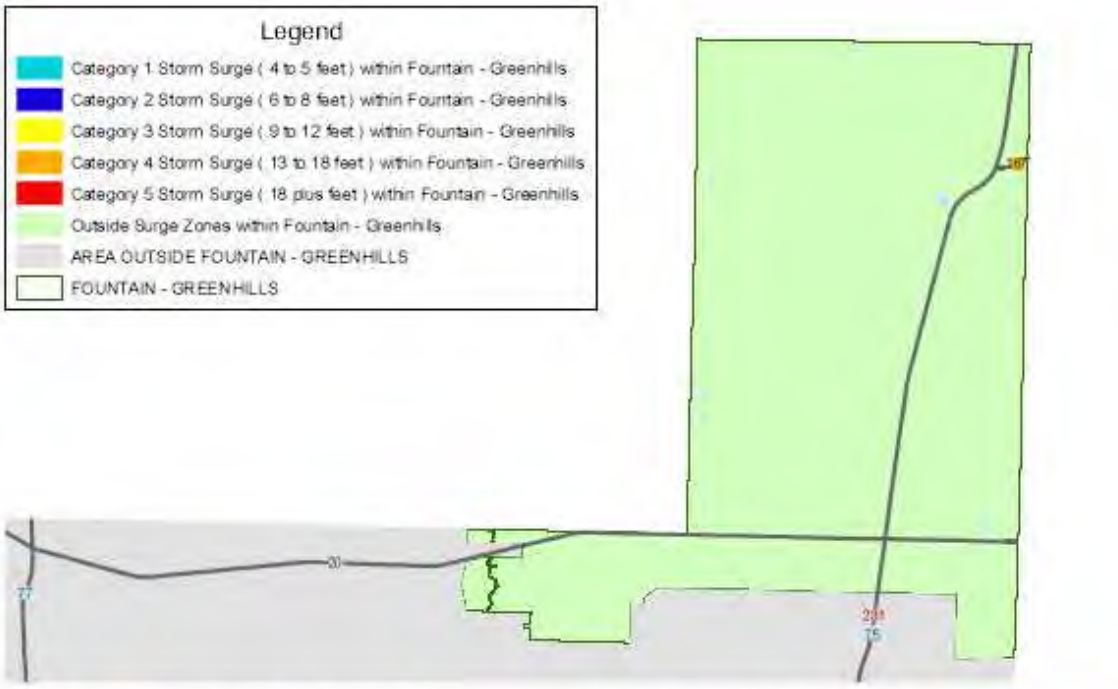
7A4.15

Fountain - Greenhills Surge Zones



	Land Use	Agriculture	Commercial	Government	High Density Residential	Industry	Institutional	Mixed Use	Mobile Home Residential	Multi Family Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1 Surge															
Parcels															0
Acres															0.00
Value ($)															$0.00
Category 2 Surge															
Parcels															0
Acres															0.00
Value ($)															$0.00
Category 3 Surge															
Parcels															0
Acres															0.00
Value ($)															$0.00
Category 4 Surge															
Parcels															0
Acres															0.00
Value ($)															$0.00
Category 5 Surge															
Parcels															0
Acres															0.00
Value ($)															$0.00

Bay County GIS November 12, 2009 fountain_greenhills_surge.mxd mwilson

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7A4.16

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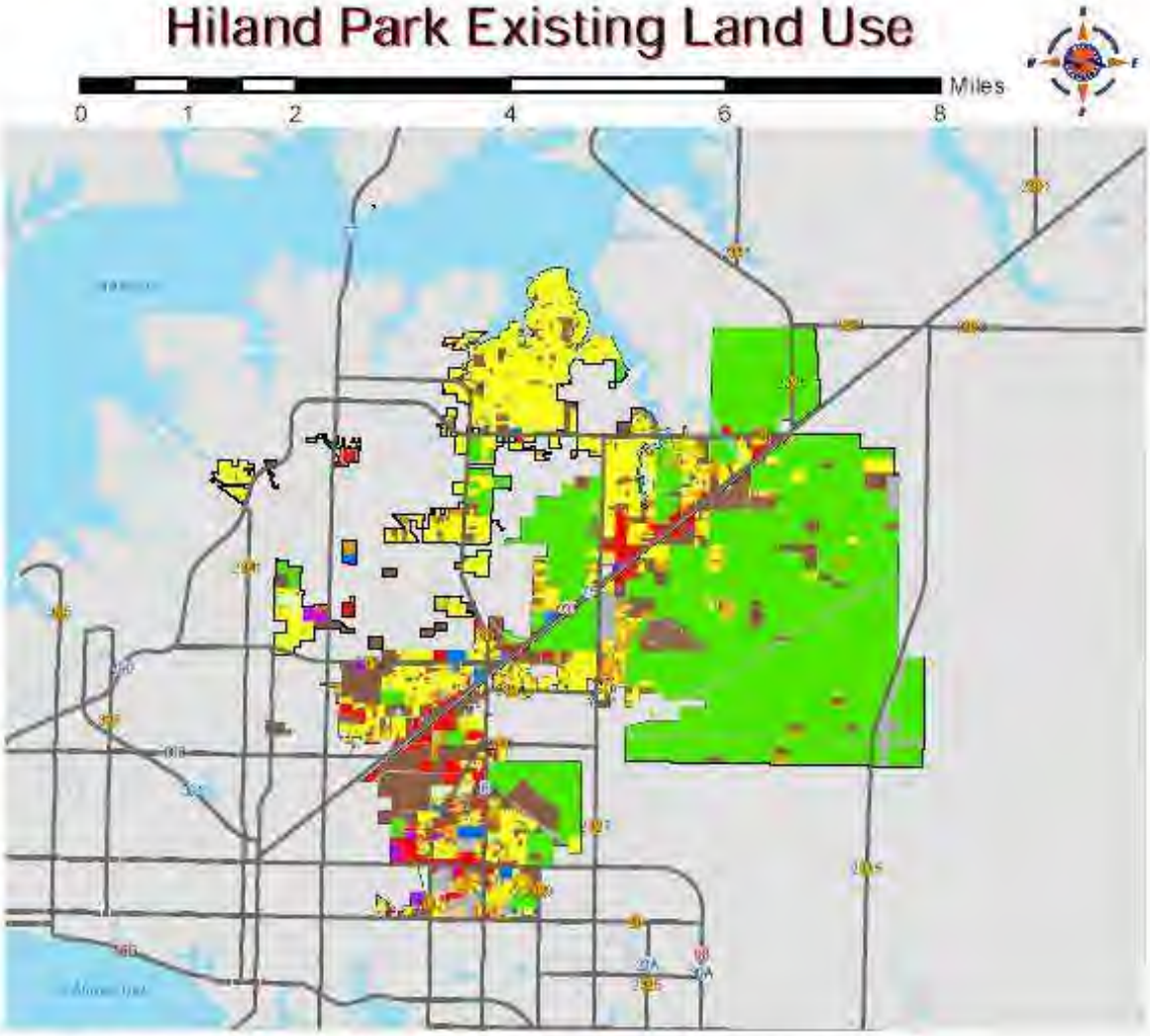
7A4.17

Hiland Park Existing Land Use



HILAND PARK	Parcels	Acres	Value ($)
Agriculture	81	5,252.91	$12,624,351
Commercial	247	453.13	$64,035,525
Government	84	332.39	$22,627,593
Industry	24	60.34	$8,637,458
Institutional	51	86.91	$22,732,450
Mobile Home Residential	579	374.34	$36,427,346
Multi Family Residential	43	26.42	$11,161,375
Recreational	11	50.75	$2,946,114
Single Family Residential	3,121	2,045.58	$442,093,062
	4,241	8,682.77	$623,285,274
Vacant	1,302	1,498.29	$60,127,192
Total	5,543	10,181.06	$683,412,466

Bay County GIS November 15, 2009 hilandpark_elu.mxd rnwilson
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Projection: NAD_1983_State_Plane_Florida_North_FIPS_0903_Feet
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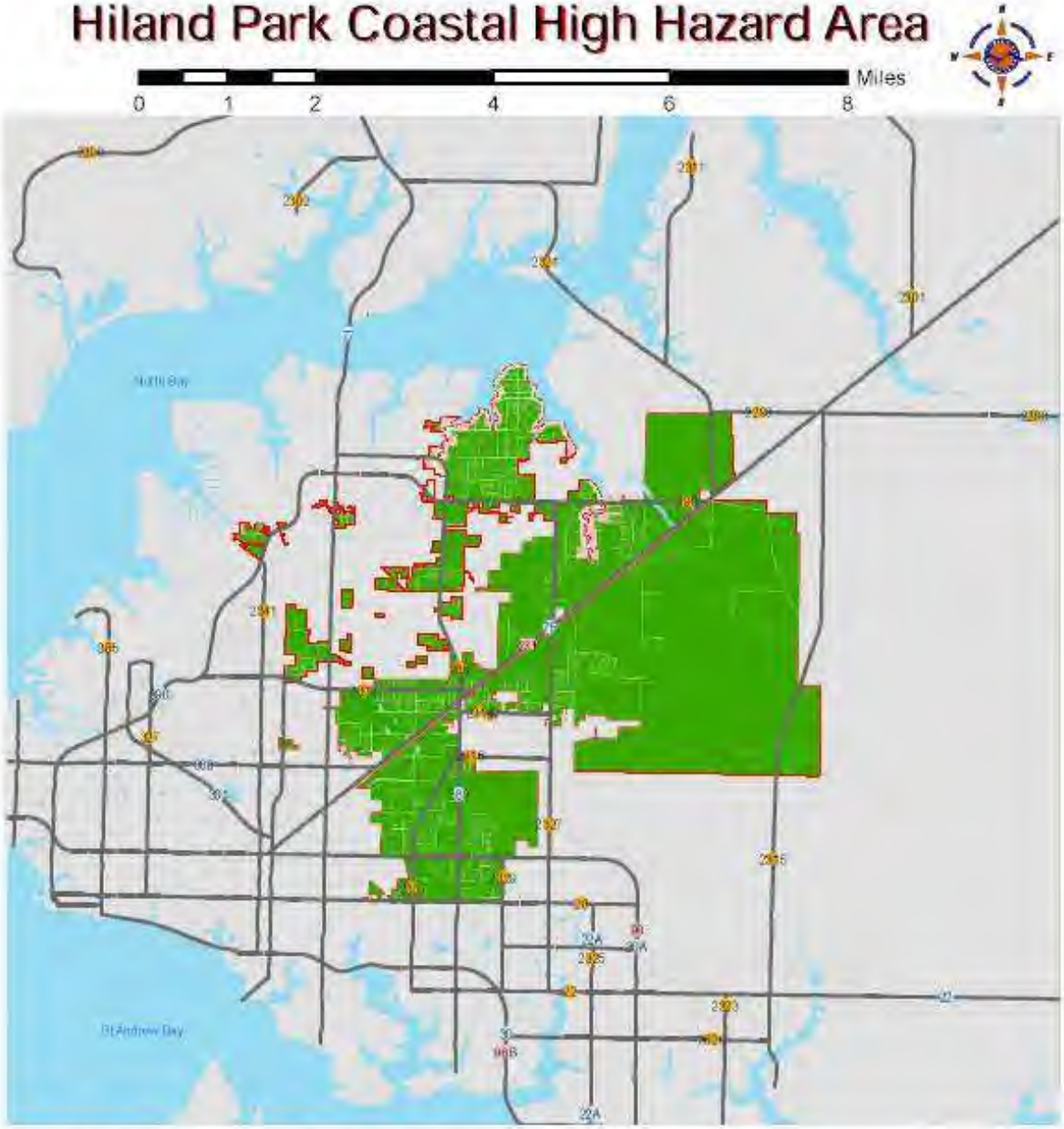
7A4.18

Hiland Park Coastal High Hazard Area



HILAND PARK	Parcels	Acres	Value ($)
Agriculture	4	30.44	$5,708,138
Mobile Home Residential	8	8.94	799,725
Recreational	1	13.3	144,000
Single Family Residential	163	169.89	42,347,441
Subtotal	176	222.57	$48,999,304
Vacant	48	43.87	6,326,222
Total	224	266.44	$55,325,526

Legend
- Coastal High Hazard Area within Hiland Park
- Parcels Coastal Hazard Area within Hiland Park
- Parcels Inside Hazard Area within Hiland Park
- AREA OUTSIDE HILAND PARK
- HILAND PARK

Bay County GIS November 18, 2009 hilandpark_chha .mxd mwilson
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7A4.19

Hiland Park Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	65	5,070.60	$5,396,583	19	885.85	$6,702,311			
Commercial	84	184.93	9,652,792	48	144.21	14,507,992			
Government	36	235.82	6,654,648	20	77.95	12,658,704			
High Density Residential									
Industry	7	21.95	3,754,566	5	17.95	1,992,261			
Institutional	6	30.89	5,290,622	5	22.82	2,519,920			
Mixed Use									
Mobile Home Residential	81	11.99	5,896,311	52	57.72	5,983,611	1	1.92	369,803
Multi Family Residential	9	2.22	10,190,206	2	9.92	5,442,331			
Recreational	3	1.16	302,232	5	42.97	2,444,906			
Single Family Residential	542	572.04	76,493,019	288	313.42	55,632,804	12	9.79	6,236,547
Subtotal	812	6,22142	$ 126,290,971	416	1571.71	$ 107,196,180	13	11.71	$ 6,604,350
Vacant	303	891.83	16,002,763	150	358.39	12,917,750			
Total	1,657	7,485.29	$ 220,786,743	836	2,243.52	$ 175,744,934	25	21.50	$ 12,839,897

Bay County GIS — November 6, 2008 — hilandpark_flood.mxd — mwilson

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7A4.20

Hiland Park Surge Zones

	Land Use	Agriculture	Commercial	Government	Mobile/Other Residential	Multi-Family Residential	Recreational	Single Family Residential	Subtotals	Vacant	Totals
Category 1 Surge											
Parcels		10			4		1	164	179	146	325
Acres		11.66			6.04		13.3	198.61	229.61	68.67	298.44
Value ($)		$5,709,190			$799,725		$44,071	$23,447,661	$49,999,300	$7,124,225	$57,123,525
Category 2 Surge											
Parcels		4	1		8		2	183	218	58	276
Acres		30.44	5.29		13.72		13.66	207.9	271.46	80.07	351.53
Value ($)		$5,709,190	$93,802		$1,037,499		$44,033	$46,852,676	$53,936,317	$6,773,198	$60,709,515
Category 3 Surge											
Parcels		6	1	2	8		2	276	295	70	365
Acres		30.44	5.29	9.24	14.25		13.66	282.49	349.04	73.64	423.68
Value ($)		$5,709,190	$93,802	$212,82	$1,088,182		$44,033	$48,511,746	$54,066,101	$7,789,428	$61,855,529
Category 4 Surge											
Parcels		7	2	9	21	1	2	496	538	184	681
Acres		99.66	22.5	7.35	20.38	0.31	13.66	466.97	631.03	199.3	787
Value ($)		$6,189,685	$1,215,210	$208,756	$1,630,519	$37,999	$44,033	$85,494,673	$107,788,210	$12,056,678	$119,844,122
Category 5 Surge											
Parcels		8	3	10	25	1	2	659	748	192	940
Acres		129.05	32.23	7.61	21.19	0.31	13.66	591.32	815.14	199.3	986.52
Value ($)		$6,295,732	$1,404,410	$260,397	$1,681,564	$37,999	$44,033	$120,306,481	$130,031,016	$18,760,417	$148,079,026

Bay County GIS | November 18, 2009 | miandpark_surge.mxd | meters

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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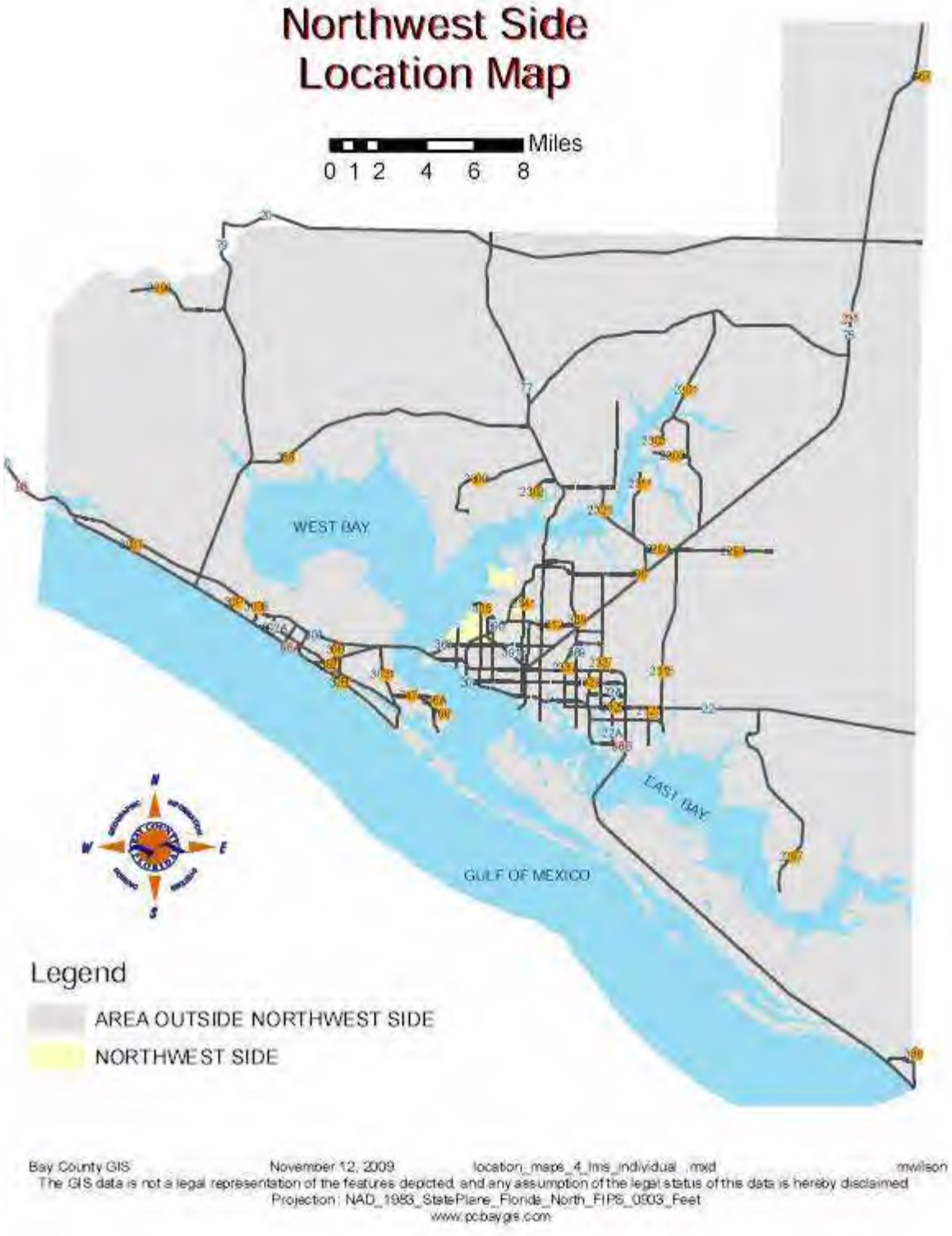
7A4.21



Bay County GIS November 12, 2009 location_maps_4_lms_individual_.mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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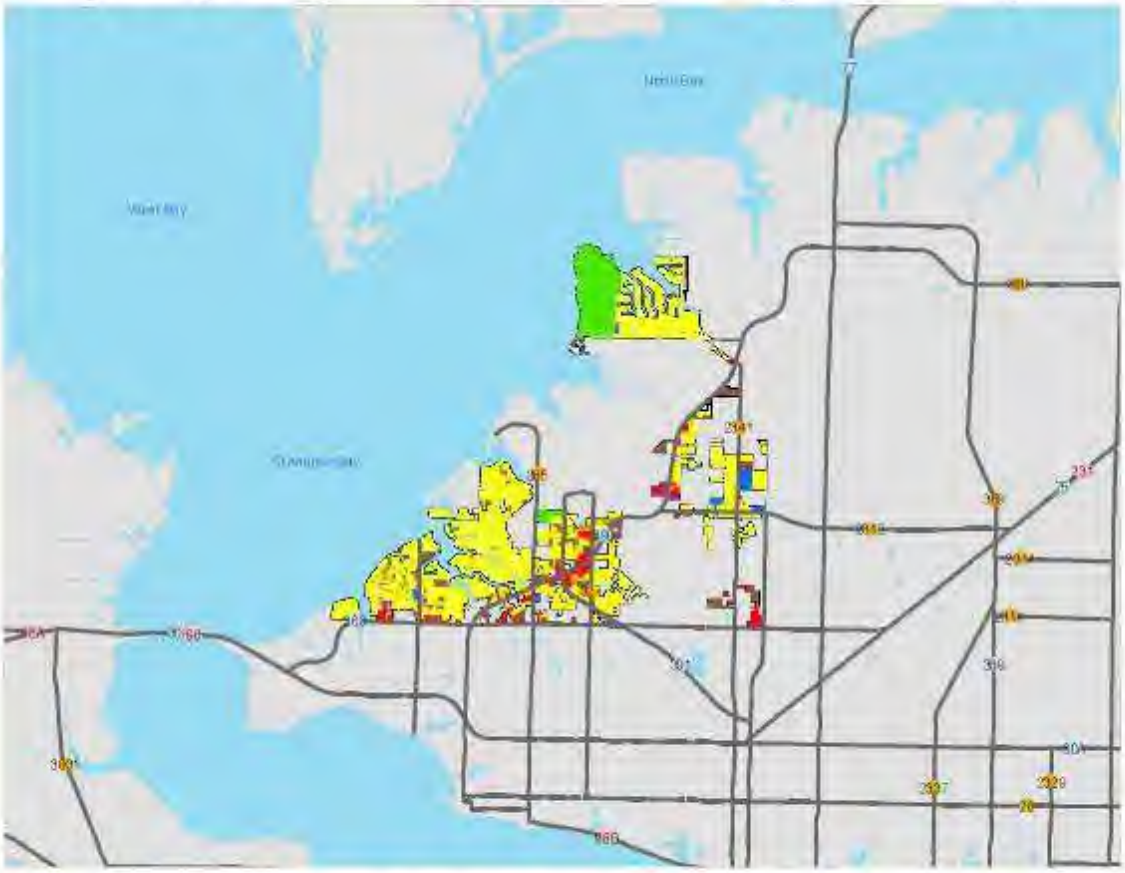
7A4.22

Northwest Side
Existing Land Use

0 1 2 4 6 8 Miles



NORTHWEST SIDE	Parcels	Acres	Value ($)
Agriculture	4	185.17	$768,233
Commercial	104	106.11	33,766,808
Government	17	9.71	517,527
Industry	6	8.99	2,582,069
Institutional	9	29.27	6,391,494
Mobile Home Residential	42	31.37	4,517,817
Multi Family Residential	14	6.09	2,273,810
Recreational	4	10.09	830,959
Single Family Residential	1,836	1,024.74	334,284,676
Subtotal	2,036	1,411.54	$385,933,393
Vacant	166	180.45	22,981,860
Total	2,202	1,591.99	$408,915,253

Legend
- Agriculture
- Commercial
- Government
- Industry
- Institutional
- Mixed Use
- Recreational
- Single Family Residential
- Multi Family Residential
- High Density Residential
- Mobile Home Residential
- Vacant
- AREA OUTSIDE NORTHWEST SIDE
- NORTHWEST SIDE

Bay County GIS November 16, 2009 northwest_elu.mxd rwilson

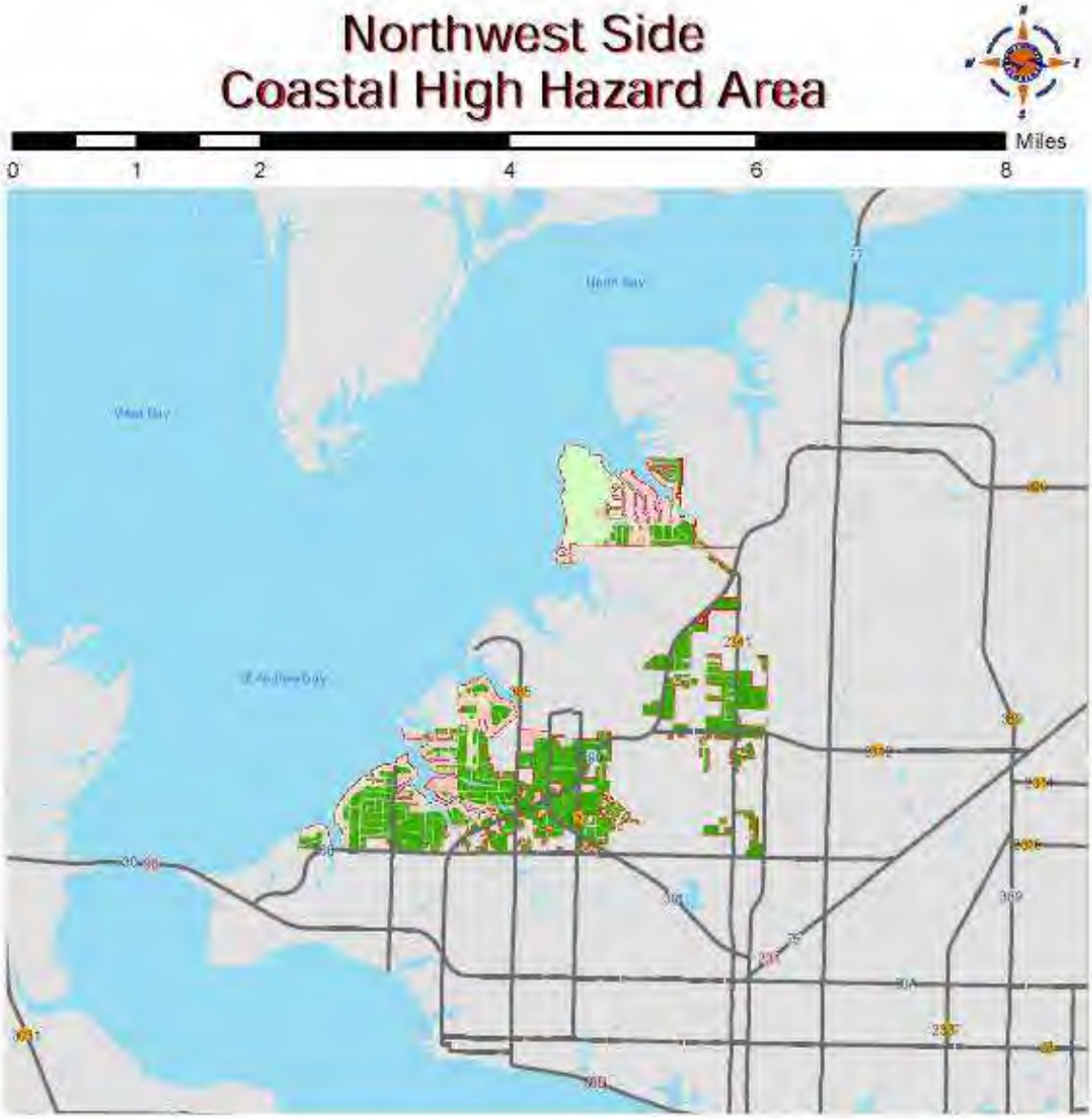
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

www.pcbaygis.com

7A4.23

Northwest Side
Coastal High Hazard Area



NORTHWEST SIDE	Parcels	Acres	Value ($)
Agriculture	4	185.17	$768,233.00
Commercial	2	1.17	750,766.00
Government	3	2.16	52,215.00
Single Family Residential	518	309.78	144,536,468.00
Subtotal	527	498.28	$146,107,682.00
Vacant	47	52.37	10,461,135.00
Total	574	550.65	$156,568,817.00

Legend
- Coastal High Hazard Area within Northwest Side
- Parcels Outside Hazard Area within Northwest Side
- Parcels Inside Hazard Area within Northwest Side
- AREA OUTSIDE NORTHWEST SIDE
- NORTHWEST SIDE

Bay County GIS November 16, 2009 northwest_chha .mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_State Plane_Florida_North_FIPS_0903_Feet
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7A4.24

Northwest Side Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture				4	85.17	$788,233	3	7.126	$204,233
Commercial	20	14.32	$8,529,852	10	6.54	2,966,725			
Government	1	0.64	3,000	9	6.40	306,776			
High Density Residential									
Industry	2	5.84	1567,778						
Institutional	2	18.00	3,255,438	2	3.23	881,433			
Mixed Use									
Mobile Home Residential	3	10.49	997,068	10	11.85	1,305,406			
Multi Family Residential				2	2.49	757,678			
Recreational	1	3.73	216,324	2	5.33	429,056			
Single Family Residential	133	137.78	21397,345	784	466.26	87,825,425	21	78.25	43,280,403
Subtotal	162	210.80	$35,956,716	823	698.27	$195,203,738	24	249.51	$43,484,636
Vacant	24	60.63	4,383,405	74	94.88	12,842,336	12	14.85	3,234,080
Total	186	271.43	$40,340,120	897	793.15	$208,046,074	136	264.36	$46,718,716

Bay County GIS — November 6, 2009 — northwest_flood.mxd — mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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7A4.25

Northwest Side Surge Zones

	Land Use	Agriculture	Commercial	Government	Industry	Institutional	Mobile Home Residential	Multi Family Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1 Surge													
Parcels		2	2	11						64	80	48	128
Acres		160.11	1.11	2.18						359.84	497.24	351.26	848.50
Value ($)		$98,213	$50,000	$2,215						$41,359,446	$41,509,874	$10,421,455	$51,931,329
Category 2 Surge													
Parcels		5	9	5	1	2	8	2	1	502	543	78	621
Acres		165.9	19.55	5.33	0.70	6.23	10.61	2.49	4.78	656.04	881.26	79.96	961.22
Value ($)		$958,233	$1,850,869	$50,230	$59,470	$861,436	$1,535,184	$97,619	$216,324	$89,470,858	$95,029,943	$2,895,825	$97,925,768
Category 3 Surge													
Parcels		4	10	6	3	2	20	0	1	831	1006	98	1104
Acres		165.9	16.64	5.86	1.91	3.23	9.66	0.35	5.01	531.21	781.82	57.2	839.02
Value ($)		$958,233	$1,350,909	$5,206	$74,961	$861,436	$1,442,625	$1,298,431	$216,324	$26,156,977	$33,264,942	$1,388,475	$34,653,652
Category 4 Surge													
Parcels		4	20	11	5	3	31	0	1	1252	1655	111	1766
Acres		165.91	23.84	5.86	5.81	3.53	10.37	0.74	5.01	666.06	879.43	65.8	1023.23
Value ($)		$958,233	$1,814,325	$52,842	$199,625	$1,016,360	$1,480,648	$1,298,431	$216,324	$34,401,574	$42,378,362	$1,400,283	$43,778,645
Category 5 Surge													
Parcels		4	31	11	5	3	34	10	2	1426	1526	50	1576
Acres		165.91	45.94	7.64	5.81	4.17	10.56	5.02	5.3	762.27	1008.64	65.67	1074.31
Value ($)		$958,233	$3,814,911	$61,842	$199,625	$1,246,359	$1,701,672	$2,197,324	$216,324	$39,400,785	$49,795,075	$1,400,283	$51,195,358

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
www.pdhsyge.com

7A4.26

Bay County GIS November 12, 2009 location_maps_4_lms_individual_.mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
www.pcbaygis.com

7A4.27

Mexico Beach County
Existing Land Use

MEXICO BEACH - COUNTY	Parcels	Acres	Value ($)
Agriculture	46	11,075.53	$1,614,992
Commercial	1	32.41	131,964
Government	4	209.72	889,655
Institutional	1	4.01	1,480,617
Single Family Residential	1	2.22	859,073
Subtotal	53	11,323.89	$4,976,301
Vacant	7	256.19	3,591,885
Total	60	11,580.08	$8,568,186

Legend
- Agriculture
- Commercial
- Government
- Industry
- Institutional
- Mixed Use
- Recreational
- Single Family Residential
- Multi Family Residential
- High Density Residential
- Mobile Home Residential
- Vacant
- AREA OUTSIDE MEXICO BEACH COUNTY
- MEXICO BEACH COUNTY
- Mexico Beach

Bay County GIS November 15, 2009 mexicobeachcounty_ elu.mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
www.pcbaygis.com

7A4.28

Mexico Beach County
Coastal High Hazard Area

MEXICO BEACH - COUNTY	Parcels	Acres	Value ($)
Agriculture	16	2732.3	$423,175.00
Government	4	209.72	889,655.00
Single Family Residential	1	2.22	859,073.00
Subtotal	21	2944.24	$2,171,903
Vacant	4	141.81	1,855,604.00
Total	25	3086.05	$4,027,507.00

Bay County GIS August 31, 2009 mexicobeachcounty_chha .mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
www.pcbaygis.com

7A4.29

Mexico Beach County Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	38	10,939.08	$350,057	21	3,234.02	$483,788	8	968.05	$133,423
Commercial	1	32.41	81,964						
Government				4	209.72	889,655	2	195.16	343,285
High Density Residential									
Industry									
Institutional	1	4.01	1,480,697						
Mixed Use									
Mobile Home Residential									
Multi Family Residential									
Recreational									
Single Family Residential				1	2.22	859,073	1	2.22	859,073
Subtotal	38	10,975.48	$3,193,166	26	3,445.96	$2,232,516	9	1,165.42	$1,335,781
Vacant	5	238.05	3,291,887	4	141.81	1,855,604	2	123.67	1,615,604
Total	43	10,913.53	$6,485,053	30	3,587.77	$4,088,120	11	1,289.09	$2,951,385

Bay County GIS | November 6, 2009 | mexicobeach county_flood.mxd | mwilson

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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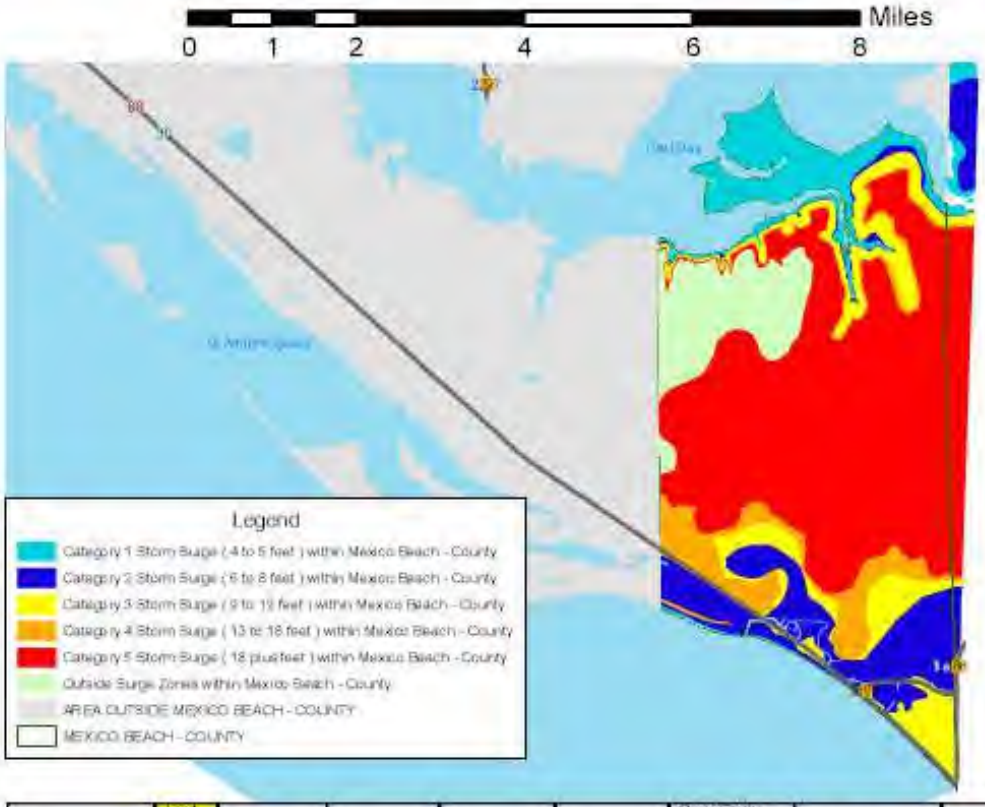
7A4.30

Mexico Beach County Surge Zones



	Land Use	Agriculture	Commercial	Government	Institutional	Single-family Residential	Subtotal	Vacant	Totals
Category 1 Surge									
Parcels		15		4		1	21	4	25
Acres		273.9		209.72		2.22	2,944.24	141.81	3,086.05
Value ($)		$463,165		889,655		859,073	$2,171,903	1,155,904	$3,327,807
Category 2 Surge									
Parcels		27	1	4	1	1	34	5	39
Acres		4793.5	32.41	209.72	4.01	2.22	5,001.86	14.77	5,149.98
Value ($)		$816,081	131,964	889,655	1,480,617	859,073	$4,179,370	1,978,404	$6,357,774
Category 3 Surge									
Parcels		34	1	4	1	1	41	5	46
Acres		6307.99	32.41	209.72	4.01	2.22	6,486.35	14.77	6,601.05
Value ($)		$1,156,601	131,964	889,655	1,480,617	859,073	$4,516,110	1,978,404	$6,494,514
Category 4 Surge									
Parcels		38	1	4	1	1	45	7	52
Acres		7366.96	32.41	209.72	4.01	2.22	7,445.34	25.19	7,701.53
Value ($)		$1,274,678	131,964	889,655	1,480,617	859,073	$4,635,983	3,591,885	$8,227,868
Category 5 Surge									
Parcels		46	1	4	1	1	53	7	60
Acres		11675.53	32.41	209.72	4.01	2.22	11,923.89	25.19	11,580.08
Value ($)		$1,911,992	131,964	889,655	1,480,617	859,073	$5,185,301	3,591,885	$8,988,186

Bay County GIS | November 12, 2009 | mexicobeach county_surge.mxd | mwilson

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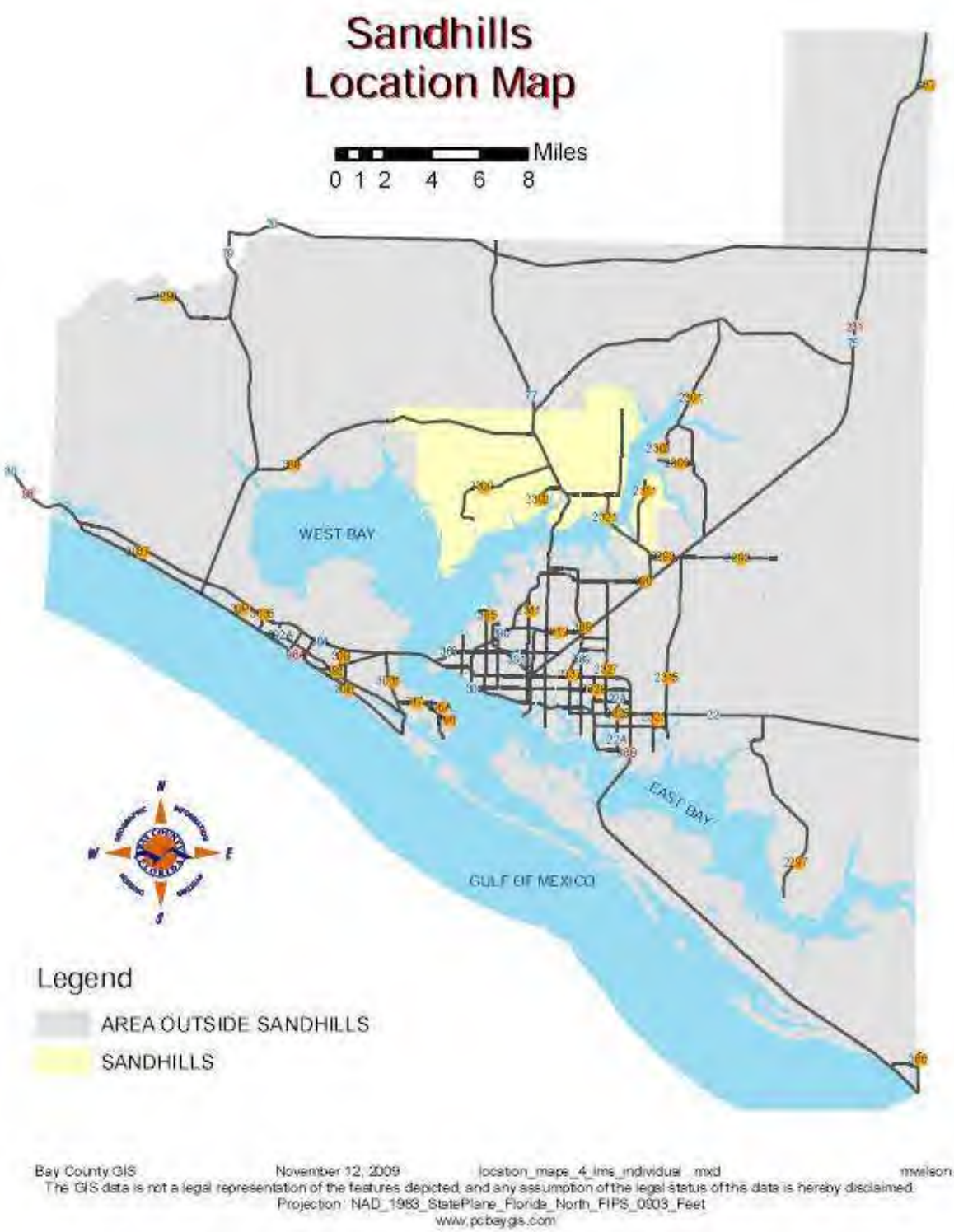
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
www.pcbaygis.com

7A4.31



Bay County GIS November 12, 2009 location_maps_4_lms_individual .mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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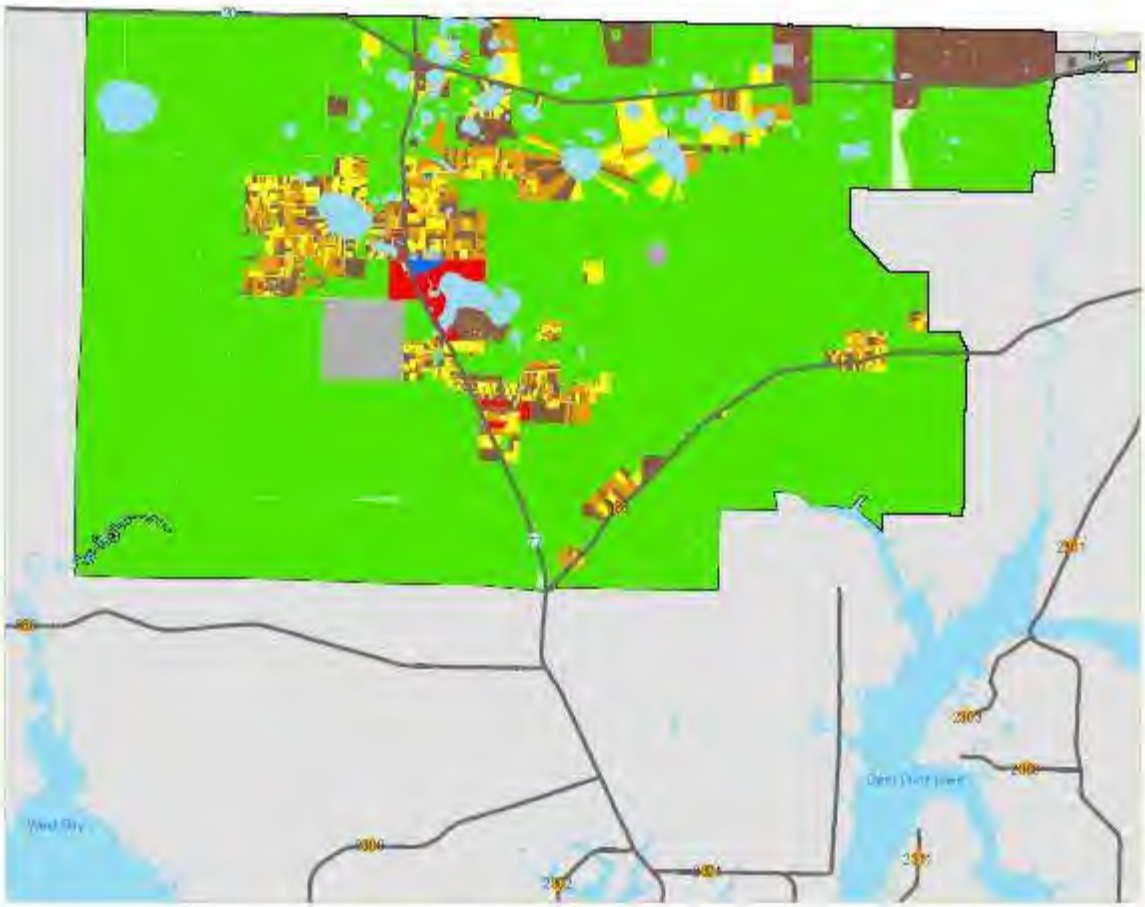
7A4.32

Sandhills Existing Land Use

0 1 2 4 6 8 Miles



SANDHILLS	Parcels	Acres	Value ($)
Agriculture	278	37,955.83	$50,300,074
Commercial	22	335.70	6,359,138
Government	25	749.74	9,350,283
Institutional	6	41.55	16,377,564
Mobile Home Residential	589	1,580.53	40,388,480
Recreational	1	111.68	348,504
Single Family Residential	591	1,820.14	92,177,254
Subtotal	1,512	42,595.17	$215,301,297
Vacant	883	3,172.87	86,513,060
Total	2,395	45,768.04	$301,814,357

Bay County GIS November 17, 2009 sandhills_ elu.mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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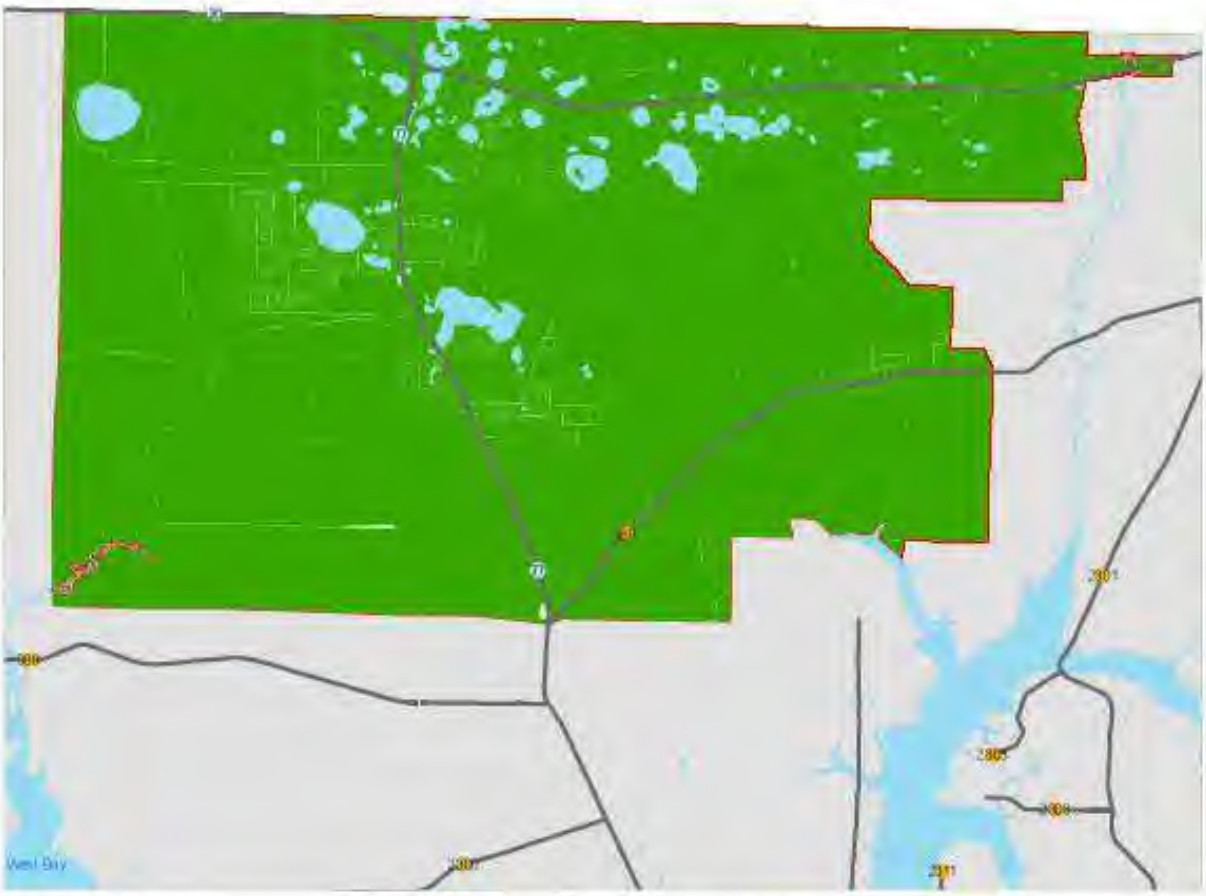
7A4.33

Sandhills Coastal High Hazard Area

Miles
0 1 2 4 6 8



SANDHILLS	Parcels	Acres	Value ($)
Commercial	0	0	$0
Government	0	0	0
High Density Residential	0	0	0
Mobile Home Residential	0	0	0
Multi Family Residential	0	0	0
Recreational	0	0	0
Single Family Residential	0	0	0
Subtotal	0	0	$0
Vacant	0	0	0
Total	0	0	$0

Legend
- Coastal High Hazard Area within Sandhills
- Parcels Outside Hazard Area within Sandhills
- Parcels Inside Hazard Area within Sandhills
- AREA OUTSIDE SANDHILLS
- SANDHILLS

Bay County GIS November 17, 2009 sandhills_chhe .mxd mwilson
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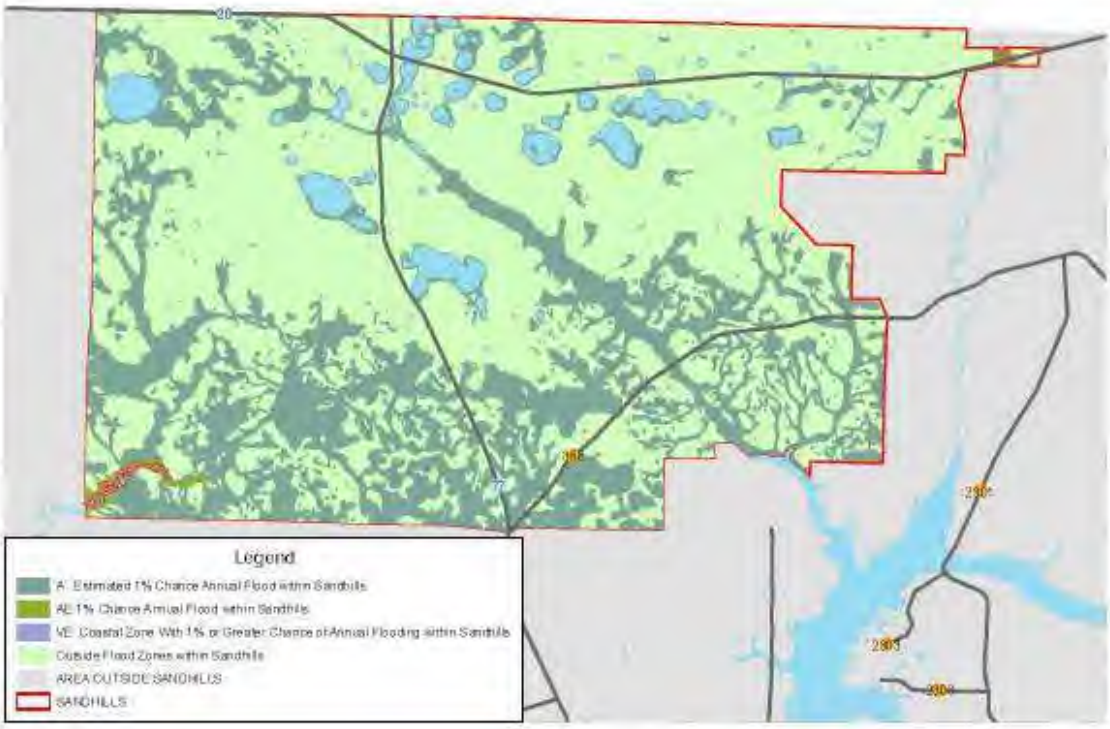
Projection: NAD_1983_State Plane_Florida_North_FIPS_0903_Feet

7A4.34

Sandhills Flood Zones



	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	205	36,575.97	$39,531,938	6	1265.19	$326,074			
Commercial	5	232.14	2,567,041						
Government	8	60.122	2,832,075						
High Density Residential									
Industry									
Institutional	1	35.87	14,684,804						
Mixed Use									
Mobile Home Residential	127	615.61	8,542,190						
Multi Family Residential									
Recreational	1	11.65	348,504						
Single Family Residential	184	1,113.60	29,842,343						
Subtotal	531	39,265.39	$99,218,595	6	1265.19	$ 326,074	0	0.00	$0
Vacant	289	2,088.38	47,758,065						
Total	820	41,371.77	$ 146,976,660	6	1,265.19	$ 326,074	0	0.00	$ 0

Bay County GIS November 10, 2009 sandhills_flood.mxd rwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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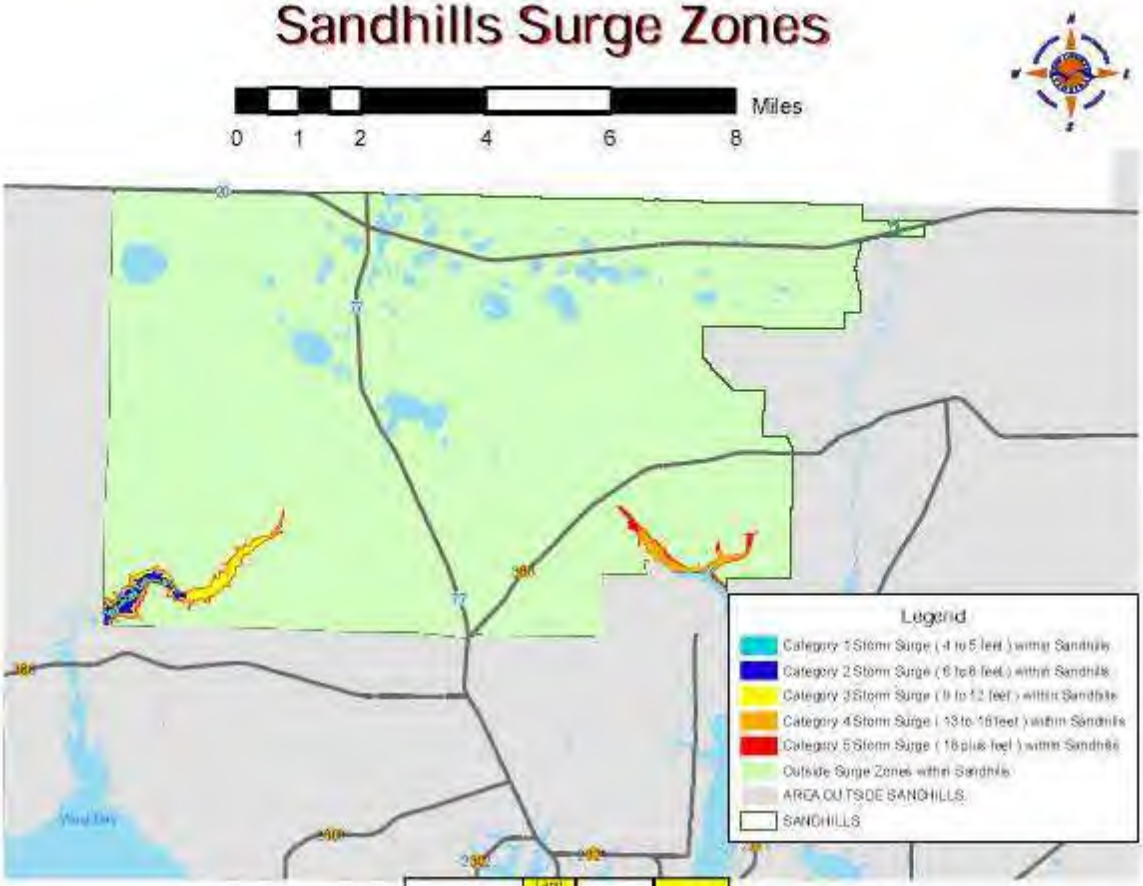
7A4.35

Sandhills Surge Zones



	Land Use:	Agriculture	Totals
Category 1 Surge			
Parcels			0
Acres			0.00
Value ($)			$0.00
Category 2 Surge			
Parcels		6	6
Acres		265.19	265.19
Value ($)		$329,074	$329,074
Category 3 Surge			
Parcels		9	9
Acres		308.06	308.06
Value ($)		$807,847	$807,847
Category 4 Surge			
Parcels		20	20
Acres		545.07	545.07
Value ($)		$1,810,812	$1,810,812
Category 5 Surge			
Parcels		21	21
Acres		580.93	580.93
Value ($)		$1905,537	$1905,537

Bay County GIS | November 15, 2009 | sandhills_surge.mxd | mwilson

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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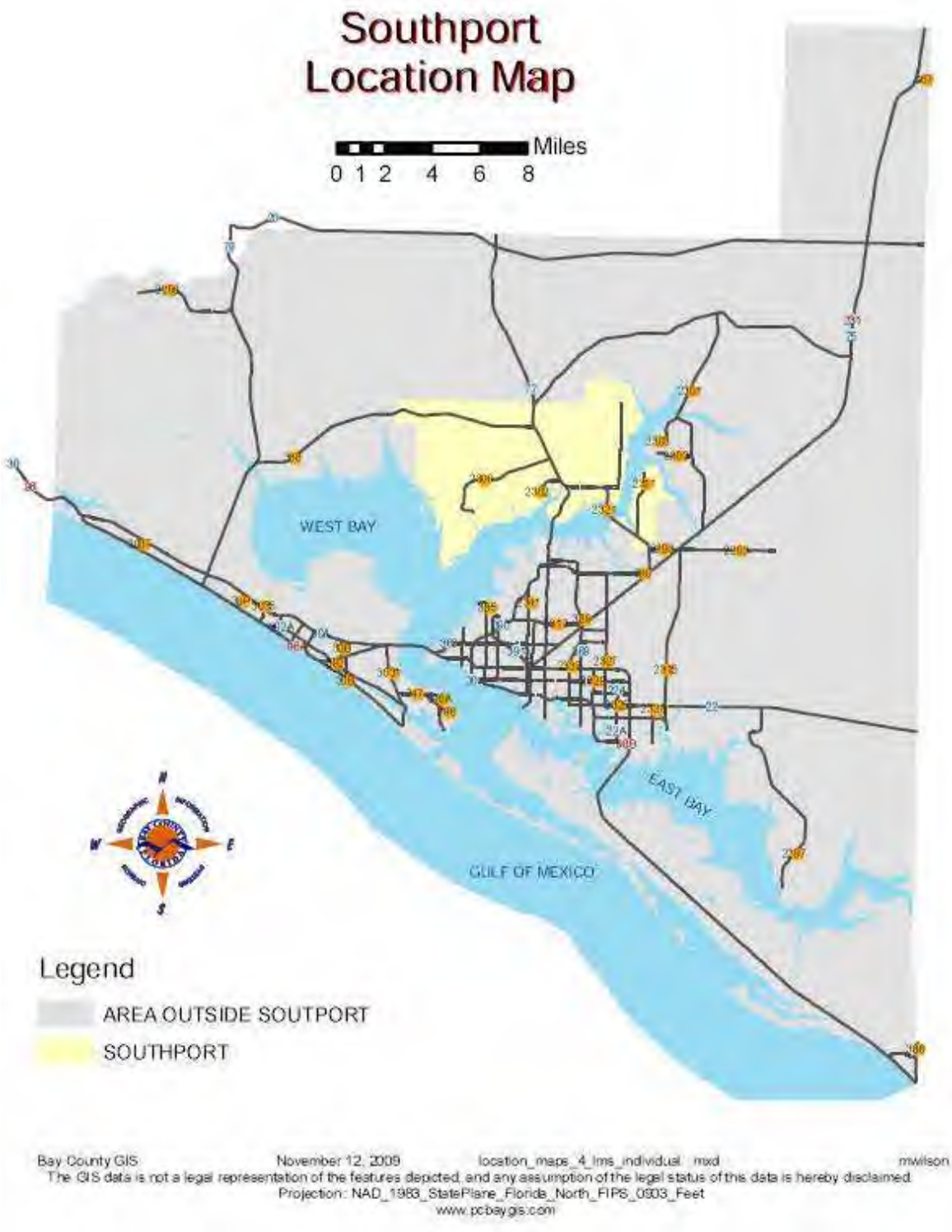
7A4.36



Bay County GIS November 12, 2009 location_maps_4_lms_individual .mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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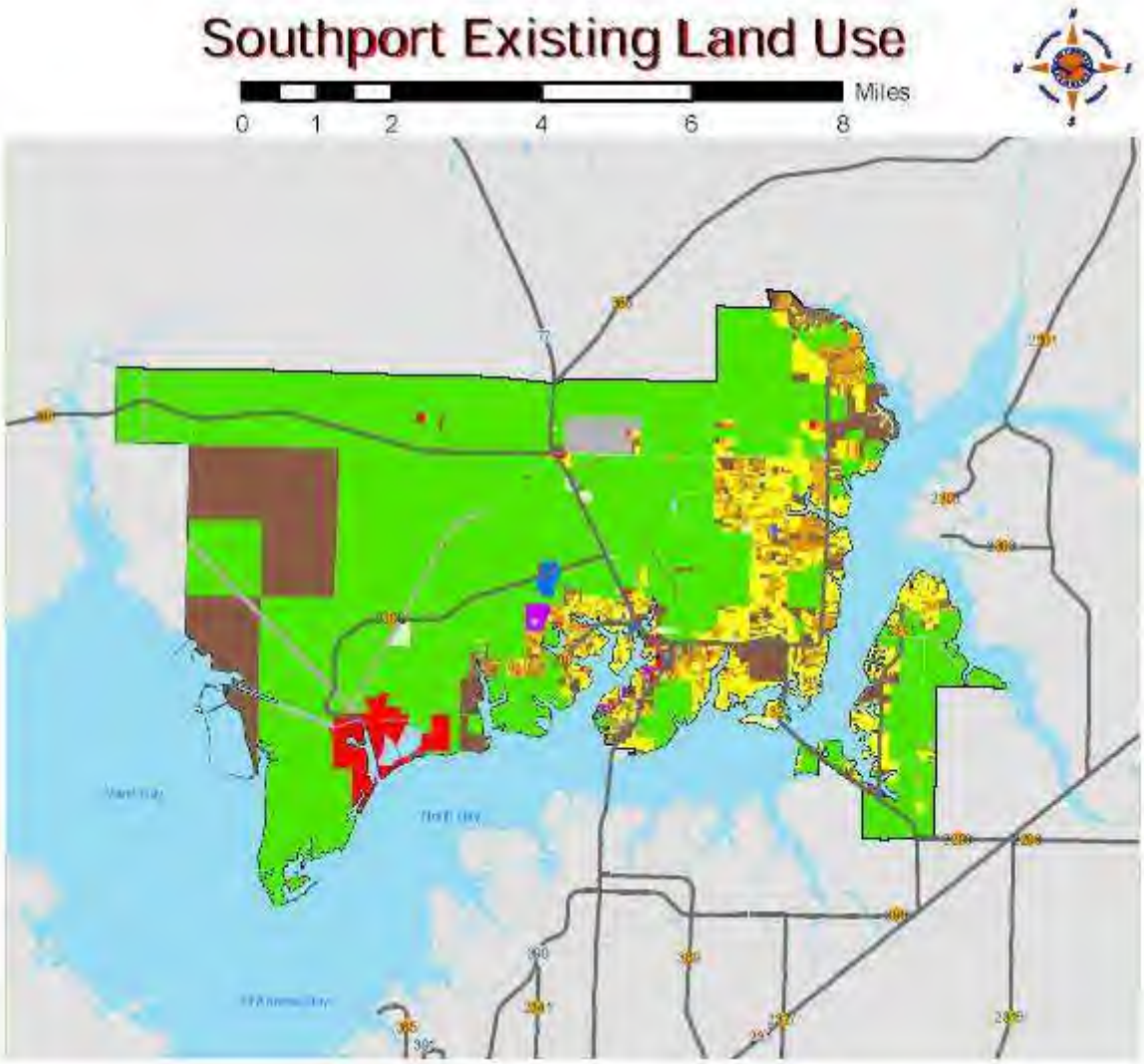
7A4.37

Southport Existing Land Use



SOUTHPORT	Parcels	Acres	Value ($)
Agriculture	224	20,351.37	$52,184,745
Commercial	70	831.67	40,662,374
Government	51	716.25	4,615,865
High Density Residential	2	4.12	0
Industry	7	93.64	3,755,309
Institutional	20	113.72	10,279,000
Mobile Home Residential	988	1,084.39	64,500,867
Recreational	13	93.60	2,884,671
Single Family Residential	1,791	2,865.00	295,763,422
Subtotal	3,166	26,153.76	$474,646,253
Vacant	1,303	4,728.83	103,142,531
Total	4,469	30,882.59	$577,788,784

Bay County GIS November 17, 2009 southport_elu.mxd mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

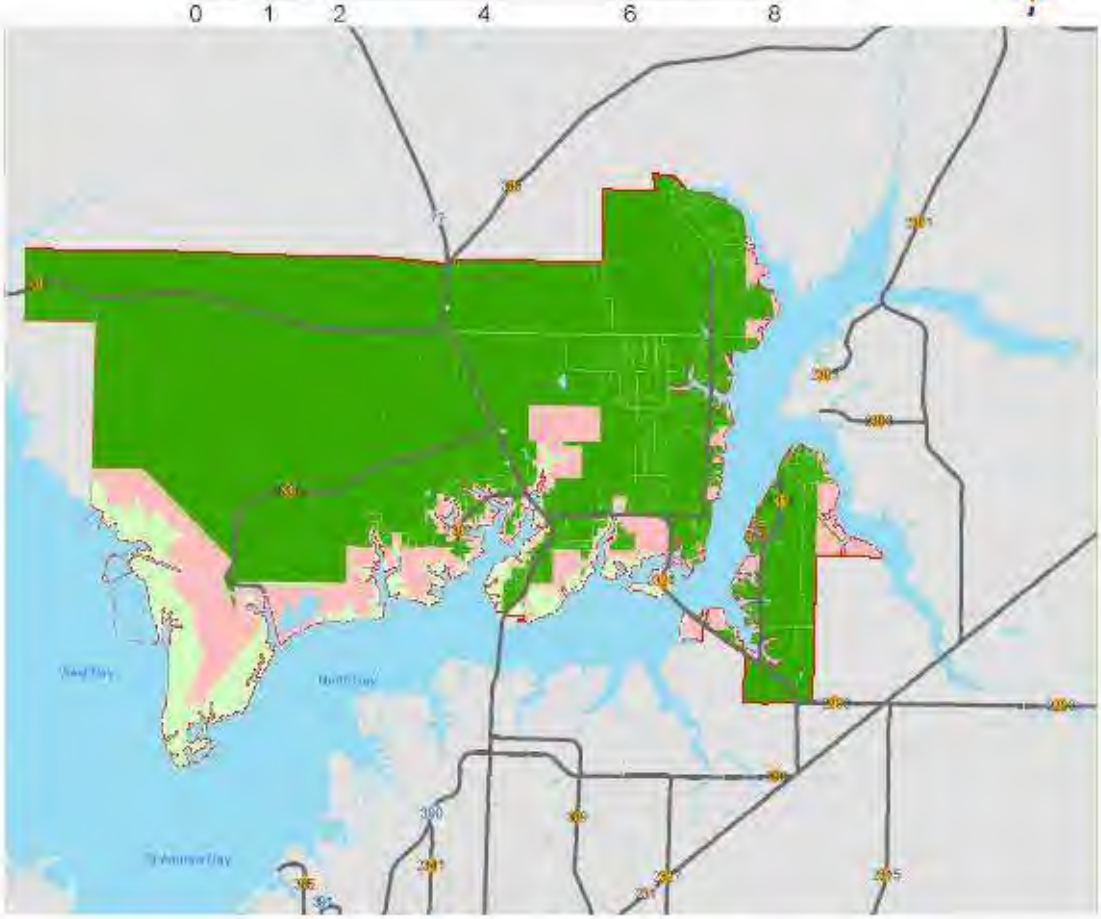
www.pcbaygis.com

7A4.38

Southport Coastal High Hazard Area

Miles

0 1 2 4 6 8



SOUTHPORT	Parcels	Acres	Value ($)
Agriculture	53	3,811.75	$33,354,388
Commercial	21	702.58	31,161,324
Government	17	79.72	1,503,989
High Density Residential	1	2.28	0
Industry	6	25.18	3,563,209
Institutional	4	9.09	4,421,337
Mobile Home Residential	63	82.76	7,284,462
Recreational	3	32.45	1,104,020
Single Family Residential	292	634.21	63,544,365
Subtotal	460	5,380.02	$145,937,094
Vacant	210	1,497.27	32,545,326
Total	670	6,877.29	$178,482,420

Legend

- Coastal High Hazard Area within Southport
- Parcels Outside Hazard Area within Southport
- Parcels Inside Hazard Area within Southport
- AREA OUTSIDE SOUTHPORT
- SOUTHPORT

Bay County GIS November 18, 2009 southport_chha.mxd mwilson

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Projection: NAD_1983_State Plane_Florida_North_FIPS_0903_Feet

www.pcbaygis.com

7A4.39

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	96	963.44	$35,728,372	71	5,944.89	$27,273,857	5	1321.84	$4,621,480
Commercial	6	729.10	32,356,812	28	1,812.36	32,055,340			
Government	22	674.49	2,362,331	24	257.35	2,771,066			
High Density Residential	1	1.84	0	2	4.12	0			
Industry	1	66.46	62,100	7	93.64	2755,369			
Institutional	7	68.10	3,247,910	6	32.83	5020,352			
Mixed Use									
Mobile Home Residential	283	354.04	9,382,760	94	130.24	2,094,361	1	02.4	85,728
Multi Family Residential									
Recreational	5	43.45	1048,100	5	58.36	2296,728	1	28.32	347,400
Single Family Residential	469	1393.03	75,347,862	694	1,199.6	98,718,643	15	183.08	4202,358
Subtotal	895	22,527.53	$189,309,956	975	7,542.75	$234,326,360	22	1533.45	$8,806,975
Vacant	489	3,784.37	41,724,284	403	1723.31	52,45,589	7	174.71	1,322,537
Total	1384	26,311.90	$231,034,240	1,381	9,266.06	$286,741,949	29	1,708.16	$10,129,512

Bay County GIS November 10, 2009 southport_flood.mxd nwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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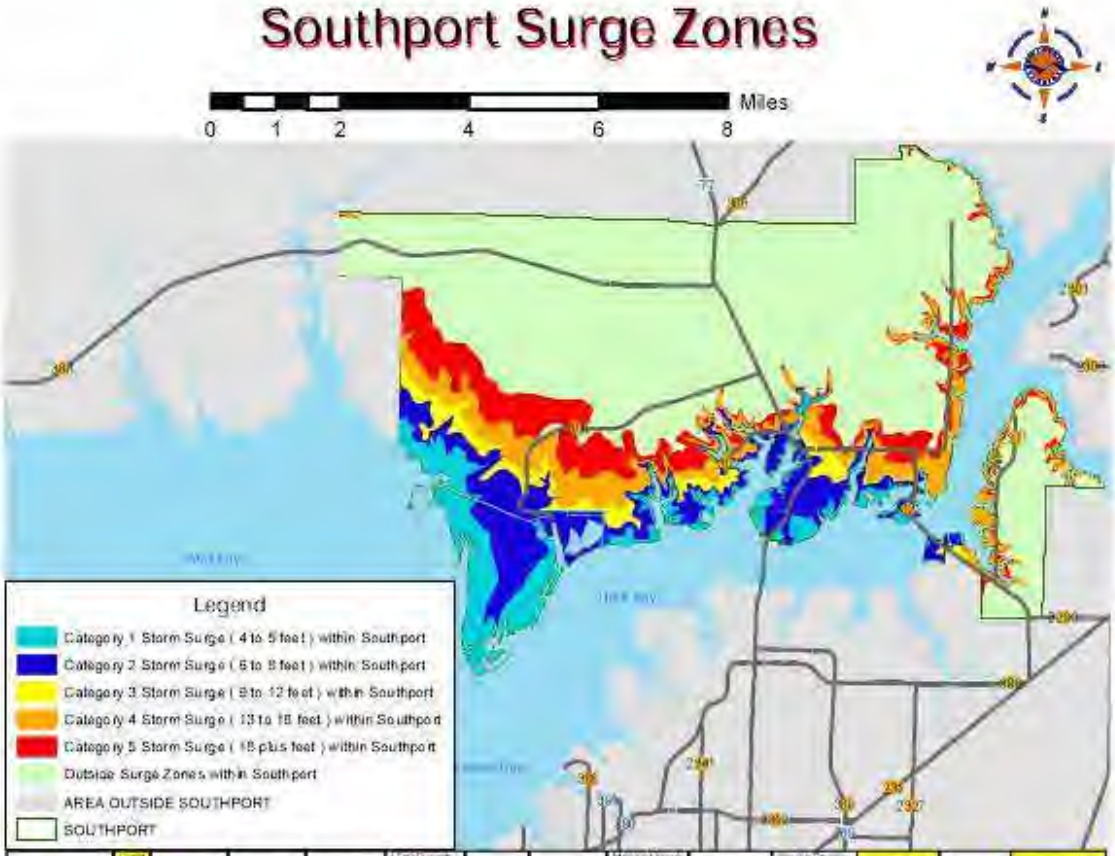
7A4.40

Southport Surge Zones



	Land Use	Agriculture	Commercial	Government	High Density Residential	Industry	Institutional	Mobile Home Residential	Recreational	Single Family Residential	Skilled	Vacant	Totals
Category 1 Surge													
Parcels		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acres		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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Category 2 Surge													
Parcels		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acres		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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Category 3 Surge													
Parcels		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acres		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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Category 4 Surge													
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Acres		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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Category 5 Surge													
Parcels		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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Bay County GIS — November 15, 2009 — southport_5surge.mxd — mmoore

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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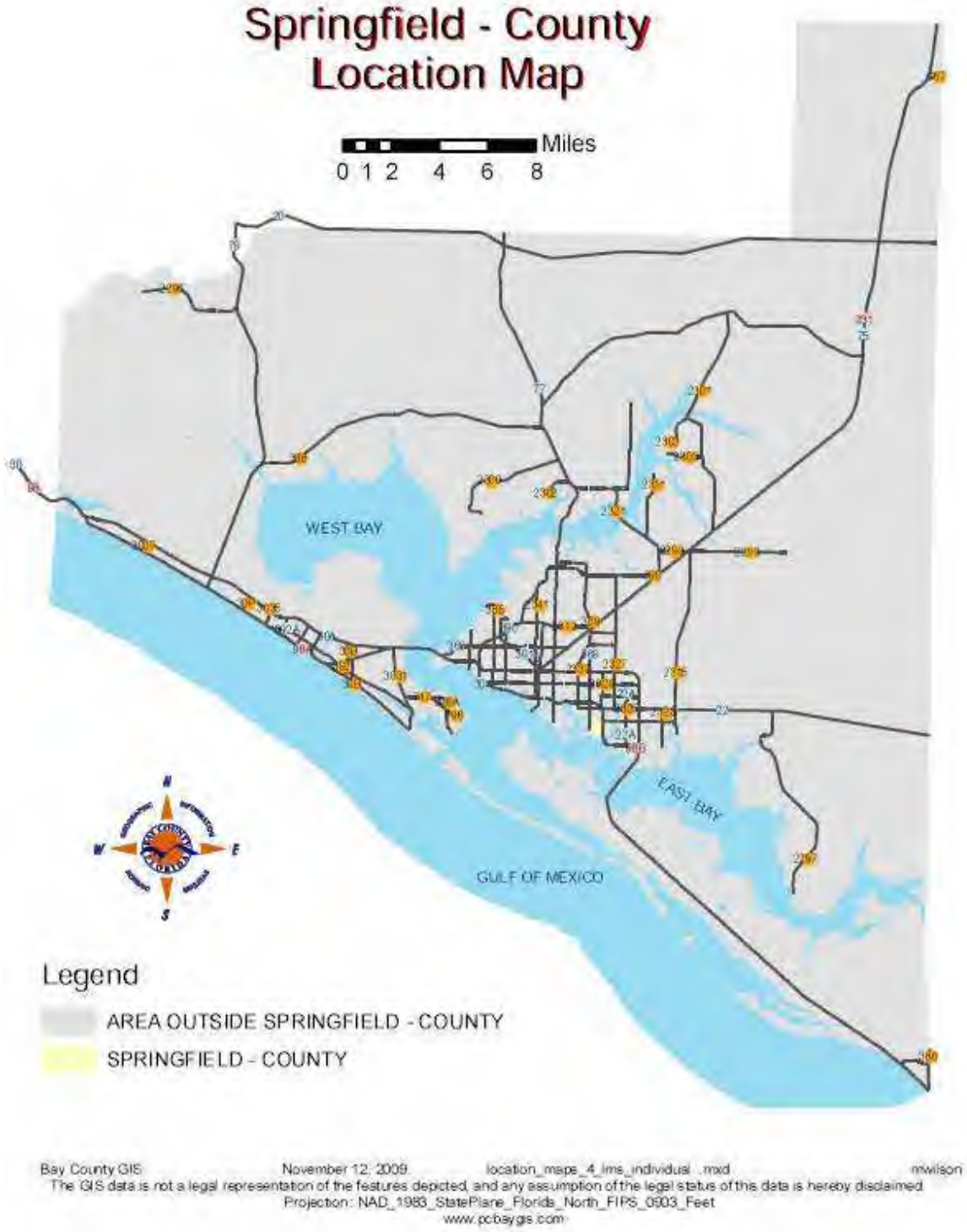
7A4.41



Bay County GIS November 12, 2009 location_maps_4_ims_individual_.mxd mwilson
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7A4.42

Springfield County
Existing Land Use

SPRINGFIELD - COUNTY	Parcels	Acres	Value ($)
Agriculture	2	16.40	$1,360,000
Commercial	4	2.00	516,154
Industry	3	199.68	13,931,031
Mobile Home Residential	9	2.52	229,983
Single Family Residential	23	6.86	832,908
Subtotal	41	227.46	$16,870,076
Vacant	29	15.72	626,200
Total	70	243.18	$17,496,276

Bay County GIS November 18, 2009 springfield_county_ elu.mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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7A4.43

Springfield County
Coastal High Hazard Area

SPRINGFIELD - COUNTY	Parcels	Acres	Value ($)
Commercial	2	1.21	$252,103
Industry	2	170	10,669,847
Mobile Home Residential	3	1.08	85,577
Single Family Residential	3	0.85	100,682
Subtotal	10	173.14	$11,108,209
Vacant	3	2.82	107,187
Total	13	175.96	$22,323,605

Legend
- Coastal High Hazard Area within Springfield - County
- Parcels Outside Hazard Area within Springfield - County
- Parcels Inside Hazard Area within Springfield - County
- AREA OUTSIDE SPRINGFIELD - COUNTY
- SPRINGFIELD - COUNTY

Bay County GIS November 18, 2009 springfield_county_chha .mxd mwilson
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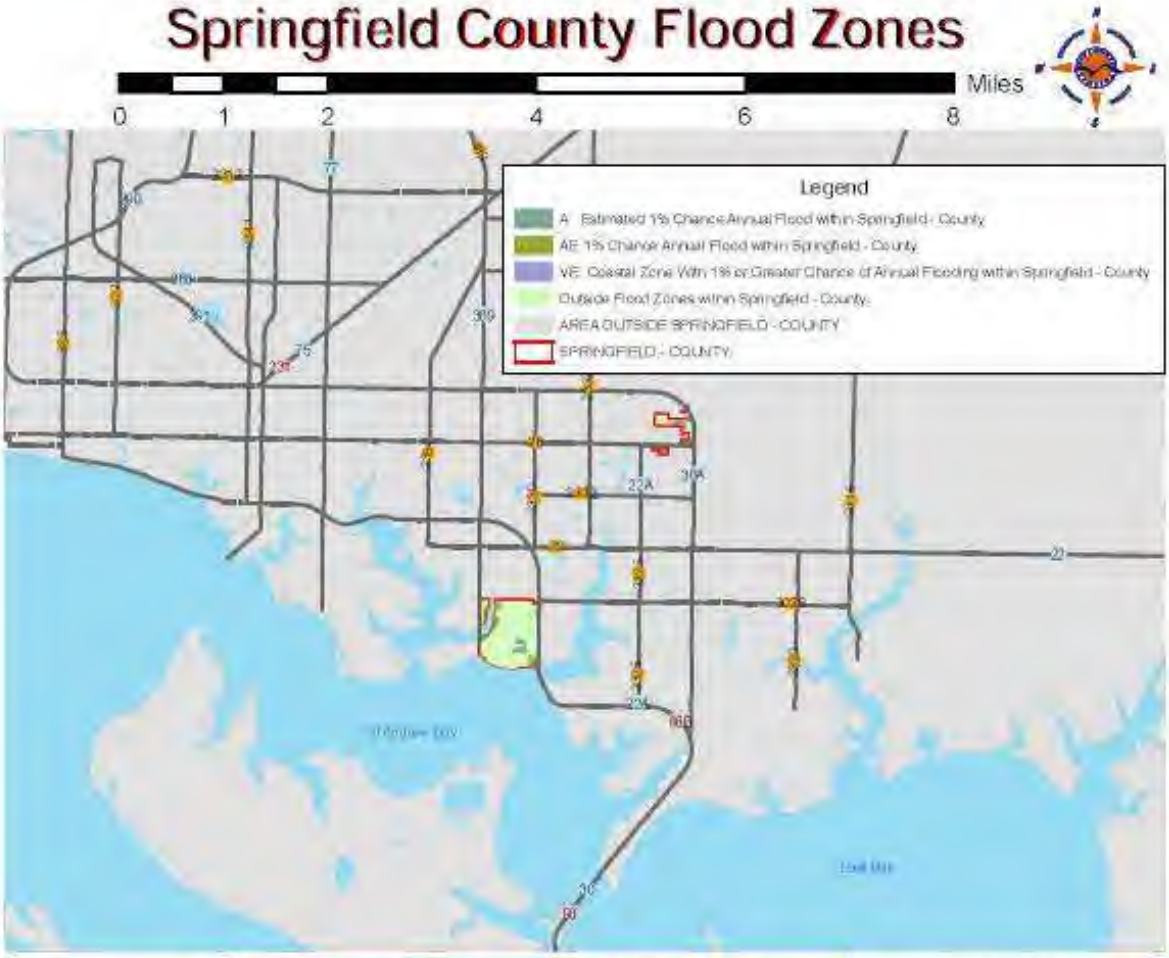
Projection: NAD_1 983_StatePlane_Florida_North_FIPS_0903_Feet

7A4.44

Springfield County Flood Zones



	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	2	16.40	$1,360,000						
Commercial				2	1.21	$252.03			
Government									
High Density Residential									
Industry	2	99.27	3,858,628	2	9.00	0,869,847	1	69.59	$10,595,444
Institutional									
Mixed Use									
Mobile Home Residential	1	0.32	15,130	7	1.83	176,341			
Multi Family Residential									
Recreational									
Single Family Residential	1	0.88	39,674	5	1.37	151,667			
Subtotal	6	216.67	$15,271,432	16	174.41	$11250.158	1	169.59	$10,595,444
Vacant	8	6.08	273,958	9	3.77	165,984			
Total	14	222.75	$ 15,545,390	25	178.18	$ 11,416,142	1	169.59	$ 10,595,444

Bay County GIS | November 10, 2009 | springfield_county_flood.mxd | rmilson

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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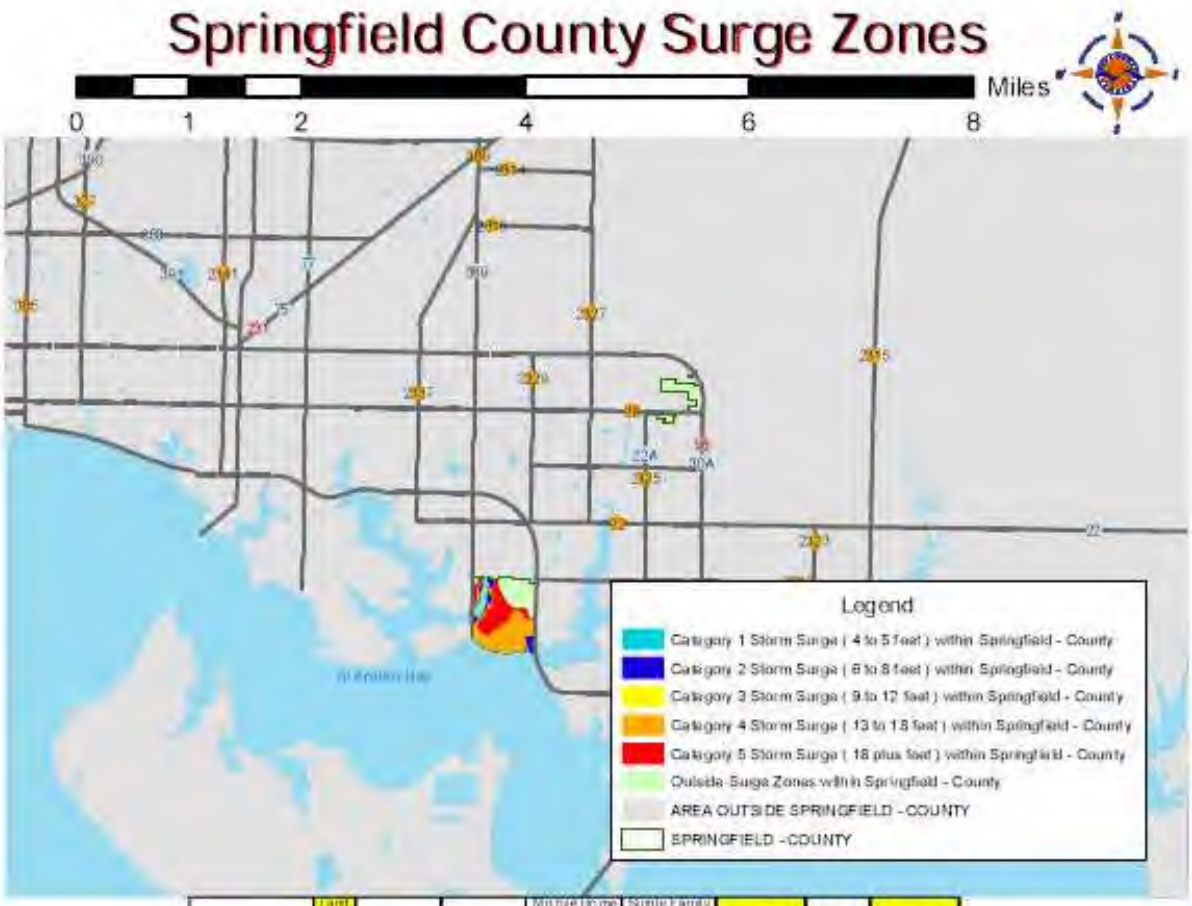
7A4.45



	Land Use	Commercial	Industry	Mobile Home Residential	Single Family Residential	Subtotal	Vacant	Totals
Category 1 Surge								
Parcels		2	2	3	3	10	3	13
Acres		121	50	108	9.85	93.14	2.82	95.96
Value ($)		$252,103	$10,699,847	$5,511	$80,682	$11,038,208	$67,917	$11,216,368
Category 2 Surge								
Parcels		3	3	6	4	16	4	20
Acres		121	50	171	12.5	94.67	3.08	97.25
Value ($)		$252,103	$10,699,847	$6,849	$29,201	$11,218,785	$16,507	$11,333,702
Category 3 Surge								
Parcels		2	2	7	4	15	5	20
Acres		121	50	183	12.5	94.29	3.19	97.48
Value ($)		$252,103	$10,699,847	$6,341	$29,201	$11,227,492	$26,890	$11,394,182
Category 4 Surge								
Parcels		3	3	7	4	17	6	23
Acres		121	169.68	183	13.7	204.09	3.8	207.89
Value ($)		$252,103	$10,951,031	$6,341	$29,201	$11,511,342	$69,278	$11,580,620
Category 5 Surge								
Parcels		3	3	8	36	26	14	40
Acres		121	169.68	2.2	2.73	205.82	4.19	210.01
Value ($)		$252,103	$10,951,031	$14,659	$445,268	$11,643,275	$93,157	$11,736,432

Bay County GIS November 19, 2009 springfield_county_surge.mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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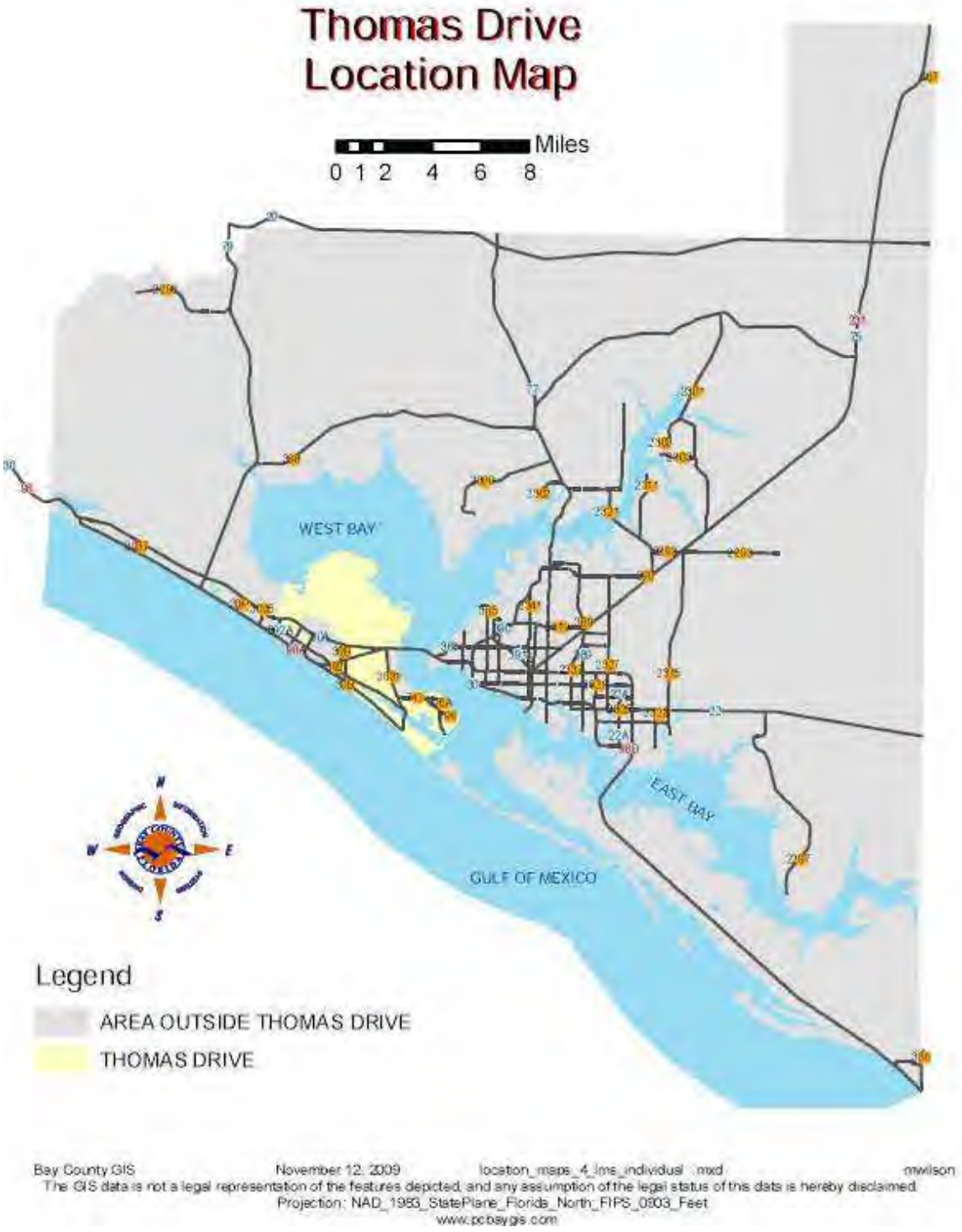
7A4.46


Thomas Drive
Location Map
Miles
0 1 2 4 6 8
WEST BAY
EAST BAY
GULF OF MEXICO
Legend
AREA OUTSIDE THOMAS DRIVE
THOMAS DRIVE
Bay County GIS
November 12, 2009
location_msps_4_lms_individual .mxd
mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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7A4.47

Thomas Drive Existing Land Use

THOMAS DRIVE	Parcels	Acres	Value ($)
Agriculture	53	5,018.33	$51,372,325
Commercial	642	596.41	416,372,691
Government	102	139.84	42,050,510
High Density Residential	5,377	241.72	1,288,966,325
Industry	14	17.15	6,668,011
Institutional	21	87.69	29,379,528
Mixed Use	19	13.48	13,635,435
Mobile Home Residential	1,818	297.67	219,209,796
Multi Family Residential	282	112.29	116,744,742
Recreational	42	744.95	412,380,943
Single Family Residential	6,976	1,787.58	1,680,596,495
Subtotal	15,346	9,057.11	$4,277,376,801
Vacant	2,415	3,886.63	500,511,864
Total	17,761	12,943.74	$4,777,888,665

Bay County GIS November 18, 2009 thomasdrive_ elu.mxd mwilson
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Projection: NAD_1983_Stat ePlane_Florida_North_FIPS_0903_Feet
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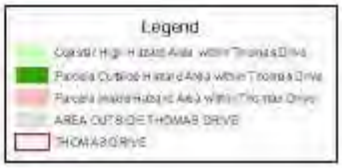
7A4.48

Thomas Drive Coastal High Hazard Area

THOMAS DRIVE	Parcels	Acres	Value ($)
Agriculture	29	4,568.60	$3,749,343
Commercial	22	112.95	54,063,043
Government	11	34.31	9,077,285
High Density Residential	564	90.48	107,074,236
Institutional	3	31.35	622,608
Mixed Use	1	7.55	8,216,755
Mobile Home Residential	127	16.12	11,298,531
Multi Family Residential	4	0.83	1,498,360
Recreational	12	362.44	151,031,945
Single Family Residential	668	304.17	277,671,266
Subtotal	1441	5,528.80	$624,303,372
Vacant	282	2,617.50	90,382,215
Total	1723	8,146.30	$714,685,587



Bay County GIS November 18, 2009 thomasdrive_chhs .mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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7A4.49

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	22	3,872.21	$28,701,674	33	471.84	$9,755,162	5	380.00	$53,554
Commercial	49	144.95	44,223,527	95	80.30	86,807,960	22	62.46	29,196,383
Government	13	61.03	9,864,272	22	33.53	10,498,228	26	14.44	14,615,307
High Density Residential	2	4.69	0	362	91.90	103,496,551	271	19.84	284,256,311
Industry	5	32.46	4,336,307	1	1.80	497,719			
Institutional	3	31.77	6,345,343	9	49.29	10,716,216	2	31.06	465,000
Mixed Use				1	7.55	8,316,795			
Mobile Home Residential	35	35.25	5,857,140	206	30.15	17,773,506	4	0.69	805,544
Multi Family Residential	6	42.00	43,936,751	50	8.72	33,719,153			
Recreational	9	562.24	245,900,335	30	441.70	136,375,810	9	446.32	226,742,070
Single Family Residential	356	144.21	53,986,657	1622	562.81	331,680,774	247	120.82	152,116,518
Subtotal	341	4,145.70	$451,857,906	3121	6,143.37	$962,477,306	591	1,155.63	$837,114,467
Vacant	236	1939.19	76,506,975	757	2864.63	202,151,842	60	87.54	60,050,195
Total	557	6,084.89	$528,364,881	3,878	9,008.00	$1,164,629,348	1,651	1,243.17	$897,164,662

Bay County GIS November 10, 2009 thomasdrive_flood.mxd mwilson

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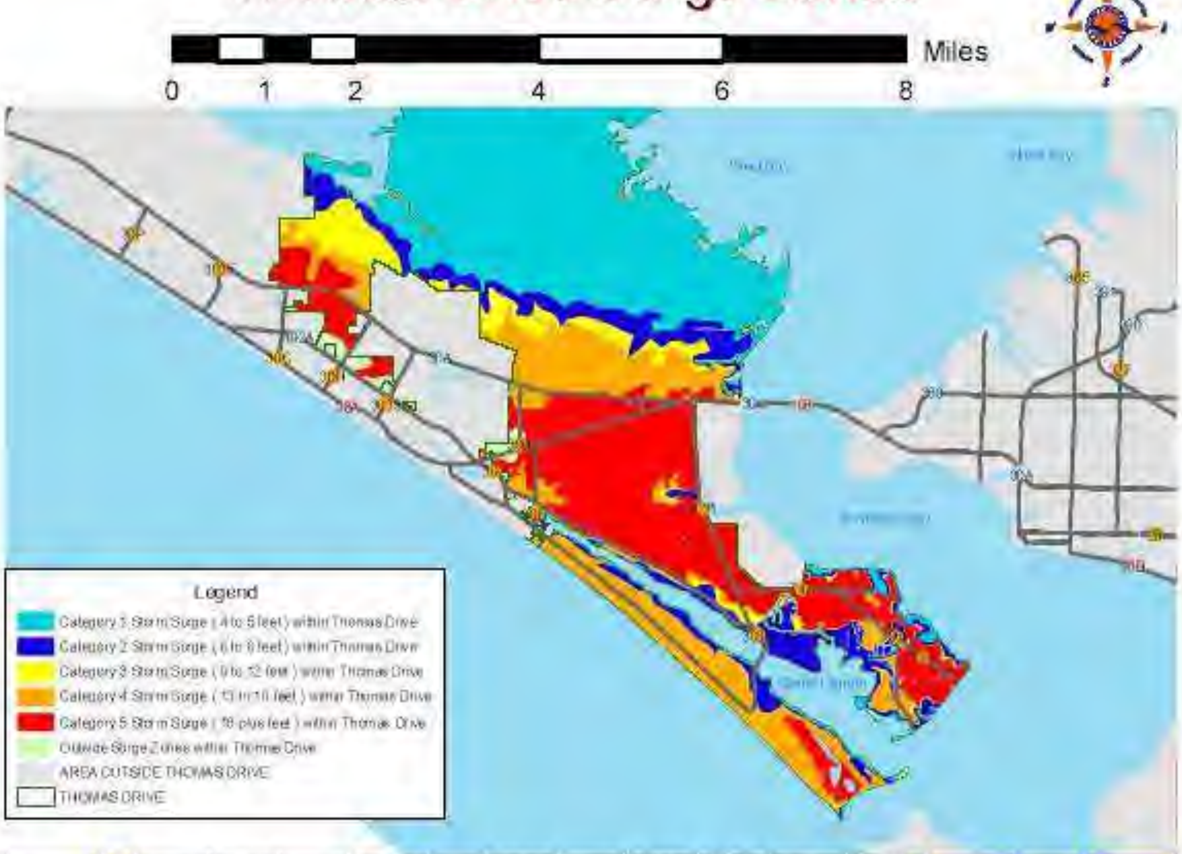
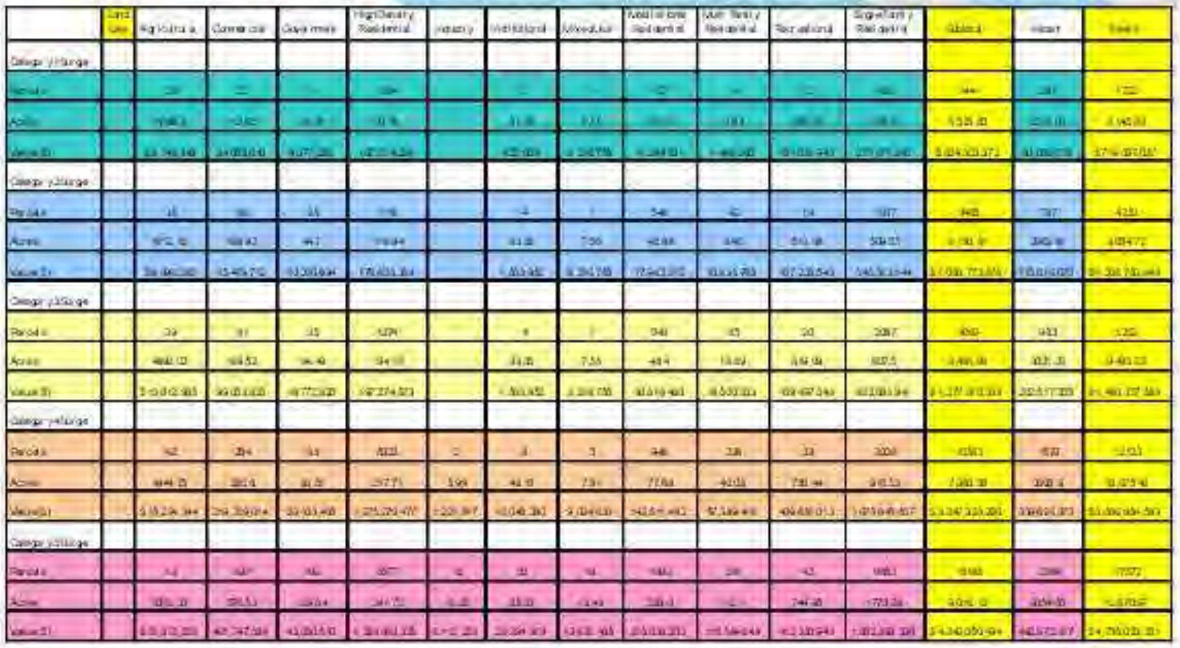
7A4.50

Thomas Drive Surge Zones





	Land Use	Agricultural	Commercial	Government	High Density Residential	Industry	Institutional	Mixed Use	Medium Density Residential	Multi Family Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1 Surge															
Parcels		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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Category 2 Surge															
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Category 3 Surge															
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Category 4 Surge															
Parcels		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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Category 5 Surge															
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Bay County GIS November 15, 2005 thomasdrive_surge.mxd mwilson

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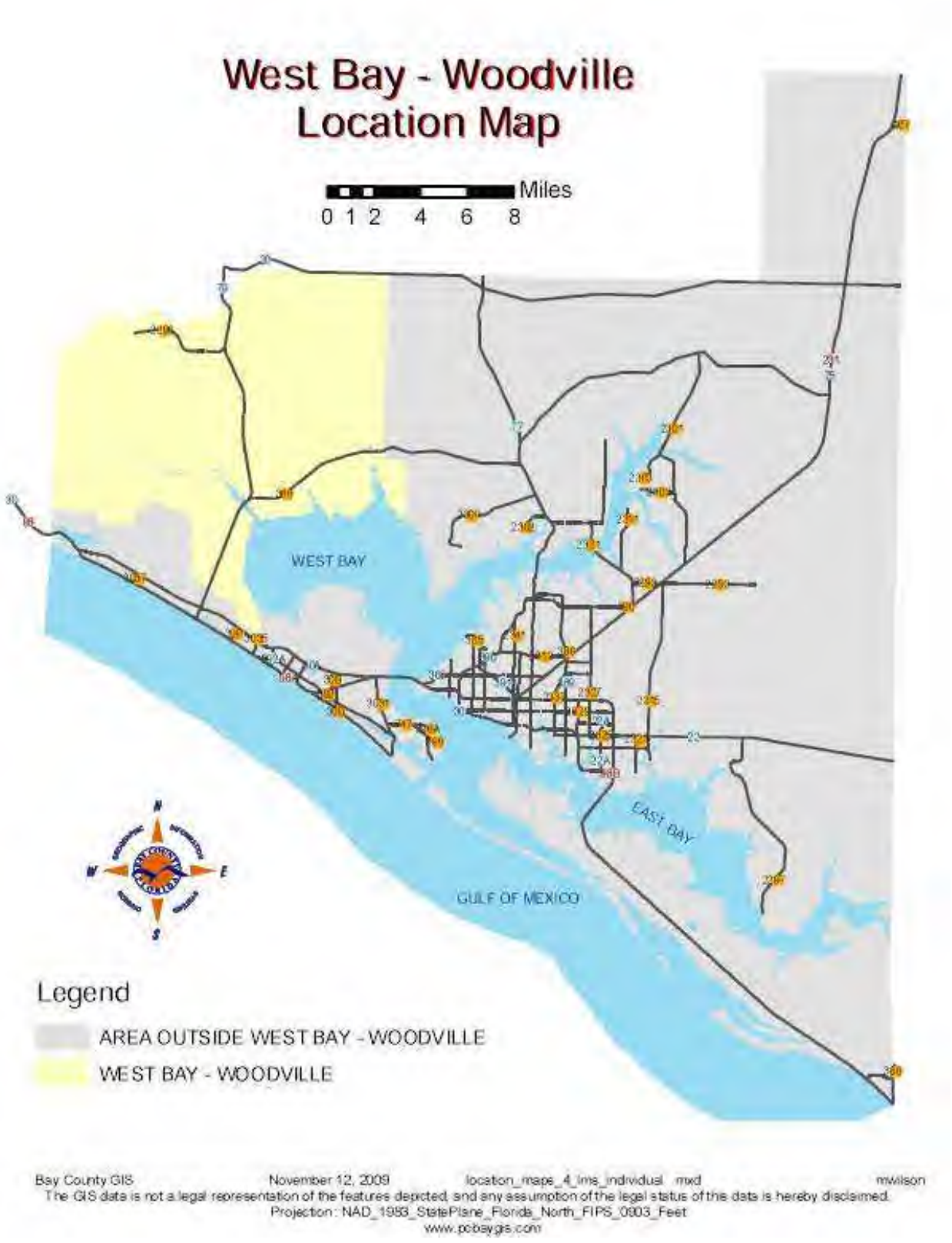
7A4.51



Bay County GIS November 12, 2009 location_maps_4_lms_individual .mxd mwilson
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7A4.52

West Bay - Woodville Existing Land Use

Miles
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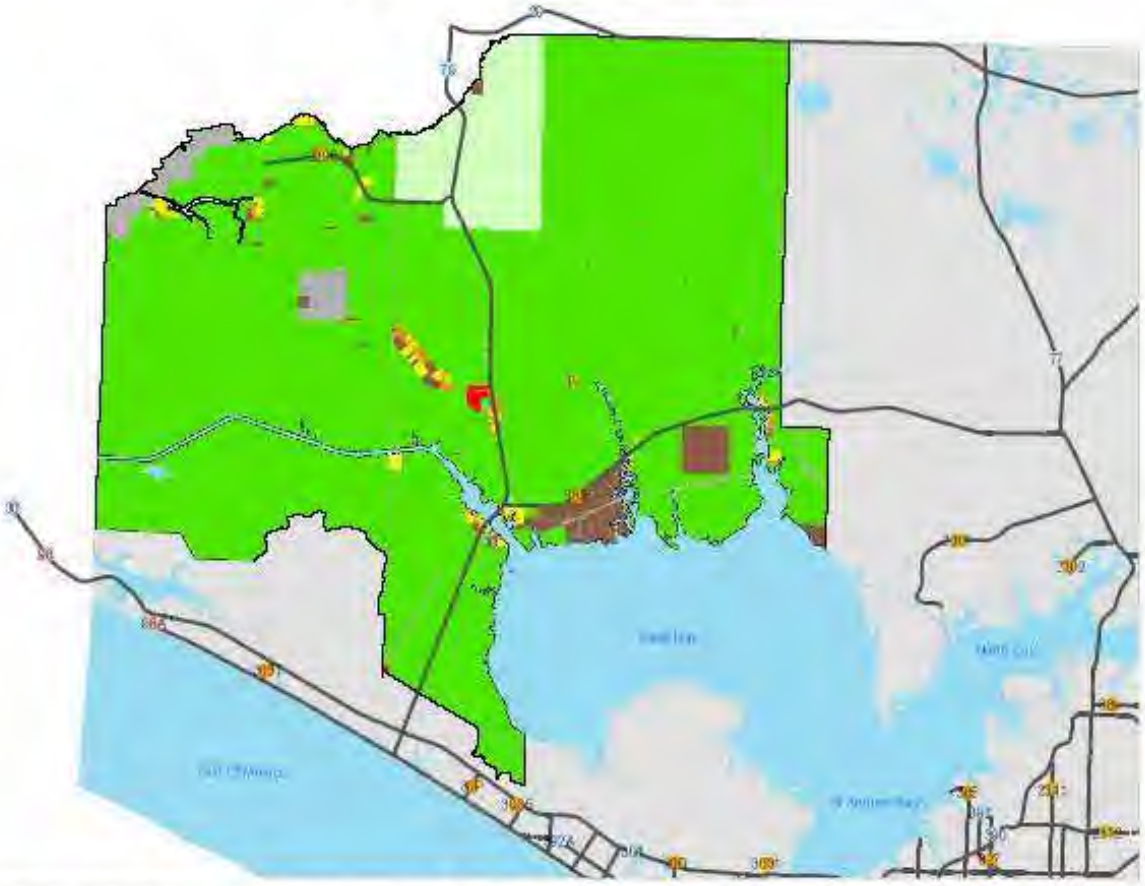

WEST BAY - WOODVILLE	Parcels	Acres	Value ($)
Agriculture	419	77,143.02	$98,939,110
Commercial	14	153.13	4,294,504
Government	74	2,191.51	7,857,399
Institutional	6	11.37	5,218,652
Mobile Home Residential	211	319.68	11,598,157
Recreational	20	5,447.08	4,894,635
Single Family Residential	264	717.00	32,247,074
Subtotal	1,008	85,982.79	$165,049,531
Vacant	912	2,627.12	146,379,111
Total	1,920	88,609.91	$311,428,642

Legend
- Agriculture
- Commercial
- Government
- Industry
- Institutional
- Mixed Use
- Recreational
- Single Family Residential
- Multi Family Residential
- High Density Residential
- Mobile Home Residential
- Vacant
- AREA OUTSIDE WEST BAY - WOODVILLE
- WEST BAY - WOODVILLE

Bay County GIS November 18, 2009 westbay_woodville_ elu.mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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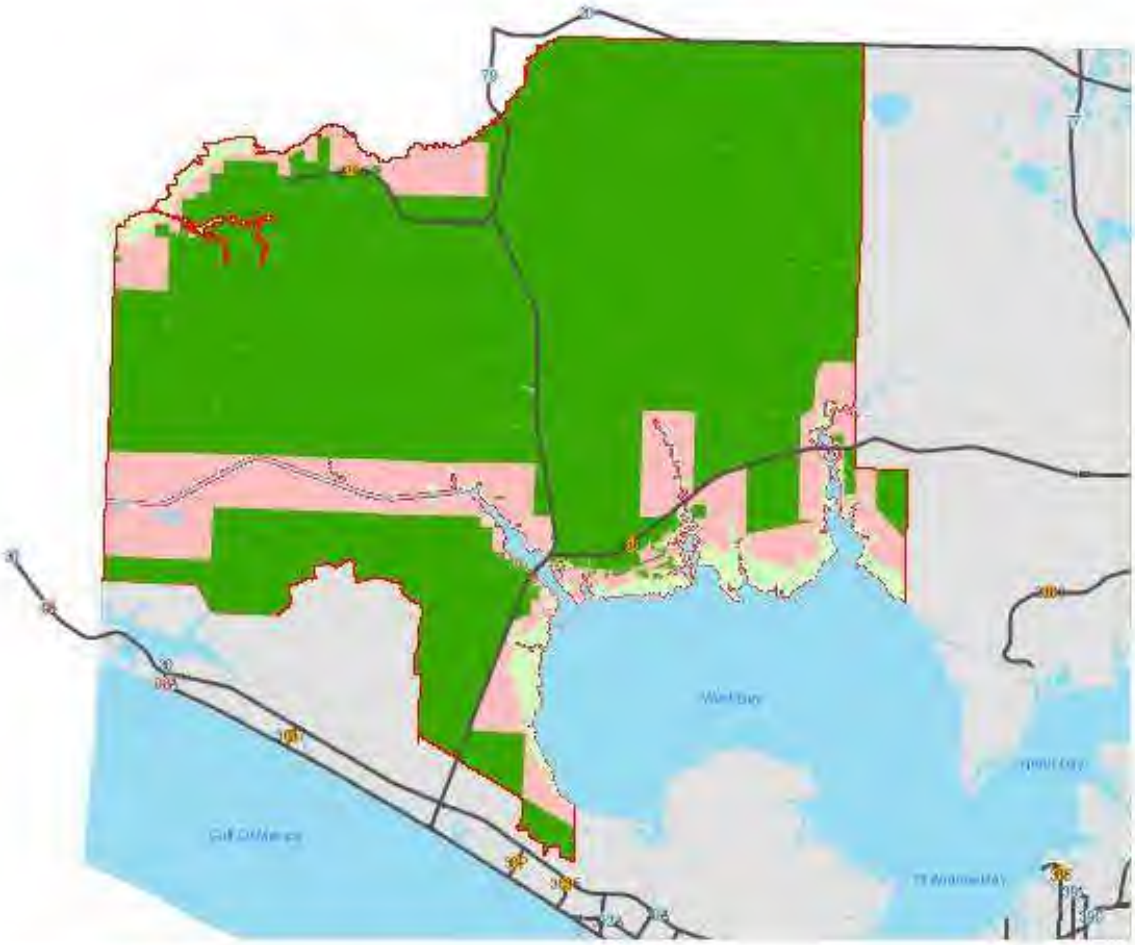
7A4.53

West Bay - Woodville Coastal High Hazard Area

Miles
0 1 2 4 6 8



WEST BAY - WOODVILLE	Parcels	Acres	Value ($)
Agriculture	115	15,794.36	$28,634,434
Commercial	2	1.57	666,641
Government	18	1,215.97	4,859,483
Mobile Home Residential	39	58.88	4,871,349
Recreational	2	638.62	341,010
Single Family Residential	82	346.57	17,524,545
Subtotal	258	18,055.97	56,897,462
Vacant	340	1,038.14	70,672,006
Total	598	19,094.11	$127,569,468

Legend
- Coastal High Hazard Area within West Bay - Woodville
- Parcels Outside Hazard Area within West Bay - Woodville
- Parcels Inside Hazard Area within West Bay - Woodville
- AREA OUTSIDE WEST BAY - WOODVILLE
- WEST BAY - WOODVILLE

Bay County GIS November 18, 2009 westbay_woodville_chha .mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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7A4.54

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	325	72,450.58	$34,218,909	42	16,030.48	$31,176,191	9	153.50	$897,068
Commercial	5	140.34	3,062,462	2	157	666,841			
Government	43	906.55	3,261,434	20	1,240.42	4,636,209			
High Density Residential									
Industry									
Institutional				6	10.79	4,678,557			
Mixed Use									
Mobile Home Residential	40	123.36	2,097,969	74	104.51	6,466,714			
Multi Family Residential									
Recreational	7	5,442.01	4,407,140	2	4.66	333,595			
Single Family Residential	60	206.58	4,936,673	187	410.21	21,139,160			
Subtotal	480	79,27.141	$101,999,037	382	19,902.64	$69,548,017	9	153.50	$897,068
Vacant	109	1394.57	9,41,365	679	2,038.64	$26,439,797	5	95.11	1805,253
Total	589	80,665.78	$ 711,140,402	1,061	21,941.28	$ 195,987,814	14	1,626.61	$2,702,347

Bay County GIS November 10, 2009 westbay_woodville_flood.mxd mwilson

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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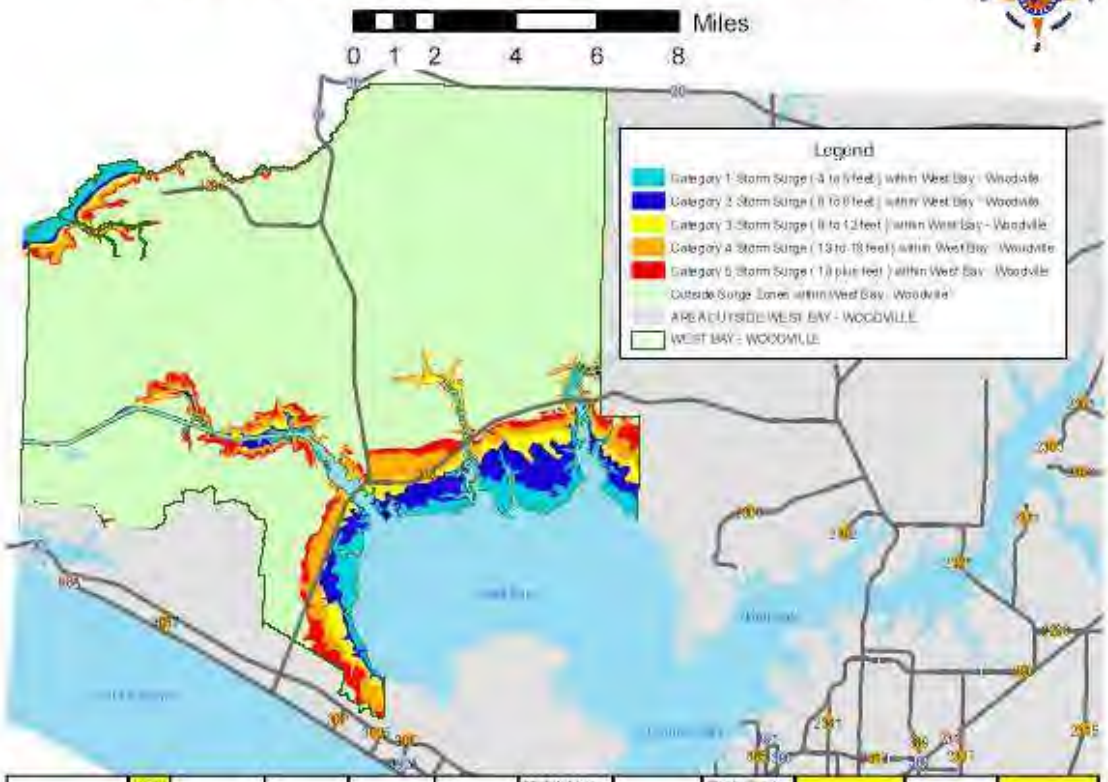
7A4.55

West Bay - Woodville Surge Zones

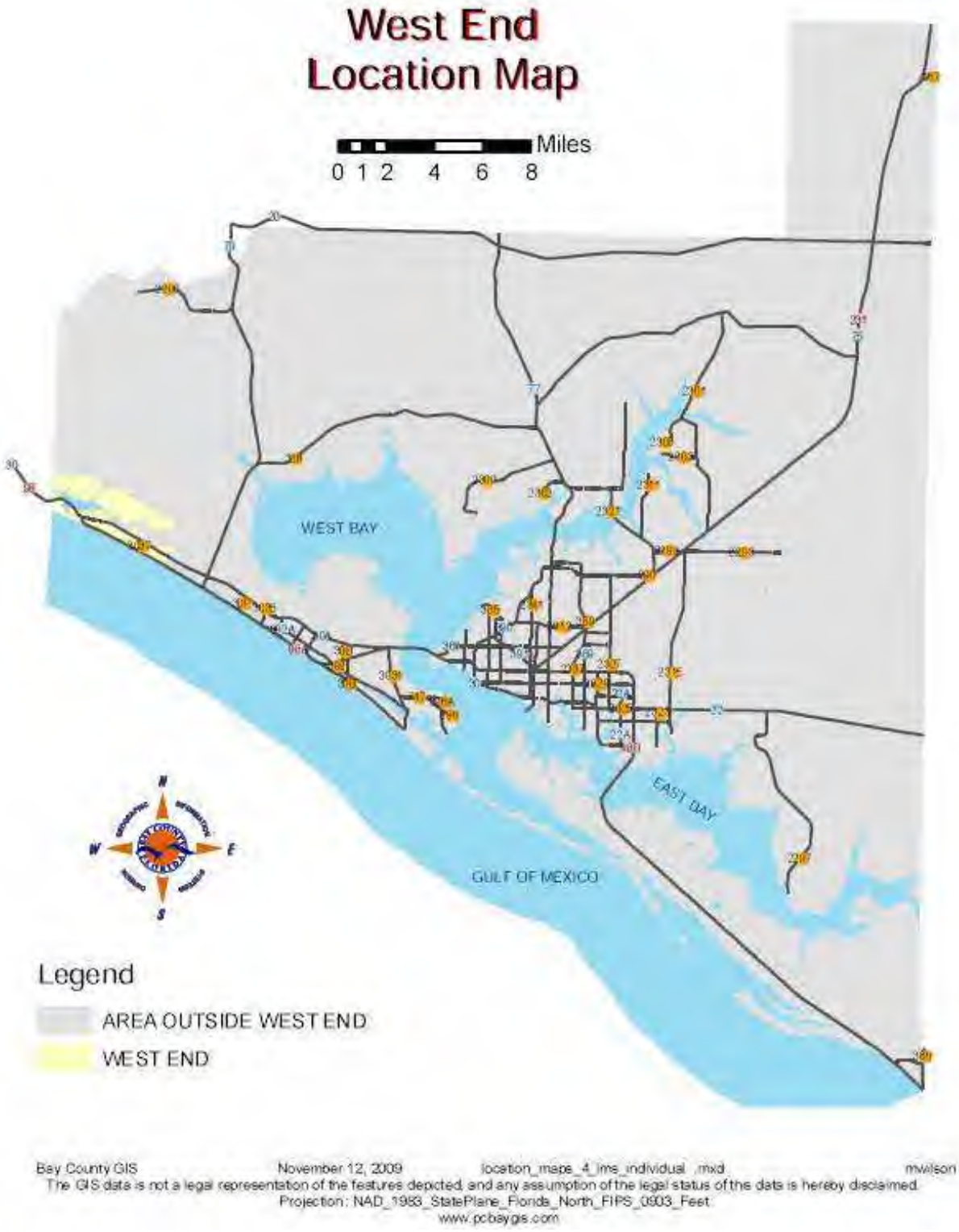


	Land Use	Agriculture	Commercial	Government	Institutional	Mobile Home Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1 Surge											
Parcels		17	1	18		31	3	35	105	340	445
Acres		6,594.70	15	13,504.7		46.05	1,038.02	346.57	21,945.04	1,089.14	23,034.11
Value ($)		$20,834,444	$55,641	$ 4,191,469		$ 967,140	$ 4,110	$ 1,254,584	$ 27,307,392	$ 2,317,504	$ 29,624,896
Category 2 Surge											
Parcels		50	2	30	3	48	9	105	247	624	871
Acres		9,761.79	15	12,043	9.92	46.14	1,142.39	389.18	23,407.22	2,060.02	25,467.24
Value ($)		$31,034,439	$55,641	$ 3,291,467	$ 4,430,266	$ 3,276.28	$ 653,585	$ 1,344,701	$ 84,549,647	$ 26,482,570	$ 111,032,217
Category 3 Surge											
Parcels		101	2	24	4	69	3	199	402	750	1152
Acres		23,757.72	15	1,238.55	10.47	75.67	642.74	433.86	26,174.99	2,153.65	28,328.63
Value ($)		$44,996,643	$55,641	$ 3,542,391	$ 4,676,355	$ 138,629	$ 653,585	$ 23,853,812	$ 128,917,056	$ 14,646,510	$ 143,563,566
Category 4 Surge											
Parcels		77	4	20	5	85	4	85	480	770	1241
Acres		26,668.86	2.96	1,247.15	11.05	35.79	15.02	362.63	28,643.26	2,146.02	30,789.28
Value ($)		$54,662,559	$203,645	$ 3,453,086	$ 4,916,445	$ 6,624,285	$ 671,405	$ 24,189,025	$ 135,101,550	$ 14,399,281	$ 149,500,831
Category 5 Surge											
Parcels		190	4	44	5	95	3	183	524	803	1327
Acres		32,408.16	2.96	1,252.5	11.05	110.1	1,057.73	480.89	35,323.39	2,215.12	37,538.51
Value ($)		$97,196,602	$203,645	$ 3,694,845	$ 4,916,445	$ 6,946,045	$ 1,324,990	$ 25,443,737	$ 145,726,309	$ 16,614,785	$ 162,341,094

Bay County GIS — November 15, 2000 — westbay_woodville_surge.mxd — revision

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

7A4.56


West End
Location Map
Miles
0 1 2 4 6 8
WEST BAY
EAST BAY
GULF OF MEXICO
Legend
AREA OUTSIDE WEST END
WEST END
Bay County GIS
November 12, 2009
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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7A4.57

West End Existing Land Use

WEST END	Parcels	Acres	Value ($)
Agriculture	101	1,833.12	$146,987,407
Commercial	112	86.10	102,157,490
Government	105	130.32	10,436,550
High Density Residential	936	78.87	235,257,010
Industry	1	0.58	311,995
Institutional	5	5.92	3,108,335
Mixed Use	4	1.01	1,048,701
Mobile Home Residential	899	161.40	84,905,758
Multi Family Residential	38	8.53	14,424,605
Recreational	37	367.12	250,255,267
Single Family Residential	3,030	519.56	983,073,137
Subtotal	5,268	3,192.53	$1,831,967,255
Vacant	1,962	948.06	772,264,323
Total	7,230	4,140.59	$2,604,231,578

Bay County GIS November 18, 2009 westend_elu.mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePla ne_Florida_North_FIPS_0903_Feet
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7A4.58

West End Coastal High Hazard Area

WEST END	Parcels	Acres	Value ($)
Agriculture	20	248.87	$40,910,725
Commercial	3	22.97	19,655,821
Government	9	48.1	280,739
High Density Residential	337	46.91	101,284,626
Mobile Home Residential	2	1.12	840,008
Multi Family Residential	2	1.18	1,907,794
Recreational	14	276.23	202,638,035
Single Family Residential	134	51	126,484,457
Subtotal	521	696.38	$494,002,205
Vacant	132	193.69	167,939,873
Total	653	890.07	$661,942,078

Bay County GIS November 18, 2009 westend_chha .mxd mwilson
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Projection: NAD_1983_StatePl ane_Florida_North_FIPS_0903_Feet
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7A4.59

West End Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	71	1753.89	$ 106,382,802	34	395.31	$73,068,313	5	73.74	$32,003,300
Commercial				31	34.57	32,478,971	5	3.79	27,469,476
Government	35	54.01	602,437	45	67.20	730,692	21	9.91	6,537,205
High Density Residential	2	4.04	434,448	228	33.43	63,842,694	530	41.61	53,802,339
Industry									
Institutional									
Mixed Use									
Mobile Home Residential	15	4.69	1,017,902	10	2.74	1,860,489			
Multi Family Residential				2	1.00	816,509	2	0.46	1,662,316
Recreational	0	335.85	106,641,991	21	276.72	43,338,145	8	268.16	80,397,294
Single Family Residential	34	14.83	9,461,360	391	68.37	278,986,268	269	36.60	268,064,615
Subtotal	147	2,145.36	$264,400,682	755	879.14	$595,102,679	840	485.27	$660,236,562
Vacant	210	304.09	70,621,321	447	316.13	470,334,090	54	75.67	90,259,398
Total	357	2,449.45	$335,022,003	1,202	1,189.27	$1,065,436,769	894	560.94	$750,495,960

Bay County GIS November 10, 2009 weekend_flood.mxd meldon

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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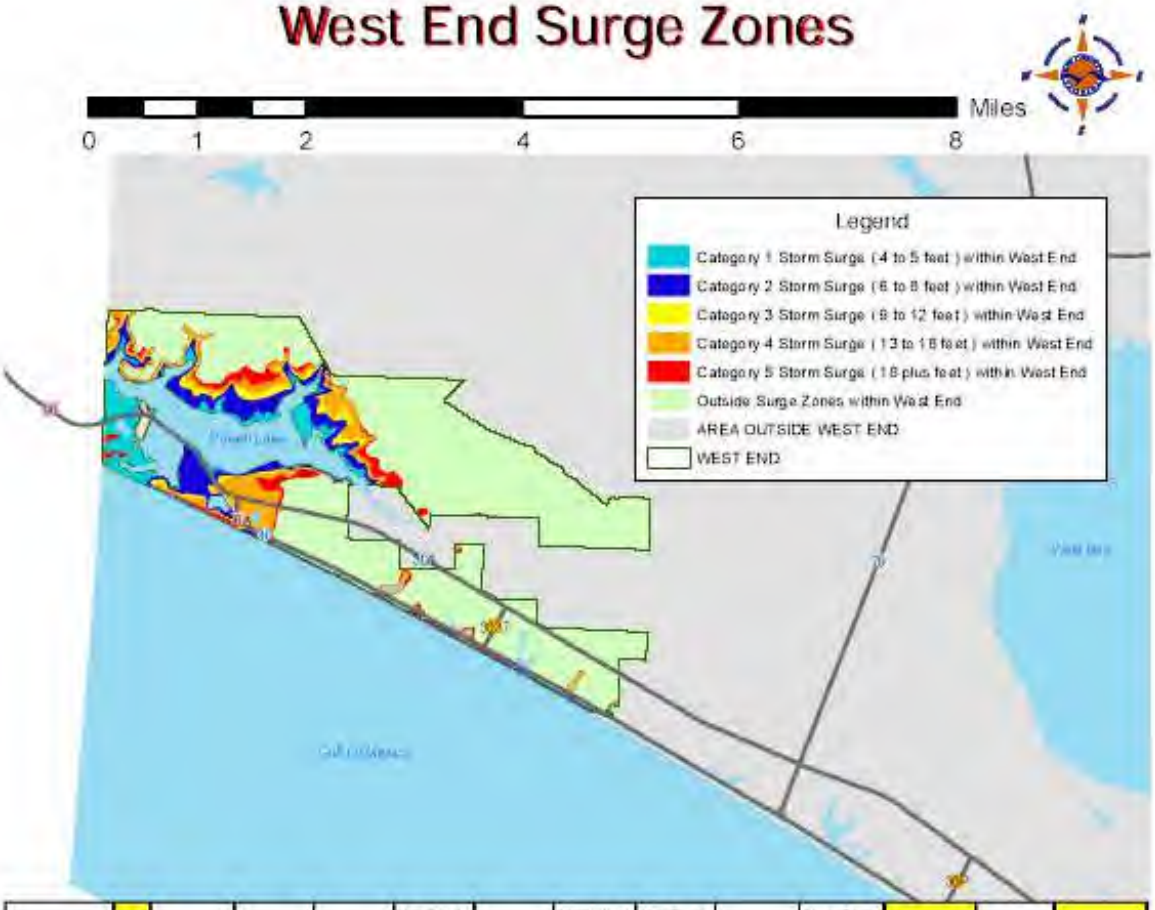
7A4.60

West End Surge Zones



	Land Use	Agriculture	Commercial	Conservation	High Density Residential	Institutional	Mobile Home Residential	Multi Family Residential	Recreational	Single Family Residential	Undeveloped	Vacant	Others
Category 1 Surge													
Parcels		10	2	3	300		2	1	14	614	621	90	955
Acres		248.87	22.06	48.3	46.91		1.16	1.19	226.22	31	108.34	608.65	690.07
Value($)		$409,672.26	$1,650,851.1	2,607.39	$3,284,638		$46,008	$807,784	$2,204,816.88	$26,484,467	$434,002,300	$57,588,973	$64,154,374.8
Category 2 Surge													
Parcels		33	11	46	634		2	2	28	621	964	372	1,836
Acres		360.11	38.7	76.27	47.82		1.16	1.19	227.57	71.69	460.46	1,149.1	1777
Value($)		$23,634,169	$9,620,645	$64,679	$4,983,169		$46,008	$807,784	$2,204,816.88	$27,88,2,288	$703,462,834	$18,785,936	$1,103,204,300
Category 3 Surge													
Parcels		56	15	59	683		2	2	28	415	1265	433	1,628
Acres		376.45	15.12	88.67	48.3		1.16	1.19	227.57	84.97	952.76	379.84	1,288.82
Value($)		$73,384,549	$5,045,902	108,347.0	$6,516,559		$46,008	$807,784	$2,204,816.88	$28,704,475	$460,801,248	$59,573,151	$1,138,189,599
Category 4 Surge													
Parcels		63	30	73	720		12	4	34	988	1971	680	3,261
Acres		446.57	30.39	101.77	48.51		3.03	1.65	304.47	131.01	1,260.94	488.29	1749.35
Value($)		$138,658,667	$9,614,461	7,756,700	$8,075,099		2,254,604	$1,062,470	$3,203,804	$40,147,185	$657,762,011	$41,470,349	$1,480,650,00
Category 5 Surge													
Parcels		61	40	75	734	1	2.3	2	28	783	1769	729	2492
Acres		1008.98	53.78	110	51.9	10.7	6.37	1.65	310.83	97.17	1683.39	531.63	2,245.65
Value($)		$168,772,08.5	72,4 65,49.5	7,88 1,348	$8,028,8.35	353,012	3,307,452	4,249,784	217,485,382	46,2,000,000	$1,124,477,4.49	574,359,435	$1,703,1,401,8.28

Bay County GIS November 15, 2009 westend_surge.mxd mattson

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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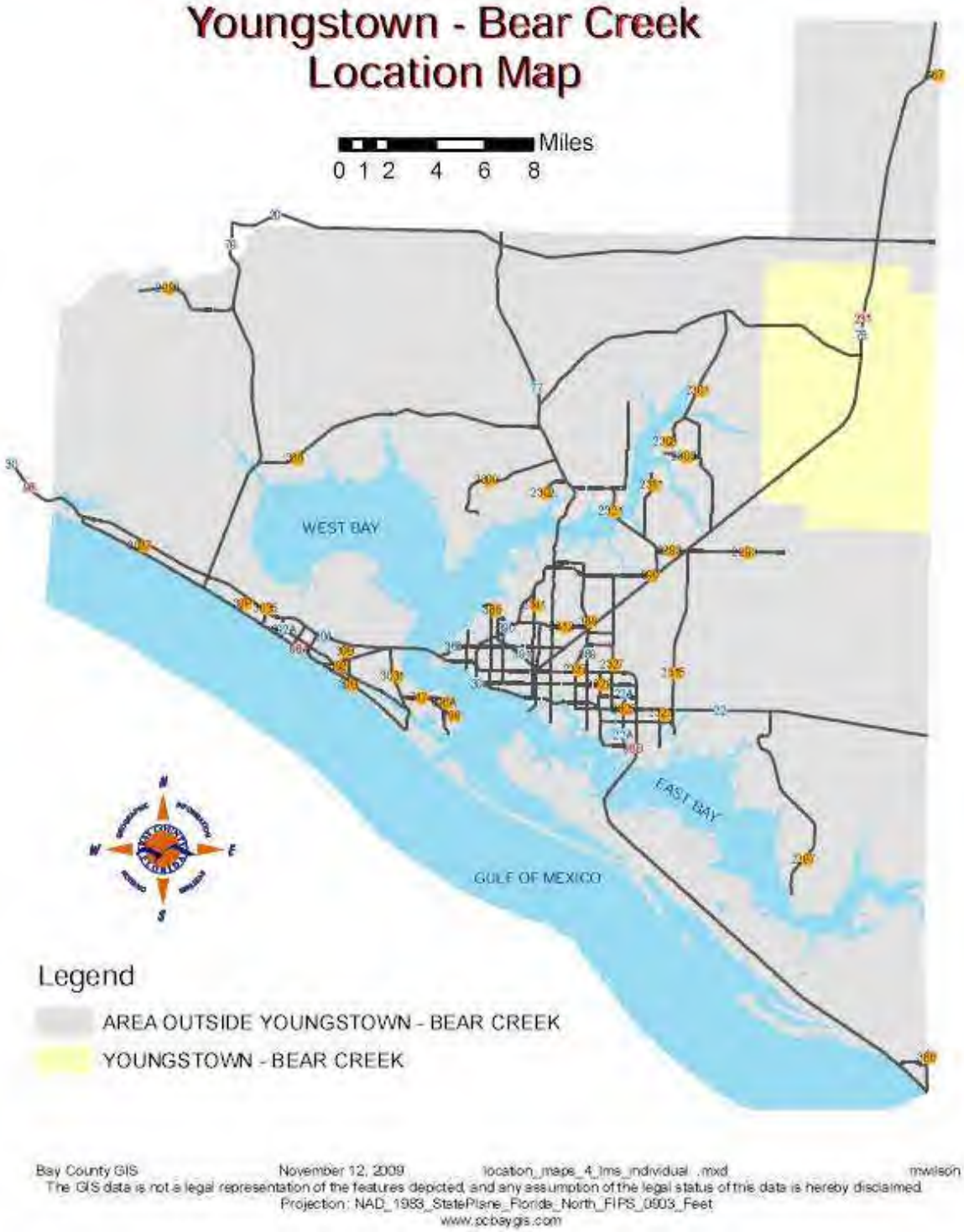

Bay County GIS November 12, 2009 location_maps_4_1ms_individual .mxd mwilson
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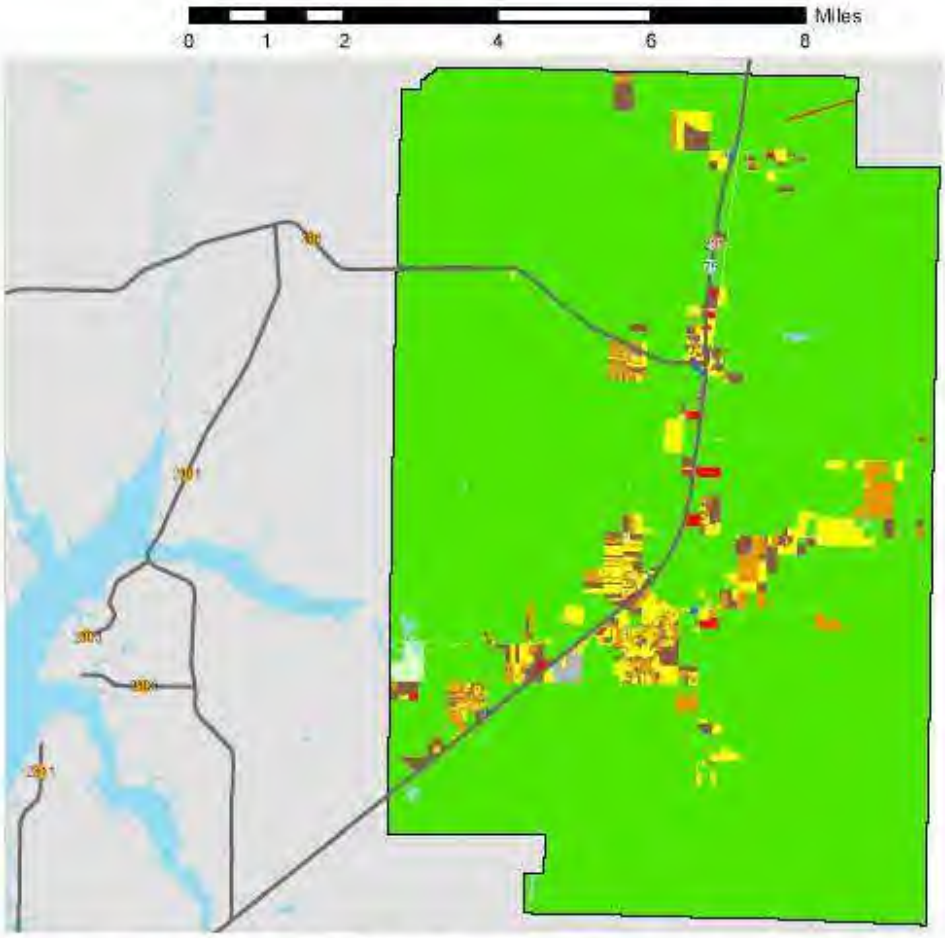
7A4.62

Youngstown - Bear Creek
Existing Land Use



YOUNGSTOWN - BEAR CREEK	Parcels	Acres	Value ($)
Agriculture	259	43,048.62	$16,874,859
Commercial	30	139.41	4,226,113
Government	5	83.57	2,601,968
Institutional	7	20.95	4,448,582
Mobile Home Residential	402	960.61	21,425,687
Recreational	2	109.18	702,429
Single Family Residential	355	1,351.81	32,236,246
Subtotal	1,060	45,714.15	$82,515,884
Vacant	368	1,094.97	6,990,000
Total	1,428	46,809.12	$89,505,884

Bay County GIS November 18, 2009 youngstown_bearcreek_ elu.mxd mwilson

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Projection: NAD_ 1983_StatePlane_Florida_North_FIPS_0903_Feet

7A4.63

Youngstown - Bear Creek
Coastal High Hazard Area

Youngstown - Bear Creek	Parcels	Acres	Value ($)
Agriculture	0	0	$0
Commercial	0	0	0
Government	0	0	0
High Density Residential	0	0	0
Mobile Home Residential	0	0	0
Multi Family Residential	0	0	0
Recreational	0	0	0
Single Family Residential	0	0	0
Subtotal	0	0	$0
Vacant	0	0	0
Total	0	0	$0

Bay County GIS November 18, 2009 youngstown_bearcreek_chha .mxd mwilson
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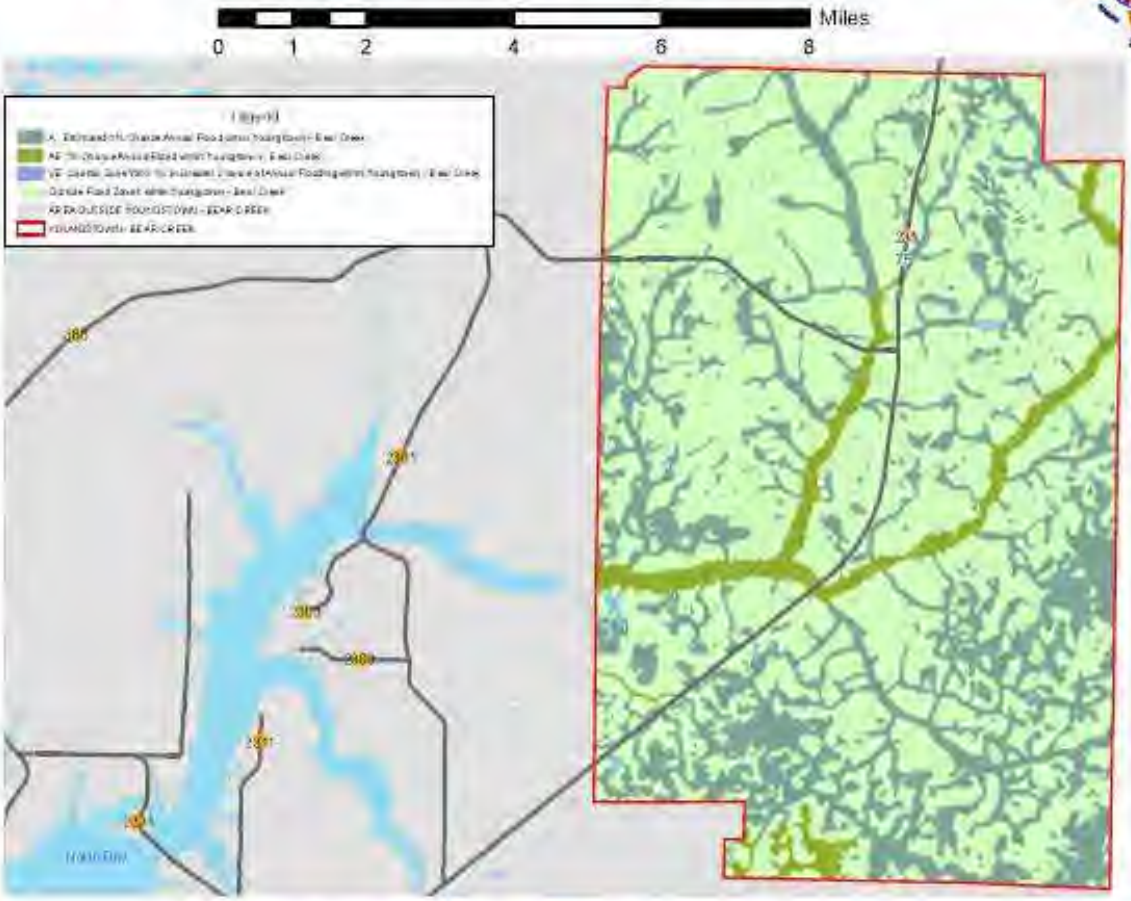
7A4.64

Youngstown - Bear Creek Flood Zones



	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	209	43,316.57	$13,741,868	56	1,063.25	$5,058,089			
Commercial	2	58.46	167,990						
Government	1	78.42	1,280,300	1	0.90	2,025			
High Density Residential									
Industry									
Institutional	2	0.16	263,565						
Mixed Use									
Mobile Home Residential	82	514.29	5,261,551	24	173.02	1,404,660			
Multi Family Residential									
Recreational	1	26.37	385,690						
Single Family Residential	90	740.00	9,678,003	42	330.81	5,014,272			
Subtotal	402	43,821.89	$32,489,360	123	1,567.98	$11,479,346	0	0.00	$0
Vacant	136	547.84	2,748,039	50	217.11	706,453			
Total	538	44,369.73	$35,237,419	173	1,785.09	$12,185,799	0	0.00	$0

Bay County GIS | November 10, 2009 | youngstown_bearcreek_fmod.mxd | marlson

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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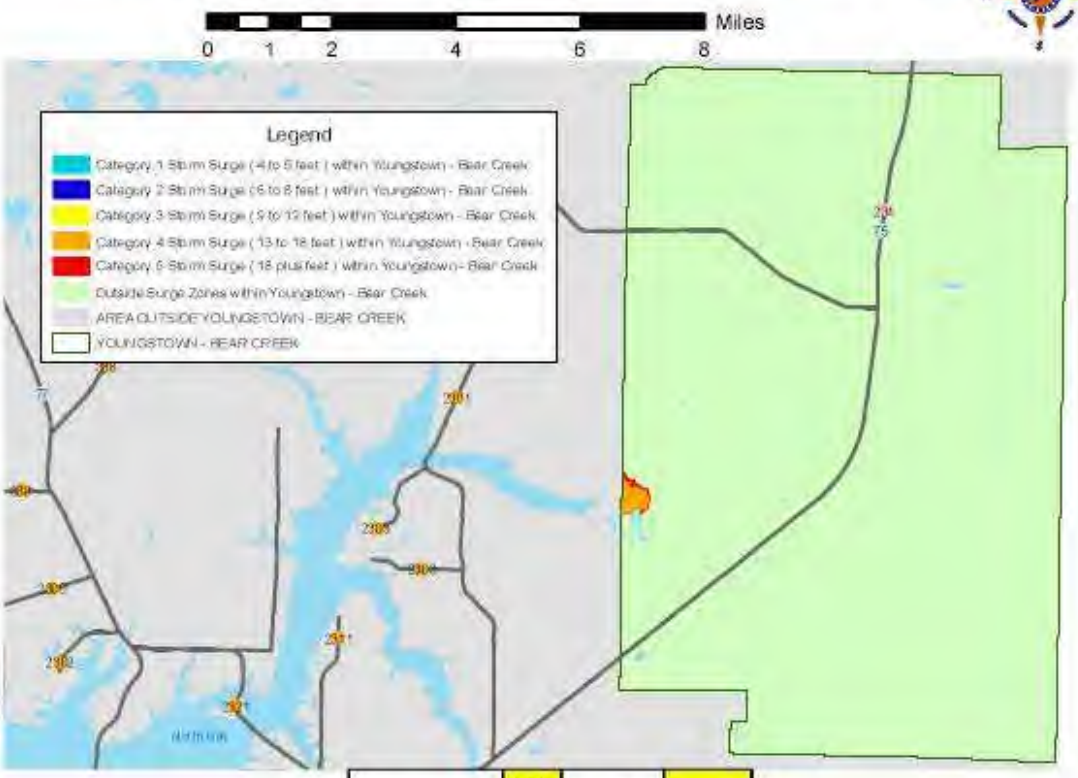
7A4.65

Youngstown - Bear Creek Surge Zones



	Land Use	Agriculture	Totals
Category 1 Surge			
Parcels			0
Acres			0.00
Value ($)			$000
Category 2 Surge			
Parcels			0
Acres			0.00
Value ($)			$000
Category 3 Surge			
Parcels			0
Acres			0.00
Value ($)			$000
Category 4 Surge			
Parcels		3	3
Acres		79.503	79.503
Value ($)		$194,755	$194,755
Category 5 Surge			
Parcels		4	4
Acres		964.04	964.04
Value ($)		$56,706	$56,706

Bay County GIS November 15, 2007 youngstown_beercreek_surge.mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
www.nobaygis.com

Section 7A.5 Bay County Resolution - LMS

RESOLUTION NO.: 2999

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF BAY COUNTY, FLORIDA ADOPTING THE BAY COUNTY LOCAL MITIGATION PLAN; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, areas of Bay County are vulnerable to the human and economic costs of natural, technological and societal disasters, and

WHEREAS, the Bay County governing body realizes the importance of reducing or eliminating those vulnerabilities for the overall good and welfare of the community, and

WHEREAS, Bay County has been an active participant in the Bay County Local Mitigation update process, which has established a comprehensive, coordinated planning process to eliminate or decrease these vulnerabilities, and

WHEREAS, Bay County representatives and staff have indentified, justified and prioritized a number of proposed projects and programs needed to mitigate the vulnerabilities of unincorporated areas of Bay County to the impacts of future disasters, and

WHEREAS, these proposed projects and programs have been incorporated into the updated edition of the Bay County Local Mitigation Plan that has been prepared and issued for consideration and implementation by the communities and jurisdictions of Bay County,

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Bay County, Florida that:

1. Bay County hereby accepts and approves its designated portion of the Bay County Local Mitigation Plan,

2. The agency personnel of Bay County are requested and instructed to pursue available funding opportunities for implementation of the proposals designated therein,

3. The agencies and organizations within Bay County will, upon receipt of such funding or other necessary resources, seek to implement the proposals contained in its section of the strategy, and

4. Bay County will continue to participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead, and

5. Bay County will further seek to encourage the businesses, industries and community groups operating within Bay County to also participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead.

6. This resolution shall become effective upon adoption.

DONE AND ADOPTED by the Board of County Commissioners of Bay County in Regular Session on the 17 day of August, 2010.

BOARD OF COUNTY COMMISSIONERS OF BAY COUNTY, FLORIDA

George B. Gainer, Vice-Chairman

ATTEST:

Bill Kinsaul, Clerk

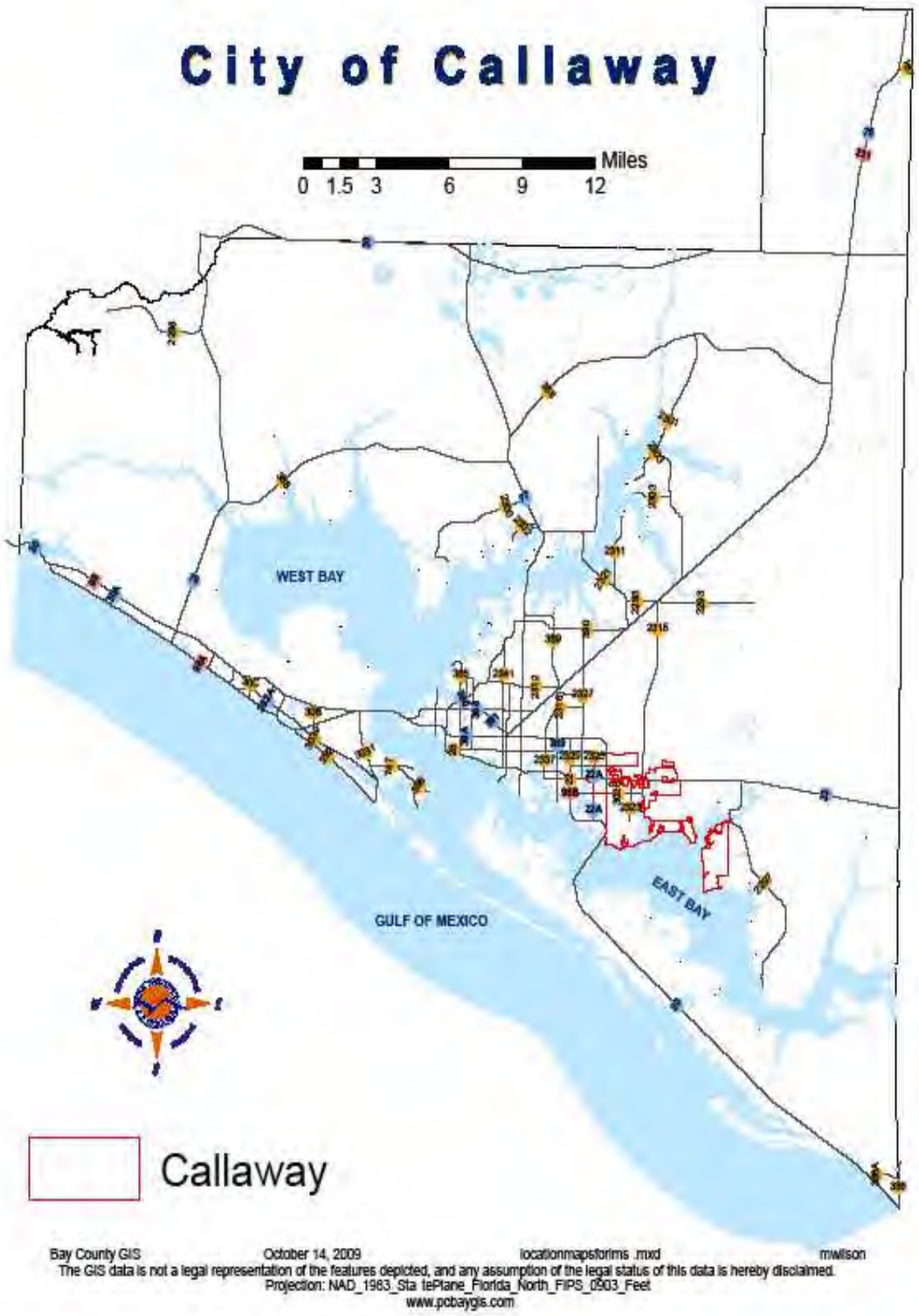
CIRCUIT COURT BAY COUNTY, FLORIDA

APPROVED AS TO FORM:

Office of County Attorney

BOARD OF COUNTY COMMISSIONERS SEAL BAY COUNTY, FLORIDA

Map 7B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www.pcbaygis.com

7B. The City of Callaway

7B1. Introduction

Callaway is an urban community covering a total land area of 4,932 acres located in southeastern Bay County in the Panhandle Region of Northwest Florida, and is approximately 5 miles southeast of Panama City. Being situated on the northern shores of East Bay, this community is separated from the Gulf of Mexico by East Bay and a peninsula occupied by Tyndall Air Force Base. Two (2) other communities to the west of Callaway, Springfield and Parker, separate it from Panama City. Comprised of an area of approximately twelve square miles, Callaway is served by two major roadways: U.S. Highway 98 on its western boundary and Highway 22 located in the northern portion of the City.

Many of the early pioneers to the area settled on what is now known as Callaway Bayou. In the early 1800s, A.B. Smith constructed a sawmill on the bayou. In 1855, E.G. Langston homesteaded a piece of property adjacent to the bayou, and the name was changed to Langston Bayou. In 1897, Pitt Callaway purchased the Langston property and over the years Callaway Bayou appeared on maps. The local government of Callaway was formed and the first officials elected on January 15, 1936, but after twenty years of inactivity, the community of Callaway was reactivated in 1959. A major influence in the development of today's Callaway is Tyndall Air Force Base, which was established in 1941. Tyndall is one of the largest Tactical Air Command installations in the world, providing training, weapons testing and air defense for the southeastern portion of the United States. Located south of Callaway across East Bay, this military base has contributed greatly to the growth of Callaway, in both population and its economy. Callaway continues a steady growth pattern. From 1990 through 1999, it is estimated that Callaway grew by 2,165 residents, which equates to approximately 240 residents per year for nine (9) years. According to the 2008 BEBR Census estimates, Callaway's population was 14,656. Due to the current economic downturn the population will remain relatively unchanged during the next five year LMS planning period.

Given that the City of Callaway is geographically situated around East Bay and Callaway Bayou, threats and vulnerabilities are a close match to those of the unincorporated areas of Bay County, with flooding from storm surge being a significant threat to its developed and populated areas.

Major land uses in Callaway are single family residential, multi-family residential, mobile home residential, agriculture, and commercial. Among these land uses, single family residential is the most prominent as it occupies 70% of all parcels and 32% of the total acreage in Callaway. Multi-family residential occupies less than 3% of all parcels and 2% of the total acreage. Mobile home residential occupies more than 5% of all parcels and more than 3% of the total acreage. Commercial land uses occupy more than 2% of all parcels and more than 3% of the total acreage. Agriculture occupies less than 1% of all parcels, but given the size of each parcel, agricultural land uses make up more than 40% of the City's total acreage. Many parcels in Callaway remain vacant.

Approximately 5% of all single family residences in the City of Callaway are located within a Coastal High Hazard Area (CHHA). Also within Callaway's CHHA, there are 8 parcels designated for multi-family residential and an additional 7 parcels designated for mobile home residential. The multi-family residential structures in Callaway's CHHA occupy over 29 acres. Given the large number of single family residences and the high density of some multi-family

residences, the potential losses to human life and residential properties within Callaway's CHHA are high. Agriculture is a major land use along Callaway's coastline in the CHHA, occupying 16 parcels and approximately 1,385 acres. However, given that this agricultural land is primarily for timber, the potential loss of life, structures, or economic assets in these areas is low. No commercial properties are located within Callaway's CHHA. Future mitigation initiatives will address the City's residential vulnerabilities, concentrated primarily around Callaway Bayou.

Much of the City of Callaway is located within several flood zone designations. The most vulnerable land use category is single family residential, particularly in the A and AE zones. The risk assessment estimates that 155 single family residences are located in flood zone A and 676 are located in flood zone AE.

7B2. Review of Existing Plans, Studies, Reports or Technical Information:

7B2(a) How the Callaway Planning and Zoning Department and Comprehensive Plan support the LMS Goals

To further the goals of minimizing damage from the hazard events that threaten Callaway, the Comprehensive Plan has adopted the following objectives and policies which are grouped into 3 hazard areas: storm surge, flood hazard s and general other/ combined hazards:

Storm Surge

Policy 1.1.2: The City shall not utilize public funds for infrastructure expansion or improvements in the coastal high-hazard area unless such funds are necessary to:

(1) To protect public health, safety and welfare;
(2) The service provided by the facility cannot be located at another location outside the coastal high hazard area;
(3) To restore and/or enhance natural resources.
(4) Provide for needs of water-dependent uses.

Objective 2.2: Identify the coastal high hazard area.
Policy 2.2.1: The Coastal High Hazard Area shall be defined as the Category 1 evacuation area as established in the Northwest Florida Hurricane Evacuation Study (1999).
Policy 2.2.2: Modify the coastal high hazard area periodically based on scientific analyses of storm events where flooding from storm surge, waves or storm-driven water has occurred causing damage to structures and infrastructure.
Policy 2.2.3: Make available to the public a map depicting the coastal high hazard area.
Policy 2.2.4: Notify owners of property in the coastal high hazard area of property designation to increase public awareness of hurricane hazard.

Objective 2.4: Limit public fund expenditures for public facilities and infrastructure in the coastal high hazard area.
Objective 2.10: Incorporate the recommendations of the hazard mitigation plan into the Comprehensive Plan.
Objective 7: Scrutinize proposed developments within the coastal high hazard areas to ensure that development of the high-hazard densities do not exceed the capacity for hurricane evacuation or shelter.

Policy 7.1: The City shall limit the density of dwelling units in the coastal area so as not to exceed hurricane evacuation capabilities.
Policy 7.2: The City shall prohibit the location of hospitals, nursing homes, convalescent homes or other similar high density institutions in the Coastal High Hazard Area.

Policy 7.14: There shall be a 50 foot building setback from the shore line of East Bay and its tributaries, as measured from the Mean High Water Line (MHWL). The building setback shall not apply to uses and activities allowed in Conservation Policy 7.5.

Flood Hazard

Goal: Provide adequate stormwater management including reasonable protection from flooding, protection of the quality of receiving waters, and protection of investments in existing facilities.
Objective E 1: By 2003, Callaway shall continue to implement the stormwater management plan for the City, based upon the study initiated in the 1982 drainage study.
Policy 1.1: The City will evaluate the need to amend the Comprehensive Plan to include the findings and recommendations of the stormwater plan. Callaway shall prioritize the identified drainage needs and maintain a five year schedule for their construction, to be updated annually and in conformance with the review process of the Capital Improvements Element of this plan.
Objective 2: The City shall achieve and maintain the adopted stormwater management level of service standards.
Policy 2.1: Stormwater facilities shall be designed to accommodate the 25-year, 24-hour design storm to meet the water quality and quantity standards that follow:
(1) Water Quantity: At a minimum, facilities shall be provided so the post development stormwater off-site peak discharge rate shall not be greater than predevelopment rate.
At a minimum, facilities shall be provided to attenuate a 25-year frequency storm event of critical duration so the post development stormwater off-site peak discharge rate shall not be greater then predevelopment rate. Regardless of the area served and in accordance with Chapter 62-25, FAC, the stormwater treatment systems must provide a level of treatment for the runoff from the first (1^{st}) inch of rainfall for projects in drainage basins of 100 acres or more, or as an option for projects with drainage basins less than 100 acres, the first one-half (½) inch of runoff, in order to meet receiving water quality standards.
Policy 2.1.1: Residential development shall be limited to the following densities in the following environmentally sensitive areas:

(1) Coastal High Hazard Area and Floodplains: 0-20 dwelling units per acre.
(2) Wetlands: The density allowed by the underlying future land use category.

Policy 2.2: No approvals for development shall be issued for new development which would not comply with the adopted level of service.
Policy 7.6: The 100-year floodplain, wetlands, water bodies, and seagrass beds shall be known as Environmentally Sensitive Lands and shall be protected as established in the policies in the Land Use, Conservation, and Coastal Management Elements of this Plan.
Policy 7.11: All development activity undertaken within special flood hazard areas as shown on the official Flood Insurance Rate Map for Callaway, Florida, published by the Federal Emergency Management Agency, shall be subject to the restrictions and standards of the Callaway Flood Plain Code.
Policy 7.12: Locally determined environmentally sensitive resources are considered to be: jurisdictional wetlands, seagrass beds, flood zones and habitat for endangered or threatened species. Development activities which destroy these resources shall be restricted as outlined in this Plan.

Policy 7.13: There shall be a 30 foot natural vegetated buffer from the landward boundary of jurisdictional wetlands identified by the Florida Department of Environmental Protection (FDEP) or the United States Army Corps of Engineers (USACOE), whichever is strictest. The natural vegetated buffer shall not apply to uses and activities allowed in Conservation Policy 7.5.
Policy 1.5.4: Development in floodplains shall be restricted to that which does not decrease the water-carrying capacity of floodways or increase flood heights and velocities in the floodway or increase flood hazards in other areas.
Policy 10.1: The City will develop and maintain an on-going program for stormwater management, including capital improvements.
Policy 10.2: The City will coordinate with Bay County and adjacent municipalities to establish a basin-wide inter-jurisdictional approach to stormwater management.

General Other/Combined Hazards

Policy 1.7.7: Callaway will recognize and provide for disaster preparedness/evacuation needs in construction of roadway improvements.
Goal 2: Protect human life and limit public fund expenditure in areas that are subject to destruction by natural disasters.
Objective 2.1: Maintain a roadway clearance time for hurricane evacuation of 17 hours.
Policy 2.1.2: Improvements to road segments that are a part of the hurricane evacuation route shall be considered a priority in making traffic circulation improvements.
Policy 2.1.3: Periodically review hurricane evacuation plans through a joint meeting of the Bay County Emergency Management Department, the municipalities and transportation planners.
Policy 2.1.5: Adjust the evacuation timetable as necessary based on occupied dwelling unit information.
Policy 2.1.6: Consider the impacts on the transportation system relative to hurricane evacuation in the development approval process.
Policy 2.1.7: Encourage improvements to state roadways identified as critical roadway segments.
Policy 2.1.8: Continue to develop evacuation procedures for citizens and other organizations concerned with the transportation disadvantaged.
Policy 2.1.9: Limit the location of group homes, nursing homes, or other residential uses serving in excess of 14 residents which have special evacuation requirements in the coastal high hazard area, consistent with State law.

7B2(b) How the Callaway Planning and Zoning Department and Land Development Regulations support the LMS Goals:
Standards established to minimize flood hazards through Environmentally Sensitive Lands Protection Measures**:**

Environmentally Sensitive Lands are lands located within the City that are characterized by one or more of the following:
(1) Located within the Regulatory Floodway as defined in Ordinance 652. For the purposes of this section, the floodway boundary shall be as shown on the most current Flood Insurance Rate Map issued under the National Flood Insurance Program administered by the Federal Emergency Management Agency,
(2) Located within a wetland and including wetland buffers. The definition of wetlands shall be the most comprehensive definition used by the Northwest Florida Water Management District, Florida Department of Environmental Protection (FDEP), or United States Army Corps of Engineers (USACOE). Wetland buffers are all areas thirty (30) feet landward of a

jurisdictional wetland as defined above. If a wetland buffer is otherwise established by one of the above agencies, the greater shall be used. Averaging of the thirty foot buffer shall be allowed if approved in writing by the City Engineer. In no case shall a wetland buffer be established less than 20 feet landward of the mean high tide line of an estuarine water body.

These sensitive lands shall be protected from adverse impacts defined as follows:

(a) Adverse Impact - Any impact which would be counter to the purpose and intent, or to the specific provisions of this Section. For the purposes of this Section, the following are examples of adverse impact:
(2) Any significant increase or reduction in the quantity of surface water reaching environmentally sensitive land, such that the increase or reduction would affect the ability of native plant and/or animal species to continue to thrive.
(a) No final plat under section 15.600 of this Chapter and no final site plan under Section 15.630 of this Chapter shall be approved except as provided in Section 15.720.7, and
(b) No building permit for a single family residential structure or major addition or change thereto shall be approved except as provided in Section 15.720.0.

Land Development Standards (selected) established to minimize flood hazards through Stormwater Management Protection Measures**:**

The City Commission has determined that the management of storm water runoff and the preservation of the water resources of the City are critical to the public health, safety, and welfare. Uncontrolled storm water runoff causes erosion, sedimentation and flooding and prevents recharge of the aquifer upon which the public depends for potable, fresh water. The City Commission finds it necessary to impose reasonable restrictions to control storm water runoff and conserve the water resources of the City.

Objectives

- Reduce wind or water caused erosion loss of valuable top soils and subsequent sedimentation of surface water bodies and damage to adjacent properties;
- Alleviate downstream flood hazards;
- Prevent significant loss of life and property due to runoff from any foreseeable rainfall event;

- Reduce the capital expenditures associated with flood-proofing and the installation and maintenance of storm drainage systems;

Selected Performance Standards

- No site alteration shall cause siltation of wetland, pollution of downstream wetlands or reduce the natural retention or filtering capabilities of wetlands.

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- Design of water retention or detention structures and flow attenuation devices shall be subject to the approval of the City Engineer pursuant to the standards hereof. Detention structures shall be designed to release runoff to the downstream drainage system over a period of time so as not to exceed the capacity of the existing downstream system. In order to maintain good water quality in storm water management detention ponds and maximize the provision of fish and wildlife habitat, storm water management systems

with permanently wet detention ponds should be designed, operated and maintained so as to resemble a natural pond to greatest extent practicable. A natural pond design should include: A littoral zone comprised of native emergent and submersed aquatic macrophytic vegetation; a deep open water limnetic zone free of rooted emergent and submersed vegetation; and where feasible, an upland buffer of native trees, shrubs and under story vegetation.

- A positive drainage system shall be provided which will not adversely impact downstream owners or adjacent lands.

- Runoff from higher adjacent lands shall be considered and provisions for conveyance of such runoff shall be included in the drainage plan.

- Open ditches will not be permitted for any new residential, commercial, or other development, or on any land in actual use or zoned for use as a school, unless they meet the definition and requirements for a "vegetated swale" as defined in 15.725.6(I) below. Further, new residential, commercial or other development not specifically exempted herein, shall be required to pipe in ditches on public rights-of-way or easements immediately adjacent to or within the subject property prior to being allowed to connect to the City's storm water system.

Drainage Systems

- Water quality. The drainage system shall provide treatment equivalent to retention, or detention with filtration, of the runoff from the first one (1") inch of rainfall; or as an option for projects with drainage areas less than one hundred (100) acres, the first one-half (1/2") inch of runoff. Facilities which discharge to Class I waters shall be provided with an approved, workable filter system. Development that discharges directly into gulf, bay or estuarine waters will not require flood attenuation; however, compliance with water quality standards and siltation controls shall be required.

- Design method. For drainage areas less than two hundred (200) acres, the drainage system shall be designed by the Rational Method.
- Design frequency. Rainfall data is to be obtained using Florida DOT Zone 6 Rainfall Survey The design frequency shall be:

  -The flow time to the first inlet shall be determined by standard practice, but shall be a minimum of fifteen (15) minutes.
  -Retention basins shall be designed to retain a twenty-four (24) hour, one hundred (100) year frequency rainfall.
  -Detention basins shall be designed so that the instantaneous peak discharge from the developed site due to a twenty-five (25) year rainfall shall not exceed the instantaneous peak discharge from the undeveloped site due to a ten (10) year rainfall.
  - Development that discharges directly into gulf, bay, or estuarine waters will not require flood attenuation; however, compliance with water quality standards and siltation controls shall be required.

-Minimum freeboard for basins shall be one (1) foot between design high water and top of bank.
-Conditions downstream of the outlet control structure shall be such that will enable said outlet control to function as shown on the design calculations.
-The basin shall be provided with an emergency overflow spillway to control discharge in the event the basin overflows.
-Inlet-outlet structures shall be designed to prevent silting, erosion and maintenance problems.

Section 7B2(c) Callaway CIP for 2010

Chart 21

FY 2010 Stormwater CIP					
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Priority Stormwater Projects (stormwater control): S. Kimbrel Avenue Drainage Project	$105,000	Undetermined	Undetermined	Undetermined	Undetermined
Subtotal	**$105,000**				

Section 7B2(d) The following pages include the NFIP compliant Floodplain Management Ordinance for the City of Callaway updated in 2009

ORDINANCE NO. 883

AN ORDINANCE OF THE CITY OF CALLAWAY, FLORIDA, AMENDING SECTIONS 15.715 OF THE CITY'S LAND DEVELOPMENT CODE TO UPDATE THE CITY'S FLOOD MANAGEMENT REGULATIONS; PROVIDING FOR ADOPTION OF THE JUNE 2, 2009 FLOOD INSURANCE RATE MAP; PROVIDING AND AMENDING DEFINITIONS RELATED TO FLOODPLAIN MANAGEMENT; AMENDING SPECIFIC STANDARDS RELATED TO CERTAIN RESIDENTIAL AND NONRESIDENTIAL CONSTRUCTION, ELEVATED BUILDINGS, MANUFACTURED HOMES, FLOODWAYS AND COASTAL HIGH HAZARD AREAS; AMENDING STANDARDS IN AREAS OF SHALLOW FLOODING; AMENDING SECTION 15-38 OF THE CITY'S CODE OF ORDINANCES TO REQUIRE THAT BASE FLOOD INFORMATION BE SUBMITTED WITH PRELIMINARY PLATS; REPEALING CHAPTER 8 OF THE CITY'S CODE OF ORDINANCES RELATING TO FLOODPLAIN MANAGEMENT; REPEALING ALL ORDINANCES IN CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING AN IMMEDIATELY EFFECTIVE DATE.

BE IT ENACTED by the people of the City of Callaway, Florida that:

Section 1. That from and after the effective date of this Ordinance, Chapter 8 of the Code of Ordinances, City of Callaway, Florida, is hereby repealed.

Section 2. That from and after the effective date of this Ordinance, Section 15.715 of the Land Development Regulations of the City of Callaway, Florida, is hereby amended to read as follows: (deleted text ~~stricken~~, new text **underlined**):

SECTION 15.715 **FLOOD PLAIN PROTECTION** ~~(Amended by Ordinance 137, February 1993)~~

SECTION 15.715 FLOOD PLAIN PROTECTION

SECTION 15.715.1 PURPOSE

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction **and throughout their intended life span**;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;

(4) Control filling, grading, dredging and other development which may increase erosion or flood damage, and;

(5) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

SECTION 15.715.2 OBJECTIVES

The objectives of this ordinance are:

(1) to protect human life and health**, and to eliminate or minimize property damage**;

(2) to minimize expenditure of public money for costly flood control projects;

(3) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) to minimize prolonged business interruptions;

(5) to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, **roadways,** ~~street and~~ bridges **and culverts** located in floodplains;

(6) to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas, and;

(7) to ensure that potential home buyers are notified that property is in a flood **hazard** area.

SECTION 15.715.3 DEFINITIONS.

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

"Accessory structure" *Accessory structure (appurtenant structure)* means a structure which is located on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure. Accessory structures should constitute a minimal initial investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

"Addition (to an existing building)" means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any

walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

"Appeal" means a request for a review of the Director of Public Works or his designee's interpretation of any provision of this ordinance or a request for a variance.

"Area of shallow flooding" means a designated AO or VO Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

"Area of special flood hazard" is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

"Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year.

"Base flood elevation" means the water surface elevation associated with the base flood.

"Basement" means that portion of a building having its floor subgrade (below ground level) on all sides.

"Building" means any structure built for support, shelter, or enclosure for any occupancy or storage.

"Breakaway wall" means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

"Coastal high hazard area" means that area defined in the Coastal Management Element of the City of Callaway Comprehensive Growth Management Plan.

"Datum" means a reference surface used to ensure that all elevation records are properly related.

"Development" means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials or equipment.

"Elevated building" means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

"Encroachment" means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which many impede or alter the flow capacity of the a floodplain.

"Existing Construction" means any structure for which the "start of construction" commenced before **November 24, 1987, or structures for which the "start of construction" commenced after November 24, 1987, which were built in compliance with the then existing Callaway flood damage prevention plan** (the effective date of the first floodplain management code, ordinance, or standard based upon specific technical base flood elevation data which establishes the area of special flood hazard) ~~or (specific date)~~.

"Existing manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the City of Callaway on November 24, 1987.

"Expansion to an existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

"Flood or flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) the overflow of inland or tidal waters;
(2) the unusual and rapid accumulation or runoff of surface waters from any source.

"Flood Boundary and Floodway Map (FBFM)" means the official map of the community in which FEMA has delineated the areas of special flood hazard and regulatory floodways.

"Flood Hazard Boundary Map (FHBM)" means an official map of the City of Callaway issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as Zone A.

"Flood Insurance Rate Map (FIRM)" means an official map of the City of Callaway on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

"Flood Insurance Study" is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the Flood Boundary Floodway Map and the water surface elevation of the base flood.

"Floodplain" means any land area susceptible to being inundated by water from any source.

"Floodplain Administrator" means the individual appointed to administer and enforce the City's floodplain management regulations.

"Floodplain management regulations" means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances and other applications of police power which control development in flood-prone areas.

"Floodproofing" means any combination of structural and non-structural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

"Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

"Floor" means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

"Free of obstruction" means any type of lower area enclosure or other construction element that will obstruct the flow of velocity water and wave action beneath the lowest horizontal structural member of the lowest floor of an elevated building during a base flood event.

"Functionally dependent facility" means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

"Hardship" (as related to variances of this chapter) means the exceptional hardship that would result from a failure to grant the requested variance. The City of Callaway requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

"Highest adjacent grade" means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a building.

"Historic Structure" means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or determined by the Florida Department of State as meeting the requirements for individual listing on either registry;

2. Certified or preliminarily determined by the Department of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Department's Secretary to qualify as a registered historic district; or

3. Individually listed on the state inventory of historic places.

"Increased cost of compliance (ICC)" means the cost to repair a substantially damaged building that exceeds the minimal repair cost and that is required to bring a substantially damaged building into compliance with the local flood damage prevention ordinance. ICC insurance coverage is provided in a standard (NFIP) flood insurance policy.

"Lowest adjacent grade" means the lowest elevation, after the completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

"Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the nonelevation design standards of this chapter.

"Manufactured home" means a building, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"Market value" means the building value, excluding the land (as agreed to between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of building (actual cash value) or adjusted assessed values.

"Mean Sea Level" means the average height of sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD).

"National Geodetic Vertical Datum (NGVD), as corrected in 1929, is a vertical control used as a reference for establishing varying elevations within the floodplain.

"New construction" means any structure for which the "start of construction" commenced after November 24, 1987, **but does not include any structures for which the "start of construction" was after November 24, 1987, and before September 18, 2002, which were built in compliance with the then existing Callaway flood damage prevention plan.** The term also includes any subsequent improvements to such structure.

"New manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after November 24, 1987.

"North American Vertical Datum (NAVD) of 1988" means a vertical control used as a reference for establishing varying elevations within the floodplain

"Obstruction" includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to share or collect debris carried by the flow of water, or its likelihood of being carried downstream.

"Public safety and nuisance" means anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay stream, canal, or basin.

"Reasonably safe from flooding" means base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

"Recreational vehicle" means a vehicle which is:

1. built on a single chassis;

2. 400 square feet or less when measured at the largest horizontal projection;

3. designed to be self-propelled or permanently towable by a light duty truck; and

4. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Regulatory floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height (generally one foot).

"Repetitive loss" means flood-related damages sustained by a structure on two separate occasions during a ten-year period ending on the date of the event for which the second claim is made, in which the cost of repairing the flood damage, on the average equaled or exceeded 25 percent of the market value of the building at the time of each such flood event.

"Special flood hazard area" *(SFHA)* (see "Area of special flood hazard") means an area having special flood hazard and shown on a FHBM or FIRM as Zone A, AO, A1--A30, AE, A99, AH, V1--V30 or VE.

"Start of construction" means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"Structure" means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

"Substantial improvements" means any combination of repairs, reconstruction, alteration, or improvements to a building, taking place during the life of a building, in which the cumulative cost equals or exceeds fifty percent of the market value of the building. The market value of the building should be (1) the appraised value of the building prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the building prior to the damage occurring. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by a Code Enforcement Officer and which are solely necessary to assure safe living conditions.

"Substantially improved existing manufactured home parks or subdivisions" is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

"Variance" is a grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this ordinance where specific enforcement would result in unnecessary hardship.

"Violation" means the failure of a structure or other development to be fully compliant with this chapter. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this chapter is presumed to be in violation until such time as that documentation is provided.

"Watercourse" means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

"Water surface elevation"means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

SECTION 15.715.4 GENERAL PROVISIONS.

a. LANDS TO WHICH THIS ORDINANCE APPLIES.

This ordinance shall apply to all areas of special flood hazard within the jurisdiction of the City of Callaway.

b. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD.

The areas of special flood hazard identified by the Federal Emergency Management Agency **in the FIS for the City of Callaway,** dated **June 2, 2009,** ~~January 2, 1986~~ with accompanying maps and other supporting data, and any **subsequent** revision**s** thereto, are adopted by reference and declared to be a part of this ordinance. **The FIS and FIRM are on file at the City of Callaway Planning Department.**

c. ESTABLISHMENT OF DEVELOPMENT PERMIT.

A Development Permit shall be required in conformance with the provision of this **Section** ~~ordinance~~ prior to the commencement of any development activities.

d. COMPLIANCE.

No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this **Section** ~~ordinance~~ and other applicable regulations.

e. ABROGATION AND GREATER RESTRICTIONS.

This **Section** ~~ordinance~~ is not intended to repeal, abrogate, or impair any existing easements, covenants, deed restrictions, growth planning ordinances or land development regulations. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

f.6. INTERPRETATION.

In the interpretation and application of this **Section** ~~ordinance~~ all provisions shall be:

(a) considered as minimum requirements;
(b) liberally construed in favor of the governing body, and:
(c) deemed neither to limit nor repeal any other powers granted under state statutes.

g.~~7.~~ WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this **Section** ~~ordinance~~ is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This **Section** ~~ordinance~~ does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This **Section** ~~ordinance~~ shall not create liability on the part of the City of Callaway or by any officer or employee thereof for any flood damages that result from reliance on this **Section** ~~ordinance~~ or any administrative decision lawfully made thereunder.

h.8. PENALTIES FOR VIOLATION.

~~Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor.~~ Any person who violates this **Section** ~~ordinance~~ or fails to comply with any of its requirements shall, upon **adjudication** ~~conviction thereof~~, be fined not more than $500.00 ~~or imprisoned for not more than 30 days, or both~~, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Callaway from taking such other lawful actions as is necessary to prevent or remedy any violation.

SECTION 15.715.5 ADMINISTRATION.

1. DESIGNATION OF THE **FLOODPLAIN ADMINISTRATOR** ~~DIRECTOR OF PUBLIC WORKS.~~

The **City Commission of the** City of Callaway **hereby appoints the** Director of **Planning** ~~Public Works~~ or his designee ~~is hereby appointed~~ to administer and implement the **City's floodplain management regulations** ~~provisions of this ordinance~~.

2. PERMIT PROCEDURES.

Application for a Development Permit shall be made to the **Planning** Director ~~of Public Works~~ on forms furnished by him prior to **the commencement of** any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(a) Application Stage.
  (i) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all buildings;
  (ii) Elevation in relation to mean sea level to which any non-residential building will be floodproofed;

(iii) Certificate from an **registered professional** engineer or architect that the non-residential floodproofed building will meet the floodproofing criteria in Section **15.715.6(2)(b) and 15.715.6 (5)(b)**~~H(2)(b)~~;

(iv) Description of the extent to which any watercourse will be altered or relocated as result of proposed development~~, and~~;

(b) Construction Stage.

~~Provide a floor elevation or flood-proofing certification after the lowest floor is completed, or instances where the building is subject to the regulations applicable to Coastal High Hazard Areas, after placement of the horizontal structural members of the lowest floor.~~

Upon placement of the lowest floor, ~~or F~~floodproofing by whatever construction means, or upon placement of the **bottom of the lowest** horizontal structural members ~~of the lowest floor~~, whichever is applicable, it shall be the duty of the permit holder to submit to the **Planning** Director ~~of Public Works~~ or his designee a certification of the **NGVD or NAVD** elevation of the lowest floor, floodproofed elevation, or ~~the elevation~~ **bottom** of the lowest ~~portion of the~~ horizontal structural members ~~of the lowest floor~~, whichever is applicable, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same.

When floodproofing is utilized for a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The **Planning** Director ~~of Public Works~~ or his designee shall review the floor **and floodproofing** elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby~~,~~ shall be cause to issue a stop-work order for the project.

3. DUTIES AND RESPONSIBILITIES OF THE **FLOODPLAIN ADMINISTRATOR** ~~PUBLIC WORKS DIRECTOR~~.

Duties of the **Planning** Director ~~of Public Works~~ or his designee shall include, but not be limited to:

(a) **Review permits to assure sites are reasonably safe from flooding;**

(b)~~(a)~~ Review all development permits to assure that the permit requirements of this **Section** ~~ordinance~~ have been satisfied;

(c)~~(b)~~ Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.

(d)~~(c)~~ Notify adjacent communities**, the Florida Department of Community Affairs, Division of Emergency Management, the North Florida Water Management District, the Federal Emergency Management Agency** and the **Florida** Department of Environmental Regulation prior to any alteration or relocation of a watercourse~~, and submit evidence of such notification to the Federal Emergency Management Agency~~.

(e)~~(d)~~ Assure that maintenance is provided within the altered or relocated portion of~~d~~ said watercourse so that the flood-carrying capacity is **maintained** ~~not diminished~~.

(f)~~(e)~~ Verify and record the actual elevation, in relation to mean sea level, of the lowest floor **(A-zones) or bottom of the lowest horizontal structural member of the lowest floor (V-zones)** ~~including basement~~ of all new or substantially improved buildings, in accordance with Section **15.715.5(2)(b)**~~G(2)(b)~~.

(g)~~(f)~~ Verify and record the actual elevation, in relation to mean sea level, to which ~~the~~ new or substantially improved buildings have been flood-proofed, in accordance with Section **15.715.5(2)(b)**~~G(2)(b)~~.

(h)~~(g)~~ **Review certified plans and specifications for compliance with the floodplain management regulations w**~~When~~ flood-proofing is utilized for a particular building, ~~the Public Works Director shall obtain certification of flood-proofing from an engineer or architect in accordance with Section H(2)(b).~~

(i)~~(h)~~ **Interpret the location of boundaries of the areas of special flood hazard w**~~W~~here interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, ~~where there appears to be conflict between a mapped boundary and actual field conditions) the Director of Public Works or his designee shall make the necessary interpretation~~. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.

(h)~~(i)~~ ~~When base flood elevation data or floodway data have not been provided in accordance with Section F(2), then the Director of Public Works or his designee shall o~~**O**btain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source **when base flood elevation data or floodway data have not been provided in accordance with Section 715.4(b).**

(j) ~~All records pertaining to the provisions of this ordinance shall be maintained in the Public Works office and shall be open for public inspection.~~ **Obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements.**

(j) **Coordinate all change requests to the FIS, FIRM and FBFM with the requester, State of Florida, and FEMA.**

4. VARIANCE PROCEDURES.

(a) The Planning Board as established by the Callaway City Commission shall hear and decide appeals and requests for variances from the requirements of this ordinance.

(b) The Planning Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Director of Public Works in the enforcement or administration of this **Section** ~~ordinance~~.

(c) Any person aggrieved by the decision of the Planning Board or any taxpayer living in the City may appeal such decision to the Circuit Court.

(d) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the

structure's continued designation as a historic structure and the variance is the minimum to preserve the historic character and design of the structure.

(e) In passing upon such applications, the Planning Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this **Section** ~~ordinance~~, and:

(i) the danger that materials may be swept onto other lands to the injury of others;

(ii) the danger of life and property due to flooding or erosion damage;

(iii) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(iv) the importance of the services provided by the proposed facility to the community;

(v) the necessity of the facility to a waterfront location, in the case of a functionally dependent facility;

(vi) the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

(vii) the compatibility of the proposed use with existing and anticipated development;

(viii) the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

(ix) the safety of access to the property in times of flood for ordinary and emergency vehicles;

(x) the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site, and;

(xi) the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(f) Upon consideration of the factors listed above, and the purposes of this **Section** ~~ordinance~~, the Planning Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this **Section** ~~ordinance~~.

(g) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(h) Conditions for Variances:

(i) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building;

(ii) Variances shall only be issued upon (A) a showing of good and sufficient cause, (B) a determination that failure to grant the variance would result in exceptional hardship, and; (C) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(iii) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the building is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(iv) The Public Works Director or his designee shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

SECTION 15.715.6 PROVISIONS FOR FLOOD HAZARD REDUCTION.

1. GENERAL STANDARDS.

In all areas of special flood hazard, **all development sites including new construction and substantial improvements shall be reasonably safe from flooding, and meet** the following provisions ~~are required~~:

(a) New construction and substantial improvements shall be **designed or modified and adequately** anchored to prevent flotation, collapse or lateral movement of the structure **resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy**;

(b) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.

(c) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

(d) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

(e) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities**, including duct work,** shall be designed ~~and/~~or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(f) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(g) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;

(h) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.; ~~and;~~

(i) Any alteration, repair, reconstruction or improvements to a building which is in compliance with the provisions of this **Section** ~~ordinance~~ shall meet the requirements of "new construction" as contained in this **Section** ~~ordinance~~.

(j) Any alteration, repair, reconstruction or improvements to a building which is not in compliance with the provisions of this **Section** ~~ordinance~~, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.

(k) All applicable additional Federal, state and local permits shall be obtained and submitted to the Planning Director. Copies of such permits shall be maintained on file with the development permit.

2. SPECIFIC STANDARDS.

In all areas of special flood hazard where base flood elevation data have been provided, as set forth in Section F(2) or Section G(3)(i), the following provisions are required:

(a) Residential Construction. New construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated **at least** ~~no lower than~~ one foot above the level of the base flood elevation ~~or seven feet above mean sea level, whichever is greater~~. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the **automatic equalization of flood hydrostatic forces on both sides of the exterior walls** ~~unimpeded movements of flood waters~~ shall be provided in accordance with standards of paragraph (c) below.

(b) Non-Residential Construction. New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated **at least** ~~no lower than~~ one foot above the level of the base flood elevation ~~or seven feet above mean sea level, whichever is greater~~. **Non-residential b**Buildings located in ~~all~~ A-zones may be flood-proofed in lieu of being elevated provided that all areas of the building **components** below the required elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and **the** effects of buoyancy. An **professional** engineer or architect shall certify that the standards of this subsection are satisfied **using the FEMA Floodproofing Certificate**. Such certification shall be provided to the **Planning Director** ~~official~~ as set forth in Section **715.5(3)(g).** ~~3(G)(3).~~

(c) Elevated Buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the **lowest floor** ~~base flood~~ elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.

(i) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

(A) Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

(B) The bottom of all openings shall be no higher than one foot above **foundation adjacent interior** grade (**which must be equal to or higher in elevation that the adjacent exterior grade**); and,

(C) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

(ii) **Fully enclosed areas below the lowest floor shall solely be used for parking of vehicles, storage and building access.** Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

(iii) The interior portion of such enclosed area shall not be partitioned or finished into separate room**s**.

(d) Standards for Manufactured Homes and Recreational Vehicles.

(i) All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, in a new manufactured home park or subdivision, or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, ~~including elevation and anchoring.~~ **be elevated on a permanent foundation to the base flood elevation, and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement.**

(ii) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:

(A) The lowest floor of the manufactured home is elevated **at least** ~~no lower than~~ one foot above the level of the base flood elevation, or

(B) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above grade.

(C) The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.

(iii) ~~(D)~~ In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, any manufactured home placed or substantially improved must meet the standards outlined in paragraphs (A) and (C) above.

~~(iv)~~(iii) All recreational vehicles placed on sites must either:

(A) Be fully licensed and ready for highway use. **A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.**

(B) Be on the site for fewer than 180 consecutive days, or

(C) ~~The recreational vehicle must m~~**M**eet all the requirements for new construction, including anchoring and elevation requirements outlined in **paragraphs** ~~Section H(2)~~(d)(i) or paragraphs (ii)(A) and (C) above.

~~A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices and has no permanently attached additions.~~

(e) Floodways. Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, the following provisions shall apply:

(i) Prohibit encroachments, including fill, new construction, substantial improvements and other developments **within the regulatory floodway** unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge;

(ii) If the paragraph (i) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this article.

(iii~~v~~) Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes(mobile home) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section **715.6(1)(b)** ~~H(1)(b)~~ and the elevation standards of Section **715.6(2)(a)** ~~H(2)(a)~~ and the encroachment standards of **subs**Section ~~H(2)(e)~~(i) **above** are met.

(v) Development activities including new construction and substantial improvements that increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies, with the City's consent, for a conditional FIRM revision, and receives the approval of FEMA.

(vi) When fill is proposed within the regulatory floodway, the development permit shall not be issued unless certification is provided by a registered professional engineer demonstrating that the proposed fill will not increase the water surface elevation of the base flood.

(f) **Adequate drainage paths around structures shall be provided on slopes to guide water away from structures.**

3. STANDARDS FOR STREAMS WITHOUT ESTABLISHED BASE FLOOD ELEVATION AND/OR FLOODWAYS.

Located within the areas of special flood hazard established in Section **715.4(b)** ~~F(2)~~, where streams exist but where no base flood data has been provided or where base flood data has been provided without floodways, the following provisions apply:;

(a) **When base flood elevation data or floodway data have not been provided in accordance with 715.4(b), then the Planning Director shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provisions of article III.**

(b) **Until regulatory floodway is designated,** ~~n~~No ~~encroachments,~~ **new construction, substantial improvements, or other development** including fill material ~~or structures shall be located~~ **shall be permitted** within areas of special flood hazard, unless certification by an engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.

(c)~~(b)~~ New construction or substantial improvements of buildings shall be elevated or flood-proofed to elevations established in Section **715.6(2)(a)** ~~G(3)(i)~~ above.

(d) **Development activities that increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies, with the City's consent, for a conditional FIRM revision, and receives the approval of FEMA.**

(e) **If base flood elevations and floodway data are not available from outside sources, then the following provisions may be used:**
i. In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than two feet above the highest adjacent grade at the building site.
ii. No encroachments, including fill material or structures, shall be located within a distance of 30 feet from any stream.

4. STANDARDS FOR SUBDIVISION PROPOSALS.

(a) All subdivision proposals shall be consistent with the need to minimize flood damage;

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and

(d) Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which is greater than the lesser of fifty lots or five acres.

5. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO ZONES).

Located within the areas of special flood hazard established above, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet (1'-3') where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

(a) All new construction and substantial improvements of residential buildings shall have the lowest floor, including basement, elevated **above the highest adjacent grade at least as high as** ~~to~~ the depth number specified on the Flood Insurance Rate Map, ~~in feet, above the highest adjacent grade~~. If no depth number is specified, the lowest floor, including basement, shall be elevated, at least two (2) feet above the highest adjacent grade.

(b) All new construction and substantial improvements of non-residential buildings shall:

(i) have the lowest floor, including basement, elevated **above the highest adjacent grade at least as high as** ~~to~~ the depth number specified on the Flood Insurance Rate Map, ~~in feet, above the highest adjacent grade~~. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade, or;

(ii) together with attendant utility and sanitary facilities be completely flood-proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(c) **Adequate drainage paths around structures shall be provided on slopes to guide water away from structures.**

6. STANDARDS FOR COASTAL HIGH HAZARD AREAS

Located within areas of special flood hazard areas established in **715.4(b)** ~~section 8-8~~ are coastal high hazard areas, designated as Zones V1—V30, VE and/or V. These areas have special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions in this chapter, the following additional provisions shall also apply:

(a) All new construction and substantial improvements in Zones V1—V30, VE and V (if base flood elevation is available) shall be elevated on pilings and columns so that:

i. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated at least one foot above the base flood elevation level; and

ii. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

(b) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (a)i. and ii., above.

I Obtain a certification of the elevation, in relation to mean sea level, of the bottom of the lowest horizontal structural member of the lowest floor, as built, excluding pilings and columns, of all new and substantially improved structures.

(d) All new construction shall be located landward of the reach of mean high tide.

(e) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than ten and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

i. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

ii. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year.

(f) If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles, building access or storage. Such space shall not be used for human habitation.

(g) Prohibit the use of fill for structural support of buildings.

~~(h) Prohibit manmade alteration of sand dunes that would increase potential flood damage.~~

(h)(i) All manufactured homes to be placed or substantially improved within Zones V1--V30, V, and VE on the community's FIRM on sites: I.) Outside of a manufactured home park or subdivision, ii.) In a new manufactured home park or subdivision, iii.) In an expansion to an existing manufactured home park or subdivision, or iv.) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood must meet the standards of subsections **(a) through (g)** ~~(1) through (8)~~. Manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision with Zones V1--V30, V, and VE on the FIRM meet the requirements of section 8-32(4)a. through b.

(i)(j) Recreational vehicles placed on sites within Zones V1--V30, VE, or V on the community's FIRM either:

i. Be on the site for fewer than 180 consecutive days;

ii. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or

iii. Meet the requirements of section **715.5(2)** ~~8-22~~, and sections **715.6(2)** ~~8-32~~ and **715.6(6)** ~~8-36~~.

7. STANDARDS FOR CRITICAL FACILITIES.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Section 2. That Section 15-38, Chapter 15 of the Code of Ordinances, City of Callaway, Florida, is hereby amended to read as follows: (deleted text ~~stricken~~, new text **underlined**):

Sec. 15-38. Specifications.

(a) *Scale.* The preliminary plat shall be clearly and legibly drawn at a scale not smaller than 100 feet to one inch.

(b) *Sheet size.* Sheet size shall be 24 inches by 36 inches. If the complete plat cannot be shown on a sheet of this size, it may be shown on more than one sheet with an index map on a separate sheet of a reduced scale.

(c) *Ground elevations.* The preliminary plat shall show ground elevations, based on the datum plane of the U.S. Coast and Geodetic Survey, and in conformance with the following:

(1) For land that slopes less than approximately two percent, spot elevations shall be shown at all breaks in grade, along all drainage channels or swales and at selected points not more than 100 feet apart in all directions.

(2) For land that slopes more than approximately two percent, contours shall be shown with an interval of not more than five feet if the ground slope is regular or with an interval of not more than two feet if the ground slope is irregular.

(3) A tie to one or more established marks shall be shown.

(4) An exception to the requirements of subsections (1) through (3) for showing ground elevations is a preliminary plat of a subdivision with the size of each lot being one acre or greater. A preliminary plat of any such subdivisions shall show only the location of streams, both perennial and intermittent, direction of flow of these streams, any areas subject to flooding and selected spot elevations.

(d) *Required information.* The preliminary plat shall contain the following information:

(1) The name and address of the owner of record and the subdivider and registration number of the surveyor or engineer;

(2) The proposed name of the subdivision and its acreage;

(3) North point and graphic scale and date;

(4) A vicinity map, showing the location and acreage of the subdivision;

(5) The exact boundary lines of the tract by bearing and distance;

(6) The names of the owners of record of adjoining land, with their approximate acreages;

(7) Any existing street, utilities and easements on and adjacent to the tract, including the size and width of each;

(8) A proposed layout, including streets, alleys and easements, with both dimensions and proposed street names, lot lines with approximate dimensions, land to be reserved or dedicated for public uses and any land to be used for purposes other than single family dwellings;

(9) Block letters and lot numbers;
(10) An indication of zoning district boundaries (Any such boundaries if they exist, to be shown and dimensioned on the plan);
(11) Provisions for water supply, sewerage and drainage, as required by the county health department;
(12) Minimum building front yard setback lines;
(13) Typical street cross-sections and centerline profiles;
(14) The location of streams, lakes and swamps and land subject to flooding as determined from past history of flooding, an estimate of the upland acres contributing runoff to the proposed subdivision, the points of entry of upland flow onto the proposed land for subdivision and a drainage plan showing proposed improvements;
(15) The location of land dedicated for public use if applicable (See section 15-107(b));
(16) The soil conditions as related to the intended use of the subdivision in the area to be subdivided at a scale equal to that of the preliminary plat;
(17) An inscription stating "NOT FOR FINAL RECORDING;" and
(18) Any other information that may be considered necessary by the planning board for full and proper consideration of the proposed subdivision.
(e) *Flood hazard reports.* If the proposed subdivision is in an area subject to flooding (see section 15-108), the planning board shall require the subdivider to submit three valley cross sections including the channel of the stream at points specified, topographic information for areas adjoining sides of the channel, cross sections for land to be occupied by the proposed development, highwater information and other pertinent information. The planning board shall transmit one copy of this information described to a designated engineer or other expert person or agency for technical assistance, where necessary, in evaluating the proposed project in relation to flood heights and velocities, the seriousness of flood damage to the use, the adequacy of the plans for protection and other technical matters. The planning board with expert assistance, shall:
(1) Estimate the discharge of the regulatory flood;
(2) Determine the specific flooding threat at the site of the proposed subdivision and determine whether the subdivision is located in a floodway or flood fringe area by:
a. Calculation of water surface elevations and flood protection elevations based upon a hydraulic analysis of the capacity of the stream channel and overbank areas to convey the regulatory flood. Flood protection elevations shall be one foot above the water surface elevations of the regulatory flood; and
b. Computation of the floodway required to convey this flood without increasing flood heights to an extent which would cause substantial upstream or downstream damage to existing or reasonably anticipated future development. Computations of increases in flood heights caused by any encroachment shall be based upon the reasonable assumption that there will be an equal degree of encroachment on the floodplain of any river or stream not to exceed one foot in any one reach or for the cumulative effect of several reaches.
(f) *Approval from the health department.* A signed certificate of approval of the county health department should be placed on the preliminary plat.
(g) *Form of the certificate of conditional approval.* The form of the certificate of conditional approval of the preliminary plat by the planning board shall be inscribed on the plat.
(h) Base flood elevation data shall be submitted with the plat for any plat proposing development of fifty or more lots or five acres of land.

Section 3. All Codes, Ordinances and/or Resolutions or parts of Codes, Ordinances and/or Resolutions in conflict herewith are hereby repealed to the extent of the conflict.

Section 4. If any section, subsection, sentence, clause, phrase of this Ordinance, or any particular application thereof shall be held invalid by any court, administrative agency, or other body with appropriate jurisdiction, the remaining sections, subsections, sentences, clauses, or phrases under application shall not be affected thereby.

Section 5. This Ordinance shall become effective immediately upon its passage.

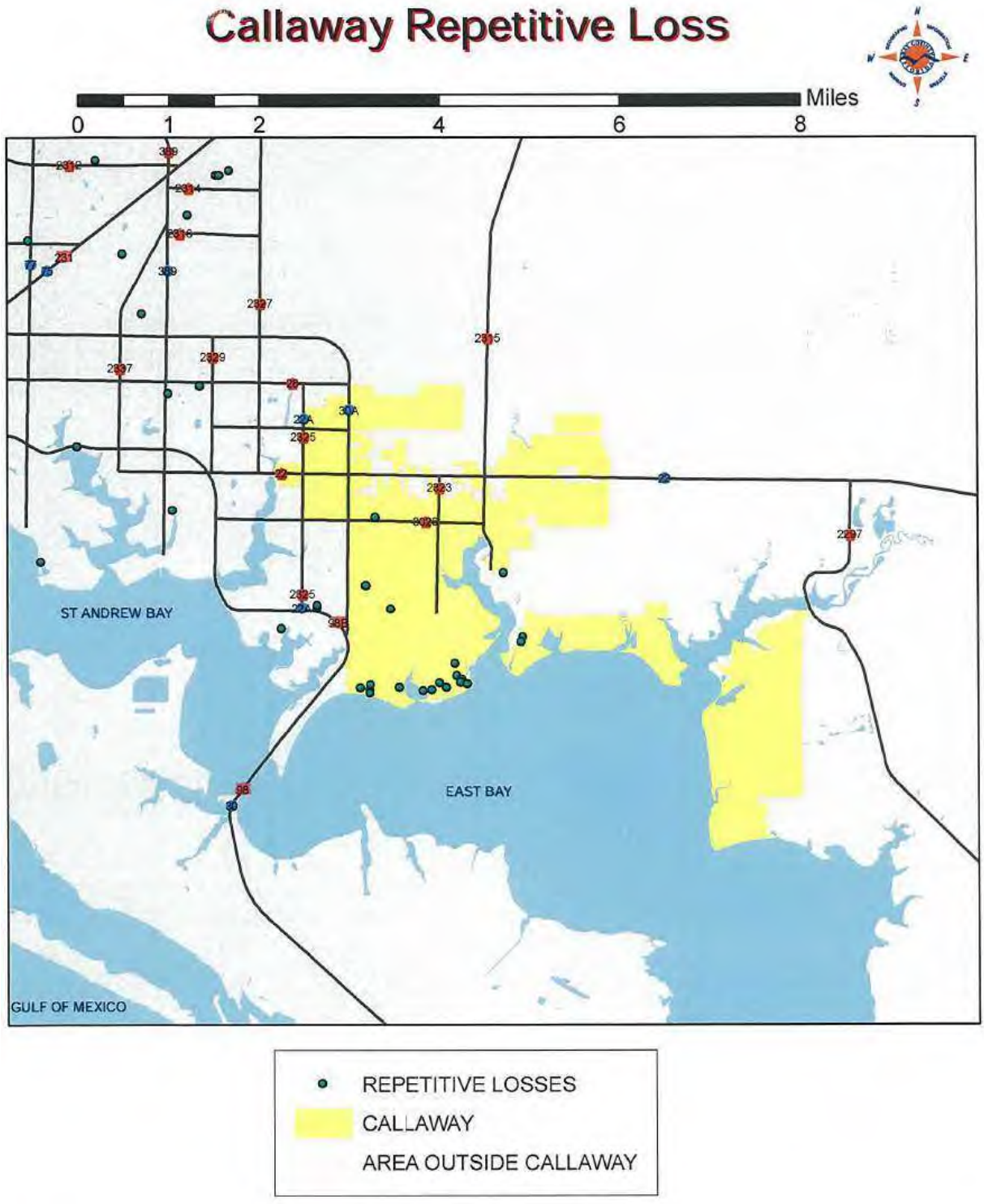
Passed, approved and adopted as of this 26th day of May, 2009.

Kenneth L. Meer, Mayor

ATTEST:

Genette R. Bernal, City Clerk

Section 7B3 - Callaway Repetitive Loss Map



Bay County GIS December 7, 2009 reploss.mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Fl orida_North_FIPS_0903_Feet
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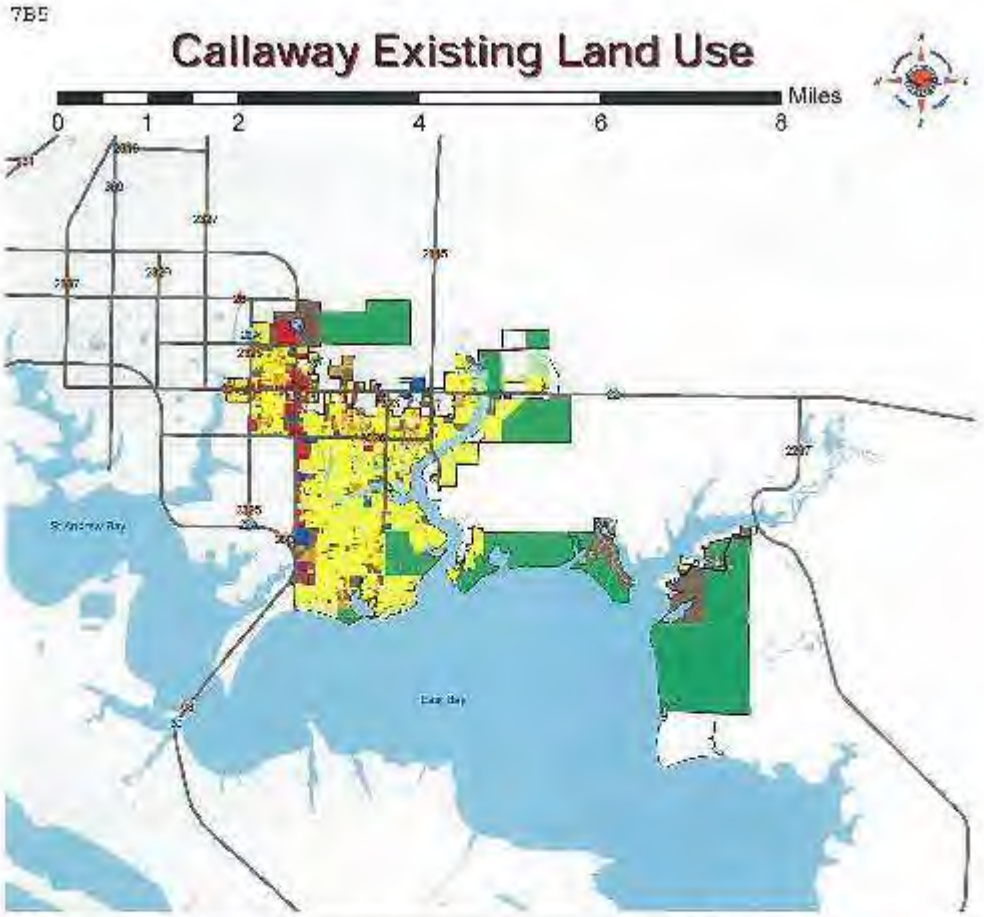
Section7B4 Callaway CRS Participation:

In an effort to help mitigate from natural hazards and disasters the City of Callaway continues to participate in the Community Rating System (CRS) program and maintains an outreach project for the community. As of 2008, the City improved its CRS rating from a nine (9) to an eight (8). The City provides Flood Insurance Rate Map (FIRM) information and information on the flood insurance purchase requirements to inquirers. This includes sending letters and documentation to property owners, lenders, insurance agents, and real estate offices about FIRM information. The City also sends notices and property protection information to citizens in the community located in repetitive loss areas. The City meets with property owners and developer to discuss policies and regulations for floodplain protection. Callaway maintains an effort to keep citizens informed as to hurricane information, including evacuation zones and routes.

Section 7B5 Callaway Flood Hazard Maps

The maps on the following pages detail Callaway's existing land use, as well as the potential vulnerabilities in dollar value in the CHHA, the flood zones and surge zones.



CALLAWAY	Parcels	Acres	Value ($)
Agriculture	27	1,979.90	$33,275,634
Commercial	130	175.79	70,344,672
Government	33	17.94	1,688,781
Industry	5	18.28	2,158,791
Institutional	36	84.91	18,065,309
Mixed Use	1	1.66	455,632
Mobile Home Residential	352	183.12	24,931,090
Multi Family Residential	157	102.21	46,080,282
Recreational	5	60.95	4,564,417
Single Family Residential	4,223	1,570.13	515,746,[illegible]97
Subtotal	4,980	4,194.79	$717,313,305
Vacant	[illegible],022	737.44	77,932,877
Total	6,002	4,932.23	$795,246,182

Bay County GIS November 15, 2009 callaway_elu.mxd mwilson
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7B6

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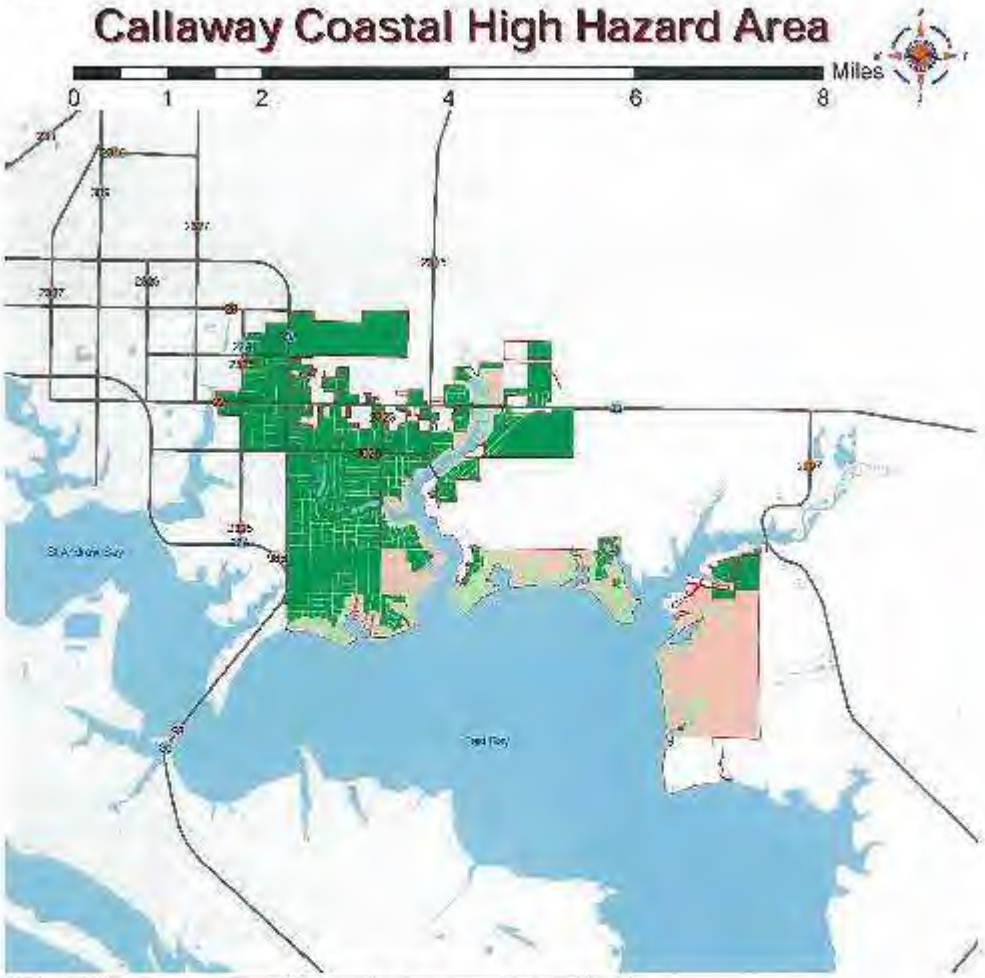
Callaway Coastal High Hazard Area



CALLAWAY	Parcels	Acres	Value ($)
Agriculture	16	1,385.29	$29,313,562
Government	2	0.29	6,315
Mobile Home Residential	7	5.34	825,731
Multi Family Residential	8	29.54	7,863,160
Recreational	1	11.71	2,174,164
Single Family Residential	327	261.80	73,236,500
Subtotal	361	1,693.97	$113,421,452
Vacant	175	257.23	29,430,674
Total	536	1,951.20	$142,852,126

Legend

- Coastal High Hazard Area within Callaway
- Parcels Outside Hazard Area within Callaway
- Parcels Inside Hazard Area within Callaway
- AREA OUTSIDE CALLAWAY
- CALLAWAY

Bay County GIS November 18, 2009 callaway_chha.mxd mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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Callaway Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	14	1,849.00	$24,072,227	17	1,445.68	$27,274,831	9	1,167.19	$22,668,886
Commercial	2	7.19	34,838,872	1	0.21	143,184			
Government	5	2.75	239,457	1	1.91	46,041			
High Density Residential									
Industry	1	0.13	8,683						
Institutional	3	4.39	2,366,811						
Mixed Use	1	1.88	456,632						
Mobile Home Residential	31	20.47	2,691,104	32	30.09	3,104,161	3	3.18	336,940
Multi Family Residential	3	4.44	1,753,751	19	36.84	7,592,253	3	35.03	4,639,720
Recreational	1	43.48	1,851,053	3	3.89	2,245,415			
Single Family Residential	155	91.16	5,023,736	676	429.63	150,367,349	48	98.85	24,340,698
Subtotal	231	1906.51	$77,740,270	757	1957.48	$195,623,148	64	1,304.25	$51,934,243
Vacant	60	339.01	4,388,515	291	338.36	40,390,193	27	164.51	6,295,881
Total	391	2,256.52	$82,128,785	1,107	2,293.84	$236,013,341	91	1168.80	$58,389,874

Bay County GIS

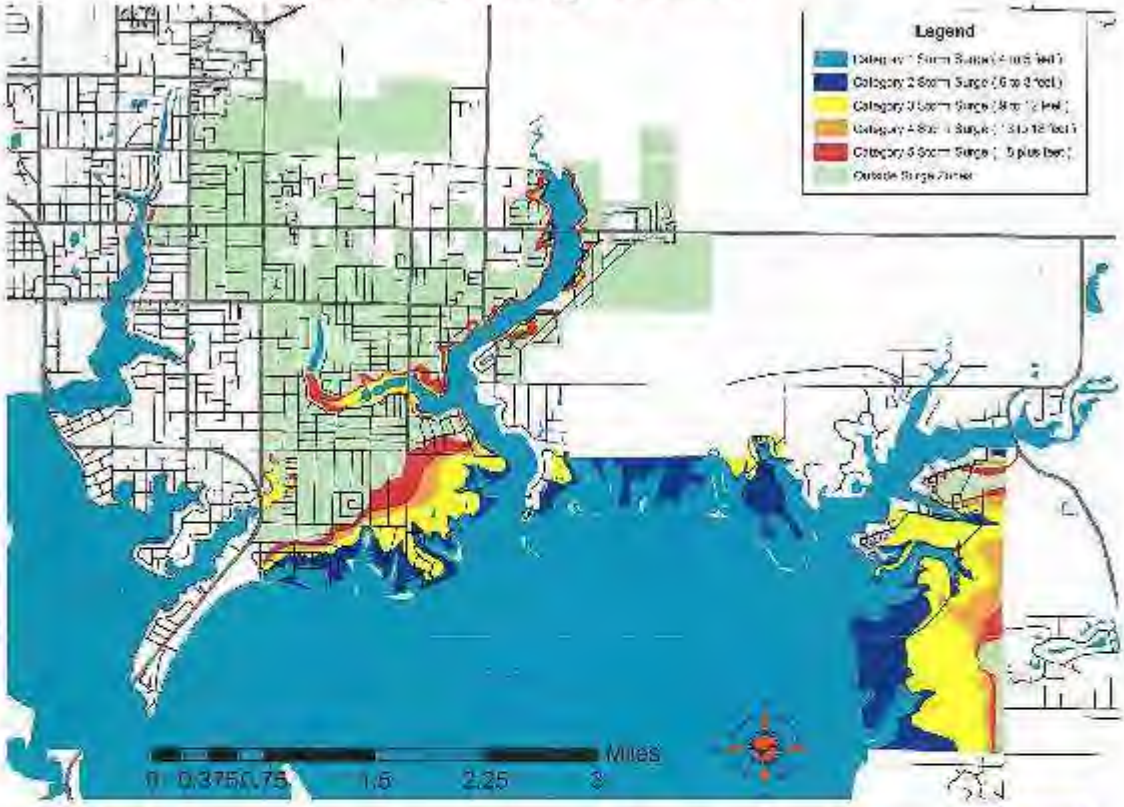
November 5, 2008

The GIS data is not a legal representation of the boundary depicted. It is for assessment purposes only. No warranty is made as to the accuracy of the data and no responsibility is assumed as a result of the data being used in a manner or for a purpose for which it was not intended. Data is projected in Florida State Plane, Florida North, NAD 1983, US Feet.

Flood data is derived digitally from the Flood Insurance Rate Maps (FIRM) for Bay County, Florida and Incorporated Areas, Panels 0001E, 0002E, 0003E, 0004E, 0005E, 0006E, 0007E, 0008E, 0009E, 0010E, 0011E, 0012E, 0013E, 0014E, 0015E, 0016E, 0017E, 0018E, 0019E, 0020E, 0021E, 0022E, 0023E, 0024E, 0025E, 0026E, 0027E, 0028E, 0029E, 0030E, 0031E, 0032E, 0033E, 0034E, 0035E, 0036E, 0037E, 0038E, 0039E, 0040E,

7B8

Callaway Surge Zones



	Low Lying	Agricultural	Commercial	Government	High Density Residential	Industry	Institutional	Mobile Home Residential	Multi-Family Residential	Recreational	Single Family Residential	Vacant	Totals
Category 1 Surge													
Parcels		2		3				1	1	1	223	69	300
Acres		69.53		8.63				0.31	0.68	1.51	37.00	109.23	226.89
Value ($)		$183,900		$1,000				$80,000	$180,000	$1,000,000	$53,000,000	$8,000,000	$62,365,900
Category 2 Surge													
Parcels		17		2				24	5	1	424	203	676
Acres		1,014.40		0.21				10.13	20.84	91.1	116.36	2,141.86	3,394.09
Value ($)		$4,844,500		$1,000				$2,700,000	$5,400,000	$2,000,000	$80,000,000	$69,000,000	$163,945,500
Category 3 Surge													
Parcels		8	1	1		1	1	10	5	1	218	412	658
Acres		1,446.96	0.04	0.01		0.3	0.05	10.52	13.56	0.1	116.87	315.50	2,903.44
Value ($)		$20,652,700	243,700	$1,000		$2,000,000	$7,000,000	$2,700,000	$3,600,000	$2,700,000	$43,000,000	$62,000,000	$143,897,400
Category 4 Surge													
Parcels		17	1	11		1	2	20	10	1	661	677	1,401
Acres		2,914.48	1.04	10.6		0.3	0.1	10.08	20.44	91.1	344.16	324.26	3,716.36
Value ($)		$41,614,000	243,700	$1,000		$2,000,000	$7,000,000	$2,700,000	$5,400,000	$2,700,000	$129,000,000	$62,000,000	$252,659,700
Category 5 Surge													
Parcels		10	1	3		1	1	13	11	1	1,080	1,000	2,220
Acres		1,461.05	1.01	2.21		0.3	0.05	10.52	20.52	91.1	460.87	1,002.34	3,049.04
Value ($)		$20,968,800	243,700	42,000		$2,000,000	$7,000,000	$2,700,000	$5,400,000	$2,700,000	$172,000,000	$70,000,000	$323,054,500

Bay County GIS August 2, 2709 callaway_surge_.mxd mwilson
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Section 7B9 Ordinance Adopting 2010 LMS

RESOLUTION #10-30

A RESOLUTION OF THE CITY OF CALLAWAY, FLORIDA TO ADOPT THE UPDATED BAY COUNTY LOCAL MITIGATION STRATEGY PLAN.

WHEREAS, the City of Callaway is vulnerable to the human and economic cost of natural, technological and societal disasters; and

WHEREAS, the City Commission recognizes the importance of reducing or eliminating those vulnerabilities for the overall good and welfare of the community, and

WHEREAS, the City of Callaway has been an active participant in the Bay County Local Mitigation Strategy committee and the 2010 update to Local Mitigation Strategy Plan

WHEREAS, the City of Callaway's representatives and staff have identified, justified, and prioritized a number of proposed projects and programs needed to mitigate the vulnerabilities of Callaway to impact of future disasters; and

WHEREAS, the proposed projects and programs have been incorporated into the updated edition of the Bay County Local Mitigation Strategy Plan that has been prepared and issued for consideration and implementation by the City of Callaway.

NOW, THEREFORE BE IT RESOLVED by the City of Callaway that:

1. The City Commission hereby accepts and approves of it designated portion of the Bay County Local Mitigation Strategy Plan,

2. The agency personnel of the City of Callaway are requested and instructed to pursue available funding opportunities for the implementation of the proposals designated therein,

3. The City of Callaway will, upon receipt of such funding or other necessary resources, seek to implement the proposals contained in its section of the strategy, and

4. The City of Callaway will continue to participate in the updating and expansion of the Bay County Local Mitigation Strategy Plan in the years ahead, and

5. The City of Callaway will further seek to encourage the businesses, industries and community groups operating within and/or for the benefit of the City of Callaway to also participate in the updating and expansion of the Bay County Local Mitigation Strategy Plan in the years ahead.

PROPOSED, PASSED, AND ADOPTED THIS 31 DAY OF August, 2010.

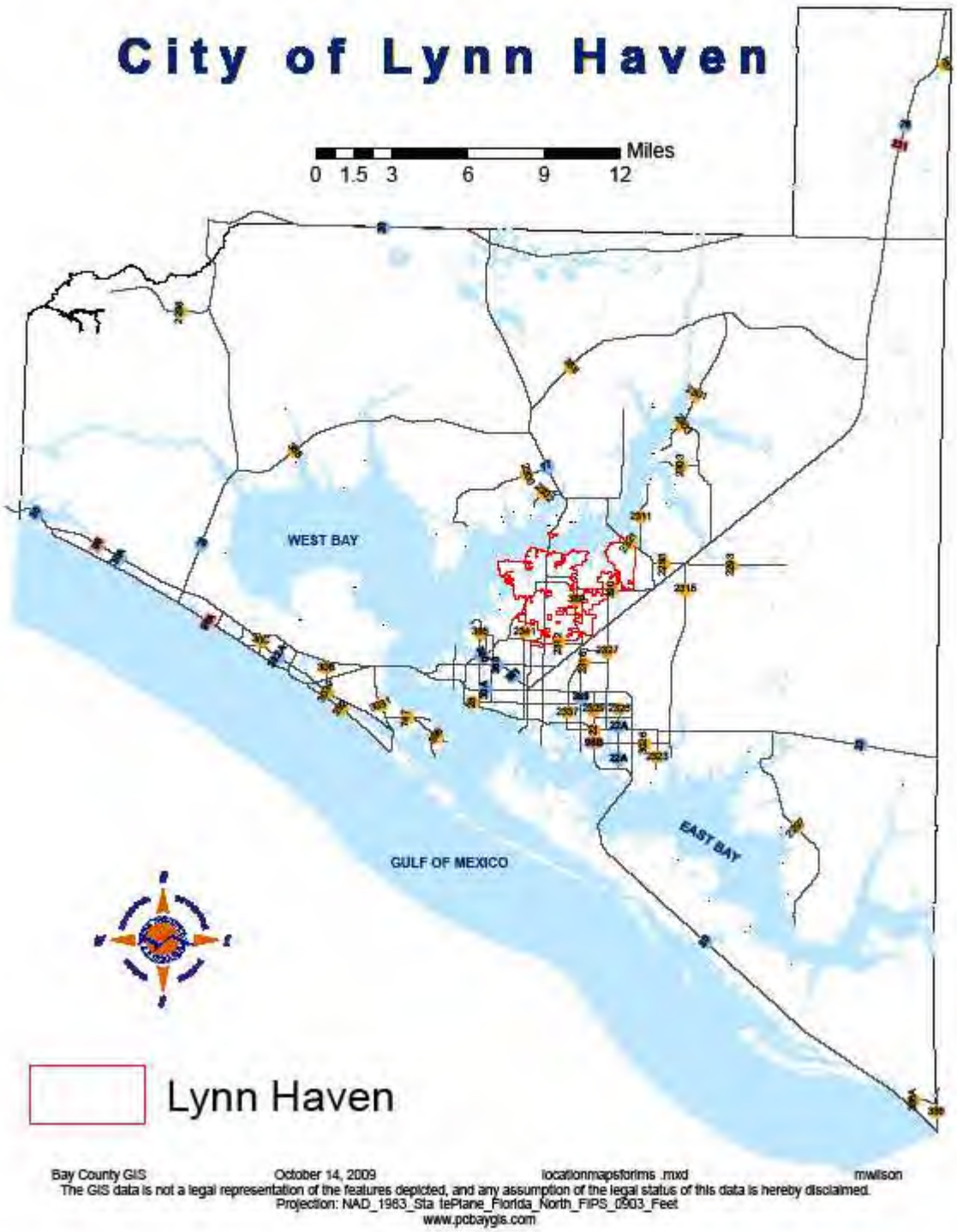
CITY OF CALLAWAY

Kenneth L. Meer, Mayor

ATTEST:

~~Genette R. Bernal~~, City Clerk (acting)

Map 7C


City of Lynn Haven
Miles
0 1.5 3 6 9 12
WEST BAY
EAST BAY
GULF OF MEXICO
Lynn Haven
Bay County GIS
October 14, 2009
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City of Lynn Haven

7C1. Introduction

The City of Lynn Haven is an urban municipality northeast of Panama City spread along the shoreline of North Bay covering approximately 6,000 acres.

W.H. Lynn was a Senator from the state of New York and publisher of the 'Grand Army of the Republic (GAR) National Tribune'. With an aging forum in the readers of his publication, Lynn saw an opportunity to help his fellow veterans and himself. Lynn pushed the idea of selecting sites in Florida for retirement communities for Union Army Civil War veterans. Encouraged by New York shipping tycoon Minor C. Keith, who had recently purchased vast acreage where Lynn Haven is now located, Lynn planned the communities of St. Cloud and Lynn Haven Florida. He formed the St. Andrews Bay Development Company to develop and market the new communities. The Keith property was surveyed and divided into numbered streets running east and west, and avenues named for various states running north and south. The 50'x50' lots sold for $150.00 dollars each and included a five acre tract of land outside of town. Lynn advertised and promoted the communities heavily in his publication and sales started to boom. Property was sold through a lottery with the lots offered spread throughout the community. In this way all areas developed at about the same rate. According to the 2008 BEBR Census estimates, Lynn Haven's population was 16,614. The population is expected to remain relatively unchanged during the next five year LMS planning period.

In 1913 both Lynn Haven and Bay County charters were approved. That same year the W.H. Lynn company donated land to the Ladies Auxiliary of the Grand Army of the Republic. The donation included several lots between 8th and 9th streets and Georgia Ave. A GAR hall was built on the site, as well as a statue to honor Union Soldiers (the only statue to a Union soldier in the south). On July 1, 1914 the Lynn Haven charter became effective. Three days later it held its first Fourth of July celebration featuring the ceremonial switching on of electricity.

Given that Lynn Haven is geographically situated around North Bay, the threats and vulnerabilities are similar to those of the unincorporated areas of Bay County, with flooding, particularly from storm surge, the most significant threat.

The primary land use designations in Lynn Haven are single family residential, agriculture, and commercial. Among these land uses, single family residential and agriculture are the most prominent. Single family residential occupies 76% of all parcels and 28% of the total acreage in Lynn Haven. Agriculture occupies nearly 34% of Lynn Haven's total acreage. The City's 285 commercial parcels occupy 5% of its total acreage. Up to 15% of all parcels in Lynn remain vacant.

Lynn Haven contains a total of 710 parcels that are located within a Coastal High Hazard Area (CHHA). Although 20% of these parcels are vacant, approximately 61% of these parcels are zoned single family residential. Nearly all high density residential parcels in Lynn Haven are located in the CHHA, making up 12% of the City's CHHA parcels. Another 3% of Lynn Haven's parcels that are located within the CHHA are government land uses.

Lynn Haven is highly susceptible to flooding throughout the various flood zone areas. Among the land uses found in these flood areas, single family residential is the most vulnerable, particularly in the A and AE categories. The risk assessment estimates that 533 single family residences are located in zone A and 827 are located in the AE zone. High density areas of single family homes may be Lynn Haven's most vulnerable land use in the event of a storm surge event.

7C2. Lynn Haven Review of Existing Plans, Studies, Reports or Technical Information:

7C2(a) How the Lynn Haven Planning and Zoning Department and Comprehensive Plan and Unified Land Development Code support the LMS Goals:

3.01.00. FLOOD DAMAGE PREVENTION.

3.01.01. Findings of Fact.

A. The flood hazard areas of the City are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

B. These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood proofed, or otherwise unprotected from flood damages.

3.01.02. Statement of Purpose. It is the purpose of this section to save lives, promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

A. Restrict or prohibit uses which are dangerous to life, health, safety, and property due to water or erosion hazard, or which result in damaging increases in erosion or in flood heights or velocities;

B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage throughout their intended life span;

C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;

D. Control filling, grading, dredging, & other development which may increase erosion or flood damage; &

E. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

3.01.03. Objectives. The objectives of this section are to:

A. Protect human life and health and to eliminate or minimize property damage;

B. Minimize expenditure of public money for costly flood control projects;

C. Minimize the need for rescue and relief efforts associated with flooding & generally undertaken at the expense of the general public;

D. Minimize prolonged business interruptions;

E. Minimize damage to public facilities & utilities such as water & gas mains, electric, telephone & sewer lines, roadways, bridges & culverts located in floodplains;

F. Help maintain a stable tax base by providing for the sound use & development of flood prone areas in such a manner as to minimize flood blight areas; and

G. Ensure that potential home buyers are notified that property is in a flood area.

3.01.04. Applicability. This section shall apply to all areas of special flood hazard within the jurisdiction of the City.

3.01.05. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the FEMA in its flood insurance rate map (FIRM), dated June 2, 2009, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this ULDC.

3.01.06. General Standards. In all areas of special flood hazard the following provisions are required:

A. New construction & substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

B. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement; methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State requirements for resisting wind forces.

C. New construction & substantial improvements shall be constructed with materials & utility equipment resistant to flood damage.

D. New construction or substantial improvements shall be constructed by methods & practices that minimize flood damage.

E. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/ or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

F. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

G. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.

H. Onsite waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

I. Any alteration, repair, reconstruction, or improvement to a building shall meet the requirements of new construction as contained in this section.

3.01.07. Specific Standards. In all areas of special flood hazard where base flood elevation data have been provided, as set forth in Section 3.01.05, the following provisions are required:

A. Residential construction. All new construction or substantial improvement of any residential building or manufactured home shall have the lowest floor, including basement, elevated no lower than one (1) foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, there must be a minimum of two openings on different sides of each enclosed area sufficient to facilitate automatic equalization of flood hydrostatic force in accordance with standards of Section 3.01.07(C)(1)(c) below.

B. Nonresidential construction.

1. All new construction or substantial improvement of any commercial, industrial, or nonresidential building (including manufactured home) shall have the lowest floor, including basement, elevated no lower than one (1) foot above the level of the base flood elevation.

2. All buildings located in A zones may be flood-proofed in lieu of being elevated, provided that all areas of the building components, together with attendant utilities and sanitary facilities below the base flood elevation are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy.

3. A professional engineer or architect, licensed in the State of Florida, shall certify that the standards of this subsection are satisfied using the FEMA Floodproofing certificate. Such certification along with the corresponding engineering data, and the operational & maintenance plans shall be provided to the Floodplain Administrator.

C. Elevated buildings. New construction or substantial improvement of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the lowest flood elevation shall be designed to preclude finished living space & designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.

1. Designs for complying with Florida, & meet the following minimum criteria:

a. Designs shall provide a minimum of 2 openings having a total net area of not less than 1square inch for every square foot of enclosed area subject to flooding.

b. The bottom of all openings shall be no higher than 1 foot above adjacent interior grade (which must be equal to or higher in elevation than the adjacent exterior grade); &

c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they provide the required net area of the openings and permit the automatic flow of floodwaters in both directions.

2. Fully enclosed areas below the lowest floor shall be solely be used for parking of vehicles, storage, & building access. Access to the enclosed areas shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).

3. The interior portion of such enclosed areas shall not be partitioned or finished into separate rooms.

D. Standards for manufactured homes & recreational vehicles.

1. All manufactured homes placed or substantially improved on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, or in substantially improved manufactured home parks or subdivisions, shall meet all the requirements for new construction be elevated on a permanent foundation to the base flood elevation, and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, & lateral movement.

2. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision that are not subject to the provisions of paragraph D(1) above, shall be elevated so that:

a. The lowest floor of the manufactured home is elevated no lower than 1 foot above the level of the base flood elevation; or

b. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above grade and securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement.

3. The manufactured home shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

4. In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood, any manufactured home placed or substantially improved shall meet the standards of this section.

5. All recreational vehicles placed on site shall either:

a. Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by

quick disconnected type utilities and security devices and has no permanently attached additions); or

b. Meet all the requirements for new construction, including anchoring and elevation requirements of this section.

6. Adequate drainage paths around structures shall be provided on slopes to guide water away from structures.

E. Floodways. Located within areas of special flood hazard established in Section 3.01.05 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the high velocity of floodwater which carries debris, potential projectiles & has significant erosion potential, the following provisions shall apply:

1. Prohibit encroachments, including fill, new construction, substantial improvements, & other developments within the regulatory floodway unless certification, with supporting technical data, by a professional engineer, licensed in the State of Florida, is provided through hydrologic & hydraulic analyses performed in accordance with standard engineering practice demonstrating that encroachments shall not result in any increase in flood levels during an occurrence of the base flood discharge.

2. All new construction & substantial improvements shall comply with all applicable flood hazard reduction provisions of this ULDC.

3. Prohibit the placement of manufactured homes, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section 3.01.06(B), the elevation standards of Section 3.01.07(A), and the encroachment standards of Section 3.01.07(E)(1) are met.

F. Coastal high hazard areas. Located within the areas of special flood hazard established in Section 3.01.05 are areas designated as coastal high hazard areas. These areas have special flood hazards associated with wave wash; therefore, the following provisions, in addition to those set forth in section 3.01.07. (A) through (D) shall apply:

1. All new construction & substantial buildings shall be located 50 feet landward of the reach of a mean high tide.

2. All buildings shall be elevated so that the bottom of the lowest supporting horizontal member of the lowest floor (excluding pilings or columns) is located no lower than one (1) foot above the base flood elevation level, with all space below the lowest supporting member open so as not to impede the flow of water. Open latticework or decorative screening may be permitted for aesthetic purposes only and shall be designed to wash away in the event of abnormal wave action and in accordance with Section 3.01.07(F)(7).

3. All new buildings or structures shall be securely anchored on pilings or columns.

4. All pile and column foundations and structures attached thereto shall be anchored to resist flotation, collapse, & lateral movement due to the effect of wind & water loads acting simultaneously on all building components. Water loading values shall equal or exceed the base flood. Wind loading values shall be in accordance with the Florida Building Code, current edition adopted by City.

5. A professional engineer or architect, licensed in the State of Florida, shall develop or review the structural design, specifications, and plans for construction and shall certify that the design & methods are in compliance with the provisions contained in Section 3.01.07(F)(2), (3), & (4) above.

6. There shall be no fill used as structural support. Non-compacted fill may be used around the perimeter of a building for landscaping and aesthetic purposes, provided the fill will wash out from storm surge, thereby rendering the building free of obstruction, prior to generating excessive loading forces, ramping effects, or wave deflection. The

Building Official shall approve design plans for landscaping and aesthetic fill only after the applicant has provided an analysis by a professional engineer, licensed in the State of Florida, which demonstrates that the following factors have been fully considered:

a. Particle composition of fill material does not have a tendency for excessive natural compaction;

b. Volume and distribution of fill will not cause wave deflection to adjacent properties; and

c. Slope of fill will not cause wave run-up or ramping.

7. Latticework or decorative screening shall be allowed below the base flood elevation (lowest floor) provided they are not part of the structural support of the building and are designed so as to break away, under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are to be used and provided the following design specifications are met:

a. No solid walls shall be allowed; and

b. Material shall consist of lattice or mesh screening only.

8. If aesthetic latticework or screening is utilized, such enclosed space shall not be designed to be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.

9. Prior to construction, plans for any buildings that will have latticework or decorative screening shall be submitted to the Building Official for approval.

10. Any alteration, repair, reconstruction or improvement to a structure shall not enclose the space below the lowest floor except with latticework or decorative screening, as provided for in Section 3.01.07(F)(7) and (8) above.

11. Prohibit the placement of manufactured homes, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section 3.01.07(F)(4) and the elevation standards of Section 3.01.07(F)(2) are met.

3.01.08. Standards for Streams Without Established Base Flood Elevation or Floodways. Located within the areas of special flood hazard established in Section 3.01.05, where small streams exist but where no base flood data have been provided or where no floodways have been provided, the following provisions apply:

A. No encroachments, including fill material or structures, shall be located within areas of special flood hazard, unless certification by a professional engineer, licensed in the State of Florida, is provided, demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the City of Lynn Haven. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.

B. New construction or substantial improvements of buildings shall be elevated or flood-proofed to elevation established in accordance with Section 3.01.07(C).

3.01.09. Standards for Subdivisions. Subdivisions shall meet the following standards:

A. All subdivision designs shall be consistent with the need to minimize flood damage.

B. All subdivisions shall have public utilities and facilities such as sewer, gas, electrical, and water systems, located and constructed to minimize flood damage.

C. All subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

D. Base flood elevation data shall be provided for subdivision plat applications & manufactured home parks which have at least 3 lots.

3.01.10. Standards for Areas of Shallow Flooding (AO zones**)**. Located within the areas of special flood hazard established in Section 3.01.05 are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist & where the path of flooding is unpredictable & indeterminate. Therefore, the following provisions, in addition to those set forth in Section 3.01.06, shall apply:

A. All new construction and substantial improvement of residential buildings in all AO Zones shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the flood insurance rate map. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least 2 feet above the highest adjacent grade.

B. All new construction & substantial improvement of nonresidential buildings shall:

1. Have the lowest floor, including basement, elevated above the highest adjacent grade as high as the depth number specified in feet on the flood insurance rate map. If no flood depth number is specified, the lowest floor, including the basement, shall be elevated at least 2 feet above the highest adjacent grade; or

2. Together with attendant utility and sanitary facilities, be completely flood-proofed to or above that level so that any space below that level to meet the floodproofing standard specified in Section 3.01.10.(b)1.

3.01.11. Designation of Floodplain Administrator. The City hereby appoints the Building Official to administer & implement the provisions of this ordinance & is herein referred to as the Floodplain Administrator.

3.01.12. Floodplain Administrator. The Floodplain Administrator shall have the following roles & responsibilities:

1. Review permits to assure sites are reasonably safe from flooding;

2. Review all development permits to assure that the permit requirements of this ordinance have been satisfied;

3. Require copies of additional Federal, State of Florida, or local permits, especially as they relate to Chapters 161.053; 320.8249; 320.8359; 373.036; 380.05; 381.0065; & 553, Part IV, Florida Statutes, be submitted along with the development permit application & maintain such permits on file with the development permit;

4. Notify adjacent communities, the Florida Department of Community Affairs – Division of Emergency Management – NFIP Coordinating Office, the Northwest Florida Water Management District, the Federal Emergency Management Agency, and other Federal and/or State of Florida agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse;

5. Assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained;

6. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (A-Zones) or bottom of the lowest horizontal structural member of the lowest floor (V-Zones) of all new & substantially improved buildings, in accordance with Article 5, Section B (1) & (2) & Section E (2), respectively;

7. Verify & record the actual elevation (in relation to mean sea level) to which the new & substantially improved buildings have been flood-proofed, in accordance with Article 5, Section B (2);

8. Review certified plans & specifications for compliance. When flood-proofing is utilized for a particular building, certification shall be obtained from a registered engineer or architect certifying that all areas of the building, together with attendant utilities & sanitary facilities, below the required elevation are water tight with walls substantially impermeable to the passage

of water, & use structural components having the capability of resisting hydrostatic & hydrodynamic loads & the effects of buoyancy in compliance with Article 5, Section B (2) of this ordinance. In Coastal High Hazard Areas, certification shall be obtained from a registered professional engineer or architect that the building is designed & securely anchored to pilings or columns in order to withstand velocity waters & hurricane wave wash. Additionally in Coastal High Hazard Areas, if the area below the lowest horizontal structural member of the lowest floor is enclosed, it may be done so with open wood lattice & insect screening or with non-supporting breakaway walls that meet the standards of Article 5, Section E (6) of this ordinance;

9. Interpret the exact location of boundaries of the areas of special flood hazard. When there appears to be a conflict between a mapped boundary & actual field conditions, the Floodplain Administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Article;

10. When base flood elevation data & floodway data have not been provided in accordance with Article 3, Section B, the Floodplain Administrator shall obtain, review & reasonably utilize any base flood elevation & floodway data available from a Federal, State of Florida, or any other source, in order to administer the provisions of Article 5;

11. Coordinate all change requests to the FIS, FIRM & FBFM with the requester, State of Florida, & FEMA, & 12. Where Base Flood Elevation is utilized, obtain & maintain records of lowest floor & floodproofing elevations for new construction & substantial improvements in accordance with Article 5, Sections B (1) & (2), respectively.

7C2(b) Lynn Haven - Five Year Schedule of Capital Improvement Projects*

Chart 22

Stormwater Drainage CIP						
Project						
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
17th Street Ditch Improvement (Funds from Stormwater Impact Fees)	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
CRA Drainage Improvements (Funds from CRA Funds)	$33,000					
Subtotal	**$283,000**	**$250,000**	**$250,000**	**$250,000**	**$250,000**	**$250,000**

***** Capital Improvements costing less than $25,000 are not included in this schedule.

Source: City of Lynn Haven Development and Planning, 2009; City of Lynn Haven Public Works, 2009; City of Lynn Haven Leisure Services, 2009; City Grant Administrator, 2009; City Deputy Finance Director, 2009; City of Lynn Haven FY 2009-2010 Budget.
* Not yet adopted by the Lynn Haven City Commission as of December 4, 2009.

7C2(c) Lynn Haven Flood Damage Prevention Ordinance

ORDINANCE NO. 916

AN ORDINANCE OF THE CITY OF LYNN HAVEN, FLORIDA, AMENDING SECTIONS 1.07.00 AND 3.01.00 OF THE CITY'S UNIFORM LAND DEVELOPMENT CODE TO UPDATE THE CITY'S FLOOD MANAGEMENT REGULATIONS; PROVIDING FOR ADOPTION OF THE JUNE 2, 2009 FLOOD INSURANCE RATE MAP; PROVIDING AND AMENDING DEFINITIONS RELATED TO FLOODPLAIN MANAGEMENT; AMENDING SPECIFIC STANDARDS RELATED TO CERTAIN RESIDENTIAL AND NONRESIDENTIAL CONSTRUCTION, ELEVATED BUILDINGS, MANUFACTURED HOMES, FLOODWAYS AND COASTAL HIGH HAZARD AREAS; AMENDING STANDARDS IN AREAS OF SHALLOW FLOODING; DESIGNATING A FLOODPLAIN ADMINISTRATOR AND SETTING FORTH HIS DUTIES AND AUTHORITY; REPEALING ALL ORDINANCES IN CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING AN IMMEDIATELY EFFECTIVE DATE.

BE IT ENACTED BY THE PEOPLE OF THE CITY OF LYNN HAVEN:

SECTION 1. From and after the effective date of this ordinance, Section 1.07.00 of the Uniform Land Development Code of the City of Lynn Haven (the "ULDC") is hereby amended to read as follows (deleted text, ~~stricken~~; new text, **double underlined and bold**; comments *[bracketed and italics]*):

1.07.00. ACRONYMS AND DEFINITIONS.
A. List of acronyms.
CRA – Community Redevelopment Agency or Community Redevelopment Area (when referring to the CRA Plan)
DBH – diameter at breast height
EPA – Environmental Protection Agency
ERP – Environmental Resource Permit
FAA – Federal Aviation Administration
FAC – Florida Administrative Code
FCC – Federal Communications Commission
FDEP – Florida Department of Environmental Protection
FDOT – Florida Department of Transportation
FEMA—Federal Emergency Management Agency
FIRM – Flood Insurance Rate Map
FLUM – Future Land Use Map
FS – Florida Statutes
NGVD – National Geodetic Vertical Datum
OFW – Outstanding Florida Water
PUD – Planned Unit Development
TRC – Technical Review Committee
TSM – Technical Standards Manual
ULDC – Unified Land Development Code
USACOE – United States Army Corps of Engineers

B. List of defined terms. Words & and phrases shall be construed according to the common & and approved usage of the language. Words with specific meaning in this ULDC are defined below.

Abutting property means any property that is immediately adjacent or contiguous to, or immediately across any road or public right-of-way from the subdivision.

Accessory use means a use of land or structure or portion thereof customarily incidental &and subordinate to the principal use of the land or structure &and located on the same parcel with the principal use.

Accessory structure (Appurtenant structure) means a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

Addition (to an existing building) means any walled &and roofed expansion to the perimeter of a building in which the addition is connected by a common load bearing wall other than a firewall. Any walled and roofed addition which is connected by a firewall or is separated by independent perimeter load bearing walls is new construction.

***

Appeal means a request for a review of the City Manager's interpretation of any provision of this ULDC**, or a request for a review of the Floodplain Administrator's interpretation of any provision of the City's floodplain management regulations**.

***

Area of shallow flooding means a designated AO or VO zone on the City's flood insurance rate map (FIRM) with base flood depths from 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

Areas of special flood hazard means the land in a floodplain within the City which is subject to a 1% or greater chance of being flooded in any given year.

***

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood" and the "regulatory flood").

Base flood elevation means the water-surface elevation associated with the base flood.

Basement means that portion of a building having its floor subgrade (below ground level) on all sides.

***

Board means the Board of Adjustment.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design &and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

Building means any enclosed or roofed structure for any occupancy or storage.

- Accessory building means any building, the use of which is incidental to the main building, and which is placed upon the same lot as the main building.
- Building setback means a line parallel to &and equidistant from the relevant lot line (front, back, &and side) between which no buildings or structures may be erected as prescribed in these regulations.

***

Coastal high hazard area means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone V1 – V30, VE, or V.

***

Datum means a reference surface used to ensure that all elevation records are properly related. The current national datum is the National Geodetic Vertical Datum (NGVD) of 1929, which is expressed in relation to mean sea level, or the North American Vertical Datum (NAVD) of 1988.

***

Development or development activities means construction, clearing, filling, excavating, grading, paving, dredging, mining, or otherwise significantly disturbing the soil of a site.

Permit (or, Development Permit) means a document issued by the City authorizing the applicant to undertake certain activities, including, but not limited to:

1. building
2. tree removal
3. temporary use
4. demolition

For the purpose of floodplain management, Development means any man-made change to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of materials or equipment.

Local Development Order is a permit that gives the developer the right to commence land clearing &**and** site work, including installation of infrastructure. A local development order will be issued for the following:

1. Development plan approval for planned unit developments (PUD).
2. Preliminary and final plat approval.
3. Minor Subdivision Replat.
4. Site plans.
5. Development orders for developments of regional impact as defined in Section 380.06, F.S.
6. Traditional Neighborhood Development (TND) plans.

Direct hydrologic connection means a surface water connection which, under normal hydrological conditions, occurs on an average of 30 or more consecutive days per year. In the absence of reliable hydrologic records, a continuum of wetlands may be used to establish a direct hydrologic connection.

****

Elevated building means a nonbasement building built to have the lowest floor elevated above the natural ground level by means of fill, solid foundation perimeter walls, piling, columns (posts and piers), shear walls, or breakaway walls.

Encroachment means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Engineer means a person registered and currently licensed to practice professional engineering in the State.

Erosion means the wearing or washing away of soil by the action of wind or water.

Existing means the average physical condition of the land and buildings on a site immediately before development or redevelopment commences.

Existing construction means any structure for which the start of construction commenced before the effective date of the first floodplain management code, ordinance, or standard based upon specific technical base flood elevation data which establishes the area of special flood hazard, in the City, ***change—insert date***.

Existing manufactured home, park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, &**and** either final site grading or the pouring of concrete pads), is completed before the effective date of floodplain management regulations adopted by the City.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, &**and** either final site grading or pouring of concrete pads).

Facade. That portion of any exterior elevation on the building extending from grade to top of the parapet, wall, or eaves and the entire width of the building elevation.

Facade, street. The facing wall of a building fronting a street, other than courtyard walls.

First story means that part of a building or structure resting on oranchored to piers, foundation, or basement enclosure supporting the first floor joist sills &**and** forming the lower floor level to its ceiling height.

Flood or flooding means a temporary rise in the level of any waterbody, watercourse, or wetland which results in the inundation of areas not ordinarily covered by water. **For the purpose of floodplain management, Flood or flooding means:**

(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

(b) The collapse or subsidence of land along a shore of a lake or other body of water as the result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a) (1) of this definition.

Floodplain means any land area susceptible to being inundated by water from any source .

Floodplain Administrator is the individual appointed to administer and enforce the floodplain management regulations of the City of Lynn Haven.

Floodplain management regulations means Section 3.01.00 of this ULDC and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes Federal, State of Florida, or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

Area of shallow flooding ~~means a designated AO or VO zone on a community's flood insurance rate map (FIRM) with base flood depths from 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, where velocity flow may be evident.~~

~~Areas of special flood hazard means the land in the floodplain within a community subject to a 1% or greater chance of being flooded in any given year.~~

~~Base flood means the base flood storm event for purposes of this ULDC is the 100-year (24-hour) storm event. The rainfall expected for this storm event shall be interpolated or extracted from acceptable hydrological publications from reliable sources such as the St. Johns River Water Management District, Soil~~

~~Conservation Service, National Oceanic & AtmosphericAdministration, etc.~~

~~Base flood elevation is the minimum flood elevation established by Federal Emergency Management Agency (FEMA) on the FIRM or by local jurisdiction.~~

FBFM, Flood Boundary and Floodway Map (FBFM) means the official map of the City of Lynn Haven on which the FEMA has delineated the areas of special flood hazard and regulatory floodways.

Flood hazard boundary map (FHBM) means an official map of a **the City of Lynn Haven**, issued by the FEMA, where the boundaries of the areas of special flood hazards have been defined as zone A.

Flood insurance rate map (FIRM) means an official map of a **the City of Lynn Haven**, on which the FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the **City of Lynn Haven**.

Flood insurance study is the official report provided by the **FEMA**. The report contains flood profiles, as well as the flood boundary floodway map and the water surface elevation of the base flood.

Floodproofing means any combination of structural &and nonstructural additions, changes, or adjustments to properties and structures which reduce or eliminate flood damage to land, water &and sanitary facilities, structures, &and contents of buildings.

Floodway means the channel of a river or other watercourse &and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than 1 foot.

~~Minimum flood elevation means the base flood elevation (see base flood elevation) established by the Federal Emergency Management Agency on the Flood Insurance Rate Map or by local regulation.~~

Floor means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

Floor area ratio (F.A.R.) means a measurement of the intensity of development on a site. The floor area ratio is the relationship between the total floor area on a site and the gross site area. The F.A.R. is calculated by adding together all floor areas of all floors and dividing this total by the gross site area. F.A.R. = Total Building Floor Area/Total Lot Area.

Free of obstruction means any type of lower area enclosure or other construction element will not obstruct the flow of velocity water and wave action beneath the lowest horizontal structural member of the lowest floor of an elevated building during a base flood event. This requirement applies to the structures in velocity zones (VZones).

Frontage means the length of the front property line of the lot, lots, or tract of land abutting a public street, road, highway, or rural right-of-way.

Functionally dependent facility or use. means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading &and unloading of cargo or passengers.

Groundwater means water beneath the surface of the ground whether or not flowing through known and definite channels.

Group home facility. Homes of six or fewer residents which otherwise meet the definition of a community residential home shall be deemed a single-family unit and a noncommercial, residential use for the purpose of local laws and ordinances. Homes of 6 or fewer residents which otherwise meet the definition of a community residential home shall be allowed in single-family or multifamily zoning without approval by the local government, provided that such homes shall not be located within a radius of 1,000 feet of another existing such home with 6 or fewer residents. Such homes with 6 or fewer residents shall not be required to comply with the notification provisions of this section; provided, however, that the sponsoring agency or the department notifies the local government at the time of home occupancy that the home is licensed by the department.

Hardship, as related to variances from the City's floodplain management regulations, means the exceptional difficulty associated with the land that would result from a failure to grant the requested variance. The City of Lynn Haven requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Height of building means the vertical distance to the top plate of the building measured from the curb level, or above the flood elevation if no curb level has been established.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to **the start of** construction, next to the proposed walls of a building.

Historic structure means any structure that is:

1. Listed individually in the National Register of Historic Places, a listing maintained by the Department of Interior, or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the national register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
a. By an approved state program as determined by the Secretary of the Interior; or
b. Directly by the Secretary of the Interior in states without approved programs.
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Lowest adjacent grade means the lowest elevation, after the completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design standards of the City's floodplain management regulations.

Lynn Haven City Plan means the Comprehensive Plan adopted by the City Commission pursuant to Ch. 163, Part II, F.S., as such plan may be amended from time to time.

Maintenance means that action taken to restore or preserve the functional intent of any facility or system.

Manufactured home means a building, transportable in one (1) or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market value means the building value, which is the property value excluding the land value and that of the detached accessory structures and other improvements on site (as agreed to between a willing buyer and seller) as established by what the local real estate market will bear. Market value can be established by an independent certified appraisal (other than a limited or curbside appraisal, or one based on income approach), Actual Cash Value (replacement cost depreciated for age and quality of construction of building), or adjusted tax-assessed values.

Massing is the overall bulk or size of a building or project, its physical volume or magnitude.

Mean high water is the average height of the high water over a 19 year period. For shorter periods of observation, it means the average height of water after corrections are applied to eliminate known variations and to reduce the result to the equivalent of a mean 19 year value. The mean high water line along the shores of land immediately bordering on navigable waters is recognized and declared to be the boundary between the foreshore owned by the State in its sovereign capacity and upland subject to private ownership.

Mean high water line means the intersection of the tidal plane of mean high water with the shore.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this ULDC, the term is synonymous with the National Geodetic Vertical Datum (NGVD) or North American Vertical Datum (NAVD) of 1988.

Minimum distance means the shortest permissible distance between 2 points.

Mini-warehouse or **self-service storage facility** means one (1) or more structures containing individual, compartmentalized stalls, lockers or storage spaces with direct, private access for dead storage of personal property.

Multiple occupancy complex means a commercial use, i.e., any use other than residential or agricultural, consisting of a parcel of property, or parcel of contiguous properties, existing as a unified or coordinated project, with a building housing more than one (1) occupant.

North American vertical datum means.

National Geodetic Vertical Datum (NGVD) means, as corrected in 1929, a vertical control used as a reference for establishing varying elevations within the floodplain.

Natural system means a system which predominantly consists of or uses those communities of plants, animals, bacteria, &and other life systems which naturally occur on the land, in the soil or in the water.

New construction means buildings for which the start of construction commenced on or after the effective date of this ULDC based upon specific technical base flood elevation data which establishes the area of special flood hazard in the City. The term also includes any subsequent improvements to such structure.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, &and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted in this ULDC.

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Plat means a map or drawing depicting the division of lands &and lots, blocks, parcels, tracts, or sites being a complete exact representation of the subdivision &and other information in compliance with all applicable sections of the State plat act, Section 177.031, F.S., et seq., and this chapter.

Pollutant means any substance, contaminant, noise, or manmade or man-induced alteration of the chemical, physical, biological, or radiological integrity of air or water in quantities or at levels which are or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property, or which unreasonably interfere with the enjoyment of life or property, including outdoor recreation.

Principally above ground means that at least 51 percent of the actual cash value of the structure is above ground.

Protected environmentally sensitive area means an environmentally sensitive area designated for protection in the Conservation Element of the City Comprehensive Plan.

Protected wellhead means those wellheads which supply potable water for public consumption in the City.

Public facilities and services means the following public facilities and services for which level of service standards have been established in the City Plan:

1. Potable water.
2. Wastewater.
3. Solid waste.
4. Recreation/open space.
5. Stormwater management.
6. Transportation.

Public safety and nuisance means anything which is injurious to safety or health of the entire community or a neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Reasonably safe from flooding means base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

Receiving bodies of water means any waterbodies, watercourses, and wetlands into which surface waters flow.

Recharge means the inflow of water into a project, site, aquifer, drainage basin or facility.

Recreational vehicle means a vehicle which is:

1. Built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable; &and

4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

Regulatory floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Restrictive covenants means private regulations recorded with the final plat which limit or otherwise govern the use, intensity, and development patterns of land within a subdivision or parcel of land for a specified time and transfers with the property.

Retention means the collection and storage of runoff without subsequent surface discharge to surface waters.

Reuse means water which has been treated to allow for irrigation.

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, or brook.

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Site means any tract, lot or parcel of land or combination of tracts, lots, or parcels of land which are in one (1) ownership, or are contiguous and in diverse ownership where development is to be performed as part of a unit, subdivision, or project.

Square means an outdoor public open space whose area is defined by streets or adjacent buildings on at least 3 sides.

Start of construction, for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building, including a manufactured home, on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

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Structure means anything constructed, installed, or portable, the use of which requires a location on a parcel of land. **For the purpose of floodplain management, Structure means a walled and roofed building, including gas or liquid storage tank that is principally above ground, as well as a manufactured home.**

Subdivider means and includes the term "developer," his duly authorized agent or representative, and shall include the word "person"; such person being engaged in the subdivision or development of land.

Subdivision means the division or re-division of a parcel of land into three (3) or more lots or parcels for the purpose of building development, or, if a new street is involved, any division of a parcel of land. The term "subdivision" includes a re-subdivision, and when appropriate to the context, shall relate to the process of subdividing or to the land subdivided. The term "subdivision" shall also include the replatting of all or any part of an existing plat.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures that have incurred "substantial damage" regardless of the actual repair work performed. This term does not, however, include any repair or improvement of a structure to correct existing violations of State of Florida or local health, sanitary, or safety code specifications, which have been identified by the local code

enforcement official prior to the application for permit for improvement, and which are the minimum necessary to assure safe living conditions. This term does not include any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as an historic structure.
Substantially improved existing manufactured home parks or subdivisions is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.
Swale means a natural or manmade drainage pathway.
Temporary means designed, constructed, &and intended to be used for a limited duration.
Trade service establishment means an establishment for sales, service or repair of articles, goods, &and materials; these establishments include, but are not limited to, household appliances, auto and tire supply, , electrical store, plumber, radio &and electronics, landscaping, sign painter, &and tool sharpener.
Unit means that part of a multiple occupancy complex housing 1 occupant.
Used means and shall include "arranged," "designed or intended to be used," and "designed or intended to be occupied."
Variance means cause to change, diversify, or modify an existing designation. For the purpose of floodplain management, a variance is a grant of relief from the requirements of the City's floodplain management regulations.
Vegetation means all plant growth, especially trees, shrubs, vines, ferns, mosses, and grasses.
Volume means occupied space, measured in cubic units.
Water or waters means and includes, but is not limited to, water on or beneath the surface of the ground or in the atmosphere, including natural or artificial watercourses, streams, rivers, lakes, ponds, or diffused surface water and water percolating, standing, or flowing beneath the surface of the ground.
Water &and community water means any &and all water on or beneath the surface of the ground or in the atmosphere. It includes the water in any watercourse, waterbody, or drainage system. It also includes diffused surface water &and water percolating, standing or flowing beneath the surface of the ground, as well as coastal water.
Water body means any natural or artificial pond, lake, reservoir, or other area with a discernible shoreline which ordinarily or intermittently contains water.
Waterbody or surface waterbody means any natural or artificial pond, lake, reservoir, or other area which ordinarily or intermittently contains water and which has a discernible shoreline.
Water's edge &and wetland's edge means the edge which shall be determined by whichever of the following indices yields the most landward extent of waters or wetlands:
1. The boundary established by the average annual high water mark;
2. The landward boundary of hydric soils; or
3. The landward boundary of wetland vegetation, based on the wetland vegetation index.

Watercourse means any natural or artificial channel, ditch, canal, stream, river, creek, waterway or wetland through which water flows in a definite direction, either continuously or intermittently, &and which has a definite channel, bed, banks, or other discernible boundary. Watercourse includes specifically designated areas in which substantial flood damage may occur.
Waters of the State means water including, but not limited to, rivers, lakes, streams, springs, impoundments, wetlands, &and all other waters or bodies of water, including fresh, brackish, saline, tidal, surface, or underground waters.
Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.
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SECTION 2. From and after the effective date of this ordinance, Section 3.01.00 of the Uniform Land Development Code of the City of Lynn Haven (the

"ULDC") is hereby amended to read as follows (deleted text, ~~stricken~~; new text, **double underlined and bold**; comments *[bracketed and italics]*):

CHAPTER 3. ENVIRONMENTAL & and RESOURCE PROTECTION.
3.00.00. GENERALLY.

3.01.00. FLOOD DAMAGE PREVENTION.
3.01.01. Findings of Fact.
A. The flood hazard areas of the City are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
B. These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood proofed, or otherwise unprotected from flood damages.

3.01.02. Statement of Purpose. It is the purpose of this section to **save lives,** promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
A. Restrict or prohibit uses which are dangerous to **life,** health, safety, and property due to water or erosion hazard, or which result in damaging increases in erosion or in flood heights or velocities;
B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage **~~at the time of initial construction~~ throughout their intended life span**;
C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;
D. Control filling, grading, dredging, and other development which may increase erosion or flood damage; and
E. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

3.01.03. Objectives. The objectives of this section are to:
A. Protect human life and health **and to eliminate or minimize property damage**;
B. Minimize expenditure of public money for costly flood control projects;
C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
D. Minimize prolonged business interruptions;
E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone **&and** sewer lines, ~~streets~~ **roadways**, and bridges **and culverts** located in floodplains;
F. ~~Help~~ Maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas; and
G. Ensure that potential home buyers are notified that property is in a flood area.

3.01.04. Applicability. This section shall apply to all areas of special flood hazard within the jurisdiction of the City.

3.01.05. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the **FEMA** in its flood insurance rate map (FIRM), **dated June 2, 2009** ~~September 18, 2002 (Change date)~~, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this ULDC.

3.01.06. General Standards. In all areas of special flood hazard the following provisions are required:

A. New construction &and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
B. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement; methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State requirements for resisting wind forces.
C. New construction &and substantial improvements shall be constructed with materials &and utility equipment resistant to flood damage.
D. New construction or substantial improvements shall be constructed by methods &and practices that minimize flood damage.
E. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
F. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
G. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
H. Onsite waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
I. Any alteration, repair, reconstruction, or improvement to a building shall meet the requirements of new construction as contained in this section.
~~J. The City may require the landowner to submit a letter of map revision (LOMR) to FEMA if the areas of special flood hazard as mapped are determined to be inaccurate for construction permitting purposes.~~

3.01.07. Specific Standards. In all areas of special flood hazard where base flood elevation data have been provided, as set forth in Section 3.01.05, the following provisions are required:
A. Residential construction. **All n**New construction or substantial improvement of any residential building or manufactured home **shall** have the lowest floor, including basement, elevated no lower than one (1) foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, **there must be a minimum of two openings on different sides of each enclosed area sufficient to facilitate automatic equalization of flood hydrostatic force** ~~openings sufficient to facilitate the unimpeded movement of floodwaters shall be provided~~ in accordance with standards of Section 3.01.07(C)(1)(c) below.
B. Nonresidential construction.
1. **All n**New construction or substantial improvement of any commercial, industrial, or nonresidential building **(including manufactured home)** shall have the lowest floor, including basement, elevated no lower than one (1) foot above the level of the base flood elevation.
2. **All b**Buildings located in all A zones may be flood-proofed in lieu of being elevated, provided that all areas of the building **components, together with attendant utilities and sanitary facilities**, below the required **base flood** elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy.
3. A professional engineer **or architect**, licensed in the State of Florida, shall certify that the standards of this subsection are satisfied **using the FEMA Floodproofing Certificate. Such certification along with the corresponding engineering data, and the operational and maintenance plans shall be provided to the Floodplain Administrator.**
C. Elevated buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base **lowest** flood elevation shall be designed to preclude finished living space &and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
1. Designs for complying with this requirement shall be certified by a professional engineer, licensed in the State of Florida, &and meet the following minimum criteria:
a. Designs shall provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding.

b. The bottom of all openings shall be no higher than one (1) foot above **adjacent interior** grade **(which must be equal to or higher in elevation than the adjacent exterior grade)**, and

c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they **provide the required net area of the openings and** permit the automatic flow of floodwaters in both directions.

2. **Fully enclosed areas below the lowest floor shall solely be used for parking of vehicles, storage, and building access.** Access to the enclosed areas shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

3. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

D. Standards for manufactured homes **&and** recreational vehicles.

1. All manufactured homes placed or substantially improved on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, or in substantially improved manufactured home parks or subdivisions, shall meet all the requirements for new construction, ~~including elevation and anchoring~~ **be elevated on a permanent foundation to the base flood elevation, and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement**.

2. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision **that are not subject to the provisions of paragraph D(1) above**, shall be elevated so that:

a. The lowest floor of the manufactured home is elevated no lower than one (1) foot above the level of the base flood elevation; or

b. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above grade **and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.**

3. The manufactured home shall be securely anchored to the **an** adequately anchored foundation system to resist flotation, collapse, and lateral movement.

4. In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood, any manufactured home placed or substantially improved shall meet the standards of this section.

5. All recreational vehicles placed on site shall either:

a. Be fully licensed and ready for highway use **(a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions)**, or

b. Meet all the requirements for new construction, including anchoring and elevation requirements of this section.

~~6. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures.~~ **Adequate drainage paths around structures shall be provided on slopes to guide water away from structures.**

E. Floodways. Located within areas of special flood hazard established in Section 3.01.06 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the **high** velocity of floodwater which carries debris, potential projectiles and has **significant** erosion potential, the following provisions shall apply:

1. Prohibit encroachments, including fill, new construction, substantial improvements, **&and** other developments **within the regulatory floodway** unless certification, with supporting technical data, by a professional engineer, licensed in the State of Florida, is provided **through hydrologic and hydraulic analyses performed in accordance with standard engineering practice** demonstrating that encroachments shall not result in any increase in flood levels during an occurrence of the base flood discharge.

2. All new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this ULDC.

3. Prohibit the placement of manufactured homes, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section 3.01.06(B), the elevation standards of Section 3.01.07(A), and the encroachment standards of Section 3.01.07(E)(1) are met.

F. Coastal high hazard areas. Located within the areas of special flood hazard established in Section 3.01.05 are areas designated as coastal high hazard areas. These areas have special flood hazards associated with wave wash; therefore, the following provisions, **in addition to those set forth in section 3.01.07. (A) through (D)**, shall apply:

1. All **new construction and substantial** buildings shall be located 50 feet landward of the reach of a mean high tide.

2. All buildings shall be elevated so that the bottom of the lowest supporting horizontal member **of the lowest floor** (excluding pilings or columns) is located no lower than one (1) foot above the base flood elevation level, with all space below the lowest supporting member open so as not to impede the flow of water. Open latticework or decorative screening may be permitted for aesthetic purposes only and shall be designed to wash away in the event of abnormal wave action and in accordance with Section 3.01.07(F)(7~~8~~).

3. All **new** buildings or structures shall be securely anchored on pilings or columns.

4. All pile and column foundations and structures attached thereto shall be anchored to resist flotation, collapse, &**and** lateral movement due to the effect of wind &**and** water loads acting simultaneously on all building components. Water loading values shall equal or exceed the base flood. Wind loading values shall be in accordance with the Florida Building Code, current edition adopted by City.

5. A professional engineer **or architect**, licensed in the State of Florida, shall **develop or review the structural** certify that the design, specifications, &**and** plans for construction **and shall certify that the design and methods** are in compliance with the provisions contained in Section 3.01.07(F)(2),(3), and (4) above.

6. There shall be no fill used as structural support. Noncompacted fill may be used around the perimeter of a building for landscaping and aesthetic purposes, provided the fill will wash out from storm surge, thereby rendering the building free of obstruction, prior to generating excessive loading forces, ramping effects, or wave deflection. The Building Official shall approve design plans for landscaping and aesthetic fill only after the applicant has provided an analysis by a professional engineer, licensed in the State of Florida, which demonstrates that the following factors have been fully considered:

a. Particle composition of fill material does not have a tendency for excessive natural compaction;

b. Volume and distribution of fill will not cause wave deflection to adjacent properties; and

c. Slope of fill will not cause wave run-up or ramping.

~~7. There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage.~~

7.~~8.~~ Latticework or decorative screening shall be allowed below the base flood elevation **(lowest floor)** provided they are not part of the structural support of the building and are designed so as to break away, under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are to be used and provided the following design specifications are met:

a. No solid walls shall be allowed; and

b. Material shall consist of lattice or mesh screening only.

8.~~9.~~ If aesthetic latticework or screening is utilized, such enclosed space shall not be designed to be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.

9.~~10.~~ Prior to construction, plans for any buildings that will have latticework or decorative screening shall be submitted to the Building Official for approval.

10.~~11.~~ Any alteration, repair, reconstruction or improvement to a structure shall not enclose the space below the lowest floor except with latticework or decorative screening, as provided for in Section 3.01.07(F)(~~8) and (9)~~ **(7) and (8)** above.

11.12. Prohibit the placement of manufactured homes, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section 3.01.07(F)(4) and the elevation standards of Section 3.01.07(F)(2) are met.

3.01.08. Standards for Streams Without Established Base Flood Elevation or Floodways. Located within the areas of special flood hazard established in Section 3.01.05, where small streams exist but where no base flood data have been provided or where no floodways have been provided, the following provisions apply:
A. No encroachments, including fill material or structures, shall be located within areas of special flood hazard, unless certification by a professional engineer, licensed in the State of Florida, is provided, demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the **City of Lynn Haven**. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.
B. New construction or substantial improvements of buildings shall be elevated or flood-proofed to elevation established in accordance with Section 3.01.07(C).

3.01.09. Standards for Subdivisions. Subdivisions shall meet the following standards:
A. All subdivision designs shall be consistent with the need to minimize flood damage.
B. All subdivisions shall have public utilities and facilities such as sewer, gas, electrical, and water systems, located and constructed to minimize flood damage. C. All subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
D. Base flood elevation data shall be provided for subdivision plat applications &**and** manufactured home parks which have at least 3 lots.

3.01.10. Standards for Areas of Shallow Flooding (AO zones). Located within the areas of special flood hazard established in Section 3.01.05 are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist &**and** where the path of flooding is unpredictable &**and** indeterminate. Therefore, the following provisions, **in addition to those set forth in Section 3.01.06, shall** apply:
A. All new construction and substantial improvement of residential buildings in all **AO Zones** shall have the lowest floor, including basement, elevated **above the highest adjacent grade at least as high as** to the depth number specified **in feet** on the flood insurance rate map, ~~in feet, above the highest adjacent grade~~. If no **flood** depth number is specified, the lowest floor, including basement, shall be elevated at least 2 feet above the highest adjacent grade.
B. All new construction &**and** substantial improvement of nonresidential buildings shall:
1. Have the lowest floor, including basement, elevated **above the highest adjacent grade as high as** to the depth number specified **in feet** on the flood insurance rate map, ~~in feet, above the highest adjacent grade~~. If no **flood** depth number is specified, the lowest floor, including the basement, shall be elevated at least two (2) feet above the highest adjacent grade; or
2. Together with attendant utility and sanitary facilities, be completely flood-proofed to or above that level ~~so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic & hydrodynamic loads & effects of buoyancy~~ to meet the floodproofing standard specified in Section 3.01.10.(B)1.

3.01.11. Designation Of Floodplain Administrator.
The City hereby appoints the Building Official to administer and implement the provisions of the City's floodplain management regulations and is herein referred to as the Floodplain Administrator.

3.01.12. Floodplain Administrator. The Floodplain Administrator shall have the following roles and responsibilities:

1. Review permits to assure sites are reasonably safe from flooding;
2. Review all development permits to assure that the permit requirements of the City's floodplain management regulations have been satisfied;
3. Require copies of additional Federal, State of Florida, or local permits, especially as they relate to Chapters 161.053; 320.8249; 320.8359; 373.036; 380.05; 381.0065; and 553, Part IV, Florida Statutes, be submitted along with the development permit application and maintain such permits on file with the development permit;
4. Notify adjacent communities, the Florida Department of Community Affairs – Division of Emergency Management – NFIP Coordinating Office, the Northwest Florida Water Management District, FEMA, and other Federal or State of Florida agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse;
5. Assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained;
6. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (AZones) or bottom of the lowest horizontal structural member of the lowest floor (V-Zones) of all new and substantially improved buildings, in accordance with Section 3.01.07(A) and (B) and Section 3.01.07(F)(2-4), respectively;
7. Verify and record the actual elevation (in relation to mean sea level) to which the new and substantially improved buildings have been flood-proofed, in accordance with Section 3.01.07(B);
8. Review certified plans and specifications for compliance. When flood-proofing is utilized for a particular building, certification shall be obtained from a registered engineer or architect certifying that all areas of the building, together with attendant utilities and sanitary facilities, below the required elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy in compliance with 3.01.07(B). In Coastal High Hazard Areas, certification shall be obtained from a registered professional engineer or architect that the building is designed and securely anchored to pilings or columns in order to withstand velocity waters and hurricane wave wash. Additionally in Coastal High Hazard Areas, if the area below the lowest horizontal structural member of the lowest floor is enclosed, it may be done so with open wood lattice and insect screening or with non-supporting breakaway walls that meet the standards of Section 3.01.07(F)(7) and (8);
9. Interpret the exact location of boundaries of the areas of special flood hazard. When there appears to be a conflict between a mapped boundary and actual field conditions, the Floodplain Administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in the City's floodplain management regulations;
10. When base flood elevation data and floodway data have not been provided in accordance with Section 3.01.05, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State of Florida, or any other source, in order to administer the City's floodplain management regulations;
11. Coordinate all change requests to the FIS, FIRM and FBFM with the requester, State of Florida, and FEMA; and
12. Where Base Flood Elevation is utilized, obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements in accordance with Sections 3.01.07(A) and (B) respectively.

SECTION 3. All ordinances or parts of ordinances in conflict herewith are repealed to the extent of such conflict.

SECTION 4. The appropriate officers and agents of the City are authorized and directed to codify, include and publish the provisions of this ordinance within the Code, and unless a contrary ordinance is adopted within ninety (90) days following such publication, the codification of this ordinance shall become final.

SECTION 5. This ordinance shall take effect immediately upon passage.

PASSED, APPROVED, AND ADOPTED this 26th day of ~~June~~ May, 2009.

CITY OF LYNN HAVEN,
FLORIDA

BY: /s/
Walter T. Kelley, Mayor

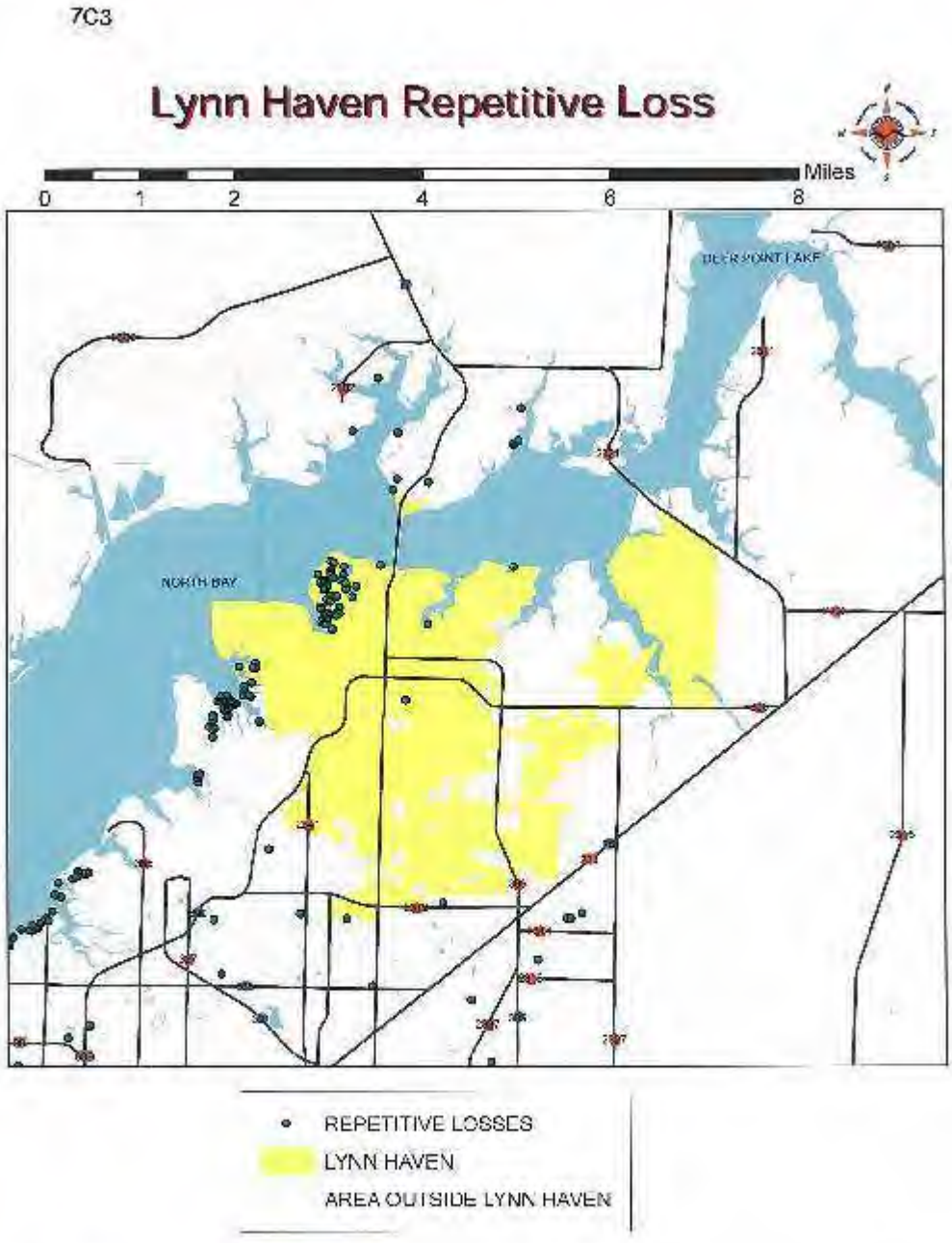
ATTEST:

/s/
John B. Lynch,
City Manager/Clerk

First Reading: 05/12/09

Second Reading: 05/26/09

7C3


7C3
Lynn Haven Repetitive Loss
Miles
0
1
2
4
6
8
DEER POINT LAKE
NORTH BAY
REPETITIVE LOSSES
LYNN HAVEN
AREA OUTSIDE LYNN HAVEN
Bay County GIS
December 7, 2006
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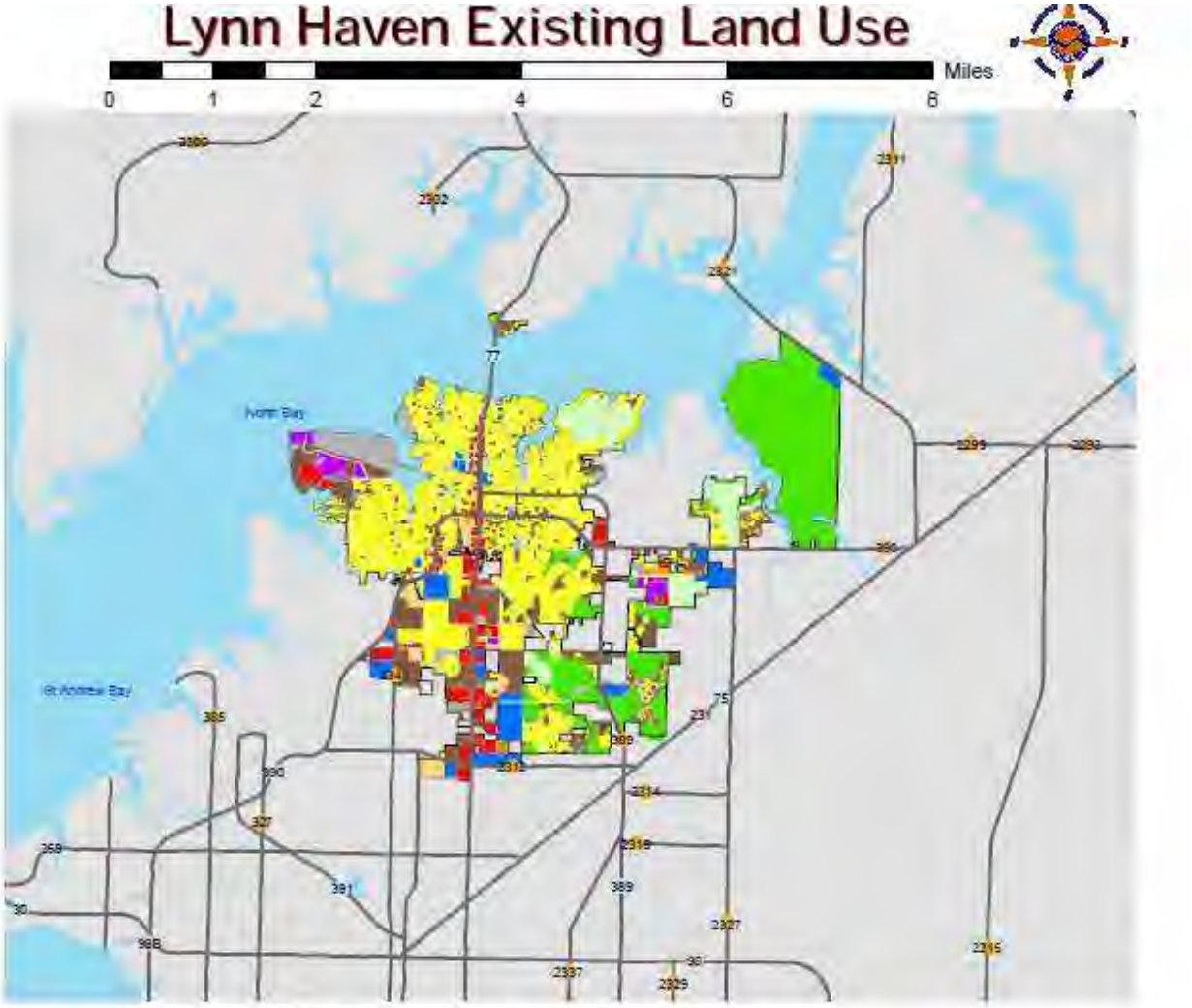
7C4. City of Lynn Haven CRS Participation

The City of Lynn Haven actively participates in the Community Rating System. Specifically, the City maintains Elevation Certificates on all new and substantially improved buildings in the Special Flood Hazard Area. The City provides Flood Insurance Rate Map information and information on the flood insurance purchase requirement to insurers. The City includes Flood Insurance information in an annual newsletter which is mailed to the residents in April.

The City periodically includes flood information and updates; as well as Stormwater Improvement Projects in the monthly water bill notices which are mailed to the residents. The City continues to keep its FIRM updated and maintains the old copies of the FIRM. The City's Library provides flood protection information to those interested individuals. The City's website has flood information; as well as information related to the Community Rating System. The City continues to enforce its current building code and the provisions of the land development code as it pertains to erosion, sediment, and water quality. The City continues to implement its drainage system maintenance program including record keeping of the maintenance activities.

7C5. The maps on the following pages detail Lynn Haven's existing land use, as well as the potential vulnerabilities in dollar value in the CHHA, the flood zones and surge zones.



LYNN HAVEN	Parcels	Acres	Value ($)
Agriculture	42	1,380.66	$67,634,583
Commercial	275	339.54	169,033,827
Government	76	253.61	17,473,057
High Density Residential	90	7.70	19,696,137
Industry	15	96.18	23,529,676
Institutional	52	318.89	67,960,569
Mobile Home Residential	36	41.92	4,919,035
Multi Family Residential	71	102.25	67,087,399
Recreational	26	375.99	14,035,376
Single Family Residential	6,039	1,857.38	919,008,789
Subtotal	6,722	4,774.12	$1,370,378,448
Vacant	993	912.74	90,793,146
Total	7,715	5,686.86	$1,461,171,594

Bay County GIS November 15, 2009 lynnhaven_ elu.mxd mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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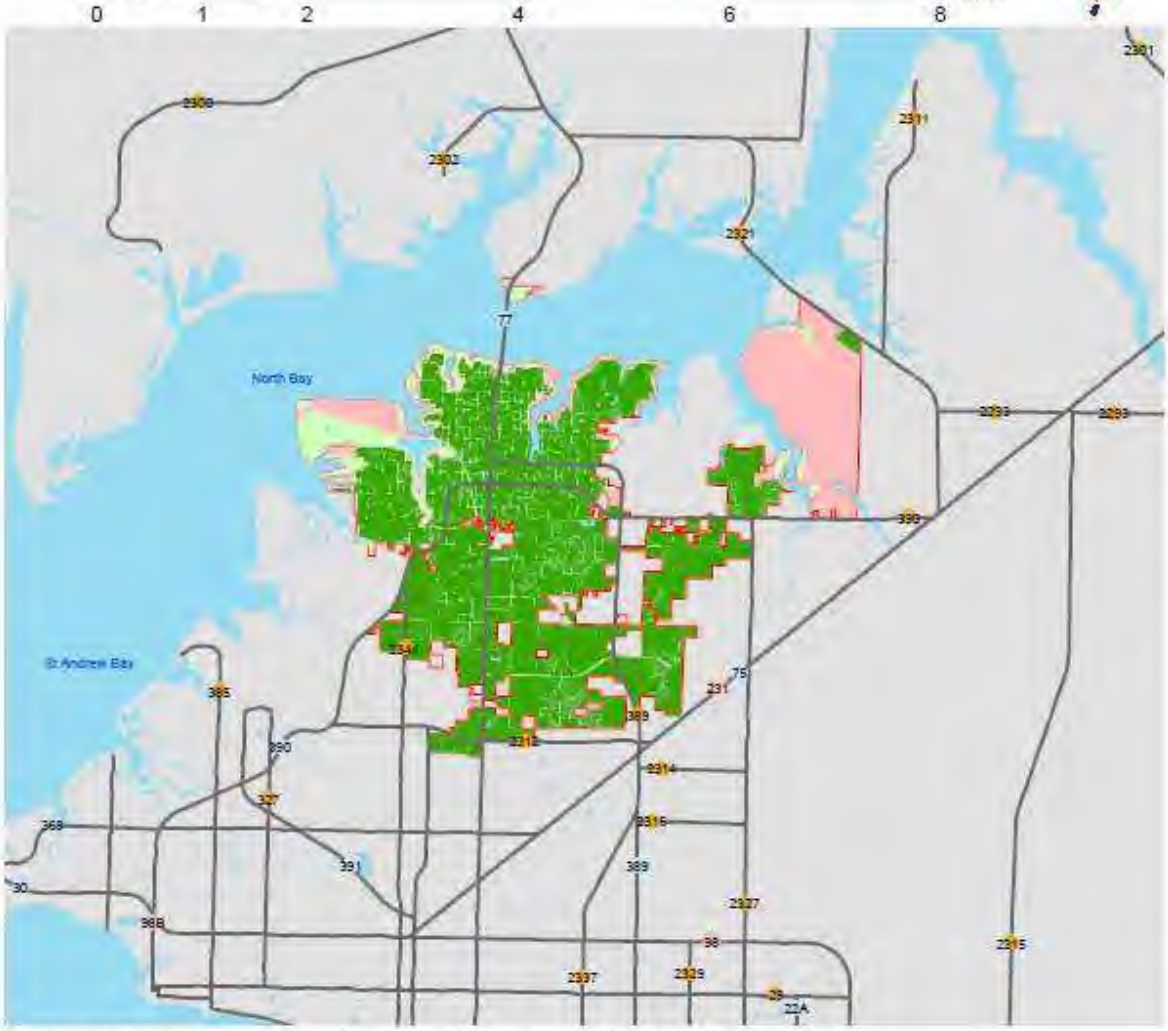
7C6

Lynn Haven Coastal High Hazard Area



LYNN HAVEN	Parcels	Acres	Value ($)
Agriculture	3	939.69	$14,447,442
Commercial	8	35.58	23,244,687
Government	22	176.86	6,473,024
High Density Residential	89	6.79	19,696,137
Industry	3	61.55	5,055,671
Recreational	4	9.96	2,296,584
Single Family Residential	461	222.73	138,433,108
Subtotal	590	1,453.16	$209,646,653
Vacant	134	179.13	28,226,655
Total	724	1,632.29	$237,873,308

Legend
- Coastal High Hazard Area within Lynn Haven
- Parcels Outside Hazard Area within Lynn Haven
- Parcels Inside Hazard Area within Lynn Haven
- AREA OUTSIDE LYNN HAVEN
- LYNN HAVEN

Bay County GIS November 18, 2009 lynnhaven_chha .mxd mwilson
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7C7

Lynn Haven Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	29	1376.27	$56,746,275	4	963.43	$ 14,445,692	1	558.78	$8,942,368
Commercial	52	169.12	36,099,485	18	42.42	24,445,801	1	17.23	11209,967
Government	21	59.66	5,882,105	28	175.75	5,820,553	5	17.62	178,091
High Density Residential	1	0.91	0	89	6.79	18,895,187	2	5.89	0
Industry	2	46.78	7,388,266	3	61.55	5,065,671	1	18.23	1037,142
Institutional	12	265.83	40,127,352	1	3.46	1326,060			
Mixed Use									
Mobile Home Residential	4	9.10	743,150						
Multi Family Residential	10	57.86	36,595,605	1	0.50	288,604			
Recreational	11	353.77	8,837,830	5	53.87	4,063,463			
Single Family Residential	467	186.41	38,512,839	851	363.78	193,737,519	60	29.36	13,157,036
Subtota	610	2,531.74	$330,633,107	996	1771.55	$269,882,700	70	647.10	$35,464,604
Vacant	227	560.32	34,796,862	195	195.41	30,419,357	14	64.09	2,541,217
Total	837	3,098.06	$355,429,969	1,191	1,969.96	$ 300,302,057	84	711.19	$ 38,005,821

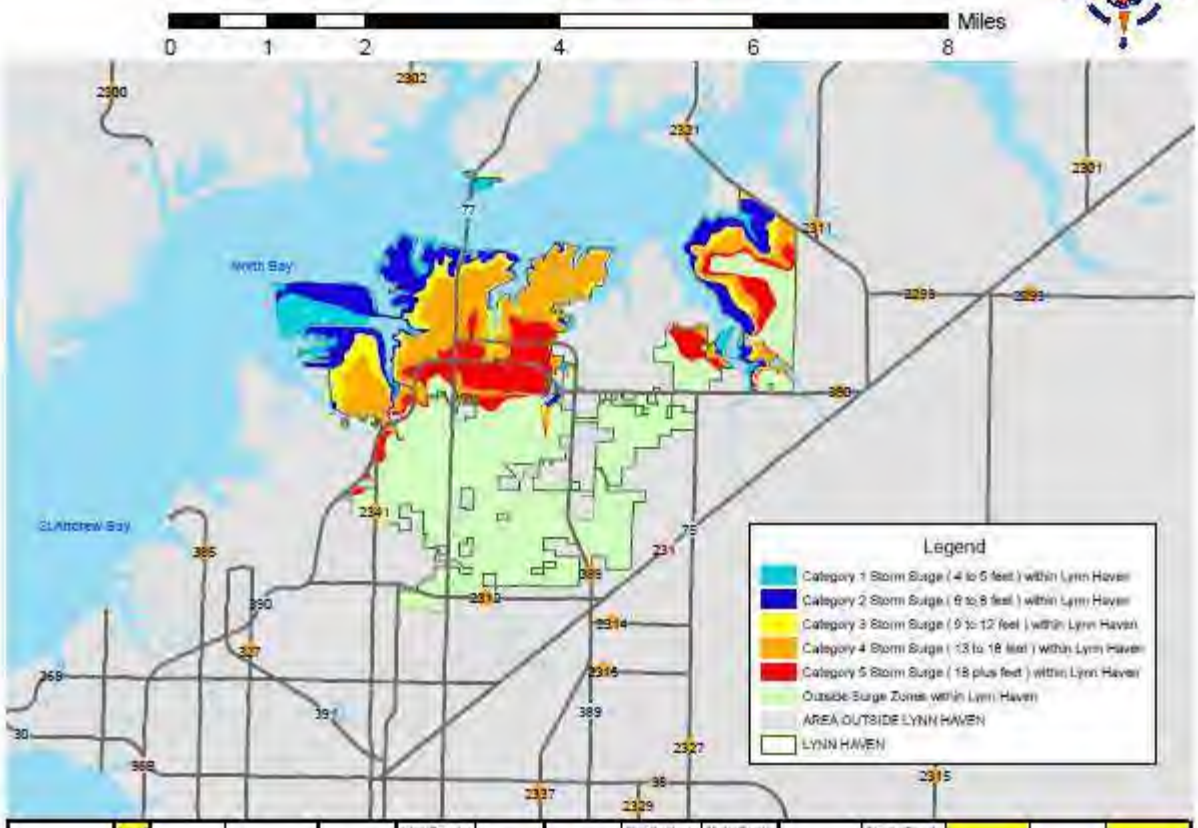
Bay County GIS | November 6, 2009 | lynnhaven_flood.mxd | mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

Flood data does not exactly overlay county base data in which the misma tch may be as much as 200 feet. This flood data is for careful reference only. This data does not replace hardcopy Flood Insurance Rate Maps (FIRMs) and does not replace an on -site survey. Hardcopy FIRMs can be viewed at Bay County Planning. For official f lood zone information in unincorporated Bay County, Springfield and Cedar Grove contact Bay County Planning (850)248-8250. In other cities contact the city's planning department.

7C8

Lynn Haven Surge Zones



	Land Use	Agricultural	Commercial	Government	High Density Residential	Industry	Institutional	Mobile Home Residential	Multi Family Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1 Surge														
Parcels		3	9	22	30	3				8	451	590	154	744
Acres		439.69	35.58	176.88	6.79	61.55				9.16	222.73	1,453.16	574.19	1,932.59
Value ($)		$14,447,442	$2,284,882	$6,473,024	$19,696,137	$5,055,671				$2,206,584	$208,434,340	$209,646,653	$34,290,656	$237,973,309
Category 2 Surge														
Parcels		4	14	33	30	3	1	1	5	5	955	1055	222	1330
Acres		963.43	39.80	382.84	6.79	61.55	0.34	0.16	1.66	153.67	399.39	1,809.83	214.55	2,024.38
Value ($)		$14,448,642	26,200,014	7,749,390	19,696,137	5,055,671	144,133	35,400	1,202,426	4,083,463	204,953,620	$283,258,846	33,267,419	$316,526,265
Category 3 Surge														
Parcels		4	16	34	30	3	2		4	6	1464	1624	288	1890
Acres		963.43	40.95	183.35	6.79	61.55	23.62		3.37	248.21	566.58	2,097.85	230.36	2,328.21
Value ($)		$14,448,642	27,102,932	7,777,390	19,696,137	5,055,671	1,728,088		2,048,920	4,872,853	280,326,792	$363,855,347	35,385,944	$399,241,291
Category 4 Surge														
Parcels		7	35	47	30	4	27	14	21	15	2789	3195	419	3625
Acres		969.78	78.18	196.52	6.79	62.11	43.43	4.53	31	257.24	667.41	2,944.07	325.97	3,267.64
Value ($)		$14,466,466	47,935,824	16,852,886	19,696,137	5,241,055	24,588,517	766,707	17,057,980	7,530,842	457,989,150	$665,972,547	46,199,626	$662,172,183
Category 5 Surge														
Parcels		9	485	50	30	6	35	33	29	15	3926	4626	957	4583
Acres		606.77	122	198.63	6.79	62.19	53.66	6.95	37.61	261.91	1251.6	3,011.34	371.34	3,382.68
Value ($)		$15,352,469	15,892,848	11,661,934	19,696,137	5,841,549	27,244,239	1,573,946	23,483,166	8,749,022	646,471,241	$757,126,950	54,991,203	$792,126,153

7C9. Lynn Haven Ordinance Adopting the 2010 LMS

RESOLUTION 2010-08-513

A RESOLUTION BY THE CITY OF LYNN HAVEN, FLORIDA TO ADOPT THE BAY COUNTY LOCAL MITIGATION PLAN.

WHEREAS, the City of Lynn Haven is vulnerable to the human and economic costs of natural, technological and societal disasters, and

WHEREAS, the City Commission recognizes the importance of reducing or eliminating those vulnerabilities for the overall good and welfare of the community, and

WHEREAS, the City of Lynn Haven has been an active participant in the Bay County Mitigation Task Force, which has established a comprehensive, coordinated planning process to eliminate or decrease these vulnerabilities, and

WHEREAS, the City of Lynn Haven's representatives and staff have identified, justified and prioritized a number of proposed projects and programs needed to mitigate the vulnerabilities of Lynn Haven to impacts of future disasters, and

WHEREAS, these proposed projects and programs have been incorporated into the initial edition of the Bay County Local Mitigation Plan that has been prepared and issued for consideration and implementation by the community of Lynn Haven.

NOW, THEREFORE BE IT RESOLVED by the City of Lynn Haven that:

1) The City Commission hereby accepts and approves of its designated portion of the Bay County Local Mitigation Plan,

2) The agency personnel of the City of Lynn Haven are requested and instructed to pursue available funding opportunities for the implementation of the proposals designated therein,

3) The City of Lynn Haven will, upon receipt of such funding or other necessary resources, seek to implement the proposals contained in its section of the strategy, and

4) The City of Lynn Haven will continue to participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead, and

5) The City of Lynn Haven will further seek to encourage the businesses, industries and community groups operating within and/or for the benefit of the City of Lynn Haven to also participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead.

PROPOSED, PASSED AND ADOPTED THIS 24th DAY AUGUST, 2010.

CITY OF LYNN HAVEN

Walter T. Kelley, Mayor

ATTEST:

John B. Lynch, City Manager

Map 7D


Mexico Beach
Location Map
Miles
0 1 2 4 6 8
WEST BAY
EAST BAY
GULF OF MEXICO
Legend
AREA OUTSIDE MEXICO BEACH
MEXICO BEACH
Bay County GIS
November 12, 2009
location_maps_4_lms_individual .mxd
mwilson
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www.pcbaygis.com

The City of Mexico Beach

7D1. Introduction

Located in the Florida panhandle, Mexico Beach is a community on the edge of the Gulf of Mexico stretching four miles along US Highway, 98 and consists of approximately 2,000 acres of land.

There are few confirmed facts about the origin of settlement in the Mexico Beach area; however, local lore indicates this coastal geographic region was utilized by Caribbean Pirates as a haven from bounty hunters in the early 1800's. Modern, historical documentation came to the undeveloped area in the 1920's when the Florida Department of Transportation built (Scenic) US Highway 98. Felix DuPont, purchased the property now known as Mexico Beach around the turn of the century for the purpose of turpentine farming, and farmed the plentiful pine trees for a number of years until he was approached by a group of investors anxious to relocate and proceed with business aspirations in 1946. Most of the land for the present City of Mexico Beach was purchased for $65,000 on July 1, 1946. The investors incorporated, forming the Mexico Beach Corporation, and set up an office at the County Line adjacent to a tavern holding the 17th liquor license issued to the State of Florida, Jack's Place. The $65,000 note, financed for 5 years at the then high interest rate of 4%, was satisfied in 6 months by sales of 50' x 150' lots.

According to the 2008 BEBR Census estimates, Mexico Beach's population was 1,331. This number is expected to remain relatively stable during the next five year LMS planning period.

Given that Mexico Beach is geographically situated along the Gulf of Mexico, the threats and vulnerabilities are similar to those of the unincorporated areas of Bay County, with flooding, particularly from storm surge, the most significant threat.

Most property is designated for high density, single family, and mobile home residential land uses. Multiple land uses in Mexico Beach are located in a Coastal High Hazard Area (CHHA), including 69 single family residences, 9 high density residential properties, 8 commercial properties, and 8 government land uses. However, the majority of each of these land uses is located outside of the CHHA.

Flood zone A and AE areas contain many residential land uses. Approximately 9% of all high density residential land uses in Mexico Beach are located in Flood A and nearly 47% are located in Flood AE. Approximately 15% of mobile home residences are located in zone A and 25% are located in zone AE. Of single family residences, 93 or 7% are located in zone A, and 273 or 23% are located in zone AE. In addition approximately 32% of government land uses in Mexico Beach are located in an A zone, and 18% are located in the coastal VE zone.

Storm surge is a significant threat to the City of Mexico Beach. In the event of a category 1 storm surge, relatively few land uses or properties in Mexico Beach would be affected; however, in the event of category 2 event, or higher, storm surge would affect significant amounts of the developed and populated areas.

7D2. Mexico Beach: Review and Incorporation of Existing Plans, Studies, Reports and Technical Information:

7D2 a. How the Mexico Beach Planning and Zoning Department and Comprehensive Plan support the LMS Goals.

To further the goals of minimizing damage from the hazard events that threaten Mexico Beach, the adopted **Comprehensive Plan** enforces goals, objectives and policies that are classified in 2 hazard areas: flood mitigation and mitigation for hurricane related damage:

Polices to reduce Flooding:

Goal: Provide a drainage system which will reduce flooding and provide reasonable protection from damage to public and private property.

Objective 4.D.1: Upon adoption of this Plan, the City shall use its Stormwater Management Plan as the basis for level of service standards and implementation of improvements to drainage facilities.
Policy 4.D.1.2: The City shall begin incremental cleaning of the entire drainage system as specified in the Stormwater Management Plan as the basis for level of service standards and implementation of improvements to drainage facilities.

Objective 4.D.2: The City shall adopt a stormwater management ordinance, or include provisions for stormwater management in its land development regulations.
Policy 4.D.2.1: The City shall regulate new development and substantial redevelopment in a manner which reduces stormwater impacts on drainage facilities and natural resources.

Objective 4.D.3: Reduce the volume of stormwater and sediment entering the estuarine system so as to protect natural drainage features.
Policy 4.D.3.1: The City shall give priority status drainage projects which reduce stormwater sedimentation, erosion and pollution.

Objective 4.D.4: Provide stormwater management and drainage control in an efficient and cost-effective manner.
Policy 4.D.4.1: The City shall include specific and detailed provisions in its land development regulations to protect the functions of natural drainage features. Such regulations shall include restrictions on land uses which cause obstruction of drainageways, sedimentation, removal of vegetation and other similar provisions.
Objective 4.D.5: The City shall coordinate with adjacent municipalities, Bay County and state/federal agencies to promote efficiency on drainage projects of mutual interest.

Objective 4.D.6: Reduce the potential for damage to public and private property caused by flooding.
Policy 4.D.6.1: The City shall use its "Conservation" land use category and its Flood damage Prevention Ordinance to reasonably reduce the potential for flood damage to public and private property.
(4) Requirements for Capital Improvements Implementation: this element shall be funded annually on an as-needed basis and the revenue shall be produced from appropriate state/federal

grants, ad valorem taxes, or a portion of potential County sales tax revenues dedicated for these improvements or available to be used for these improvements.

Polices to mitigate risk of wind/hurricane related damage:

Goal: Reduce the risk of hurricane related damage to life and property.

Objective 5.4: Maintain or reduce hurricane evacuation times.
Policy: 5.4.1: The City shall coordinate with and assist Bay County in the implementation of the County Emergency Plan through the availability of police and emergency personnel during hurricane evacuation.
Policy 5.4.2: The City shall use its land development regulations to prohibit the locations of hospitals, nursing homes, group homes, mobile homes and other similar structures in the 100-year flood zone, coastal high-hazard area, or category 1-3 hurricane evacuation zone.
Policy 5.4.3: The City shall identify and maintain a list of elderly, handicapped or infirmed persons that might require special evacuation assistance.

Objective 5.5: Establish procedures, which will reduce the exposure of human life, and public and private property to hurricane related hazards.
Policy 5.5.1: All habitable structures shall be designed and constructed in conformance with the City's Flood Damage Prevention Ordinance and the provisions of the Coastal Zone Protection Act.
Policy 5.5.2: The City shall not locate infrastructure facilities, except for water-dependent facilities, in the 100-year flood zone of the Coastal High Hazard Area.
Policy 5.5.3: Post-disaster redevelopment shall be undertaken in conformance with the City's Flood Damage Prevention Ordinance and the Plan, including attendant land development regulations.
Policy 5.5.4: When undertaking post-disaster redevelopment activities development permits may be waived for short-term recovery measures such as:

1. Damage assessment to meet post-disaster assistance requirements;
2. Removal of debris;
3. Emergency repairs to streets, water electricity or other associated utilities to restore service;
4. Public assistance including temporary shelter or housing.

Policy 5.5.5: Long-term redevelopment activities shall require approval of development permits and be consistent with the Plan. These activities include:

1. Repair or restoration of private residential or commercial structures with damage in excess of 50% of market value;
2. Repair or restoration of docks, seawalls, groins, or other similar structures;
3. Non-emergency repairs to bridges, highways, streets or public utilities.

Policy 5.5.6: When reviewing permits for post-disaster redevelopment activities the City shall evaluate hazard mitigation measures including:

1. Relocation of structures;
2. Removal of structures;
3. Structural modification of buildings to reduce the risk of future damage.

Policy 5.5.7: The City shall incorporate applicable future recommendations of the Interagency Hazard Mitigation Report to this Plan.
Policy 5.5.8: As part of the post-disaster redevelopment process the City shall structurally modify or remove infrastructure facilities which have experienced repeated storm damage.

Objective 5.6: The City shall use the provisions of this Plan and the attendant land development regulations to restrict development which would contribute to the concentration of the residential population in the coastal high-hazard area.

1. Relocation of structures;
2. Removal of structures;
3. Structural modification of buildings to reduce the risk of future damage.

Policy 5.6.1: The City shall maintain existing year-round residential densities in the coastal high-hazard area through provision of specific and detailed standards in its land development regulations.

Policy 5.6.2: The City shall use its "Tourist Residential" and "Tourist Commercial" land use districts to concentrate nonpermanent populations in the areas most subject to evacuation and direct permanent residential populations away from these areas.

Policy 5.6.3: The City shall re-define its coastal high-hazard area upon any change to the boundaries of the V-zone or coastal construction control line as redefined by the Flood Insurance Rate Maps or other appropriate document.

7D2(b) To help meet the mitigation objectives and policies of the Comprehensive Plan and the Land Development Regulations, Mexico Beach has made provisions for the following projects:

Chart 23 Current Schedule of Capital Improvements

Project	Year	Cost Estimate	Funding Source
Improve Canal Dredging System	2007-2010	$150,000	General Fund/Grants
Stormwater Management Ditches and Drainage Improvement	2007-2010	$40,000 per year	General Fund/Grants/1% Sales Tax
Master Drainage and Stormwater Plan	2007-2010	$50,000	General Fund/Grants/1% Sales Tax

7D2(c) Mexico Beach Floodplain Management Ordinance adopted in July, 2009

ORDINANCE NO. 567

AN ORDINANCE ADOPTNG THE FEMA COASTAL FLOODPLAIN REQUIREMENTS, ADOPTING A ONE-FOOT ABOVE FREEBOARD REQUIREMENT, PROVIDING AN EFFECTIVE DATE, AND REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH.

WHEREAS, the City Council of Mexico Beach, Florida adopted Ordinances 74, 137, 201, and 275 to adopted certain measures to reduce future flood risks to new construction in special flood hazard areas; and

WHEREAS, the adoption of the City of Mexico Beach Flood Damage Prevention Ordinance enables the property owners of Mexico Beach to purchase flood insurance and to participate in the National Flood Insurance Program; and

WHEREAS, the Council included the Flood Damage Prevention Ordinance within its Land Development Regulations as adopted by the City of Mexico Beach Ordinance No. 242 the "City of Mexico Beach Land Development Regulations"; and

WHEREAS, the Council was recently advised that due to regulatory changes in the National Flood Insurance Program, all participating communities are required to amend their previously adopted ordinances to maintain their eligibility to participate in the National Flood Insurance Program.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF MEXICO BEACH:

ARTICLE 1. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND OBJECTIVES

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Florida has authorized and delegated in Chapter 166, Florida Statutes, the responsibility of local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City Council of the City of Mexico Beach does hereby adopt the following floodplain management regulations.

SECTION B. FINDINGS OF FACT

(1) The flood hazard areas of Mexico Beach are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

(2) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or

hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages.

SECTION C. STATEMENT OF PURPOSE

It is the purpose of this ordinance to save lives, promote the public health, safety and general welfare, and minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Restrict or prohibit uses which are dangerous to life, health, safety and property due to water or erosion hazards, which result in damaging increases in erosion or in flood heights and velocities;

(2) Require that uses vulnerable to floods including facilities which serve such uses be protected against flood damage throughout their intended life span;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;

(4) Control filling, grading, dredging and other development which may increase erosion or flood damage; and

(5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

SECTION D. OBJECTIVES

The objectives of this ordinance are to:

(1) Protect human life, health and to eliminate or minimize property damage;

(2) Minimize expenditure of public money for costly flood control projects;

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business interruptions;

(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, roadways, and bridges and culverts located in floodplains;

(6) Maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas; and

(7) Ensure that potential homebuyers are notified that property is in a flood hazard area.

ARTICLE 2. DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

Accessory structure (Appurtenant structure) means a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

Appeal means a request for a review of the Floodplain Administrator's interpretation of any provision of this ordinance or a request for a variance.

Area of shallow flooding means a designated AO or AH Zone on the community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard is the land in the floodplain within a community subject to a one- percent or greater chance of flooding in any given year. This term is synonymous with the phrase "special flood hazard area."

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood" and the "regulatory flood"). Base flood is the term used throughout this ordinance.

Base Flood Elevation means the water-surface elevation associated with the base flood.

Basement means any portion of a building having its floor sub-grade (below ground level) on all sides.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

Building – see **Structure**.

Coastal high hazard area means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone V1 – V30, VE, or V.

Datum A reference surface used to ensure that all elevation records are properly related. The current national datum is the National Geodetic Vertical Datum (NGVD) of 1929, which is expressed in relation to mean sea level, or the North American Vertical Datum (NAVD) of 1988.

Development means any man-made change to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of materials or equipment.

Elevated building means a non-basement building built to have the lowest floor elevated above the ground level by foundation walls, posts, piers, columns, pilings, or shear walls.

Encroachment means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing Construction means, for the purposes of floodplain management, structures for which "the start of construction" commenced before June 8, 1993. Existing construction, means for the purposes of determining rates structures for which the "start of construction" commenced before January 1, 1975. This term may also be referred to as "existing structures".

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before June 8, 1993.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood or flooding means:

(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

(3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a) (2) of this definition and are akin to a river of liquid and flowing mud on the surface of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(b) The collapse or subsidence of land along a shore of a lake or other body of water as the result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a) (1) of this definition.

Flood Boundary and Floodway Map (FBFM) means the official map of the community on which the Federal Emergency Management Agency (FEMA) has delineated the areas of special flood hazard and regulatory floodways.

Flood Hazard Boundary Map (FHBM) means an official map of the community, issued by FEMA, where the boundaries of the areas of special flood hazard have been identified as only Approximate Zone A.

Flood Insurance Rate Map (FIRM) means an official map of the community, issued by FEMA, which delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood Insurance Study (FIS) means the official hydrology and hydraulics report provided by FEMA. The study contains an examination, evaluation, and determination of flood hazards, and, if appropriate, corresponding water surface elevations, or an examination, evaluation, and determination of mudslide (i.e., mudflow) and other flood-related erosion hazards. The study may also contain flood profiles, as well as the FIRM, FHBM (where applicable), and other related data and information.

Floodplain means any land area susceptible to being inundated by water from any source (see definition of "flooding").
Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain Administrator is the individual appointed to administer and enforce the floodplain management regulations of the community.

Floodplain management regulations means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance, and erosion control ordinance), and other applications of police power which control development in flood-prone areas. This term describes Federal, State of Florida, or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

Floodproofing means any combination of structural and non-structural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design standards of this ordinance.

Mangrove Stand means an assemblage of mangrove trees which are mostly low trees noted for a copious development of interlacing adventitious roots above ground and which contain one or more of the following species: Black mangrove (Avicennia Nitida); red mangrove (Rhizophora mangle); white mangrove (Languncularia Racemosa); and buttonwood (Conocarpus Erecta).

Manufactured home means a building, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market value means the building value, which is the property value excluding the land value and that of the detached accessory structures and other improvements on site (as agreed to between a willing buyer and seller) as established by what the local real estate market will bear. Market value can be established by an independent certified appraisal (other than a limited or curbside appraisal, or one based on income approach), Actual Cash Value (replacement cost depreciated for age and quality of construction of building), or adjusted tax-assessed values.

Mean Sea Level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929, or North American Vertical Datum (NAVD) of 1988.

National Geodetic Vertical Datum (NGVD) of 1929 means a vertical control used as a reference for establishing varying elevations within the floodplain.

New Construction means, for floodplain management purposes, any structure for which the "start of construction" commenced on or after June 8, 1993. The term also includes any subsequent improvements to such structures. For flood insurance rates, structures for which the start of construction commenced on or after December 31, 1974, and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the first floodplain management code, ordinance or standard.

North American Vertical Datum (NAVD) of 1988 means a vertical control used as a reference for establishing varying elevations within the floodplain.

Primary frontal dune means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

Principally above ground means that at least 51 percent of the actual cash value of the structure is above ground.

Program deficiency means a defect in the community's floodplain management regulations or administrative procedures that impairs effective implementation of those floodplain management regulations or of the standards required by the National Flood Insurance Program.

Structure means, for floodplain management purposes, a walled and roofed building, including gas or liquid storage tank that is principally above ground, as well as a manufactured home.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. This term also includes "repetitive loss" structures as defined herein.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures that have incurred "substantial damage" regardless of the actual repair work performed. This term does not, however, include any repair or improvement of a structure to correct existing violations of State of Florida or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement official prior to the application for permit for improvement, and which are the minimum necessary to assure safe living conditions. This term does not include any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Substantially improved existing manufactured home parks or subdivisions is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Variance is a grant of relief from the requirements of this ordinance.

Violation means the failure of a structure or other development to be fully compliant with the requirements of this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Watercourse means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

ARTICLE 3. GENERAL PROVISIONS

SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of special flood hazard within the jurisdiction of the City Council of the City of Mexico Beach.

SECTION B. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Emergency Management Agency in the Flood Insurance Study (FIS) for the City of Mexico Beach dated June 8, 1993 with the accompanying maps and other supporting data, and any subsequent revisions thereto, are adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study and Flood Insurance Rate Map are on file at the Mexico Beach Building Department.

SECTION C. DESIGNATION OF FLOODPLAIN ADMINISTRATOR

The City Council of the City of Mexico Beach hereby appoints the City Administrator to administer and implement the provisions of this ordinance and is herein referred to as the Floodplain Administrator.

SECTION D. ESTABLISHMENT OF DEVELOPMENT PERMIT

A development permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities.

SECTION E. COMPLIANCE

No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this ordinance and other applicable regulations.

SECTION F. ABROGATION AND GREATER RESTRICTIONS

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION G. INTERPRETATION

In the interpretation and application of this ordinance all provisions shall be:

(1) Considered as minimum requirements;

(2) Liberally construed in favor of the governing body; and

(3) Deemed neither to limit nor repeal any other powers granted under State of Florida statutes.

SECTION H. WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of City Council of the City of Mexico Beach or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

SECTION I. PENALITIES FOR VIOLATION

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall be punishable for a non-criminal violation. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon adjudication therefore, be fined not more than $500, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the Floodplain Administrator from taking such other lawful actions as are necessary to prevent or remedy any violation.

ARTICLE 4. ADMINISTRATION

SECTION A. PERMIT PROCEDURES

Application for a Development Permit shall be made to the Floodplain Administrator on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing and

proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Application Stage:

a) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all buildings;

b) Elevation in relation to mean sea level to which any non-residential building will be flood-proofed;

c) Certificate from a registered professional engineer or architect that the non-residential flood-proofed building will meet the flood-proofing criteria in Article 4, Section A (2) and Article 5, Section B (2);

d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and

(e) Elevation in relation to mean sea level of the bottom of the lowest horizontal structural member of the lowest floor and provide a certification from a registered engineer or architect indicating that they have developed and/or reviewed the structural designs, specifications and plans of the construction and certified that are in accordance with accepted standards of practice in Coastal High Hazard Areas.

(2) Construction Stage:

Upon placement of the lowest floor, or flood-proofing by whatever construction means, or bottom of the lowest horizontal structural member it shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the NGVD or NAVD elevation of the lowest floor or flood-proofed elevation, or bottom of the lowest horizontal structural member of the lowest floor as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood proofing is utilized for a particular building said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The Floodplain Administrator shall review the lowest floor and flood-proofing elevation survey data submitted. The permit holder immediately and prior to further progressive work being permitted to proceed shall correct violations detected by such review. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project.

SECTION B. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties of the Administrator shall include, but are not be limited to:

(1) Review permits to assure sites are reasonably safe from flooding;

(2) Review all development permits to assure that the permit requirements of this ordinance have been satisfied;

(3) Require copies of additional Federal, State of Florida, or local permits, especially as they relate to Chapters 161.053; 320.8249; 320.8359; 373.036; 380.05; 381.0065; and 553, Part IV, Florida Statutes, be submitted along with the development permit application and maintain such permits on file with the development permit;

(4) Notify adjacent communities, the Florida Department of Community Affairs – Division of Emergency Management – NFIP Coordinating Office, the Northwest Florida Water Management District, the Federal

(2) Manufactured homes shall be anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State of Florida requirements for resisting wind forces;

(3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

(4) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage;

(5) Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

(6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems;

(7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;

(8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;

(9) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this ordinance shall meet the requirements of "new construction" as contained in this ordinance;

(10) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this ordinance, shall be undertaken only if said non-conformity is not furthered, extended, or replaced;

(11) All applicable additional Federal, State of Florida, and local permits shall be obtained and submitted to the Floodplain Administrator along with the application for development permit. Copies of such permits shall be maintained on file with the development permit. State of Florida permits may include, but not be limited to, the following:

(a) Northwest Florida Water Management District in accordance with Chapter 373.036 Florida Statutes, Section (2) (a) – Flood Protection and Floodplain Management;

(b) Department of Community Affairs: in accordance with Chapter 380.05 F.S. Areas of Critical State Concern, and Chapter 553, Part IV F.S., Florida Building Code;

(c) Department of Health: in accordance with Chapter 381.0065 F.S. Onsite Sewage Treatment and Disposal Systems; and

(d) Department of Environmental Protection, Coastal Construction Control Line: in accordance with Chapter 161.053 F.S. Coastal Construction and Excavation.

(12) Standards for Subdivision Proposals and other new Proposed Development (including manufactured homes):

(a) Such proposals shall be consistent with the need to minimize flood damage;

(b) Such shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage; and

(c) Such proposals shall have adequate drainage provided to reduce exposure to flood hazards.

SECTION B. SPECIFIC STANDARDS.

In all A-Zones where base flood elevation data have been provided (Zones AE, A1–30, A (with base flood elevation), and AH), as set forth in Article 3, Section B, the following provisions, in addition to those set forth in Article 5, Section A, shall apply:

(1) *Residential Construction.* All new construction and substantial improvement of any residential building (including manufactured home) shall have the lowest floor, including basement, elevated to no lower than one foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, there must be a minimum of two openings on different sides of each enclosed area sufficient to facilitate automatic equalization of flood hydrostatic forces in accordance with standards of Article 5, Section B (3).

(2) *Non-Residential Construction.* All new construction and substantial improvement of any commercial, industrial, or non-residential building (including manufactured home) shall have the lowest floor, including basement, elevated to no lower than one foot above the base flood elevation. All buildings located in A-Zones may be flood-proofed, in lieu of being elevated, provided that all areas of the building components, together with attendant utilities and sanitary facilities, below the base flood elevation plus one foot are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied using the FEMA Floodproofing Certificate. Such certification along with the corresponding engineering data, and the operational and maintenance plans shall be provided to the Floodplain Administrator.

(3) *Enclosures below the Lowest Floor.* New construction and substantial improvements that include fully enclosed areas formed by foundation and other exterior walls below the lowest floor shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.

(a) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet or exceed the following minimum criteria:

(i) Provide a minimum of two openings on different sides of each enclosed area having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

(ii) The bottom of all openings shall be no higher than one foot above adjacent interior grade (which must be equal to or higher in elevation than the adjacent exterior grade); and

(iii) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they provide the required net area of the openings and permit the automatic flow of floodwaters in both directions.

(b) Fully enclosed areas below the lowest floor shall solely be used for parking of vehicles, storage, and building access. Access to the enclosed area shall be minimum necessary to allow for parking of vehicles (garage door), limited storage of maintenance equipment used in connection with the premises (standard exterior door), or entry to the living area (stairway or elevator); and

(c) The interior portion of such enclosed area shall not be finished or partitioned into separate rooms.

(4) Standards for Manufactured Homes and Recreational Vehicles

(a) All manufactured homes that are placed, or substantially improved within Zones A1-30, AH, and AE, on sites (i) outside of an existing manufactured home park or subdivision, (ii) in a new

manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, the lowest floor be elevated on a permanent foundation to no lower than one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(b) All manufactured homes to be placed or substantially improved in an existing manufactured home park or subdivision that are not subject to the provisions of paragraph 4 (a) of this Section, must be elevated so that either:

(i) The lowest floor of the manufactured home is elevated to no lower than one foot above the base flood elevation, or

(ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength that are no less than 48 inches in height above the grade and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(c) Placement of manufactured homes is prohibited within the regulatory floodway, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Article 5, Section A (2), the elevation standards of Article 5, Section B (1) and (2), and the encroachment standard of Article 5, Section B (7) (a), are met.

(d) All recreational vehicles must either:

(i) Be on the site for fewer than 180 consecutive days,

(ii) Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions), or

(iii) Meet all the requirements for new construction, including anchoring and elevation standards in accordance with Article 5, Section B (4) (a) and (b).

(5) Adequate drainage paths around structures shall be provided on slopes to guide water away from structures within Zone AH.

(6) Standards for waterways with established Base Flood Elevations, but without Regulatory Floodways

Located within the areas of special flood hazard established in Article 3, Section B, where streams exist for which base flood elevation data has been provided by the Federal Emergency Management Agency without the delineation of the regulatory floodway (Zones AE and A1–30), the following provisions, in addition to those set forth in Article 5, Section B (1) through (5), shall apply:

(a) Until a regulatory floodway is designated, no new construction, substantial improvements, or other development including fill shall be permitted within the areas of special flood hazard, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the community.

(b) Development activities which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies – with the community's endorsement – for a conditional FIRM revision, and receives the approval of the Federal Emergency Management Agency (FEMA).

(7) Standards for waterways with established Base Flood Elevations and Floodways.

Located within areas of special flood hazard established in Article 3, Section B, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the high velocity of flood waters which carry debris, potential projectiles and have significant erosion potential, the following provisions, in addition to those set forth in Article 5, Section B (1) through (5), shall apply:

(a) Prohibit encroachments, including fill, new construction, substantial improvements and other developments within the regulatory floodway unless certification (with supporting technical data) by a registered professional engineer is provided through hydrologic and hydraulic analyses performed in accordance with standard engineering practice demonstrating that encroachments would not result in any increase in flood levels during occurrence of the base flood discharge.

(b) Placement of manufactured homes is prohibited within the regulatory floodway, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Article 5, Section A (2), the elevation standards of Article 5, Section B (1) and (2), and the encroachment standard of Article 5, Section B (7) (a), are met.

(c) Development activities including new construction and substantial improvements within the regulatory floodway that increase the base flood elevation may be allowed, provided that the developer or applicant first applies – with the community's endorsement – for a conditional FIRM revision, and receives the approval of FEMA.

(d) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, within the regulatory floodway, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood in accordance with Article 5, Section B (7) (a).

(8) For all structures located seaward of the Coastal Construction Control Line (CCCL), the lowest floor of all new construction and substantial improvements shall be elevated to no lower than the 100-year flood elevation established by the Florida Department of Environmental Protection or by FEMA in accordance with Article 3, Section B, whichever is higher. All non-elevation design requirements of Article 5, Section B shall apply.

SECTION C. SPECIFIC STANDARDS FOR A-ZONES WITHOUT BASE FLOOD ELEVATIONS AND REGULATORY FLOODWAYS.

Located within the areas of special flood hazard established in Article 3, Section B, where there exist A Zones for which no base flood elevation data and regulatory floodway have been provided or designated by the Federal Emergency Management Agency, the following provisions shall apply:

(1) Require standards of Article 5, Section A.

(2) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals base flood elevation data. Standards set forth in Article 5, Section B shall apply.

(3) The Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State of Florida, or any other source, in order to administer the provisions of this ordinance. When such data is utilized, provisions of Article 5, Section B shall apply. The Floodplain Administrator shall:

a) Obtain the elevation (in relation to the mean sea level) of the lowest floor (including the basement) of all new and substantially improved structures,

b) Obtain, if the structure has been floodproofed in accordance with the requirements of Article 5, Section B (2), the elevation in relation to the mean sea level to which the structure has been floodproofed, and

c) Maintain a record of all such information.

(4) Notify, in riverine situations, adjacent communities, the Florida Department of Community Affairs – NFIP Coordinating Office, and the Northwest Florida Water Management District prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.

(5) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

(6) Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated and anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State of Florida and local anchoring requirements for resisting wind forces.

(7) When the data is not available from any source, in accordance with standard set forth in Article 5, Section C (2) of this Section, the lowest floor of the structure shall be elevated to no lower than three feet above the highest adjacent grade. Standards set forth in Article 5, Section B shall apply.

SECTION D. STANDARDS FOR AO-ZONES

Located within the areas of special flood hazard established in Article 3, Section B, are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of one to three feet, where a clearly defined channel does not exist and the path of flooding is unpredictable and indeterminate; therefore, the following provisions, in addition to Article 5, Section A, apply:

(1) All new construction and substantial improvements of residential structures in all AO Zones shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Flood Insurance Rate Map plus one foot. If no flood depth number is specified, the lowest floor, including basement, shall be elevated to no less than three feet above the highest adjacent grade.

(2) All new construction and substantial improvements of non-residential structures shall:

(a) Have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Flood Insurance Rate Map. If no flood depth number is specified, the lowest floor, including basement, shall be elevated to at least three feet above the highest adjacent grade, or

(b) Together with attendant utility and sanitary facilities be completely floodproofed to no less than one foot above that level to meet the floodproofing standard specified in Article 5, Section D (2) (a).

(3) Adequate drainage paths around structures shall be provided on slopes to guide water away from structures.

(4) Fully enclosed areas below the lowest floor that are subject to flooding shall meet the non-elevation design requirements of Article 5, Section B.

SECTION E. STANDARDS FOR COASTAL HIGH HAZARD AREAS (V-ZONES)

Located within areas of special flood hazard established in Article 3, Section B are Coastal High Hazard Areas, designated as Zones V1–30, VE, or V (with BFE). The following provisions shall apply:

(1) Meet the standards of Article 4, Section A, and Article 5, Sections A, B (except B (7)), C, and D.

(2) All new construction and substantial improvements in Zones V1–V30, VE, and V (with BFE) shall be elevated on pilings or columns so that:

a) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to no lower than one foot above the base flood elevation whether or not the structure contains a basement; and

b) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading will be those values associated with the base flood. Wind loading values will be those required by applicable State of Florida or local, if more stringent than those of the State of Florida, building standards.

c) For all structures located seaward of the Coastal Construction Control Line (CCCL), the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to the 100-year flood elevation established by the Florida Department of Environmental Protection or the base flood elevation, whichever is the higher.

(3) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this Section.

(4) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures. The Floodplain Administrator shall maintain a record of all such information.

(5) All new construction and substantial improvements shall be located landward of the reach of mean high tide.

(6) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by State of Florida or local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

a) Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

b) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). The water loading shall be those values associated with the base flood. The wind loading values shall be those required by applicable Florida or local, if more stringent than those of the State of Florida, building standards.

(c) Such enclosed space shall be useable solely for parking of vehicles, building access, or storage.

(7) Prohibit the use of fill for structural support. No development permit shall be issued for development involving fill in coastal high hazard areas unless it has been demonstrated through appropriate engineering analyses that the subject fill does not cause any adverse impacts to the structure on site or other properties.

(8) Prohibit man-made alteration of sand dunes and mangrove stands that would increase potential flood damage.

(9) Standards for Manufactured Homes

(a) All manufactured homes to be placed or substantially improved on sites: (i) Outside a manufactured home park or subdivision, (ii) In a new manufactured home park or subdivision, (iii) In an expansion to an existing manufactured home park or subdivision, or, (iv) In an existing manufactured home park or subdivision in which a manufactured home has incurred "substantial damage" as the result of a flood, must meet the standards of Article 5, Section E (2) though (8), or

(b) All manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision shall meet the requirements of Article 5, Section B (4) (b).

(10) Recreational vehicles placed on sites within Zones VE, V1–V30, V (with base flood elevation) on the FIRM either

(a) Be on the site for fewer than 180 consecutive days,

(b) Be fully licensed and ready for highway use (on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions); or

(c) Meet the requirements of Article 5, Section E (2) through (8).

(d) Prohibit the placement of recreational vehicles, except in an existing recreational vehicle park. Recreational vehicles placed on other sites in an existing recreational park must be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (on its wheels or jacking system, is attached to the site by quick disconnect type utilities and security devices, and has no permanently attached additions). They shall also have a plan for removal in case of a threat at least four hours prior to the arrival of the threat.

(11) For all structures located seaward of the Coastal Construction Control Line (CCCL), the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to the flood elevation established by the Florida Department of Environmental Protection or the base flood elevation plus one foot, whichever is higher. All non-elevation design requirements Article 5, Section E (2) through (10) shall apply.

(12) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, in coastal high hazard area, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood nor cause any adverse impacts to the structure on site or other properties by wave ramping or deflection.

ARTICLE 6. VARIANCE PROCEDURES.

SECTION A. DESIGNATION OF VARIANCE AND APPEALS BOARD.

The Mexico Beach Planning and Zoning Board as established by the City Council of the City of Mexico Beach shall hear and decide appeals and requests for variances from the requirements of this ordinance.

SECTION B. DUTIES OF VARIANCE AND APPEALS BOARD.

The board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Management Administrator in the enforcement or administration of this ordinance. Any person aggrieved by the decision of the board may appeal such decision to the Circuit Court.

SECTION C. VARIANCE PROCEDURES.

In acting upon such applications, the Mexico Beach Planning and Zoning Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:

(1) The danger that materials may be swept onto other lands to the injury of others;

(2) The danger of life and property due to flooding or erosion damage;

(3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(4) The importance of the services provided by the proposed facility to the community;

(5) The necessity to the facility of a waterfront location, where applicable;

(6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

(7) The compatibility of the proposed use with existing and anticipated development;

(8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

(9) The safety of access to the property in times of flood for ordinary and emergency vehicles;

(10) The expected heights, velocity, duration, rate of rise, and sediment of transport of the flood waters and the effects of wave action, if applicable, expected at the site; and

(11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

SECTION D. CONDITIONS FOR VARIANCES.

(1) Variances shall only be issued when there is:

a) A showing of good and sufficient cause;

b) A determination that failure to grant the variance would result in exceptional hardship; and

c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(2) Variances shall only be issued upon a determination that the variance is the minimum necessary deviation from the requirements of this ordinance.

(3) Variances shall not be granted after-the-fact.

(4) The Floodplain Administrator shall maintain the records of all variance actions, including justification for their issuance or denial, and report such variances in the community's NFIP Biennial Report or upon request to FEMA and the State of Florida, Department of Community Affairs, NFIP Coordinating Office.

SECTION E. VARIANCE NOTIFICATION.

Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

(1) The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage, and

(2) Such construction below the base flood level increases risks to life and property.

A copy of the notice shall be recorded by the Floodplain Administrator in the Office of the Clerk of Court and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

SECTION F. HISTORIC STRUCTURES.

Variances may be issued for the repair or rehabilitation of "historic" structures – meeting the definition in this ordinance – upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a "historic" structure.

SECTION G. STRUCTURES IN REGULATORY FLOODWAY.

Variances shall not be issued within any designated floodway if any impact in flood conditions or increase in flood levels during the base flood discharge would result.

ARTICLE 7. SEVERABILITY.

If any section, clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

INTRODUCED, at the Regular Meeting of the City Council of Mexico Beach on June 9, 2009, and ADOPTED at the Regular Meeting of the City Council on July 14, 2009.

CITY OF MEXICO BEACH, FLORIDA

William A. Cathey, Mayor

ATTEST:

Deborah McLeod, City Clerk

7D3

Mexico Beach Repetitive Loss

Bay County GIS December 7, 2006 replossmxb mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
www.pcfloyds.com

7D4. Mexico Beach CRS Participation

Bay County annually provides The City Mexico Beach with outreach literature that the City provides to citizens at public events and local hazard information meetings. The City intends to expand their role in the CRS program over the next 5 year LMS planning period by working with Bay County and incorporating some of the County's information and procedures.

7D5. The maps on the following pages detail Mexico Beach's existing land use, as well as the potential vulnerabilities in dollar value in the CHHA, the flood zones and surge zones.

City of Mexico Beach
Existing Land Use

0 1 2 4 6 8 Miles

MEXICO BEACH	Parcels	Acres	Value ($)
Agriculture	10	639.58	$11,949,371
Commercial	71	36.11	44,693,291
Government	43	39.94	83,736,991
High Density Residential	342	13.09	99,409,962
Institutional	7	16.10	6,959,093
Mobile Home Residential	216	67.12	20,309,718
Multi Family Residential	33	7.14	12,129,028
Recreational	2	1.92	1,365,968
Single Family Residential	1,199	216.67	344,788,504
Subtotal	1,923	1,037.67	$625,341,926
Vacant	753	216.43	112,376,662
Total	2,676	1,254.10	$737,718,588

Legend
- Agriculture
- Commercial
- Government
- Industry
- Institutional
- Mixed Use
- Recreational
- Single Family Residential
- Multi Family Residential
- High Density Residential
- Mobile Home Residential
- Vacant
- AREA OUTSIDE MEXICO BEACH
- MEXICO BEACH

Bay County GIS November 15, 2009 mexicobeach_ elu.mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_Stat ePlane_Florida_North_FIPS_0903_Feet
www.pcbaygis.com

7D6

City of Mexico Beach
Coastal High Hazard Area

MEXICO BEACH	Parcels	Acres	Value ($)
Agriculture	3	164.09	$5,195,604
Commercial	8	3.92	23,972,439
Government	7	29.56	79,343,691
High Density Residential	9	1.04	3,015,511
Multi Family Residential	1	1.92	3,066,935
Single Family Residential	69	13.53	41,376,885
Subtotal	97	214.06	$155,971,065
Vacant	23	10.71	18,076,421
Total	120	224.77	$174,047,486

Legend
- Coastal High Hazard Area within Mexico Beach
- Parcels Outside Hazard Area within Mexico Beach
- Parcels Inside Hazard Area within Mexico Beach
- AREA OUTSIDE MEXICO BEACH
- MEXICO BEACH

Bay County GIS November 15, 2009 mexicobeach_chha .mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_Sta tePlane_Florida_North_FIPS_0903_Feet
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7D7

City of Mexico Beach Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	7	570.92	$6,753,757	7	39144	$11067,033	3	164.08	$5,195,604
Commercial	5	16.93	2,678,636	26	11.37	26,160,484	5	3.92	23,972,439
Government	15	3.01	15	8	27.11	35,876,256	7	29.56	79,343,691
High Density Residential	35	3.13	430,222	140	7.25	46,067,407	3	0.08	540,872
Industry									
Institutional	2	12.85	4,286,576	4	1.24	1,635,576			
Mixed Use									
Mobile Home Residential	33	30.14	5,675,176	55	10.67	3,674,333			
Multi Family Residential	1	0.91	496,560	5	3.45	4,356,169			
Recreational	2	1.92	1,365,966						
Single Family Residential	94	99.44	17,880,459	286	49.32	17,535,361	41	6.70	24,642,699
Subtotal	194	679.25	$39,569,583	530	501.75	$246,374,639	62	204.35	$ 183,695,305
Vacant	195	111.86	20,393,739	231	58.19	46,010,691	11	3.55	8,956,850
Total	389	791.11	$60,163,322	761	559.94	$292,385,330	73	207.90	$ 192,652,155

Bay County GIS | November 6, 2009 | mexicobeach_flood.mxd | mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

Flood data does not exactly overlay county base data in which the mis. match may be as much as 200 feet. This flood data is for careful reference only. This data does not replace hardcopy Flood Insurance Rate Maps (FIRMs) and does not replace an on -site survey. Hardcopy FIRMs can be viewed at Bay County Planning. For official flood zone information in unincorporated Bay County, Springfield and Cedar Grove contact Bay County Planning (850) 248-8250. In other cities contact the city's planning department.

7D8

	Land Use	Agriculture	Commercial	Government	Institutional	Single Family Residential	Subtotal:	Vacant	Totals:
Category 1 Surge									
Parcels:		16		4		1	21	4	25
Acres:		2752.3		209.72		2.22	2,944.34	141.71	3,086.05
Value ($):		$423,075		889,695		889,073	$2,171,903	1856,604	$4,027,507
Category 2 Surge									
Parcels:		27	1	4	1	1	34	5	39
Acres:		4793.5	32.41	209.72	4.01	2.22	5,001.86	147.7	5,149.56
Value ($):		$1,016,061	81,964	889,695	1480,617	889,073	$4,379,370	1978,404	$6,357,774
Category 3 Surge									
Parcels:		34	1	4	1	1	41	5	46
Acres:		6207.99	32.41	209.72	4.01	2.22	6,456.35	147.7	6,604.05
Value ($):		$1,154,801	81,964	889,695	1480,617	889,073	$4,516,110	1978,404	$6,494,514
Category 4 Surge									
Parcels:		38	1	4	1	1	45	7	52
Acres:		7186.98	32.41	209.72	4.01	2.22	7,445.34	295.15	7,740.53
Value ($):		$1,274,674	81,964	889,695	1480,617	889,073	$4,635,983	3,591,885	$8,227,868
Category 5 Surge									
Parcels:		46	1	4	1	1	53	7	60
Acres:		7875.53	32.41	209.72	4.01	2.22	7,323.89	295.15	7,580.08
Value ($):		$1,614,982	81,964	889,695	1480,617	889,073	$4,975,301	3,591,885	$8,568,186

Bay County GIS | November 12, 2009 | mexicobeach_surge.mxd | mwilson

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7D9 Mexico Beach resolution adopting the 2010 LMS

RESOLUTION 2010-08

A RESOLUTION OF THE CITY OF MEXICO BEACH, FLORIDA, CONCERNING THE CITY OF MEXICO BEACH'S LOCAL MITIGATION PLAN; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Mexico Beach is vulnerable to the human and economic costs of natural, technological, and social disasters; and

WHEREAS, the City Council recognizes the importance of reducing or eliminating those vulnerabilities for the overall good and welfare of the community; and

WHEREAS, the City of Mexico Beach has been an active participant in the Bay County Mitigation 20/20 Task Force, which has established a comprehensive, coordinated planning process to eliminate or decrease these vulnerabilities; and

WHEREAS, the City of Mexico Beach's representatives and staff have identified, justified and prioritized a number of proposed projects and programs needed to mitigate the vulnerabilities of Mexico Beach to the impacts of future disasters; and

WHEREAS, these proposed projects and programs have been incorporated into the initial edition of the Bay County Local Mitigation Plan that has been prepared and issued for consideration and implementation by the community of Mexico Beach;

NOW, THEREFORE, be it resolved by the City Council of the City of Mexico Beach,

1. The City Council hereby accepts and approves of its designated portion of the Bay County Local Mitigation Plan.

2. The agency personnel of the City of Mexico Beach are requested and instructed to pursue available funding opportunities for implementation of the proposals designated therein.

3. The City of Mexico Beach will, upon receipt of such funding or other necessary resources, seek to implement the proposals contained in its section of the strategy, and

4. The City of Mexico Beach will continue to participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead, and

5. The City of Mexico Beach will further seek to encourage the businesses, industries, and community groups operating within and/or for the benefit of the City of Mexico Beach to also participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead.

PASSED AND DULY ADOPTED by the City Council of the City of Mexico Beach on this 10th Day of August, 2010.

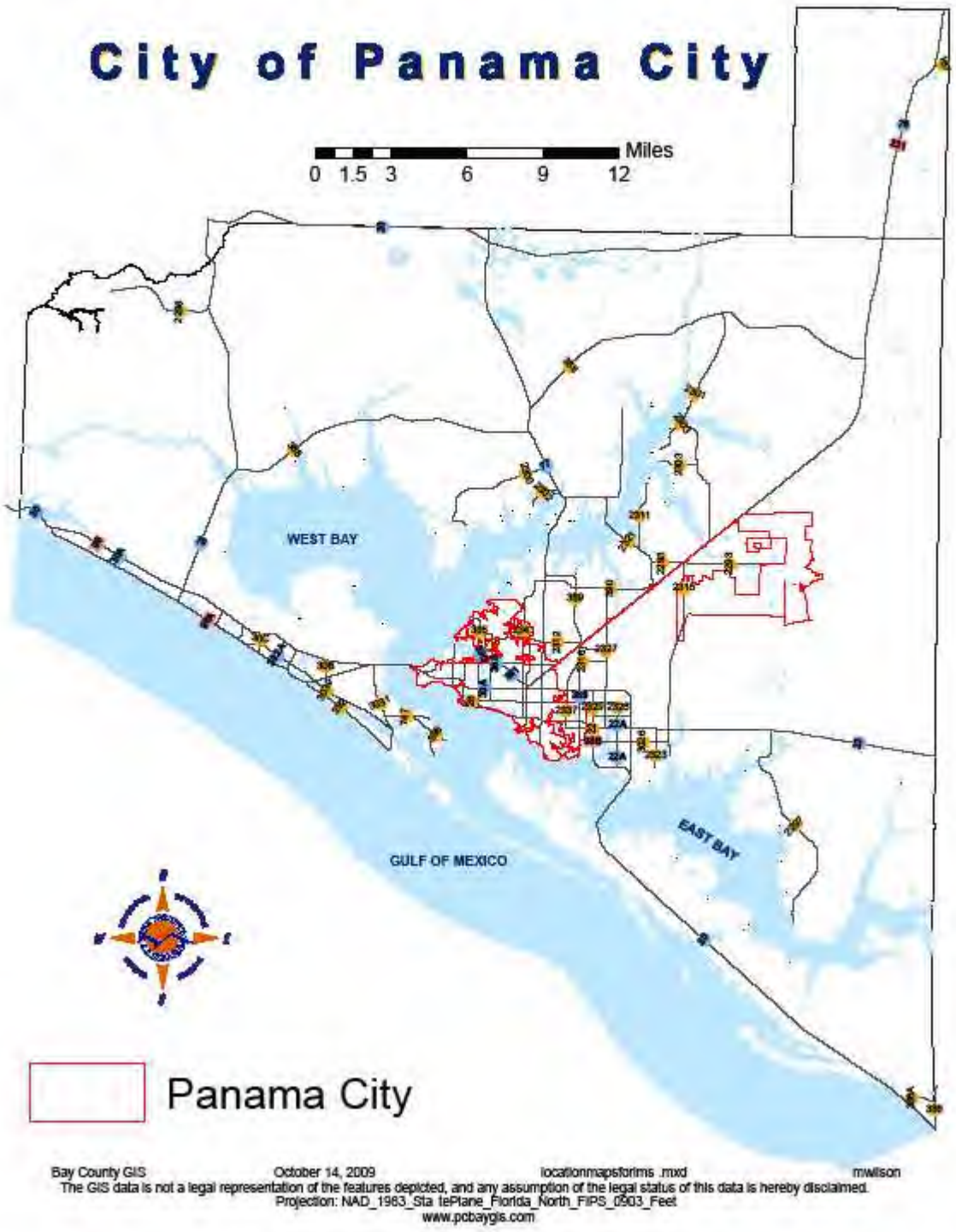
CITY OF MEXICO BEACH, FLORIDA

William A. Cathey, Mayor

ATTEST:

Deborah A. McLeod, City Clerk

Map 7E


City of Panama City
Miles
0 1.5 3 6 9 12
WEST BAY
EAST BAY
GULF OF MEXICO
Panama City
Bay County GIS
October 14, 2009
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7E. The City of Panama City

7E1 Introduction

The City of Panama City is located in the Florida "panhandle" on St. Andrew Bay approximately 170 miles east of Mobile, Alabama, 95 miles east of Pensacola, Florida and 100 miles southwest of Tallahassee, Florida. Positioned with an extensive coastline, St. Andrew Bay surrounds much of Panama City and provides a protected harbor for facilities at the growing Panama City port complex. The City-owned Panama City Marina and St. Andrews Marina, located on Florida's Intercoastal Waterway, provide excellent docking service for vessels up to 130 ft. in length. Panama City covers a total land area of 15,983 acres and contains roughly 16,927 parcels.

Native Americans were the first inhabitants of the Panama City area until the 1830s when settlers from Georgia and Alabama began to build summer cabins along the shoreline, approximately a mile west of present day Panama City. General Andrew Jackson was the first to survey St. Andrews Bay, and many of his soldiers and officers returned to settle the area when it opened for settlement in 1821. Old Town, St. Andrews, was then established and stretched along the bay in the present day Frankford Avenue area east to the Old Town Bayou, now known as Lake Caroline. The city began with three homesteads. One was secured by S.L. Slade and was located around the present courthouse site and was platted as Floropolis. J.R. Irwin's homestead included the Harrison Avenue land. It was sold to George Jenks and platted in 1888 as Park Resort. The town name was later changed to Harrison after our 9th president, President William H. Harrison. The third homestead, west of Harrison Avenue around the Bay Line Depot, belonged to G. B. Thompson. The unsold land in each of the homesteads was purchased by G. M. West of Chicago, Illinois in 1905. Since a line between Chicago, Illinois and the Panama Canal passes through Panama City, Harrison was renamed Panama City. The Town of Panama City was incorporated in 1909, by a Special Act of the Legislature. On March 12, 1926 the City of Panama City became a chartered city when it merged with the Town of Millville and the Town of St. Andrews. The Florida Land Boom of the 1920s brought more expansion and major growth came during World War II when Tyndall Air Field was established and Wainwright Shipyard built Liberty Ships.

Major land uses in Panama City include commercial, government, high density residential, and single family residential. Among these land uses, single family residences are the majority, occupying 67% of all parcels and nearly 15% of the total acreage in Panama City. Commercial land uses make up over 9% of all parcels in the City.

Although only 6% of Panama City's parcels are located within a Coastal High Hazard Area (CHHA), it contains 707 single family residences, 51 government land uses, and 35 commercial properties.

Given that Panama City South is geographically situated along the bays, the threats and vulnerabilities are similar to those of the unincorporated areas of Bay County, with flooding, particularly from storm surge, the most significant threat.

Many portions of Panama City are within various categories of flood zones. The most significantly vulnerable land uses in these flood zones are commercial, governmental, high

density residential, and single family residential. Over 67% of the City's high density residential and 14% of its single family residential are located in Flood Zone AE. More than 9% of Panama City's commercial parcels are located in Flood Zone A and an additional 17% are located in Flood Zone AE. Approximately 35% of the City's governmental land uses are also located in Flood Zone AE.

Storm surge events are a significant threat to Panama City. In the event of a category 1 storm surge, 700 of the City's single family residences may be affected. Lesser, but still significant, impacts to Panama City during a category 1 storm surge may be to high density residential, commercial, industrial, and governmental land uses. Increases in storm surge severity significantly increase the risks to all land uses in Panama City. The drainage projects on the following chart have been approved implementation in 2010 to mitigate the impacts of flooding.

7E2. Panama City: Review and Incorporation of Existing Plans, Studies, Reports and Technical Information:

7E2(a) To further the goals of minimizing damage from the hazard events that threaten Panama City, the Comprehensive Plan has adopted the following objectives and policies which are grouped into 2 hazard areas: flood mitigation and general other/ combined hazard mitigation:

Flood hazard mitigation

FUTURE LAND USE ELEMENT

GOAL: PROVIDE THE FISCAL AND REGULATORY CONDITIONS NECESSARY TO PROTECT THE HEALTH, WELFARE, SAFETY AND QUALITY OF LIFE OF CITY CITIZENS CONSISTENT WITH CONTINUED ECONOMIC DEVELOPMENT AND PRIVATE PROPERTY RIGHTS AND; ESTABLISH A DEFINED PATTERN OF LAND USE INTENDED TO GUIDE THE PROVISION OF PUBLIC FACILITIES AND PROVIDE PREDICTABILITY IN MANAGING DEVELOPMENT.

2. Residential Low-Density (RLD)

(a) Intent - This district is intended to provide areas for the preservation or development of low-density neighborhoods consisting of single-family dwelling units on individual lots.

(b) Density - No more than five dwelling units per acre.

(c) Intensity - No more than 40% lot coverage as determined by dividing the impervious areas by the gross area of the site or lot. not intended to prohibit or preclude development activity but rather provide an indicator that environmental features may be present which require special permits or special construction practices. Protection measures are specified in Policies 1.1.4, 5.1.3 and 6.6.2. Adopted Conservation Special Treatment Zones are shown on map inserts 1, 2 and 3.

2. Residential Low-Density (RLD)

Objective 1.2: The City has adopted land development regulations which contain specific provisions for implementation of this Plan. Such regulations will contain innovative land use management provisions such as for mixed use areas and planned unit developments.

Policy 1.2.1: The City will administer land development regulations for implementation of the Comprehensive Plan. At a minimum these regulations will:
4. Regulate areas subject to seasonal and periodic flooding and provide for drainage and stormwater management through provision of or reference to specific and detailed requirements which will include, but not be limited to, standards for construction in designated flood-prone areas, standards for design of drainage and stormwater management facilities, measures to protect drainageways and drainage conveyance systems, and other such relevant requirements;

Objective 1.5: Coordinate coastal area population densities with adequate capability for hurricane evacuation. Adequate capability will be maintaining existing evacuation times and maintaining level of service standards on roadways as specified in the Traffic Circulation Element of this Plan and as specified in the Bay County Peacetime Emergency Plan.

Policy 1.5.1: The City will limit the density of dwelling units in the coastal area so as not to exceed hurricane evacuation capabilities within the City's jurisdiction. This will be accomplished as part of the development review process.

Policy 1.5.2: The City will prohibit the location of hospitals, nursing homes, convalescent homes or other similar high-density institutions in the hurricane evacuation zone.

Objective 1.12: Require that all proposed development/redevelopment activities are designed and constructed in conformance with detailed and specific standards to be established in the land development regulations, and as specified in Policy 6.6.2 of this Plan.

Policy 1.12.1: The City will maintain an ongoing program of stormwater management, including both regulation and capital improvements. Stormwater regulations will rely largely upon existing laws and rules for permitting criteria.

Policy 1.12.2: The City will coordinate with Bay County and adjacent municipalities to establish a basin-wide, inter-jurisdictional approach to stormwater management.

Policy 1.12.3: The City will carefully evaluate all proposed development/redevelopment activities located in the Conservation areas designated on the Future Land Use Map for potential impacts on flooding, drainage or damage to natural resources.

Policy 1.12.4: The City will maintain buffers and building setbacks for areas adjacent to drainageways as part of its land development regulations.

COASTAL ELEMENT
GOAL: MAINTAIN THE QUALITY OF COASTAL RESOURCES BY RESTRICTING DEVELOPMENT ACTIVITIES WHICH DAMAGE OR DESTROY COASTAL RESOURCES.

Objective 5.1: The City will maintain regulatory or management techniques intended to protect coastal wetlands, living marine resources and wildlife habitat.

Policy 5.1.1: Development activities which have the potential to damage or destroy coastal resources are considered to be: 1) dredge and fill operations in wetlands or seagrass beds; 2) construction of piers, docks, wharves or other similar structures which extend into the water from

the shoreline; 3) removal of shoreline vegetation; and, 4) discharge of non-point source pollutants into estuaries.

Policy 5.1.3: The City will limit specific and cumulative impacts upon coastal wetlands, water quality, wildlife habitat and living marine resources using the following regulatory and management techniques:
1. Protection of identified wetlands as specified in Policy 6.2.2,2 of this Plan.
2. Reserve approval of development permits until all applicable permits are obtained by developers from jurisdictional agencies.
3. Prohibit construction of docks, piers, wharves or similar structures for areas under City jurisdiction, unless otherwise specifically approved by the City Commission.
4. Coordinate with DEP to restrict construction activities which would permanently damage seagrass beds, oyster reefs or other living marine resources, unless appropriate mitigation measures are undertaken.
5. Establish a 30 foot estuarine set-back line provision in the land development regulations, including restrictions on the removal of shoreline vegetation.

Objective 5.4: The City will maintain measures in its land development regulations providing standards which protect beach systems from the impacts of man-made structures.

Policy 5.4.1: The City will provide specific and detailed provisions for protection of beach systems in its land development regulations. Such provisions will include setbacks from the shoreline for non-waterdependent structures, required construction practices, and coordination of permitting with appropriate jurisdictional agencies.

Policy 5.5.4: The City will direct population concentrations away from known Coastal High Hazard Areas (as defined in this element) through the Future Land Use Map by not increasing densities within the CHHA, unless appropriate mitigation measures are undertaken as described in § 163.3178, F.S. (2009). Such mitigation measures shall include, without limitation, payment of money, contribution of land, and construction of hurricane shelters and transportation facilities. Required mitigation shall not exceed the amount required for a developer to accommodate impacts reasonable attributable to development. The City and the developer shall enter into a binding agreement to memorialize the mitigation plan.

Policy 5.5.5: New structures, other that recreational amenities or water-dependent structures, are prohibited within the portion of the CHHA lying within the FEMA V Zone.

Policy 5.5.6: In the case of destruction by a hurricane, redevelopment shall be allowed to occur at preexisting densities to prevent impairments of the property rights of current residents.

Objective 5.6: Maintain procedures which will reduce the exposure of human life, and public and private property to hurricane-related hazards.

Policy 5.5.1: The City will coordinate with and assist Bay County in the implementation of the Comprehensive Emergency Management Plan, the Local Mitigation Strategy, and the Post Disaster Redevelopment Plan by providing police and fire department support personnel during emergencies.

Policy 5.6.1: All habitable structures will be designed and constructed in conformance with the City's Flood Damage Prevention Ordinance.

Policy 5.6.2: The City will not locate infrastructure facilities, except for water-dependent facilities and distribution / transmission lines, in the 100-year flood zone, or the Coastal High Hazard Area.

Policy 5.6.3: Post-disaster redevelopment will be undertaken in conformance with the City's Flood Damage Prevention Ordinance and this Plan, including attendant land development regulations.

Policy 5.6.4: When undertaking post-disaster redevelopment activities development permits may be waived for short-term recovery measures such as:
1. Damage assessment to meet post-disaster assistance requirements;
2. Removal of debris;
3. Emergency repairs to streets, water, electricity or other associated utilities to restore service;
4. Public assistance including temporary shelter or housing.

Policy 5.6.5: Long-term redevelopment activities will require approval of development permits and be consistent with this Plan. These activities include:
1. Repair or restoration of private residential or commercial structures with damage in excess of 50% of market value;
2. Repair or restoration of docks, seawalls, groins, or other similar structures;
3. Non-emergency repairs to bridges, highways, streets or public utilities.

Policy 5.6.6: When reviewing permits for post-disaster redevelopment activities
the City will evaluate hazard mitigation measures including:
1. Relocation of structures;
2. Removal of structures;
3. Structural modification of buildings to reduce the risk of future damage. City of Panama City Coastal Management Element March 2008

Policy 5.6.7: The City will use specific regulatory and management techniques for general hazard mitigation including:
1. Regulation of construction practices in flood-prone areas as specified in the City's Flood Damage Prevention Ordinance;
2. Providing specific and detailed standards in the land development regulations for shoreline construction including provisions for building setbacks, removal of vegetation, and construction seaward of the mean highwater line;
3. Use of the stormwater pollution abatement standards found in Chapter 17-25, FAC;
4. Location of sewer facilities outside of Coastal High Hazard Areas, floodprone
areas or floodproofing of such facilities to prevent flood damage in accordance with FEMA construction standards; and
5. Limiting residential densities within the Coastal High Hazard Area (CHHA). The Coastal High Hazard Area shall be those areas identified within the Category 1 Storm Surge Zone as determined by the most recent SLOSH model.

Policy 5.6.8: The City will incorporate applicable future recommendations of the Local Mitigation Strategy into this Plan. Specific inclusion of recommendations pertaining to zoning, densities and building practices will be undertaken as plan amendments.

Policy 5.6.9: As part of the post-disaster redevelopment process the City will structurally modify or remove infrastructure facilities which have experienced repeated storm damage.

Policy 5.6.10: The Coastal High Hazard Area (CHHA) shall be defined as the seaward area of the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.

Policy 5.6.11: New public emergency shelters shall be built outside of the Hurricane Vulnerability Zone (HVZ).

Objective 5.9: Provide ongoing and effective coordination with the Panama City Port Authority on the orderly development and use of Port Panama City. At a minimum, such coordination will include measures specified in Policy 5.9.1 to resolve problems in transportation, land use, natural and man-made hazards, and protection of natural resources.

Policy 5.9.1: The City will use the following measures to coordinate with the Panama City Port Authority on the orderly development and use of Port Panama City:
3. Natural and Man-Made Hazards. The City will require general hazard mitigation at Port Panama City including: enforcement of the provisions found in the Flood Damage Prevention Ordinance; providing specific and detailed provisions for waterfront construction and building set-backs from the shoreline; requiring stormwater permits pursuant to Chapter 17-25, FAC and limiting storage or transfer of hazardous materials on port property.

CONSERVATION ELEMENT
GOAL: PROVIDE THE CIRCUMSTANCES NECESSARY FOR THE CONSERVATION, PROTECTION AND USE OF NATURAL RESOURCES.

Policy 6.6.2: The City will protect and conserve the natural functions of existing soils, wetlands, marine resources, wildlife habitat, flood zones, and estuaries by enforcing the guidelines established in its land development regulations.

1. Soils :All grading, filling, excavation, storage or disposal of soil and earth materials associated with development activities will be undertaken so as to reduce the potential for soil erosion and sedimentation of water bodies or drainageways. Erosion control measures will be required for all such activities.

As part of the development review process required pursuant to Policy 1.2.2 of this Plan, a developer will include an "Erosion and Sediment Control Plan". Such plan will include:
(a) Calculations of maximum runoff based on the 25-year, critical
duration storm event;
(b) A description of, and specifications for, sediment retention devices;
(c) A description of, and specifications for, surface runoff and erosion control devices;
(d) A description of vegetative measures;
(e) A map showing the location of all items listed in (a) through (d) in this paragraph.

A developer may propose the use of any erosion and sediment control techniques provided such techniques represent best management practices, and are certified by a registered professional engineer. Once development activity begins, the developer will maintain in good order all

erosion and sediment control measures specified in the Erosion and Sediment Control Plan regardless of whether the development project is completed or not.

5. Flood Zones
All development activity undertaken within designated A-zones as shown on the official Flood Insurance Rate Map for Panama City, Florida published by the Federal Emergency Management Agency will be subject to the restrictions and standards of the City's Flood Damage Prevention Ordinance.
Policy 6.6.3: Locally determined environmentally sensitive resources are considered to be: jurisdictional wetlands, seagrass beds, flood zones and habitat for endangered or threatened species. Development activities which destroy these resources will be restricted through use of measures specified in Policy 6.6.2.
Policy 6.6.4: The intent and policy of the City will be to maintain, conserve, protect, enhance and appropriately utilize wetlands within the City, recognizing the rights of individual property owners to use their lands in a reasonable manner as well as the rights of all citizens of the City to the protection of the natural resources of the City, including the natural wetland hydrologic cycles and ecologic systems. The City recognizes an important public interest in wetlands which perform physical and ecological functions, including:
1. Natural storage and conveyance of rainwater.
2. Wetlands vegetation filter sediment, organic matter and chemicals, assimilate nutrients and natural or man-made pollutants.
3. Temporary storage of surface waters during times of flood, regulating flood elevations and timing, velocity and rate of flood discharges.
4. Temporary storage of floodwaters reduces erosion and facilitates settling of suspended sediment, filtering and detaining sediment to prevent pollution of lakes, streams, and estuaries.
5. When adjacent to lakes, rivers, and estuaries, wetlands prevent erosion and provide habitat and spawning ground for fish and shellfish.
6. Depending on their condition and functional value, isolated wetlands provide important wildlife habitat.
7. Recreational areas for activities including fishing, hunting, camping, photography, boating, and nature observation.

Policy 6.6.5: Wetlands in the City, including those which are designated on the future land use map series, and those that are part of the conservation special treatment zone will be subject to the following protection measures. The identification of any wetlands on the future land use map and conservation zone are presumptive only and must be specifically identified and delineated as set forth below. Wetlands will be designated for appropriate low impact land uses which will insure the protection of functionally valuable wetlands and to integrate them into the natural stormwater system and the master stormwater management plan for the watershed.

General Other/Combined Hazards

GOAL: REDUCE THE RISK OF HURRICANE RELATED DAMAGE TO LIFE AND PROPERTY.
Objective 5.5: Maintain or reduce hurricane evacuation times as established in the Northwest Florida Hurricane Evacuation Restudy.

Policy 5.5.1: The City will use its land development regulations to prohibit the location of hospitals, nursing homes, mobile homes and other similar structures and high risk uses in the 100-year flood zone and the Coastal High Hazard Area (CHHA). The CHHA is the area below the elevation of the Category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.

Policy 5.5.2: The City will identify and maintain a list of elderly, handicapped or infirmed persons that might require special evacuation assistance.

Policy 5.5.3: The level of service for out-of-county hurricane evacuation for a category 5 storm event, as measured on the Saffir-Simpson Scale, shall not exceed sixteen (16) hours for land use map amendments located within the Coastal High Hazard Area (CHHA), unless the increase in density is mitigated pursuant to Policy 5.5.4.

7E2 (b) STORMWATER MANAGEMENT SUB-ELEMENT (The Panama City Stormwater Management Plan is under revision in 2009)

(1) Stormwater Management Plan - Current Status

Stormwater management planning is an on-going priority for the City. In 1980, a plan entitled City of Panama City, Florida Master Drainage Plan was developed. In 1987 the City requested assistance from the Northwest Florida Water Management District to help outline a comprehensive stormwater management program that would serve to update the City's Master Drainage Plan. A document was created presenting a plan of study for the development of a Comprehensive Stormwater Management Plan for the City of Panama City. The plan was intended to provide cost-effective solutions to current and anticipated stormwater problems in the City, addressing both flooding and environmental concerns. The plan was reviewed but not implemented. A current, updated Stormwater Management Plan is being developed by the City. Modeling projects are underway to identify specific needs in three drainage basins:

Posten Bayou, Lake Huntington, and Lake Caroline. The Lake Caroline project is being handled by City staff; the other two have been contracted out for a cost of $146,000. A fourth drainage basin, Robinson Bayou, is budgeted for study next year. This is anticipated to be a joint City/County effort with $140,000 budgeted in the City's General Fund. Following the computer modeling effort, capital projects will be scheduled to address identified needs.

(2) Current Conditions

The following description of existing facilities was taken from the "Master Drainage Plan". Assessments of existing conditions were based upon a 20-year, 24-hour rainfall event. The study area for the development of the Master Drainage Plan comprises approximately 15,760 acres; incorporating the 201 Planning Area and contiguous lands. The study area is predominately urbanized within the city limits with a significant portion of undeveloped land outside. The topography is generally flat except along the shorelines of the bays and numerous adjacent lakes and bayous. Elevation range from sea level to 40 feet above sea level with a large portion of the area above 30 feet in elevation. Precipitation varies throughout the year with maximum rainfall amounts occurring in the summer months, July through September. This time period, accounting for approximately 40 per cent of the average annual rainfall, is subject to severe thunderstorm and hurricane hazards.

Existing Drainage Features

Surface water runoff within the Panama City study area makes its way to St. Andrews Bay or North Bay by combinations of overland flow and flows through storm sewer and open ditch systems. The major drainage systems identified in this report outlet into one of the ten lakes and bayous adjacent to the bays: Goose Bayou, Robinson Bayou, Pretty Bayou, Posten Bayou, Lake Huntington, Lake Ware, Lake Caroline, Johnson Bayou, Massalina Bayou and Watson Bayou. Existing drainage in Panama City is hampered, in general, by the natural features of poorly drained soils and flat topography enhanced by open ditches with inadequate capacity and inadequate or non-existent maintenance easements, antiquated storm sewer systems, continued development of natural water storage areas, erosion, and the like.

The 10 identified drainage basins within the City are described below.

1. Goose Bayou: Goose Bayou outlets directly to North Bay. The watershed is approximately 2,500 acres of developed and undeveloped land. The primary conveyance system in this watershed is an 14,000-foot open ditch network extending northwesterly from SR 77 to Goose Bayou. Portions of the open ditch are included in the Bay County Mosquito Control District (BCMCD). The BCMCD ditches are generally quite old, 15 to 20 years, with diminished capacity due to erosion, maintenance restrictions due to limited or non-existent easements and increased development.

Existing Assessment: The Goose Bayou watershed lies within the Bay County and Panama City jurisdictions. Approximately $4.6 million (1999 dollars) of improvements have been identified for this watershed.

2. Robinson Bayou

The major trunkline outfall consists of a 28,000-foot open ditch network extending northwesterly from U.S. Highway 231, southeast of the Panama City Mall, to Robinson Bayou. The network consists of a 15,600-foot main ditch with three major tributaries and associated road crossing structures. A portion of the main ditch is effectively controlled as pond system near the downstream terminus at Airport Road. The watershed is approximately 2,267 acres of varies residential, commercial and undeveloped lands. Most of the lower reaches of the watershed (below Stanford Avenue) are outside City limits. Solutions to existing problems within this watershed and to future development impacts will require a coordinated and cooperative effort between the City of Panama City and Bay County.

Existing Assessment: The primary impact of the 20-year frequency event on the Robinson Bayou watershed is seen in the extensive flood storage areas occurring in the upper reaches of the watershed (in the vicinity and upstream of 23rd Street) . Much of this storage occurs in low-lying areas that are currently undeveloped and the impact is not readily apparent. Areas where the impact is observed, in terms of street and residential/ commercial site flooding, occur along reaches between Lisenby Avenue and 23rd Street, along 19th Street near Northside Drive and near Jenks Avenue, and along SR 77 in the vicinity of the Panama City Mall. Most of the City's remaining wetlands are located in this watershed. Approximately $6.7 million (1999 dollars) of improvements have been identified for this watershed.

3. Pretty Bayou

Pretty Bayou outlets directly to North Bay. The Bayou has a number of "canal" extensions, the southern-most controlled by a small dam with an overflow spillway. The watershed is approximately 600 acres of predominately residential land. Three primary conveyance systems are located in this watershed. The first is a natural ponding area regulating flows from south of

23rd Street north through SR 390 to the southern-most extension of Pretty Bayou. The second system consists of a 1,500-foot open ditch with associated road crossing structures extending northerly from 23rd Street, west of its intersection with SR 390, to the southern-most extension of Pretty Bayou. The third system consists of a 3,200-foot open ditch with associated road crossing structures extending northerly from 23rd Street to a position parallel to Michigan Avenue thence to Pretty Bayou. The connection to Pretty Bayou is below the aforementioned dam. Existing Assessment: The primary impact of the 20-year frequency event for the Pretty Bayou watershed is seen in the extensive flooding occurring along Michigan Avenue and in the residential subdivisions south of 23rd Street between Michigan and Frankford Avenues. Generally, the flooding is a result of insufficient conveyance capacity. Approximately $1.5 million (1999 dollars) of improvements have been identified in this watershed.

4. Posten Bayou

Posten Bayou outlets directly to North Bay. The watershed is approximately 1050 acres of residential and industrial-commercial development. The primary conveyance system to be evaluated in this watershed is a 7,100-foot open ditch which parallels the north embankment of the Atlanta and St. Andrews Bay Railroad linkage to Port Panama city. Several tributary inflows from culverts under the railroad and from residential subdivisions on the north contribute to the discharge of flows at Mound Avenue to Posten Bayou. Portions of this ditch are included in the BCMCD.

Existing Assessment: The primary impact of the 20-year frequency event on the Posten Bayou watershed is seen in the undeveloped areas east of Frankford Avenue, within the Meadowbrook and College Village residential subdivisions, and in the Hayes Park area along 19th Street. Flooding is a function of limited conveyance capacity within the outfall ditch and its associated structures. Approximately $3 million (1999 dollars) of improvements have been identified in this watershed.

5. Lake Huntington

Lake Huntington outlets through a 30 to 50-foot channel under 15th Street to St. Andrews Bay. The watershed is approximately 200 acres of predominately residential, with some commercial, development. The primary conveyance system to be evaluated in this watershed is a combination open ditch and storm sewer network extending southwesterly from the vicinity of 17th Street. The network consists of some 650 feet of poorly defined open ditch connecting approximately 200 feet of pipe between Drake Avenue and 17th Street with over 600 feet of pipe between Chestnut Avenue, U.S. Highway 98 and Lake Huntington. Storm sewer tributaries serving portions of U.S. Highway 98 and local streets outlet to the lower pipe system. No improvements have been identified in this watershed.

6. Lake Ware

Lake Ware outlets through a 42-inch concrete pipe under Beck Avenue to St. Andrews Bay. The watershed is approximately 175 acres of older residential areas with some undeveloped parcels. The primary conveyance system to be evaluated in this watershed consists of the 7-acre Lake Ware, the adjacent ponding area between Drake Avenue and Hickory Avenue and the associated road crossing and control structures. In addition to direct surface flows, tributary inflows occur from poorly defined open ditches above Hickory Avenue and from Beck Avenue storm sewers. No improvements have been identified in this watershed.

7. Lake Caroline

Lake Caroline outlets through a 10-foot channel under Beach Drive to St. Andrews Bay. Structures under 10th and 11th Streets serve to divide the lake into three sections. The watershed is approximately 560 acres of residential and commercial-industrial development. The primary conveyance system in this watershed is a 2,360-foot open ditch network extending southerly from 15th Street (U.S. Highway 98) to the upper section of Lake Caroline.

Existing Assessment: The primary impact of the 20-year frequency event for the Lake Caroline watershed is seen in flooding of the three lake sections and in areas upstream (north) of 15th Street (U.S. 98). Flood storage occurs in the low-lying, undeveloped area bounded by Lisenby Avenue, 17th Street and the railroad. Approximately $1.8 million (1999 dollars) have been identified for this watershed.

8. Johnson Bayou

Johnson Bayou outlets through a 10-foot channel under Beach Drive to St. Andrews Bay. The watershed is approximately 518 acres of predominately commercial-industrial development. The primary conveyance system to be evaluated in this watershed is a 2,300-foot open ditch extending southerly from the Atlanta and St. Andrews Bay Railroad linkage to Port Panama City through the pond located in Bay Memorial Park to Johnson Bayou. The pond also receives tributary inflow from residential and railroad industrial areas to the east.

Existing Assessment: The primary impact of the 20-year frequency event in the Johnson Bayou watershed is seen in the extensive flooding of the predominately commercial area lying between 15th Street (U.S. 98) and the railroad, and in the residential area south of Bay Memorial Park (Skyland Avenue and Garden Club Drive) . Both situations are the result of insufficient conveyance capacity out of the immediate area. Approximately $2.8 million (1999 dollars) of improvements have been identified in this watershed.

9. Massalina Bayou

Massalina Bayou outlets directly to St. Andrews Bay. The watershed is approximately 625 acres of commercial and older residential development. The primary conveyance system to be evaluated in this watershed is a 3,000 foot open ditch network extending south from 9th Street through the above-mentioned tract to the Bayou at 6th Street.

Existing Assessment: The primary impact of the 20-year frequency event on the Massalina Bayou watershed is seen in flooding along 9th Street; in particular the vicinity of the 9th Street/McKenzie Avenue intersection to Magnolia Avenue. Approximately $1.6 million (1999 dollars) of improvements have been identified for this watershed.

10. Watson Bayou

Watson Bayou outlets directly to St. Andrews Bay. It is the largest bayou in the study area. The watershed is approximately 4,000 acres of residential and commercial-industrial development with much of the upper portions undeveloped. Two primary conveyance systems are to be evaluated in this watershed. The first is a 1,300-foot storm sewer line serving 9th Street from MacArthur Avenue east to the Bayou. The second system is a 19,500-foot open ditch network extending generally south in three major tributaries from the Atlanta and St. Andrews Bay Railroad yards and the Bay Line Railroad Industrial Park area to the Bayou at 11th Street.

Existing Assessment: The primary impact of the 20-year frequency event within the Watson Bayou watershed is reflected in the extensive storage areas occurring in the predominately undeveloped and low-lying upper reaches of the watershed. Most of this area is outside City limits. Areas impacted with flooding of roads, commercial/industrial sites and residential home sites include Palo Alto Avenue between 14th and 15th Streets, 11th Street east of Sherman Avenue, and portions of the industrial complex within the Atlanta and St. Andrews Bay Railroad Yard. Approximately $1.5 million (1999 dollars) of improvements have been identified for this watershed, most of which is in the County jurisdiction.

Level of Service

The adopted stormwater level of service for Panama City is:

a. Water Quantity

For flood attenuation and drainage control the City will use the 25-year, critical duration storm event. The critical duration storm event is defined as a specific storm event which creates the largest volume or highest rate of net stormwater runoff for typical durations up through and including the 10-day duration event.

b. Water Quality

Stormwater facilities will provide retention, or detention with filtration, of runoff from the first one inch of rainfall; or, for development with drainage areas of less than 100 acres, facilities which provide for the retention, or detention with filtration, of the first one-half inch of runoff or provide for the treatment of stormwater runoff which will not degrade surface waters below pre-development levels of quality, whichever is greater.

c. The requirements of paragraphs a. and b. will not apply to the development of single-family through quadruplex residential dwellings when all of the following conditions are met:

i. Such residential dwellings are not part of a larger, common plan of development approved after the effective date of this Plan;

ii. Such residential dwellings are to be developed in an existing, established residential area or a subdivision duly recorded prior to the effective date of this Plan;

iii. The proposed development will not contribute pollutants which will cause runoff from the immediate drainage area to degrade the water quality of receiving waters below existing conditions, and;

iv. The proposed development will not increase the potential for flooding.

Regulations and Programs

State:

Chapter 17-25, Florida Administrative Code: "Regulation of Discharge"; Department of Environmental Protection (DEP). Permits are required for stormwater discharge (drainage) facilities that discharge into the waters of the state, including wetlands. The objective of this rule is to obtain 80-95% removal of pollutants before discharge to receiving waters. Rule requirements involve treatment of the first inch of runoff for sites greater than 100 acres in size and the first one-half inch of runoff for sites 100 acres or less. Exemptions to the permit requirements are provided for: 1) facilities serving individual sites for single-family, duplex, triplex or quadruplex units; 2) facilities serving dwelling unit sites which are less than ten acres in total land area, have less than two acres of impervious area, and which comply with local stormwater management regulations or discharge to a permitted regional facility; and, 3) facilities for agriculture or silvacultural lands which have approved management plans.

Chapter 14-86, Florida Administrative Code: .Drainage Connections; Florida Department of Transportation (FDOT). The purpose of this rule is to "ensure safe conditions and the integrity of the Department's (DOT) transportation facilities and to prevent an unreasonable burden on lower properties by providing standards and procedures for drainage connections from the properties adjacent to the Department's right-of-way". Permits are required from DOT for drainage

structures that connect with or drain into DOT drainage facilities. Exceptions are provided for in the rule. Chapter 373, Florida Statutes; Northwest Florida Water Management District. The governing boards of the Water Management Districts exercise broad statutory powers under Chapter 373, Florida Statues in regard to water resources of the state. Chapter 17-12, Florida Administrative Code: "Dredge and Fill Activities"; Department of Environmental Protection. Requires permit approval by DEP for dredging and filling in areas determined to be under state jurisdiction. In order to obtain a dredge and fill permit, the applicant must provide reasonable assurance that state water quality standards will not be violated and the proposed project will not be contrary to public interest Within Outstanding Florida Waters, the project must be clearly in the public interest. In making the public interest determination, DEP must "consider and balance" such factors as the public health, safety, and welfare, the conservation of fish and wildlife, erosion and schooling, fishing and other recreational values, and the current condition and relative value of the affected area. The department must also consider measures proposed by the applicant which would mitigate the adverse effects of the project.

Local:

Panama City - City Ordinance 1755 entitled .Land Development Regulations (LDR), City of Panama City, Florida. includes provisions for stormwater management as part of its .General Development Standards.. The regulations require developers to submit a stormwater and erosion control plan that demonstrates that stormwater will be managed consistent to the adopted level of service standards within the Comprehensive Plan. The regulations specifically addressed pollution control, flood control, and erosion and siltation control. Provisions are also included with regard to adherence to, and maintenance of, stormwater and erosion control plans.

Bay County - County Ordinance 86-05 entitled "Land Subdivision Regulations of Bay County, Florida" includes provisions for drainage of subdivided developments. The ordinance includes provisions for drainage of subdivided developments. The ordinance requires that preliminary plans include:

(1) "an overall topographical map showing one foot contours based on National Geodetic Vertical Datum of the land to be subdivided together with an estimate of the number of upland acres contributing runoff water to the land under consideration and the points of entry of such upland runoff water," and;

(2) a drainage plan showing any proposed or existing storm sewers, culverts, drainage canals, bridges, easements for drainage and final disposal of drainage collected within the land to be subdivided, and location of outfall ditch right-of -way." Drainage plans are to be based on the rainfall intensity, duration, and frequency curves from the Florida Department of Transportation "Drainage Manual" (Ch. 14-86, FAC) using the 25-year frequency. Specifications are also given for width of drainage easements and composition of stormwater culverts. Proof that all necessary governmental approvals have been obtained is required to be submitted by the developer with the final plat.

Impacts on Natural Resources

The City storm sewer and drainage system, as well as the FDOT drainage system, discharges into local estuaries. The extent of pollution caused by these discharges has not been researched in any degree of detail. It is known that stormwater discharges do cause sedimentation in local bayous and bays and it can be assumed that other pollutants are entering surface waters. The City can abate increased stormwater pollution by application of standards found in Chapter 17-25, FAC and through improvements to its existing drainage system. The City should also become involved with Bay County in the preparation of a county-wide drainage study which should focus on both the qualitative and quantitative aspects of stormwater management.

Needs Assessment

Drainage and localized flooding have been recurring problems for the City. The 1980 "Master Drainage Plan" identified a program of improvements which was based upon storage of stormwater in currently undeveloped areas and upgrade of the existing drainage system. A successful drainage or stormwater management program for the City must be predicated upon two essential components: 1) a strong stormwater control ordinance to address potential problems from future development, and; 2) improvement of existing drainage facilities to remedy current problems. The City is currently in the process of updating the 1980 "Master Drainage Plan". This should result in a program of capital improvements which can be implemented over the next several years. Upon completion, this update will be included in this plan sub-element and the capital improvement element.

7E2(c) Panama City Approved Priority CIP Stormwater/Flood Mitigation Projects - 2010

Chart 24

Priority	Project Area	Survey Date	Prelim Design	Permitting	Final Design
1	Utility Yard Pavement (add stormwater pond)	08/28/09	10/01/09	10/15/09	11/15/09
2	12th St.@ Harmon St	09/15/09	11/15/09	02/01/10	04/01/10
3	Beck @ 19th St	10/15/09	11/01/09	NA	11/15/09
4	13th St @ Buena Vista	NA	12/01/09	02/01/10	03/01/10
5	1500 Oak St	11/15/09	12/15/09	02/01/10	02/15/10
6	300 College Ave.	12/01/09	01/01/10	02/15/10	03/01/10
7	17th St.@ Wilmont to Drake Ave	12/15/09	01/15/10	03/01/10	03/15/10
8	3rd & Davis	01/15/10	02/15/10	04/01/10	04/15/10
9	10th St @ Church Ave to East Ave	02/01/10	03/01/10	04/15/10	05/01/10
10	Bakers Ct to Lake Caroline	02/15/10	03/15/10	05/01/10	05/15/10
11	PC Housing/Apts @ 11th	NA	12/01/09	03/01/10	04/01/10
12	Jenks @ 14th St.	03/01/10	04/01/10	06/01/10	08/01/10

7E2(d) Panama City Floodplain Management Ordinance (Revisions)

Chapter 9 DRAINAGE AND FLOOD DAMAGE PREVENTION*

*State law references: Municipal Home Rule Powers Act, ES. ch. *166;* and water management generally, F.S. ch. 298.

Article . In General
Sec. 9-1. State law to take precedence where standards more restrictive.
Sec. 9-2. Obstructing natural drainways.
Secs. 9-3-.9-22. Reserved.
Article II. Flood Hazard Areas
Division 1. Generally

ARTICLE I. IN GENERAL

Sec. 9.1. State law to take precedence where standards more restrictive.

All statutes and regulations which impose more restrictive drainage and flood control standards shall take precedence over the minimum standards set forth under this Code.

Sec. 9-2. Obstructing natural drainways.

(a) The term “natural drainway” as herein used is defined as any ditch, depression, channel or watercourse located in, upon or across any land or area through or across which surface waters naturally drain or flow from one tract of land to another.

(b) It shall be unlawful for any person to cause pipe to be laid in, to block, stop or otherwise impede, or to cause to be blocked, stopped or otherwise impeded, normal flow of through or across any drainway for surface water within the city, without the written permission of the city manager.

(c) The blocking, stopping or otherwise impeding of the normal flow of water through or across any natural drainway for surface waters within the city Is hereby declared to be a public nuisance.

(d) Any person violating any of the provisions of this section shall, upon conviction, be punished as provided in section 1-8 of this Code. All officers of any corporation violating any provision of this section shall be subject to the same penalty or penalties imposed upon persons violating the provisions hereof. The members of any firm violating any of the provisions of this section shall likewise be subject to the same penalty imposed upon persons violating the provisions hereof.

Secs. 9-3--9-22. Reserved.

ARTICLE II. FLOOD HAZARD AREAS

Division 1. GENERALLY

Sec. 9-23. Definitions.

Unless specifically defined in this section, the words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application:

Appeal shall mean a request for a review of the city's interpretation of any provision of this article or a request for a variance.

Area *of special flood hazard* mean: the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. This term is also referred to as the SFHA.

Base flood shall mean the flood having a one percent chance of being equaled or exceeded in any given year.

Breakaway walls shall mean any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other suitable building material which are not part of the structural support of the building and which are so designed as to break away, under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are used or any buildings to which they might be carried by the floodwaters.

Coastal high hazard area shall mean the area subject to high velocity waters, including but not limited to hurricane wave wash. The area is designated on a FIRM as Zone V1-30.

Development shall mean man made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations. or storage of equipment and materials.

Flood or *flooding* mean a general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters.

(2) The unusual and rapid accumulation of runoff or surface waters from any source.

Flood insurance rate map (FIRM) shall mean an official map of a community, on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood insurance study shall mean the official report provided by the Federal insurance Administration. The report contains flood profiles, as well as the flood hazard boundary-floodway map and the water surface elevation of the base flood.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Highest adjacent grade (HAG) means the highest natural elevation of the ground surface, prior to the start of construction, next to the proposed walls of a structure.

Historic Structure means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register:

(2). Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic or a district preliminarily determined by the Secretary to qualify as a registered historic district:

(3). Individually listed on the Florida inventory of historic places, which has been approved by the Secretary of the Interior; or

(4). Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

a. By the approved Florida program as determined by the Secretary of the Interior, or

b. Directly by the Secretary of the Interior.

Lowest floor shall mean the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable no elevation design requirements of this article.

Manufactured home shall mean a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes, the term ‘‘manufactured home’’ also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days.

For insurance purposes, the term ‘‘manufactured home’’ does not include park trailers, travel trailers and other similar vehicles.

Manufactured home park or subdivision mean a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Mean sea level mean the average height of the sea for all stages of the tide, based on the National Geodetic Vertical Datum.

National Geodetic Vertical Datum (NGVD) of 1929 means a vertical control used as a reference for establishing varying elevations within the floodplain.

New construction shall mean structures for which the “start of construction” commenced on or after the effective date of July 18, 1977. The term also includes any subsequent improvements to such structures. For flood insurance rates, structures for which the start of construction commenced on or after July 18, 1977, and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the first floodplain management code, ordinance or standard.

North American Vertical Datum (NAVD) of 1988 means a vertical control used as a reference for establishing varying elevations within the floodplain.

Principally above ground means that at least 51 percent of the actual cash value of the structure is above ground.

Recreational vehicle (RV) means a vehicle that is:

1. Built on a single chassis;

2. 400 square feet or less when measured at the largest horizontal projection;

3. Designed to be self-propelled or permanently towable by a light duty truck; and

4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Sand dunes shall mean naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act), includes substantial improvement, and shall mean the date the building permit was issued, provided the actual start of construction, repair, reconstruction, replacement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of a slab or footings, the installations of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling: nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Structure shall mean a walled and roofed building, including a gas or liquid storage tank that is principally aboveground, as well as a manufactured home.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. This term also includes “repetitive loss” structures as defined herein.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures that have incurred “substantial damage” regardless of the actual repair work performed. This term does not, however, include any repair or improvement of a structure to correct existing violations of State of Florida or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement official prior to the application for permit for improvement, and which are the minimum necessary to assure safe living conditions. This term does not include any alteration of a historic structure, provided that the alteration will not preclude the structure’s continued designation as a historic structure.

Variance shall mean a grant of relief to a person from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship.

Violation means the failure of a structure or other development to be fully compliant with the requirements of this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance

required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Cross references: Definitions and rules of construction generally, □˜ -2.

Sec. 9-24. Statement of purpose.

It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion, or in flood heights or velocities.

(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.

(3) Control the alteration of natural floodplains. stream channels, and natural and protective barriers, which are involved in the accommodation of floodwaters.

(4) Control filling, grading, dredging and other development which may increase erosion or flood damage.

(5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may Increase flood hazards to other lands.

Sec. 9-25. Objectives.

The objectives of this article are:

(1) To protect human life and health.

(2) To minimize expenditure of public money for costly flood control projects.

(3) To minimize the need for rescue and relief efforts associated with flooding and

generally undertaken at the expense of the general public.

(4) To minimize prolonged business interruptions.

(5) To minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; streets and bridges located in floodplains.

(6) To help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize future flood blight areas.

(7) To ensure that potential home buyers are notified that property is in a flood area.

Sec. 9-26. Scope.

This article shall apply to all areas of special flood hazards within the jurisdiction of the city.

Sec. 9-27, Compliance required.

No structure or land shall be located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable regulations.

Sec. 9-28. Basis for establishing the areas of special flood hazard.

The areas of special flood hazard are identified by the Federal Emergency Management Agency (FEMA) in its flood insurance rate map (FIRM) # 12005CIND0, dated effective September 18, 2002, and any subsequent revisions thereto, which is adopted by reference and declared to be a part of this article.

Sec. 9-29. Interpretation.

In the interpretation and application of this article, all provisions shall be:

(1) Considered as minimum requirements.

(2) Liberally construed in favor of the city commission.

(3) Deemed neither to limit or nor repeal any other powers granted under state statutes.

Sec. 9-30. Conflicts.

This article is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this article and another

conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Sec. 9-31. Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the city or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made pursuant to this article.

Sec. 9-32. Violations.

Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variances and special exceptions, shall constitute an offense. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction, be punished as provided in section 1-8. Nothing contained in this article shall prevent the city from taking such other lawful action as is necessary to prevent or remedy any violation.

DIVISION 2. ADMINISTRATION AND ENFORCEMENT

Sec. 9-53. Local administrator.

(a) The city manager is hereby local administrator to administer and implement the provisions of this article.

(b) The city engineer shall have the responsibility to perform the duties set forth in this section upon the direction of the city manager, and shall, upon performance thereof, report to the city manager his findings or recommendations, where indicated, regarding compliance with the provisions of this article:

(1) Review all development permits to ensure that the permit requirements of this article have been satisfied.

(2) Review permits for proposed development to ensure that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

(3) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new ~~or~~ and substantially improved structures.

(4) Verify and record the actual elevation (in relation to mean sea level) to which the new and substantially improved structures have been floodproofed.

(5) In coastal high hazard areas, certification shall be obtained from a registered professional engineer or architect that the structure is securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash.

(6) In coastal high hazard areas, review plans for the adequacy of breakaway walls in accordance with section 9-85(e)(7).

(7) Obtain certification from a registered professional engineer or architect when floodproofing is utilized for a particular structure. Federal Emergency Management Agency Floodproofing certificate and associated design and operation and maintenance plans.

(8) Make recommendations regarding the location of the boundaries of the area of a special flood hazard, i.e., where there appears to be a conflict between the mapped boundary and actual field conditions for the approval or disapproval of the city manager. Any person affected by the location of the boundary shall be given reasonable opportunity to appeal the interpretation of the boundary as provided in this section.

(9) When base flood elevation data has not been provided in accordance with section 9-28, then the city engineer shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source and recommend to the city manager an appropriate elevation to apply in determining compliance with division 3 of this article.

(10) All records pertaining to the provisions of this article shall be maintained in the office of the department of engineering, and shall be open for public inspection.

Sec. 9-54. Development permit.

(a) A development permit shall be required in conformance with the provisions of this article. In addition to the development permit, a developer shall be required to secure a building permit in accordance with the city's requirements.

(b) An application for a development permit shall be made to the city manager on forms furnished by him. The information and supporting exhibits shall include, but not be limited to, plans in duplicate drawn to scale, showing the nature, location, dimensions and elevations of the area in question: existing or proposed structure; proposed fill; storage of materials: drainage facilities; and the location of the foregoing. Specifically, the following information is required:

(1) Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures.

(2) Elevation in relation to mean sea level to which any nonresidential structure has been floodproofed.

(3) Provide a certificate from a registered professional engineer or architect that the nonresidential floodproofed structure meets the floodproofing criteria in section 9-85.

Sec. 9-55. Variances and appeals.

(a) The city commission shall hear and decide appeals and requests for variances from the requirements of this article.

(b) The city commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made

by the city manager in the enforcement or administration of this article.

(c) Variances may be issued for the reconstruction, rehabilitation or restoration of historic structures listed without regard to the procedures set forth in the remainder of this section., so long as the proposed alterations and improvements do not prelude the structure's continued designation as historic structure.

(d) In passing upon such applications, the city commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this article, and:

(1) The danger that materials may be swept onto other lands to the injury of others.

(2) The danger to life and property due to flooding or erosion damage.

(3) The susceptibility of the proposed facility and its contents to flood damage, and the effect of such damage on the individual owner.

(4) The importance of the services provided by the proposed facility to the community.

(5) The necessity to the facility of a waterfront location, where applicable.

(6) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.

(7) The compatibility of the proposed use with existing and anticipated development.

(8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area.

(9) The safety of access to the property in times of flood for ordinary and emergency vehicles.

(10) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.

(11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

(e) Upon consideration of the factors listed above and the purposes of this article, the city commission may attach such conditions to the granting of

variances as it deems necessary to further the purposes of this article. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the base flood level, provided that items (1) through (11) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

(f) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(g) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(h) Variances shall only be issued upon:

(1) A showing of good and sufficient cause.

(2) A determination that failure to grant the variance would result in exceptional hardship to the applicant.

(3) A determination that the granting of a variance will not result In increased flood heights, additional threats to public safety, extraordinary public expense, creates nuisances, cause any fraud, or conflict with existing local laws or ordinances.

(i) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation in number of feet below base flood elevation specified in such written notice, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(j) The department of engineering shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Administration (FEMA) upon request.

DIV1SION 3. PROVISIONS FOR FLOOD HAZARD

Sec. 9-84. Generally.

In all areas of special flood hazards, the following provisions are required:

(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse and lateral movement the structure.

(2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(3) All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damage.

(4) All and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

(5) New and replacement sanitary sewage systems be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.

(6) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(7) All applicable additional Federal, State of Florida, and local permits shall be obtained and submitted to the Floodplain Administrator along with the application for development permit. Copies of such permits shall be maintained on file with the development permit. State of Florida permits may include, but not be limited to, the following:

a. Northwest Florida Water Management District in accordance with Chapter 373.036 Florida Statutes, Section (2) (a) – Flood Protection and Floodplain Management;

b. Department of Community Affairs: in accordance with Chapter 380.05 F.S. Areas of Critical State Concern, and Chapter 553, Part IV F.S., Florida Building Code;

c. Department of Health: in accordance with Chapter 381.0065 F.S. Onsite Sewage Treatment and Disposal Systems; and

d. Department of Environmental Protection, Coastal Construction Control Line: in accordance with Chapter 161.053 F.S. Coastal Construction and Excavation.

(8) When proposed new construction and substantial improvements are partially located in an area of special flood hazard, the entire structure shall meet the standards for new construction.

(9) When proposed new construction and substantial improvements are located in multiple flood hazard risk zones or in a flood hazard risk zone with multiple base flood elevations, the entire structure shall meet the standards for the most hazardous flood hazard risk zone and the highest base flood elevation.

(10)

Sec. 9-85. Areas where base flood elevation data provided.

(a) *Scope.* all areas of special flood hazards designated as Zone AE, AH, OR A99, where base flood elevation data has been provided, as set forth in section 9-28, or section 9-53(b)(9), the provisions of this section in addition to those of Section 9-84 are required.

(b) *Residential construction.*

(1) Construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

(2) For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: a minimum of two openings having a total net area not less than one square inch for every square foot enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, or other coverings or provided they the automatic entry and exit of floodwaters.

(3) Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities shall be designed or located so as to prevent water from entering or accumulating within the component during conditions of flooding.

(c) *Nonresidential construction.*

(1) New construction or substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base floor elevation, or, together with attendant utility and sanitary facilities, be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or shall certify that the standards of this subsection are satisfied. Such shall be provided to the official as set forth in section 9-54(b)(3).

(2) For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed

the following minimum criteria: a minimum of two openings having a total net area not less than one square inch for every square foot enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, or other coverings or provided they the automatic entry and exit of floodwaters.

(3) Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities shall be designed or located so as to prevent water from entering or accumulating within the component during conditions of flooding.

(d) *Manufactured home* homes shall comply with the following:

(1) No manufactured home shall be placed in a coastal high hazard area, except in an existing manufactured home park or existing manufactured home subdivision.

(2) All manufactured homes to be placed within zone A on a community's FHBM or FIRM shall be installed using methods in practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse and lateral movement or may include, but are not limited to, use of over-the-top or frame ties to anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

(3) All manufactured homes to be placed or substantially improved within zones A1-30, AE, AH, or A99 shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and shall be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection (d)(2) of this section.

(e) Standards for waterways with established Base Flood Elevations and Floodways.

Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the high velocity of flood waters which carry debris, potential projectiles and have significant erosion potential, the following provisions, in addition to those set forth in Article II, Section 9-53 b (1) through (3), shall apply:

(1) Prohibit encroachments, including fill, new construction, substantial improvements and other developments within the regulatory floodway unless certification (with supporting technical data) by a registered professional engineer is provided through hydrologic and hydraulic analyses performed in accordance with standard engineering practice demonstrating that encroachments would not result in any increase in flood levels during occurrence of the base flood discharge.

(2) Development activities including new construction and substantial

improvements within the regulatory floodway that increase the base flood elevation may be allowed, provided that the developer or applicant first applies – with the community's endorsement – for a conditional FIRM revision, and receives the approval of FEMA.

(3) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, within the regulatory floodway, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood in accordance with Article II, Section 9-85 (f) (1).

(~~e~~ f) Coastal high hazard areas (V zones). Located within the areas of special flood hazard established in section 9-28 are areas designated as coastal high hazard areas. These areas have special flood hazards associated with high velocity waters from tidal surge and hurricane wave wash. Therefore, the following provisions shall apply:

(1) All buildings or structures shall be located landward of the reach of the mean high tide.

(2) All buildings or structures shall be elevated so that the lowest supporting member is located no lower than the base flood elevation level, with all space below the lowest supporting member open so as not to impede the flow of water, except for breakaway walls, as provided for in subsection (8) below.

(3) All buildings or structures shall be securely anchored on pilings or columns.

(4) Pilings or columns used as structural support shall be designed and anchored so as to withstand all applied loads of the base flood flow.

(5) Compliance with provisions contained in subsections (2), (3) and (4) above shall be certified to by a registered professional engineer or architect.

(6) There shall be no fill used as structural support.

(7) There shall be no alteration of sand dunes which would increase potential flood damage.

(8) Breakaway walls shall be allowed below the base flood elevation, provided they are not part of the structural support of the building and are designed so as to break away, under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are to be used, and provided the following design specifications are met:

a. Specifications and plans for breakaway walls will be determined in consultation with local engineers and architects and based on local conditions. These plans will be officially stamped by a registered engineer or architect.

b. Minimum design criteria of breakaway walls shall employ a loading of ~~20~~ 10 to ~~30~~ 20 pounds per square foot (psf) as a wind load on vertical panels facing directly into the wind, corresponding to a wind speed of about 100 miles per hour; and maximum loading which would not cause failure to the superstructure, being more difficult to determine, is probably about 50 to 75 pounds per square foot. Factors such as materials, cross section and spacing of columns upon which the structure sits, the elevation above ground, and other assumed loadings on the structure shall be considered in designating the maximum and minimum load limits.

(9) If breakaway walls are utilized, such enclosed space shall not be used for human habitation.

(10) Prior to construction, plans for any structure that will have breakaway walls must be submitted to the city manager for approval.

(11) Prohibit the placement of manufactured homes, except in an existing manufactured home park or existing manufactured home subdivision.

(12) Any alteration, repair, reconstruction or improvements to a structure started after the enactment of this article shall not enclose the space below the lowest floor, unless breakaway walls are used as provided in subsections (8) and (9) above.

(Code 1982, □˜ 9-47; Code 1992, □˜ 10-72)

Sec. 9-86. Standards for subdivision proposals and other development proposals.

(a) All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(c) All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(d) Base flood elevation data shall be provided for subdivision proposals and

other proposed development which is greater than the lesser of 50 lots or five acres. This applies to only properties in A-Zones.

Sec. 9-86. SPECIFIC STANDARDS FOR A-ZONES WITHOUT BASE FLOOD ELEVATIONS AND REGULATORY FLOODWAYS.

Located within the areas of special flood hazard established there exist A Zones for which no base flood elevation data and regulatory floodway have been provided or designated by the Federal Emergency Management Agency, the following provisions shall apply:

(1) Require of standards Article II, Section 9-84.

(2) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals base flood elevation data.

(3) The Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State of Florida, or any other source, in order to administer the provisions of this ordinance. The Floodplain Administrator shall:

a. Obtain the elevation (in relation to the mean sea level) of the lowest floor (including the basement) of all new and substantially improved structures,

b. Obtain, if the structure has been floodproofed in accordance with the requirements of Article II Section 9, the elevation in relation to the mean sea level to which the structure has been floodproofed, and

c. Maintain a record of all such information.

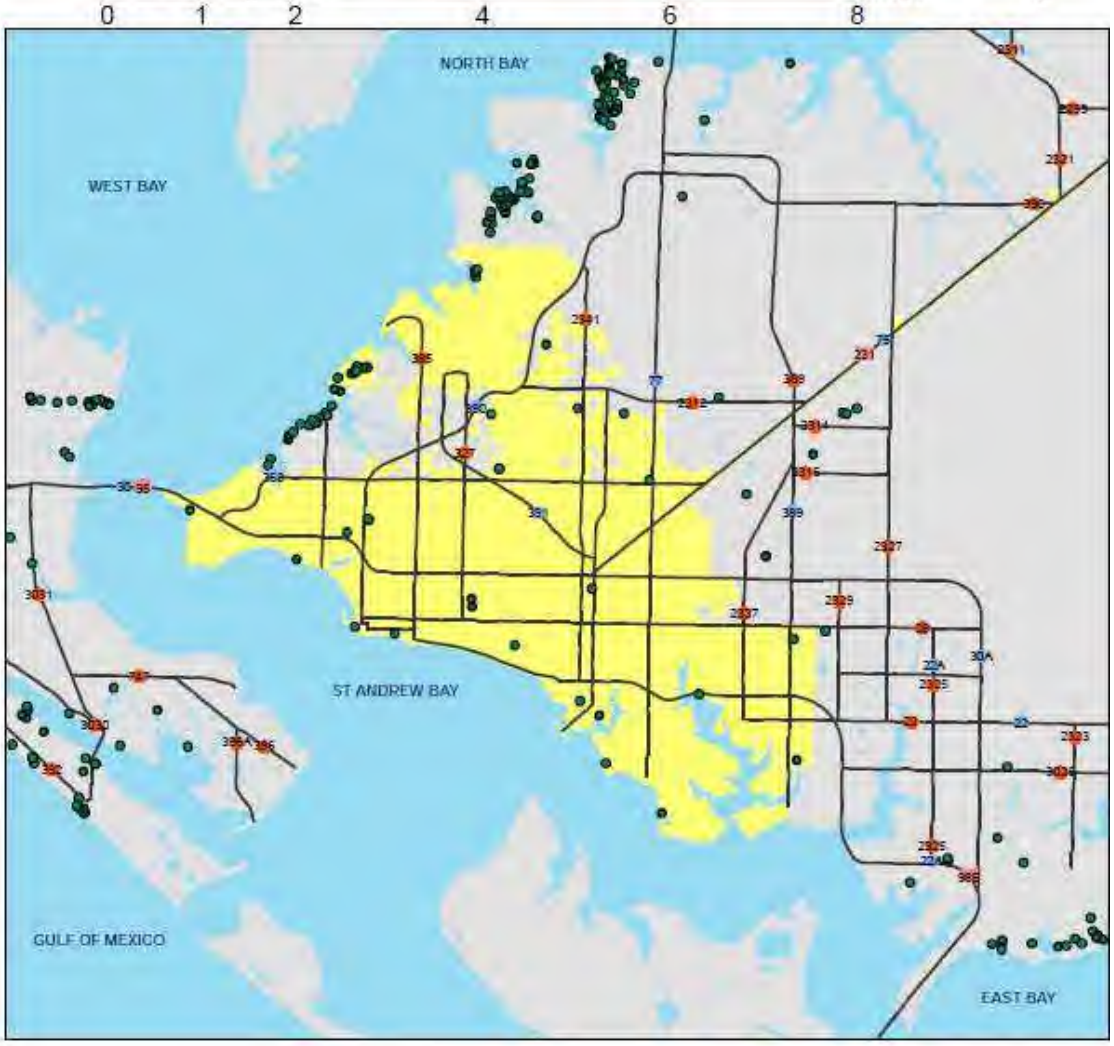
(4) Notify, in riverine situations, adjacent communities, the Florida Department of Community Affairs – NFIP Coordinating Office, and the applicable Florida Water Management District prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.

(5) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

(6) Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated and anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State of Florida and local anchoring requirements for resisting wind forces.

7E3 Following is a generalized map of Panama City's **Repetitive Loss Properties**. Further information is available to authorized personnel upon request

Panama City (South) Repetitive Loss



- REPETITIVE LOSSES
- PANAMA CITY
- AREA OUTSIDE PANAMA CITY (SOUTH)

Bay County GIS | December 7, 2009 | reploss.mxd | mwilson

Projection: NAD_1983_StatePlane_Fl orida_North_FIPS_0903_Feet

www.pcbaygis.com

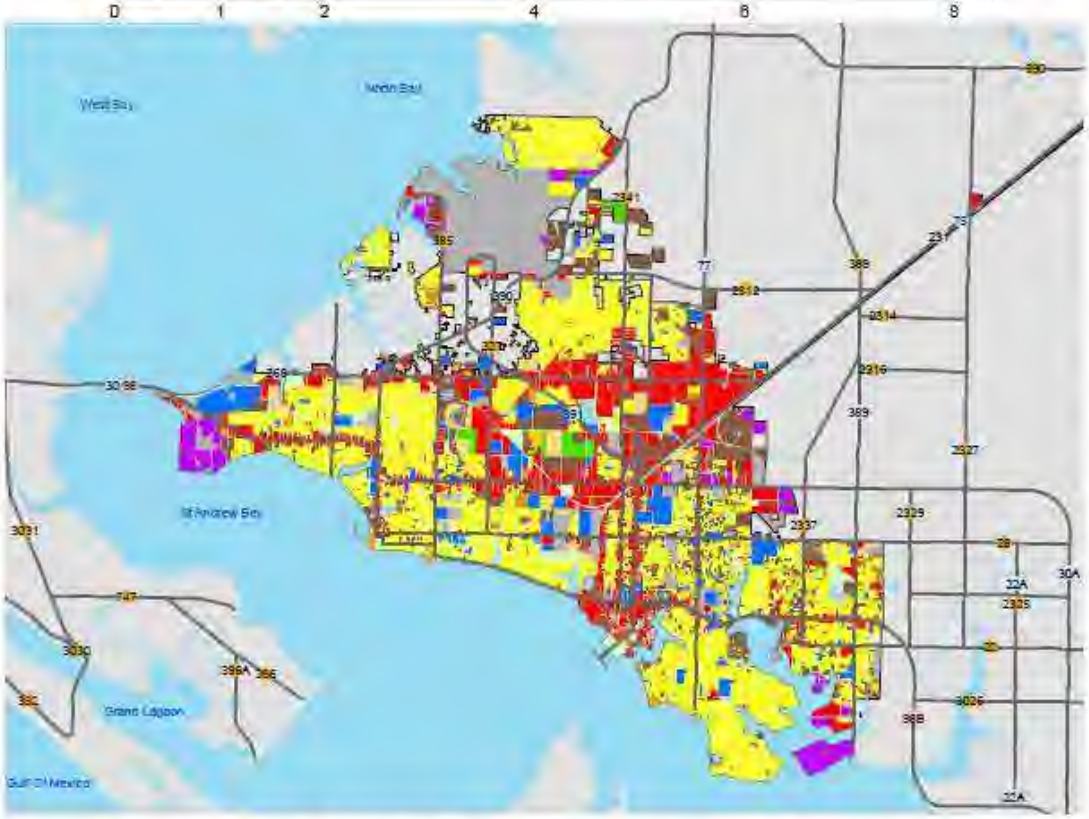
7E4 Panama City CRS Participation

The City of Panama City is an active participant in the Community Ratings System (CRS), and every year around the months of August and September Panama City sends out letters to residences and businesses of the City of Panama City letting them know if they are in a Special Flood Hazard Area (SFHA). We also send out letters to the local banks, realtors, and insurance agents letting them know of any updates to the CRS program and to advise their customers that they have access to Flood Insurance Rate Maps (FIRM) and should purchase flood insurance. These letters that are sent out to the community are a major component of the Panama City outreach project. Panama City has achieved the CRS rating of "6", and intends to seek out and adopt new programs and procedures over the next 5 year LMS Planning period in order to both improve the effectiveness of the projects and to improve flood safety within the community.

7E5

Panama City (South)
Existing Land Use

Miles
0 1 2 4 6 8



PANAMA CITY	Parcels	Acres	Value ($)
Agriculture	63	6,825.85	$23,805,528
Commercial	1,597	1,587.43	886,813,096
Government	355	1,263.15	291,830,105
High Density Residential	595	50.04	103,940,968
Industry	50	340.06	56,598,760
Institutional	251	559.75	270,026,122
Mobile Home Residential	138	55.25	8,018,176
Multi Family Residential	314	254.67	154,116,561
Recreational	64	205.81	42,017,184
Single Family Residential	11,376	3,231.45	1,261,503,221
Subtotal	14,803	14,373.46	$3,098,669,721
Vacant	2,124	1,610.01	194,745,885
Total	16,927	15,983.47	$3,293,415,606

Bay County GIS November 16, 2009 panamacity(south)_ elu.mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

7E6

Panama City (South)
Coastal High Hazard Area

PANAMA CITY	Parcels	Acres	Value ($)
Commercial	36	102.73	$37,987,688
Government	55	733.63	138,253,184
High Density Residential	70	17.61	6,504,276
Industry	10	215.44	32,738,182
Institutional	3	11.48	11,490,251
Mobile Home Residential	2	1.67	373,476
Multi Family Residential	12	26.94	16,630,385
Recreational	10	51.71	27,415,104
Single Family Residential	695	344.85	193,115,993
Subtotal	893	1,506.06	$464,508,539
Vacant	179	145.53	63,557,378
Total	1072	1,651.59	$528,065,917

Legend
- Coastal High Hazard Area within Panama City (South)
- Parcels Outside Hazard Area with Panama City (South)
- Parcels Inside Hazard Area within Panama City (South)
- AREA OUTSIDE PANAMA CITY (SOUTH)
- PANAMA CITY (SOUTH)

Bay County GIS November 18, 2009 panamacity(south)_chha .mxd mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Projection: NAD_19 83_StatePlane_Florida_North_FIPS_0903_Feet

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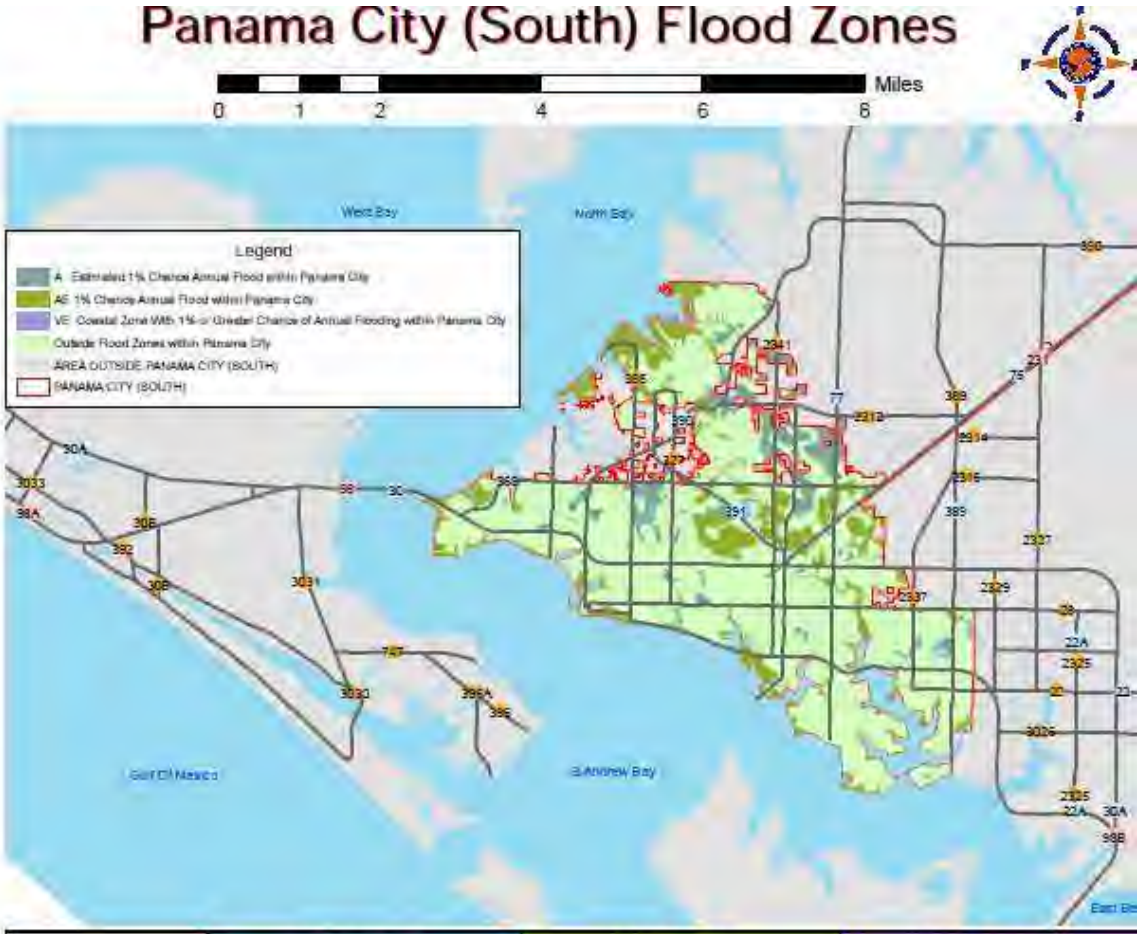
7E7

Panama City (South) Flood Zones



	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	43	6,848.79	$ 16,491,029	29	5,058.26	$9,342,053			
Commercial	138	295.66	62,735,841	291	543.94	319,075,016	11	47.34	$ 17,200,482
Government	38	817.30	62,466,165	126	577.53	186,086,084	25	659.53	117,225,236
High Density Residential	1	1.15	10	401	44.28	58,992,929	48	15.92	8,167,627
Industry	7	106.44	6,864,740	33	388.31	39,610,826	3	173.06	25,865,462
Institutional	24	69.46	37,522,446	22	164.82	60,357,463	2	9.66	9,292,805
Mixed Use									
Mobile Home Residential	5	15.97	791,843	11	13.68	1,510,642			
Multi Family Residential	9	9.09	43,515,305	59	94.15	56,308,489			
Recreational	7	58.33	3,044,948	22	86.74	29,537,870	6	36.33	24,683,462
Single Family Residential	826	274.48	96,719,312	1590	668.63	317,630,870	113	96.57	56,687,665
Subtotal	698	8,450.67	$442,089,334	2576	7,826.89	$1,090,952,172	208	1038.41	$259,314,243
Vacant	91	515.32	23,139,046	498	880.72	103,018,573	26	36.62	12,853,900
Total	1,089	8,966.99	$ 465,228,380	3,074	8,707.31	$ 1,193,970,745	234	1,075.03	$ 272, 168, 143

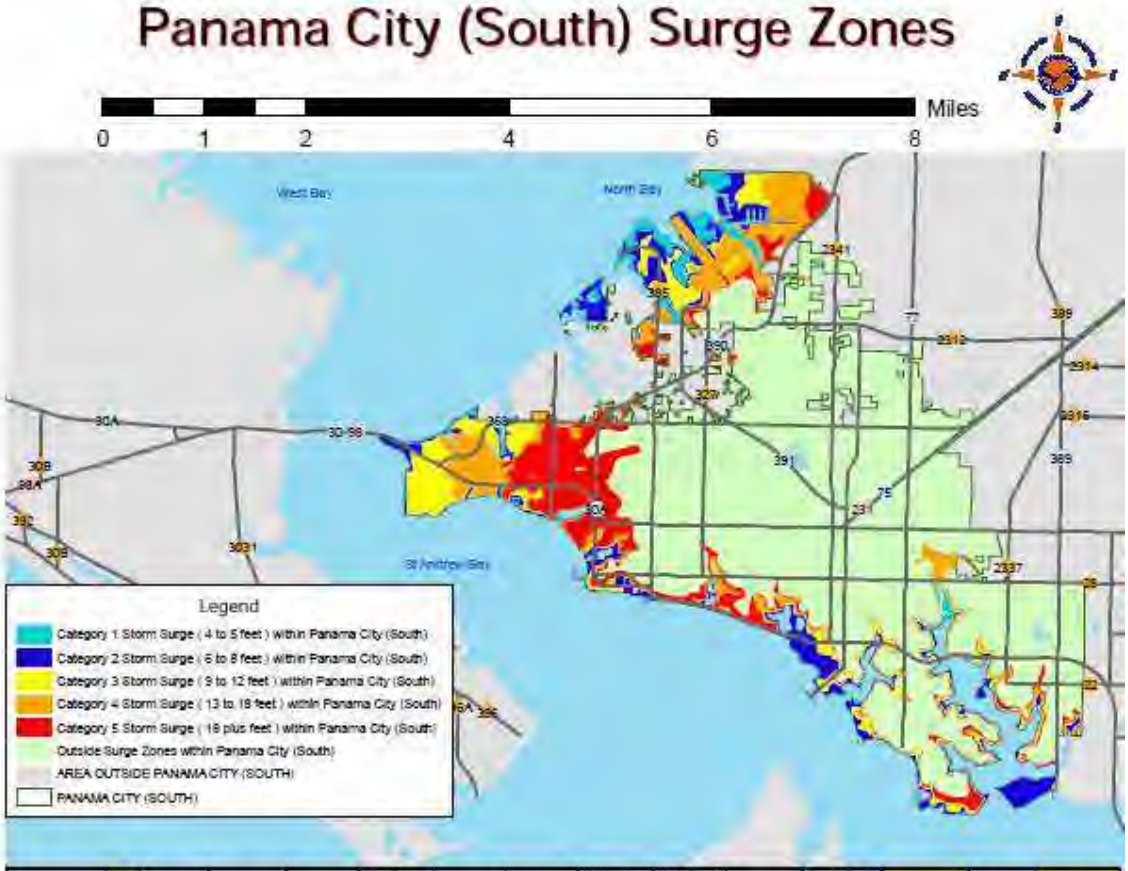
Bay County GIS November 6, 2009 panamacity(south)_flood.mxd mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1 983_StatePlane_Florida_North_FIPS_0903_Feet

Flood data does not exactly overlay county base data in which t he mismatch may be as much as 200 feet. This flood data is for careful reference only. This data does not replace hardcopy Flood Insurance Rate Maps (FIRMs) and does not replace an on -site survey. Hardcopy FIRMs can be viewed at Bay County Planning. For of ficial flood zone information in unincorporated Bay County, Springfield and Cedar Grove contact Bay County Planning (850) 248-8250. In other cities contact the city's planning department.

7E8

Panama City (South) Surge Zones



	Land Use	Agriculture	Commercial	Government	High Density Residential	Industry	Institutional	Mobile Home Residential	Multi Family Residential	Recreational	Single Family Residential	Residential	Vacant	Totals
Category 1 Surge														
Parcels			90	30	82	31	3	2	8	10	890	970	76	1056
Acres			123.73	713.63	07.17	215.84	0.46	.61	26.64	51.71	344.67	1504.34	46.53	1,550.87
Value ($)			$37,957,566	[illegible]	$1,375,249	$2,758,162	$1,440,251	$12,479	$2,050,382	$7,415,104	$62,451,304	$460,749,597	$3,657,978	$508,273,845
Category 2 Surge														
Parcels			522	95	391	35	7	4	27	73	1380	1914	305	2219
Acres			145.77	783.74	25.33	237.33	66.56	2.67	34.11	52.54	533.55	1883.64	237.24	2,068.93
Value ($)			$59,134,467	$745,310,231	$40,460,839	$34,255,743	$41,067,844	$497,139	$33,278,830	$27,893,873	$370,142,925	$885,352,861	$81,071,645	$784,424,392
Category 3 Surge														
Parcels			212	118	479	20	14	5	45	35	1779	2663	403	3066
Acres			197.84	793.41	27.52	248.22	97.73	4.03	40.43	55.54	643.91	2,008.83	398.67	2,407.50
Value ($)			$93,833,235	198,564,240	82,033,203	36,998,015	46,861,662	974,798	36,923,682	28,668,667	342,065,766	$828,841,468	91,025,069	$917,869,525
Category 4 Surge														
Parcels			407	194	529	23	25	80	62	22	2641	3773	529	4292
Acres			246.32	839.26	28.65	252.3	126.49	13.78	58.57	85.59	912.1	2,582.16	361.54	2,943.70
Value ($)			$127,872,736	208,405,465	99,047,892	38,570,677	54,220,718	2,736,510	40,339,704	30,353,547	452,380,031	$1,053,717,682	97,386,962	$1,158,188,044
Category 5 Surge														
Parcels		2	450	168	340	28	44	79	107	28	4603	5780	668	6483
Acres		644.17	343.02	904.36	28.18	324.84	162.44	19.26	83.02	87.38	1311.64	3,558.83	447.14	4,992.79
Value ($)		$1/0,5/8	178,690,846	225,915,124	100,879,666	40,308,359	72,231,078	4,305,180	62,459,621	32,564,246	875,199,181	$1,573,424,613	115,152,378	$1,488,559,613

Bay County GIS | November 13, 2009 | panamacity(south)_surge.mxd | rowilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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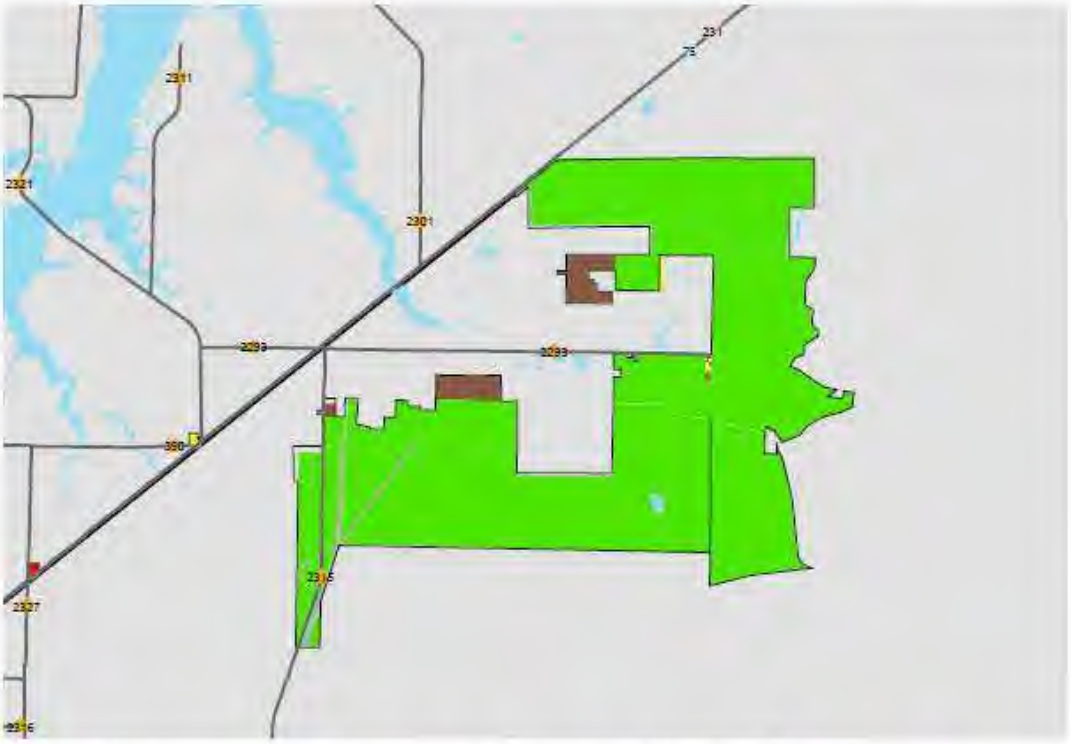
7E9

Panama City (North)
Existing Land Use

0 1 2 4 6 8 Miles



PANAMA CITY	Parcels	Acres	Value ($)
Agriculture	63	6,825.85	$23,805,528
Commercial	1,597	1,587.43	$866,813,096
Government	355	1,263.15	$291,830,105
High Density Residential	595	50.04	$103,940,968
Industry	50	340.06	$56,598,760
Institutional	251	559.75	$270,026,122
Mobile Home Residential	138	55.25	$8,018,176
Multi Family Residential	314	254.67	$154,116,561
Recreational	64	205.81	$42,017,184
Single Family Residential	11,376	3,231.45	$1,261,503,221
Subtotal	14,803	14,373.46	$3,098,669,721
Vacant	2,124	1,610.01	$194,745,885
Total	16,927	15,983.47	$3,293,415,606

Bay County GIS November 16, 2009 panamacity(north)_ elu.mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_198 3_StatePlane_Florida_North_FIPS_0903_Feet
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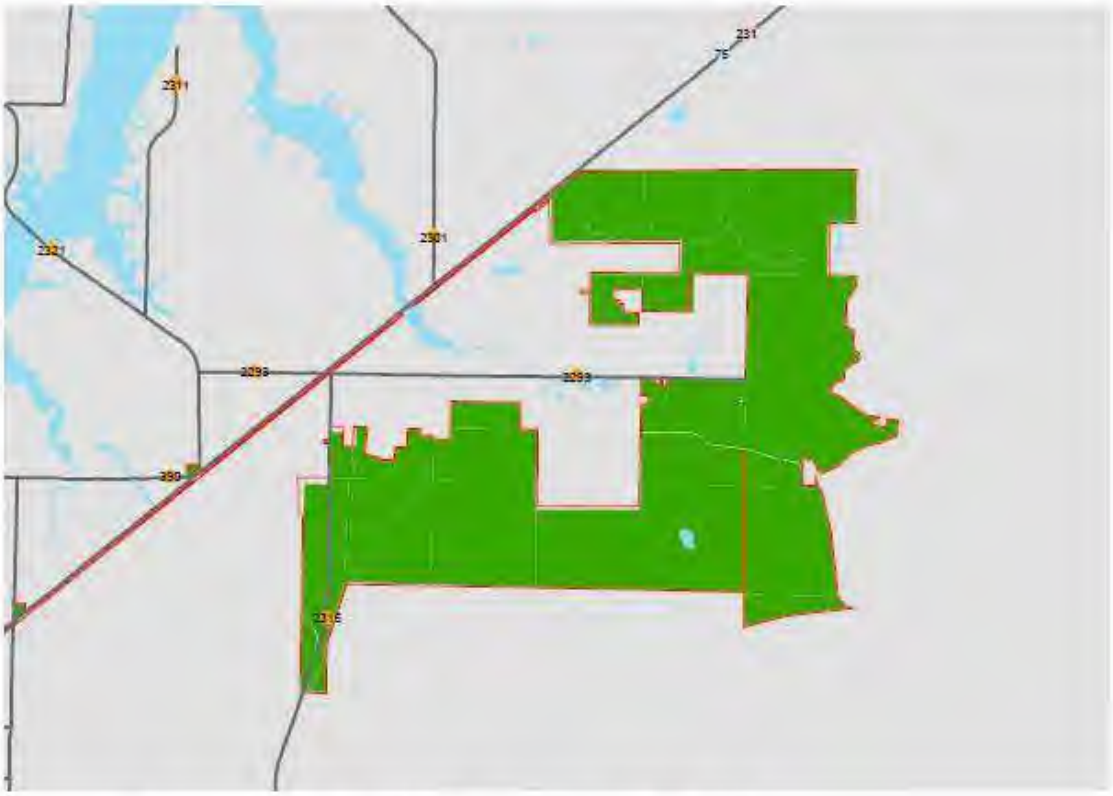
7E10

Panama City (North)
Coastal High Hazard Area

0 1 2 4 6 8 Miles



PANAMA CITY	Parcels	Acres	Value ($)
Commercial	36	102.73	$37,987,688
Government	55	733.63	138,253,184
High Density Residential	70	17.61	6,504,276
Industry	10	215.44	32,738,182
Institutional	3	11.48	11,490,251
Mobile Home Residential	2	1.67	373,476
Multi Family Residential	12	26.94	16,630,385
Recreational	10	51.71	27,415,104
Single Family Residential	695	344.85	193,115,993
Subtotal	893	1,506.06	$464,508,539
Vacant	179	145.53	63,557,378
Total	1072	1,651.59	$528,065,917

Legend
- Coastal High Hazard Area within Panama City (North)
- Parcels Outside Hazard Area within Panama City (North)
- Parcels Inside Hazard Area within Panama City (North)
- AREA OUTSIDE PANAMA CITY (NORTH)
- PANAMA CITY (NORTH)

Bay County GIS November 18, 2009 panamacity(north)_chha .mxd mwilson

Projection: NAD_19 83_StatePlane_Florida_North_FIPS_0903_Feet

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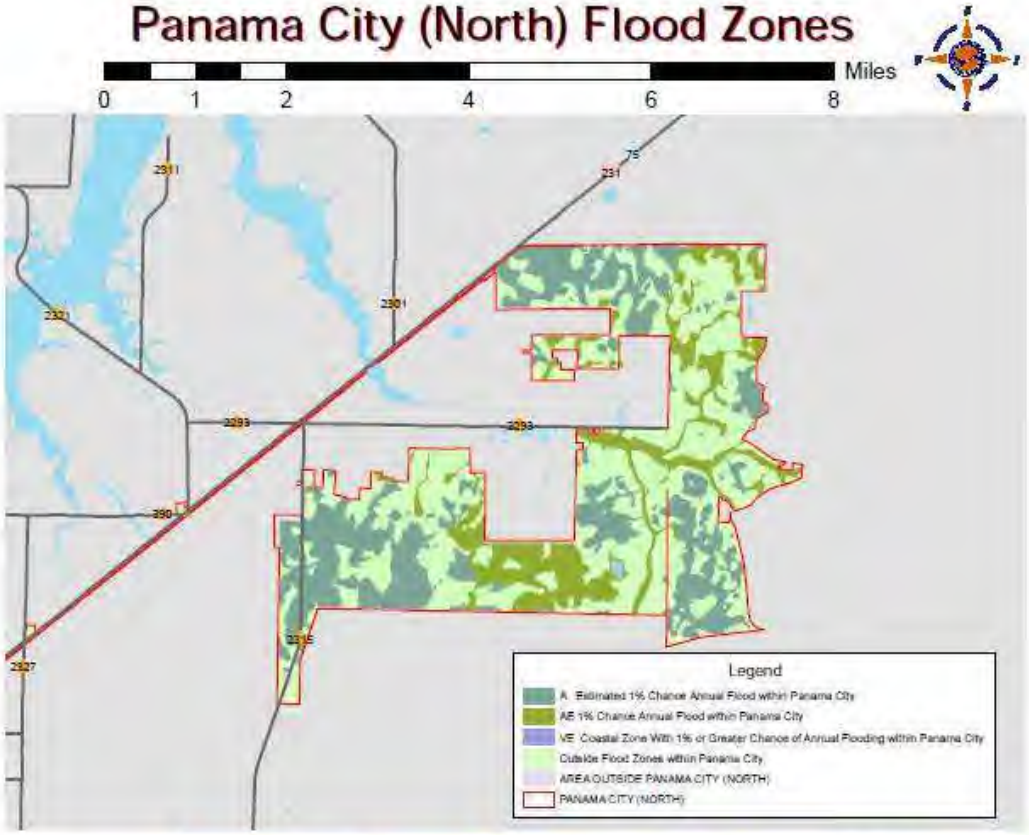
7E11

Panama City (North) Flood Zones



	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	43	6,648.79	$14,491,729	29	5,058.26	$9,342,063			
Commercial	138	293.66	102,739,841	231	543.94	315,075,015	11	47.34	$17,200,462
Government	36	817.30	102,405,156	126	677.53	198,056,054	25	659.53	117,225,236
High Density Residential	1	1.15	0	401	44.23	58,992,929	48	15.92	8,157,527
Industry	7	105.44	6,364,740	23	288.31	39,610,526	3	173.06	25,865,462
Institutional	24	139.46	37,522,448	22	151.62	60,357,483	2	9.66	9,292,306
Mixed Use									
Mobile Home Residential	6	15.97	791,848	11	13.63	1,510,842			
Multi Family Residential	9	9.09	43,515,305	59	94.15	56,808,489			
Recreational	7	56.33	3,044,946	22	85.74	29,537,670	5	36.33	24,885,462
Single Family Residential	626	274.46	98,713,312	1590	668.63	317,630,870	113	96.57	56,667,666
Subtotal	898	8,450.67	$442,069,334	2576	7,825.59	$1,090,952,172	206	1038.41	$259,314,243
Vacant	191	516.32	23,159,046	498	880.72	103,018,573	28	36.62	12,853,900
Total	1,089	8,966.99	$465,228,380	3,074	8,707.31	$1,193,970,745	234	1,075.03	$272,168,143

Bay County GIS November 6, 2009 panamacity(north)_flood.mxd mwilson

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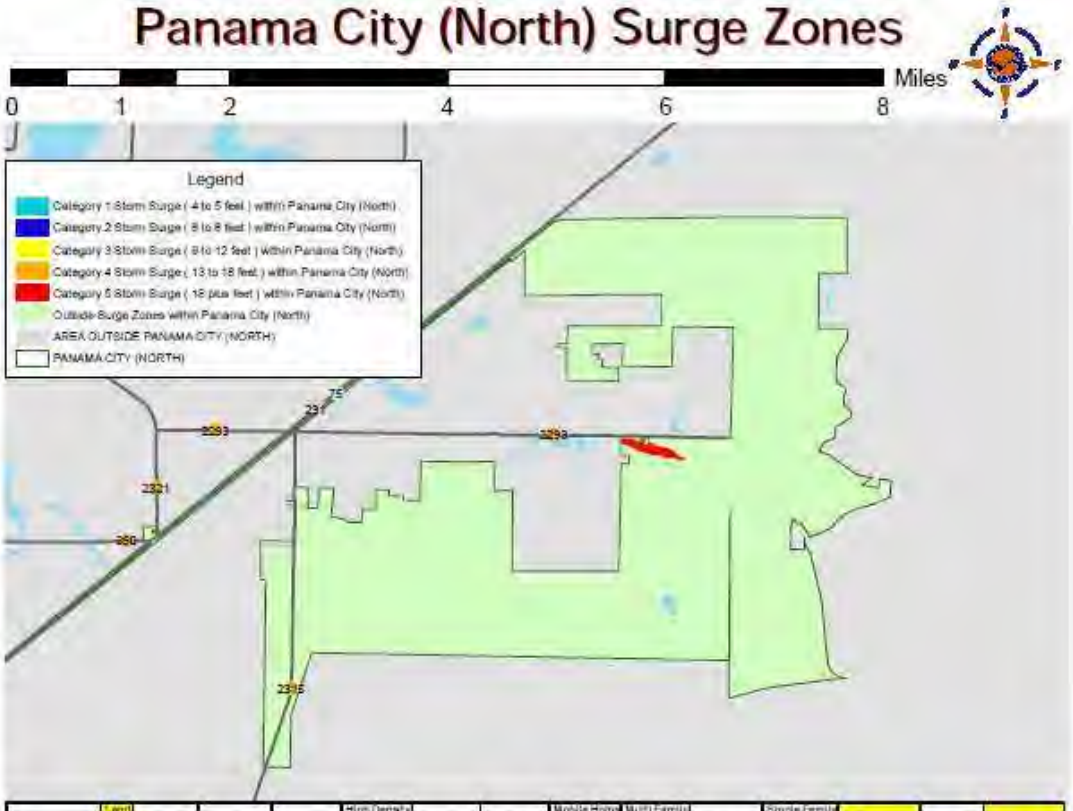
Projection: NAD_1 983_StatePlane_Florida_North_FIPS_0903_Feet

7E12

Panama City (North) Surge Zones



	Land Use	Agriculture	Commercial	Government	High Density Residential	Industry	Institutional	Mobile Home Residential	Multi Family Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1 Surge														
Parcels			28	23	60	10	2	8	12	20	889	879	109	1088
Acres			409.79	753.63	17.17	215.84	1.49	1.87	28.84	31.91	444.07	1504.84	345.33	1850.17
Value($)			$37,957,998	$69,233,764	$1,378,643	$2,194,183	$1,460,239	$153,479	$2,630,345	$7,431,104	$62,411,164	$462,716,567	$63,457,378	$526,273,945
Category 2 Surge														
Parcels			122	85	351	18	7	4	27	16	1262	1914	305	2219
Acres			146.77	169.74	28.32	237.33	66.66	2.67	34.17	63.54	510.55	1860.69	238.24	2,098.93
Value($)			$68,134,407	$148,310,231	$48,460,819	$34,286,745	$41,367,514	$497,129	$33,279,830	$27,863,973	$270,142,928	$883,352,661	$81,071,541	$964,424,202
Category 3 Surge														
Parcels			212	118	473	20	14	5	46	35	1779	2693	403	3096
Acres			187.64	793.41	27.53	248.22	97.73	4.03	40.42	55.94	844.81	2,099.83	308.57	2,407.00
Value($)			$93,533,239	$56,564,240	$2,035,203	$9,606,015	$8,261,662	$74,795	$5,923,882	$8,566,657	$42,085,789	$626,641,456	$1,026,069	$627,669,525
Category 4 Surge														
Parcels			307	294	529	23	25	30	62	22	2841	3715	526	4293
Acres			246.32	636.38	28.85	352.3	126.49	13.74	59.67	63.59	912.1	2,562.16	381.54	2,943.70
Value($)			$127,672,736	$295,405,485	$9,047,992	$9,570,977	$4,220,716	$2,736,512	$9,939,704	$9,251,647	$482,960,011	$1,060,787,082	$97,386,982	$1,158,183,044
Category 5 Surge														
Parcels		2	459	188	549	23	45	79	107	26	4303	5785	988	6433
Acres		344.51	642.20	954.19	29.15	384.04	162.64	19.25	83.92	97.06	5311.04	8,538.85	447.14	8,985.70
Value($)		$335,478	$76,605,846	$25,388,524	$2,849,468	$2,538,258	$2,231,078	$4,605,140	$2,469,821	$2,384,346	$815,189,781	$1,026,424,812	$110,195,378	$1,136,620,190

Bay County GIS

November 13, 2009

panamacity(north)_surge.mxd

mwilson

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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

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7E13 City of Panama City LMS Board Adoption

STATE OF FLORIDA

DIVISION OF EMERGENCY MANAGEMENT

CHARLIE CRIST
Governor

DAVID HALSTEAD
Director

September 15, 2010

Mr. Mark Bowen – EM Director
Bay County Local Mitigation Strategy Coordinator
644 Mulberry Avenue
Panama City, Florida 32401

Dear Mr. Bowen:

Congratulations! The enclosed letter constitutes the Federal Emergency Management Agency's (FEMA) formal approval of the Bay County Local Mitigation Strategy Plan (LMS) for the City of Panama City. The plan has been approved for a period of five years and will expire again on September 8, 2015.

The mitigation planning unit would like to thank you for all of your hard work. It has been a pleasure working with you and we look forward to serving you in the future.

If you have any questions regarding this matter, please contact Bill McCusker 850-487-3211 or Laura Herbert at 850-922-5580.

Respectfully,

Miles E. Anderson
Bureau Chief, Mitigation
State Hazard Mitigation Officer

MEA/wjm

Enclosed: FEMA letter of notification dated September 8, 2010

FLORIDA RECOVERY OFFICE • DIVISION HEADQUARTERS • STATE LOGISTICS RESPONSE CENTER
30 Skyline Drive — 2555 Shumard Oak Boulevard — 2702 Directors Row
Lake Mary, FL 32746-6201 — Tallahassee, FL 32399-2100 — Orlando, FL 32809-5321
Tel: 850-413-9969 • Fax: 850-488-1016
www.FloridaDisaster.org

U.S. Department of Homeland Security
FEMA Region IV
3003 Chamblee-Tucker Road
Atlanta, GA 30341

FEMA

September 8, 2010

Mr. David Halstead, Director
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

2010 SEP 13 AM 11:35

Attention: Mr. Miles Anderson

Reference: Bay County Multi-jurisdictional Local Mitigation Strategy

Dear Mr. Halstead:

We are pleased to inform you that the Bay County Multi-jurisdictional Local Mitigation Strategy is in compliance with the federal hazard mitigation planning standards resulting from the Disaster Mitigation Act of 2000, as contained in 44 CFR 201.6. The plan is approved for a period of five (5) years, to September 8, 2015.

This plan approval extends to the following participating jurisdiction that provided a copy of their resolution adopting the plan:

- City of Panama City

The approved participating jurisdiction is hereby an eligible applicant through the State for the following mitigation grant programs administered by the Federal Emergency Management Agency (FEMA):

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Severe Repetitive Loss (SRL)
- Flood Mitigation Assistance (FMA)

We commend the participants in the Bay County plan for the development of a solid, workable plan that will guide hazard mitigation activities over the coming years. Please note that all requests for funding will be evaluated individually according to the specific eligibility and other requirements of the particular program under which the application is submitted.

For example, a specific mitigation activity or project identified in the plan may not meet the eligibility requirements for FEMA funding, and even eligible mitigation activities are not automatically approved for FEMA funding under any of the aforementioned programs. In addition, please be aware that if any of the approved jurisdictions participating in this plan are placed on probation or are suspended from the National Flood Insurance Program, they may be ineligible for certain types of federal funding.

We strongly encourage each Community to perform an annual review and assessment of the effectiveness of their hazard mitigation plan; however, a formal plan update is required at least every five (5) years. We also encourage each Community to conduct a plan update process within one (1) year of being included within a Presidential Disaster Declaration or of the adoption of major modifications to their local Comprehensive Land Use Plan or other plans that affect hazard mitigation or land use and development. When the plan is amended or revised, it must be resubmitted through the State as a "plan update" and is subject to a formal review and approval process by our office. If the plan is not updated prior to the required five (5) year update, please ensure that the draft update is submitted at least six (6) months prior to expiration of this plan.

The State and the participants in the **Bay** County plan should be commended for their close coordination and communications with our office in the review and subsequent approval of the plan. If you or Bay County have any questions or need any additional information please do not hesitate to contact Gabriela Vigo, of the Hazard Mitigation Assistance Branch, at (229) 225-4546, or Linda L. Byers of my staff at (770) 220-5498.

Sincerely,

Robert E. Lowe, Chief
Risk Analysis Branch
Mitigation Division

RESOLUTION NO. 82410.1

A RESOLUTION APPROVING THE CITY OF PANAMA CITY'S LOCAL HAZARD MITIGATION STRATEGY.

Whereas, the City of Panama City is vulnerable to the human and economic cost of natural, technological and societal disasters, and

Whereas, the City Commission recognizes the importance of reducing or eliminating those vulnerabilities for the overall good and welfare of the community, and

Whereas, the City of Panama City has been an active participant in the Bay County Local Mitigation Strategy Team, which has established a comprehensive, coordinated planning process to eliminate or decrease these vulnerabilities, and

Whereas, the City of Panama City's representatives and staff have identified, justified and prioritized a number of proposed projects and programs needed to mitigate the vulnerabilities of Panama City to the impacts of future disasters, and

Whereas, these proposed projects and programs have been incorporated into the "2010 Local Hazard Mitigation Strategy, Bay County, Florida" that has been prepared and issued for consideration and implementation by the community of Panama City,

Now therefore, be it resolved on this 24th day of August, 2010 that,

1) The City Commission hereby accepts, adopts, and approves of its designated portion of the "2010 Local Hazard Mitigation Strategy"

2) The agency personnel of the City of Panama City are requested and instructed to pursue available funding opportunities for implementation of the proposals designated therein,

3) The City of Panama City will, upon receipt of such funding or other necessary resources, seek to implement the proposals contained in its section of the strategy, and

4) The City of Panama City will continue to participate in the updating and expansion of the Bay County Local Hazard Mitigation Strategy in the years ahead, and

5) The City of Panama City will further seek to encourage the businesses, industries and community groups operating within and/or for the benefit of the City of Panama City to also participate in the updating and expansion of the Bay County Local Hazard Mitigation Strategy in the years ahead.

PASSED, APPROVED, AND ADOPTED this 24th day of August, 2010.

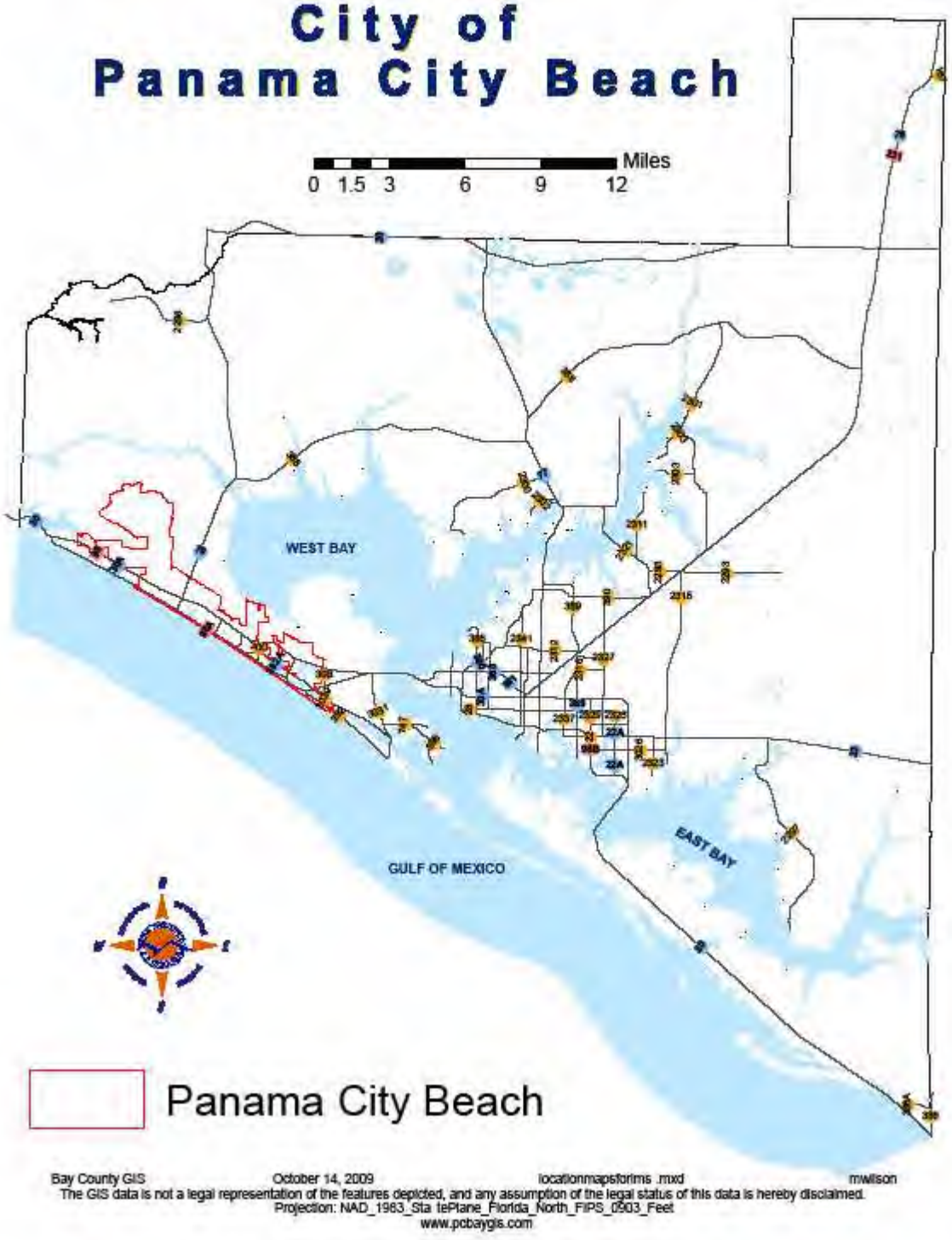
CITY OF PANAMA CITY

By _____
Scott W. Clemons, Mayor

ATTEST

_____
Terri Lillard, City Clerk - Treasurer

7F.


City of
Panama City Beach
Miles
0 1.5 3 6 9 12
WEST BAY
EAST BAY
GULF OF MEXICO
Panama City Beach
Bay County GIS
October 14, 2009
locationmapsforims .mxd
mwilson
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Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
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7F. Panama City Beach

7F1. Introduction

The City of Panama City Beach is a generally linear, flat, Gulf-front municipality located in the Florida panhandle. The City is approximately 17.21 square miles in size and measures approximately 12 miles in length. Although noted by the Spanish explorers in the 1500s, this beach area remained remote and unsettled, in part because of its inaccessibility, but also due to the lawless marauders that roamed the area making it unsafe. It wasn't until the construction of the Hathaway Bridge in the early 1930's, providing a connection to the "mainland", that the area opened up and became a tourist destination.

It is currently characterized as a beach resort community with an increasing year-round residential presence. Much of the land along the beach is used to accommodate beach visitors with either lodging, recreation, food or shopping facilities. The main thoroughfares are primarily commercial usage with scattered motels and recreational facilities. Single family residential development is located throughout the beach area with an increasing amount of multifamily condominium projects occurring in the Thomas Drive area along the Gulf of Mexico. The City is 17.21 square miles in size and measures approximately 12 miles in length, having grown in physical size through a number of annexations, most notably a 3,000 acre site which is owned and managed by the City. This site will function as a conservation area, passive recreation area for hiking, cycling and educational purposes and a treated wastewater absorption/wetland area designed to minimize the amount of effluent currently pumped into west Bay.

Since 2000, the City has experienced a building boom with the development of over 5,982 new condominium units and associated retail development. According to the 2008 BEBR census estimates, the City is estimated to have a population of 13,453 fulltime residents. As with the other municipalities in Bay County, notable growth is not expected over the next five-year LMS planning period. The expected population for 2010 is around 14,500 people. Similar to Bay County, with its position along the Gulf of Mexico, significant vulnerabilities to coastal hazards exist for Panama City Beach. The most prominent land use in Panama City Beach is its 11,924 high density residential parcels. Because its principal source of income is tourism, the two principal developed land uses are residential and commercial. Many of these parcels are contained within high-rise condominium buildings, where upper levels may be unaffected by storm surge or flooding; however, these upper levels of high-rise structures are most vulnerable to high winds.

The risk assessment indicates that more than 83% of the high density residences in Panama City Beach are located within a Coastal High Hazard Area (CHHA). In addition, 128 single family residences are located in the CHHA. Significant portions of Panama City Beach are located within flood zones. More than 10% of all single family residences, 11% of all commercial parcels, and 34% of all governmental land uses in the City are located in Flood Zone A. In its VE Zone, Panama City Beach contains over 37% of its high density residences.

Storm surge is a significant threat to many of the land uses of the residential and non-residential land uses in Panama City Beach. A category 1 storm surge would primarily affect commercial,

high density residential, and single family residential land uses in the City. Higher categories of storm surge significantly increase the range of affected properties.

7F2. Panama City Beach: Review and Incorporation of Existing Plans, Studies, Reports and Technical Information:

To further the goals of minimizing damage from the hazard events that threaten Panama City Beach, the Comprehensive Plan has adopted the following objectives and policies which are grouped into 2 hazard areas: flood mitigation and general other/ combined hazard mitigation:

7F2 (a) City of Panama City Beach Comprehensive Plan - Associated Disaster Mitigation Support Language

flood hazard mitigation

Chapter 3 Future Land Use: Projected Development in flood prone areas

When looking at the City as a whole, some of the most developed areas are those in the floodplains (gulf front). There will be continue to be some infill development and an increasing amount of redevelopment in the future in areas shown to be subject to periodic inundation as defined in the Category 1 storm surge area reflected on the Floodplain Map, and the Hurricane Evacuation Zone Map. All development and redevelopment in the areas highlighted on the Floodplain map will be required to comply with current floodzone legislation and ordinances.

OBJECTIVE 6: Coordinate coastal area population densities with the appropriate local hurricane evacuation plan, when applicable.

OBJECTIVE 12: Coordinate with the West Bay Area Vision Plan (Sector Plan), and any applicable Detail Specific Area Plan (DSAP) thereunder, and any special character district containing specific natural resource protection standards that are applicable to property annexed into the City limits.
POLICY 12.1: For areas annexed into the City limits that are located within areas identified in Objective 12, the City shall apply the preexisting natural resource protection policies of the Vision Plan, the DSAP or the special character district when such policies are more restrictive on development and redevelopment than the City's Comprehensive Plan by appropriate amendment to its Comprehensive Plan unless it shall determine and declare a valid public purpose precluding or limiting such policies. Such plan amendment shall be considered concurrently with the requested annexation/future land use map amendment.

Chapter 8 Conservation:
The Federal Emergency Management Agency (FEMA) was established in 1981 to administer the National Flood Insurance Program (NIFP), and Panama City Beach passed an ordinance adopting this program shortly thereafter. This ordinance established criteria for flood prone areas to conform to FEMA regulations. The floodplains in the City of Panama City Beach area are shown on the floodzone map. These areas indicate the 100-year potential flood areas.

POLICY 5.10: Where sufficient uplands exist to locate the proposed development in the upland portion of the site, the City may allow the transfer of development at the future land use densities established on the Future Land Use Map from the wetlands to the upland portion of the site. The transfer of density may occur provided all other plan provisions are satisfied regarding, but not limited to, upland and floodplain resource protection, compatibility of adjacent land use, stormwater management, and setbacks. Transfer of development densities shall also satisfy the minimum lot size of the zoning district in which the lot is located.
POLICY 5.20: Development within the 100 year floodplain will be required to provide 1:1 ratio for compensating flood storage where flood storage areas are displaced.
POLICY 5:21: Development in the 100 year floodplain will not be allowed to use septic tanks or grey water discharges within the 100 year floodplain.

OBJECTIVE 6: Protect Floodplains and floodways by establishing construction standards which minimize the impact of man-made structures.
POLICY 6.1: All development activity undertaken within designated A-zones as shown on the official Flood Insurance Rate Map for Panama City Beach, Florida published by the Federal Emergency Management Agency shall be subject to the restrictions and standards of the City's Floodplain Management Ordinance which are contained in Chapter 11 of the City's Code of Ordinances.
POLICY 6.2: Floodplain management standards shall minimize public and private losses due to flood conditions in specific areas by provisions designed to:
a. restrict uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in increased flood heights or velocities:
b. require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction:
c. control the alteration of natural flood plains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters:
d. control filling, grading, dredging, and other development which may increase erosion or flood damage: and,
e. regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

Chapter 9 Coastal management Element:
The City's corresponding share of Bay County's 24-hour hurricane evacuation time is approximately 13 hours based upon the Corps report, assuming a 100% participation rate, with a long response, and high seasonal occupancy. However, since the hurricane evacuation times established in the DEM study are more recent than the Corp's study, the data found in DEM's study will be used in this Plan to establish an appropriate hurricane evacuation time for the City.
Maintaining or reducing the hurricane evacuation times established for Bay County is beyond the jurisdiction of the City. However, the City does have the authority to exercise growth management control on its proportionate share of the potential evacuating population. Using the evacuation times of the DEM study for a category 3 hurricane, results in an evacuation time for the City limits of Panama City Beach of 10 hours. By applying this strict standard as an appropriate evacuation time does create an inconsistency with the standards adopted by Bay County. It is expected that as annexations occur, the evacuation time may have to be amended since the Beach's proportionate share of the County population would increase.

OBJECTIVE 3: Coordinate with other local governments and appropriate agencies to maximize natural resource planning, conservation and protection activities so that no net losses of dune vegetation occur in the coastal area as compared to January 1993.
POLICY 4.3: The City shall prohibit the removal of dune vegetation seaward of the Coastal Construction Control Line.
POLICY 4.4: All construction shall comply with the Coastal Construction Control Line regulations as enforced by the Department of Environmental Protection.
POLICY 4.5: The City shall promote the construction and maintenance of elevated dune crossovers.
POLICY 5.7: Panama City Beach will recognize and provide for disaster preparedness and evacuation needs in construction of roadway improvements in the coastal area.
OBJECTIVE 9: Establish and promote an intergovernmental process between Panama City Beach and appropriate Federal and State agencies and Bay County to deal with mutual concerns and enhance planning for public recreation, access and use of the Gulf of Mexico beaches.
GOAL 2: Protect human life and limit public fund expenditure in areas that are subject to destruction by natural disasters.
OBJECTIVE 10: Identify the coastal high hazard area.

POLICY 10.1: The Coastal High Hazard Area shall be defined as the area approximated by the Category 1 hurricane storm surge as reflected in the 1998 Northwest Florida Hurricane Evacuation Study and shown on Exhibit 16.
POLICY 10.2: Exhibit Number 16 which reflects the Coastal High Hazard Area is hereby adopted.
POLICY 10.3: Notify at the appropriate time, owners of property in the coastal high hazard area of property designation to increase public awareness of hurricane hazard.
OBJECTIVE 11: Maintain a roadway clearance time for hurricane evacuation and peacetime emergency evacuations.

POLICY 11.1: Improvements to road segments that are a part of the hurricane evacuation route shall be considered a priority in making traffic circulation improvements.
POLICY 11.2: Periodically review hurricane evacuation plans through a joint meeting of the Bay County Emergency Management Department, the municipalities and transportation planners.
POLICY 11.3: The Hurricane Evacuation Map is adopted as the routes to be used for evacuations in an emergency. Peacetime emergency and hurricane evacuations should be achieved in at least 10 hours from the time the City Council concludes that evacuation is necessary.
POLICY 11.4: Adjust the evacuation timetable as necessary based on occupied dwelling unit information and annexations.
POLICY 11.5: Consider the impacts on the transportation system relative to hurricane evacuation in the development approval process.
POLICY 11.6: Encourage improvements to State roadways identified as critical roadway segments.
POLICY 11.7: Continue to develop evacuation procedures for citizens and other organizations concerned with the transportation disadvantaged.
POLICY 11.8: Limit the location of group homes, nursing homes, or other residential uses which have special evacuation requirements in the coastal high hazard area to be consistent with State law.

OBJECTIVE 12: Limit population concentrations in the Coastal High Hazard Area to reduce exposure of human life to natural disasters.
POLICY 12.1: The Public Utilities Department shall prepare annually an estimate of population density in the coastal high hazard area. This estimate shall include all existing development and developments which have received development approval.
POLICY 12.2: Population concentrations shall be directed away from the Coastal High Hazard Area through provisions in the Land Development Regulations, if the emergency evacuation time standard of Policy 11.3 cannot be maintained.

OBJECTIVE 13: Limit public fund expenditures for public facilities and infrastructure in the coastal high hazard area.
POLICY 13.1: Public facilities shall not be located or improved in the coastal high hazard area unless the following criteria are met:

A. The use is necessary to protect public health, safety and welfare; or
B. The service provided by the facility cannot be provided at another location outside the coastal high hazard area; or
C. The use is necessary to restore and/or enhance natural resources.

Chapter 10 Intergovernmental Coordination:
E. Coastal Management
Years of Intergovernmental Coordination on coastal management include hurricane evacuation, beach access, and waste-water point source discharges. In the event of hurricane evacuation, Bay County has assumed the lead role through the Emergency Management Department. All emergency activities, including evacuation routing, public shelters, and police and fire services, are coordinated by the County. Point-source wastewater discharge into coastal waters is handled by the City through a discharge into West Bay. The City has initiated a plan to eliminate discharge into West Bay through public access reuse and wetland wet weather discharge areas.

General Other/Combined Hazards

OBJECTIVE 14: Adopt a post-disaster redevelopment plan for Panama City Beach that identifies short-term recovery and long-term redevelopment activities.

POLICY 14.1: The following post-disaster actions shall be considered short-term recovery measures:
A. Damage assessment to meet post-disaster assistance requirements and to aid in post-disaster redevelopment decisions;
B. Debris removal;
C. Emergency protection measures including repairs to water, sewer, electric, and other public utilities to restore service;
D. Public assistance including temporary housing and provisions of food and clothing.
POLICY 14.2: Repair or restoration of damage resulting in destruction of over fifty percent of the value of an individual structure or facility in the coastal high hazard area shall be considered to be redevelopment activities. Repair or restoration of such a structure or facility shall be subject to the following restrictions:

A. Redevelopment of residential structures shall be in accordance with adopted redevelopment policies; and
B. Redevelopment of commercial structures shall be consistent with the intensities established in land development regulations; and
C. Public facilities shall be relocated to areas outside of the coastal high hazard area, unless they satisfy the criteria established in Policy 13.1.

OBJECTIVE 15: The post-disaster redevelopment plan will provide a process for consideration of relocation, removal or modification of damaged structures.
POLICY 15.1: Redevelopment of structures within the coastal high hazard area that are permitted subject to the adopted requirements shall be constructed to comply with National Flood Insurance minimum elevation and construction standards and conform to minimum coastal construction standards.

OBJECTIVE 16: Establish site design criteria for construction and reconstruction within the coastal high hazard area.
POLICY 16.1: The issuance of Development Permits in the coastal high hazard area shall be conditioned on the following criteria:
Siting
A. Construction will be limited to adopted densities and intensities in the land development regulations;
B. Placement of required open space, if any, shall be in the most vulnerable area of the site;
C. Access to structures shall be provided on the landward side;

Landscaping

A. Native plant species are maintained and protected;
B. Provision of a landscaping plan which addresses the stabilization of soils;
C. Shrubbery and trees are planted so as to deflect floating material from building foundation.

OBJECTIVE 18: Establish formal procedures to implement the post-disaster redevelopment plan.
POLICY 18.1: Prepare short-term recovery implementation procedures to be incorporated in the Bay County Peacetime Emergency Plan and City operating procedures.
POLICY 18.2: The following actions will be part of the procedures for implementation of the long-term redevelopment plan:
A. Formation of an Ad Hoc Recovery Task Force to coordinate decision-making not related to short-term recovery efforts;
B. Passage of emergency ordinances, such as moratoria on rebuilding in heavily damaged areas and amendments to zoning or building codes;
C. Procedures for damage assessment;
D. Decision making procedures to determine relocation, rebuilding or structural modification options.

OBJECTIVE 19: Incorporate the recommendations of a hazard mitigation plan into the Comprehensive Plan.
POLICY 19.1: The City will continue participating in the Bay County Hazard Mitigation Strategy Team to update the natural disaster hazard mitigation report. This report will continue to address general hazard mitigation including regulation of building practices, floodplains, beach and dune alteration, stormwater management, sanitary sewer and septic tanks, and land use to

reduce the exposure of human life and public and private property to natural hazards. The recommendations of this report will be incorporated into the Comprehensive Plan and Land Development Regulations.

Chapter 11 Capital improvements:

OBJECTIVE 1: Priorities for Capital Improvements- The City of Panama City Beach shall identify and fund services and capital improvements required by this Plan.
POLICY 1.1: In the absence of legal constraints on the use of revenues, projects and programs shall be funded in order to:
A. Correct public hazards;
B. Eliminate existing deficiencies as described by the minimum levels of service;
C. Provide capacity for developments that have received a determination as a Committed Development when such developments are within the City limits.
D. Maintain levels of service as new growth occurs; and
E. Increase existing levels of service to desired levels of service
POLICY 1.2: The City shall not utilize public funds for infrastructure expansion or improvements in coastal high-hazard areas unless such funds are necessary
A. Provide services to existing development;
B. Provide adequate evacuation in the event of an emergency;
C. Provide for needs of water-dependent uses.

7F2 (b) Panama City Beach - Code Supporting Floodplain Management

ARTICLE III. Stormwater Treatment and Control Standards

Sec. 26-37. Flood control (quantity).
All development not exempt shall provide for flood attenuation as follows:
(a) At a minimum, facilities shall be provided to attenuate a 25-year frequency storm vent of critical duration so that the post-development stormwater peak discharge rate shall not be greater than the predevelopment peak discharge rate. In addition, development which cannot demonstrate a positive, direct discharge into a receiving wetland or a public easement or right-of-way, each with sufficient capacity to accept stormwater runoff from a 100-year frequency storm event of critical duration without adversely affecting other development or property, shall attenuate a 100-year frequency storm event of critical duration. The critical duration shall be defined as the storm event that when routed through the proposed facility results in the greatest post-development discharge rate. The FDOT 1-hour, 2-hour, 4-hour, 8-hour and 24-hour rainfall distribution shall be used to determine the critical duration. Off-site contributions shall be exempt from the foregoing attenuation requirements, provided that they are conveyed through the site and discharged at the same location as prior to development. The analysis of pre-development run-off shall presume the site to be in a natural and undeveloped condition, except that the analysis of pre-development run-off for a public roadway redevelopment project shall use the current site conditions. A public roadway redevelopment project is a roadway project proposed by a governmental entity, or a non-governmental entity if the roadway project is required as an off-site improvement by a development order or permit, that involves the redevelopment of an existing roadway classified as a principal or minor arterial or an urban or rural collector.

(b) Developments which directly discharge stormwater into estuarine waters shall not be subject to stormwater quantity standards.
(c) For those developments located within the basin of a regional stormwater plan, the stormwater facility shall consider the critical duration for the regional stormwater plan basin. The post- development discharge for the stormwater facility shall not exceed the pre-development rate for the event equal in duration to the critical event for the regional stormwater plan basin.
(d) All stormwater discharge facilities shall have sediment controls and skimming devices.
(e) Off-site discharge flows shall be limited to non-erosion velocities.
(f) For purposes of this section, direct discharge or directly discharge shall mean that stormwater is discharged into a water body via a continuous piped or channeled conveyance to the waters edge over a course or path not exceeding 500' in length.

Sec. 26-38. Erosion and sedimentation control.

(a) All development shall provide for erosion and sedimentation control as follows:
1. During construction, storm drainage inlets shall be protected by hay bales, sod screens, or temporary structures to prevent sedimentation. All soil stockpiles shall be protected against dusting and erosion.
2. At all times during and after development, denuded areas shall be stabilized. Final stabilization measures shall be in place within sixty (60) days of final grading.
3. All control measures shall comply with the management practices contained in the Florida Department of Environmental Regulation's Florida Development Manual: A Guide to Sound Land and Water Management.
(b) The drainage and stormwater management plan required by this Chapter shall be accompanied by a plan for erosion and sedimentation control as required by the preceding subsection (a).

7F2 (c) Panama City Beach Capital Improvement Projects:

Memorandum

To: Richard Jackson

CC: Holly White, Paul Casto, Al Shortt

From: Kelly Jenkins

Date: September 25, 2009

Subject: Engineering Services - Stormwater Improvements

The City experiences on-going localized stormwater problems in several different locations scattered throughout Panama City Beach. These problems have been identified during certain rainfall events and some were also identified in the Stormwater Management Master Plan (SMMP) developed by Camp Dresser & McKee Inc. (CDM).

The City has a Master Services Agreement, dated March 2004, with CDM for stormwater engineering services. There are nine initial projects that have been identified for engineering services. Five of the projects will consist of engineering design and construction oversight services. The remaining four projects are set up as phased projects which will only include engineering analysis as part of this scope of work. Once the engineering services are complete for these projects and adequate funding is available, staff anticipates advertising and bidding them out for construction. Furthermore, in the future, staff will identify additional areas with stormwater problems to be included for improvements as funding becomes available.

CDM, along with their sub-consultants, has provided proposed Task Orders 09-02 through 09-10 (attached) to City staff for a total lump sum fee of $309,846 to perform this work. The cost of these services will be paid out of the stormwater utility fund budget for fiscal year 2010 which has adequate funds available.

Task Order	Project Name	Subdivision	Fee
09-02	Lullwater Drive	El Centro	$45,440
09-03	Moonlight Bay	Colony Club	$25,440
09-04	San Souci Street	Miramar Heights	$19,200
09-05	South Glades Trail	The Glades	$39,215
09-06	Beth and Gardenia Street	Bahama Beach	$26,156
09-07	Caladium Circle	Open Sands	$51,334
09-08	Coral Drive	Gulf Highlands 2	$49,992
09-09	Eagle Drive	Colony Club	$36,665
09-10	Hombre Circle	The Glades	$16,404
	Total Fee for Engineering Services		**$309,846**

7F2(d) The following pages provide a copy of the **Panama City Beach Floodplain Management Ordinance** as adopted and updated in 2009.

ORDINANCE NO. 1156

AN ORDINANCE OF THE CITY OF PANAMA CITY BEACH, FLORIDA, REPEALING CHAPTER 11 OF THE CITY'S CODE OF ORDINANCES RELATING TO FLOODPLAIN MANAGEMENT; CREATING A NEW CHAPTER 11 OF THE CITY'S CODE OF ORDINANCES TO UPDATE THE CITY'S FLOODPLAIN MANAGEMENT REGULATIONS; PROVIDING FOR ADOPTION OF THE JUNE 2, 2009 FLOOD INSURANCE RATE MAP; PROVIDING AND AMENDING DEFINITIONS RELATED TO FLOODPLAIN MANAGEMENT; AMENDING SPECIFIC STANDARDS RELATED TO CERTAIN RESIDENTIAL AND NONRESIDENTIAL CONSTRUCTION, ELEVATED BUILDINGS, MANUFACTURED HOMES, FLOODWAYS AND COASTAL HIGH HAZARD AREAS; AMENDING STANDARDS IN AREAS OF SHALLOW FLOODING; REPEALING ALL ORDINANCES IN CONFLICT; PROVIDING FOR CODIFICATION; AND PROVIDING AN IMMEDIATELY EFFECTIVE DATE.

BE IT ENACTED by the people of the City of Panama City Beach, Florida that:

Section 1. That from and after the effective date of this Ordinance, Chapter 11 of the Code of Ordinances, City of Panama City Beach, Florida, is hereby repealed.

Section 2. That from and after the effective date of this Ordinance, Chapter 11 of the City's Code of Ordinances, is hereby created to read as follows:

CHAPTER 11 FLOOD PLAIN PROTECTION

ARTICLE I. PURPOSE AND OBJECTIVES

Section 11-1. Statement of Purpose. It is the purpose of this Chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(a) Restrict or prohibit uses which are dangerous to life, health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

(b) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction and throughout their intended life span;

(c) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;

(d) Control filling, grading, dredging and other development which may increase erosion or flood damage, and;

(e) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

Section 11-2. Objectives. The objectives of this Chapter are:

(a) to protect human life and health, and to eliminate or minimize property damage;

(b) to minimize expenditure of public money for costly flood control projects;

(c) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(d) to minimize prolonged business interruptions;

(e) to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, roadways, bridges and culverts located in floodplains;

(f) to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas, and;

(g) to ensure that potential home buyers are notified that property is in a flood hazard area.

Section 11-3. Adoption of Standard for Floodplain Management.

(a) The Florida Building Code (FBC), as amended from time to time, is hereby adopted in full, as if set out at length herein, except as amended, modified or deleted herein as the standard requirements for floodplain management of the City applicable to new construction and substantial improvements.

(b) The standard adopted in subsection (a) contains the minimum standards for floodplain management within the City, and any unauthorized deviations from the standards are hereby prohibited.

(c) Notwithstanding subsections (a) and (b) above, the provisions of Chapter 11, Article V shall control over less restrictive requirements set out in the Florida Building Code applicable to new construction and substantial improvements.

ARTICLE II. DEFINITIONS

Section 11-5. Definitions. Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application:

Accessory structure means, for purposes of floodplain management, a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

Addition (to an existing structure) means any walled and roofed expansion to the perimeter of a structure, in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition which is connected by a firewall or is separated by independent perimeter load-bearing walls is new construction.

Appeal means a request for a review of the interpretation by the Floodplain Administrator, or his designee, of any provision of this chapter or a request for a variance.

Area of shallow flooding means a designated AO or AH zone on the City's Flood Insurance Rate Map (FIRM) with base flood depths from one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by sheet flow or ponding.

Area of special flood hazard or *special flood hazard area* means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year as established by FEMA and identified in the City's FIS.

Base flood elevation means the water-surface elevation associated with the base flood.

Basement means any area of a structure having its floor subgrade (below ground level) on all sides.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

Building. See Structure.

Coastal high hazard area means the area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity waters caused by storms or seismic sources, as specifically designated on the FIRM as Zone V1-30, VE or V.

Datum means a reference surface used to ensure that all elevation records are properly related. The current national datum is the National Geodetic Vertical Datum (NGVD) of 1929, which is expressed in relation to mean sea level, or the North American Vertical Datum (NAVD) of 1988.

Development means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations or storage of materials or equipment.

Elevated building means a non-basement structure which has its lowest elevated floor raised above the ground level by foundation walls, shear walls, posts, piers, pilings or columns.

Encroachment means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before September 10, 1987, or after September 10, 1987, in compliance with the then existing Panama City Beach flood damage prevention plan, or subsequent superseding law (e.g. this floodplain management regulation).

Existing structure means any structure for which the "start of construction" commenced before September 10, 1987, or structures for which the "start of construction" commenced after September 10, 1987, which were built in compliance with the then existing Panama City Beach flood damage prevention plan, or subsequent superseding law (e.g. this floodplain management regulation).

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood or flooding means:

(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters;

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

(b) The collapse or subsidence of land along a shore of a lake or other body of water as the result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a) (1) of this definition.

Flood hazard boundary map (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as Zone A.

Flood insurance rate map (FIRM) means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood Insurance Study (FIS) is the official hydrology and hydraulics report provided by the Federal Emergency Management Agency. The study contains an examination, evaluation and determination of flood profiles and flood-related erosion hazards, as well as the Flood Insurance Rate Map, the water surface elevation of the base flood and other related data and information.

Floodplain means any land area susceptible to being inundated by water from any source.

Floodplain Administrator means the individual appointed to administer and enforce the floodplain management regulations of the City of Panama City Beach.

Floodplain management regulations means Chapter 11 of the Code of Ordinances of the City of Panama City Beach and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes Federal, State of Florida, or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

Floodproofing means any combination of structural and nonstructural additions, changes, or adjustments to properties and structures which reduce or eliminate flood damage to land, water and sanitary facilities, structures, and contents of buildings.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Floodway fringe means that area of the one-hundred year floodplain on either side of the regulatory floodway.

Freeboard means the additional height, usually expressed as a factor of safety in feet, above a flood level for purposes of floodplain management. Freeboard is intended to compensate for many unknown factors, such as wave action, blockage of bridge or culvert openings and hydrological effect of urbanization of the watershed, which could contribute to flood heights greater than the heights calculated for a selected frequency flood and floodway conditions.

Free of obstruction means that any type of lower area enclosure or other construction element will not obstruct the flow of velocity water and wave action beneath the lowest horizontal structural member of the lowest floor of an elevated building during a base flood event. This requirement applies to the structures in velocity zones (V-Zones).

Functionally dependent facility or use means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair, seafood processing facilities or waterfront recreational facilities. The term does not include long-term storage, manufacture, sales or service facilities.

Hardship, as related to variances from the City's floodplain management regulations, means the exceptional difficulty associated with the land that would result from a failure to grant the requested variance. The City of Panama City Beach requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

Historic structure means any structure that is:
(a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register.

(b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
(c) Individually listed on the Florida inventory of historic places which has been approved by the Secretary of the Interior.

Improvement means any reconstruction, rehabilitation, addition or other improvement to a structure.

Insubstantial improvement means any reconstruction, rehabilitation, addition or other improvement to a structure which is not a substantial improvement.

Lowest adjacent grade means the lowest elevation, after the completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

Lowest floor means the top surface of the lowest enclosed area in a structure (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the unfinished or flood-resistant floor of a structure used solely for parking vehicles, business access or storage, located in an area other than a basement..

Lowest horizontal structural member means the lowest structural member which supports floor, wall or column loads and transmits them to the pile foundation.

Manufactured home means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes mobile homes, park trailers, travel trailers and similar transportable structures placed on a site for one hundred eighty (180) consecutive days or longer and intended to be improved property.

Manufactured home park or subdivision means a parcel of land divided into two or more manufactured home lots for rent or sale.

Market value means the building value, which is the property value excluding the land value and that of the detached accessory structures and other improvements on site as established by what the local real estate market will bear. Market value can be established by an independent certified appraisal (other than a limited or curbside appraisal, or one based on income approach), Actual Cash Value (replacement cost depreciated for age and quality of construction of building), or adjusted tax-assessed values.

Mean sea level means the average height of the sea for all stages of the tide. For purposes of this Chapter, the term is synonymous with the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988.

National Geodetic Vertical Datum (NGVD) of 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

New construction means any structure for which the "start of construction" commenced after September 10, 1987, but does not include any structure for which the "start of construction" was after September 10, 1987, and before June 25, 2009, which was built in compliance with the City's then existing flood management regulations.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be

affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after September 10, 1987, but does not include any manufactured home park or subdivision which was completed after September 10, 1987, but before September 18, 2002, which was completed in compliance with the City's then existing flood management regulations.

North American Vertical Datum (NAVD) of 1988 is a vertical control used as a reference for establishing varying elevations within the floodplain.

Principally above ground means that at least fifty one percent (51%) of the actual cash value of the structure is above ground.

Public safety and nuisance means anything which is injurious to safety or health of the entire community or a neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Reasonably safe from flooding means base flood waters will not inundate the land or damage structures and that any subsurface waters related to the base flood will not damage existing or proposed buildings, as indicated by the FIS and FIRM.

Recreational vehicle means a vehicle which is:
1. Built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable; and
4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

Regulatory floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Repetitive loss means flood related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, or brook.

Sand dune means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Start of construction means (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P. L. 97-348)) the date the building permit was issued, provided the actual start of construction, repair, reconstruction or improvement was within one hundred eighty (180) days of the permit date. For new construction, the actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory structures, such as garages or sheds not occupied as dwelling units or not part of the main structure. For substantial

improvements, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. This term also includes "repetitive loss structures" as defined herein.

Substantial improvement means any improvement to a structure, the cumulative cost of which equals or exceeds fifty (50) percent of the market value of the structure, before the start of construction of the improvement. This term includes any improvement to structures that have incurred substantial damage regardless of the actual repair work performed. The term does not, however, include any repair or improvement of a structure required to comply with existing health, sanitary or safety code specifications which are solely necessary to assure safe living conditions. This term does not include any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Substantially improved existing manufactured home parks or subdivisions is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Variance means a grant of relief from the requirements of this chapter which permits construction in a manner otherwise prohibited by this chapter where specific enforcement would result in unnecessary hardship.

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

ARTICLE III. GENERAL PROVISIONS.

Section 11-6. Lands to which this Chapter Applies. This Chapter shall apply to all areas of special flood hazard within the jurisdiction of the City of Panama City Beach, Florida.

Section 11-7. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in the FIS for the City of Panama City Beach, dated June 2, 2009, with accompanying maps and other supporting data, and any subsequent revisions thereto, are adopted by reference and declared to be a part of this Chapter. The FIS and FIRM are on file at the City of Panama City Beach Building Department. When base flood elevation data has not been provided in accordance with the preceding sentence, then the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer the provisions of Article V below.

Section 11-8. Development Permit Required. A Development Permit shall be required in conformance with the provision of this Chapter prior to the commencement of any development activities. When required, this development permit shall be in lieu of the permit known as a building permit, if the latter is required, but shall be issued only in compliance with requirements for issuance of a building permit, including fees, as well as the requirements contained in this Chapter.

Section 11-9. **Compliance.** No structure or land shall be located, extended, converted or structurally altered without full compliance with the terms of this Chapter and other applicable regulations in effect at the time of such location, extension, conversion or structural alteration, except for insubstantial improvements.

Section 11-10. **Abrogration and Greater Restrictions.** This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants or deed restrictions. However, where this Chapter and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Section 11-11. **Interpretation.** In the interpretation and application of this Chapter all provisions shall be:

(a) considered as minimum requirements;
(b) liberally construed in favor of the City, and
(c) deemed neither to limit nor repeal any other powers granted under Florida Statutes.

Section 11-12. **Warning and Disclaimer of Liability.** The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Chapter does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This Chapter shall not create liability on the part of the City or by any officer or employee thereof for any flood damages that result from reliance on this Chapter or any administrative decision lawfully made thereunder.

Section 11-13. **Penalties for Violation.** Violation of the provisions of this chapter for failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute an offense punishable as provided in this Code.

Section 11-14. **Reserved.**

ARTICLE IV. **ADMINISTRATION.**

Section 11-15. **Designation of the Floodplain Administrator.** The Chief Building Official, or his designee, is hereby appointed to administer and implement this Chapter.

Section 11-16. **Permit Procedures.**

Application for a Development Permit shall be made to the Floodplain Administrator on forms furnished by him prior to the commencement of any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(a) Application Stage.
  (1) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures;
  (2) Elevation in relation to mean sea level to which any non-residential structure will be floodproofed;

(3) Certificate from a registered professional engineer or architect that the non-residential floodproofed structure will meet the floodproofing criteria in Sections 11-16 (b) (2) and 11-19 (b).

(4) Description of the extent to which any watercourse will be altered or relocated as result of proposed development; and

(5) Elevation in relation to mean sea level of the bottom of the lowest horizontal structural member of the lowest floor and certification from a registered engineer or architect indicating that they have developed or reviewed the structural designs, specifications and plans of the construction and that those designs, specification or plans are in accordance with accepted standards of practice in Coastal High Hazard Areas.

(6) For new subdivision proposals and other proposed developments greater than fifty (50) lots or five (5) acres, the applicant shall provide base flood elevation data prepared by a registered engineer.

(b) Construction Stage.

(1) Elevation Certification required. Upon placement of the lowest floor, floodproofing by whatever construction means, or upon placement of the bottom of the lowest horizontal structural member, whichever is applicable, it shall be the duty of the permit holder to submit to the Chief Building Official or his designee a certification of the NGVD or NAVD elevation of the lowest floor, floodproofed elevation, or bottom of the lowest horizontal structural member, whichever is applicable, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The Chief Building Official or his designee shall review the floor and floodproofing elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

(2) Floodproofing certification. When floodproofing is utilized for a particular building, certification shall be obtained from a professional engineer or architect certifying that all areas of the building, together with attendant utility and sanitary facilities, below the required elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy in compliance with Section 11-19-(b).

(iii) Design certification in Coastal High Hazard Areas. In Coastal High Hazard Areas, certification shall be obtained from a registered professional engineer or architect that the building is designed and securely anchored to pilings or columns in order to withstand velocity waters and hurricane wave wash.

Section 11-17. Duties and Responsibilities of the Floodplain Administrator. Duties of the Floodplain Administrator shall include, but not be limited to:

(a) Review permits to assure sites are reasonably safe from flooding;

(b) Review all development permits to assure that the permit requirements of this Chapter have been satisfied;

(c) Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.

(d) Notify adjacent communities, the Florida Department of Community Affairs—Division of Emergency Management NFIP Coordinating Office, the North Florida Water Management District, FEMA and the Florida Department of Environmental Regulation prior to any alteration or relocation of a watercourse.

(e) Assure that the flood-carrying capacity within the altered or relocated portion of said watercourse is maintained.

(f) Verify and record the actual elevation, in relation to mean sea level, of the lowest floor (A-zones) or bottom of the lowest horizontal structural member of the lowest floor (V-zones) of all new or substantially improved structures, in accordance with Sections 11-19(a) & (b) and 11-22 (b).

(g) Verify and record the actual elevation, in relation to mean sea level, to which new or substantially improved buildings have been flood-proofed, in accordance with article Section 11-19(b)

(h) Review certified plans and specifications for compliance.

(i) Interpret the location of boundaries of the areas of special flood hazard where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided Article VI below.

(j) Obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source when base flood elevation data or floodway data have not been provided in accordance with Section 11-7.

(k) Obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements, where base flood elevation is utilized.

(l) Coordinate all change requests to the FIS, FIRM and FHBM with the requester, State of Florida, and FEMA.

ARTICLE V. PROVISIONS FOR FLOOD HAZARD REDUCTION.

Section 11-18. General Standards.

In all areas of special flood hazard, all new construction and substantial improvements shall be reasonably safe from flooding, and meet the following provisions:

(a) New construction and substantial improvements shall be designed or modified and adequately anchored to prevent flotation, collapse or lateral movement of the

structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(b) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.

(c) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(d) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.

(e) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities, including duct work, shall be designed or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(f) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.

(g) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

(h) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

(i) Any alteration, addition, repair, reconstruction or improvements to a building which is in compliance with the provisions of this Chapter shall meet the requirements of "new construction" as contained in this Chapter.

(j) Any substantial improvement to a building which is not in compliance with the provisions of this Chapter shall be undertaken only if said non-conformity is not furthered, extended, or replaced.

(k) All applicable additional Federal, state and local permits shall be obtained and submitted to the Floodplain Administrator along with the application for development permit. Copies of such permits shall be maintained on file with the development permit.

Section 11-19. <u>Specific Standards for A-Zones with Base Flood Elevations.</u>

In all A-Zones where base flood elevation data have been provided (Zones AE, A1-30, AE and AH), as set forth in Section 11-7, the following provisions, in additions to those set forth in Section 11-18, shall apply:

(a) <u>Residential Construction.</u> All new construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated at least one foot above the level of the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, there must

be a minimum of two openings on different sides of each enclosed area sufficient to facilitate the automatic equalization of flood hydrostatic forces on both sides of the exterior walls shall be provided in accordance with standards of Section 11-19(c).

(b) Non-Residential Construction. All new construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated at least one foot above the level of the base flood elevation. Non-residential buildings located in A-zones may be flood-proofed in lieu of being elevated provided that all areas of the building components, together with attendant utilities and sanitary facilities, below the required elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A professional engineer or architect shall certify that the standards of this subsection are satisfied using the FEMA Floodproofing Certificate. Such certification shall be provided to the Floodplain Administrator with the corresponding engineering data, operational and maintenance plans.

(c) Enclosures below the lowest floor of elevated buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the lowest floor shall be designed to preclude finished living space and to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.

(1) Designs for complying with this requirement must either be certified by a professional engineer or architect, or meet or exceed the following minimum criteria:

(i) Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

(ii) The bottom of all openings shall be no higher than one foot above adjacent interior grade (which must be equal to or higher in elevation than the adjacent exterior grade); and,

(iii) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

(2) Fully enclosed areas below the lowest floor shall solely be used for parking of vehicles, storage and building access. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door), limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

(3) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(d) Standards for Manufactured Homes and Recreational Vehicles.

(1) All manufactured homes placed or substantially improved on sites (i) outside of an existing manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood, the lowest floor shall be elevated on a permanent foundation to at least one foot above the level of the base flood elevation, and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement.

(2) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:

(i) The lowest floor of the manufactured home is elevated at least one foot above the level of the base flood elevation, or

(ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than forty eight (48) inches in height above grade.

(iii) The manufactured home must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

(3) Placement of manufactured homes is prohibited within the regulatory floodway, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section 11-18(b), the elevation standards of Section 11-19(a) and (b), and the encroachment standard of Section 11-19 (g)(1).

(4) All recreational vehicles placed on sites must either:

(i) Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions);

(ii) Be on the site for fewer than 180 consecutive days, or

(iii) Meet all the requirements for new construction, including anchoring and elevation requirements in accordance with Section 11-19(d)(1) and (2) above.

(e) Adequate drainage paths around structures shall be provided on slopes to guide water away from structures within Zone AH.

(f) Standards for waterways with established Base Flood Elevations, but without Regulatory Floodways. Located within the areas of special flood hazard established in Section 11-7, where streams exist for which base flood elevation data has been provided by FEMA without the delineation of the regulatory floodway (Zones AE and

A1-30), the following provisions, in addition to those set forth in Section 11-19 (a) – (d), shall apply:

(1) Until a regulatory floodway is designated, no new construction, substantial improvement or other development including fill shall be permitted within the areas of special flood hazard, unless it is demonstrated that the cumulative effect when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point in the community.

(2)Development activities which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies, with the City's endorsement, for a conditional FIRM revision, and receives the approval of FEMA.

(g) Standards for waterways with Base Flood Elevations and Floodways. Located within areas of special flood hazard established in Section 11-7 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has significant erosion potential, the following provisions, in addition to those set forth in Section 11-19(a)-(d), shall apply:

(1) Encroachments, new construction, substantial improvements and other developments shall be prohibited within the regulatory floodway unless certification (with supporting technical data) is provided by a registered professional engineer demonstrating (through hydrologic and hydraulic analyses performed in accordance with standard engineering practice) that encroachments would not result in any increase in flood levels during occurrence of the base flood discharge.

(2) Development activities including new construction and substantial improvements that increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies, with the City's endorsement, for a conditional FIRM revision, and receives the approval of FEMA.

(3) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, within the regulatory floodway, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood in accordance with Section 11-19(g)(1) above.

(h) Notwithstanding the foregoing, but in addition thereto, for all habitable structures located seaward of the CCCL, the bottom of the lowest shore-parallel horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to the 100-year flood elevation established by the Florida Department of Environmental Protection (FDEP). For purposes of this subsection, habitable structure means structures which (i) are designed primarily for human occupancy and (ii) are potential locations for shelter from storms. Typically included are residences, hotels and restaurants. Typically excluded are bath houses, cabanas, swimming pools, garages and other structures which are

either not designed primarily for human occupancy or, if designed for occupancy by humans, are not also potential locations for human shelter from storms.

Section 11-20. Standards for A-Zones without Established Base Flood Elevations and Regulatory Floodways.

Located within the areas of special flood hazard established in Section 11-7, where there exist A Zones for which no base flood elevation data has been provided or designated by FEMA, the following provisions apply:

(a) Require standards of Section 11-18.
(b) Require that all new subdivision proposals and other proposed developments greater than fifty (50) lots or five (5) acres, whichever is the lessar, include with such proposals base flood elevation data. The standards set forth in Section 11-19 shall apply.
(c) The Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to administer the provisions of this Chapter. When such data is utilized, provisions of Section 11-19 shall apply. The Floodplain Administrator shall:
    (1) Obtain the elevation (in relation to the mean sea level) of the lowest floor (including basement) of all new or substantially improved structures;
    (2) Obtain, if the structure has been floodproofed in accordance with the requirements of Section 11-19(b), the elevation in relation to the mean sea level to which the structure has been floodproofed; and
    (3) Maintain a record of all such information.
(d) Notify, in riverine situations, adjacent communities, the Florida Department of Community Affairs—NFIP Coordinating Office, FEMA and the Northwest Florida Water Management District prior to any alteration or relocation of a watercourse.
(e) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
(f) Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated an anchored to prevent flotation, collapse and lateral movement. Methods of anchoring include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local requirements for resisting wind forces.
(g) When the data is not available from any source, or required pursuant to subsection (b) herein, the lowest floor of the structure shall be elevated at least three (3) feet above the highest adjacent grade. The standards set forth in Section 11-19 shall apply.

Section 11-21. Standards for AO-Zones. Located within the areas of special flood hazard established in Section 11-7, are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of one to three feet, where a clearly defined channel does not exist and the path of flooding in unpredictable and indeterminate. Therefore, the following provisions, in addition to Section 11-18, apply:

(a) All new construction or substantial improvements of residential structures shall have the lowest floor, including basement, elevated above the highest adjacent grade at least one foot above the depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated to at least three feet above the highest adjacent grade.
(b) All new construction or substantial improvement of non-residential structures shall:
    (1) Have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated to at least three feet above the highest adjacent grade, or

(2) Together with attendant utility and sanitary facilities be completely floodproofed to at least one foot above that level necessary to meet the floodproofing standard specified in Section 11-21(b)(1) above.

(c) Adequate drainage paths around structures shall be provided on slopes to guide water away from structures.

(d) Fully enclosed areas below the lowest floor of new or substantially improved structures that are subject to flooding shall meet the non-elevation design requirements of Section 11-19.

Section 11-22. Standards for Coastal High Hazard Areas. Located within areas of special flood hazard areas established in Section 11-7 are Coastal High Hazard Areas, designated as Zones V1—V30, VE or V. These areas have special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions in this chapter, the following additional provisions shall also apply:

(a) Meet the standards of Section 11-16.

(b) All new construction and substantial improvements in Zones V1—V30, VE and V (if base flood elevation is available) shall be elevated on pilings and columns so that:

(1) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated at least one foot above the base flood elevation level established by FEMA, as adopted by Section 11-7; and

(2) Notwithstanding the foregoing, but in addition thereto, for all habitable structures located seaward of the CCCL, the bottom of the lowest shore-parallel horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to the 100-year flood elevation established by the Florida Department of Environmental Protection (FDEP). For purposes of this subsection, habitable structure means structures which (i) are designed primarily for human occupancy and (ii) are potential locations for shelter from storms. Typically included are residences, hotels and restaurants. Typically excluded are bath houses, cabanas, swimming pools, garages and other structures which are either not designed primarily for human occupancy or, if designed for occupancy by humans, are not also potential locations for human shelter from storms.

(3) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

(c) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction of new or substantially improved structures, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this Section.

(d) Obtain the elevation, in relation to mean sea level, of the bottom of the lowest horizontal structural member of the lowest floor, as built, excluding pilings and columns, of all new or substantially improved structures.

(e) All new construction shall be located landward of the reach of mean high tide.

(f) Provide that all new construction or substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of twenty (20) pounds per square foot (either by design or when so required by state or local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

(1) Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

(2) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year.

(g) If breakaway walls are utilized on new or substantially improved structures, such enclosed space shall be useable solely for parking of vehicles, building access or storage. Such space shall not be used for human habitation.

(h) Prohibit the use of fill for structural support of buildings. No development permit shall be issued for development involving fill in coastal high hazard areas unless it has been demonstrated through appropriate engineering analyses that the subject fill does not cause any adverse impacts to the structure on site or other properties.

(i) Standards for Manufactured Homes.

(1) Manufactured homes to be placed or substantially improved on sites: i.) Outside of a manufactured home park or subdivision, ii.) In a new manufactured home park or subdivision, iii.) In an expansion to an existing manufactured home park or subdivision, or iv.) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood must meet the standards of subsections (b) though (h) herein.

(2) Manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision shall meet the requirements of section 11-19(d)(2).

(j) Recreational vehicles placed on sites within Zones V1--V30, VE, or V on the community's FIRM shall either:

(1) Be on the site for fewer than 180 consecutive days;

(2) Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or

(3) Meet the requirements of Section 11-22(b) through (h) herein.

Section 11-23. Standards for Critical Facilities.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Section 11-24. Floodplain Management Standards for Subdivision Plat Approval.

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.

ARTICLE VI. VARIANCES

Section 11-25. Variance Procedures.

(a) The Planning Board as established by the City Council shall hear and decide appeals and requests for variances from the requirements of this Chapter.

(b) The Planning Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this Chapter.

(c) Any person aggrieved by the decision of the Planning Board the may appeal such decision to the Circuit Court.

(d) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum to preserve the historic character and design of the structure.

(e) In passing upon variance applications, the Planning Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this Chapter, and:

(1) the danger that materials may be swept onto other lands to the injury of others;

(2) the danger of life and property due to flooding or erosion damage;

(3) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(4) the importance of the services provided by the proposed facility to the community;

(5) the necessity of the facility to a waterfront location, in the case of a functionally dependent facility;

(6) the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

(7) the compatibility of the proposed use with existing and anticipated development;

(8) the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

(9) the safety of access to the property in times of flood for ordinary and emergency vehicles;

(10) the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site, and;

(11) the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(f) Upon consideration of the factors listed above, and the purposes of this Chapter, the Planning Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Chapter.

(g) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(h) Conditions for Variances:

(1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building;

(2) Variances shall only be issued upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship, and; (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(3) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the building is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(4) The Chief Building Official or his designee shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

Section 3. All Codes, Ordinances and/or Resolutions or parts of Codes, Ordinances and/or Resolutions in conflict herewith are hereby repealed to the extent of the conflict.

Section 4. The appropriate officers and agents of the City are authorized and directed to codify, include and publish in electronic format the provisions of this Ordinance within the Panama City Beach Code, and unless a contrary ordinance is adopted within ninety (90) days following such publication, the codification of this Ordinance shall become the final and official record of the matters herein ordained. Section numbers may be assigned and changed whenever necessary or convenient.

Section 5. If any section, subsection, sentence, clause, phrase of this Ordinance, or any particular application thereof shall be held invalid by any court, administrative agency, or other

body with appropriate jurisdiction, the remaining sections, subsections, sentences, clauses, or phrases under application shall not be affected thereby.

Section 5. This Ordinance shall become effective immediately upon its passage.

Passed, approved and adopted as of this ____ day of _____, 2009.

_____
Gayle F. Oberst, Mayor

ATTEST:

_____
Holly J. White, City Clerk

EXAMINED AND APPROVED by me this _____ day of _____, 2009.

_____
GAYLE F. OBERST, MAYOR

POSTED AT:

_____ Dated: _____

_____ Dated: _____

_____ Dated: _____

7F3 The complete set of 26 Panama City Beach **Repetitive Loss Area Maps** are available upon request.

7F4. Panama City Beach CRS Participation

As of this writing Panama City Beach is not a member of the CRS program; however, the City has filed their community application and is working with the ISO to become a member in 2010.

7F5

Panama City Beach (East)
Existing Land Use

PANAMA CITY BEACH	Parcels	Acres	Value ($)
Agriculture	39	2,189.18	$28,012,941
Commercial	612	924.35	842,114,994
Government	110	3,344.30	274,170,632
High Density Residential	10,715	247.32	2,063,422,745
Industry	10	24.23	6,361,107
Institutional	33	260.23	109,660,880
Mixed Use	8	22.49	6,823,882
Mobile Home Residential	86	15.74	9,157,319
Multi Family Residential	72	114.28	58,406,879
Recreational	33	370.71	128,445,976
Single Family Residential	5,172	899.11	1,062,529,008
Subtotal	16,890	8,411.94	$4,589,106,363
Vacant	1,777	2,407.27	875,253,173
Total	18,667	10,819.21	$5,464,359,536

Legend
- Agriculture
- Commercial
- Government
- Industry
- Institutional
- Mixed Use
- Recreational
- Single Family Residential
- Multi Family Residential
- High Density Residential
- Mobile Home Residential
- Vacant
- AREA OUTSIDE PANAMA CITY BEACH (EAST)
- PANAMA CITY BEACH (EAST)

Bay County GIS November 18, 2009 panamacitybeach(east)_ elu.mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD _1983_StatePlane_Florida_North_FIPS_0903_Feet
www.pcbaygis.com

7F6

Panama City Beach (East)
Coastal High Hazard Area

PANAMA CITY BEACH	Parcels	Acres	Value ($)
Agriculture	1	65.2	$12,531
Commercial	46	92.58	234,309,603
Government	6	9.76	37,922,848
High Density Residential	455	87.41	74,209,834
Institutional	1	120.41	43,688,799
Multi Family Residential	1	0.33	1,448,122
Recreational	3	25.59	69,299,099
Single Family Residential	132	31.64	72,380,412
Subtotal	645	432.92	$533,271,248
Vacant	98	264.49	159,396,439
Total	743	697.41	$692,667,687

Legend
- Coastal High Hazard Area within Panama City Beach (East)
- Parcels Outside Hazard Area within Panama City Beach (East)
- Parcels Inside Hazard Area within Panama City Beach (East)
- AREA OUTSIDE PANAMA CITY BEACH (EAST)
- PANAMA CITY BEACH (EAST)

Bay County GIS November 16, 2009 panamacitybeach(east)_chha .mxd mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Projection: NA D_1983_StatePlane_Florida_North_FIPS_0903_Feet

7F7

Panama City Beach (East) Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	34	2,166.46	$24,569,736	3	134.68	$34,662			
Commercial	69	414.41	$76,479,356	38	155.75	$9,885,637	60	97.39	$268,146,708
Government	39	3,278.95	$16,445,942	10	48.53	20,863,449	15	7.81	41,904,802
High Density R	126	39.62	8,462,396	531	64.39	86,242,626	3256	196.53	683,801,974
Industry	4	13.70	2,408,336						
Institutional	7	223.04	73,030,367	2	0.00	4,460,211			
Mixed Use	4	21.55	4,668,710						
Mobile Home	2	1.17	229,622						
Multi Family R	6	102.71	37,836,416	1	0.16	285,869	4	0.74	4,480,924
Recreational	10	292.71	35,059,439	9	108.35	71,534,316	3	22.51	69,045,552
Single Family F	544	131.50	16,514,871	236	75.36	69,004,440	224	30.67	140,183,172
Subtotal	851	6,687.82	$694,795,397	829	588.22	$382,331,209	3564	275.35	$1,207,563,132
Vacant	390	1687.40	244,028,563	144	348.10	106,369,809	81	65.52	146,259,340
Total	1,241	8,375.22	$838,823,960	973	936.32	$488,701,014	3,645	340.87	$1,353,822,472

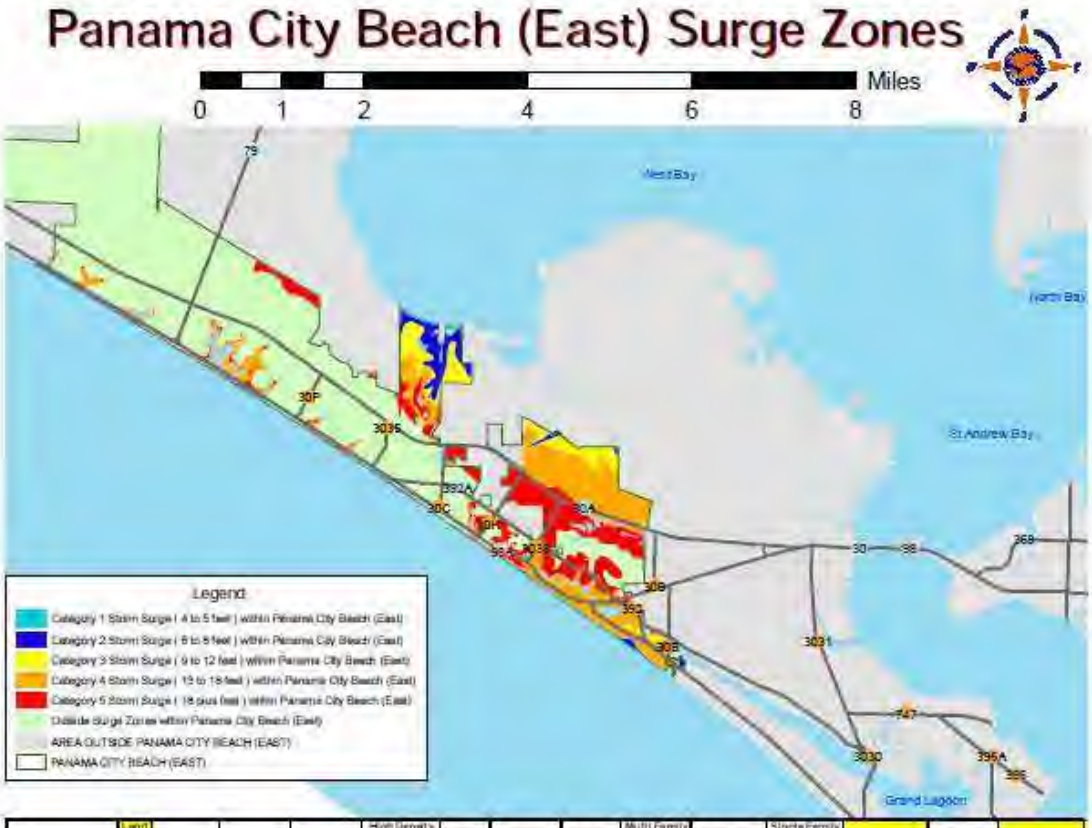
Bay County GIS | November 10, 2009 | panamacitybeach(east)_flood.mxd | mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

Flood data does not exactly overlay county base data in wh ich the mismatch may be as much as 200 feet. This flood data is for careful reference only. This data does not replace hardcopy Flood Insurance Rate Maps (FIRMs) and does not replace an on -site survey. Hardcopy FIRMs can be viewed at Bay County Planning. F or official flood zone information in unincorporated Bay County, Springfield and Cedar Grove contact Bay County Planning (850)248 -8250. In other cities contact the city's planning department.

7F8

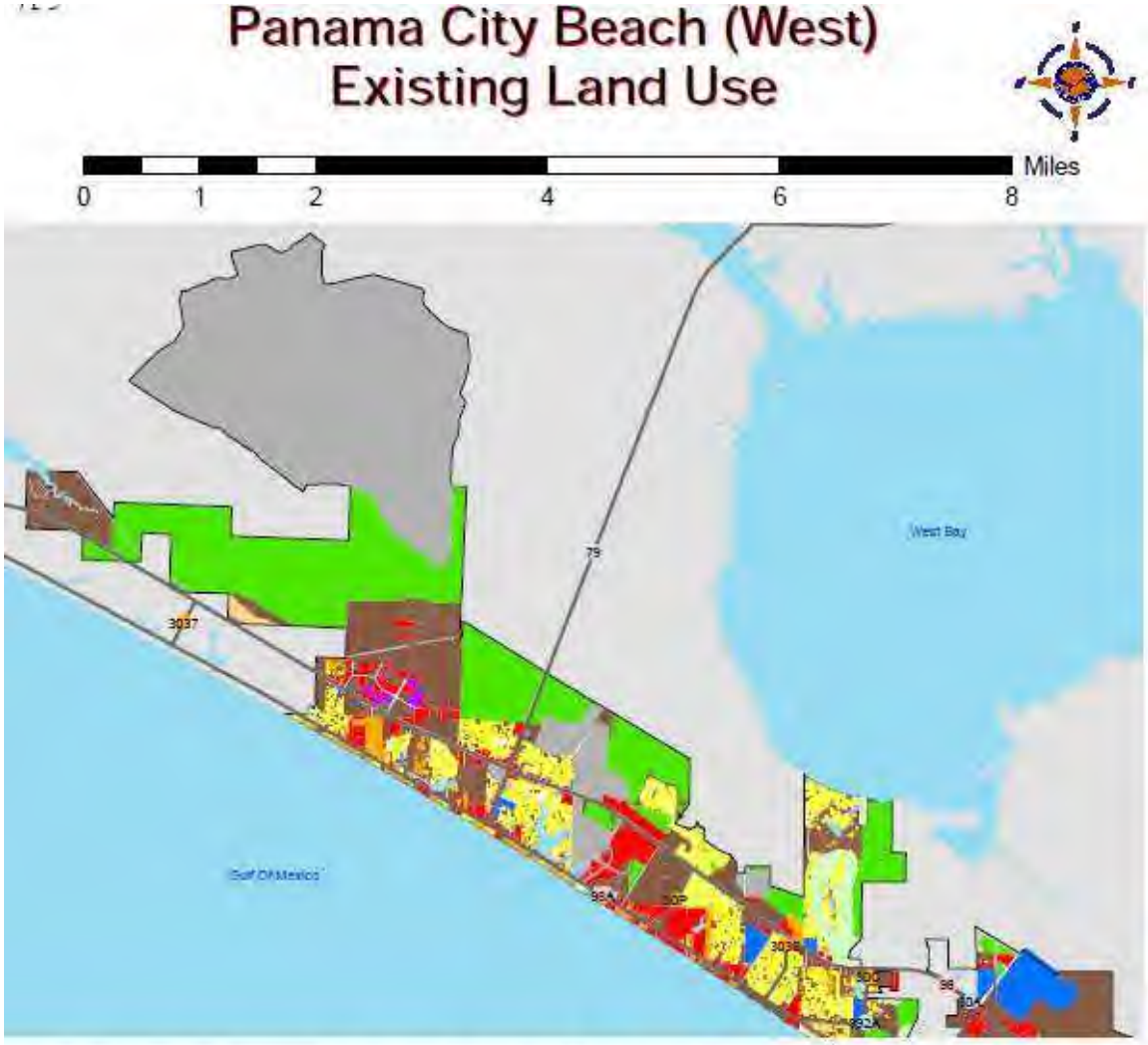
Panama City Beach (East) Surge Zones



	Land Use	Agriculture	Commercial	Government	High Density Residential	Industry	Institutional	Mixed Use	Multi Family Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1Surge														
Parcels		1	48	0	485		3		1	5	10	845	97	742
Acres		88.2	32.78	6.78	93.61		120.81		0.33	25.03	31.68	432.92	256.89	690.41
Value ($)		871,031	324,103,013	27,022,948	74,199,234		43,896,788		1,448,122	96,280,084	72,990,431	$553,271,245	$84,196,918	$892,897,598
Category 2 Surge														
Parcels		1	50	11	1487		2		1	5	287	1770	184	1954
Acres		448.74	103.24	27.35	99.69		142.82		0.33	154.85	67.3	1,044.83	405.67	1,450.50
Value ($)		82,586,076	202,572,932	40,968,536	315,913,784		49,893,984		1,448,122	72,990,007	118,320,535	$884,291,974	$73,542,164	$1,057,834,038
Category 3 Surge														
Parcels		5	52	13	1663		3		1	5	340	2088	241	2329
Acres		459.28	99.63	27.45	98.64		182.58		0.33	226.44	89.29	1,183.82	624.66	1,808.48
Value ($)		$5,255,579	219,740,664	40,969,931	371,067,675		57,047,184		1,448,122	83,119,334	129,783,251	$907,425,990	$78,172,054	$1,085,498,044
Category 4 Surge														
Parcels		10	209	39	5412	1	7	3	10	13	688	7860	522	8123
Acres		695.6	417.56	161.06	566.57	0.37	365.74	0.34	38.78	247.48	171.57	2,877.67	944.17	3,821.84
Value ($)		$5,312,079	437,668,542	166,161,207	1,356,523,152	696,830	85,665,074	536,268	7,575,724	91,924,977	263,442,594	$2,391,646,407	430,891,892	$2,822,827,299
Category 5 Surge														
Parcels		16	317	58	7123	1	12	7	14	24	1605	9783	856	10449
Acres		829.57	536.7	204.14	1,003.5	0.37	228.41	22.32	79.37	358.26	258.6	3,775.01	269.36	4,044.37
Value ($)		$15,303,514	567,092,021	173,403,026	1,642,596,044	696,830	78,196,857	8,647,986	42,036,933	191,212,240	392,144,128	$3,015,668,778	505,396,894	$3,520,965,475

7F9

Panama City Beach (West)
Existing Land Use



PANAMA CITY BEACH	Parcels	Acres	Value ($)
Agriculture	39	2,189.18	$28,012,941
Commercial	612	924.35	842,114,994
Government	110	3,344.30	274,170,632
High Density Residential	10,715	247.32	2,063,422,745
Industry	10	24.23	6,361,107
Institutional	33	260.23	109,660,860
Mixed Use	8	22.49	6,823,882
Mobile Home Residential	86	15.74	9,157,319
Multi Family Residential	72	114.28	58,406,879
Recreational	33	370.71	128,445,976
Single Family Residential	5,172	899.11	1,062,529,008
Subtotal	16,890	8,411.94	$4,589,106,363
Vacant	1,777	2,407.27	875,253,173
Total	18,667	10,819.21	$5,464,359,536

Legend
- Agriculture
- Commercial
- Government
- Industry
- Institutional
- Mixed Use
- Recreational
- Single Family Residential
- Multi Family Residential
- High Density Residential
- Mobile Home Residential
- Vacant
- AREA OUTSIDE PANAMA CITY BEACH (WEST)
- PANAMA CITY BEACH (WEST)

Bay County GIS November 17, 2009 panamacitybeach(west)_ elu.mxd mwilson

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

7F10

Panama City Beach (West)
Coastal High Hazard Area

PANAMA CITY BEACH	Parcels	Acres	Value ($)
Agriculture	1	65.2	$12,531
Commercial	46	92.58	234,309,603
Government	6	9.76	37,922,848
High Density Residential	455	87.41	74,209,834
Institutional	1	120.41	43,688,799
Multi Family Residential	1	0.33	1,448,122
Recreational	3	25.59	69,299,099
Single Family Residential	132	31.64	72,380,412
Subtotal	645	432.92	$533,271,248
Vacant	98	264.49	159,396,439
Total	743	697.41	$692,667,687

Legend
- Coastal High Hazard Area within Panama City Beach (West)
- Parcels Outside Hazard Area within Panama City Beach (West)
- Parcels Inside Hazard Area within Panama City Beach (West)
- AREA OUTSIDE PANAMA CITY BEACH (WEST)
- PANAMA CITY BEACH (WEST)

Bay County GIS November 17, 2009 panamacitybeach(west)_chha .mxd mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

7F11

Panama City Beach (West) Flood Zones

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	34	2,168.46	$24,663,736	3	134.68	$34,652			
Commercial	69	414.41	76,475,556	38	156.75	129,885,697	60	97.39	$258,146,708
Government	39	3,278.95	16,445,942	10	46.53	20,863,449	15	7.61	41904,602
High Density F	126	39.62	8,462,398	531	64.39	86,242,626	3258	116.53	683,601,974
Industry	4	13.70	2,406,335						
Institutional	7	223.04	73,030,367	2	0.00	4,460,211			
Mixed Use	4	21.55	4,658,712						
Mobile Home	3	1.17	229,822						
Multi Family R	6	102.71	37,835,416	1	0.15	285,869	4	0.74	4,460,924
Recreational	15	292.71	33,056,439	6	108.35	71,534,315	3	22.21	69,045,552
Single Family	544	131.50	116,514,671	236	75.36	69,004,440	224	30.67	140,183,172
Subtotal	851	6,687.82	$594,795,397	829	588.22	$382,331,209	3564	275.35	$1,207,563,132
Vacant	390	1687.40	244,028,563	144	348.10	106,369,805	81	65.52	146,259,340
Total	1,241	8,375.22	$838,823,960	973	936.32	$488,701,014	3,645	340.87	$1,353,822,472

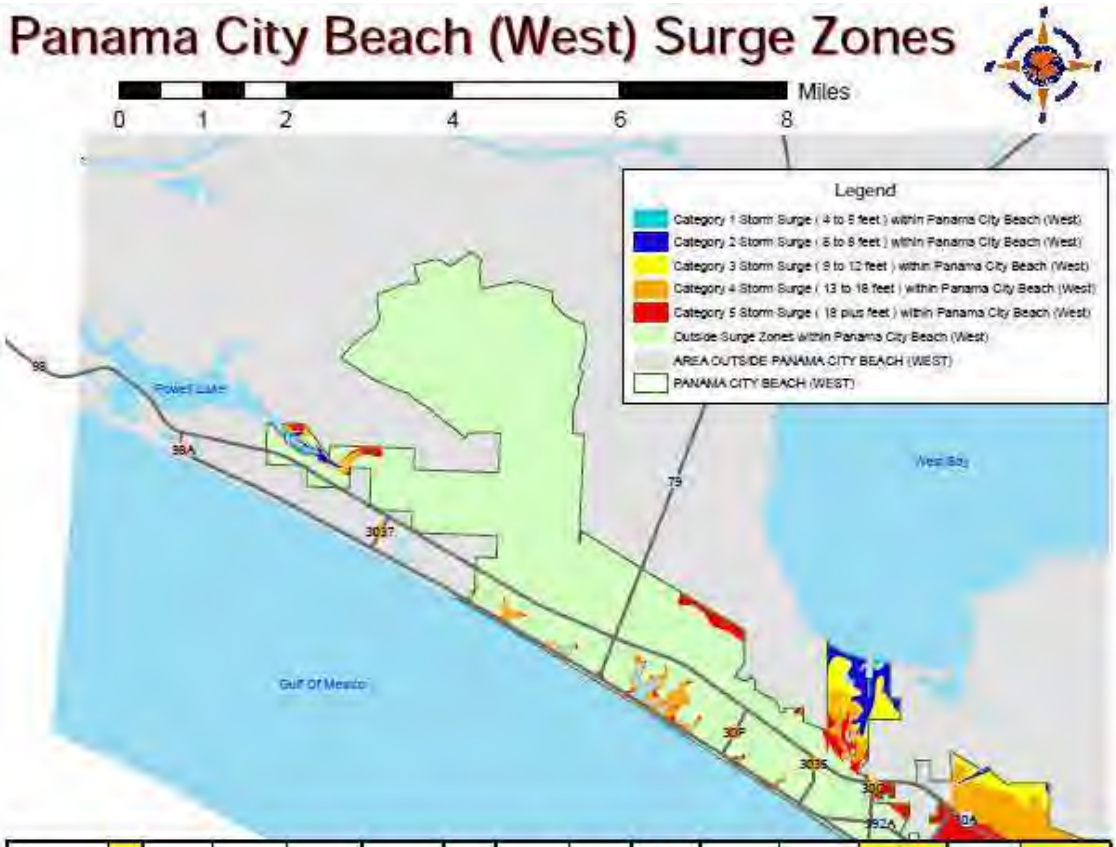
Bay County GIS November 10, 2009 panamacitybeach(west)_flood.mxd mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

7F12

Panama City Beach (West) Surge Zones



	Land Use	Agriculture	Commercial	Government	High Density Residential	Industry	Institutional	Mixed Use	Multi-Family Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1 Surge														
Parcels		1	46	5	451		1		1	1	133	648	97	745
Acres		85.2	62.36	6.73	87.41		105.41		0.33	25.59	31.84	402.87	280.49	683.41
Value($)		$42,631	$54,308,823	$1,022,848	$74,206,834		$9,666,746		$446,522	$3,288,399	$2,391,845	$145,374,048	$30,366,439	$175,740,487
Category 2 Surge														
Parcels		7	33	11	1407		2		1	5	297	1,763	164	1,927
Acres		445.74	103.26	27.35	99.99		142.82		0.33	84.95	67.2	1,044.83	405.47	1,450.30
Value($)		$2,588,219	$32,873,835	$3,988,539	$15,313,784		$9,869,984		$446,522	$2,990,007	$8,020,530	$76,091,420	$13,532,184	$89,623,604
Category 3 Surge														
Parcels		9	52	12	1883		3		1	6	340	2306	241	2547
Acres		459.28	99.63	27.45	98.64		182.58		0.33	328.44	69.29	1,265.83	534.88	1,800.48
Value($)		$3,255,578	$16,740,884	$3,989,831	$7,997,875		$7,041,384		$446,522	$3,115,334	$8,763,251	$51,350,659	$18,172,284	$69,522,943
Category 4 Surge														
Parcels		10	289	38	8402	1	7	2	10	13	988	7551	522	8073
Acres		488.6	417.56	88.06	98.87	0.17	195.74	0.34	16.78	287.48	0.137	1,877.67	944.17	2,821.84
Value($)		$5,312,079	$37,696,582	$8,181,337	$353,625,182	$36,630	$5,655,974	$38,268	$1,573,726	$1,924,977	$23,442,584	$437,487,339	$93,661,892	$531,149,231
Category 5 Surge														
Parcels		16	331	56	7721	1	10	1	14	24	1808	9982	836	10818
Acres		529.57	596.7	234.14	203.6	0.17	225.41	22.33	16.21	355.23	256.6	2,779.01	1864.36	4,644.37
Value($)		$15,468,834	$97,992,021	$29,403,020	$1,560,286,049	$36,630	$8,166,657	$6,842,888	$2,020,248	$10,232,230	$60,144,326	$1,810,586,903	$326,386,480	$2,136,973,383

Bay County GIS | November 13, 2009 | panamacitybeach(west).mxd | mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

7F 13. Panama City Beach Resolution adopting the 2010 LMS

Resolution No. 10-139

A RESOLUTION OF THE CITY OF PANAMA CITY BEACH, APPROVING THAT PORTION OF THE BAY COUNTY LOCAL MITIGATION PLAN RELATING TO THE CITY, AUTHORIZING CITY STAFF TO PURSUE FUNDING OPPORTUNITIES TO IMPLEMENT THE PLAN, AND PROVIDING FOR CONTINUED CITY PARTICIPATION IN FUTURE UPDATES AND EXPANSION OF THE PLAN.

WHEREAS, the City of Panama City Beach is vulnerable to the human and economic costs of natural, technological and societal disaster, and

WHEREAS, the City Council recognizes the importance of reducing or eliminating those vulnerabilities for the overall good and welfare of the community, and

WHEREAS, the City of Panama City Beach has been an active participant in Bay County Mitigation 20/20™ Task Force, which has established a comprehensive, coordinated planning process to eliminate or decrease these vulnerabilities, and

WHEREAS, the City of Panama City Beach's representatives and staff have identified, justified and prioritized a number of proposed projects and programs needed to mitigate the vulnerabilities of Panama City Beach to the impacts of future disasters, and

WHEREAS, these proposed projects and programs have been incorporated into the initial edition of the Bay County Local Mitigation Plan that has been prepared and issued for consideration and implementation by the community of Panama City Beach,

NOW THEREFORE, BE IT RESOLVED on this 9th day of September 2010, that:

1) The City Council hereby accepts and approves that portion of the Bay County Local Mitigation Plan relating to the City of Panama City Beach, as attached and incorporated herein.

2) The agency personnel of the City of Panama City Beach are authorized and directed to pursue available funding opportunities for implementation of the proposals designated therein.

3) The City of Panama City Beach will, upon receipt of such funding or other necessary resources, seek to implement the proposals contained in that portion of the Bay County Local Mitigation Plan relating to the City of Panama City Beach.

4) The City of Panama City Beach will continue to participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead.

5) The City of Panama City Beach will seek to encourage the businesses, industries and community groups operating within or for the benefit of the City of Panama City Beach to also participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead.

PASSED, APPROVED, AND ADOPTED this 9th day of September, 2010.

CITY OF PANAMA CITY BEACH

By: _____
GAYZE OBERST, MAYOR

ATTEST:

_____
HOLLY WHITE, CITY CLERK

Map 7G

Bay County GIS November 12, 2009 location_maps_4_lms_individual .mxd mwilson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet
www.pcbaygis.com

7G. The City of Parker

7G1 Introduction

The City of Parker encompasses approximately 2.5 square miles, containing 2,237 parcels. Approximately 6 miles are coastal and serves as the population south side boundary line. The 2008 BEBR census estimates a population of 4,650 residents. Population growth is expected to remain relatively stable over the next LMS planning cycle of five years.

The first known description of the Parker area appeared in, *A View of West Florida*. This journal contained the first American survey of the St. Andrews Bay area and the survey identified a place called "Loftin" on the east bank of St. Andrews Bay. William M. Loftin, one of two men generally credited with the original settlement of Parker, first visited the area in 1818 as a member of Andrew Jackson's military expedition. He eventually settled in Parker about 1830. Mr. Loftin went into the land development business with Joseph M. White and Henry Riviere, and they steadily purchased land in the East Bay region while trying to develop the St. Andrews Bay area. Their intent was to develop the Parker area and call it "Austerlitz." The exact boundaries for the City of Austerlitz were not known, but they are thought to have included the areas of Springfield, Parker, Callaway, Cedar Grove and possibly Lynn Haven. The name Austerlitz remained for half a century and was attributed to William Loftin and Peter Parker. It should be noted that Peter Parker had no bearing on the city's current name. When William Loftin died in 1838 at the age of 53, he left behind 4 sons and 2 daughters. One daughter, Annie, married Peter Ferdinand Parker, who did in fact become one of the community's founders.

Major land uses in Parker include commercial, mobile home, residential, and single family residential. Only a low percentage of the total number of parcels and acreage in Parker are located within a Coastal High Hazard Area (CHHA). The most numerous of these land uses is 148 single family residences.

Situated along the shores of St. Andrew Bay and East Bay, Parker shares similar risks and threats with the County, as well as the other municipalities, with storm surge being the primary threat. Based on historical flooding events, in today’s cost estimates, a Category 2 storm surge, the most likely event to threaten the area, has the potential to cause roughly $107,880,837 in property damage. A Category 5 storm surge would not greatly increase the costs, as the population is more sparse away from coast. Current estimates for Parker indicate a Category 5 storm surge could affect 23 Commercial properties and 458 Single Family Residences at a cost of $149,042,681.

Major land uses in Parker include commercial, mobile home, and residential, with single family residential at the top of the list. Only a low percentage of the total number of parcels and acreage in Parker are located within a Coastal High Hazard Area (CHHA). The most numerous of these land uses is single family, estimating 148 residences.

7G2. The City of Parker: Review and Incorporation of Existing Plans, Studies, Reports and Technical Information:

7G2.(a) Flood Prevention

7. Drainage

All parking or maneuvering areas shall be designed and engineered in such manner that the drainage will run to the existing drainage structures or otherwise conform to drainage standards set forth in this Code.

Sec. 5-10. SUBDIVISION STANDARDS; PLAT APPROVAL

5-10.1 Purpose

The purpose of this Section is to establish minimum standards for the platting and development of residential subdivisions. The provisions of this section shall serve to establish the identity of all lands shown on and being a part of platted subdivisions so that such lands may be thenceforth conveyed by reference to such plat, and to establish standards of development necessary to protect the interests of the City and the general public.

5-10.2 Applicability

The City Council must grant approval for all subdivision of real property into two (2) or more lots, parcels, tracts, tiers, blocks, sites, units or any division of land; including establishment of new streets and alleys, additions, and resubdivisions; and, when appropriate to the context, relates

the standards set forth in Recommended Standards for Water Works, 1982 Edition.

4. Drainage

In addition to the pollution control requirements set forth in subsection 5-6.10 of this Code, the developer shall design and construct all drainage structures or conveyances to accommodate stormwater runoff produced by a 25-year, 24-hour storm event and, when applicable, the requirements of Chapter 14-86, Florida Administrative Code (FDOT Drainage Permit).

5-7.2 Utility Easements

When a developer installs, or causes the installation of, water, sewer, electrical power, telephone or cable television facilities and intends that such facilities shall be owned, operated or maintained by a public utility or any entity other than the developer, the developer shall convey title to such utility or entity the facilities and easement rights necessary to enable the utility or entity to operate and maintain such facilities, as appropriate.

4. Drainage systems or facilities. The interim standards for water quantity and water quality for the 25-year, 24-hour storm event are as follows: 1) Water Quantity – Post development runoff from the site shall not exceed peak pre-development runoff rates; 2) Water Quality – Stormwater treatment shall be provided for a volume equivalent to one-half (1/2) inch of depth over the entire site, or the runoff from the first one (1) inch of rainfall on the entire site in accordance with Chapter 17-25, FAC in order to meet receiving water quality standards in Chapter 17-302, section 17-302.500, FAC. Water quantity and quality standards shall apply to all new development and redevelopment, regardless of size.

c. Drainage facilities for the proposed development of a single-family detached or duplex dwelling unit on an individual lot or parcel shall be presumed adequate when: 1) the proposed development which has been previously approved by the City; or, 2) site modifications do not involve the obstruction or alteration of any drainage way as specified in Subsection 5-6.10 of this code.

d. All development shall be undertaken in strict conformance with the erosion control measures specified in Subsection 5-6.7 of this code.

Development in Flood Prone Areas

The land uses existing in the floodprone areas are also mostly low density residential. In descending order of amount of land usage in the FEMA Zone A areas are low density residential, vacant, recreation, medium to high density residential, and commercial. The vacant areas have a future land use designation of mostly low density residential, with some recreation and mixed use.

Analysis of the Need for Redevelopment

There are few areas within the City that show signs of deterioration and might be in need of redevelopment. The latest Census showed no substandard housing within the City. During the next planning period, the City will monitor for areas that may become in need of redevelopment in the future. Redevelopment programs and funding should be explored and a plan established to address the City's redevelopment needs should they occur during the next planning period.

Hazard Mitigation Report Recommendations

A review of available hazard mitigation reports did not reveal any specific recommendations for the City of Parker. The County is preparing a Local Mitigation Strategy Plan that the City will consider and contribute. The City has participated in the preparation of the Bay County Hazard Mitigation Strategy (Bay County Intergovernmental Hazard Mitigation Committee, 1998). Included in that document is a list of mitigation initiatives for each local government.

7G2.(b) Parker adopted 2009 Floodplain Management Ordinance

ORDINANCE NO. 09-337

AN ORDINANCE OF THE CITY OF PARKER AMENDING THE CITY'S LAND DEVELOPMENT REGULATIONS (ORDINANCE 90-177, AS AMENDED); RELATING TO FLOOD DAMAGE PREVENTION; PROVIDING FOR SEVERABILITY, REPEALING CONFLICTING PROVISIONS AND ESTABLISHING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY OF PARKER:

SECTION 1. Section 1-5 of Ordinance 90-177, as amended, is hereby amended to add the following in appropriate alphabetical order:

ACCESSORY STRUCTURE (Appurtenant structure). A structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds and pole barns.

DEVELOPMENT. ~~This word "development" shall have the same meaning as set forth in Section 380.04, Florida Statutes, as may be amended or superseded.~~Any man-made change to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of materials or equipment.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA). The federal agency responsible for overseeing the National Flood Insurance Program.

FLOOD INSURANCE RATE MAP (FIRM). ~~The official map of the City, on which he Federal Insurance Administrator has delineated both the special areas and the risk premium zones applicable to the City.~~An official map of the City, issued by FEMA, which delineated both the areas of special flood hazard and the risk premium zones applicable to the City.

MANUFACTURED HOUSING or MANUFACTURED HOME. A structure, transportable in one or more sections, which, in the traveling mode, is eight (8) body feet or more in width and forty (40) body feet or more in length; and when erected on site, is 320 or more square feet in living area; and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning, and electrical systems contained therein. The term includes any structure that meets all of the requirements of this definition except the size requirements and with respect o which the manufacturer voluntarily files a certification required by the United States Secretary of Housing and Urban Development and complies with the standards established under Title 42 of the United States Code. ~~If fabricated after June 15, 1976, each section must be built to standards prescribed by the U.S. Department of Housing and Urban Development.~~ The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

SECTION 2. Section 8-1.1 of Ordinance 90-177, as amended, is hereby amended as follows:

8-1.1 Statutory Authorization

The Legislature of the State of Florida has authorized and delegated in Chapter 166, Florida Statutes, ~~delegated~~ the responsibility ~~to~~of local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City Council does hereby adopt the following floodplain management regulations.

SECTION 3. Section 8-1.3 of Ordinance 90-177, as amended, is hereby amended as follows:

8-1.3 Statement of Purpose

1. It is the purpose of this Article to save lives, promote the public health, safety and general welfare and to minimize public and private losses due to flood

conditions in specific areas by provisions designed to:

a. restrict or prohibit the uses which are dangerous to life, health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

b. require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage ~~at the time of initial construction~~throughout their intended life span;

c. control the alteration of natural floodplains, steam channels, and natural protective barriers which are involved in the accommodation of flood waters;

d. control filling, grading, dredging and other development which may increase erosion or flood damage; and

e. prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

SECTION 4. Section 8-1.4 of Ordinance 90-177, as amended, is hereby amended as follows:

8-1.4 Objectives

The objectives of this Article are:

1. to protect human life and health and to eliminate or minimize property damage;

2. to minimize expenditure of public money for costly flood control projects;

3. to minimize the need for rescue and relief effort associated with flooding and generally undertaken at the expense of the general public;

4. to minimize prolonged business interruptions;

5. to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;

6. to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize future flood blight areas; and

7. to ~~i~~ensure that potential home buyers are notified that property is in a flood area.

SECTION 5. Section 8-1.5 of Ordinance 90-177, as amended, is hereby amended as follows:

8-1.5 Methods of Reducing Flood Losses

1. In order to accomplish its purposes, this Article includes methods and provisions for:

a. restricting or prohibiting uses which are dangerous to life, health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

b. requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

c. controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;

d. controlling filling, grading, dredging, and other development which may increase flood damage; and,

e. preventing or regulating the construction of flood barriers that will unnaturally divert flood

waters or may increase flood hazards in other areas.

SECTION 6. Section 8-2 of Ordinance 90-177, as amended, is hereby amended as follows:

Sec. 8-2. DEFINITIONS

In the interpretation and construction of this Article, the general definitions contained in the Code shall apply as supplemented by the following definitions and rules of construction, unless they are inconsistent with the manifest intent of the City Council or the context clearly requires otherwise:

ADDITION (TO AN EXISTING BUILDING). Any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

APPEAL. A request for a review of the Floodplain Administrator's interpretation of any provision of this Article or a request for a variance.

AREA OF SHALLOW FLOODING. A designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD. The land in the flood plain within the City subject to a one percent or greater chance of flooding in any given year. This term is synonymous with the phrase "special flood hazard area."

BASE FLOOD. The flood having a one percent chance of being equaled or exceeded in any given year (also commonly called the "100-year flood" and the "regulatory flood").

BASE FLOOD ELEVATION. The water-surface elevation associated with the base flood.

BASEMENT. That portion of a building having its floor subgrade (below ground level) on all sides.

BREAKAWAY WALL. A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

BUILDING. ~~Any structure that encloses a space used for sheltering any occupancy. Each portion of a building separated from other portions by a firewall shall be considered as a separate building.~~See definition of structure.

COASTAL HIGH HAZARD AREA. An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone V1 - V30, or VE or V.

CRITICAL FACILITY. A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

DATUM. A reference surface used to ensure that all elevation records are properly related. The current national datum is the National Geodetic Vertical Datum (NGVD) of 1929, which is expressed in relation to mean sea level, or the North American Vertical Datum (NAVD) of 1988.

~~DEVELOPMENT. This term shall have the same definition as defined in Section 380.04, Florida Statutes, as may be amended or superseded.~~

ELEVATED BUILDING. A non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

ENCROACHMENT. The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures

or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

EXISTING CONSTRUCTION. ~~Any structure for which the start of construction commenced before the effective date of Ordinance No. 79-97 of the City.~~For the purposes of floodplain management, existing construction shall mean structures for which "the start of construction" commenced before the effective date of Ordinance No. 79-97. Existing construction, means for the purposes of determining rates structures for which the "start of construction" commenced before the effective date of Ordinance No. 79-97. This term may also be referred to as "existing structures".

EXISTING MANUFACTURED HOME PARK or EXISTING MANUFACTURED HOME SUBDIVISION. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of Ordinance No. 79-97 of the City.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed. This definition shall also include the installation of utilities, the construction of streets, and either final grading or the pouring of concrete pads.

FLOOD or FLOODING.

(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland or tidal waters; or

2. the unusual and rapid accumulation or runoff of surface waters from any source.

3. Mudslides (i.e. mudflows which are proximately caused by flood as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surface of normally dry land areas,

as when earth is carried by a current of water and deposited along the path of the current.

(b) The collapse or subsidence of land along a shore of a lake or other body of water as the result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, by an unanticipated force of nature, including but not limited to a flash flood or an abnormal tidal surge or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

FLOOD BOUNDARY and FLOODWAY MAP (FBFM). An official map of the community on which the Federal Emergency Management Agency (FEMA) has delineated the areas of special flood hazard and regulatory floodways.

FLOOD HAZARD BOUNDARY MAP (FHBM). An official map of the community, issued by FEMA, where the boundaries of the areas of special flood hazard have been identified as only Approximate Zone A.

FLOOD INSURANCE STUDY (FIS). The official hydrology and hydraulics report provided by FEMA. The study contains an examination, evaluation, and determination of flood hazards, and, if appropriate, corresponding water surface elevations, or an examination, evaluation, and determination of mudslide (i.e., mudflow) and other flood-related erosion hazards. The study may also contain flood profiles, as well as the FIRM, FHBM (where applicable), and other related data and information.

FLOOD INSURANCE STUDY. The official hydraulic and hydrologic report provided by the Federal Emergency Management Agency. The report contains flood profiles, flood data tables, and floodway data tables.

FLOODPLAIN. Any land area susceptible to being inundated by water from any source (see definition of "flooding").

FLOODPLAIN MANAGEMENT. The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control

works, floodplain management regulations, and open space plans.

FLOODPLAIN MANAGEMENT ADMINISTRATOR or ADMINISTRATOR. The individual appointed to administer and enforce the floodplain management regulations.

FLOODPLAIN MANAGEMENT REGULATIONS. This Article and other zoning Articles, subdivision regulations, building codes, health regulations, special purpose Articles, and other applications of police power which control development in flood-prone areas in the City. This term describes federal, state or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

FLOODPROOFING. Any combination of structural and non-structural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOODWAY. ~~See Regulatory Floodway.~~The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

FLOODWAY FRINGE. ~~That area of the floodplain on either side of the regulatory floodway where encroachment may be permitted without additional hydraulic and/or hydrologic analysis.~~That area of the one-percent (base or 100 year) floodplain on either side of the regulatory floodway.

FLOOR. The top surface of an enclosed area in a building (including basement); i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

FREEBOARD. The additional height, usually expressed as a factor of safety in feet, above a flood level for purposes of floodplain management. Freeboard tends to compensate for many unknown factors, such as wave action, blockage of bridge or culvert openings, and hydrological effect of urbanization of the watershed, which could contribute to flood heights greater than the heights calculated for a

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

4. Individually listed on a local inventory historic places in communities with historic preservation programs that have been certified either:

a. By an approved state program as determined by the Secretary of the Interior, or

b. Directly by the Secretary of the Interior in states without approved programs.

INCREASED COST OF COMPLIANCE or ICC. The cost to repair a substantially damaged building that exceeds the minimal repair cost and that is required to bring a substantially damaged building into compliance with the local flood damage prevention Article. ICC insurance coverage is provided in a standard (NFIP) flood insurance policy.

LOWEST ADJACENT GRADE. The lowest elevation, after the completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

LOWEST FLOOR. The lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the non-elevation design standards of this Article.

MANUFACTURED HOME PARK or MANUFACTURED HOME SUBDIVISION. A parcel (or contiguous parcels) of land divided into three or more manufactured home lots for rent or sale.

MARKET VALUE. The building value, excluding the land (as agreed to between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of building (Actual Cash Value) or adjusted assessed values.

MEAN SEA LEVEL. The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the flood plain. For purposes of this Article, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929, or North American Vertical Datum (NAVD) of 1988.

NATIONAL GEODETIC VERTICAL DATUM or NGVD. The vertical control used as a reference for establishing varying elevations within the floodplain, as corrected in 1929.

NEW CONSTRUCTION. Structures for which the start of construction commenced on or after the effective date of Ordinance No. 79-97 of the City. The term also includes any subsequent improvements to such structures. For flood insurance rates, structures for which the start of construction commenced on or after the effective date of Ordinance No. 79-97 of the City and includes any subsequent improvements to such structures.

NEW MANUFACTURED HOME PARK or NEW MANUFACTURED HOME SUBDIVISION. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of Ordinance No. 79-97 of the City.

NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. A vertical control used as a reference for establishing varying elevations within the floodplain.

PRIMARY FRONTAL DUNE. A continuous or nearly continuous mound or ridge of sand with relatively steep seaward and

landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

PRINCIPALLY ABOVE GROUND. At least 51 percent of the actual cash value of the structure is above ground.

PROGRAM DEFICIENCY. A defect in the community's floodplain management regulations or administrative procedures that impairs effective implementation of those floodplain management regulations or of the standards required by the National Flood Insurance Program.

PUBLIC SAFETY and NUISANCE. Anything which is injurious to safety or health of the entire community or a neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

REASONABLY SAFE FROM FLOODING. Base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

RECREATIONAL VEHICLE. A vehicle that is:

a) Built on a single chassis;

b) 400 square feet or less when measured at the largest horizontal projection;

c) Designed to be self-propelled or permanently towable by a light duty truck; and

d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOODWAY. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

REMEDY A DEFICIENCY or VIOLATION. To bring the regulation, procedure, structure or other development into compliance with State of Florida, Federal, or local floodplain management regulations; or if this is not possible, to reduce the impacts of its noncompliance. Ways the impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of this ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

REPETITIVE LOSS. Flood-related damages sustained by a structure on two separate occasions during a 10-year period ending on the date of the event for which the second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25% of the market value of the building at the time of each such flood event.

RIVERINCE. Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

SAND DUNE. Naturally occurring accumulations of sand in ridges or mounds landward of the beach.

SHALLOW FLOODING. See area of shallow flooding.

SPECIAL FLOOD HAZARD AREA or SFHA. ~~As it refers to the Area of Special Flood Hazard shall mean an area having special flood hazard and shown on a FHBM or FIRM as Zone A, AO, A1-A30, AE, A99, V1-30, or VE.~~See area of special flooding.

START OF CONSTRUCTION. When relating to other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement, shall mean the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including manufactured home) on a site, such as the poring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation,

such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory building, such as garages or sheds not occupied as dwelling units or not part of the main structure. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STORM CELLAR. A place below grade used to accommodate occupants of the structure and emergency supplies as a means of temporary shelter against severe tornadoes or similar windstorm activity.

STRUCTURE. For floodplain management purposes, a structure shall mean a walled and roofed building, including gas or liquid storage tank that is principally above ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent (50%) of the market value of the structure before the damage occurred. Substantial damage also means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred (also referred to as repetitive loss).

SUBSTANTIAL IMPROVEMENT. Any reconstruction, rehabilitation, ~~alteration~~addition, or other improvement~~s to~~of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage"~~,~~ regardless of the actual repair work ~~was~~ performed. This term ~~also~~does not, however, includes ~~any combination of repairs, reconstruction, alteration, or improvements to a building taking place during a 10 year period, in which the cumulative cost equals or exceeds 50 percent (50%) of the market value of the building (also referred to as cumulative substantial improvement).~~any

repair or improvement of a structure to correct existing violations of State of Florida or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement official prior to the application for permit for improvement, and which are the minimum necessary to assure safe living conditions. This term does not include any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

~~For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either:~~

~~1. any project for improvement of a structure required to comply with existing health, sanitary, or safety code violations which have been identified prior to permit issuance by the City or the City's designee and which are solely necessary to assure safe living conditions; or~~

~~2. any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.~~

VIOLATION. The failure of a structure or other development to be fully compliant with this Article. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this Article is presumed to be in violation until such time as that documentation is provided.

WATERCOURSE. A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

WATER SURFACE ELEVATION. The height, in relation to the National Geodetic Vertical Datum (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

SECTION 7. Section 8-3.1 of Ordinance 90-177, as amended, is hereby amended as follows:

8-3.1 Lands ~~Applicable~~to Which this Article Applies.

This Article shall apply to all areas of special flood hazard within the jurisdiction of the City.

SECTION 8. Section 8-3.2 of Ordinance 90-177, as amended, is hereby amended as follows:

8-3.2 Basis for Establishing the Areas of Special Flood Hazard

1. The areas of special flood hazard identified by the Federal Emergency Management Agency in the Flood Insurance Study for Bay County (a countywide study), Florida, including the City, dated June 2, 2009, with the accompanying, applicable Flood Insurance Rate Map panels for the City and other supporting data and revisions thereto, are adopted by reference and declared to be a part of this Article. The FIS and FIRM are on file with the Administrator.

2. The areas of special flood hazard identified by the Federal Emergency Management Agency in its Flood Hazard Boundary Map (FHBM), Panels 0363, 0364, 0426, and 0427, dated June 2, 2009, with accompanying maps and other supporting data, and any revisions thereto, are adopted by reference and declared to be a part of this Article. The Flood Insurance Study and FIRM are on file with the Administrator.

3. A Building Permit shall be required in conformance with the provisions of this Article prior to the commencement of any development and/or building activities.

SECTION 9. Section 8-4.2 of Ordinance 90-177, as amended, is hereby amended as follows:

8-4.2 Permit Procedures

Any application for a building permit shall be made to the Bay County Building Department on forms furnished by that office prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations, of the area in question; existing or proposed structures, earthen fill, storage or materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

1. Application Stage.

   a. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures;

   b. Elevation in relation to mean sea level to which any non-residential structure will be flood-proofed;

   c. Certificate from a registered professional engineer or architect that the non-residential flood-proofed structure will meet the flood proofing criteria in Section 8-5; and

   d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

   e. Elevation in relation to mean sea level of the bottom of the lowest horizontal structural member of the lowest floor and provide a certification from a registered engineer or architect indicating that they have developed and/or reviewed the structural designs, specifications and plans of the construction and certified that those specifications and plans are in accordance with this Article and with accepted standards of practice in Coastal High Hazard Areas.

2. Construction Stage. Upon placement of the lowest floor, or flood-proofing by whatever construction means, it shall be the duty of the permit holder to submit to the Administrator a certification of the elevation, or bottom of the lowest horizontal structural member of the lowest

floor or flood-proofed elevation, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood proofing is utilized for a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The Administrator shall review the lowest floor & flood proofing elevation data submitted. The permit holder immediately and prior to further progressive work being permitted to proceed shall correct deficiencies detected by such review. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

SECTION 10. Section 8-4.3 of Ordinance 90-177, as amended, is hereby amended as follows:

8-4.3. Duties and Responsibilities of Administrator

Duties of the Administrator shall include, but not be limited to:

1. Review all development permits to assure that the permit requirements of this Article have been satisfied;

2. Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.

3. Notify adjacent communities, the Florida Department of Community Affiars-Division of Emergency Management-NFIP Coordinating Office, the Northwest Florida Water Management District, the Federal Emergency Management Agency~~and the State of Florida Department of Environmental Protection,~~ and other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse.

4. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

5. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved buildings, in accordance with Section 8-4.

6. Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been flood-proofed, in accordance with Section 8-4.

7. Review certified plans and specifications for compliance. When flood-proofing is utilized for a particular building, certification shall be obtained from a registered engineer or architect certifying that all areas of the building, together with attendant utilities and sanitary facilities, below the required elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy in compliance with Section 8-5.2.2 of this Article. In Coastal High Hazard Areas, certification shall be obtained from a registered professional engineer or architect that the building is designed and securely anchored to pilings or columns in order to withstand velocity waters and hurricane wave wash. Additionally in Coastal High Hazard Areas, if the area below the lowest horizontal structural member of the lowest floor is enclosed, it may be done so with open wood lattice and insect screening or with non-supporting breakaway walls that meet the standards of Section 8-5.6.5 of this Article.

8. Where interpretation is needed as the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Bay county Building Permit Office shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Article.

9. When base flood elevation data has not been provided in accordance with Section 8-3, then the Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of Section 8-5.

10. All records pertaining to the provisions of this Article shall be maintained in the office of the Administrator and shall be open for public inspection.

11. Review all permits to assure sites are reasonably safe from flooding.

12. Require copies of any additional required federal and state permits to be submitted along with the development permit application and maintain such permits on file with the development permit.

13. Coordinate all change requests to the FIS, FIRM and FBFM with the requester, State of Florida, and FEMA, and

14. Where Base Flood Elevation is utilized, obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements in accordance with Sections 8-5.2.1 and 8-5.2.2, respectively.

SECTION 11. Section 8-5 of Ordinance 90-177, as amended, is hereby amended as follows:

Sec. 8-5. PROVISIONS FOR FLOOD HAZARD REDUCTION.

8-5.1 General Standards

In all areas of special flood hazard the following provisions are required:

1. New Construction and substantial improvements shall be designed or modified and adequately anchored to prevent flotation, collapse or lateral movement of the structure;

2. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of

anchoring may include, but are not limited to, use of over-the-top frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;

3. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

4. New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

5. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

6. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

7. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;

8. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;

9. Any alteration, repair, reconstruction or improvements to a structure which is in compliance with the provisions of this Article, shall meet the requirements of "new construction" as contained in this Article; and

10. Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this Article, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.

11. All applicable additional federal, state and local permits shall be obtained and submitted to the

Administrator along with the application for the development permit. Copies of such permits shall be maintained on file with the development permit.

12. Standard for subdivision and other proposed development (including manufactured homes shall be consistent with the need to minimize flood damage, shall have public utilities and facilities located and constructed to minimize or eliminate flood damage and shall have adequate drainage provided to reduce exposure to flood hazards.

13. When proposed new construction and substantial improvements are partially located in an area of special flood hazard, the entire structure shall meet the standards of new construction.

14. When proposed new construction and substantial improvements are located in multiple flood hazard risk zones or in a flood hazard risk zone with multiple base flood elevations, the entire structure shall meet the standards for the most hazardous flood risk zone and the highest base flood elevation.

8-5.2. Specific Standards

In all areas of special flood hazard, Zones AE, A1-30, and/or AH, where base flood elevation data have been provided, as set forth in Section 8-3.2, the following provisions are required:

1. Residential Construction. All ~~N~~new construction or substantial improvement of any residential structure (including manufactured home) shall have the lowest floor, including basement, elevated to or above at least one foot above base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, a minimum of two openings on different sides of the each enclosed area, sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with standards of Section 8-5.2.3.

2. Non-residential Construction. New construction or substantial improvement of any commercial, industrial, or non-residential structure (~~or~~ including manufactured home) shall have the lowest floor,

including basement, elevated to at least 1 foot above the level of the base flood elevation. Non-residential buildings may be flood-proofed in lieu of being elevated provided that all areas of the structure below the required elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in Section 8-4.3.9.

3. ~~Elevated Buildings~~Enclosures below the Lowest Floor. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.

a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

i. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

ii. The bottom of all opening shall be no higher than one foot above grade, and;

iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

b. ~~Electrical, plumbing, and other utility connections are prohibited below the base flood elevation;~~Fully enclosed areas below the lowest floor shall solely be used for parking of vehicles, storage and building access.

c. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage or maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

d. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

4. Standards for Manufactured Homes and Recreational Vehicles.

a. All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, in a new manufactured home park or subdivision or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.

b. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:

i. The lowest floor of the manufactured home is at or above at least one foot above the base flood elevation.

ii. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above the ground.

iii. The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.

iv. In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood, any manufactured home placed or substantially improved must meet

the standards of Sections 8-5.2.4.b.i and 8-5.2.4.b.iii above.

c. All recreational vehicles placed on sites must either:

i. Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions), or;

ii. ~~m~~Meet all the requirements for new construction, including anchoring and elevation requirements of Section 8-5.2.4.a or 8-5.2.4.b.i and 8-5.2.4.b.iii, above, or;

iii. Be on the site for fewer than 180 consecutive days.

Adequate drainage paths around structures shall be provided on slopes to guide water away from structures within Zone AH.

8-5.3 Standards for Streams Without Established Base Flood Elevations and/or Floodways

Located within the areas of special flood hazard established in Section 8-3.2, where small streams exist but where no base flood data have been provided or where no floodways have been provided, the following provisions apply:

1. When base flood elevation data or floodway data have not been provided in accordance with Section 8-3.2, then the local administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provisions of Section 8-5.

2. In special flood hazard areas with base flood elevations (Zones AE and A1-30) but without floodways, no encroachments, including fill material or structures, shall be permitted unless certification by

a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.

3. If base flood elevations and floodway data are not available from outside sources, then the following provisions may be used:

a. In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than 2 feet above the highest adjacent grade at the building site.

b. No encroachments, including fill material or structures, shall be located within a distance of the stream bank equal to 10 times the width of the stream at the top of the bank or 20 feet each side from the top of the bank, whichever is greater, unless certification by a registered professional engineer is provided demonstrating that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge. (NOTE: Use of center line of a stream may be a more suitable standard under some conditions).

(A) Standards for waterways with established Base Flood Elevations and Floodways.

Located within areas of special flood hazard established in Section 8-3.2, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the high velocity of flood waters which carry debris, potential projectiles and have significant erosion potential, the following provisions, in addition to those set forth in Section 8-5.2.1 through 8-5.2.5, shall apply:

(1) Prohibit encroachments, including fill, new construction, substantial improvements and other developments within the regulatory floodway unless certification (with supporting technical data) by a registered professional engineer is provided through hydrologic and hydraulic analyses performed in accordance with standard engineering practice demonstrating that encroachments would not result in any increase in flood levels during occurrence of the base flood discharge.

(2) Placement of manufactured homes is prohibited within the regulatory floodway, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section 8-5.1.2, the elevation standards of Section 5-5.2.1 and Section 5-5.2.2, and the encroachment standard of Section 8-5.3(A)(1), aer met.

(3) Development activities including new construction and substantial improvements within the regulatory floodway that increase the base flood elevation may be allowed, provided that the developer or applicant first applies - with the community's endorsement - for a conditional FIRM revision, and receives the approval of FEMA.

(4) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, within the regulatory floodway, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood in accordance with Section 8-5.3(A)(1).

(5) For all structures located seaward of the Coastal Construction Control Line (CCCL), the lowest floor of all new construction and substantial improvements shall be elevated to no lower than the 100-year flood elevation established by the Florida Department of Environmental Protection or by FEMA in accordance with Section 8-3.2,

whichever is higher. All non-elevation design requirements of Section 8-5.2.

(B) Specific Standards for A-Zones Without Base Flood Elevations and Regulatory Floodways.

Located within the areas of special flood hazard established in Section 8-3.2, where there exist A Zones for which no base flood elevation data and regulatory floodway have been provided or designated by the Federal Emergency Management Agency, the following provisions shall apply:

(1) Require standards of Section 8-5.1.

(2) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals base flood elevation data. Standards set forth in Section 8-5.2 shall apply.

(3) The Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State of Florida, or any other source, in order to administer the provisions of this ordinance. When such data is utilized, provisions of Section 8-5.2 shall apply. The Floodplain Administrator shall:

a) Obtain the elevation (in relation to the mean sea level) of the lowest floor (including the basement) of all new and substantially improved structures,

b) Obtain, if the structure has been floodproofed in accordance with the requirements of Section 8-5.2.2, the elevation in relation to the mean sea level to which the structure has been floodproofed, and

c) Maintain a record of all such information.

(4) Notify, in riverine situations, adjacent communities, the Florida Department of Community Affairs - NFIP Coordinating Office, and the Northwest Florida Water Management District prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.

(5) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

(6) Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated and anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State of Florida and local anchoring requirements for resisting wind forces.

(7) When the data is not available from any source, in accordance with standard set forth in Section 8-5.3(B)(2) of this Article, the lowest floor of the structure shall be elevated to no lower than three feet above the highest adjacent grade. Standards set forth in Section 8-5.2 shall apply.

8-5.4 Standards for Areas of Shallow Flooding (AO Zones)

Located within the areas of special flood hazard established in Section 8-3.2, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet (1' - 3') where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

1. All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to the depth number specified on the Flood Insurance Rate Map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade.

2. All new construction and substantial improvements of non-residential structures shall:

a. Have the lowest floor, including basement, elevated to the depth number specified on the Flood Insurance Rate Map, in feet, above the

highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade, or;

b. Together with attendant utility and sanitary facilities be completely flood-proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required as per Section 8-5.2.2.

3. Adequate drainage paths around structures shall be provided on slopes to guide water away from structures.

4. Fully enclosed areas below the lowest floor elevation that are subject to flood shall meet the non-elevation design requirements of Section 8-5.2.

8-5.5 Standards for Subdivision Proposals

1. All subdivision proposals shall be consistent with the need to minimize flood damage;

2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and;

4. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which is greater than the lesser of fifty lots or five acres.

8-5.6 Coastal High Hazard Areas

Located within areas of special flood hazard areas established in Section 8-3.2 are Coastal High Hazard Areas, designated as Zones V1-V30, VE and/or V. These areas have

special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions in this Article, the following provisions shall also apply:

1. All new construction and substantial improvements in Zones V1 - V30 and VE (V if base flood elevation is available) shall be elevated on pilings and columns so that:

a. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated at or above at least one foot above the base flood elevation level; and,

b. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

c. For all structure located seaward of the Coastal Construction Control Line, the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to the 100 year flood elevation established by the Florida Department of Environmental Protection or the base flood elevation, whichever is higher.

2. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of Section 8-5.6.1.

3. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V1 - V30 and VE. The Floodplain Management

Administrator shall maintain a record of all such information.

4. All new construction shall be located landward of the reach of mean high tide.

5. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

a. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and,

b. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year.

<u>c. Such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be finished, partitioned into multiple rooms, or temperature controlled.</u>

6. If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles,

building access, or storage. Such space shall not be used for human habitation.

7. Prohibit the use of fill for structural support of buildings. No development permit shall be issued for development involving fill in coastal high hazard areas unless it has been demonstrated through appropriate engineering analyses that the subject fill does not cause any adverse impacts to the structure on site or other properties.

8. Prohibit man-made alteration of sand dunes that would increase potential flood damage.

9. All manufactured homes to be placed or substantially improved within Zones V1 - V30, V, and VE on the community's FIRM on sites:

a. Outside of a manufactured home park or subdivision;

b. In a new manufactured home park or subdivision;

c. In an expansion to an existing manufactured home park or subdivision; or

d. In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood;

Meet the standards of Sections 8-5.6.1 through 8-5.6.8 and that manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision with Zones V1 - V30, V, and VE on the FIRM meet the requirements of Sections 8-5.2.4.a through 8-5.2.4.b.

10. Recreational vehicles placed on sites within Zones V1 - V30, V, and VE on the community's FIRM either:

a. Be on the site for fewer than 180 consecutive days;

b. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

c. Meet the requirements of Section 8-4.2 (Permit Procedures), Section 8-5.2 and Section 8-5.6.

d. Prohibit the placement of recreational vehicles, except in an existing recreational vehicle park. Recreational vehicles placed on other sites in an existing recreational park must be on site for fewer than 180 days and be fully licensed and ready for highway use (on its wheels or jacking system, is attached to the site by quick disconnect type utilities and security devices, and has no permanently attached additions). They shall also have a plan for removal in case of a threat at least four hours prior to the arrival of the threat.

11. For all structures located seaward of the Coastal Construction Control Line, the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to the flood elevation established by the Florida Department of Environmental Protection or the base flood elevation, plus one foot, whichever is higher.

12. When fill is proposed to be used, in accordance with the permit issued by the Florida Department of Health, in coastal high hazard areas, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood nor cause any adverse impacts to the structure on site or other properties.

8-5.7 Critical Facility

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site

is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

SECTION 12. Severability.

If any section, subsection, sentence, clause, phrase, word or provision of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, whether for substantive, procedural, or any other reason, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions of this Ordinance.

SECTION 13. Repeal of Conflicting Ordinances, and Resolutions.

All codes, ordinances and resolutions or parts of codes, ordinances and resolutions or portions thereof of the City of Parker, in conflict with the provisions of this Ordinance are hereby repealed to the extent of such conflict.

SECTION 14. Effective Date.

This Ordinance shall take effect immediately upon its passage and publication as provided by law.

PASSED, APPROVED AND ADOPTED at a meeting of the City Council of the City of Parker on this 30 day of June, 2009.

Brenda G. Hendricks

BRENDA G. HENDRICKS, MAYOR

ATTEST:

ADONNA MULLEN, CITY CLERK

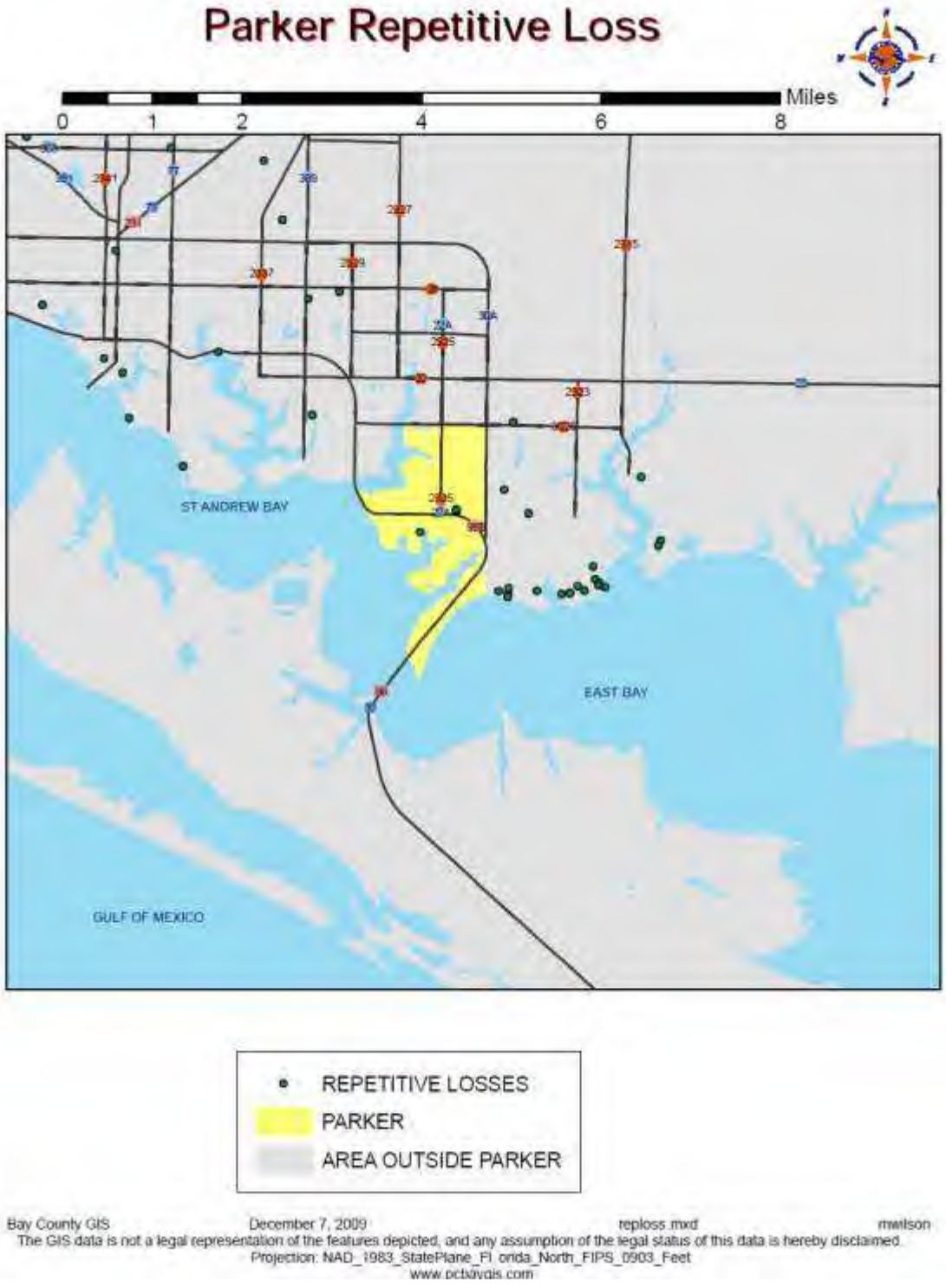
Examined and approved by me, this 30 day of June, 2009.

Brenda G. Hendricks

BRENDA G. HENDRICKS, MAYOR

In this Ordinance, language added to an existing section is printed in underscored type, and language deleted is printed in ~~struck through type~~.

7G3 Parker Repetitive Loss Map



7G4. Parker CRS Participation

Parker is currently a CRS category 8, and the City intends to expand their role in the CRS program over the next 5 year LMS planning period. Parker has an active outreach program and maintains elevation certificates and DFIRMS in their office for public review.

7G5. The maps on the following pages detail Parker's existing land use, as well as the potential vulnerabilities in dollar value of residences in the flood zones and storm surge zones.

Map 7G5

PARKER	Parcels	Acres	Value ($)
Commercial	130	142.44	$68,622,894
Government	27	15.13	7,697,331
High Density Residential	28	2.73	3,936,264
Institutional	12	18.64	8,652,072
Mobile Home Residential	103	52.75	10,704,322
Multi Family Residential	34	13.88	10,242,660
Recreational	9	57.94	8,650,025
Single Family Residential	1,602	554.91	184,471,749
Subtotal	1,945	858.42	$302,977,317
Vacant	252	149.16	25,044,355
Total	2,197	1,007.58	$328,021,672

Legend
Agriculture
Commercial
Government
Industry
Institutional
Mixed Use
Recreational
Single Family Residential
Multi Family Residential
High Density Residential
Mobile Home Residential
Vacant
AREA OUTSIDE PARKER
PARKER

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Map 7G6

PARKER	Parcels	Acres	Value ($)
Commercial	7	23.12	$8,285,734
Government	3	5.26	5,698,087
High Density Residential	7	2.73	671,356
Mobile Home Residential	6	8.97	3,227,564
Multi Family Residential	7	6.77	5,992,737
Recreational	3	23.09	5,015,365
Single Family Residential	148	79.32	33,878,715
Subtotal	181	149.26	$62,769,558
Vacant	21	26.57	8,269,910
Total	202	175.83	$71,039,468

Legend
- Coastal High Hazard Area within Parker
- Parcels Outside Hazard Area within Parker
- Parcels Inside Hazard Area within Parker
- AREA OUTSIDE PARKER
- PARKER

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Map 7G7

	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture									
Commercial				10	25.10	$9,273,609	5	20.16	$7,533,882
Government	4	2.93	$478,855	7	5.50	5,699,757	2	4.54	5,659,792
High Density Residential				3	2.73	0	2	2.73	0
Industry									
Institutional				1	0.80	260,856			
Mixed Use									
Mobile Home Residential	1	0.93	69,267	26	9.86	4,766,206	4	5.79	1,707,903
Multi-Family Residential				12	6.94	6,534,183	2	0.73	450,439
Recreational				4	35.78	6,947,816	3	23.00	5,815,389
Single Family Residential	17	16.23	2,149,082	331	162.76	58,699,397	66	39.85	15,809,636
Subtotal	22	20.09	$2,747,204	387	254.45	$90,855,225	84	96.80	$36,296,957
Vacant	9	4.73	336,961	71	51.43	11,457,613	9	5.97	2,279,127
Total	31	24.82	$3,084,165	458	305.88	$102,312,838	93	102.86	$38,576,084

Bay County GIS | November 10, 2009 | parker_flood.mxd | mwilson

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Flood data does not exactly overlay county base data in which the mismatch may be as much as 200 feet. This flood data is for careful reference only. This data does not replace hardcopy Flood Insurance Rate Maps (FIRMs) and does not replace an on-site survey. Hardcopy FIRMs can be viewed at Bay County Planning. For official flood zone information in unincorporated Bay County, Springfield and Cedar Grove contact Bay County Planning (850) 248-8250. In other cities contact the city's planning department.

Map 7G8

	Land Use	Commercial	Government	High Density Residential	Institutional	Mobile Home Residential	Multi Family Residential	Recreational	Single Family Residential	Subtotal	Vacant	Totals
Category 1Surge												
Parcels		7	3	7		6	7	3	169	181	21	202
Acres		23.12	5.05	3.29		6.97	6.77	23.09	79.55	149.26	26.57	175.83
Value ($)		$6,265,734	5,849,037	671,356		3,227,564	5,992,757	5,936,345	33,826,715	$62,769,508	6,269,960	$71,039,468
Category 2 Surge												
Parcels		10	9	27		17	8	5	330	406	65	471
Acres		25.11	5.6	2.73		12.74	6.9	37.64	165.29	256.21	57.77	313.98
Value ($)		$9,379,608	5,772,761	3,756,083		4,520,934	6,070,276	6,436,003	59,220,396	$95,160,681	12,720,156	$107,880,837
Category 3 Surge												
Parcels		10	10	26	1	23	10	5	370	460	76	536
Acres		25.11	6.9	2.73	0.8	16.5	7.34	37.64	175.09	270.11	59.5	329.61
Value ($)		$9,373,606	5,886,290	3,936,264	290,166	4,909,603	6,657,589	6,436,003	63,685,270	$101,170,853	13,346,585	$114,525,538
Category 4 Surge												
Parcels		11	10	26	1	29	13	5	458	557	98	655
Acres		40.88	7.05	2.73	13	16.6	7.34	37.64	21155	325.09	73.04	398.13
Value ($)		$10,346,779	5,886,826	3,936,264	428,481	5,322,324	6,657,589	6,436,003	73,081,595	$112,101,931	14,310,264	$126,416,195
Category 5 Surge												
Parcels		23	10	26	3	43	17	7	588	720	108	828
Acres		516	6.92	2.73	1.96	25.83	8.76	56.68	282.81	409.71	83.65	492.96
Value ($)		$12,719,872	5,900,416	3,936,264	488,599	6,782,778	7,559,710	8,229,866	86,821,469	$132,357,979	16,154,702	$148,042,681

Bay County GIS

November 16, 2009

parker_surge.mxd

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7G9. City of Parker resolution adopting the 2010 LMS

RESOLUTION NUMBER 2010-282

A RESOLUTION CONCERNING THE CITY OF PARKER'S LOCAL MITIGATION PLAN AND PROVIDING AN EFFECTIVE DATE.

Whereas, the City of Parker is vulnerable to the human and economic costs of natural, technological and societal disasters;

Whereas, the City Council recognizes the importance of reducing or eliminating those vulnerabilities for the overall good or eliminating those vulnerabilities for the overall good and welfare of the community;

Whereas, the City of Parker has been an active participant in the Bay County Mitigation 20/20TM Task Force, which has established a comprehensive, coordinated planning process to eliminate or decrease these vulnerabilities;

Whereas, the City of Parker's representatives and staff have identified, justified and prioritized a number of proposed projects and programs needed to mitigate the vulnerabilities of Parker to the impacts of future disasters; and

Whereas, these proposed projects and programs have been incorporated into the initial edition of the Bay County Local Mitigation Plan that has been prepared and issued for consideration and implementation by the community of Parker.

NOW THEREFORE, BE IT RESOLVED BY THE CITY OF PARKER AS FOLLOWS:

Section 1. The City hereby accepts and approved of the City of Parker's designated portion of the Bay County Local Mitigation Plan ("Mitigation Plan")

Section 2. Agents and employees of the City of Parker are requested and instructed to pursue available funding opportunities for implementation of the proposals designated in the Mitigation Plan.

Section 3. The City of Parker will, upon receipt of such funding or other necessary resources, seek to implement the proposals contained in its section of the Mitigation Plan.

Section 4. The City of Parker will continue to participate in the updating and expansion of the Mitigation Plan in the future.

Section 5. The City of Parker will further seek to encourage the businesses, industries and community groups operating within and/or for the benefit of the City of Parker to also participate in the updating and expansion of the Mitigation Plan in the future.

Section 6. This Resolution shall take effect as of August 3, 2010.

PASSED, APPROVED, AND ADOPTED by the City Council of the City of Parker, Florida, as of this 3rd day of August, 2010

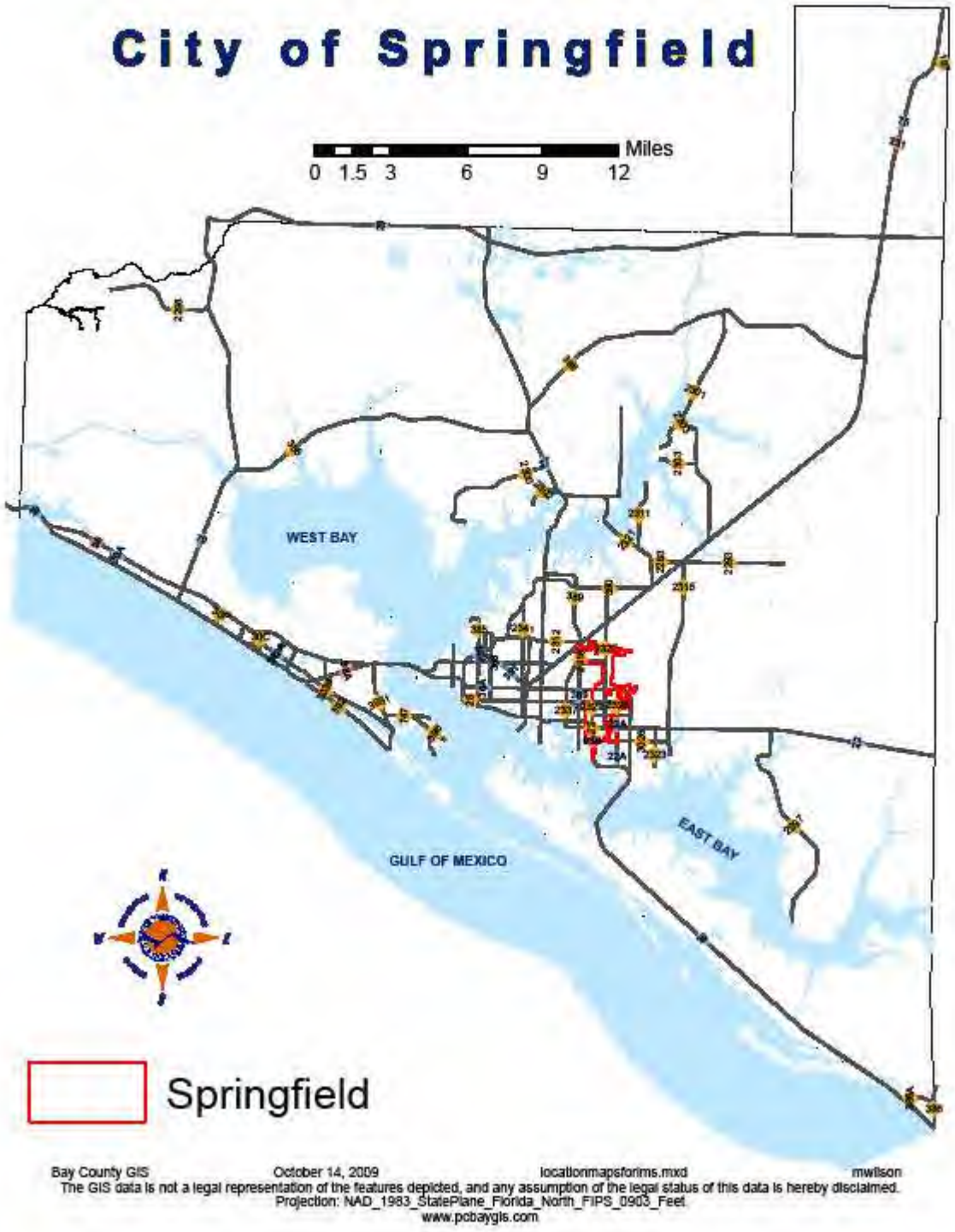
CITY OF PARKER

Brenda G. Hendricks, Mayor

ATTEST:

Adonna S. Mullen, City Clerk

Map 7H


City of Springfield
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Springfield
Bay County GIS
October 14, 2009
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7H. The City of Springfield

7H1. Introduction

Located in the Panhandle Region of Northwest Florida, Springfield is an urban community covering a total land area of approximately 4.2 Square Miles.

The 2008 BEBR census estimates attribute a population count of 8,999 to Springfield. As with the County, and the other six municipalities, minimal growth, if any, is anticipated over the current 5-year LMS planning cycle.

On February 26, 1935 thirty-eight voters assembled to select officers and organize a new municipal government. The City of Springfield was officially incorporated.

Springfield is the only jurisdiction in Bay County located entirely outside of a Coastal High Hazard Area. Thus, Springfield is largely unaffected by storm surge hazards for categories 1 through 3. In the event of a category 4 or 5 storm surge event, the City may experience moderate impacts to a variety of its residential and non-residential land uses. Springfield follows the general vulnerability patterns of the County for the other hazard events: hurricane winds, tornados, and wildfires explained in detail in Sections 1-5.

7H2. Review of Existing Plans, Studies, Reports or Technical Information:

7H2(a) How the Callaway Planning and Zoning Department and Comprehensive Plan support the LMS Goals

To further the goals of minimizing damage from the hazard events that threaten the City, the City of Springfield Comprehensive Planning and Land Development Regulation Code has adopted the following policies to mitigate flood hazards within the City limits:

3-6 Flood Damage Prevention, Drainage, and Stormwater Management Regulations

1. Flood Damage Prevention

a. Purpose

Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;

Control filling, grading, dredging and other development which may increase erosion of flood damage; and,

Prevent or regulate the construction of flood barriers which unnaturally divert floodwaters or which increase flood hazards to other lands.

b. Development Standards; Compliance

All development undertaken within designated flood zones as shown on Flood Insurance Rate Map (FIRM) Panel number 120014 00001 B shall conform to the provisions and requirements of City Ordinance No. 247 (Section 9.5, City Code of Ordinance) and any amendments thereto.

2. Drainage and Stormwater Management

a. Purpose

Ensure the provision of a system of drainage ways and conveyances so as to reduce the potential for flooding and attendant threats to life and property.

b. Development Standards

i. The City shall require all developers submitting an application for development approval an application for development approval to provide as part of the overall development site plan [subsection 2-4.4 (b)] a drainage and grading plan. At a minimum, such drainage and grading plan shall include: 1) finished topographic contours; 2) impervious surfaces; 3) existing drainage structures; 4) proposed drainage structures; and, 5) proposed stormwater treatment facilities. Construction or placement of individual single-family dwellings, including mobile homes, or duplex dwellings on an individual lot or parcel shall be exempt from these requirements.

ii. Design of drainage facilities and structures shall be based upon the 25-year, critical duration storm frequency event. Under no circumstances shall a developer undertake any development activity which causes stormwater to flow onto adjacent properties unless such flow is directed into an approved drainage system.

iii. No development permit shall be issued by the City until the developer has obtained a stormwater permit pursuant to Chapter 17-25, Florida Administrative Code, if applicable (DER permit).

iv. No development permit may be issued by the City until the developer has obtained a drainage permit pursuant to Chapter 14-86, Florida Administrative Code, if applicable (FDOT permit).

v. No developer or any other person shall obstruct, in whole or in part, any public drainage ditch, pipe, easement or any other drainage facility in the City, whether dedicated or not.

3-7.4 Wetlands

I. There is hereby created a "Wetlands Protection Zone" in which special restrictions on development apply. The boundaries of this zone shall be the most landward extent of the following:

a. Areas within the dredge and fill jurisdiction of the Department of Environmental Protection as specified in Chapter 403, Florida Statutes and/or:

b. The U. S. Army Corps of Engineers as specified in Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899.

2. Protection Standards

All development activities in the jurisdictional wetlands within the City are prohibited unless:

a. Valid permits are obtained from the Department of Environmental Regulation and/or the U. S. Army Corps of Engineers prior to the development approval by the City, subject to the provisions of the subsection 2-5.3 of this Code;

b. Appropriate mitigation of destroyed or damaged wetlands is undertaken by the developer subject to the provisions of Chapter 17-3 12, Part III, Florida Administrative Code.

3-7.6 Soils

All grading, filling, excavation, storage or disposal of soil and earth materials associated with development activities shall be undertaken so as to minimize the potential for soil erosion and

sedimentation of -water bodies or drainage ways. Erosion control measures shall be required for all such activities except when all of the following criteria are met:
a. The site upon which land area is disturbed or filled is 10,000 square feet or less.
b. Natural and finished slopes are less than 10%.
c. Volume of soil or earth materials stored is 50 cubic yards or less.
d. Rainwater runoff is directed, either during or after construction, from an area smaller than 5,000 square feet.
e. An impervious surface, if any, of less than 5,000 square feet is created.
f. No drainway is blocked or has its stormwater carrying capacities or characteristics modified.
g. The activities does not take place within 100 feet by horizontal measurement from the top of the bank of a watercourse, the mean high watermark (line of vegetation) of a body of water or within the wetlands associated with a watercourse or water body, whichever distance is greater.

2. Protection Standards
As part of the development review process required pursuant to ARTICLE II of this Code the developer shall include an "Erosion and Sediment Control Plan" as part of the overall site plan [subsection 2-4.4 (b)]. Such plan shall include:
a. Calculations of maximum runoff based on the 25 year, critical duration storm event;
b. A description of, and specifications for sediment retention devices;
c. A description of, and specifications for, surface runoff and erosion control devices;
d. A description of vegetative measures;
e. A map showing the location of all items listed in (a) through (d) in this paragraph. A developer may propose the use of any erosion and sediment control techniques provided such techniques represent best management practices, and are certified by a registered professional engineer. Once development activity begins the developer shall maintain in good order all erosion and sediment control measures specified in the Erosion and Sediment Control Plan regardless of whether the development project is completed or not.

3-7.8 Flood Zones

1. Protection Standards
All development activity undertaken within designated, flood zones as shown on the Official Flood Insurance Rate Map for Springfield, Florida (Community Panel Number 1200 14 0001 B) shall be in conformance with the provisions of Section 3-6. of this Code. In addition to the requirements set forth in Section 3-6. of this Code, the location of hospitals, nursing homes, institutions or similar facilities is prohibited within designated flood zones.

3-7.9 Stormwater Management

1. Protection Standards
All development undertaken within the City shall be in conformance with the provisions of Chapter 17-25, Florida Administrative Code and Section 3-6. of this Code. Stormwater permits must be obtained by developers pursuant to subsection 2-5.3 of this Code prior to the City issuing final development approval.

3-9.4 Level of Service Standards for Drainage Systems or Facilities

Design and construction of drainage facilities and structures shall be based upon water quantity and water quality standards for the 25-year, 24-hour storm event as follows: Water Quality- Post-development runoff from the site shall not exceed peak pre-development runoff rates; 2) Water Quality- Stormwater treatment shall be provided for a volume equivalent to one-half (½) inch of depth over the entire site, or the runoff form the first one (1) inch of rainfall on the entire site in accordance with Chapter 17-25, FAC in order to meet receiving water quality standards in Chapter 17-302, section 17-302.500, FAC. These standards shall apply to all new development and redevelopment, regardless of size.

7H2(b) Capital Improvement Program

Springfield does not have a 5-year Capital Improvement Plan. Projects are completed on an individual basis depending on funding and demand. One area of flooding is the Robindale subdivision, where some flooding of homes was experienced. This area has received a lot of recent maintenance; however to fix the problems in the area, it has been estimated that about $2.4 million is needed. Although over $1 million in grant funding has been received for this project, The City is currently pursuing grants to fund the final portion of this CIP need. A stormwater plan was prepared for about two-thirds of the city a number of years ago defining about $12 million in total need for this area.

Chart 25 Springfield Stormwater Utility
Summary of Existing Stormwater Expenditures

Program [1]	Total Budget	% of Budget	Total Amount	% of Total
Program Management				
Streets Department	$381,426	10%	$19,071	9%
NPDES Compliance		5%	$9, 536	5%
Operations & Maintenance				
Streets Department	$381,426	35%	$133, 459	66%
Recreation Department	$166, 655	25%	$41, 664	20%
Capital Improvement Program			$0	$0
TOTAL			$203,770	$0

Pipe Program[2]

Notes:
1 The overall budget for the Street Department is $381,435, of which 50% is for stormwater programs. Of this amount, 10% was estimated for the program management and 5% for NPDES compliance.
2 The City administers a residential pipe replacement program similar to Bay County. This program is self supporting with fees.

In 2007 The City of Springfield contracted with CDM to develop and help implement a stormwater utility via a non-ad valorem assessment. A major component of the Stormwater Assessment of this study included:
a. **Program Management Services (PGM)** – this area of activities provides for the management and planning of the stormwater assets for the City. Included are program administration, planning, development review, enforcement and monitoring.

b. **NPDES Compliance Services (MS4)** – this includes the NPDES MS4 permit compliance activities that are not otherwise accounted for in the other categories.
c. **Operation and Maintenance Services (O&M)** – these activities include the maintenance of the stormwater assets of the City including mowing, cleaning, litter control, street sweeping, and minor repair.
d. **Capital Improvement Program (CIP)** – this includes major construction of new stormwater assets for the City. Projects are generally identified annually in the 5-year CIP program.

The complete study and recommendations of the final report are available on CD upon request.

7H2C. Floodplain Management Ordinance

ARTICLE II. FLOOD DAMAGE PREVENTION*
Ord. No. 435, arts. 1--7, adopted Aug. 18, 2004, amended Art. II in its entirety to read as herein set out. Former Art. II, §§ 30-31--30-95, pertained to similar subject matter, and derived from Ord. No. 277, arts. 1--5, adopted Apr. 6, 1987. Newly adopted June 2009

DIVISION 1. GENERALLY

Sec. 30-31. Statutory authorization.
The Legislature of the State of Florida has in F.S. ch. 166 delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City Commission of the City of Springfield, Bay County, Florida does hereby adopt the following floodplain management regulations.
(Ord. No. 435, art. 1, § A, 8-18-2004)

Sec. 30-32. Findings of fact.
(a) The flood hazard areas of the city are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
(b) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages.
(Ord. No. 435, art. 1, § B, 8-18-2004)

Sec. 30-33. Statement of purpose.
It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
(1) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, which result in damaging increases in erosion or in flood heights and velocities;
(2) Require that uses vulnerable to floods including facilities which serve such uses be protected against flood damage throughout their intended life span;
(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
(4) Control filling, grading, dredging and other development which may increase erosion or flood damage; and
(5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.
(Ord. No. 435, art. 1, § C, 8-18-2004)

Sec. 30-34. Objectives.
The objectives of this article are:

(1) To protect human life and health;
(2) To minimize expenditure of public money for costly flood control projects;
(3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
(4) To minimize prolonged business interruptions;
(5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, roadways, and bridges and culverts located in floodplains;
(6) To help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas; and
(7) To ensure that potential homebuyers are notified that property is in a flood hazard area.
(Ord. No. 435, art. 1, § E, 8-18-2004)

Sec. 30-35. Methods of reducing flood losses.
In order to accomplish its purposes, this section includes methods and provisions for:
(1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
(2) Requiring that uses vulnerable to floods including facilities which serve such uses be protected against flood damage throughout their intended life span;
(3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
(4) Controlling filling, grading, dredging, and other development which may increase flood damage; and
(5) Preventing or regulating the construction of flood barriers that will unnaturally divert flood waters or may increase flood hazards in other areas.
(Ord. No. 435, art. 1, § E, 8-18-2004)

Sec. 30-36. Definitions.
Unless specifically defined below, words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application.
Accessory structure (appurtenant structure) means a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.
Addition (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.
Appeal means a request for a review of the floodplain management administrator's interpretation of any provision of this article or a request for a variance.
Area of shallow flooding means a designated AO or AH Zone on the community's flood insurance rate map (FIRM) with base flood depths from one to three feet where a clearly

defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood" and the "regulatory flood"). Base flood is the term used throughout this article.

Base flood elevation means the highest water-surface elevation associated with the base flood.

Basement means that portion of a building having its floor sub grade (below ground level) on all sides.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

Building. See *Structure.*

Coastal high hazard area means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone V1--V30, VE, or V.

Critical facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

Development means any manmade change to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of materials or equipment.

Elevated building means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

Encroachment means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing construction means any structure for which the "start of construction" commenced before the adoption of Springfield Flood Damage Ordinance 247, August 3, 1981.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community before the adoption of Springfield Flood Damage Ordinance 247, August 3, 1981.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood or *flooding* means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters;

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood boundary and floodway map (FBFM) means the official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated the areas of flood hazards and regulatory floodway.

Flood hazard boundary map (FHBM) means an official map of a community, issued by FEMA, where the boundaries of the areas of special flood hazard have been identified as zone A.

Flood insurance rate map (FIRM) means an official map of a community, on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood insurance study (FIS) is the official hydraulic and hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM, FHBM (where applicable) and the water surface elevation of the base flood.

Floodplain means any land area susceptible to flooding.

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain management administrator is the individual appointed to administer and enforce the floodplain management regulations.

Floodplain management regulations means this article and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Floodway fringe means that area of the floodplain on either side of the regulatory floodway where encroachment may be permitted without additional hydraulic and/or hydrologic analysis.

Freeboard means a factor of safety usually expressed in feet above a flood level for purposes of flood plain management.

Functionally dependent facility means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

Hardship (as related to variances of this article) means the exceptional hardship associated with the land that would result from a failure to grant the requested variance. The city commission requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional

hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to the start of construction, next to the proposed walls of a building.

Historic structure means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic or a district preliminarily determined by the secretary to qualify as a registered historic district;

(3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

(4) Individually listed on a local inventory historic places in communities with historic preservation programs that have been certified either:

a. By an approved state program as determined by the Secretary of the Interior, or

b. Directly by the Secretary of the Interior in states without approved programs.

Increased cost of compliance (ICC) means the cost to repair a "substantially" or "repetitively" flood-damaged building that is required to bring it into compliance with the requirements of this article. ICC coverage is provided for in every standard NFIP flood insurance policy.

Lowest adjacent grade means the lowest elevation, after the completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the nonelevation design standards of this article.

Manufactured home means a building, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market value means the building value, excluding the land (as agreed to between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of building (Actual Cash Value), or adjusted assessed values.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this article, the term is synonymous with National Geodetic Vertical Datum (NGVD).

National Geodetic Vertical Datum (NGVD) as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

New construction means any structure for which the "start of construction" commenced on or after the adoption of Springfield Flood Damage Ordinance 247, August 3, 1981.

The term also includes any subsequent improvements to such structures. For flood insurance rates, structures for which the start of construction commenced on or after the effective date of the date of an initial FIRM or after December 31, 1974, whichever is later.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the first floodplain management code, ordinance or standard.

Obstruction includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

Public safety and nuisance, anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational vehicle means a vehicle that is:

(1) Built on a single chassis;

(2) Four hundred square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light duty truck; and

(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Repetitive loss means flood-related damages sustained by a structure on two separate occasions during a ten-year period ending on the date of the event for which the second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25 percent of the market value of the building at the time of each such flood event.

Special flood hazard area (SFHA) (see *area of special flood hazard*) means an area having special flood hazard and shown on a FHBM or FIRM as Zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE, or V.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act P. L. 97-348), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or

foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means all walled and roofed buildings, including gas or liquid storage tanks and manufactured homes that are principally above ground.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term also includes structures that have incurred "substantial damage" or "repetitive loss", regardless of the actual repair work performed. This term does not, however, include any repair or improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement official prior to the application for, permit for improvement and which are the minimum necessary to assure safe living conditions.

This includes any combination of repairs, reconstruction, rehabilitation, addition, alteration, or other improvements to a building taking place during a five-year period, in which the cumulative cost of such improvements equals or exceeds 50 percent of the market value of the building either:

(1) Before the improvement is started; or

(2) In case of substantial damage, before the damage occurred. For the purposes of this definition "substantial improvement' is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

Substantially improved existing manufactured home parks or subdivisions is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Variance is a grant of relief from the requirements of this article, which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in a hardship.

Violation means the failure of a structure or other development to be fully compliant with this article. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this article is presumed to be in violation until such time as that documentation is provided.

Watercourse means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

(Ord. No. 435, art. 2, 8-18-2004)

Sec. 30-37. Lands to which this article applies.
This article shall apply to all areas of special flood hazard within the zoning and building code jurisdiction of the City Commission of the City of Springfield, Bay County, Florida.
(Ord. No. 435, art. 3, § A, 8-18-2004)

Sec. 30-38. Basis for establishing the areas of special flood hazard.
The areas of special flood hazard identified by the Federal Emergency Management Agency in the Flood Insurance Study (FIS) for the City of Springfield, Bay County, Florida, dated September 18, 2002, with the accompanying maps and other supporting data, and any subsequent revisions thereto, are adopted by reference and declared to be a part of this article.
(Ord. No. 435, art. 3, § B, 8-18-2004)

Sec. 30-39. Designation of flood damage prevention ordinance administrator.
The city commission hereby appoints the City Clerk of the City of Springfield or the city clerk's appointed agent to administer and implement the provisions of this article and is herein referred to as the floodplain ordinance administrator, the floodplain management administrator, or the administrator.
(Ord. No. 435, art. 3, § C, 8-18-2004)

Sec. 30-40. Establishment of development permit.
A development permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities.
(Ord. No. 435, art. c, § D, 8-18-2004)

Sec. 30-41. Compliance.
No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable regulations.
(Ord. No. 435, art. 3 § E, 8-18-2004)

Sec. 30-42. Abrogation and greater restrictions.
This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
(Ord. No. 435, art. 3, § F, 8-18-2004)

Sec. 30-43. Interpretation.
In the interpretation and application of this article all provisions shall be:
(1) Considered as minimum requirements;
(2) Liberally construed in favor of the governing body, and
(3) Deemed neither to limit nor repeal any other powers granted under state statutes.
(Ord. No. 435, art. 3, § G, 8-18-2004)

Sec. 30-44. Warning and disclaimer of liability.
The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade

or natural causes. This article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of city commission or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.
(Ord. No. 435, art. 3, § H, 8-18-2004)

Sec. 30-45. Penalties for violation.
Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than $500.00 or imprisoned for not more than 60 days, or both, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the floodplain management administrator from taking such other lawful actions as is necessary to prevent or remedy any violation.
(Ord. No. 435, art. 3, § I, 8-18-2004)
Secs. 30-46--30-65. Reserved.

DIVISION 2. ADMINISTRATION

Sec. 30-66. Permit procedures.
Application for a development permit shall be made to the floodplain management administrator on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:
(1) *Application stage.*
a. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all buildings;
b. Elevation in relation to mean sea level to which any nonresidential building will be flood-proofed;
c. Certificate from a registered professional engineer or architect that the nonresidential flood-proofed building will meet the flood-proofing criteria in subsection 30-92(2) and subsection 30-94(2); and
d. Description of the extent to which any watercourse will be altered or relocated as result of proposed development.
(2) *Construction stage.* Upon placement of the lowest floor, or flood-proofing by whatever construction means, it shall be the duty of the permit holder to submit to the floodplain management administrator a certification of the NGVD elevation of the lowest floor or flood-proofed elevation, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood proofing is utilized for a particular building said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. (The floodplain

management administrator shall review the lowest floor and flood-proofing elevation survey data submitted.) The permit holder immediately and prior to further progressive work being permitted to proceed shall correct deficiencies detected by such review. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.
(Ord. No. 435, art. 4, § A, 8-18-2004)

Sec. 30-67. Duties and responsibilities of the floodplain management administrator.
Duties of the administrator shall include, but are not be limited to:
(1) Review permits to assure sites are reasonably safe from flooding.
(2) Review all development permits to assure that the permit requirements of this article have been satisfied;
(3) Advise permittee that additional federal, state, or local permits may be required, and if such additional permits are necessary, require that copies of such permits be provided and maintained on file with the development permit;
(4) Notify adjacent communities, the state NFIP coordinator, and other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse;
(5) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished;
(6) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor of all new or substantially improved buildings, in accordance with subsection 30-66(2);
(7) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been flood-proofed, in accordance with subsection 30-66(2);
(8) Review certified plans and specifications for compliance;
(9) Interpret the exact location of boundaries of the areas of special flood hazard. When there appears to be a conflict between a mapped boundary and actual field conditions, the floodplain management administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article;
(10) When base flood elevation data or floodway data have not been provided in accordance with section 30-38, the floodplain management administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state, or any other source, in order to administer the provisions of division 3;
(11) Coordinate all change requests to the FIS and FIRM or FBFM or both with the requester, state, and FEMA; and
(12) Where base flood elevation are utilized, obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements.
(Ord. No. 435, art. 4, § B, 8-18-2004)
Secs. 30-68--30-90. Reserved.

DIVISION 3. PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 30-91. General standards.
In all areas of special flood hazard the following provisions shall apply:

(1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
(2) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;
(3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
(4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
(5) Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
(6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
(7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
(8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
(9) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this article shall meet the requirements of "new construction" as contained in this article; and
(10) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this article, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.
(Ord. No. 435, art. 5, § A, 8-18-2004)

Sec. 30-92. Specific standards.
In all areas of special flood hazard where base flood elevation data have been provided, as set forth in section 30-38, the following provisions shall apply:
(1) *Residential construction.* New construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated at or above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate automatic equalization of flood hydrostatic forces on both sides of the exterior walls shall be provided in accordance with standards of subsection (3).
(2) *Nonresidential construction.* New construction or substantial improvement of any commercial, industrial, or nonresidential building (or manufactured home) shall have the lowest floor, including basement, elevated at or above the base flood elevation. Buildings located in all A-Zones may be flood-proofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the BFE plus one foot are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in subsection 30-123(9).

(3) *Elevated buildings.* New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the lowest floor elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.

a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

1. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

2. The bottom of all openings shall be no higher than one foot above foundation interior grade (which must be equal to in elevation or higher than the exterior foundation grade); and

3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they provide the required net area of the openings and permit the automatic flow of floodwaters in both directions.

b. Access to the enclosed area shall be minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

d. Where elevation requirements exceed six feet above the highest adjacent grade, a copy of the legally recorded deed restriction prohibiting the conversion of the area below the lowest floor to a use or dimension contrary to the building's originally approved design, shall be presented as a condition of issuance of the final certificate of occupancy.

(4) *Standards for manufactured homes and recreational vehicles.*

a. All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, in a new manufactured home park or subdivision or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.

b. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:

1. The lowest floor of the manufactured home is elevated at or above the base flood elevation, or

2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above the grade.

3. The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.

4. In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, any manufactured home placed or substantially improved must meet the standards of subsection (4)b.1. and 3. above.

c. All recreational vehicles placed on sites must either:

1. Be on the site for fewer than 180 consecutive days,

2. Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick

disconnect type utilities and security devices and has no permanently attached additions), or

3. Meet all the requirements for new construction, including anchoring and elevation requirements of subsection (4)a. or b.1. and 3. above.

(5) *Floodways.* Located within areas of special flood hazard established in section 30-38, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and have significant erosion potential, the following provisions shall apply:

a. Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge;

b. If subsection (5)a. is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of division 3.

c. Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of subsection 30-91(2), and the elevation standards of subsection 30-92(1) and the encroachment standards of subsection 30-92(5)a., are met.

(Ord. No. 435, art. 5, § B, 8-18-2004)

Sec. 30-93. Standards for streams without established base flood elevation and floodways.

Located within the areas of special flood hazard established in section 30-38, were streams exist for which no base flood elevation data or regulatory floodway has been provided designated by the Federal Emergency Management Agency, the following provisions shall apply:

(1) When base flood elevation data or floodway data have not been provided in accordance with section 30-38 the administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or any other source, in order to administer the provisions of division 3. When such base flood elevation data is utilized:

a. Obtain the elevation (in relation to the mean sea level) of the lowest floor (including the basement) of all new and substantially improved structures,

b. Obtain, if the structure has been floodproofed in accordance with the requirements of subsection 30-92(2) of this article, the elevation in relation to the mean sea level to which the structure has been floodproofed, and

c. Maintain a record of all such information with the official designated in section 30-39.

(2) Notify, in riverine situations, adjacent communities and the state coordinating office prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.

(3) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

(4) Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated and anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-

the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
(5) When the data is not available from any source as in subsection (1) above, the lowest floor of the structure shall be elevated at or above the highest adjacent grade.
(Ord. No. 435, art. 5, § C, 8-18-2004)

Sec. 30-94. Standards for streams with established base flood elevation without regulatory floodways.
Located within the areas of special flood hazard established in section 30-38 where streams exist for which base flood elevation data has been provided by the Federal Emergency Agency without the delineation of the regulatory floodway, the following provisions shall apply:
(1) Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within the areas of special flood hazard, designated as Zones A1-30 and AE on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the city.
(2) Development activities in Zones Al-30, AE, and AH, on the city's FIRM which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies--with the city's endorsement-- for a conditional FIRM revision, and receives the approval of the Federal Emergency Management Agency.
(Ord. No. 435, art. 5, § D, 8-18-2004)

Sec. 30-95. Standards for AO, AH and unnumbered A zones.
Located within the areas of special flood hazard established in section 30-38 are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of one to three feet, where a clearly defined channel does not exist and the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:
(1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to or above the flood depth specified on the flood insurance rate map, above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at or above the highest adjacent grade.
(2) All new construction and substantial improvements of nonresidential structures shall:
a. Have the lowest floor, including basement, elevated to or above the flood depth specified on the flood insurance rate map, above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two feet above the highest adjacent grade, or
b. Together with attendant utility and sanitary facilities be completely flood-proofed to the specified flood level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required as per subsection 30-92(2)

c. In zones AO, AH, zones require drainage paths around structures on slopes to guide water away from structures.
d. In unnumbered A-Zones, when base flood information is not available from a federal, state, or other source, the lowest floor, including basement shall be elevated at least two feet above the highest adjacent grade.
(Ord. No. 435, art. 5, § F, 8-18-2004)

Sec. 30-96. Standards for subdivision proposals.
(a) All subdivision proposals shall be consistent with the need to minimize flood damage;
(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and
(d) Base flood elevation data shall be provided for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed 50 lots or five acres, whichever is the lesser.
(Ord. No. 435, art. 5, § F, 8-18-2004)

Sec. 30-97. Coastal high hazard areas.
Located within areas of special flood hazard areas established in section 30-38 are coastal high hazard areas, designated as Zones V1--V30, VE, or V. These areas have special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions in this article, the following provisions shall also apply:
(1) All new construction and substantial improvements in Zones V1--V30 and VE (V if base flood elevation is available) shall be elevated on pilings or columns so that:
a. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to one foot freeboard; and
b. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (one percent annual chance).
(2) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsection (1).
(3) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V1--V30 and VE. The floodplain management administrator shall maintain a record of all such information.
(4) All new construction shall be located landward of the reach of mean high tide.
(5) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood-lattice work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less

than ten and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

a. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

b. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any give year.

(6) The enclosed space below the lowest floor shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be partitioned into multiple rooms, temperature-controlled, or used for human habitation.

(7) Prohibit the use of fill for structural support of buildings. When fill is proposed in a coastal high hazard area, appropriate engineering analyses shall be conducted to evaluate the impacts of the fill prior to issuance of a development permit.

(8) Prohibit manmade alteration of sand dunes and mangrove stands that would increase potential flood damage.

(9) All manufactured homes to be placed or substantially improved within Zones V1--V30, V, and VE on the city's FIRM on sites meet the standards of subsection 30-91(1) though (8) and that manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision with Zones V1--V30, V, and VE on the FIRM meet the requirements of subsections 30-92(4)a. through b., if they are located:

a. Outside of a manufactured home park or subdivision,

b. In a new manufactured home park or subdivision,

c. In an expansion to an existing manufactured home park or subdivision, or

d. In an existing manufactured home park or subdivision in which a manufactured home has incurred "substantial damage" as the result of a flood.

e. Prohibit the placement of manufactured homes (mobile home), except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of section 30-97, and the elevation standards of subsection 30-97(1) and the encroachment standards of section 30-97 are met.

(10) Recreational vehicles placed on sites within Zones V1--V30, V, and VE on the community's FIRM either;

a. Be on the site for fewer than 180 consecutive days; or

b. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

c. Meet the requirements of section 30-66 (permit procedures) and sections 30-92 and 30-93; or

d. Prohibit the placement of recreational vehicles, except in an existing recreational vehicle park. Must be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site by quick disconnect type utilities and security devices, and has no permanently attached additions. Be on site no more than 180 days and park must have a plan for removal in case of a flooding threat.

(Ord. No. 435, art. 5, § G, 8-18-2004)

Sec. 30-98. Critical facilities.
Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA).
(Ord. No. 435, art. 5, § H, 8-18-2004)
Secs. 30-99--30-120. Reserved.

DIVISION 4. VARIANCE PROCEDURES

Sec. 30-121. Designation of variance and appeals board.
The Springfield Planning Board as established by the city commission shall hear and decide appeals and requests for variances from the requirements of this article.
(Ord. No. 435, art. 6, § A, 8-18-2004)

Sec. 30-122. Duties of variance and appeals board.
The board shall hear and recommend to the city commission for a final decision appeals when it is alleged an error in any requirement, decision, or determination is made by the floodplain management administrator in the enforcement or administration of this article. Any person aggrieved by the decision of the board may appeal such decision to the appropriate court as provided by Florida Statutes.
(Ord. No. 435, art. 6, § B, 8-18-2004)

Sec. 30-123. Variance procedures.
In acting upon such applications, the Springfield Planning Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this article, and:
(1) The danger that materials may be swept onto other lands to the injury of others;
(2) The danger of life and property due to flooding or erosion damage;
(3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
(4) The importance of the services provided by the proposed facility to the community;
(5) The necessity to the facility of a waterfront location, where applicable;
(6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
(7) The compatibility of the proposed use with existing and anticipated development;
(8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
(9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
(10) The expected heights, velocity, duration, rate of rise, and sediment of transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
(11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
(Ord. No. 435, art. 6, § C, 8-18-2004)

Sec. 30-124. Conditions for variances.

(a) Variances shall only be issued when there is:
(1) A showing of good and sufficient cause;
(2) A determination that failure to grant the variance would result in exceptional hardship; and
(3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
(b) Variances shall only be issued upon a determination that the variance is the minimum necessary deviation from the requirements of this article.
(c) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the lowest floor is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation (See section 30-125).
(d) Variances shall not be granted after-the-fact.
(e) The floodplain management administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request (See section 30-125).
(Ord. No. 435, art. 6, § D, 8-18-2004)

Sec. 30-125. Variance notification.
Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:
(1) The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as $25.00 for $100.00 of insurance coverage, and
(2) Such construction below the base flood level increases risks to life and property.
A copy of the notice shall be recorded by the floodplain management administrator in the Office of the Bay County Clerk of Courts Public Records and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.
The floodplain management administrator will maintain a record of all variance actions, including justification for their issuance, and report such variances issued in its biennial report submitted to the Federal Emergency Management Agency.
(Ord. No. 435, art. 6, § E, 8-18-2004)

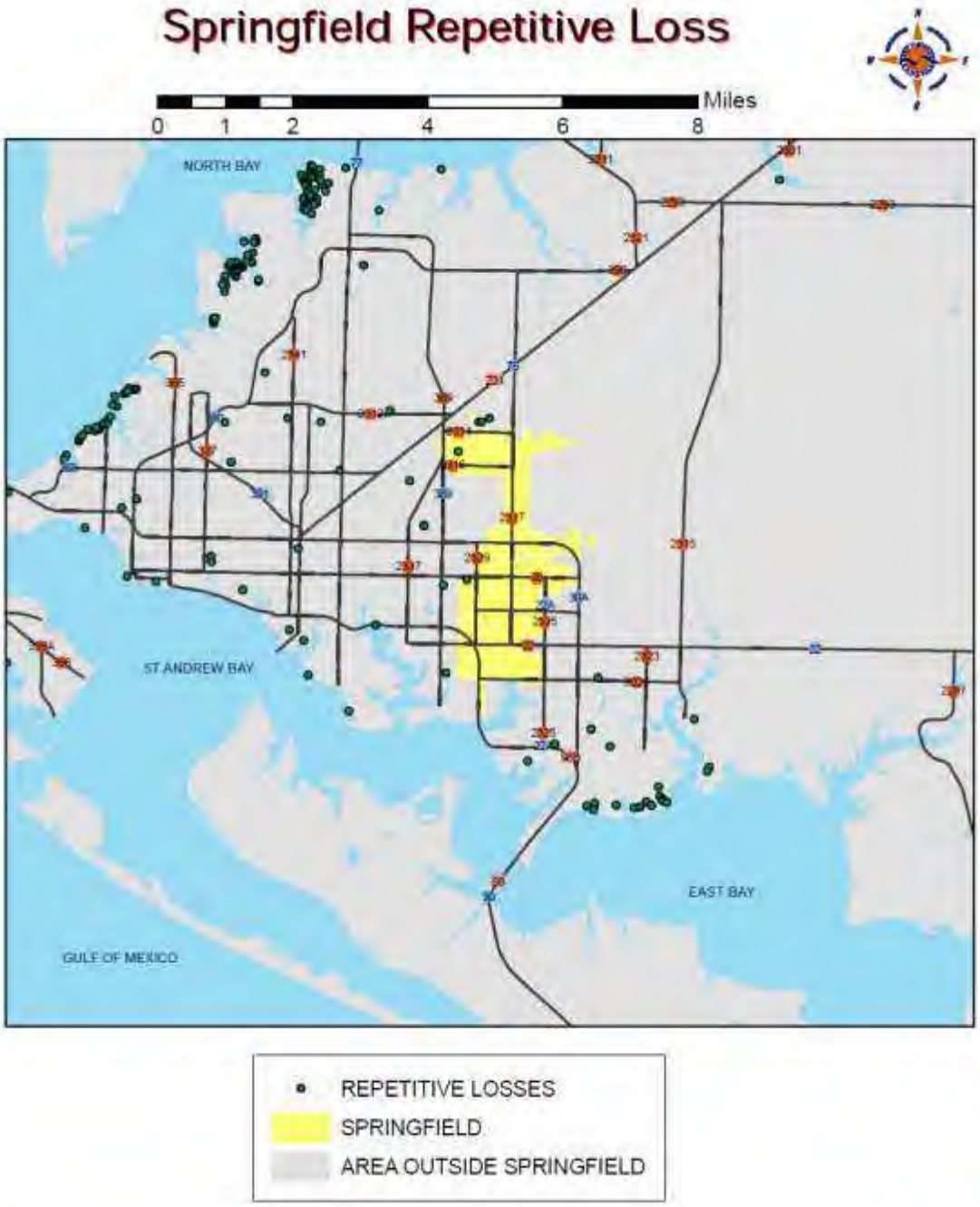
Sec. 30-126. Historic structures.
Variances may be issued for the repair or rehabilitation of "historic" structures--meeting the definition in this article--upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a "historic" structure.
(Ord. No. 435, art. 6, § F, 8-18-2004)

Sec. 30-127. Special conditions.
Upon consideration of the factors listed in division 4, and the purposes of this article, the Springfield Planning Board may attach such conditions to the granting of variances, as it deems necessary to further the purposes of this article.
(Ord. No. 435, art. 6, § G, 8-18-2004)

Sec. 30-128. Structures in regulatory floodway.

Variances shall not be issued within any designated floodway if any impact in flood conditions or increase in flood levels during the base flood discharge would result.
(Ord. No. 435, art. 6, § H, 8-18-2004)

7H3 City of Springfield Repetitive Loss Map

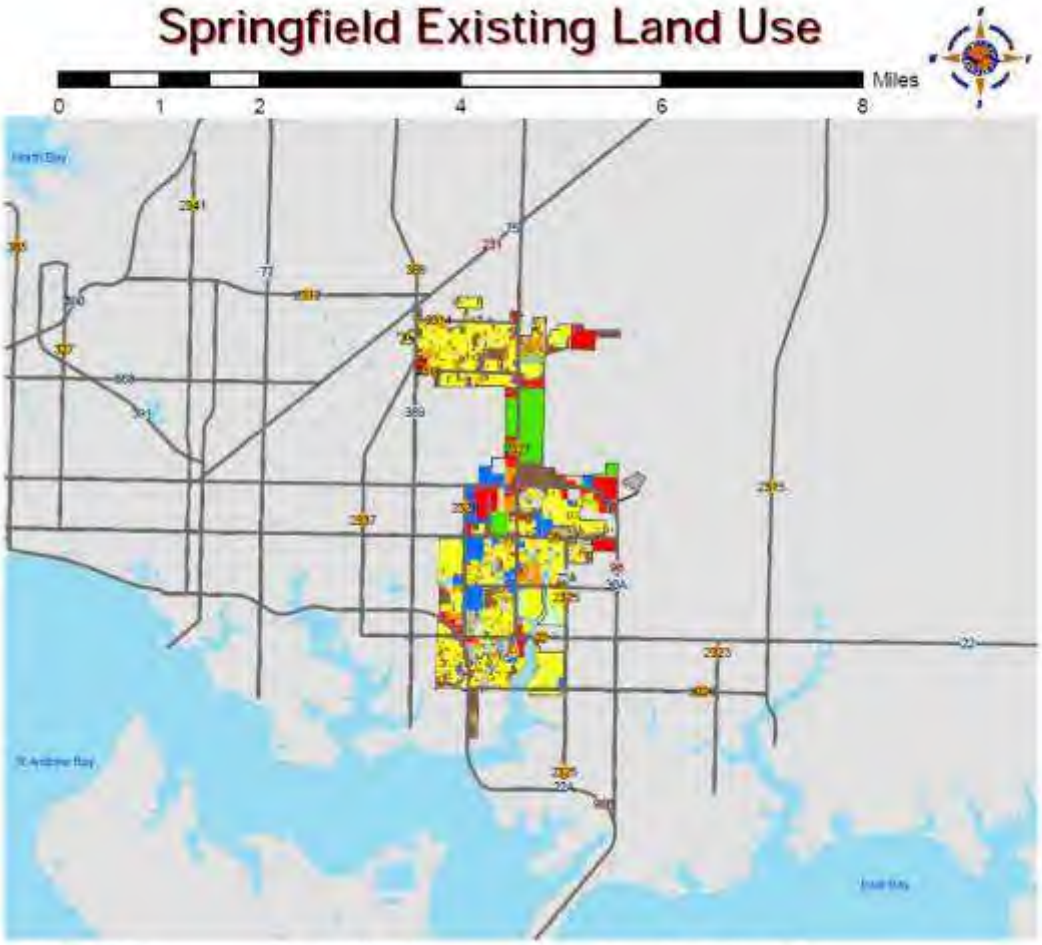


7H4 City of Springfield CRS Participation

Springfield maintains a public education and outreach program to inform the public within their jurisdiction about the management of stormwater, and in particular, the importance of maintaining berms, stormdrains and swales. Springfield is also covered under the County's main public education and outreach program providing multi-hazard information in the Yellow Pages section of the telephone directory. Over the current LMS planning period, Springfield intends to become a member of the CRS program.

7H5 The following maps explain Springfield's existing land use, as well as the potential vulnerabilities in dollar value of residences in the CHHA, flood zones and storm surge zones.

Map 7H5



SPRINGFIELD	Parcels	Acres	Value ($)
Agriculture	9	201.73	$662,843
Commercial	131	277.10	34,962,932
Government	72	80.02	13,049,846
High Density Residential	2	3.41	0
Industry	8	103.12	32,717,810
Institutional	66	196.06	42,206,492
Mobile Home Residential	415	196.73	30,093,942
Multi Family Residential	103	53.49	20,214,577
Recreational	9	43.79	890,503
Single Family Residential	2,444	857.11	203,805,055
Subtotal	3,259	2,012.56	$378,604,000
Vacant	572	385.96	24,987,862
Total	3,831	2,398.52	$403,591,862

Bay County GIS November 18, 2009 springfield_elu.mxd mattson
The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

Map 7H6

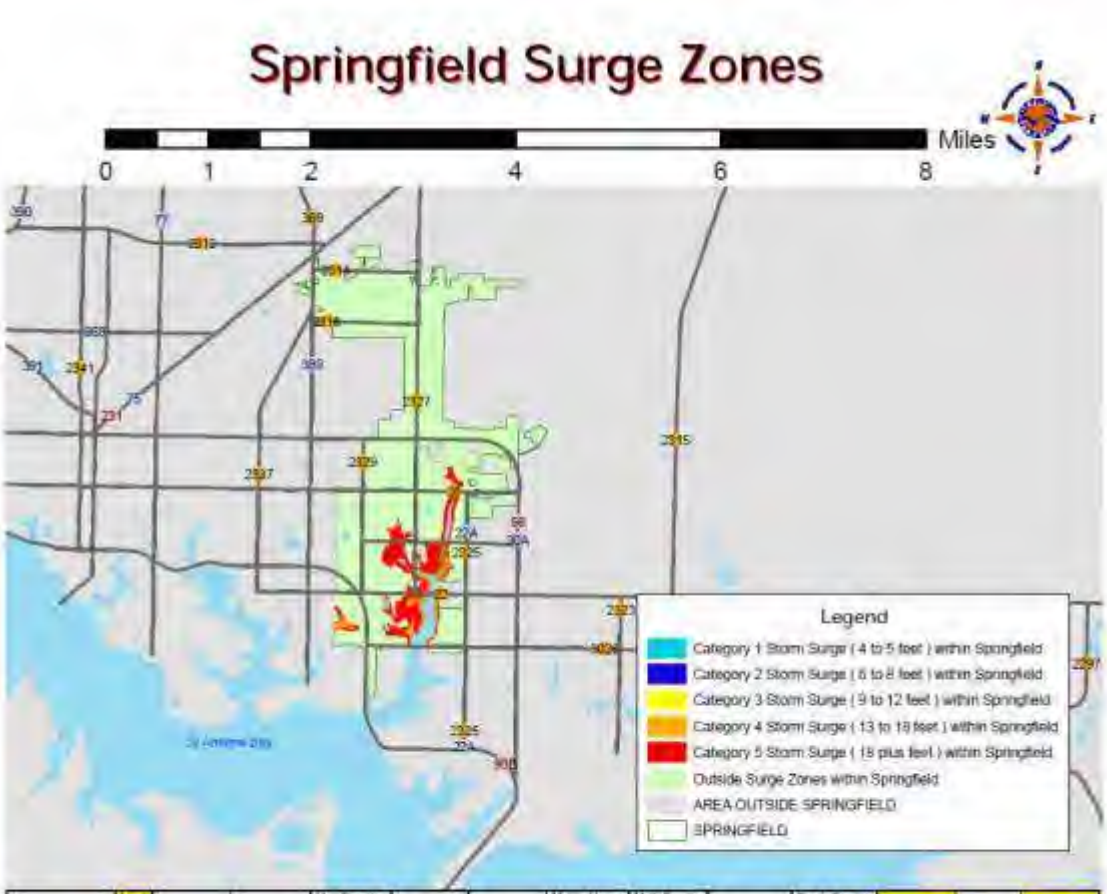
	Flood Zone A			Flood Zone AE			Flood Zone VE		
LAND USE	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)	Parcels	Acres	Value ($)
Agriculture	5	97.09	$364,084						
Commercial	15	92.74	5,544,915	5	42.75	$3,670,269			
Government	6	22.46	4,005,661	2	8.23	920,857			
High Density Residential				2	3.41	0			
Industry	3	38.08	10,783,254	4	39.13	31,677,850			
Institutional	5	10.21	640,570	1	20.75	910,255			
Mixed Use									
Mobile Home Residential	37	24.52	2,894,823	1	4.74	506,734			
Multi Family Residential	20	15.25	3,895,610	2	0.65	328,676			
Recreational	2	30.67	316,030	4	30.38	403,347			
Single Family Residential	212	92.72	22,216,906	92	80.53	17,473,626			
Subtotal	307	560.95	5263445	219	300.67	$56,091,914	0	0.00	$0.00
Vacant	107	154.89	8,026,126	40	40.41	1937,467			
Total	414	715.84	58,089,571	253	341.08	$58,029,381	0	0.00	$0

Bay County GIS November 10, 2009 springfield_flood.mxd meltkon

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.
Projection: NAD_1983_StatePlane_Florida_North_FIPS_0903_Feet

Flood data does not exactly overlay county base data in which the mismatch may be as much as 200 feet. This flood data is for careful reference only. This data does not replace hardcopy Flood Insurance Rate Maps (FIRMs) and does not replace an on -site survey. Hardcopy FIRMs can be viewed at Bay County Planning. For official flood zone information in unincorporated Bay County, Springfield and Cedar Grove contact Bay County Planning (850) 248-8250. In other cities contact the city's planning department.

Map 7H7



	Land Use	Commercial	Government	High Density Residential	Industry	Institutional	Mobile Home Residential	Multi Family Residential	Recreational	Single Family Residential	Outdoor	Vacant	Totals
Category 1 Surge													
Parcels											0		0
Acres											0.00		0.00
Value ($)											$0		$0
Category 2 Surge													
Parcels					3		3			4	10	3	13
Acres					88.07		2.94			2.45	93.56	2.94	96.50
Value ($)					$31,786,932		$94,420			$67,039	$32,079,291	$66,295	$32,044,596
Category 3 Surge													
Parcels					2						2		2
Acres					87.41						87.41		87.41
Value ($)					$21,980,888						$21,980,888		$21,980,888
Category 4 Surge													
Parcels		5	10		3	5	9	1	3	92	132	54	186
Acres		11.69	3.41		88.07	5.44	5.47	0.41	28.95	44.05	169.67	29.01	225.68
Value ($)		$5,420,277	$82,826		$31,786,932	$152,765	$606,927	$80,340	$34,270	$6,669,306	$47,124,861	$2,697,183	$49,821,944
Category 5 Surge													
Parcels		8	31	2	4	14	53	6	8	396	520	184	704
Acres		18.24	30.16	0.41	88.13	45.21	16.21	2.86	41.27	152.76	389.67	83.82	473.49
Value ($)		$5,008,164	$4,397,527	$0	$31,977,860	$3,884,578	$1,854,787	$1,044,738	$617,793	$39,471,955	$78,368,592	$5,569,980	$83,938,572

Bay County GIS | November 15, 2009 | springfield_surge.mxd | mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Map 7H8

SPRINGFIELD	Parcels	Acres	Value ($)
Commercial	0	0	$0
Industry	0	0	0
Mobile Home Residential	0	0	0
Single Family Residential	0	0	0
Subtotal	0	0	$0
Vacant	0	0	0
Total	0	0	$0

Legend
- Coastal High Hazard Area within Springfield
- Parcels Outside Hazard Area within Springfield
- Parcels Inside Hazard Area within Springfield
- AREA OUTSIDE SPRINGFIELD
- SPRINGFIELD

Bay County GIS November 18, 2009 springfield_chha .mxd mwilson

The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed.

Projection: NAD_1983_Sta tePlane_Florida_North_FIPS_0903_Feet

7H9 - City of Springfield - Resolution Adopting the 2010 LMS

BAY COUNTY, FLORIDA
DRAFT RESOLUTION NO.: 09-11
CONCERNING THE CITY OF SPRINGFIELD'S LOCAL MITIGATION PLAN

WHEREAS, the City of Springfield is vulnerable to the human and economic costs of natural, technological and social disasters, and

WHEREAS, the City Commission recognizes the importance of reducing or eliminating those vulnerabilities for the overall good and welfare of the community, and

WHEREAS, the City of Springfield has been an active participant in the Bay County Mitigation 20/20 Task Force, which has established a comprehensive, coordinated planning process to eliminate or decrease these vulnerabilities, and

WHEREAS, these proposed projects and programs have been incorporated into the initial edition of the Bay County Local Mitigation Plan that has been prepared and issued for consideration and implementation by the community of Springfield

NOW THEREFORE, BE IT RESOLVED THAT,

1) The City Commission hereby accepts and approves of its designated portion of the Bay County Local Mitigation Plan,
2) The agency personnel of the City of Springfield are requested and instructed to pursue available funding opportunities for implementation of the proposals designated therein.
3) The City of Springfield will, upon receipt of such funding or other necessary resources, seek to implement the proposals contained in its section of the strategy, and
4) The City of Springfield will continue to participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead, and
5) The City of Springfield will further seek to encourage the businesses, industries and community groups operating within and/or for the benefit of the City of Springfield to also participate in the updating and expansion of the Bay County Local Mitigation Plan in the years ahead.

PASSED, APPROVED, AND ADOPTED in regular session of the City Commission of the City of Springfield, Florida on this 1st day of December 2009. 10

ATTEST:

CITY OF SPRINGFIELD

Robert Walker, Mayor