

# OKALOOSA COUNTY LOCAL MITIGATION STRATEGY 2016



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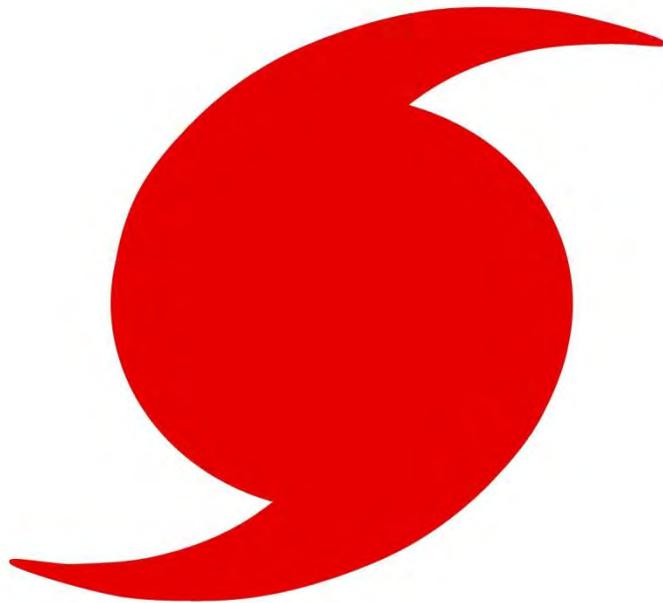
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# **Chapter 1**

## **Executive Summary & History**





## Executive Summary and History

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### Section 1.01 Executive Summary

As defined by the Federal Emergency Management Agency (FEMA), a hazard mitigation plan is a long-term strategy for reducing disaster losses. In Florida, A Local Mitigation Strategy (LMS) is a local government plan that is designed to reduce or eliminate risks to people and property from natural hazards. The plan is required to include three major elements: public participation, risk assessment, and mitigation actions. Under the Disaster Mitigation Act of 2000, state and local governments are required by federal law to have a FEMA-approved hazard mitigation plan in order to receive pre- and post-disaster mitigation grants.

Okaloosa County's first Local Mitigation Strategy was adopted in 1998 pursuant to Okaloosa County Ordinance 98-24. In addition to adopting the LMS, Ordinance 98-24 designates the Comprehensive Plan Committee, a previously-existing body formed to coordinate the comprehensive planning efforts of the county and municipalities, as the Local Mitigation Strategy Committee, and charges it with development and maintenance of the LMS, including annual and 5-year updates. Pursuant to this directive, the LMS Committee developed this 2015 Local Mitigation Strategy.

In order to maintain grant eligibility, local governments must review and update their Local Mitigation Strategies every 5 years to reflect changes in development trends, monitor progress in mitigation efforts and make note of priority changes. Okaloosa County last updated their LMS in 2010, and so this plan serves as the necessary 5-year plan update as required by FEMA. The 2015 LMS plan addresses each of the required elements of public participation, risk assessment, and mitigation actions, but also includes a vulnerability assessment. The plan was approved by Okaloosa County Board of County Commissioners on \_\_\_\_\_. The municipalities approval of the 2016 LMS are found in Appendix M.

Okaloosa County is exposed to a number of natural hazards: hurricanes and tropical storms; storm surge; flooding; dam safety; land erosion; severe storms; heat wave and drought; wildfire; and beach erosion. The purpose of this Local Mitigation Strategy (LMS) is to identify the risks associated with each hazard and identify corresponding mitigation actions to reduce the human, environmental, and economic costs of those natural disasters. The 2015 LMS assesses the problems associated with each hazard in a comprehensive three-step process: 1) risk assessment; 2) vulnerability assessment, and 3) mitigation actions. The 2015 LMS Plan is a reflection of the joint effort between the public, state and local agencies, the private-sector and all members of the LMS Committee in creating a plan that makes Okaloosa County and its residents resilient to natural hazard damage. The comprehensive planning process behind the 2015 LMS update has culminated in the publication of this document: "The Okaloosa County 2015 Local Mitigation Strategy (LMS) Update."

### **Chapter 1 Executive Summary and History**

The first section of the 2015 LMS update is devoted to explaining the procedural history behind the creation of the plan, public participation and private-sector involvement and the incorporation of the LMS with existing plans.



## Executive Summary and History

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### **Chapter 2 LMS Committee Organization**

Chapter 2 of the LMS establishes the purpose of the Local Mitigation Strategy Committee and the committee by-laws.

The committee's purpose is to develop, in accordance with Section 322 of the Robert T. Stafford Disaster Relief Act, a Local Mitigation Strategy that reduces the vulnerability of Okaloosa County's citizens, governments, businesses, and institutions to the future human, economic and environmental costs of natural disasters.

The committee's by-laws establish a membership which is open to all jurisdictions, organizations and individuals supporting its purposes with at least one representative from each jurisdiction and other individuals from the general public. Committee officer's duties and responsibilities include conducting the LMS Committee meetings; assisting the LMS planning support staff; establishing formation of temporary sub-committees; and distributing general LMS Committee outreach information.

The LMS Committee will be responsible for development and maintenance, including future annual updates and revisions, of the Multi-Jurisdictional Local Mitigation Strategy as required by Section 322 of the Robert T. Stafford Disaster Relief Act. For continuity, every effort will be made to involve the same members who participated in the development of this 2 LMS, though membership on the LMS committee will be subject to some change as individual members change employment or they are assigned new responsibilities by their employers

Meetings of the LMS Committee are conducted at least quarterly, and includes a minimum of two advertised public meetings during the preparation of the LMS Plan and its subsequent updates as required by FEMA Region IV Minimum Standards of Acceptability and 44 CFR Part 201.

### **Chapter 3 Goals, Objectives, Policies and Project Ranking Criteria**

The mitigation goals, objectives and policies listed in Chapter 3 of the 2016 LMS Plan are designed to reduce the impacts of future natural disasters in Okaloosa County and meet the requirements of 44 CFR 201.6(c)(3).

### **Chapter 4 Risk Assessments and Vulnerabilities**

A major process behind development of the LMS is identifying the types of natural hazards that impact Okaloosa County and its 9 municipalities. The risk assessment section of this plan defines the types of natural hazards to which Okaloosa County, the unincorporated areas, and its municipalities are susceptible. The section also discusses historical occurrences of each hazard, extent of damage, and the probability of future occurrence.

The vulnerability assessment of this plan provides an estimate of the potential damage and resulting economic loss to buildings and structures in Okaloosa County that are susceptible to damage from a natural disaster. The section assesses estimated damage for a wide range of residential structures, commercial buildings, and critical facilities and explains the methodology behind the estimates.



## Executive Summary and History

### **Chapter 5 Jurisdictions**

The intent of this section is to provide each jurisdiction with specific hazards, vulnerabilities and mitigation actions, as required by the following Code of Federal Regulations:

*44 CFR 201.6(c) 3: The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, polices, programs, and resources, and its ability to expand on and improve these existing tools. This section shall include:*

- (i.) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. AND*
  
- (iv.) For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.*

Each jurisdiction's section includes a brief summary description of the identified hazard area, vulnerability to the identified hazards, and the degree of impact each hazard has on the jurisdiction. The section also describes vulnerability in terms of the types and numbers of repetitive loss properties and notes the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area. The specific mitigation actions listed were developed by each jurisdiction in response to the particular hazards to which they are vulnerable. The mitigation actions included in the 2016 LMS coincide with the mitigation goals and objectives defined by the LMS Committee and set forth an approach for implementing activities that are cost effective, technically feasible, and environmentally sound. The actions range from community awareness programs about natural hazards, to building code enforcement to flood plain management. The actions are both proactive and reactive: meaning, some of the actions prepare in advance for hazards, while others are actions to be taken following a natural disaster.

### **Appendix**

The Appendix to the 2016 LMS Update includes the project list and project submittal sheets for all jurisdictions. The project list has been compiled according to the criteria established in Chapter 3 of the 2016 LMS Update. Also included is a list of changes to the LMS for documentation. The 2016 Annual outreach letter and mail out list are referenced here, along with the current member list; minutes of the 2016 LMS Committee meetings and other support documentation.

This document details the work of the Okaloosa County LMS Committee over the past several months to develop the planning organization, to undertake the needed technical analyses, and coordinate the mitigation initiatives that have been proposed by the participating jurisdictions and organizations. Through publication of this local mitigation plan, the committee continues to solicit the involvement of the entire community to make the residents, neighborhoods, businesses and institutions of Okaloosa County safer from the impacts of future disasters.



## Executive Summary and History

Okaloosa County Planning Staff would like to acknowledge the following participants in the 2016 LMS update:

Okaloosa County Department of Growth Management  
The City of Crestview  
The City of Destin  
The City of Fort Walton Beach  
The City of Laurel Hill  
The City of Mary Esther  
The City of Niceville  
The City of Valparaiso  
The Town of Cinco Bayou  
The Town of Shalimar  
Okaloosa County Department of Public Safety

### Section 1.02 Planning Process

#### 1.02.01 Procedural History

The Okaloosa County Board of County Commissioners first adopted a Local Mitigation Strategy in July 1998. The original (1998) document included natural hazards as well as anthropogenic hazards (i.e. coastal oil spills, civil disturbance, mass immigration, nuclear power plant incidents, exotic pests and diseases, and terrorist action). In compliance with the Disaster Mitigation Act of 2000, Okaloosa County and its nine incorporated municipalities established the *Okaloosa County 2005 Local Mitigation Strategy (LMS) Plan* that was prepared by the West Florida Regional Planning Council. This document was adopted by each jurisdiction in April, 2005. According to the Federal Regulations, the LMS plan requires documentation of the planning process, public participation, hazard identification, mitigation strategies, coordination with other plans, and formal adoption by the governing board in order to be eligible for hazard mitigation grants. This current plan serves to address all of the necessary requirements, which includes updating and making revisions to the 2005 LMS plan. The LMS document has a designed process which allows changing conditions, in terms of mitigation actions, needs, and development trends, to be addressed through continual revisions. In May, 2010, the five-year update of the County's LMS plan begun by the Okaloosa County Department of Growth Management with assistance from two interns provided by Florida State University through a grant with the Florida Division of Emergency Management and FEMA.

Unlike the 2011 LMS Plan which was a complete revision of the 2005 and earlier documents, this 2015 plan is a substantial update done in compliance with the State of Florida Division of Emergency Management LMS Review Tool dated 9-30-2015.

The timeline, below, provides the history of ordinances affecting Okaloosa County's LMS:

Ordinance 98-24: Adopted the first Local Mitigation Strategy.

Ordinance 99-27: Established the Citizen's Advisory Committee (now referred to as the "LMS Committee") and further defined the mitigation goals. Also, project ranking criteria and a list of projects were included.



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Ordinance 01-08: Replaced the old list of ranked mitigation initiatives.  
Ordinance 04-40: Amended Ordinance 99-27; Established Guiding Principles.  
Ordinance 05-39: Adopted the second Local Mitigation Strategy.  
Ordinance 06-61: Amended Ordinance 99-27; 5 year update.  
Ordinance 11-09: Adopting 2011 LMS Plan  
Ordinance\_\_\_\_\_: Adopting 2016 LMS Plan

### **Section 1.02.02 Planning Process**

The LMS Committee is comprised of local stakeholders and representatives from each of the 9 jurisdictions within in the county as well as representatives from Eglin Air Force Base. The LMS Committee members include the following entities.

<b>Organization/Department</b>
Okaloosa County/Growth Management Dept.
Okaloosa County/Public Works Dept.
Okaloosa County/Emergency Management
City of Cinco Bayou
City of Crestview/Planning Dept.
City of Destin/Community Development Dept.
City of Destin/Engineering Dept.
City of Fort Walton Beach/Community Development Services
City of Fort Walton Beach/Public Works Dept.
City of Laurel Hill
City of Mary Esther
City of Niceville
Town of Shalimar
City of Valparaiso
Eglin Air Force Base
Hurlburt Air Force Base
North West Florida Water Management District
Okaloosa County School Board
Gulf Power Company
Choctawhatchee Electric Co-op
West Florida Regional Planning Council

The revision process began in September 2015 when the current (2011) LMS document was reviewed by Okaloosa County Planning Coordinator Sherry Reed, who has 32 years of experience with Okaloosa County in planning and is a Certified Floodplain Manager, and Okaloosa County Growth Management Director, Elliot Kampert, AICP.

Ms. Reed and Mr. Kampert evaluated the 2011 LMS to determine whether the requirements of the Stafford Act and other governing rules were adequately met and how it compared to the State



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of Florida Division of Emergency Management LMS Review Tool dated 9-30-2015. This evaluation revealed that, the analysis of disaster events and the jurisdictions' responses thereto would need to be updated, and that the criteria used to rank mitigation projects needed to be updated based on experience gained since the adoption of the 2011 Plan. However, unlike the 2011 Plan this 2016 LMS Plan would be a substantial update of its predecessor, not a complete re-write. Ms. Reed and Mr. Kampert presented their conclusions to the LMS Committee who agreed, and have worked with the County for those parts of the LMS that affect their specific jurisdictions. The necessary updates and revisions have been incorporated into this 2016 Plan. Okaloosa County Department of Growth Management's GIS Analyst, Mike Ruzowski, assisted in the compiling of the jurisdictions' exposure and vulnerability to each hazard, which included the visual representation of this data, through the utilization of Okaloosa County Property Appraiser and West Florida Regional Planning Council data. Also, relevant data was collected from the Northwest Florida Water Management District, Florida Division of Emergency Management, Federal Emergency Management Agency, U.S. Census Bureau, Florida Division of Forestry, National Climatic Data Center, National Oceanic and Atmospheric Administration, and other related organizations

Each jurisdiction is required to have at least one mitigation action for each hazard to which their community is vulnerable. The purpose of the mitigation actions is to work towards achieving the overall mitigation goals and objectives established by the LMS Committee. Each jurisdiction must also list a status of the action, (ongoing, no funding, etc.).

In addition to the actions (some of which are programmatic, such as implementing the Florida Building Code or floodplain management activities), this LMS Plan also includes a list of projects that are intended to further mitigate the jurisdictions' vulnerability to the identified hazards. The project ranking criteria presented in the 2016 LMS are based on the those found in the 2011 Plan, and provide for a point-based system of prioritization based on each proposed project's consistency with mitigation goals, objectives and other planning documents, and if the actions considered such things as environmental impacts, project cost and available funding, feasibility, and beneficiaries. A benefit-cost review is also used to determine which projects derive the most benefits while minimizing costs. This benefit-cost review has been used in the 2016 LMS Plan criteria to assign prioritization in the case of tie scores. The revised criteria were discussed with the LMS Committee and approved on August 12, 2015. All the jurisdictions were responsible for submitting an updated list of mitigation projects to the Okaloosa County Staff.

As Okaloosa County Staff revised sections of the LMS plan, they were sent out to the LMS Committee for comments. This was a continual process throughout the duration of the update and comments and revisions were actively sought. Various state agencies and county departments also provided valuable input on certain portions of the LMS plan.

The final draft of the 2016 LMS Plan was presented to the LMS Committee and made available for public comments prior to the December 9, 2015 meeting of the LMS Committee which included a public hearing of the proposed document. The public hearing was advertised on December 4, 2015 in the County's newspaper of record, the Northwest Florida Daily News. Following the public hearing, the 2016 LMS Plan was transmitted to the Florida Division of Emergency Management for review and approval.

Each jurisdiction in Okaloosa County has continued their participation in the LMS since its formal adoption in 2005 and no new jurisdictions have been formed within the county.



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### **Section 1.02.03 Public and Private-Sector Participation**

The 2016 LMS Update involved the public throughout the entire process from the initial drafting stage, to prior to plan approval. During the 2016 LMS Plan Update, the public was allowed to participate in the discussions of the LMS Committee meetings, ask questions, give comments, and become a LMS Committee member. The public representatives include businesses, property owners, community stakeholders, flood plain residents, and all other residents who are interested in contributing to the 2016 LMS Plan Update. The public is greatly encouraged to participate in the future as well, as the LMS is a document that required continual updates. The proper procedures for public notification regarding LMS Committee meetings will be followed. The meeting time, location, and date will be posted to the count website once established by the LMS Committee Chair.

Various e-mails and telephone conversations were held with State of Florida, Division of Emergency Management, Mitigation Planner Alexander Falcone, MPA regarding the content and processes of adoption for the 2016 LMS.

All members of the general public are invited to participate in the LMS Committee meetings and any member of the public can serve as a committee member. Notices of regular meeting times and locations are listed on the Okaloosa County website. In addition to the regular meetings which are open to the public, a public hearing was held in December 2015 to provide an opportunity for the general public to comment and ask questions about the 2016 LMS plan prior to transmittal to the State.

### **1.02.04 Review and Incorporation of Existing Plans**

As previously mentioned, the Okaloosa County Planning Staff reviewed and revised each section of the plan throughout the update process and incorporated suggestions from the LMS Committee members. Also, when new or better data was available it was added to the document, especially if it made the document align more closely with the LMS Crosswalk.

The 2016 LMS update incorporates existing plans, studies, reports and technical information within the document. The 2011 LMS Plan served as the basis for the 2016 LMS plan update. The 2016 LMS plan was critically examined to see how the contents compared to the Crosswalk requirements and necessary elements were revised. The 2016 LMS mitigation actions and overall goals were compared to the Okaloosa County Comprehensive Plan, Land Development Code, Florida Building Code, National Electrical Code, Fire and Life Safety Code, and other relevant County and municipal ordinances to ensure their consistency. As stated previously, the 2016 Plan retain's the 2011 Plan's awarding of points for projects that are consistent with other plans or planning documents, and provides for the prioritization of projects in the event of a tie.

While the LMS incorporates a great deal of information from a variety of other documents as mentioned above, it is itself incorporated wholly or in part into other planning documents. As the LMS is formally adopted by each city as well as the county, it is part of the framework that forms the basis of the jurisdictions' underlying growth management plans. The LMS is incorporated into the local governments' comprehensive plans as the "best available data" on which the goals, objectives and policies of their Coastal Management and Future Land Use elements are based, and are also integral to the statutorily mandated Comprehensive Plan Evaluation and Appraisal



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Report process. Local Comprehensive Plans and Comprehensive Plan Evaluation and Appraisal Reports, are subject to a rigorous planning process that includes substantial opportunities for public input culminating in adoption through public hearings.

### ***1.02.04.01 Community Rating System***

With the exception of the City of Laurel Hill, all jurisdictions as well as the County are members of the National Flood Insurance Program (NFIP) and five participate in the Community Rating System (CRS); therefore special attention was given during the drafting of the 2016 LMS plan so that it fulfills the requirements above and beyond the NFIP. The CRS is a voluntary incentive program that encourages community flood plain management activities that exceed the minimum NFIP requirements. Numerous aspects of the LMS plan fulfill requirements of the CRS Crosswalk, which benefits participating communities by reducing their flood insurance premiums.

Listed below is a simple explanation of who is responsible for the implementation of the CRS requirements as part of the 2016 LMS plan:

**Who:** All participating jurisdictions.

**What:** Incorporate the CRS requirements into the 2016 LMS; ensure the LMS and mitigation actions are implemented.

**When:** Time frame in which the mitigation actions and projects will take place; this is specific to each action or project. For example, some might be ongoing actions such as requiring building setbacks in coastal areas, while others might be a single event, such as structural engineering project.

**Where:** This refers to where the mitigation actions and projects will occur. Since each jurisdiction is responsible for submitting a list of mitigation actions for each hazard they are vulnerable to and project forms to mitigate against hazards, the location of the actions and projects will take place in each individual jurisdiction or in Okaloosa County.

**How:** How the projects are implemented, and to what extent, will depend on available funding. Some actions may be carried out through grants, while others may be funded through annual budgets as determined by the local governing board. Funding will be dependent on each jurisdiction's available funding and project priority.

### ***1.02.04.02 Development, Redevelopment, and Population Trends***

The majority of development in Okaloosa County is restricted to two distinct geographic areas due to the presence of Eglin Air Force Base: north Okaloosa (north of the Eglin Air Force Base reservation) and the south Okaloosa (south of the Eglin Air Force Base reservation). In north Okaloosa, most of the residents live in or near the City of Crestview, which is the fastest growing city in Okaloosa County. It is expected that Crestview will continue to grow, especially due to the vast acres of undeveloped land and because of the growth of Eglin Air Force Base brought about by the 2005 Base Realignment and Closure (BRAC) legislation which relocated the entire United States Army 7<sup>th</sup> Special Forces Group as well as the initial F-35 Joint Strike Fighter training mission to Eglin Air Force Base. The effects of the BRAC induced growth are the subject of two



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recently completed studies, the Eglin Joint Land Use Study and the Tri-County Growth Management Plan, which are in various stages of implementation. From 2003-2007 the area north of Old Bethel Road and west of SR 85 N (in north Okaloosa) experienced significant growth in residential subdivisions. There is likely going to be some redevelopment in the mix of Crestview's growth as well, as older structures are converted into newer ones. North Okaloosa County will likely experience steady development and population growth into the future.

Aside from the City of Crestview in north Okaloosa County, the unincorporated areas and City of Laurel Hill are very rural in character and largely undeveloped. In these sparsely populated areas the demand on public services is low and although there is room for development, any growth is expected to be slow.

In south Okaloosa County, most of the residents live in the City of Destin, the City of Niceville, the City of Fort Walton Beach and in the Unincorporated areas in proximity to the municipalities.

Many jurisdictions in the south end such as the Town of Cinco Bayou, Town of Shalimar, City of Valparaiso, City of Fort Walton Beach, and City of Destin have been built out, meaning there's virtually no room for new development. The type of development within these communities will therefore be redevelopment. This trend has been confirmed in a number of these towns and cities. For example, in the City of Valparaiso, former single-family lots have turned into multifamily townhomes or apartments, and in the City of Fort Walton Beach some former commercial structures have been converted into offices. This trend of redevelopment can be expected to continue into the future in the cities and towns with few or no vacant land parcels. Other factors limiting development in these areas are traffic problems and roadway capacity, and development restrictions in the coastal high hazard areas and flood plain. In most of these built-out cities, no significant planning is needed except for transportation planning along US Highway 98.

In south Okaloosa County, there are some vacant lots within the City of Niceville, City of Mary Esther, and in the Unincorporated areas south of Eglin Air Force Base which presents development opportunity. New housing and commercial developments are underway in the City of Niceville and growth is expected to continue into the future.

To characterize the general development trends of Okaloosa County, the south end will primarily see new growth and development in and around the City of Niceville and redevelopment in the other areas due to the built out nature of the area. In north Okaloosa County, development and population growth is anticipated in and around the City of Crestview while the remaining areas of north Okaloosa County will remain largely rural in character, though some growth will unduly occur in the unincorporated Baker and Holt areas.

### ***1.02.04.03 Implementation***

The 2016 LMS provides a bounty of current, professionally developed data which will be incorporated into the County's and municipalities' local comprehensive plans and land development codes.

Collectively, the comprehensive plan, land development code, ordinances, policies and LMS will work towards promoting the safety of all Okaloosa County residents, reduce the structural damage to buildings, and prevent property damage. Because the LMS is a multijurisdictional document, the planning departments or city governments within each jurisdiction will necessarily



## Executive Summary and History

incorporate the LMS into their individual planning mechanisms, which in addition to the jurisdictions' comprehensive plans and land development codes, may also include, as appropriate, capital improvement programs and re-development plans.

The updated 2016 LMS plan includes a process by which Okaloosa County and the municipalities will incorporate the information contained in the plan, such as in the risk assessment, into other planning mechanisms when appropriate. The record of historical occurrences and extent of damage identified for each hazard in the risk assessment section of the LMS will influence the county and municipalities land development codes. For example, the findings of the 2016 LMS might reinforce set-back requirements for structures within storm surge and flood zones. The Florida Building Code, which already includes requirements for wind resistant windows and doors, can be amended by the Florida Building Code Commission at the request of a local government if further strengthening is warranted. Okaloosa County and the municipalities, in conjunction with their respective code enforcement and building inspection divisions, can ensure those requirements are met.

The updated 2016 LMS allows for continued public participation. The LMS Committee will hold meetings throughout the year, as determined by the LMS Committee Chair. Once a meeting date, time, and place has been set, the proper public notices will be posted on the county website. Notices of public hearings will be advertised in the local newspaper. During the meetings, the public will have the opportunity to participate in the discussions of the meeting, ask questions, give comments, and even become a member of the LMS Committee.

The table below shows the annual time line and process for updating the LMS plan on a continual basis.

Month	Activity
<b>April - May</b>	Revisions to Annual Update to include project goals achieved and any changes to the LMS.
<b>June</b>	Updated LMS Annual Update to LMS/Comp Plan Committee Meeting.
<b>July</b>	Submit agenda item to be placed on the Board of County Commission (BCC) meeting schedule. Present LMS Annual Update to BCC as informational item. Annual update includes latest Project Priority List.
	Following presentation to BCC, advertise availability of current LMS Annual update in the Northwest Florida Daily News.
	Forward copies of LMS Annual Update with Project Priority List to all parties listed in the advertisement. Send memo to "Newsroom" to NWFDN and copies in both North and South Growth Management Offices. Copy should be available to the public year round.
	Have LMS Annual Update posted on the Growth Management website.
	Obtain "Proof of Publication" from NWFDN, forward to appropriate Flood Plain manager for CRS points. FY09-Mike Ruzowski
	Email to LMS Committee with notification of date presented to BCC: LMS Annual Update and "Flood Notes" documents.
<b>Nov-Dec</b>	Begin Annual update of Project Priorities at LMS/Comp Plan Committee Meeting.



## Executive Summary and History

<b>December - January</b>	Finalize at LMS/Comp Plan Committee Meeting Project Priority List. Forward copy of list to DCA with cover letter by January 31 of each year to comply with 9G-22 Compliance.
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### **1.02.05 Procedures for Plan Maintenance**

The 2016 LMS has specific procedures for plan maintenance. The plan will be monitored, evaluated, and updated annually to accommodate changes in growth trends, vulnerability, project status, and goals. The LMS Committee Chair and the Okaloosa County Growth Management Department are responsible for monitoring changes throughout the county, accounting for these changes within the plan, and notifying the LMS Committee of any changes that are made. The LMS Committee Chair is also responsible for coordinating all LMS Committee meetings and sending out proper notification to all committee members and the public. The LMS Committee Chair will keep in contact with each of the municipalities in Okaloosa County and actively request information concerning any changes within their municipality that might be relevant to the LMS plan. Every year the LMS Committee Chair will be responsible for submitting a report to DEO which captures any changes within the 2016 LMS plan.

Every 5 years, all components of the LMS plan will be completely updated and comprehensively evaluated; therefore, this 2016 LMS plan will be substantially revised and a new LMS plan will be submitted to DEO in 2021. The LMS Committee Chair will be responsible for carrying out all the necessary tasks to ensure that the 2016 plan is completed and consistent with state and federal requirements. The LMS will begin its review of the 2016 LMS for substantial update in 2020 no later than June 2019.

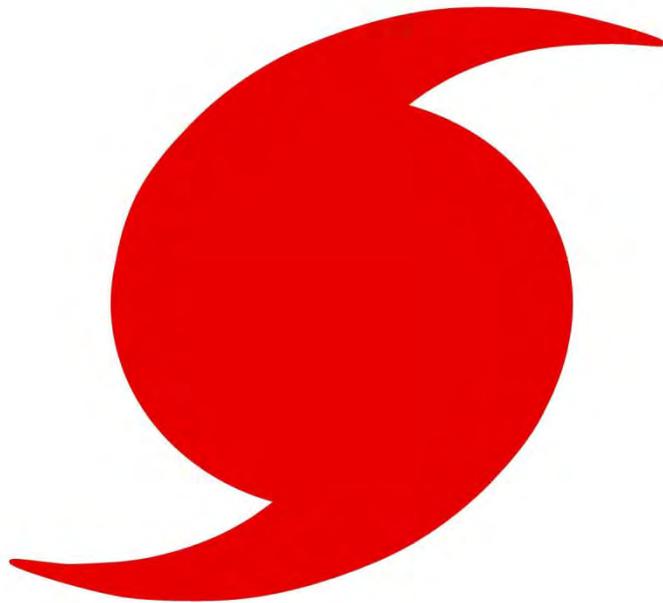
In June 2019, the LMS committee will conduct a public kick-off meeting that will begin the re-evaluation process. Throughout 2020, the LMS committee (which includes representatives from each city and the School Board as well as Okaloosa County) will evaluate the LMS based on with input from the general public as well as affected parties such as Eglin Air Force Base, the independent fire districts, Hurlburt Field, the U. S. Coast Guard Station at Destin, the U.S. Army 7<sup>th</sup> Special Forces Group (relocated from Fort Bragg North Carolina beginning in 2011 as a result of the 2005 Base Realignment and Closure Legislation), the Division of Forestry, and the Northwest Florida Water Management District. The evaluation will specifically include:

- a substantial update of the hazard assessments to include up-to-date data;
- a review of the goals and objectives for each jurisdiction to determine whether they need to be updated to reflect changed conditions, new information, or other factors;
- a review of the outcomes of projects (did they achieve their mitigation goals);
- the continued participation of each agency; and
- a review of the public input process to determine whether it needs to be improved or expanded.

The results of this evaluation, as well as any new data and information that become available during the update process, will form the basis for the revised LMS which will be completed in December 2020.

## **Chapter 2**

# **LMS Committee Organization**





## Local Mitigation Strategy (LMS) Committee Organization

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### Section 2.01 By-Laws

#### **2.01.01 Purposes of the Local Mitigation Strategy Committee**

The purpose of the Okaloosa County Local Mitigation Strategy (LMS) Committee is to reduce the vulnerability of Okaloosa County's citizens, governments, businesses, and institutions to the future human, economic and environmental costs of natural disasters. To this end, the LMS Committee will develop, monitor, implement, and maintain a comprehensive multi-jurisdictional plan (aka the Local Mitigation Strategy) for hazard mitigation as provided in Section 322 of the Robert T. Stafford Disaster Relief Act that is intended to accomplish this purpose and to promote a sustainable and disaster-resistant community.

#### **2.01.02 Membership**

##### ***2.01.02.01 Membership in General***

Membership of the LMS Committee is open to all jurisdictions, organizations, and individuals supporting its purposes with representatives from the following:

- At least one appointed LMS Committee member and alternate from the government of Okaloosa County and each participating incorporated municipality, and
- Other individuals from the general public (including private citizens and businesses, stakeholder organizations, and community groups) as deemed appropriate by the LMS Committee to ensure well-balanced representation on the Steering Committee.

##### ***2.01.02.02 Initial Membership***

Based on long-standing LMS Committee status prior to the establishment of these By-laws, representatives from the following departments/organizations will serve as members of the initial LMS Committee under these By-laws. Additional LMS Committee members will be added as the group grows in membership and as representation is needed to maintain a well-conceived and well-balanced LMS Committee. The current, updated membership list shall be kept as an addendum to these Bylaws.



**Local Mitigation Strategy (LMS) Committee Organization**

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<b>Okaloosa County LMS Working Group</b> June 2010
Okaloosa County/Growth Management Dept.
Okaloosa County/Public Works Dept.
Okaloosa County/Emergency Management
City of Cinco Bayou
City of Crestview
City of Destin/Community Development Dept
City of Destin/Engineering Dept.
City of Fort Walton Beach/Community Development Services
City of Fort Walton Beach/Public Works Dept.
City of Laurel Hill
City of Mary Esther
City of Niceville
Town of Shalimar
City of Valparaiso
Eglin Air Force Base & Hurlburt Field
North West Florida Water Management District
Okaloosa County School Board
Northwest Florida State College
West Florida Regional Planning Council

Subsequent to the effective date of these By-laws, membership shall be accomplished through the completion of a Member Information Form (attached hereto as Exhibit 1 and made a part of). The Member Information Form shall be submitted to the Chair of the LMS Committee for a signature of acknowledgement. The Chair shall cause a record to be kept of all Member Information Forms to serve as the LMS Committee Membership Database. LMS Committee alternate members shall also be required to submit a Member Information Form which shall be kept as part of the database.

***2.01.02.03 Recruitment of New Members***

The LMS Committee shall actively solicit membership and participation from private citizens and businesses through direct mail outs to current and past members, stakeholder organizations (Association of Realtors, Building Industry Association, etc), and community groups; notification on the County website, and other measures as appropriate and available. The LMS Committee Chairman shall keep a record of all membership solicitation activities. Ideally, LMS Committee members should have responsibility and authority for implementing proposed mitigation initiatives on behalf of their agencies when resources to do so become available.

***2.01.02.04 Maintenance of Standing***

To maintain good standing, members of the LMS Committee must not have more than three unexcused absences from meetings during the course of a year. An absence may be excused if the member's alternate attends in his/her place. If the member's alternate cannot attend in the member's place, the Chairperson may excuse the member's absence if the member notifies the



## **Local Mitigation Strategy (LMS) Committee Organization**

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chairperson prior to the meeting that a conflict will not permit attendance at the specified meeting.

Criteria for Member Alternates: Each member of the LMS Committee may designate one alternate to assist them in fulfilling their roles and responsibilities on the LMS Committee and the Working Group as a whole. The alternate member may have one vote only when the primary member is absent. To maintain a well-balanced membership, the designated alternate should represent the same entity as the primary member. Alternate members of individual citizens shall also be individual citizens and not represent any other entity. A LMS Committee member cannot serve as an alternate member for another member. The roles and responsibilities of the LMS Committee members are described in Article IV.

### **2.01.03 LMS Committee Officers**

Any member in good standing of the LMS Committee is eligible for election as an officer. The LMS Committee will have a chair and a vice-chair. The chair and vice-chair shall be elected by a majority vote of a quorum of the LMS Committee members. Each officer will serve a term of one year, and be eligible for re-election for an unlimited number of terms.

The chair of the LMS Committee will preside at each meeting of the LMS Committee as well as establish temporary subcommittees and assign personnel to them. The vice chair will fulfill the duties and responsibilities of the chair in his or her absence.

Duties and Responsibilities of the LMS Committee Officers will include, but shall not be limited to:

- Conducting the LMS Committee Meetings as outlined in the agenda and maintaining decorum.
- Assist the LMS planning support staff in setting meeting agendas.
- Establish formation of temporary sub-committees and assign members to serve.
- Distribute minutes, meeting notices, and general LMS Committee outreach.

### **2.01.04 Responsibilities**

#### **2.01.04.01 LMS Committee**

The LMS Committee will be responsible for development of the multi-jurisdictional Local Mitigation Strategy as required by Section 322 of the Robert T. Stafford Disaster Relief Act, including:

- Developing the data and technical analysis of the LMS, including hazard identification and all other necessary research, including annual and five-year updates as required by the Robert T. Stafford Disaster Preparedness Act and all other applicable laws.



## Local Mitigation Strategy (LMS) Committee Organization

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- Developing and approving the mitigation initiatives for incorporation into the LMS, the priority of those initiatives, and the removal or termination of initiatives.
- Setting guidelines for the total mitigation planning effort.
- Serving as the official body to represent the overall planning process.
- Serving as the official liaison of the LMS Committee to the community, including public Information responsibilities as specified in CFR 44 Part 201, FEMA Region IV Minimum Standards of Responsibilities, 9G-22 FAC or any other federal and state mitigation requirements. These responsibilities include, but are not limited to securing public input and comment on the efforts of the LMS Committee; informing the public about the activities of the LMS Committee; conducting public information and education programs regarding hazard mitigation, and informing the community about the vulnerability to future disasters and effective hazard mitigation actions; conducting surveys to gather information on community needs and attitudes; assisting with the conduct of public meetings; providing a venue to receive comments from the public who cannot attend public meetings, and preparing the community for issuance of the LMS and promoting public acceptance of the strategy developed by the Working Group.
- Presenting the plan to communities and the local elected bodies.

Temporary Subcommittees – The LMS Committee Chairman may, with the affirmative vote of a majority of a quorum present at the time of the vote, appoint temporary subcommittees, including subcommittees comprised of citizens, for the accomplishment of specific tasks. The specific tasks and responsibilities of temporary subcommittees will be defined at the time they are established.

### **2.01.04.02 LMS Planning Support Staff**

The Okaloosa County Growth Management Department or other agency as so designated by the Board of County Commissioners will serve as the LMS Program's planning support staff for the LMS Committee, and assist in the facilitation, coordination and support of the Committee's activities.

Roles and responsibilities that support the general and primary responsibility stated above include, but are not limited to, the following:

- Serve as initial point of contact for all matters relating to mitigation planning and implementation and when appropriate confer with the chair and/or vice chair, the authority specified in Article VI, or other member(s) of the Task.
- Document the planning process in the mitigation plan as required by FEMA criteria in CFR 44 Part 201, and FEMA Region IV Minimum Standards of Acceptability (and any other subsequent State and Federal requirements).



## **Local Mitigation Strategy (LMS) Committee Organization**

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- Obtain and utilize technical assistance and/or training support from the State and FEMA or other agencies as needed by the LMS planning support staff and/or the LMS Committee.
- Read, interpret, and keep current on State and Federal mitigation planning requirements and accordingly guide the planning activities of the LMS Committee as necessary to ensure the community's eligibility for State and Federal mitigation and disaster funding remains in good standing.
- Work with the LMS Committee to collect, compile, organize, and analyze needed information for plan development. Prepare the LMS as a document.
- Coordinate with the County's website staff in the posting of meeting documentation, agendas, and other items to promote public information, participation, and feedback. Maintain public review documentation.
- Attend State and Federal workshops on behalf of the LMS Committee.
- Provide logistical and administrative support to the LMS Committee.

### **2.01.05 Authorized County Point of Contact**

The Okaloosa County Growth Management Director shall be the LMS Committee's designated county point of contact, which is empowered by the County Board of County Commissioners to accept and disburse funds, enter into contracts, hire staff, and take such other actions as necessary in support of, or for the benefit of, the LMS Committee.

### **2.01.06 Actions by the LMS Committee**

#### ***2.01.06.01 Meetings, Voting, and Quorum***

Meetings of the LMS Committee will be conducted in accord with Robert's Rules of Order, if and when deemed necessary by chair of the meeting.

Regular meetings of the LMS Committee will be scheduled at least quarterly with a minimum of 7 days' notice. Subcommittees and other working groups, if established, may conduct additional and separate meetings with appropriate notice as required by law, as needed to complete tasks.

All final actions and decisions made in the name of the LMS Committee will be by affirmative vote of a simple majority of the LMS Committee members present. The LMS Committee shall take no formal actions unless a quorum is present. A quorum shall be 50 percent plus one of the members or their alternates of the LMS Committee in good standing present at the time of the vote. A member and alternate from the same organization shall not be counted as two members for purposes of determining whether a quorum is presented. Each member or alternate of the LMS Committee will have one vote. Under no circumstances shall both a member and an alternate from the same organization or interest cast a vote. When both a member and his/her alternate are present, the member shall vote unless the vote by the



## Local Mitigation Strategy (LMS) Committee Organization

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alternate is approved by a simple majority vote of a quorum of the LMS Committee. When the LMS Committee approves the vote of an alternate when the member is also present, the member shall not vote on the issue for which the alternate's vote is cast.

### ***2.01.06.02 Public Meetings***

The LMS Committee shall hold a minimum of two advertised public meetings during the preparation of the LMS Plan as required by FEMA Region IV Minimum Standards of Acceptability and CFR 44 Part 201.

When required by statute or the policies of Okaloosa County, or when deemed necessary by the LMS Committee, a public meeting regarding actions under consideration for implementation by the LMS Committee will be held.

### ***2.01.06.03 Public Notice***

Notice of meeting time and location listed on the Okaloosa County website. A copy of such notice shall be kept available for public inspection during regular business hours at the office of the Growth Management Department. The notice shall state the time, date, and place for each hearing; the title(s) of the proposed action(s); the place(s) where the action under consideration may be inspected by the public, and; a general statement advising that all interested parties may appear at the meeting and be heard with respect to the proposed ordinance(s).

### ***2.01.06.04 Documentation of Actions***

All meetings and other forms of action by the LMS Committee will be documented and made available for inspection by the public at one or more of the following county locations: the County's website and/or link to any consultant's website, and/or the Department of Growth Management. Documentation may include minutes, handouts, and sign-in sheets. In addition, the LMS planning support staff will maintain public review documentation.

### ***2.01.07 Adoption of and Amendments to the Bylaws***

The Bylaws of the LMS Committee may be adopted and/or amended by a two-thirds majority vote of the members in good standing of the LMS Committee. All proposed changes to the Bylaws will be provided to each member of the LMS Committee not less than ten days prior to such a vote. Voting can be accomplished at a regularly scheduled meeting, a special meeting, or via electronically utilizing email or fax so that a written confirmation of the vote can be generated.

### ***2.01.08 Dissolution of the Committee***

The LMS Committee may be dissolved by affirmative vote of 100% of a quorum of members in good standing of the LMS Committee at the time of the vote, by order of a court of competent jurisdiction, and/or by instruction of the Okaloosa County Board of County Commissioners. Voting can be accomplished at a regularly scheduled meeting, a special meeting, or via electronically utilizing email or fax so that a written confirmation of the vote can be generated. At the time of dissolution, all remaining documents, records, equipment and supplies belonging



**Local Mitigation Strategy (LMS) Committee Organization**

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to the LMS Committee will be transferred to the Okaloosa County position specified as the LMS Committee's Point of Authority in Article V for disposition.

**Section 2.02 Member Form**

**OKALOOSA COUNTY  
LOCAL MITIGATION STRATEGY AND/OR COMPREHENSIVE PLAN  
COMMITTEE**

**Committee Member Information**

Member Name \_\_\_\_\_

Agency Represented \_\_\_\_\_

Department Represented \_\_\_\_\_

Job Title \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

E-Mail \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

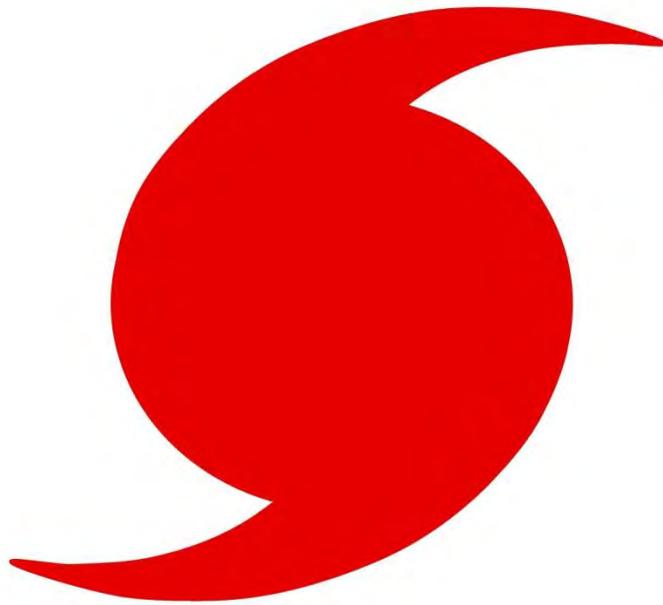
Circle one:

Member      Alternate      Public

Committee Chair Approval \_\_\_\_\_

# **Chapter 3**

## **Goals, Objectives and Policies**





## Goals, Objectives, and Policies

### Section 3.01 Introduction

The intent of this section is to provide a list of mitigation goals for Okaloosa County, as required by the Code of Federal Regulations as follows:

*44 CFR 201.6(c) 3: The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs, and resources, and its ability to expand on and improve these existing tools. This section shall include:*

- (i.) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards. See Section 3.02 Goals*
- (ii.) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. See Chapter 5 for each jurisdiction's mitigation actions and see the Appendix for the project list.*
- (iii.) An action plan describing how those actions will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs. See Section 3.03 Project Ranking Criteria*
- (iv.) For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan. See Chapter 5 for each jurisdiction's actions.*

The purpose of Okaloosa County's goals and objectives is to support the reduction or avoidance of long-term vulnerabilities to the hazards that are identified in the overall County's Risk Assessment, Chapter 4. Each jurisdiction within Okaloosa County is responsible for generating mitigation actions, including an assessment of actions they are already taking, to address each hazard by which they are affected. The mitigation actions are to align with the goals and objectives that were defined by the LMS Committee. From these actions, the jurisdictions generate projects that assist in achieving the overall mitigation goals and objectives, and are in conjunction with their current mitigation actions. For the 2011 LMS plan, the project ranking criteria have been revised to emphasize projects that are practical and feasible, so once funding becomes available they will be implemented first (\*Note\* Project Ranking Criteria is further explained in Section 3.02).

The LMS Committee has utilized and incorporated into this 2011 LMS relevant components of existing County plans and documents which address the identified hazard, including: the 1998 Okaloosa County Local Mitigation Strategy, 2005 Okaloosa County Local Mitigation Strategy, Okaloosa County Comprehensive Plan, Municipal Comprehensive Plans, County and Municipal Land Development Codes and the Okaloosa County Comprehensive Emergency Management Plan. These existing plans and documents collectively assist in accomplishing the overall purpose of reducing or avoiding long-term vulnerabilities from the identified hazards, and reinforce implementation of the LMS. For example, Objective 2.6 of the Coastal Management Element of the Okaloosa County Comprehensive Plan specifically references the Local Mitigation Strategy, and recognizes the guiding principles of the LMS as follows:



**Goals, Objectives, and Policies**

1. Protect human life and private property from the effects of disaster events;
2. Reduce public expenditures due to damage from disaster events;
3. Adopt land use regulations that support sustainable communities;
4. Protect environmentally sensitive areas;
5. Monitor and protect the natural resources of Okaloosa County;
6. Mitigate potential losses through administrative measures; and
7. Coordinate with private sector to mitigate losses.
8. Address lot coverage, vegetated buffers, stormwater management, and erosion and sedimentation controls.

**Section 3.02 Goals**

Listed below are the mitigation goals that have been adopted by the LMS Committee.

<b><i>Goal 1 – Continually provide mechanisms for local government jurisdictions and the public to accomplish mitigation activities in Okaloosa County.</i></b>	
<b>Accomplish by:</b>	
	-Maintain bylaws that define membership and public participation methods.
	-Holding regularly scheduled LMS Committee and Working Committee meetings. Committee meetings will be held quarterly at minimum.
	-Forming Working Groups for sub-regions, municipalities, or for specific hazards named in the plan to reduce or eliminate vulnerability.
	-Maintaining a staffing presence to the LMS Committee through contract or through staff hire or appointment.
	-Providing communications to county and municipal contacts and through media outlets to advertise opportunities to attend and participate in mitigation functions, consistent with the Florida Sunshine Law.
	-Holding meetings throughout the County and in various municipalities to encourage local participation.
<b><i>Goal 2 – Maintain communication between the LMS Committee and key County and Municipal departments to coordinate intra- and inter-departmental mitigation activities among various jurisdictions, and with the public.</i></b>	
<b>Accomplish by:</b>	
	-Ensuring all interests of various departments are represented by the appointed staff to the LMS Committee
	-Ensuring all interests are aware of Working Groups and a need to represent their own interests concerning various geographical areas or to address various hazards.
	-Maintaining up-to-date e-mail and postal addresses and phone numbers to ensure communication.
	-Establishing a website on the County’s web server that discusses the LMS program.



### Goals, Objectives, and Policies

***Goal 3 – Update the LMS plan, as necessary, to identify changes to hazards, vulnerability, goals, initiatives/priorities accomplishments/withdrawal/additions/pending, update of funding sources, current disaster declarations, and adoption of revisions.***

**Accomplish by:**

-Having the LMS Committee direct staff to update plan sections, tables, maps, etc., based upon current activities, trends, or issues.

-Providing LMS staff feedback that provides localized information that is current.

-Continually reviewing the plan and comparing it to other planning requirements (emergency management plans, comprehensive land use plans, community rating system plans) that contain mitigation provisions or may otherwise help to assert or hinder mitigation initiatives.

-Notifying staff to the committee regarding issues that arise that may need their consideration or to solicit opinion.

-Identifying and documenting potentially new hazards, including technological and homeland security issues not otherwise analyzed as a result of the Disaster Mitigation Act of 2000.

***Goal 4 – Assist property owners, residents, businesses, non-profits and others in understanding and knowing of their eligibility for grants, loans and services that may help to mitigate hazards that directly affect their interests.***

**Accomplish by:**

-Working with existing programs within the County and Municipalities (building inspections, local Community Rating System/National Flood Insurance Program, emergency management, chambers of commerce, etc.) to connect mitigation to these efforts.

-Being perceptive of and proactively engage new opportunities to promote mitigation interests.

-Developing a website that conveys updated information about mitigation activities on a continual basis.

-Staying abreast of available funding and service opportunities through participation in meetings, conferences, seminars, and research.

-Maintaining initiatives/priorities and contact persons lists to facilitate rapid notification of assistance availability.

***Goal 5 – Reduce or eliminate hazards identified to at risk locations in the County and its municipalities by implementing the following mitigation actions.***

**Accomplish by:**



## Goals, Objectives, and Policies

### Section 3.03 Explanation of Ranking Criteria

The following criteria were approved by the LMS Committee to rank each proposed mitigation project in a uniform manner to meet the goals of the LMS. The ranking criteria give credit for meeting CRS requirements, potential community benefits, consistency with the LMS and other community rules and regulations, environmental impacts, the prevention of the loss of life, and cost.

#### **3.03.01 The Community Rating System**

The Community Rating System (CRS) is a voluntary program of the National Flood Insurance Program (NFIP) which encourages local floodplain management and flood damage prevention. The intent of the CRS is to reduce the amount a jurisdiction has to pay for federal flood insurance. The points are awarded based on flood prevention measures and if they meet the goals of the CRS requirements:

1. Reduce flood losses;
2. Facilitate accurate insurance rating; and
3. Promote the awareness of flood insurance.

For CRS participating communities, flood insurance premium rates are discounted in increments of 5%; i.e., a Class 1 community would receive a 45% premium discount, while a Class 9 community would receive a 5% discount (a Class 10 is not participating in the CRS and receives no discount). The CRS classes for local communities are based on 18 creditable activities, organized under four categories:

1. Public Information,
2. Mapping and Regulations,
3. Flood Damage Reduction, and
4. Flood Preparedness.

Ranking criteria:

This project criteria is met solely by whether or not it qualifies to meet the requirements of the Community Ratings System (CRS) element. Points are awarded 0 to 5:

1. 0 pts= Does not meet the criteria
2. 2 pts= Meet the Public Information element for CRS credit
3. 3 pts= Meet the Maps and Regulations element for CRS credit
4. 4 pts= Meet the Flood Damage Reduction element for CRS credit
5. 5 pts= Meet the Flood Preparedness element for CRS credit



### Goals, Objectives, and Policies

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Supporting documentation is required regarding the project's fulfillment of the requirements of the CRS element(s).

#### **3.03.02 Potential Community Benefits**

The points associated with this category are based on infrastructure investments and facility investments, and infrastructure and facility improvements which alleviate concerns over public safety. Included in this category are projects such as highway expansion, roadway improvements, critical facility armoring, natural resource management, and shelter designation and creation. The improvements associated with these infrastructure upgrades not only provide hazard mitigation and disaster prevention, but provide basic community benefits through enhanced services.

The greater the number of people the project benefits, the greater the number of points. The highest ranking points are awarded to projects that provide the desired benefits to 40-50% of the community. Projects that provide desired benefits to 20-30% of the community are awarded a medium point score, and those that provide the fewest benefits are awarded the lowest number of points. If the project has no perceived community benefits, it is considered not applicable and given zero points, recognizing that not all projects considered as LMS mitigation strategies will be inherently directed towards providing community benefits. Points are awarded 0 to 5:

Ranking criteria:

1. 0 pts= Not Applicable
2. 1 pts= An improvement that provides minimal benefits ( $\leq 20\%$ )
3. 3 pts= Improvements that provide a moderate increase in benefits ( $\geq 20\%$  but  $\leq 30\%$ )
4. 5 pts= Improvements that provide a high amount of community benefits ( $\geq 40\%$ )

#### **3.03.03 Consistency**

The points associated with this category are awarded based on how consistent the projects are with LMS goals, objectives, and mitigation actions, and other planning documents, such as the Comprehensive Plan's and Capital Improvements Plan's. The purpose of this ranking criteria is to ensure that individual projects meet the intended goals and specific hazard mitigation strategies identified by each municipality in the county.

Ranking criteria:

1. 0= Not consistent or referenced in the goals and objectives of the LMS and other governmental documents
2. 5= Is consistent or referenced with the goals and objectives of the LMS and other governmental documents



## Goals, Objectives, and Policies

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Supporting documentation is required regarding the project's consistency.

Comprehensive Plan Goals and Objectives: Relevant Chapter and Section  
Capital Improvements: Relevant Chapter and Section  
LMS Goals and Objectives: Relevant Chapter and Section  
Other governmental documents: Relevant Chapter and Section

### **3.03.04 Environmental Impacts**

The points associated with this category are intended to protect the natural environment of Okaloosa County, with particular concern on environmentally sensitive areas as defined by the Comprehensive Plans of each municipality (Comp Plan). Environmental and natural resource protection are explicitly stated in the Comp Plans, and the highest priority ranking points will be awarded to those projects that mitigate for environmental impacts or provide environmental benefits.

The ranking assessment will incorporate a multiplier effect on the points earned in Section IV by a multiple of 2 if the project takes place in the environmentally sensitive areas. It will create a weighed effect on the value in this section: if the impact is positive the project is rewarded and if the impact is negative the project loses extra points from its total score. Points are awarded -3 to 3 based on the results of the project's environmental impact assessment:

Ranking criteria:

1. -3= The project will have negative environmental impacts
2. 1= The project will have little (or neutral) environmental impacts
3. 3= The project will have positive environmental impacts

Supporting documentation and information required regarding the project's environmental impact.

### **3.03.05 Prevention of Loss of Life**

This category is broken into highly hazardous, moderately hazardous, and minimally hazardous areas depending on what location-specific mitigation actions the project provides for areas most susceptible to a specific hazard. For example, the coastal and bay areas are located in highly hazardous areas susceptible to storm surge; if the project prevents a high number of deaths from this hazard, it will be awarded the highest number of points. To illustrate another example, a more inland area moderately susceptible to storm surge activity will be awarded lesser points for the same type of preventive results. It is recognized that different projects will provide various degrees of prevention based on the type of hazard and location-specific susceptibility. However, this scale



### Goals, Objectives, and Policies

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will only award points based on whether the project can be reasonably assumed to prevent the loss of life and in what type of hazardous area it is located in. Points are awarded 0 to 5:

Ranking criteria:

1. 0= Does not have a perceived effect on the prevention of loss of life for the population which the project is directed towards
2. 1= There is a perceived positive effect on the prevention of loss of life for the intended population in a minimally hazardous area (no surge zone, no floodplain, no readily identifiable natural hazards)
3. 3= There is a perceived positive effect on the prevention of loss of life for the intended population in a moderately hazardous area (Category 3 or higher storm surge, Flood zone A or AE)
4. 5= There is a perceived positive effect on the prevention of loss of life for the intended population in a highly hazardous area (Category 2 or lower storm surge, Coastal High Hazard Area, Flood zone V)

Supporting documentation and information required regarding the classification of the project's intended hazard area and its expected impact on the prevention of loss of life.

#### **3.03.06 Cost**

The category considers many of the aspects of cost associated with projects, such as the acquisition of repetitive loss properties and structures, initial cost of the project, current available funds, funding assistance (such as loans), grant availability, and unmet need. Points are award based on funding availability and grant programs. Priority should be given to projects that have a source of funding.

Ranking Criteria for Funding Availability:

1. 0= Does not qualify for a grant or grant program; does not have funding assistance; does not have locally allocated funds for the project
2. 2= Does qualify for a grant or grant program; does not have funding assistance; does not have locally allocated funds for the project
3. 3= Does qualify for a grant or grant program; does have funding assistance; does have locally allocated funds for the project

Supporting documentation and information is required regarding the specific available funds.

Within this category the ranking criteria considers the cost of acquiring repetitive loss properties and severe repetitive loss structures. This is one specific example of cost-savings through property damage reduction. There are two Hazard Assistance Mitigation Programs that provide grant funding for repetitive loss claims or severe repetitive loss structures. The Repetitive Flood Claims



### Goals, Objectives, and Policies

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program awards funds to states and communities to reduce flood damages to insured properties that have one or more claims to NFIP. The Severe Repetitive Loss Program provides funding to reduce the long-term risk of flooding damage to severe repetitive loss structures, as defined by FEMA, and insured under NFIP.

Ranking Criteria for Acquisition of Repetitive Loss Structure(s):

1. 0= Does not acquire Repetitive Loss Structure(s)
2. 2=Does acquire Repetitive Loss Structure(s), but not Severe Repetitive Loss
3. 4= Does acquire Severe Repetitive Loss Structure(s)

The points also consider the cost-savings associated with property damage reduction and awards points for preventive measures.

Ranking Criteria for Property Damage Reduction:

1. 0= Does not prevent property damage
2. 4= Does prevent property damage

Supporting documentation and information required regarding the qualifications of a structure(s) as a Repetitive Loss Structure(s).

#### Projects with Equal Points

In the event of a tie, projects will be assigned an alpha-numeric ranking. For example, two projects with 35 points apiece that rank 7<sup>th</sup> on the overall list will be assigned rankings of 7a and 7b. The letter applied will be based on the number of people benefitting from a proposed project. Using the same example, one of the 35 point projects benefitting 100 people, the other project benefits 50 people. The project benefitting 100 people would be assigned 7a. The project benefitting 50 people would be assigned 7b. Thus the 100 person project 7a would be considered a higher priority than 7b.



Goals, Objectives, and Policies

**3.04 Ranking Criteria Sheet**

<b>Mitigation Projects: Ranking Criteria Sheet</b>			
<b>3.03.01 Community Ratings System (CRS)</b>	No	Yes	If 'Yes,' explain
1. Flood Preparedness	0 pts	5 pts	
2. Flood Damage Reduction	0 pts	4 pts	
3. Maps and Regulations	0 pts	3 pts	
4. Public Information	0 pts	2 pts	
<b>3.03.02 Potential Community Benefits</b>	High	Medium	Low
	(Expected Impact)		
1. Infrastructure Investments	5 pts	3 pts	1 pt
2. Facility Improvement	5 pts	3 pts	1 pt
3. Resource Improvement	5 pts	3 pts	1 pt
<b>3.03.03 Consistency</b>	No	Yes	If 'Yes,' explain
1. Consistent with LMS goals and objectives	0 pts	5 pts	
2. Consistent with other governmental documents' goals and objectives (i.e. Comprehensive Plan)	0 pts	5 pts	
3. Existing governmental document(s) referenced in project (i.e. Capital Improvements Plan)	0 pts	5 pts	
<b>3.03.04 Environmental Impacts</b>	No	Yes	If 'Yes' to #4, explain
1. Negative Impact	0 pts	-3 pts	
2. No or Minimal Impact	0 pts	1 pt	
3. Positive Impact	0 pts	3 pts	
4. Environmentally Sensitive Areas (as defined in the Comp Plan)	pts x 1	pts x 2	

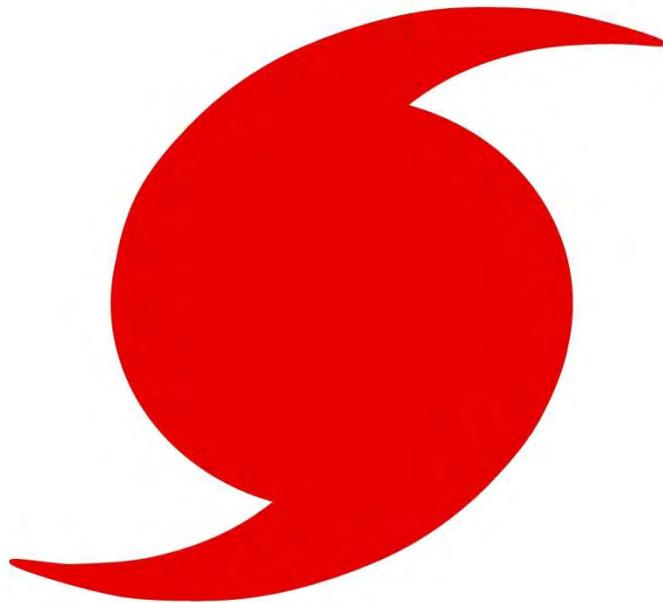


**Goals, Objectives, and Policies**

	High	Medium	Low
<b>3.03.05 Prevention of Loss of Life</b>	High	Medium	Low
	(Expected Impact)		
1. No Impact	0 pt	0 pt	0pt
2. Highly Hazardous Area	5 pts	4 pts	3 pts
3. Moderately Hazardous Area	4 pts	3 pts	2 pts
4. Minimally Hazardous Area	3 pts	2 pts	1 pt
<b>3.03.06 Cost</b>	No	Yes	If 'Yes,' explain
1. Acquisition of Repetitive Loss Structures Claims	0 pts	4 pts	
2. Property Damage Reduction	0 pts	4 pts	
3. Total Project Cost	\$		
a. Current Funding	\$		
	No	Yes	If 'Yes,' explain
b. Funding Availability			
i. Qualifies for a grant (grant programs)		\$	
ii. Funding assistance		\$	
iii. Locally Allocated Funds		\$	
c. Unmet Need	\$		

# **Chapter 4**

## **Risk Assessments**





## Risk Assessments

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### Section 4.01 Overall Risk Assessments

#### 4.01.01 Introduction

The intent of this section is to provide information regarding the hazards threatening Okaloosa County. In this section, information relevant to the entire county is compiled and an overview of the analyses is provided.

The hazards that will be analyzed in this section are natural events and the analysis concentrates on the anthropogenic affects on those events as well as the effects of those events on mankind. However, this analysis is not an assessment of technological and/or societal hazards and, therefore, these types of events are not covered under this plan or in the analysis provided in this section.

Primary attention is given to hazards (with sub-sections) considered reasonably possible to occur in the County. These hazards include:

- Hurricane and Tropical Storm
- Storm Surge
- Flooding
- Dam Safety
- Land Erosion
- Severe Storms
  - Tornado and Waterspout
  - Thunderstorms and Lightning
  - Winter Storms
- Heat Wave and Drought
  - Heat Wave
  - Drought
- Wildfire
- Beach Erosion

The following hazards are considered minimal or no risk to Okaloosa County: sinkholes, expansive soils, earthquakes, avalanches, land subsidence, landslides, volcanoes, and tsunamis. Therefore, these hazards are not analyzed in any depth in the hazard analysis. Further explanation is provided in the “Other Hazards” section.

#### *Hazard Identification*

The technical planning process begins with hazard identification. In this process, the LMS Committee has identified all of the natural hazards that may pose a potential threat to the county.



**Risk Assessments**

**4.01.02 Hurricane and Tropical Storm**

**DEFINITIONS:**

A tropical storm is defined as a tropical cyclone with maximum sustained winds between 39 miles per hour (or 34 knots) and 73 miles per hour (63 knots). One knot equals roughly 1.15 miles per hour.

A tropical cyclone is in turn defined as a large-scale circular flow occurring within the tropics or subtropics which has its strongest winds at low levels, including hurricanes, tropical storms and other weaker rotating vortices (Klotzbach & Gray, 2010).

A hurricane is defined as a type of tropical cyclone with a well-defined circulation and sustained wind of 74 mph (roughly 64 knots) or higher (NOAA’s Atlantic Oceanographic and Meteorological Laboratory). All of Okaloosa County is equally susceptible to hurricanes and tropical storms.

**Table 4.01.02.1:** Saffir-Simpson Hurricane Wind Scale

Category	Sustained Winds	Description
1	74-95	Minimal
2	96-110	Moderate
3	111-130	Extensive
4	131-155	Extreme
5	>155	Catastrophic

Source: NOAA’s Atlantic Oceanographic Meteorological Laboratory

**HISTORICAL OCCURRENCE:**

Historically, 11 hurricanes and 13 tropical storms have made landfall within 50 nautical miles of Okaloosa County between 1950 and 2015. Four of these storms were recognized as major Category 3 storms on the Saffir-Simpson scale. These Category 3 storms include Eloise in 1975, Elena in 1985, Opal in 1995, and Dennis in 2005. One of the storms was recorded as a major Category 4 storm and then downgraded to a Category 3, which was hurricane Dennis in 2005. (See Table 4.01.02.2 below).

**Table 4.01.02.2:** Historical Record of Hurricanes and Tropical Storms, Okaloosa County 1950-2015

Year	Storm Name	Wind Speed (KTS)	Pressure (MB)	Category
1953	ALICE	40	0	TS
1953	FLORENCE	90	0	H2
1953	FLORENCE	70-80	0-985	H1
1956	FLOSSY	65-80	0-980	H1
1956	FLOSSY	45	0	TS
1957	DEBBIE	35	0	TS
1959	IRENE	45-50	0-1001	TS
1965	NOT NAMED	45	0	TS
1975	ELOISE	105-110	955-958	H3



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1985	ELENA	110	953	H3
1985	JUAN	40-55	982-984	TS
1994	ALBERTO	45-55	993-1000	TS
1995	ERIN	65-80	974-985	H1
1995	OPAL	110	938	H3
1995	OPAL	80	950	H1
1997	DANNY	65	986	H1
1997	DANNY	35-60	991-1001	TS
1998	EARL	70-80	985-987	H1
2000	HELENE	35-50	1001-1006	TS
2001	BARRY	60	991-992	TS
2004	IVAN	130	964	H4
2005	ARLENE	50-55	990-991	TS
2005	DENNIS	120	930	H4
2005	DENNIS	110	942	H3
2008	FAY	40	998-999	TS
2009	CLAUDETTE	40-50	1005-1008	TS

Note: This hurricane data was condensed due to multiple entries of the same storm. Some of the storms are listed twice to reflect the change in the storm's classification.  
Source: NOAA Coastal Services Center, 2015

Figure 4.01.02.1 below shows the path of each tropical storm and hurricane which landed within 50 nautical miles of Okaloosa County from 1950-2015.

**Figure 4.01.02.1: Historical Hurricane Tracks, 1950- 2015**



Source: NOAA Coastal Services Center, 2015

It is acknowledged that even hurricanes landing greater than 50 nautical miles from Okaloosa County may have an impact on its infrastructure, homes, and businesses. An example of this is Hurricane Ivan in 2004. Although Ivan made landfall in the neighboring state of Alabama, its impact on Florida's Panhandle was one of the strongest and most destructive since Hurricane Opal in 1995 (FDEP's Bureau of Beaches and Coastal Systems, Hurricane Ivan Damage



## Risk Assessments

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Assessment, 2004). Hurricane Ivan’s 120 mph wind and storm surge caused severe structural damage and beach erosion in Okaloosa County.

Historically, Okaloosa County has experienced a peak 5% chance of hurricane or tropical storm landfall as indicated in the table below. This peak percentage occurs during the month of September; the typical expectation being that the month of September falls right in the center of peak hurricane season between mid-August to late October. The official, nationally recognized hurricane season starts June 1<sup>st</sup> and spans to November 30<sup>th</sup>.

Okaloosa County has been fortunate in that no hurricanes have made landfall within 50 miles of its borders within the past 5 years.

However, in the past the county has suffered significant damage. During hurricane Opal, U.S. Highway 98 was washed out between Fort Walton Beach and Destin; thus, causing major traffic issues as this is a major east-west corridor. Many homes were damaged due to storm surge and high winds. Road systems in the northern portion of the county were impassable due to power lines being down from numerous trees on them. Hurricane Ivan with its high winds and long duration brought many of the same issues along with numerous damage to individual roof systems. The U.S. Army Corps of Engineers brought temporary assistance with roof protection by giving out large tarps that offered temporary protection for roofs until the individuals could get them repaired. Another issue that arose from the damages were issues with unlicensed contractors.

**Table 4.01.02.3:** Historical Trends of Tropical Storm/Hurricane Impacts by Percentage Odds.

Month	Named Storm	Hurricane	Major Hurricane
June	4%	<2%	<1%
<b>July</b>	4%	<2%	<1%
<b>August</b>	7%	2%	<1%
<b>September</b>	15%	5%	1%
<b>October</b>	4%	<2%	<1%
<b>November</b>	1%	<1%	<1%

Source: Atlantic Oceanographic and Meteorological Laboratory, NOAA, Miami

**EXTENT:**

High winds from hurricanes are a substantial threat to all homes, especially manufactured housing. Category 3 or higher force winds would likely cause substantial damage throughout the County. Winds in excess of 155 MPH could be experienced in a major Category 5 hurricane in some locations. Traditional stud and brick veneer or siding homes and businesses are vulnerable, as well, especially when hurricane shutters are not used. Relatively few businesses and homes have hurricane shutters in the County, although shelters and some critical facilities are shuttered.

In the worst case scenario of a Category 5 hurricane, there will be significant to catastrophic damage to homes and buildings, trees, service utilities, and signage. In particular to power pole damage, there would be extensive widespread system destruction anticipated, which can include transmission/substation damage. It is anticipated that an overwhelming majority of mobile homes



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will be completely destroyed, and a substantial number of frame homes will receive substantial to catastrophic damage due to wind causing structural collapse. The Category 5 winds in excess of 155 MPH will cause significant damage to all buildings, with loss of roof sheathing, broken windows, and in some cases wall failure resulting in a structural collapse. The majority of trees will be snapped and power poles downed. In some cases, this will result in power outages that could last for weeks or months. People and animals would be at an extremely high risk of injury or death as a result of the strong, forceful winds causing flying or falling debris. Evacuation is recommended prior to the Category 5 hurricane making landfall. In addition, the expected storm surge level of up to 21 feet associated with a Category 5 hurricane, per the Northwest Florida Regional Planning Council, will substantially impact the unincorporated coastal and bay areas in Okaloosa County. This will cause beach erosion to the coastal areas; however, this will be discussed further in another section. Also, severe flooding will occur and likely cause polluted water, storm sewer overflow, and damage to roadways. Storm surge will be examined in greater depth in the following section. (NOAA, 2015)

**PROBABILITY:**

According to Colorado State University's United States Landfalling Hurricane Probability Project, Okaloosa County has the following future probabilities in a 50-year time period.

**Table 4.01.02.4:** 50-Year Probabilities of Named Storm, Tropical Storm, and Hurricane Making Landfall in Okaloosa County

1 or More Named Storms Making Landfall	1 or More Hurricanes Making Landfall	1 or More Intense Hurricanes Making Landfall	Tropical Storm-Force (≥ 40 mph) Wind Gusts	Hurricane-Force (≥ 75 mph) Wind Gusts	Intense Hurricane-Force (≥115 mph) Wind Gusts
90.90%	68.60%	40.50%	>99.9%	99.60%	82.30%

Source: The United States Landfalling Hurricane Web Project, 2015

**4.01.03 Storm Surge**

**DEFINITION:**

According to the National Oceanographic and Atmospheric Administration (NOAA), storm surge is defined as water that is pushed toward the shore by the force of the winds swirling around the storm. Residents living in the coastal areas of the county are most vulnerable to storm surge. These jurisdictions include the City of Destin, City of Fort Walton Beach, Town of Shalimar, City of Niceville, Town of Cinco Bayou, City of Valparaiso, and City of Mary Esther. The potential storm surge levels were updated in 2010 and are shown below with the corresponding hurricane category.

**Table 4.01.03.1:** Potential Tide Height (above Mean Sea Level)

Storm Surge Strength	Height
Category 1	Up to 4 ft
Category 2	Up to 9 ft
Category 3	Up to 12 ft



**Risk Assessments**

<b>Category 4</b>	Up to 17 ft
<b>Category 5</b>	Up to 21 ft

Note: Surge heights based on the SLOSH Maximum of MEOW (Maximum Envelope of Water)  
Source: West Florida Regional Planning Council

***HISTORICAL OCCURRENCE:***

As previously mentioned, storm surge is strongly connected to the intensity and wind speeds of hurricanes and tropical storms. As shown in Table 4.01.03.2, below, the most significant surge recorded for Okaloosa County was associated with Hurricane Opal of 1995. Damage associated with Opal's surge included the complete destruction of US 98 on Santa Rosa Island, downed power lines across the island, and damage to numerous homes and other structures. The surge also overtopped US 98 in the Mary Esther area, causing damage to the road system as well as homes and other structures. Residents of Okaloosa Island were not allowed to return to their homes for weeks, prompting the County to set up a public bus system to access the impacted areas so that residents could assess damage and salvage what they could. US 98 on Santa Rosa Island is also a major east-west corridor along the coast. Its destruction proved a major impediment to travel, requiring travelers to utilize longer alternative routes. In order to help prevent such catastrophic damage in future events, the rebuilding of US 98 on the island included hardening of the edges of the causeway. In addition to the loss of highway infrastructure, Opal also caused major damage to the island's natural systems, including the removal of over a mile of well-established dunes which were in places as much as 26 feet high. Dunes are important natural systems that not only provide a first line of defense against coastal storms, but also provide habitat for a large variety of plants and wildlife adapted to the typically xeric, saline environment. They are also a key element in the tourism component of the County's economy.

Damage from the other surge events noted in Table 4.01.03.2, below, was typically minor, consisting primarily of localized beach erosion and road flooding. No storms have occurred since 2009.

**Table 4.01.03.2:** Tropical Storm and Hurricane Surge Levels, 1975-2009

<b>Year</b>	<b>Storm Name (Category)</b>	<b>Storm Surge Level/Range</b>
1975	Eloise (H3)	0 feet
1985	Elena (H3)	0 feet
1985	Juan (TS)	0 feet
1994	Alberto (TS)	0 feet
1995	Erin (H1)	0 feet
1995	Opal (H3/H1)	10.0-20.0 feet
1997	Danny (H1/TS)	0 feet
1998	Earl (H1)	4.0 feet
2000	Helene (TS)	1.0 feet
2001	Barry (TS)	0 feet
2004	Ivan (H4)	9.0-13.0 feet
2005	Arlene (TS)	0 feet
2005	Dennis (H4/H3)	0 feet
2008	Fay (TS)	0 feet



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<b>2009</b>	Claudette (TS)	1.70-2.32 feet
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Note: The Tropical Storms and Hurricanes listed above have landed in Okaloosa County or are within 50 nautical miles.  
Source: NOAA

Eglin Air Force Base, which occupies nearly half of the county's land area, borders the southern portion of the county. This land is primarily forested with little to no anticipated impacts from storm surge activity.

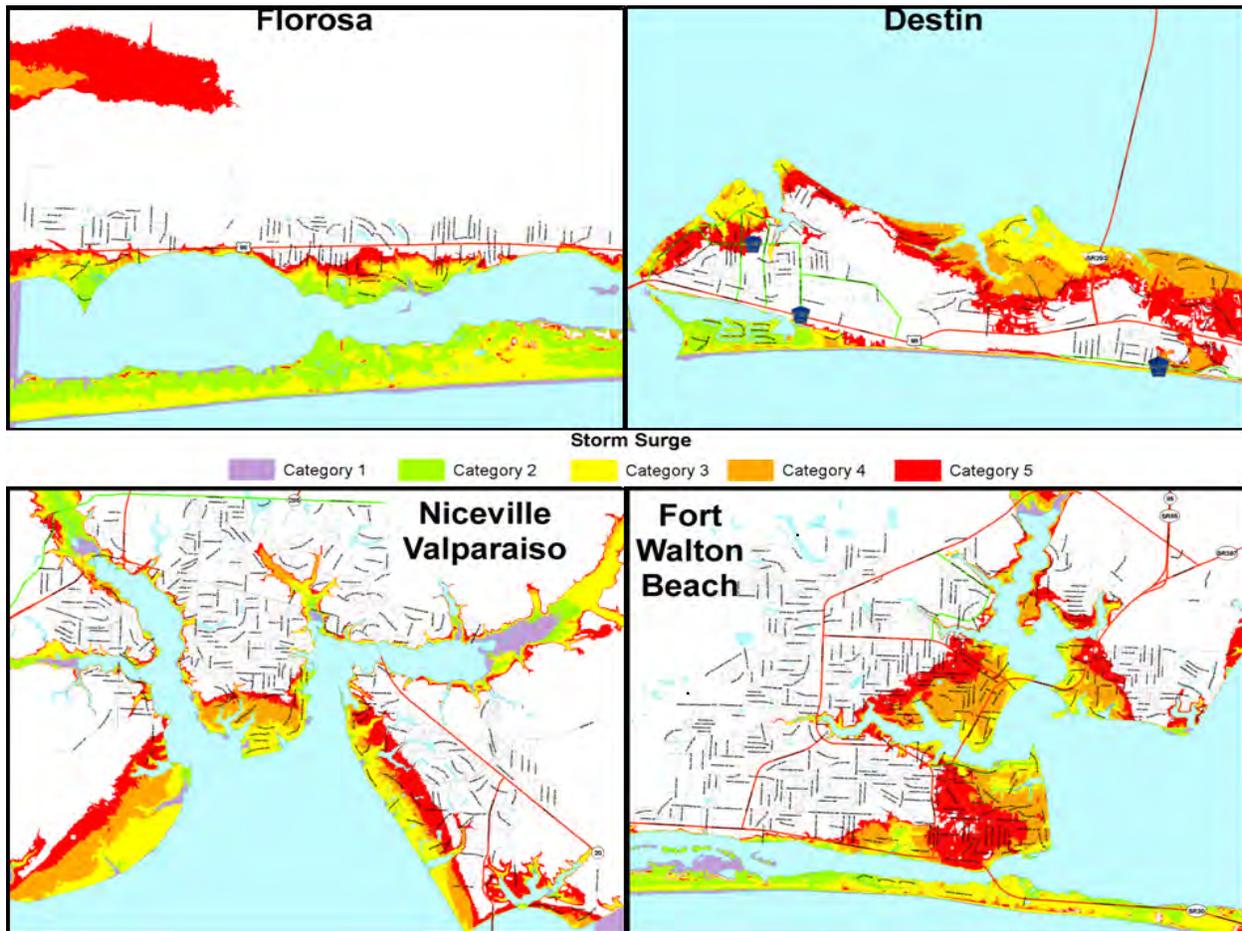
***EXTENT:***

In the worst case scenario, some of these areas may experience storm surge levels up to 21 feet above mean sea level during a Category 5 hurricane (see Figure 4.01.03.1). The high storm surge levels will cause significant flooding of residential and commercial structures, power outages, and storm sewer overflow. Also, beach erosion will be accelerated along the coastal areas causing significant damage to and/or the collapse of a majority of the homes and buildings, docks, and other structures along the coast. The hazard of beach erosion will be further examined in another section. The figure below displays the extent of the storm surge levels associated with each of the hurricane categories.

**Figure 4.01.03.1:** Southern Okaloosa County's Exposure to Storm Surge



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Source: West Florida Regional Planning Council

Some of the coastal areas, particularly on Okaloosa Island, may experience storm surge levels up to 21 feet above mean sea level during a Category 5 hurricane (see Figure 4.01.03.1). The largest area of the county susceptible to storm surge are those areas lying adjacent to the Choctawhatchee Bay Area Basin and the Gulf of Mexico. These areas include virtually the entire southern portion of the county, totaling roughly 123,963 people. This population estimate was extrapolated from 2000 Census data, which can be seen in Table 4.01.04.4 in the *Flooding* section.

The potential storm surge levels can be determined for each incorporated and unincorporated coastal area within the county (See Table 4.01.03.3).

**Table 4.01.03.3:** Potential Storm Surge Level for Hurricane Categories

HISTORY POINT (Description)	HURRICANE SURGE ELEVATION (in feet)				
	CAT 1	CAT 2	CAT 3	CAT 4	CAT 5
Santa Rosa Sound/Florosa	3.6	5.2	10.8	15.4	18
Santa Rosa Sound near Mary Esther	3.3	4.8	9.9	15.3	17.2



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<b>Santa Rosa Sound near FWB City Hall</b>	3.6	5.3	8.7	14.5	17.1
<b>Gap Creek</b>	4.4	6.9	9.4	16	18.3
<b>Cinco Bayou</b>	4.2	6.4	8.8	14.4	17.4
<b>Garnier Bayou (near EOC)</b>	4.1	6.5	8.7	14.4	17.7
<b>Choctawhatchee Bay</b>	3.7	5.7	7.4	13.8	16.8
<b>East Pass</b>	4.9	8	11.6	13.5	16.7
<b>Joe's Bayou</b>	3.3	5.2	6.7	12.9	15.8
<b>Indian Bayou</b>	3.1	4.7	6.2	12.2	15
<b>Piney Point</b>	3.2	4.8	6.2	12	14.8
<b>Mouth of Rocky Bayou</b>	3.7	5.6	7.4	13.1	16.1
<b>Upper Rocky Bayou</b>	4.3	6.6	7.9	13.4	16.4
<b>White Point</b>	3.3	5	6.4	12.2	14.9

Source: West Florida Regional Planning Council, 2010

It is evident from Figure 4.01.03.1 that, regardless of the storms' levels of intensity, their associated surges vary greatly due to a variety of factors. A recent example is provided by Hurricane Charley. Despite being the strongest landfalling storm of the 2004 Atlantic Hurricane Season, the highest recorded surge associated with Category 4 Hurricane Charley was only 9.4 feet (*Hurricane Charley Characteristics and Storm Tide Evaluation* Florida Department of Environmental Protection Bureau of Beaches and Coastal Systems, April 2005). According to the Storm Surge Atlas for Lee County, Florida, (the location of the highest recorded surge), a Category 4 storm at that location should have had a surge between 16.5 and 28.7 feet. Factors commonly cited for this relatively mild surge are Charley's compact size and speed (*Hurricane Charley Characteristics and Storm Tide Evaluation* Florida Department of Environmental Protection Bureau of Beaches and Coastal Systems, April 2005). This fact is recognized in the updated Saffir-Simpson Hurricane Wind Scale where storm surge has been removed due to the difficulties in its prediction.

**PROBABILITY:**

Notwithstanding the storm-to-storm variability of potential surge heights, it is safe to assume that any given storm will have an associated surge. Therefore, for purposes of this LMS, the probably of storm surge occurring in Okaloosa County is considered the same as the probability of occurrence of a landfalling storm - 90.9% - as provided in Table 4.01.02.4: 50-Year Probabilities of Named Storm, Tropical Storm, and Hurricane Making Landfall in Okaloosa County.

**4.01.04 Flooding**

**DEFINITION:**

This section only considers flooding that is the result of rainfall, which includes heavy rains associated with a hurricane, tropical storm, or severe storm over a period of several days. However, a flash-flood differs in that it is the result of intense rainfall over a short period of time (National Weather Service, 2010). All of Okaloosa County's jurisdictions are susceptible to



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localized flooding. It occurs primarily along the Blackwater, Yellow and Shoal Rivers and associated tributaries, sloughs, river oxbow lakes, and isolated swamps; locally called “bays”. The areas of the county most susceptible to flooding are located north of I-10 and Eglin Air Force Base and occur from local flooding of the Shoal River, the Blackwater River, and Yellow River. With the exception of the City of Laurel Hill, all of Okaloosa County’s municipalities as well as the County participate in the National Flood Insurance Program (NFIP). In addition, the County, along with the City of Destin, City of Fort Walton Beach, City of Mary Esther, City of Niceville, and the Town of Shalimar participate in the NFIP Community Rating System.

A floodplain is perhaps most simply described as the area adjacent to a body of water that is subject to periodic inundation (i.e., flooding). The Federal Emergency Management Agency, among others, classifies floodplains according to the frequency with which flooding is expected to occur. Excerpted from FEMA publication 248 (*Unified National Program for Floodplain Management*, 1994, promulgated by the Interagency Floodplain Management Task Force), the description of the natural and beneficial functions of floodplains, below, provides a concise summary of the functions and benefits of Okaloosa County's floodplain areas.

### **Natural and Beneficial Floodplain Functions**

**Water Resources:** resources and functions that are part of or provide a benefit to the hydrologic cycles on the earth’s surface and below ground

*Natural Flood and Erosion Control Water Quality Protection*

- Provide flood storage and conveyance
- Filter nutrients and impurities from runoff
- Reduce flood velocities
- Process organic wastes
- Reduce flood peaks
- Moderate temperature fluctuations
- Reduce sedimentation

*Groundwater Recharge/Discharge*

- Promote infiltration and aquifer recharge
- Help to maintain natural base flows instream

**Biological Resources:** resources and functions that benefit plants and animals

*Biological Productivity Fish and Wildlife Habitats*

- Support high rate of plant growth
- Provide breeding and feeding grounds
- Maintain biodiversity
- Create and enhance waterfowl habitat
- Protect habitats for rare/endangered species

**Societal Resources:** resources and functions that directly benefit human society

*Harvest of wild and cultivated products Recreational Opportunities*

- Enhance agricultural lands



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Provide areas for active and passive uses  
 Provide sites for aquaculture  
 Provide open space  
 Restore and enhance forest lands  
 Provide aesthetic pleasure

*Areas for Scientific Study and Outdoor Education*

Contain cultural resources (historic and archaeological sites)  
 Provide opportunities for environmental and other studies

**HISTORICAL OCCURRENCE:**

Historically, Okaloosa County experienced major floods during the years of 1970, 1975, 1990, 1994, 1997, 2009, and 2014 (See Table 4.01.04.1). In 1975, the highest flood level was recorded at the Yellow River near Milligan. The flood level reached 62.71 feet per the National Geodetic Vertical Datum (NGVD). Other reported flooding and the source of flooding in Okaloosa County from the year 1994 to February 2010 are displayed in Table 4.01.04.2 and Table 4.01.04.03

**Table 4.01.04.1:** FEMA Declarations: History of Major Flooding in Okaloosa County, 1970-2015

Declaration Date	Incident Type	Title	Incident Begin Date	Incident End Date
7/3/1970	Flood	HEAVY RAINS & FLOODING	7/3/1970	7/3/1970
8/22/1975	Flood	FLOODING	8/22/1975	8/22/1975
9/26/1975	Flood	HIGH WINDS, HEAVY RAINS & FLOODING	9/26/1975	9/26/1975
4/3/1990	Flood	SEVERE STORMS & FLOODING	3/16/1990	4/9/1990
7/10/1994	Severe Storm(s)	SEVERE STORMS AND FLOODING (TROPICAL STORM ALBERTO)	7/2/1994	7/29/1994
1/6/1998	Severe Storm(s)	SEVERE STORMS, HIGH WINDS, TORNADOES, AND FLOODING	12/25/1997	4/24/1998
4/21/2009	Severe Storm(s)	SEVERE STORMS, FLOODING, TORNADOES, AND STRAIGHT-LINE WINDS	3/26/2009	5/5/2009
5/06/2014	Severe Storm(s)	SEVERE STORMS, FLOODING, AND STRAIGHT-LINE WINDS	4/28/2014	5/16/2014

Source: FEMA

**Table 4.01.04.2:** General Flooding and Flash-Flooding in Okaloosa County, 1994 - 2015

Date	Occurrences	Flood-Flash Flooding	Heavy Rains-Tropical Storms/Hurricanes
1994	1	1-0	0-1
1995	3	0-3	3-0
1997	2	0-2	2-0



**Risk Assessments**

<b>1998</b>	3	2-1	2-1
<b>1999</b>	1	0-1	1-0
<b>2002</b>	2	1-1	1-1
<b>2003</b>	3	0-3	2-1
<b>2004</b>	1	0-1	1-0
<b>2005</b>	7	0-7	5-2
<b>2007</b>	1	0-1	1-0
<b>2008</b>	1	0-1	1-0
<b>2009</b>	5	0-5	4-1
<b>2010</b>	2	0-2	2-0
<b>2014</b>	1	0-1	1-0

Source: NOAA's National Climatic Data Center, 2015

**Table 4.01.04.3:** Flood warning calls from Okaloosa County's Code Red System, 2007-2015

<b>Blackwater River</b>	<b>Shoal River</b>	<b>Yellow River</b>
2-5-2010	2-5-2010	12-17-2009
1-21-2010	1-21-2010	12-2-2009
3-28-2009	12-15-2009	3-28-2009
11-27-2007	12-2-2009	11-27-2007
9-5-2012	3-28-2009	2-25-2013
2-25-2013	12-10-2008	4-18-2014
4-18-2014	11-27-2007	12-26-2015
	10-19-2007	
	10-18-2007	
	2-23-2013	
	2-25-2013	
	4-18-2014	
	9-29-2015	
	11-2-2015	

Source: Okaloosa County Public Safety

Hurricane Georges inundated the Yellow and Shoal River floodplains around the Crestview area to the extent that travel and shipments in and out of the area were stopped for a number of days while waiting on roads and bridges to be approved for travel. Numerous homes built above the 100-year base flood were damaged.

Flooding impacts the agricultural community by ruining crops, hay supplies, and meat production operations. From 1996-2015, natural hazards caused over 3.986 billion dollars in damage to Florida crops based on data available from NOAA's National Weather Service Hazard Statistics. According to the Okaloosa County Comprehensive 2010 Plan, Agricultural and Timberland use accounts for nearly 37% of land use in the unincorporated county.



**Risk Assessments**

Public health is an immediate issue during and following flooding. Raw sewage from septic tanks and overflowing sewage treatment systems creates a high risk for the public and emergency responders. It should be noted that, whereas the causes of many of the wastewater system failures were not caused by natural disasters *directly*, they could inevitably be an unfortunate casualty as a result of other system failures. For example, the chart below shows the number of wastewater spills caused by power outages and failure of the electric grid.

**Table 4.01.04.4: Wastewater Overflows and Spills due to Power Outages, 2004-2015**

Date	Amount	Description
09/17/04	UNK	Unknown amount of wastewater released in the Valparaiso area from 4 to 5 lift stations due to a power outage from severe weather. No waterways affected.
09/18/04	10,000	10,000 gallons of wastewater spilled in Fort Walton Beach due to a power failure.
09/20/04	5,500	Approx. 5000 to 5500 gallons of wastewater spilled at Eglin Air Force Base due to a power outages from severe weather. No waterways affected.
10/11/04	874	Two wastewater spills were reported in Destin. The first spill was approx. 374 gallons of treated wastewater released due to a line separation. The second was approx. 500 gallons of untreated wastewater released due to a power failure. No waterways affected.
03/27/05	20,000	Lightning strike caused a transformer to blow. 20,000 gallons of treated water spilled onto the ground.
04/07/05	UNK	Approximately 1/2 dozen lift stations in Fort Walton have been having difficulty keeping up with flow. Power was lost to a couple locations. Generators have been put in place. An unknown amount of sewage has been spilled.
07/11/05	100	Power was lost due to the storm causing 100 gallons of wastewater to overflow from a manhole.
07/18/05	1,500	1500 gallons of wastewater spilled in Shalimar due to a loss of power. Some of the material drained into Shalimar Bay.
10/30/06	7,000	7000 gallons of untreated wastewater spilled in Niceville due to a blown fuse. No waterways affected.
4/16/2009	UNK	Unknown amount of wastewater released in the Destin area due to a power outage.
5/6/2009	150	150 gallons of wastewater spilled at Okaloosa Water and Sewer due to a switch failure as a result of a power outage.
3/3/2010	200	200 gallons of wastewater spilled at Okaloosa Water and Sewer due to a power outage.
2/25/2011		700 gallons of wastewater spilled at 57 Hidden Cove Drive, Valparaiso
6/6/2011	8,500	8500 gallons of untreated effluent spilled at corner of East Road, Mary Esther
7/18/2011	1,000 +	1000+ gallons of treated effluent spilled at 14 Industrial Park Lane (facility) Destin Water Users
9/27/2011	1,000	1000 gallons of untreated effluent spilled at 630 W. Sunset Blvd., Fort Walton Beach
2/16/2012	1,000	1000 gallons of untreated effluent due to hydraulic overload causing solids into RIB
5/11/2012	25	25 gallons of untreated at lift station at 274 Antiqua Way, Niceville caused by alternator not responding
5/29/2012	50	50 gallons of untreated Lift Station spill on Star Drive, Fort Walton Beach
10/31/2012	1,563	1563 gallons of untreated effluent Lift station overflow due to contractor interrupting high level alarm
1/27/2013	1,500	1250 James Lee Blvd., Crestview
2/7/2013	16,200	16,200 gallons of untreated effluent Rocky Bayou Lift Station power failure, onsite generator did not respond.
3/27/2014	5,000	5,000 gallons of untreated domestic wastewater spilled on-site at lift station #71 in Niceville due to an electrical short in a pump
5/23/2014	7,000	7,000 gallons of raw sewage released from a manhole due to a power failure
6/30/2014	200	200 gallons spill to the ground from lift station E-02, located at 4348 Stonebridge Road, and nearby manhole due to control panel short from a frog.
7/21/2014	25,000	25000 gallons of wastewater was released in Niceville due to a power failure.



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<b>10/27/2014</b>	100	100 gallons sewer spill to the ground at the Shalimar #61 lift station located at 26 Shalimar
<b>11/4/2015</b>	1,500	Overflow at manhole due to power outage at lift station #1, A/C power failure. Back-up generator tripped out.

Source: Florida Department of Environmental Protection, Wastewater Program, 2015

**EXTENT:**

Flooding can severely impact Okaloosa County’s road network. There are approximately 301 miles of arterial and collector roads in Okaloosa County. Out of this total, 275 miles of these roads are located in the NFIP X Zone (500 Year Flood Zone) and 27 miles located in the NFIP Special Flood Hazard Zone. Many of the State and County roads in Okaloosa County may be susceptible to flooding during moderate to heavy rain events.

Temporary localized flooding can also severely impact roadways during moderate to heavy rain events, which could result in road-closures. It is particularly difficult to prepare transportation systems for “trailing” storm systems that tend to saturate land as well as overload drainage and retention systems. Flooding rain events on Highway 85 have resulted in lane closures or entire road segment closures. Arterial roads, dirt roads, and roads constructed prior to uniform standards and regulations are some of the roadways typically impacted by isolated heavy rain events. Unpaved roads are vulnerable to flooding and highly subject to washout. Culverts and small bridges can sometimes be undermined, causing people to be stranded and isolated until the repairs can be made. Some major roadways used for evacuation are subject to flooding.

Although localized flooding is common, nearly all of the urban areas in the county are naturally elevated to avoid any major, sustained flooding. These areas include all the areas near the southern perimeter of Eglin Air Force Base and adjacent to Choctawhatchee Bay. The total incorporated population in these areas was estimated at 54,548 people in 2010 (See Table 4.01.04.4).

**Table 4.01.04.5:** Population by Municipality, 2014 Estimate

<b>County/Municipality</b>	<b>2010 Census</b>	<b>Estimate Base</b>	<b>2014 Estimate</b>
<b>Okaloosa County</b>	180,822	180,488	196,512
<b>Cinco Bayou</b>	383	380	414
<b>Crestview</b>	20,978	19,753	22,955
<b>Destin</b>	12,305	11,987	13,355
<b>Ft. Walton Beach</b>	19,507	19,889	21,558
<b>Laurel Hill</b>	537	526	575
<b>Mary Esther</b>	3,851	3,786	4,180
<b>Niceville</b>	12,749	12,586	14,387
<b>Shalimar</b>	717	717	784
<b>Valparaiso</b>	5,036	5,025	5,188

Source: U.S. Census Bureau, Population Division



**Risk Assessments**

Based on 2010 Census data, the vast majority of Okaloosa County's population (approximately 73%) is concentrated in the bay and coastal areas (See Table 4.01.04.5). To calculate this concentration, census tracts were used, with the tracts south of Eglin Air Force Base considered the bay and coastal areas.

**Table 4.01.04.6:** Okaloosa County Population Concentration, 2010

Area	Total
<b>Total Population</b>	180,822
<b>Census Tracts South of Eglin A.F.B.</b>	131,463
<b>Eglin A.F.B's Census Tract</b>	4,608
<b>Census Tracts North of Eglin A.F.B.</b>	53,967

Source: 2010 Census, Total Population

**Table 4.01.04.7:** Flood Impacts for Blackwater River

<b>Blackwater River Near Baker, FL on Hwy 4 at Cotton Bridge</b>	
<b>GAUGE HEIGHT</b>	<b>FLOOD IMPACTS</b>
<b>26.76</b>	100 YEAR BASE FLOOD ELEVATION, BASED ON FLOW
<b>16</b>	SOME RESIDENTIAL FLOODING OCCURS DOWNSTREAM FROM BAKER WHEN THE RIVER LEVEL RISES ABOVE 16 FEET.
<b>15</b>	FLOODING OF WEST PARK AND EAST PARK IN BAKER WILL SUBSIDE AS THE RIVER DROPS BELOW 14 FEET.
<b>14</b>	FLOODING OF EAST PARK IN BAKER OCCURS AT 14 FEET AND WEST PARK BECOMES FLOODED AT 14.5 FEET.
<b>12</b>	FLOODING OF SECONDARY ROADS AND LOWLANDS WILL SUBSIDE AS THE RIVER DROPS BELOW 12 FEET.
<b>11</b>	<b>FLOOD STAGE</b> SOME MINOR FLOODING OF SECONDARY ROADS AND LOWLANDS FROM AROUND BAKER DOWNSTREAM WILL OCCUR.
<b>9.5</b>	KENNEDY AND PEADEN BRIDGES FLOODED UPSTREAM.

Source: USGS

**Table 4.01.04.8** Flood Impacts for Shoal River

<b>Shoal River near Crestview, FL on Hwy 85</b>	
<b>GAUGE HEIGHT</b>	<b>FLOOD IMPACTS</b>



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<b>17.95</b>	100 YEAR BASE FLOOD, BASED ON FLOW
<b>14</b>	RESIDENTIAL FLOODING IN THE TREVOR COURT AREA WILL LIKELY OCCUR AS THE RIVER RISES ABOVE 14 FEET.
<b>11</b>	FLOODING BECOMES A THREAT TO THE TREVOR COURT AND RATTLESNAKE BLUFF AREAS AS THE RIVER RISES ABOVE 11 FEET.
<b>10.5</b>	FLOODING TO TRAILERS NORTH OF THE OKALOOSA CORRECTIONAL INSTITUTE WILL SUBSIDE AS THE RIVER LEVEL FALLS BELOW 10 FEET.
<b>10</b>	LOWLAND FLOODING IN THE AREA WILL DIMINISH AS THE RIVER DROPS BELOW 8 FEET.
<b>8.5</b>	WATER CROSSES HIGHWAY 90, WEST END OF BRIDGE
<b>8</b>	<b>FLOOD STAGE</b> SOME MINOR FLOODING OF LOW LYING AREAS WILL OCCUR.

Source: USGS

**Table 4.01.04.9:** Flood Impacts for Yellow River

<b>Yellow River near Milligan, FL on Hwy 90</b>	
<b>GAUGE HEIGHT</b>	<b>FLOOD IMPACTS</b>
<b>26</b>	SEVERE FLOODING WILL OCCUR IN MILLIGAN. WATER WILL BE 6 TO 8 FEET DEEP OVER PORTIONS OF U.S. HIGHWAY 90.
<b>23.19</b>	100 YEAR BASE FLOOD, BASED ON FLOW
<b>20.32</b>	SEVERAL HOMES ON BOTH SIDES OF RIVER FLOOD, (ANTIOCH & OLD MILLIGAN) 3" OF WATER IN SEVERAL HOMES ON ANTIOCH ROAD.
<b>19.1</b>	WATER CROSSES HIGHWAY 90 EAST END OF BRIDGE.
<b>19</b>	WIDESPREAD FLOODING IN OLD MILLIGAN WILL SUBSIDE AS THE LEVEL DROPS BELOW 18 FEET.
<b>18.6</b>	WATER CROSSES HIGHWAY 90, WEST END OF BRIDGE
<b>18</b>	WIDESPREAD FLOODING WILL OCCUR IN OLD MILLIGAN. FLOODING OF U.S. HIGHWAY 90 AND THE L & N RAILROAD BEGIN AROUND 18 FEET.
<b>15</b>	SEVERAL HOMES IN OLD MILLIGAN WILL OCCUR AND SOME EVACUATIONS WILL BE NECESSARY.
<b>14.5</b>	ANTIOCH ROAD IS FLOODED.
<b>14.4</b>	FLOODING IN OLD MILLIGAN WILL SUBSIDE AS THE LEVEL DROPS BELOW 14 FEET.
<b>14</b>	SOME HOUSES IN OLD MILLIGAN WILL BECOME FLOODED AND SOME EVACUATIONS COULD BECOME NECESSARY.
<b>13</b>	THREATENS HOME ON ELLIS AND ANTIOCH ROADS.
<b>12.5</b>	FLOODING OF LOWLANDS WILL GRADUALLY SUBSIDE AS THE RIVER LEVEL DROPS BELOW 12 FEET.
<b>12</b>	<b>FLOOD STAGE</b> EXTENSIVE OVERFLOW OF LOWLANDS WILL OCCUR AND A FEW RURAL ROADS IN THE AREA WILL BECOME FLOODED.
<b>11.5</b>	WATER YARDS ON ELLIS ROAD.
<b>9.9</b>	SOME MINOR OVERFLOW OF LOW LYING AREAS WILL OCCUR. WATER WILL ENTER SOME YARDS ALONG ANTIOCH ROAD IN MILLIGAN.
<b>5.9</b>	WATER OVER ELLIS ROAD AT TRELIS.
<b>5</b>	BANK FULL. RIGHT BANK OVERFLOWS, MAINLY INTO SWAMP AND MARSH LANDS.

Source: USGS

Due to Okaloosa County's varying height elevation from sea level to over 200 feet and varying base flood elevations from sea level to 88 feet, in the numbered A zones, it is impossible to give a set depth of flooding inundation for the 100 year base flood for the whole county. However, as shown in tables 4.01.04.7; 4.01.04.8; and 4.01.04.9 flooding impacts for the areas surrounding



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the river gauges for the Blackwater River, the Shoal River and Yellow River have been documented.

The worst case scenario for flooding would be if all the areas within the 100-Year Floodplain were to be inundated during a single event. This would result in the submergence of approximately 27 miles of arterial and collector roadways and flooding of 2,163 residential structures with a combined value of \$814,551,816.00 (Source: Okaloosa County Property Appraiser) as well as 283 non-residential buildings with a value of \$822,567,100.00 (Source: Okaloosa County Property Appraiser). If all the residential and non-residential structures were completely destroyed in a catastrophic flood, the damage would total in excess of \$1.6 billion. Due to the unpredictability of damage to roadways caused by the velocity of the water it is impossible to accurately predict the damage and cost that would be associated with any flood event. However, the cost of repair of roads and their associated infrastructure (culverts, etc) would easily run into the tens of millions of dollars. In addition to the cost of repair, additional costs would be incurred due to the impacts to commerce associated with road closures. Flooding of this magnitude could also cause millions of dollars of damage (or loss) of agricultural products, and severe erosion caused by this sort of flooding could impact the County's waterways, including the Choctawhatchee estuary system, causing millions in additional damage to commercial, recreational and sport fishing industries, and causing environmental harm from which it would take years to recover.

### *PROBABILITY:*

As previously mentioned in Table 4.01.04.1, from 1970-2009 there were seven 'Major Floods' in Okaloosa County. Based on this data, the future probability of a major flood occurring in the county is less than one major flood per year. Although there were 32 reported floods or flash-floods (see Table 4.01.04.2), due to the localized nature of flash-flooding and because some of these floods are unrecorded, it is difficult to state a specific probability even though flash-floods do occur in the County.

### **4.01.05 Dam Safety**

#### *DEFINITION:*

Although dam safety might be considered a man-made hazard, the primary concern is the potential for flooding downstream from a dam where flooding might not naturally occur. It is considered separate from the *Flooding* section of this chapter (dealing strictly with natural flood) because of the technological relation to a human-made structure and the regulatory framework in place for dam safety.

Dams are heavily concentrated in the northern portion of Okaloosa County, especially around the City of Crestview. However, in the southern portion, there are only a few dams. Dams are located in the following jurisdictions: City of Crestview, City of Laurel Hill, and throughout the unincorporated areas.

The Northwest Florida Water Management District is responsible for the permitting, inspection, and revocation of permits for dams in Okaloosa County that meet certain criteria, per the guidance of Chapters 373.314 of the Florida Statutes, and Chapters 40A-4 and 40A-44 of the Florida Administrative Code (FAC). The numbers of dams, their types, and regulating authority under FAC for Okaloosa County are depicted in the table below.



**Risk Assessments**

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**Table 4.01.05.1:** Registered Dam Activity in Okaloosa County as of 2015.

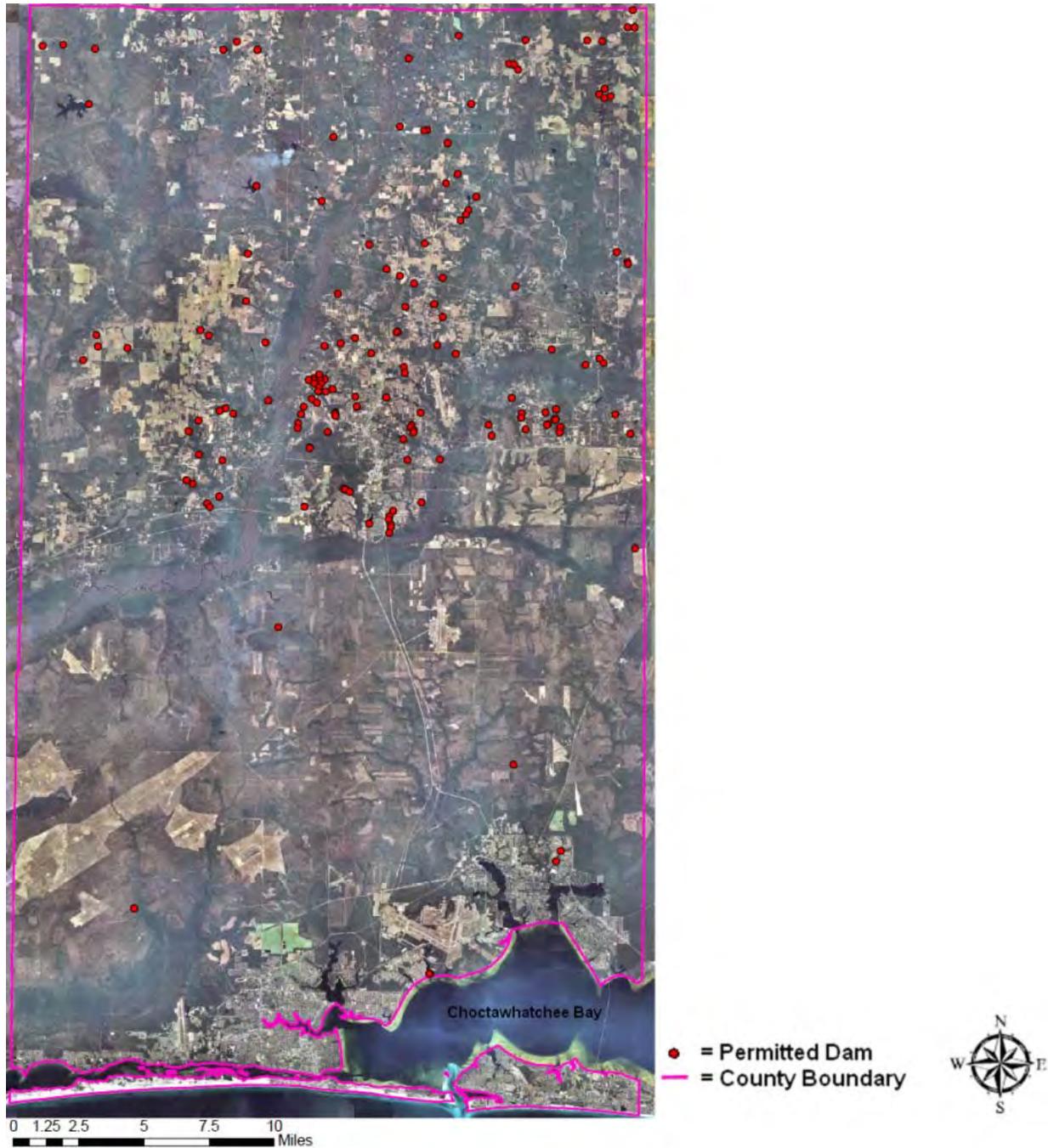
<b>Dam Type</b>	<b>Active Permits</b>	<b>Expired Permits</b>	<b>Permits Withdrawn/ Void/Revoked</b>
<b>Agricultural</b>	119	14	7
<b>Non-Agricultural</b>	63	10	7
<b>Total</b>	182	24	14

Source: North West Florida Water Management District, 2015



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Figure 4.01.05.1: Permitted Dams in Okaloosa County



Source: Northwest Florida Water Management District, 2015



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### *HISTORICAL CONTEXT:*

Since 2001, 2 out of 161 active permitted dams have failed resulting in flooding in Okaloosa County. One of the failures occurred in the Old Bethel Road area north of Crestview but no homes were affected and no significant losses were reported. The other occurrence was in the southern portion of the county off of North Beal Extension. This occurred from an illegal dam that was constructed by a citizen. It did result in the adjoining community being affected (streets covered with water) but no homes were flooded. This data was obtained from the Okaloosa County Public Safety Department/Emergency Management Section.

No dam in Okaloosa County, permitted by the Northwest Florida Water Management District, has been classified as a “high hazard” dam. A classification of “high hazard” would result in a dam failure study and be on file with the North West Florida Water Management District. No dam failure event has occurred during 2011-2015.

### *EXTENT:*

The possible damages associated with dam failure are flooding of roads and properties and agricultural losses. Regarding dam failure, a worst case scenario is difficult to determine due to the variability in dam specifications (i.e. dam size, storage capacity, and topography) and the surrounding areas' elevations and population.

As shown by Figure 4.01.05.2, and Figure 4.01.05.3 there are a total of 6 non-agricultural dams located within the unnumbered A flood zones throughout Okaloosa County.

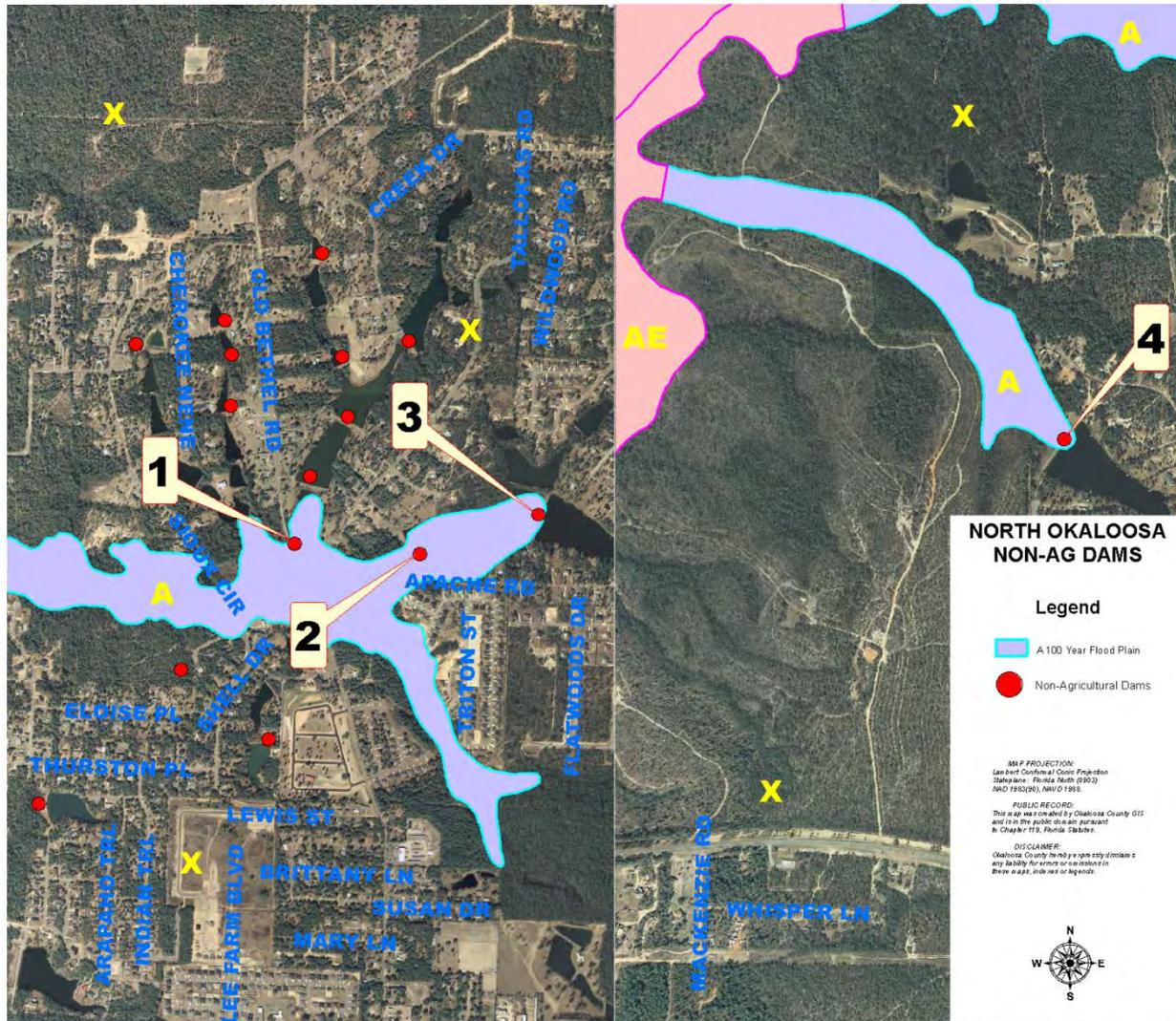
Again referring to Figure 4.01.05.2, dams 1, 2, and 3 are located in a fashion that cascades into the Yellow River. A total failure of these dams could potentially impact 10 single family homes with a just value of \$1,719,009.00. The complete loss of all 10 single family homes would be considered a worst case scenario for dam failure. However, due to the elevation of these homes, substantial damage is unlikely to occur.

Dam 4, located on a tributary to the Shoal River, is located in an unnumbered A flood zone. No homes are located downstream of this dam. The area of Shoal River downstream of the mouth of this tributary is primarily unpopulated agricultural timber lands and unpopulated Eglin Air Force Base Reservation. Thus, resulting in little to no damage.



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Figure 4.01.05.2: Non-Agricultural Dams North Okaloosa County



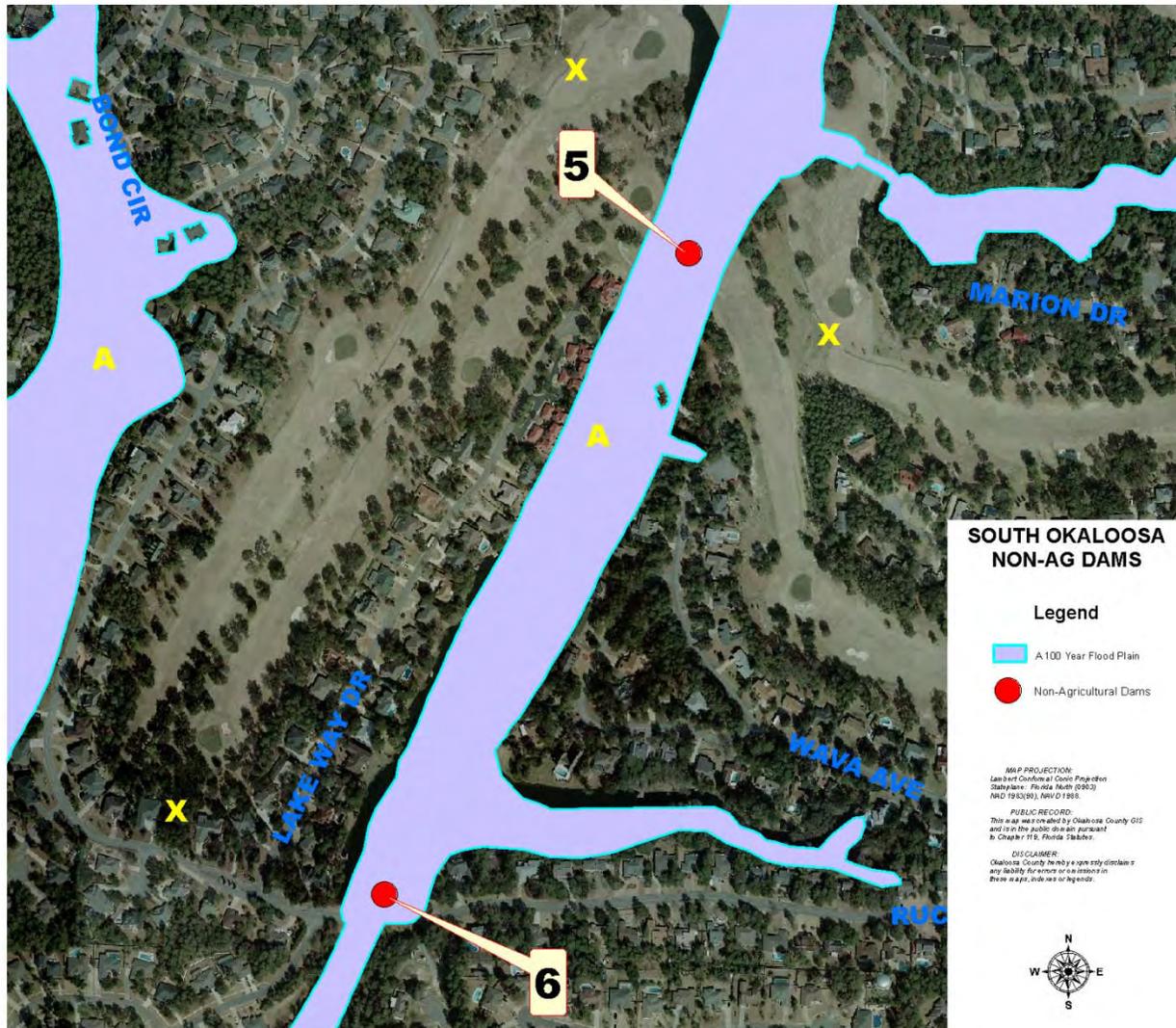
The last two dams, numbered 5 and 6 on Figure 4.01.05.3, are located in the unnumbered A zone associated with a tributary of Swift Creek which ultimately flows into Swift Bayou. There are 55 single family structures with a just value of \$14,787,354.00 downstream from the dams. The complete loss of all 55 single family homes would be considered a worst case scenario for dam failure. However, neither of these dams is classified by the NFWFMD as a high hazard dam. As all of the residential structures have been built in compliance to meet the minimum Okaloosa County requirement of being 5 feet above highest adjacent grade for a residential structure located in an unnumbered A flood zone as well as being 1 foot above the Base Flood Elevation in a numbered AE flood zone, substantial damage is unlikely to occur.

Any flooding associated with dams 1 thru 6 would be less than 1 foot in depth.



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Figure 4.01.05.3: Non-Agricultural Dams South Okaloosa County



**PROBABILITY:**

Due to the rarity of dam failure in Okaloosa County, the probability of future dam failure resulting in flooding is less than one per year.

**4.01.06 Land Erosion**

**DEFINITION:**

Land erosion, also known as soil erosion, is “the removal and thinning of the soil layer due to climatic and physical processes, such as high rainfall,” which can be greatly accelerated by human activities (Encyclopedia.com, 2010). All of Okaloosa County is susceptible to land erosion in some localized areas.

**HISTORICAL OCCURRENCE:**



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The Gulf Coastal Plain consists of sands, clays, and silts that form the soils of the County. Limestone outcrops, although present in some locations (particularly along the Yellow and Shoal Rivers) are not common. The soft sediments that prevail can be vulnerable to erosion when topography, vegetation, and ability to absorb water combine to form energy to weather away soils.

Sheet erosion, rills, and gullies, are the most commonly observed types of erosion in the County. Most of these features are associated with disturbances in natural vegetation, poor management of agricultural lands, silvicultural operations, building construction, or road construction and maintenance projects.

Erosion along riverbanks is a much less common issue in the County. The major rivers in the County are the Shoal River, Blackwater River, and Yellow River. The majority of the flood plain of the Yellow River is owned by the Northwest Florida Water Management District and is not subject to development. The majority of the floodplain of the Blackwater River is owned by the State of Florida and is not subject to development. There are private parcels, however, that front Yellow River, Shoal River, Blackwater River, and other water bodies. These properties are generally on small bluffs over the river (five to ten feet above normal water level). At this time there are no reports of riverine erosion impacting structures along these water bodies. The most likely areas of riverine erosion potential include the southern portion of the Yellow River and the nearly the entire lower portion of the Shoal River.

Erosion can also be found where topography and slope increases away from rivers. Steeper topography, combined with road and homesite development, can cause sheet erosion, rilling and gullies where sediment can empty into creeks, bays, etc. According to the Okaloosa County Soil Survey (1995), out of the 55 identified soil types in the county, 34.7% possess characteristics of “Highly Erodible (HE)\*\*” or “Potentially Highly Erodible (PHE)\*” soil types (See Table 4.01.06.1). No erosion event has occurred during 2011-2015.

**Table 4.01.06.1:** Erodible Lands in the Okaloosa County.

Soil Type	PHE Soils*	HE Soils**	Total Acreage	Total Land Area
<b>Total</b>	20.2%	14.5%	208,961	34.7%

\*Potentially Highly Erodible Soils

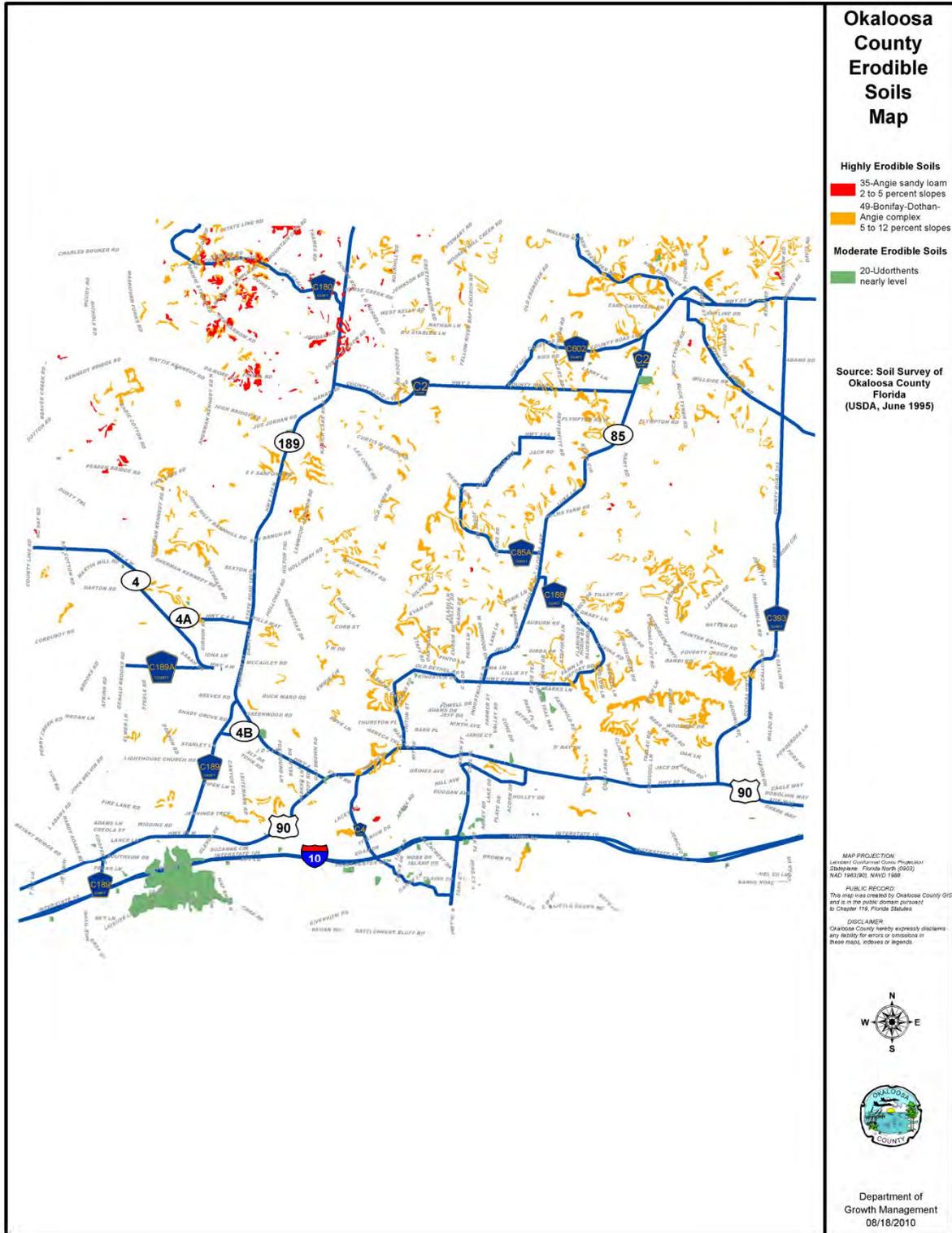
\*\*Highly Erodible Soils

Source: Okaloosa County Soil Survey, Natural Resource Conservation Service, 1995.
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Figure 4.01.06.1 Erodible Soils Map



EXTENT:



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The extent of Okaloosa County's Highly Erodible and Potentially Highly Erodible Soils is shown in Figure 4.01.06.1. Sheet erosion, if left unchecked, can damage drainage ditches, fill stormwater retention ponds with sediment, and cause erosion into property, including structures. Most erosion of this nature occurs in the agricultural areas of the County and along unpaved roadways in hilly areas. In this instance, the result is the deposition and buildup of soils/sands on the roadways and in the drainage systems.

In the worst case scenario, soil erosion will cause land to be unusable for agriculture and other purposes because of the degraded soil quality, structure, stability and texture. Also, the yield, quality, and market value of crops will be reduced. Erosion along stream and ditch banks will cause loss of productive farmland, undermining of structures (bridges, etc), and washing out of roads. Erosion can also result in sedimentation of natural streams and rivers which can lead to impacts in the receiving coastal waters such as Santa Rosa Sound and the Choctawhatchee Bay estuary.

As there is no record of any large erosion events in Okaloosa County, it is not possible to assign a reliable dollar value to the extent of damage. However, if an event were to occur that impacted homes, businesses, roads, and agricultural products, then damage could easily run into the tens of millions of dollars as evidenced by the discussions of the costs of infrastructure, and the value of housing and business structures as well as the value of agricultural products throughout this chapter.

### *PROBABILITY:*

Erosion is a natural, ongoing process that shapes the landscape; whether by wind or water, Okaloosa County's soils are constantly moving. Not all erosion is catastrophic, and most natural and man-made systems function normally under day-to-day erosion conditions; however, it is with large or catastrophic events that this LMS is concerned. Unfortunately, while the extent of potentially highly erodible and erodible soils throughout Okaloosa County is known, there is no record of occurrences, and so it is impossible to provide a probability of occurrence at the time of this writing. However, it is safe to state that land erosion is occurring, and will continue to occur. Over time, and as record-keeping and modeling improve, it may be possible to develop an estimate of the probability of occurrence of major or catastrophic erosion events.

### **4.01.07 Severe Storms**

The Severe Storms segment of the LMS Hazards Assessment includes tornado and waterspout, thunderstorms and lightning, and winter storms (hurricanes are excluded from this section because they are covered in section 4.01.01).

#### **4.01.07.01 Tornado and Waterspout**

### *DEFINITION:*

Tornadoes and waterspouts are small-scale weather phenomena caused by a vortex of rising air. Tornadoes occur over land and therefore the entire county is susceptible to tornadoes. Only the coastal and bay areas are susceptible to waterspouts because they only occur over water.

The Fujita Scale is the basis of measurement for the strength of tornadoes. The Fujita Scale has undergone slight modifications and improvements, in comparison to the years prior to 2007,



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including the addition of 28 Damage Indicators and adjustments to the Degree of Damage's estimated wind speed for each category. These changes can be viewed on the National Weather Service's Storm Prediction Center's "The Enhanced Fujita Scale" webpage. Although the scale has been updated, the original tornado database is still maintained (See Table 4.01.07.01.1).

**Table 4.01.07.01.1:** Fujita Scale (1971-2007) & Enhanced Fujita Scale (2007-Present)

<b>F Number</b>	<b>Fastest 1/4-mile (mph)</b>	<b>3 Second Gust (mph)</b>	<b>Enhanced F Number</b>	<b>3 Second Gust (mph)</b>
<b>0</b>	40-72	45-78	0	65-85
<b>1</b>	73-112	79-117	1	86-110
<b>2</b>	113-157	118-161	2	111-135
<b>3</b>	158-207	162-209	3	136-165
<b>4</b>	208-260	210-261	4	166-200
<b>5</b>	261-318	262-317	5	>200

Source: NOAA's National Weather Service

**HISTORICAL OCCURRENCE:**

*Water Spout*

According to the U.S. Storms Database, from 1996-2001 there have only been 9 reported waterspouts in Okaloosa County with no known injuries, fatalities, or property damages (NCDC, 2010).

*Tornado*

Nationwide, seventy-six percent (76%) of all tornadoes are relatively weak F0 or F1 systems and account for 4% of total deaths. Twenty-five percent (25%) are F2 or F3 strong tornadoes, accounting for 29% of total nationwide tornado deaths. Finally, 1% are F5 violent tornadoes and account for 67% of all tornado deaths nationwide.

From 1980 to 1999, the National Severe Storms Center has calculated Okaloosa County as having about 0.8 to 1.0 tornado days each year. This is the average number of days that tornadoes occur over the course of one year. Tables 4.01.07.01.2 and 4.01.07.01.3, below, summarize the documented tornadoes in Okaloosa County from 1950 through 2013, and illustrate that, as with the national averages, the majority of tornadoes occurring in Okaloosa County are of FO or F1 intensity, resulting in relatively few deaths and injuries, and mainly localized damage. Notable events include a 1989 tornado that caused over \$5 million damage to Eglin Air Force Base, and a 1933 (pre-dates the tables, below) that traveled 35 miles through Okaloosa County, setting a state record up to that time.



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**Table 4.01.07.01.2:** Okaloosa County's Documented Tornadoes, 1950-2010

Decade	Total	Total Dead	Total Injured	F-0	F-1	F-2	F-3	Category Unknown
1950's	1	0	-	-	-	1	-	-
1960's	12	2	87	-	2	5	1	4
1970's	26	1	17	11	8	4	-	3
1980's	18	-	1	10	7	1	-	-
1990's	21	1	4	18	1	2	-	-
2000's	16	0	13	15	1	-	-	-

Source: Tornado History Project

**Table 4.01.07.01.3:** Okaloosa County's Documented Tornadoes, 2000- 2015

Date	Time (CST)	Dead	Injured	Fujita Scale
Aug 18,2000	14:15:00	0	0	F-0
Jul 24,2001	14:35:00	0	0	F-0
Sep 25,2002	13:30:00	0	0	F-0
Sep 25,2002	18:10:00	0	0	F-0
Oct 14,2002	18:00:00	0	0	F-0
Dec 31,2002	9:47:00	0	0	F-1
Apr 25,2003	3:55:00	0	0	F-0
Apr 25,2003	4:10:00	0	0	F-0
Dec 22,2004	17:45:00	0	0	F-0
Jul 06,2005	9:55:00	0	0	F-0
Aug 28,2005	20:30:00	0	0	F-0
Aug 29,2005	7:42:00	0	0	F-0
Jan 13,2006	10:41:00	0	13	F-0
Sep 01,2008	8:15:00	0	0	F-0
Sep 01,2008	8:45:00	0	0	F-0
Dec 02,2009	7:32:00	0	0	F-0
Sep 04, 2011	4:15:00	0	0	F-0
Jul 07, 2013	13:00:00	0	0	F-0

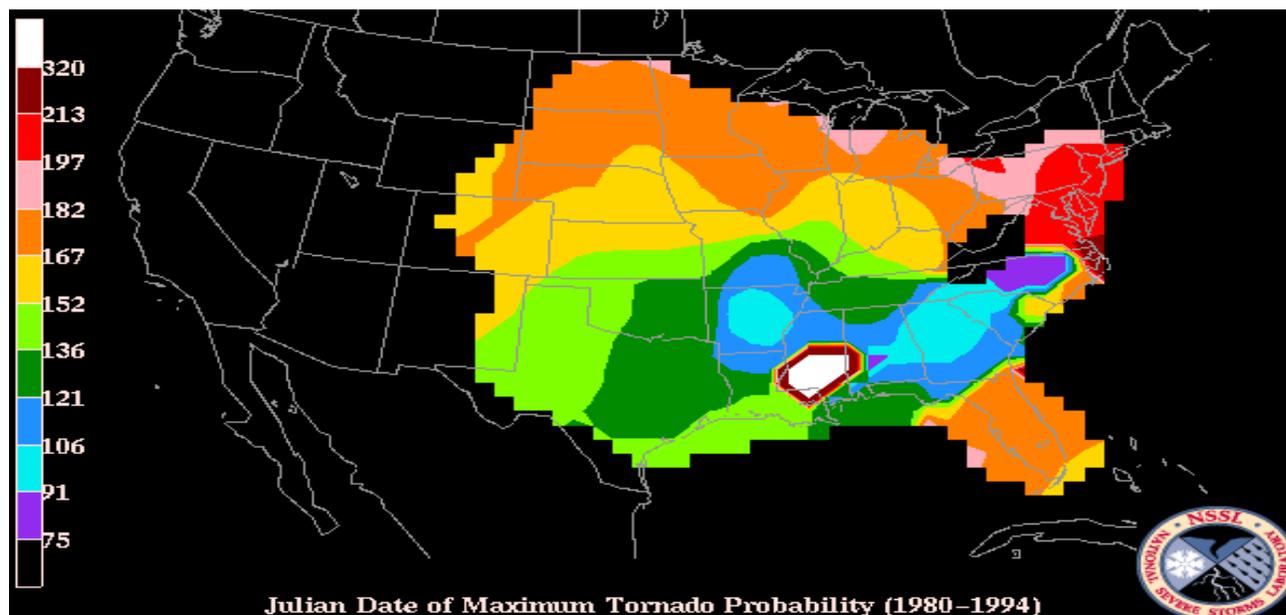
Source: Tornado History Project

The greatest likelihood of tornado occurrence is during April and May (See Figure 4.01.07.01.1).



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**Figure 4.01.07.01.1:** Probability of a tornado in North America. Okaloosa County's greatest probability for any tornado is in April and May of each year. The color depicted for the Okaloosa County area on this maps shows Julian days 121-136 and the most vulnerable (May).



Source: National Severe Storms Laboratory.

### *EXTENT:*

#### *Water Spout*

Because of the unpredictable nature of water spouts, the minimal historical occurrences, and no historical damages reported in Okaloosa County, the worst possible scenario would be that of complete destruction of homes and businesses that were in the water spouts path.

#### *Tornado*

Because of the unpredictable patterns of tornadoes, and because Okaloosa County has a relatively high frequency of occurrence, the entire County is vulnerable to tornado damage. The damage potential for a tornado increases as a function of population density. As the number of structures and people increase, the potential damage/injury rate increases. Manufactured housing, poorly constructed or substandard housing and apartment complexes are especially susceptible to damage from a tornado. Manufactured housing and substandard housing are exceptionally susceptible because of their lack of resistance to high winds, and apartment complexes because of their size and densities.

The worst possible scenario in terms of tornado damage would be if an F-5 tornado hit Okaloosa County. It is very unlikely that an F-5 tornado would strike the County, but if one did there would be complete destruction of homes and businesses that were in the tornado's path. Trees and power lines would be snapped, building debris scattered about, and severe structural damage would be evident on any building left standing.



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The most common and active weather threat in Okaloosa County for the formation of tornadoes is severe thunderstorms associated with frontal boundaries. Frontal boundaries and summertime afternoon air mass thunderstorms can reach severe limits because of atmospheric uplift. High winds relating to gust fronts and microbursts can create high wind speeds up to 100 MPH. Buildings and highway traffic are vulnerable to these storms. For a single event Okaloosa County could expect an F-0 tornado.

### *PROBABILITY:*

From 1958-2009 there have been a total of 94 reported tornadoes in Okaloosa County. Based on this data (See Tables 4.01.07.01.2 & 4.01.07.01.3), the future probability of a tornado in the unincorporated area of Okaloosa County has been determined to be less than 2 per year. Also, since there were only 9 reported waterspouts from 1996-2001, the future probability was determined to be less than 2 waterspouts per year.

### **4.01.07.02 Thunderstorms and Lightning**

#### *DEFINITION:*

The National Severe Storms Laboratory of the National Weather Service classifies a thunderstorm as severe when it contains one or more of the following phenomena:

- Hail 3/4" or greater
- Winds gusting in excess of 50 knots (57.5 mph)
- A tornado

All areas of Okaloosa County are vulnerable to thunderstorms and lightning.

#### *HISTORICAL OCCURRENCE:*

Okaloosa County has 70 to 90 thunderstorm days each year (See Figure 4.01.07.02.1). Consistent with averages from around the State of Florida, this is some of the highest frequency in the nation.

Despite Florida's dubious distinction of leading the nation in lightning deaths per year, lightning is not the main threat from thunderstorms in Okaloosa County. Wind is the main threat from thunderstorms in Okaloosa County and occasionally hail. A severe thunderstorm is defined as having winds of 58 MPH or faster, or hailstones three-quarters of an inch or larger in diameter. A microburst is a severe type of downburst, i.e., winds that blast down from a thunderstorm and hit the ground causing it to reflect out from the center in all directions. Microbursts can generate wind speeds of 150 MPH or faster, and create a starburst damage pattern on the ground. Though not common in Florida or Okaloosa county, derechos resulting from squall-line thunderstorms can create high level straight line winds and repeated downbursts.

Another hazard of severe thunderstorms is the Derecho. A derecho results from squall-line thunderstorms that create repeated downbursts. These types of storms are more frequent in the Midwest than in Florida.

The main damage associated with severe thunderstorms is damage to structures and power lines caused by strong winds and, less frequently, hail. Trees falling on powerlines is a major source



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of local power outages. Such outages are typically brief, lasting only 1-2 hours (Chelco, personal communication).

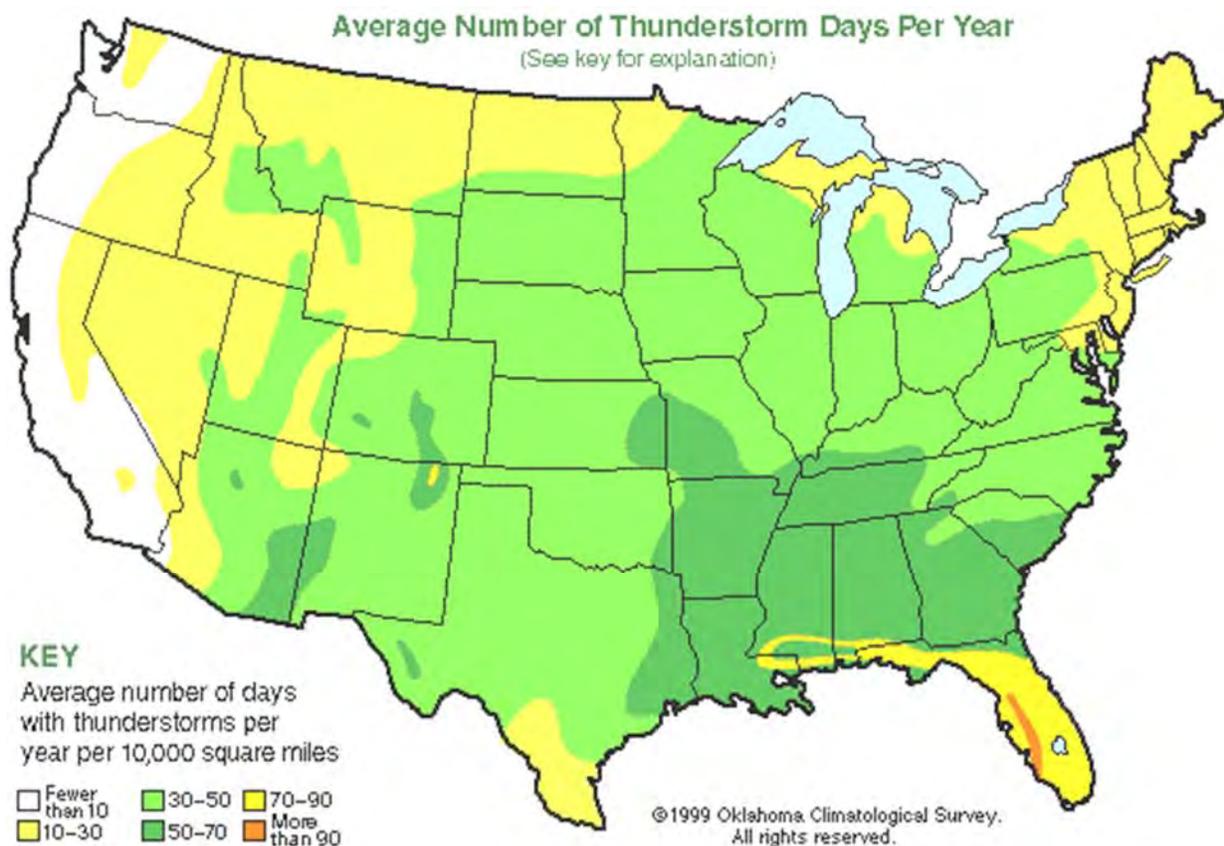
Okaloosa County experiences thunderstorms regularly, especially in the summer months. While all of these events have the potential for causing damage the following highlight severe damages which have occurred in the past.

06/05/2012 - A thunderstorm produced wind damage in northwest Florida. Winds estimated at 60 mph downed several powerlines on State Road 189.

04/29/2014 - A strong storm system brought record flooding along with severe thunderstorms that produced damaging winds and tornadoes to the region. Winds estimated at 80 mph downed large trees and ripped a roof off a house at Duke Airfield.

01/22/2016 - A line of thunderstorms moved across the western Florida panhandle producing high winds which caused several reports of damage. Winds estimated at 70 mph peeled a gas station awning off and caused damage to a roof at Harbor Walk Village in Destin.

**Figure 4.01.07.02.1:** Average number of days with thunderstorms per 10,000 square miles. Okaloosa County receives 70 to 90 thunderstorm days per year.





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Source: Oklahoma Climatologically

The vast majority of thunderstorm days are from May to September. However, thunderstorms may occur during any month of the year. The most severe thunderstorms reported from 1964-2015 occur in the months of June and July (See Table 4.01.07.02.1).

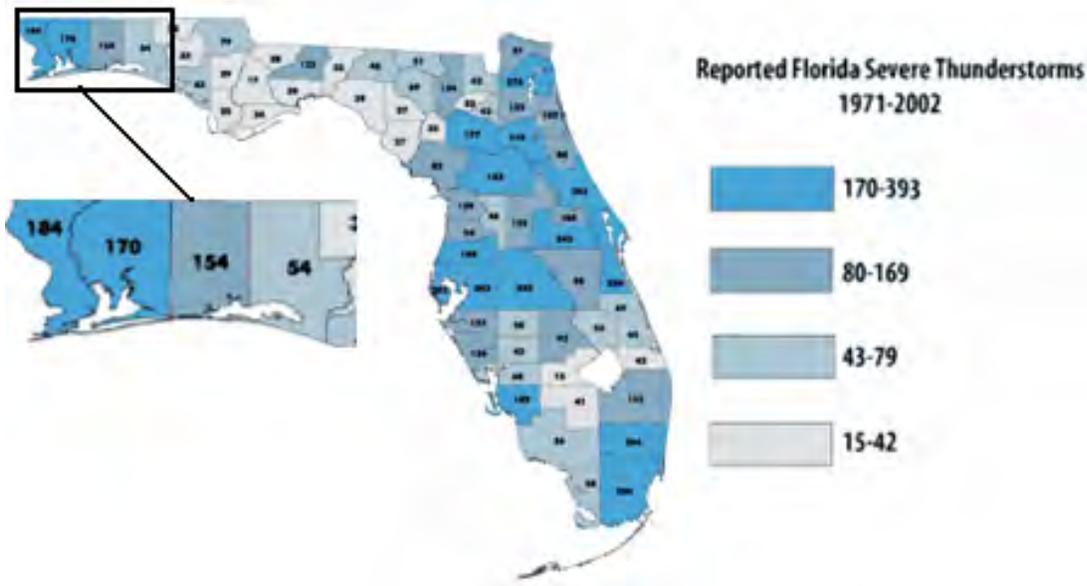
**Table 4.01.07.02.1:** Total Reported Severe Storms in Okaloosa County by Month, 1964-2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Total:</b>	6	4	8	16	10	14	24	8	10	7	5	7

Source: Sheldus (calculations from data)

Between 1971 and 2002 (See Figure 4.01.07.02.2), Okaloosa County recorded 180 severe thunderstorms. Most thunderstorms in the County occur due to air mass heating during hot summer days. Additionally passage of cold fronts in the autumn, winter and spring can trigger lines of thunderstorms.

**Figure 4.01.07.02.2:** Reported Florida Severe Thunderstorms, 1971-2002



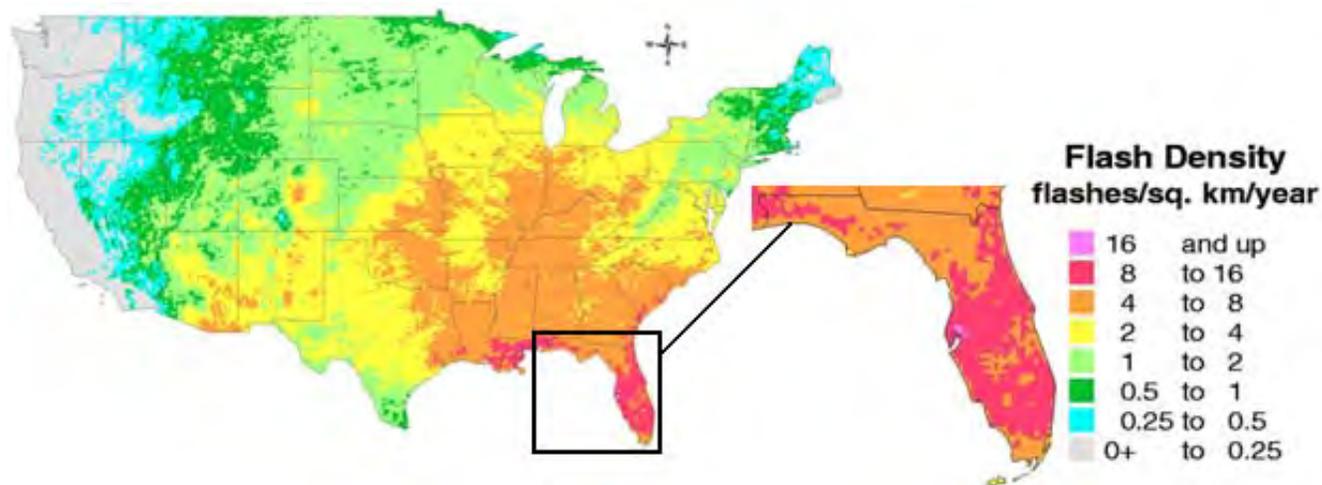
Source: National Weather Service.

Okaloosa County is estimated to have between 4 to 16 lightning flashes per square kilometer per year throughout the county, based upon data from 1996 to 2000 (See Figure 4.01.07.02.3). The 5-Year Flash Density Map shows the average amount of lightning recorded in 1996-2000.

**Figure 4.01.07.02.3:** 5-Year Flash Density Map of the U.S.



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Source: Vaisala-GAI

### *EXTENT:*

Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage. Aside from being able to produce tornadoes, thunderstorms can produce damaging high winds. Cold upper level air descending from the top of a thunderstorm to the ground usually causes these winds. In a worst case scenario, if the upper level air speed of descent is rapid, these cold “microbursts” can fan out as they come in contact with the ground at a high rate of speed. This is sometimes referred to as “straight line winds.” These winds can cause significant property damage, injuries, and deaths similar to a F0 to F2 tornado or Category 1 or 2 hurricanes.

### *PROBABILITY:*

Based on the data from Figure 4.01.07.02.2, Okaloosa County has a future probability of experiencing less than 5 severe thunderstorms per year. Based on the data from Figure 4.01.07.02.3, Okaloosa County is likely to experience 4 to 16 flashes of lightning per square kilometer per year.

### **4.01.07.03 Winter Storms**

#### *DEFINITION:*

Winter weather in Okaloosa County can include snow, ice, sleet (freezing rain), hard freeze, and frost. The most common winter event is frost, followed by hard freeze. All of Okaloosa County is vulnerable to winter weather, although some locations, such as the northern portions of the county, are at greater risk of experiencing winter weather.

#### *HISTORICAL OCCURRENCE:*

It was difficult to locate temperature data for the county as a whole, therefore two cities were chosen to represent the range of temperature difference throughout the county. From 2005-2009, Niceville had a total of 49 days where the temperature was below 32°F. In contrast, Crestview had a total of 160 days where the temperature was below freezing (Weather Underground, Inc., 2010). Crestview’s larger amount of freezing days may be attributed to its elevated location, which creates a greater exposure to the cold.



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Freezes occur most every winter, mostly in January. The average winter low temperature during the month of January is 36.9° F or 2.7° C with some nightly temperatures reaching below freezing (*World Climate*, 2008). Generally, the second night following the passage of a strong cold front is the coldest night when skies are clear and humidity is lowest. Most low temperatures involving freezes occur at night and in the hours near dawn. In most instances, temperatures even on the coldest winter days rise above freezing during daylight hours. In the table below, the historical winter minimum average temperatures are shown for two cities. The City of Niceville, which is located in the southern part of the county near the Choctawhatchee Bay and the City of Crestview, which is located further inland and is north of Eglin Air Force Base. There were no days from 2009-2015 in either Niceville or Crestview where the *high* temperature was less than 32° F (i.e., there were no days in which the temperature did not rise above freezing).

**Table 4.01.07.03.1:** Monthly Mean Temperature Minimums in degrees Fahrenheit, 1971-2009

	Nov	Dec	Jan	Feb	Mar
<b>Crestview FAA Airport, FL</b>	38.3°	33.9°	29.6°	33.8°	40.2°
<b>Niceville, FL</b>	37.2°	31.7°	26.8°	30.2°	39.7°

Source: Southeast Regional Climate Center, 2010

Temperatures lower than 40° F (-9.4° C) for an extended period would likely cause cold weather shelters to be opened for those who had inadequate heating of their homes. During the 2009-2010 winter season, the cold weather emergency shelters were open for 18 days. There are two shelters open for Okaloosa County residents, one in both the north and south end. (Okaloosa County Emergency Management, 2010).

Since tropical or subtropical crops are generally not grown in northern and western Florida during the winter freeze season, agricultural damage so often associated with winter freezes in the state are all but absent in Okaloosa County. Icing, glaze, and sleet are rare, in fact there was no data found to provide a historical context to these types of occurrences, but they are a real possibility in the county.

Snow in Okaloosa County is considered very rare and generally melts off quickly. No historical, scientific data was found regarding snowfall in the county. But, in February 2010 there were local reports of snow flurries in the northern portion of the County. No official snowfall amount was recorded, as the snow flurries did not accumulate on the ground.

On January 29, 2014 an icing event occurred in the northern portion of the County. Roads and schools were closed, and citizens were advised to stay indoors. This disrupted commerce, and caused people to alter work and other schedules in order to accommodate having children at home and in order to adhere to the road closures. As Okaloosa County does not experience such events with any frequency, neither the County nor any of the municipalities had any road salt or



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other de-icing materials available to address the problem. On certain major roads, the County utilized clean sand to provide traction for the traffic that could not avoid using the road system. While the sand did help alleviate the problem, it became something of an issue in and of itself when the temperatures rose above freezing and the ice melted, carrying the sand into drainage systems from which it had to be removed. Roads were opened as temperatures rose above freezing and ice did not cover any bridges.

### *EXTENT:*

The worst case scenario in terms of winter storms in the County would be if freezing or below freezing temperatures lasted for a week or more, and if the storm responsible for such freezing temperatures knocked down power lines resulting in power loss, and the inability of residents to heat their homes. A freeze's greatest risk is generally unprotected or under-protected water pipes in homes, businesses and infrastructure. Outdoor irrigation systems and plumbing in homes where insulation is inadequate in walls or in off-grade homes where plumbing is exposed are most vulnerable. Unmitigated older structures and manufactured housing are probably the most vulnerable structures.

An icing, glaze, or sleet incident in Okaloosa County would likely result in severe traffic problems and safety concerns throughout the community and its roadways, including I-10. With no means of salting roadways or removing ice, emergency response would be severely slowed in iced areas. Electrical service would likely be interrupted or totally absent in many areas due to power line glazing and downed tree branches due to ice accumulation. Mitigation efforts would more likely focus on sheltering and ability to receive outside mutual aid assistance, rather than on equipment and ice buildup prevention due to the infrequency and inconsistency of such events.

### *PROBABILITY:*

Based on the data of total below freezing days, the future probability of freezing temperature days in the county's southern region is estimated to be 55 days in a 5-year time frame. In the county's northern region the future probability is estimated to be 100 days in that same time. Because a snow event in Okaloosa County is so rare, a single snow "event" over five or ten years is probably the average.

### **4.01.08 Heat Wave and Drought**

The Heat Wave and Drought generally intertwine with one another; however, data is available for each independently for this segment of the LMS.

#### **4.01.08.01 Heat Wave**

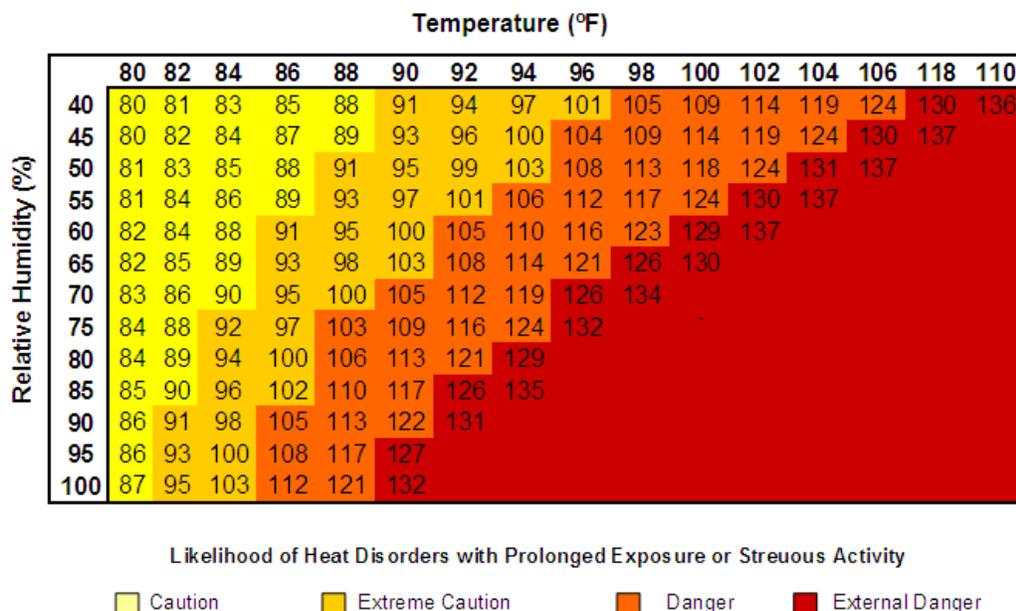
##### *DEFINITION:*

According to the Federal Emergency Management Agency (FEMA), extreme heat or heat waves occurs when temperatures "hover 10 degrees or more above the average high temperature for the region and last for several weeks" (2009). Heat waves usually occur over five to ten continuous days along the northern Gulf Coastal region and West Florida. Heat can build up in the summer months and cause temperatures to climb into the upper 90° F range or above. Also, relative humidity affects how the temperature is felt or experienced, which can be seen in the figure below. All of Okaloosa County is susceptible to both heat waves and drought.



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Figure 4.01.08.01.1: Heat Index



Source: NOAA's National Weather Service

**HISTORICAL OCCURRENCE:**

Temperature data for the county was recorded in Niceville and Crestview. From 2005-2009, the City of Niceville had three heat waves with high temperatures ranging from 86°F-100°F with an average humidity range of 58%-99%. During that same time period, the City of Crestview had three heat waves with high temperatures ranging from 91°F-102°F with an average humidity range of 58%-84%. When considering the heat index chart with these numbers, the likelihood of heat disorders with prolonged exposure is at a dangerous level for many during heat wave days. (Weather Underground, Inc., 2010). The table below shows the average monthly temperature in the summer months from 1971-2009. The two selected cities are the City of Niceville, located near the Choctawhatchee Bay and the City of Crestview, and located further inland north of Eglin Air Force Base. No heat wave event has occurred during 2011-2015.

By themselves, heat waves do not typically produce any major impacts to infrastructure, crops, commerce, or the public health, although isolated cases of heat stroke and other heat-related health issues can occur. The primary impacts associated with a heat wave are statements from the Health Department advising the elderly and infirm to remain indoors in air conditioning while temperatures remain high. Electrical system failures due to high demand is possible during excessive heat conditions. The general threat to the community is to agricultural crops, livestock, poultry, and individuals without adequate cooling systems in their homes, with emphasis on low income and the elderly. An electrical system failure caused by excessive demand would only enhance problems for all of these industries and populations. (NOAA Watch: Heat Wave).

In combination with a drought, however, a heat wave can be a more serious threat, and can be linked to wildfires (discussed in greater detail later in this document), crop loss, and other impacts.



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**Table 4.01.08.01.1:** Monthly Mean Temperature Maximums in degrees Fahrenheit, 1971-2009

	May	Jun	Jul	Aug
<b>Crestview FAA Airport, FL</b>	89.8°	95.6°	97°	96.9°
<b>Niceville, FL</b>	88.1°	94°	95.6°	94.5°

Source: Southeast Regional Climate Center, 2010

**EXTENT:**

The worst case scenario in terms of a heat wave would be if excessive heat and humidity lasted for a week or more. Dangerous conditions are present when both heat and high humidity combine to make outside temperatures feel in the 103-124° F range. External danger warnings are issued when high temperatures and humidity combine to make outside temperatures feel in the 126-137° F range. Heat disorders may develop in people who work outside for long periods of time, such as construction workers or agricultural workers. To combat the dangerous effects of excessive heat residents should dress appropriately, stay indoors, refrain from strenuous work during the hottest part of the day and stay hydrated.

**PROBABILITY:**

Based on the Niceville and Crestview heat wave data, it is predicted that the future probability of a heat wave occurring in Okaloosa County is on average three times during a 5-year period.

**4.01.08.02 Drought**

**DEFINITION:**

According to the U.S. Drought Monitor (2006), a drought is defined as a “deficiency of precipitation over an extended period of time, usually a season or more.” The table below is the drought intensity categories from U.S. Drought Monitor.

**Table 4.01.08.02.1:** Drought Intensity Categories

Category	Possible Impacts	Palmer Drought Index
<b>Abnormally Dry (D0)</b>	Going into drought: short-term dryness slowing planting, growth of crops or pastures; fire risk above average. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.	-1.0 to -1.9
<b>Moderate Drought (D1)</b>	Some damage to crops, pastures; fire risk high; streams, reservoirs, or wells low, some water shortages developing or imminent, voluntary water use restrictions requested	-2.0 to -2.9
<b>Severe Drought (D2)</b>	Crop or pasture losses likely; fire risk very high; water shortages common; water restrictions imposed	-3.0 to -3.9
<b>Extreme Drought (D3)</b>	Major crop/pasture losses; extreme fire danger; widespread water shortages or restrictions	-4.0 to -4.9
<b>Exceptional Drought (D4)</b>	Exceptional and widespread crop/pasture losses; exceptional fire risk; shortages of water in reservoirs, streams, and wells, creating water emergencies	-5.0 or less

Source: U.S. Drought Monitor, 2006



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**HISTORICAL OCCURRENCE:**

Droughts are relatively frequent and cyclical in the area. Seasonal climatological droughts occur in April and October. Table 4.01.08.02.2, below, displays the months from 2000- 2015 that Okaloosa County experienced various drought levels. The Drought Monitor maintained by the U.S. Geologic Survey provided the data and the classification scheme for the various drought levels.

Droughts impact the County in a number of ways. For example, declining water levels and altered hydro-periods in swamps can disrupt breeding cycles of fish and amphibians which can affect other species which prey on, or which are preyed upon, such fish and amphibians.

In addition to impacts to natural systems such as wetlands and estuaries, agricultural losses would be widespread. As shown by Table 4.01.08.02.3 Okaloosa County Agricultural Statistics below, Okaloosa County’s cropland production totaled \$17,209,602 in 2009 (the most recent year available). An exceptional drought lasting an extended period of time would have a catastrophic impact on crop production. Depending on the farmers’ ability to access water via wells and pumps, crop losses could easily total in the millions of dollars. Similarly, livestock production (including aquaculture and fowl) in Okaloosa County had a gross value of \$4,527,800 in 2009. Again, depending on the ranchers’ and poultryers’ ability to provide water to their animals, losses could total in the millions. Even short of drought-increased mortality, droughts can cause animals to lose muscle and fat, and stress can lead to lower fecundity, all of which results in loss of value. Finally, forestry products accounted for \$20,586,000 in 2009. As with crops and livestock, forestry production can also experience declines due to drought. However, unlike crops and stock for which the impacts are typically felt within the same season as the drought, forestry impacts can take several years to fully manifest, and can linger for years after a drought has passed and other agricultural products have recovered.

In addition to impacts to natural systems and agricultural activities, increased demand created by drought conditions on public and private water supply systems that serve the public can and has caused some generators and pumps to fail, creating low or no pressure for critical facilities such as fire hydrants and medical centers.

**Table 4.01.08.02.2:** Drought Occurrence in Okaloosa County by Year & Month, 2000-2015

<b>D0-Abnormally Dry</b>	<b>D1-Moderate Drought</b>	<b>D2-Severe Drought</b>	<b>D3-Extreme Drought</b>	<b>D4-Exceptional Drought</b>
2000 (Jan-Dec)	2000 (Apr-Dec)	2000 (May-Dec)	2000 (Jun-Sep & Nov)	2000 (Aug-Sep)
2001 (Jan-Mar & Jun)	2001 (Jan, Mar, Jun)	2002 (Jun & Jul)	2006 (Aug)	2011 (Jun-Jul)
2002 (Jan-Mar, May-Jul, & Sep)	2002 (Jun & Jul)	2006 (Jul-Sep)	2010 (Aug-Dec)	2012 (Feb-Dec)
2004 (Apr-Jul)	2006 (Jun-Oct)	2007 (Jul-Oct)	2011 (May, Aug-Dec)	2013 (Jan-Feb)
2006 (Apr-Dec)	2007 (Apr-Oct)	2010 (Jul)	2012 (Jan)	
2007 (Jan & Apr-Nov)	2010 (Jan, Apr-Jun)	2013 (Jun, Dec)	2013 (Mar-May)	
2008 (Jul-Aug & Oct)	2011 (Jan-Apr)			
2009 (Feb-Mar & Jul)	2013 (Jul, Sep-Nov)			
2014 (Jan-Mar)	2014 (Apr)	2014 (May-Aug)	2014 (Sep-Dec)	
2015 (Dec)	2015 (Jan-Mar, May, Oct-Nov)	2015 (Apr, Jun, Sep)	2015 (Jul-Aug)	

Source: The U.S. Drought Monitor



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**EXTENT:**

The worst case scenario in terms of drought would be if an exceptional drought (D4) lasted for months or years. Lakes, swamps, and other non-tidal bodies of water would see a drastic decline in natural water levels, with smaller, shallower systems drying up entirely. Estuaries, despite tidal exchange, would also see impacts to fish and wildlife populations due to increased salinity caused by decreased freshwater inflow. Also, the risk of wildfire increases as drought deepens. (U.S. Drought Monitor, 2010). Such a drought would have Countywide and almost certainly regional impacts on not only the health and productivity of natural systems, but also economic impacts due to crop.

While it is impossible to determine a precise dollar value for the impacts a prolonged drought would have on Okaloosa County, it is reasonable to estimate that such a drought could result in millions of dollars of lost agricultural and resource commodities from which recovery could take years.

**Table 4.01.08.02.3 Okaloosa County Agricultural Statistics**

CROP	ACREAGE PLANTED	PRODUCTION PER ACRE	TOTAL PRODUCTION	UNIT \$ VALUE	GROSS \$ VALUE
Soybeans	500	42 bu.	21,000 bu.	9.60	201,600
Peanuts	3,650	3,400 lbs.	6,205 tons	.25	3,102,500
Cotton	4,100	945 lbs.	7,749 bales	.60	2,324,700
Cottonseed		1,250 lbs.	1,512 tons	200.00	302,400
Corn	600	94 bu.	56,400 bu.	4.25	239,700
Wheat*	300	50 bu.	15,000 bu.	5.25	78,750
Oats	100	50 bu.	5,000 bu.	3.00	15,000
Sorghum	50	55 bu.	2,750 bu.	3.75	10,312
Hay-Silage	3,216	4.0 tons	\$740.00/acre		2,379,840
Improved Pasture	4,190		\$160.00/acre		670,400
Native Pasture	4,500		\$40.00/acre		180,000
Truck Crops/Mixed Vegetables	1,000		1,100.00/acre		1,100,000
Watermelons	50		\$15.00/acre		75,000
Pecans	160	400	\$64,000		54,400
Ornamental Horticulture	12 nurseries			.85	5,000,000
CRP **	6,135				225,000
FSA ***					1,250,000
<b>TOTAL</b>	<b>28,551 ****</b>				<b>17,209,602</b>
LIVESTOCK	APPROXIMATE PRODUCTION		PER UNIT \$ VALUE	GROSS \$ VALUE	
Beef (All Cattle) (Beef Cattle)	4,000 head 2,000 head		710.00 542.00	2,840,000 1,084,000	
Hogs (Market)	150 head		94.00	14,100	
Goats	2,400 head		55.00	132,000	
Aquaculture (Catfish)	2,000 lbs		2.10	4,200	
Quail	10,000 head		3.50	3,500	



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Equine	7,000 head		
Poultry Broilers	200,000 head	2.25	450,000
TOTAL			<b>4,527,000</b>
	<b>TOTAL CROPS &amp; LIVESTOCK</b>		<b><u>\$21,737,402</u></b>
<b>FORESTRY FACTS</b>			
	<b>ACRES</b>	<b>DIRECT EMPLOYEES</b>	<b>FOREST MANUFACTURING OUTPUT</b>
Timberland	448,300	400	\$20,586,000
Public Land	271,800		
Forest Industry & Private Land	176,500		

Source: The Okaloosa County Extension

**PROBABILITY:**

Abnormally dry conditions were experienced in Okaloosa County for 49 out of 120 months during 2000 and 2009. Based on this data, the county has a future probability of experiencing on average less than 5 abnormally dry months every year. Also, from 2000-2009, there were a total of 51 out of 120 months where moderate, severe, extreme, or exceptional drought occurred in Okaloosa County. The future probability of a moderate to severe drought occurring is on average 5 months per year.

**4.01.09 Wildfire**

**DEFINITION:**

Florida Statutes 590.015 defines “wildfire” as any vegetative fire that threatens to destroy life, property, or natural resources.

**HISTORICAL OCCURRENCE:**

There are a total of 665,646 acres of forest land in Okaloosa. This includes the acreage of the state-owned Blackwater Forest, Eglin Air Force Base, and privately-owned forest lands. The forests of Okaloosa County consist of natural vegetation and soils historically related to the Longleaf Pine or upland Southeastern forests. Natural fire plays an important role in the health of these forest types. Prescribed burning alleviates the potential for wildfire in much of the county.

Table 4.01.09.1 shows the record of wildfire outbreaks in Okaloosa County from 2011-2015. The majority of the fire outbreaks have been relatively small in size, ranging from 0.3 to 9 acres. According to the Florida Forest Service, most of the fires were caused by human-induced action, such as escaped debris burns or controlled burns, campfires, cigarettes, and fireworks. The county has not experienced a massive wildfire (human-induced or natural) greater than 1,000 acres.

Though wildfire primarily impacts natural systems, it also poses a threat to structures as discussed in greater detail, below. The Florida Division of Forestry regularly issues warnings



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regarding the threat of wildfire, and has published informational pamphlets and other materials advising property owners how to reduce the risk of wildfire to their homes and properties. Smoke from wildfires – and on occasion from controlled burns that do not behave as planned – can cause temporary closure of roads, resulting in the disruption of traffic patterns.

Okaloosa County has not experienced a wildfire in the unincorporated area or in any of the participating jurisdictions over the past 10 years. Wildfires have occurred but have existed on State and Federal land ergo there have been no impacts to Okaloosa County or its citizens. It is however possible that future wildfire occurrences could impact the county. Potential impacts could include evacuations of homes in the wildland urban interface, closure of arterial roadways particularly state roads 85 and 123 and smoke related illnesses. Furthermore there can be impacts to tourism, traffic accidents related to smoke fog and economic impacts related to loss of agricultural revenue.

**Table 4.01.09.1:** Wildfire Outbreaks in Okaloosa County, 2011-2015

Size of fire (acres)	Number of outbreaks	Total acres burned
0.1-0.2	23	2.6
0.3-9	75	207
10.0-99	28	1009.1
100-299	2	433
300-999	0	0

Source: Florida Forestry Service, 2015

**EXTENT:**

Based on the Wildland Fire Risk Assessment of Okaloosa County, the worst case scenario would be if the areas with the greatest Level of Concern (LOC) experienced a massive wildfire. These areas have a greater likelihood of danger and destruction due to their inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface which is defined by the Florida Division of Forestry as “the zone where structures and other human development meets/intermingles with undeveloped wildland fuels and other natural features.” Fires could come into subdivisions and neighborhoods in urban and suburban areas, which could be a potentially catastrophic situation. Smoke and ash from dangerous wildfires could decrease visibility on highways and local roads.

There are 109 residential and 20 non-residential structures with a total combined value of \$113,981,264 located in the areas with the greatest Level of Concern as determined by the Florida Forestry Service (as illustrated by Map 4.01.09.1) that could be destroyed under a true worst case scenario for wildfire. To this figure must be added the loss of life and injuries that would likely occur during a catastrophic wildfire. In addition, secondary impacts such as loss of business and tax revenue would also run to the millions of dollars.

**PROBABILITY:**

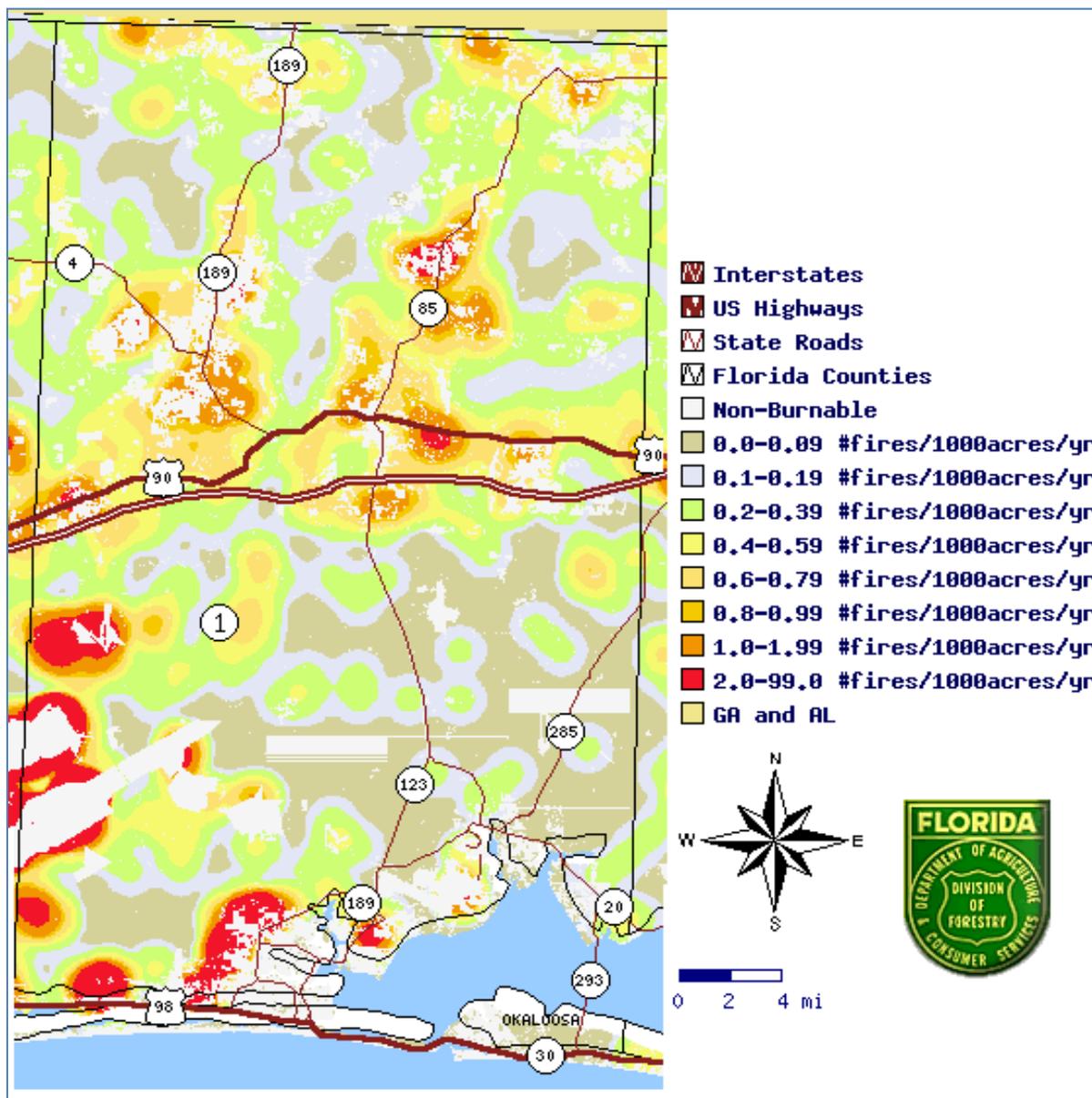
The Blackwater Forest will experience on average 160.9 small, human-induced wildfires per year. It will also experience on average 1.3 natural lightning fires per year.



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The Wildland Fire Risk Assessment System of the Florida Division of Forestry provides a county-wide wildfire probability map specific to Okaloosa County. The number of potential wildfires per year in the county greatly varies due to a number of factors; such as intensity of urban development, vegetation and soil type, and forest management and practices. Figure 4.01.09.1 shows how many wildfires per year an area might reasonably expect per 1,000 acres. In a single wildfire event Okaloosa County could expect 0-9. acres to burn.

**Figure 4.01.09.1: Wildfire Risk Assessment for Okaloosa County**





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Source: Florida Division of Forestry (WRAS Mapping System)

### **4.01.10 Beach Erosion**

#### **DEFINITION:**

According to the Rule 62B-33 of the Florida Administrative Code, the term *beach* refers to the “zone of unconsolidated material that extends landward from the mean low water line to the place where there is marked change in material or physiographic form or to the line of permanent vegetation” (62B-33.002). Additionally, the term *erosion* refers to the “wearing away of land or the removal of consolidated or unconsolidated material from the beach and dune system by wind, water, or wave action.” Erosion includes:

- a) Landward horizontal movement of the line of mean high water or beach and dune system profile.
- b) Vertical lowering or volumetric loss of sediment from the beach and dune system or the offshore profile.

The issue of beach erosion is only a coastal issue, therefore only the coastal areas of the county are at risk of experiencing this type of natural hazard.

Since the intent of this plan is to focus on natural hazards, the discussion will center on the effects of storm events on the coastal sands. According to a FDEP report number BCS-99-05, Shoreline Change Rate Estimates, background beach erosion can occur at increments from 1’ to 8’ per year. However, storm events can increase those measurements greatly and have done so in the past.

#### **HISTORICAL OCCURRENCE:**

As previously mentioned in the *Flooding* section, the vast majority of Okaloosa County’s population is concentrated in the coastal areas. The issue of beach erosion is of concern due to the potential impact on infrastructure, such as roads, water, sewer, communications and gas transmission lines, as well as impacts to the tourist economy which in Okaloosa County is driven by the beaches. The effects of beach erosion are particularly difficult to plan mitigation for since background erosion can be accelerated by hurricanes and other weather events.

Hurricane Ivan (September 2004) caused major damage to the beach and dune systems of the county. As a result of beach erosion, approximately 59 dwelling units, 9 walls or revetments, and 20 other structures were either destroyed or deemed uninhabitable. Highway 98 between the City of Destin and City of Fort Walton Beach was washed-out during Ivan. A breach of Norriego Point occurred as well, which resulted in the loss of the beach area. This type of hurricane storm damage resulted in both the lowering of the beach profile and dune erosion.

In 2009, the Florida Department of Environmental Protection (FDEP) designated the shoreline between Reference Marker 17 (R-17) to and Reference Marker 20 (R-20), minus 180 feet west in Okaloosa County, as an “Emergency Area” due to the severe shoreline erosion from Tropical Storm Ida. Prior to T.S. Ida, between July 2005 and July 2007, the shoreline in this area had

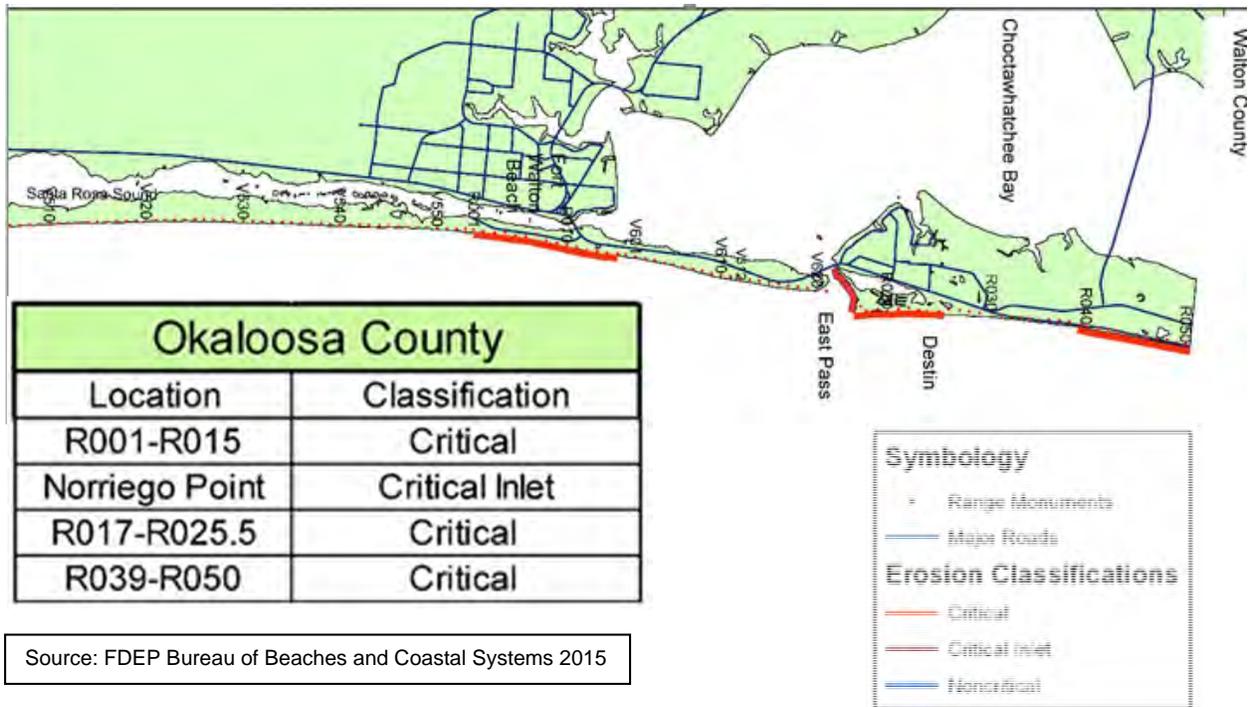


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retreated approximately 55 feet. At R-18, between March 1996 and July 2007, the shoreline retreated 282 feet. (FDEP, 2010).

According to the Florida Department of Environmental Protection, Bureau of Beaches and Coastal Systems, there are 6.5 miles of critically eroded beaches in Okaloosa County. The location of these critically eroded areas include 2.8 miles of developed land on Santa Rosa Island near the City of Fort Walton Beach in the unincorporated area of the county, 1.6 miles in the City of Destin on the west side, and 2.1 miles in the City of Destin on the east side. The east end of Santa Rosa Island within the Eglin Air Force Base Property contains 1.7 miles of non-critically eroded beaches. This all can be seen in Figure 4.01.10.1.

**Figure 4.01.10.1: Beach Erosion Classification in Okaloosa County,**



Source: FDEP Bureau of Beaches and Coastal Systems 2015

**EXTENT:**

The worst case scenario of a beach erosion occurrence would be if a major storm with significantly strong winds and storm surge washed-out the coastal areas. The resulting erosion would undermine the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation, sometimes resulting in complete destruction. If all the structures fronting on the gulf beaches were destroyed due to a worst case erosion event, the damage would total 1,972,226,402. To this figure must be added the cost of road and other infrastructure repairs which would run into the tens if not hundreds of millions of dollars. Further, Okaloosa County's gulf beaches contribute millions of dollars annually in taxable sales to the local economy through restaurants, hotels, shopping areas and bed tax revenues. These revenues would be lost during the recovery and rebuilding period associated with a severe erosion event.



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### **PROBABILITY:**

Beaches are among the most dynamic, if not the most dynamic, systems on the planet. To the extent that beach erosion is the “wearing away of land or the removal of consolidated or unconsolidated material from the beach and dune system by wind, water, or wave action”, it may be said that Okaloosa County’s beaches are continually eroding and then accreting based on tides, waves, storms, and other factors, and that the probability of erosion occurring along some portion of Okaloosa County’s beaches at any given time is nearly 100%. Certain segments totaling 6.5 miles have been designated by the Florida Department of Environmental Protection as critically eroded and illustrated by Figure 4.01.10.1; these areas in particular have been losing sand more quickly than accretion can replace it. Based on the recent historical data, it appears that beach erosion will most certainly occur in the future. The frequency and extent of the erosion are highly dependent on the frequency and intensity of tropical storms and hurricanes. Therefore, a numerical value will not be given for the estimated future amount of beach erosion.

### **4.01.11 Other Hazards**

The hazards listed below have been analyzed and determined by the LMS Committee that the impact would be minimal or non-existent in Okaloosa County.

#### **4.01.11.01 Sinkholes**

The map and description prepared by the United States Geologic Survey (USGS) in its “Sinkhole, Type, Development and Distribution in Florida” (1985) indicates that Okaloosa County in its entirety is located in an area where sinkholes seldom, if ever, occur. The Florida Geologic Survey’s statewide sinkhole database indicates no sinkholes in the County. Since there is no history of this hazard in the County, no further analysis or risk assessment will be conducted for this plan. However, should conditions change and geological features be discovered which contribute to the development of sinkholes, the LMS committee will include any new occurrence information in ongoing updates.

The probability of a sinkhole occurring in the future is less than 1% based upon no documented sinkholes in the county and the soil strata is non-conductive to the formation of sinkholes.

#### **4.01.11.02 Expansive Soils**

According to the *Soil Survey of Okaloosa County Florida* (USDA, June 1995), two types of soils are considered vulnerable to expansion. These are known as shrinking and swelling or “expansive soils.” Another way of describing expansive soils is the change of volume of a soil with a change of moisture content. All of the soils listed in the expansive class are also considered erodible soils. Okaloosa County may be susceptible to expansive soils in some localized areas. There have been no previous occurrences recorded of expansive soils in the County. Table 4.01.11.02.1 lists soils having moderate to high shrink swell potential in Okaloosa County. Only those soils with an associated risk of “High” are listed:



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**Table 4.01.11.02.1:** Shrink/ swell potential of soils in Okaloosa County.

Soil Type	ME Soils*	HE Soils**	Total Acreage	% Total Land Area
#35-Angie (2 to 5 percent slopes)		X	1,073.26	.16
#49-Angie (5 to 12 percent slopes)		X	10,280.79	1.61
#20-Udorthents (nearly level)	X		655.31	.11
<b>Total</b>	.11	1.77	12,009.36	1.88

\* Moderate Erodible Soils

\*\*Highly Erodible Soils

Note: Expansive soils and erodible soils are classified as the same.  
Source: Soil Survey of Okaloosa County, Florida; June 1995.

Expansive soils can lessen the strength of building foundations, which could result in structural collapse or instability. In addition, these soils have limitations for use as local roads and streets because of lack of strength to support roadways and traffic. There is a possibility of shrink/swell potential or soil expansion based on the existence of moderately erodible soils and highly erodible soils in Okaloosa County. Although the specific amount of these soils in the county is known, the future probability of this occurring is minimal because this issue is addressed during the time of construction and there are no previous records of occurrence.

**4.01.11.03 Earthquake**

According to the U.S. Geological Survey Earthquake Probability Maps, Okaloosa County has between a 0.005 and 0.010% chance of experiencing a 5.0 magnitude earthquake within 100 years. This is considered a very minimal risk. Also, since there is no history of earthquakes in the county, no further analysis or risk assessment will be conducted for this plan. The future probability of an earthquake occurring in Okaloosa County has been determined to be less than 1 in 100 years.

**4.01.11.04 Avalanche**

Okaloosa County does not have either the topography or the snowfall amounts that would create conditions for an avalanche. Since there is no history of this hazard in the county, no further analysis or risk assessment will be conducted for this plan. The future probability of an avalanche occurring in Okaloosa County has been determined to be less than 1 in 100 years.

**4.01.11.05 Land Subsidence**

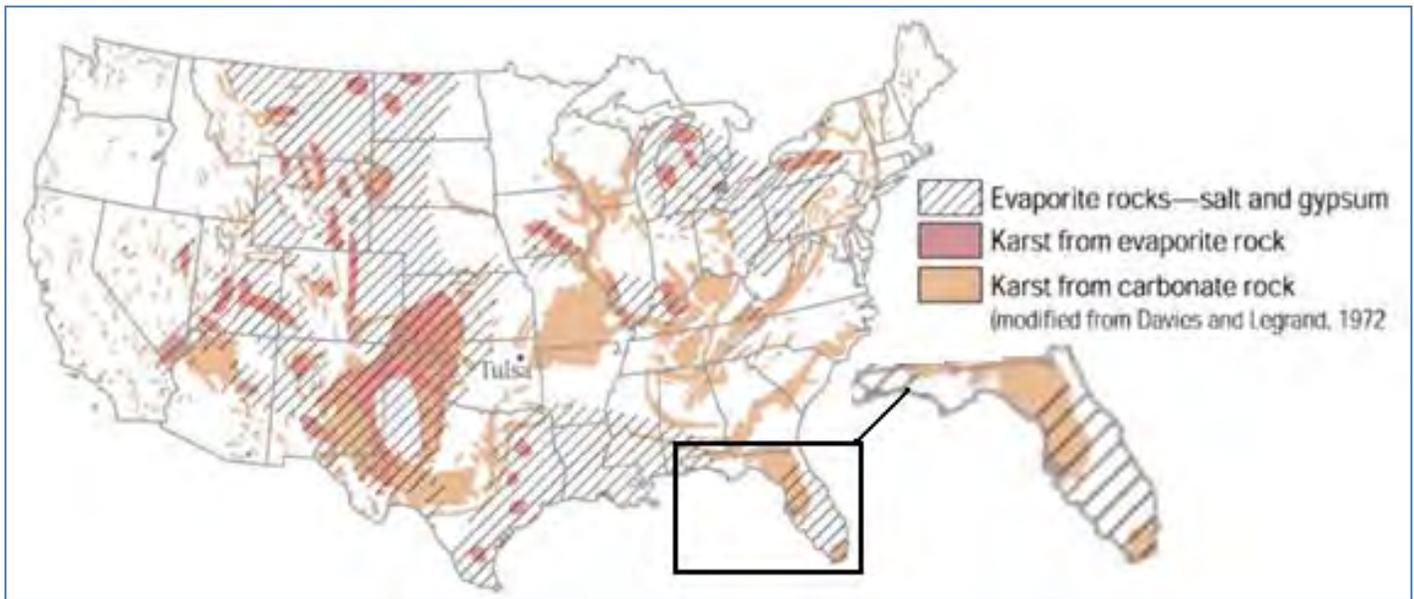
According to the U.S. Geological Survey, "land subsidence occurs when large amounts of ground water have been withdrawn from certain types of rocks, such as fine-grained sediments. The rock compacts because the water is partly responsible for holding the ground up. When the water is withdrawn, the rock falls in on itself. Land subsidence is most often caused by human activities,



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mainly from the removal of subsurface water” (U.S. Geological Survey). Okaloosa County has a minimal amount of the most common rock types that are connected to land subsidence (Figure 4.01.11.05.1). Since there is no history of this hazard in the county, no further analysis or risk assessment will be conducted for this plan. The future probability of land subsidence occurring in Okaloosa County has been determined to be less than 1 in 100 years.

**Figure 4.01.11.05.1:** Rock types connected to collapse (subsurface cavities/sinkholes) in the U.S.



Source: U.S. Geological Survey

### **4.01.11.06 Landslide**

According to U.S. Geological Survey Map of Relative Incidence and Susceptibility Map, Okaloosa County has a very low landslide incidence with less than 1.5% area susceptible to a landslide (USGS, 2010). Landslides are therefore considered to be a minimal risk to the county and no further analysis or risk assessment will be conducted for this plan. The future probability of a landslide occurring in Okaloosa County has been determined to be less than 1 in 100 years.

### **4.01.11.07 Volcano**

There are no geological features in or near Okaloosa County or the Southeast related to volcanism. Since there is no history of this hazard in the county, no further analysis or risk assessment will be conducted for this plan. The future probability of a volcanic eruption occurring in Okaloosa County has been determined to be less than 1 in 100 years.

### **4.01.11.08 Tsunami**



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According to the U.S. Geological Survey, Okaloosa County is not located in an area that has historically been subjected to tsunamis, even though it is a coastal county. Since there is no history of this hazard in the county, minimum analysis and risk assessment will be conducted for this plan. The Local Mitigation Strategy Committee will monitor any developments in the ability to predict, monitor and issue warnings. There is no record of a tsunami occurring in Okaloosa County; therefore the future probability has been determined to be less than 1 in 100 years.

### **4.01.12 Summary**

The risk assessment section of this LMS document provides an overview of the hazards to which all of Okaloosa County is exposed. This provides the foundation for the subsequent section covering how vulnerable the County is to these identified hazards. Numerous facilities, infrastructure, and neighborhoods in Okaloosa County need to be assessed for their vulnerability to disasters.

## **Section 4.02 Overall Vulnerabilities**

### **4.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and economic loss to buildings and structures in Okaloosa County. This includes the unincorporated areas as well as each jurisdiction.

This section includes a brief summary description of the unincorporated areas, as well as each jurisdiction's vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties in the identified hazard areas. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the various jurisdictions so that mitigation options can be considered in future land use decisions.

### **4.02.02 Methodology**

The LMS Committee used various methods to quantify the estimated dollar losses to the vulnerable structures potentially impacted by each hazard. For hazards to which the entire County is equally susceptible, tornadoes, thunderstorms and lightning, property appraisal and Geographic Information Systems (GIS) data were used. Since all structures are vulnerable to these hazards, the Okaloosa County Staff tabulated all the structures by type and their 'just values' per jurisdiction to generate overall totals. The Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study of Okaloosa County in 2005 provided the probabilities for the threat of a tornado and thunderstorm or lightning events occurring annually. The County was determined to have a medium risk, 1 in 250 per year, of a tornado event



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occurring, and the threat of thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

For other hazards, like hurricanes and tropical storms, storm surge, flooding, waterspout, wildfire, and beach erosion, property appraisal data and GIS data were used in conjunction with hazard-specific exposure data from the West Florida Regional Planning Council, Okaloosa County Department of Growth Management, and Florida Department of Forestry. To determine the vulnerable structures, the LMS Committee overlaid the hazard-specific exposure data with the property appraisal and GIS data. Then, the LMS Committee tabulated all the vulnerable structures and their 'just values' per jurisdiction to generate an overall total for each hazard. Specific to the hazards of waterspout and beach erosion, only the structures located along the coastal and bay areas were determined to be vulnerable in this assessment.

The LMS Committee is unable to provide dollar loss estimates for all of the identified hazards that Okaloosa County is susceptible to because the necessary data to complete this assessment is unavailable. In particular, there have not been any relevant studies on the hazards of land erosion, winter storms, heat wave, and drought; therefore, it is difficult to determine what structures are vulnerable and the extent of those impacts on the County. All of Okaloosa County is vulnerable to land erosion, winter storms, heat wave, and drought; however, the specific impacts of those hazards are unavailable at this time. The LMS Committee will update this section as data becomes available.

For the purpose of this study "just values" were acquired from the Okaloosa County Property Appraisers Office. Just Values are the values established by the Property Appraiser for ad valorem purposes and include both the structural and land value. Under Florida Law, Just Value has been the term coined for representing Fair Market Value.

### **4.02.03 Summary Description of Okaloosa County**

Okaloosa County is split into three geographic tiers; South County, Eglin Air Force Base and Hurlburt Field, and North County. The unincorporated areas of the south county are located directly on the Gulf of Mexico, Choctawhatchee Bay, and Santa Rosa Sound. Due to the presence of Eglin Air Force Base, most of the population is geographically constricted to living on pockets of non-federal lands that are located mostly as enclaves between the municipalities and Eglin Air Force Base. Within Okaloosa County's jurisdiction has the following amount of coastline: 57.73 miles in the Choctawhatchee Bay, 10.63 in the Gulf of Mexico, and 10.04 miles in the Santa Rosa Sound.

The municipalities located in the southern part of the County are the City of Destin, City of Fort Walton Beach, City of Mary Esther, City of Valparaiso, City of Niceville, Town of Cinco Bayou, and Town of Shalimar. The City of Destin and an area of unincorporated Okaloosa County are located directly on the Gulf of Mexico, while the City of Mary Esther, City of Fort Walton Beach, City of Valparaiso, City of Niceville, Town of Cinco Bayou, and Town of Shalimar are located on the Choctawhatchee Bay and associated bayous, inlets, and sounds.

The incorporated cities located in the northern portion of the county are the City of Crestview and City of Laurel Hill. The City of Crestview is the largest jurisdiction in Okaloosa County and has



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been one of the fastest growing cities in the County for the past few years. It is expected to continue to grow at a fast pace.

According to the University of Florida's Shimberg Center for Housing Studies (which uses data from UF's Bureau of Economic and Business Research), over the next 25 years Okaloosa County's population is expected to grow by approximately 13% from a 2014 estimate of 196,512 to a projected population of 225,467 by the year 2040. The Shimberg Center's data also indicates that population growth will not occur uniformly across the County, but that some areas will experience greater growth (both in numbers and percentage) than others, and that some areas will, if the projections are accurate, actually lose population as shown by Table 4.02.03.01, which follows, below.

**Table 4.02.03.01** Population Growth by Community 2010 to 2030)

Jurisdiction	2014 Population Estimate	2035 Population Projection	2040 Population Projection
Cinco Bayou	414	423	427
Crestview	22,955	35,112	37,577
Destin	13,355	14,041	14,266
Fort Walton Beach	21,558	22,061	22,310
Laurel Hill	575	496	488
Mary Esther	4,180	3,554	3,485
Niceville	14,387	16,423	17,029
Shalimar	784	751	755
Valparaiso	5,188	4,154	3,981
Unincorporated Okaloosa County	113,116	122,489	125,149
<b>Totals</b>	<b>196,512</b>	<b>219,504</b>	<b>225,467</b>

Source: University of Florida Shimberg Center for Housing Research

Of the 28,955 people projected by the Shimberg Center to move to Okaloosa County and its municipalities by 2040, only 4,526 are anticipated to live in the cities exclusively south of Eglin Air Force Base and the Eglin Reservation which bisect the County. Unincorporated Okaloosa County accounts for the remaining 24,429 of the anticipated new residents. However, since there are unincorporated areas both north and south of the Base and Reservation, it is necessary to determine where the new population will reside. Fortunately, in 2009 the County completed a major planning study that centered on determining where population growth will occur in Okaloosa County due to a large influx of military personnel.

As part of the 2005 Federal Base Realignment and Closure (BRAC) legislation, Congress directed that the U.S. Army's 7th Special Forces Group relocate from its long-time home in Ft Bragg, North Carolina to the Eglin Reservation in Okaloosa County. The 2005 BRAC legislation also designated Eglin Air Force Base as the site for the stand up of the new F-35 Joint Strike Fighter training program. In order to adequately plan for this growth, Okaloosa, Santa Rosa, and Walton



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counties, as well as their municipalities, developed a comprehensive Tri-County Eglin Growth Management Plan. One of the most important features of the Tri-County Growth Plan is its growth suitability analysis which identifies the specific communities within the Tri-County area where growth is likely to occur. To do this, the suitability analysis considers the 9 factors, below, to determine where incoming personnel are likely to locate:

1. **Transportation** summarizes existing average daily traffic, lanes, level of service, deficiencies, concurrency, and future level of service.
2. **Housing** summarizes tenure of residential structures, location of residential structures, homestead exemption locations, median value of single-family residential, real estate transactions, and the location of underutilized acreage.
3. **Public Utilities** summarizes the water supply and resource areas administered by the Northwest Florida Water Management District (NFWFMD), waste utility franchise areas, water supply service and franchise areas, natural gas service areas, and Okaloosa Gas District service area.
4. **Land Use** summarizes existing land use, future land use, vacant land, large land ownership, approved residential developments, and existing plans.
5. **Economic and Jobs** summarizes forecasts of population growth, employment growth (by sector) impact on county revenue and expenditures, and BRAC impact annual wage rates.
6. **Public Safety and Emergency** summarizes the existing conditions and level of service for law enforcement, fire protection, and medical services. The emergency management component identifies the areas potentially subject to damage from natural hazards (i.e., storm surge and excessive wind velocity).
7. **Health and Social Services** summarizes the facilities and location of the health care, family services, child care and veterans facilities.
8. **Education** summarizes the elementary, junior high, and high school location and capacities of existing facilities as well as the locations and programs offered at post-secondary institutions.
9. **Quality of Life** summarizes the location and level of service for existing libraries, listings of historic places, and park, recreational and cultural facilities.

The paragraph, below, excerpted from the Tri-County Growth Management Plan, summarizes the BRAC-related growth for Okaloosa County based on its analysis of the 9 factors listed above:

A total of three growth areas (Crestview, Fort Walton Beach and Niceville / Valparaiso) were identified within Okaloosa County. The Crestview Growth Area, with an estimated increase of 2,941 new households, is expected to experience the largest growth in population and number of households in the Tri-County Study Area as a result of the BRAC realignment. The Fort Walton Beach Growth Area is estimated to increase by 553 households, while the Niceville / Valparaiso Growth Area will need to accommodate 273 new households. In total, Okaloosa County is anticipated to receive up to 90 percent of the households attributable to the BRAC realignment by 2015. This is due in large part to the proximity of these areas to Eglin AFB's Main Gate and the 7th Special Forces Group(A) [7 SFG(A)] cantonment area.



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In short, the City of Crestview and the surrounding unincorporated area will absorb approximately 80% of the BRAC-related growth. While the Tri-County Growth Management Plan is specific to the growth resulting from the 2005 BRAC legislation, the factors considered in the suitability analysis are applicable to the needs of civilians, as well. It is not unreasonable, therefore, based on the analysis contained in the Tri-County Growth Management Plan, to conclude that the majority of the 24,429 new residents expected to live in Okaloosa County by 2040 will also choose to live north of the Eglin Reservation. In addition to the conclusions of the suitability analysis, the municipalities and unincorporated areas south of Eglin Air Force Base and the Eglin Reservation are substantially built out, and most growth in these areas will be primarily re-development and infill. This is an important consideration in emergency planning, since the areas north of Eglin are not subject to storm surge, and there are no hurricane evacuation zones.

### Employment

As shown by Table 4.02.03.02, below, a wide variety of trades, industries, and occupations provide employment in Okaloosa County. Table 4.02.03.03 presents a graphic representation of the "size" of each economic activity relative to the others.

The military accounts for roughly 16,000 jobs directly and is also responsible for the lion's share of federal civilian employment in the county as well. A study conducted by the Haas Center utilizing 2007 data indicated that the military accounted for roughly \$4.5 billion of Okaloosa County's total economic output – nearly 48% of the total county economy at the time the study was conducted. The military therefore accounts for an overwhelmingly high percentage of the county's economic activity and is *the* key driver of Okaloosa's high-wage, high-tech economy. The presence of the military, as studies have demonstrated, also has a sizable impact on the health of all of Okaloosa's key economic sectors.

While the military is identified as a discreet activity in Table 4.02.03.02, below, "tourism" is not; its effects are indicated by assessing those activities that depend wholly or in part on tourism as their drivers. Early studies conducted by the Haas Center for Business Research indicate that tourism accounts for roughly 10% of the total economic activity in Okaloosa County. The US Bureau of Economic analysis indicates that total gross domestic product for the County was approximately \$9.5 billion in 2008. If this previous remains valid, tourism presently accounts for roughly \$950 million the county's gross domestic product – a sizable share. As stated previously, the tourism industry affects many of the jobs identified in Table 4.02.03.02. For example, the construction industry depends on tourism dollars to drive economic growth and development in that sector. The retail trade and accommodation and food services sectors are also dependent on tourism for their health. Together these three sectors alone account for roughly 33,000 of Okaloosa's 127,000 jobs.



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**Table 4.02.03.02** Employment in Okaloosa County

<b>TYPE</b>	<b>2008</b>
Farm employment	525
Forestry, fishing, and related activities	319
Mining	313
Utilities	222
Construction	7,873
Manufacturing	4,525
Wholesale trade	1,547
Retail trade	14,481
Transportation and warehousing	1,607
Information	2,288
Finance and insurance	5,075
Real estate and rental and leasing	9,036
Professional, scientific, and technical services	8,919
Management of companies and enterprises	417
Administrative and waste services	7,118
Educational services	1,102
Health care and social assistance	9,364
Arts, entertainment, and recreation	2,150
Accommodation and food services	11,864
Other services, except public administration	7,652
Federal, civilian	6,805
Military	16,030
State and local government	8,282
<b>Total employment</b>	<b>127,514</b>

Source: Bureau of Economic Analysis – Regional Economic Accounts



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**Table 4.02.03.03:** Employment, Growth Patterns and Earnings for Okaloosa County Industry Super Clusters - The figure uses 2010 estimates from Economic Modeling Specialists, Incorporated that reflect total employment in each sector (overall size of each bubble), earnings (vertical axis) and five-year growth patterns (horizontal axis). Gross domestic product is defined as the overall value of the goods and services produced in the local economy.

Employment/Industry Sector	Salary Range	5 Year Growth Percentage
<b>Agriculture, natural resources and mining</b>	\$21,000 - \$23,000	4.4 - 5.5
<b>Construction</b>	\$35,000 - \$45,000	4.6 - 6.3
<b>Education and health services</b>	\$32,000 - \$48,000	10.1 - 13.9
<b>Financial activities</b>	\$25,000 - \$35,000	20 - 23.9
<b>Government</b>	\$72,000 - \$95,000	-3.5 - 3
<b>Information</b>	\$58,000 - \$65,000	14.1 - 15.3
<b>Leisure and hospitality</b>	\$12,000 - \$30,000	7.9 - 12
<b>Manufacturing</b>	\$56,000 - \$66,000	11.9 - 14.1
<b>Other services</b>	\$18,000 - \$28,000	11.4 - 12
<b>Professional and business services</b>	\$39,000 - \$59,000	11.8 - 16.2
<b>Trade, transportation and utilities</b>	\$22,000 - \$39,000	1.8 - 6.2

Source: Economic Modeling Specialists Incorporated, 2010

**4.02.04 Vulnerable Populations**

Hazards do not affect the entire population equally. Therefore, special attention needs to be given to the more vulnerable populations. In general, the selected populations are more vulnerable to some of the hazards due to their more limited mobility and resources to prepare before and respond after a hazard. In particular, populations that are language isolated may not be able to understand the important hazard information being communicated to them. Special mitigation efforts targeted at these populations may be necessary. The following categories listed below have been determined to be the vulnerable populations in this analysis.



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**Table 4.02.04.1: Vulnerable Population Categories Defined**

<b>Category</b>	<b>Description</b>
<b>Minority:</b>	Non-white population (*Note* this is a racial category and does not include ethnic minorities)
<b>Elderly:</b>	Population aged over 65 years old
<b>Disabled:</b>	Population includes sensory, physical, mental, self-care, employment, and go-outside-home disabilities (*Note* this category includes all ages)
<b>Poverty:</b>	Population with incomes below poverty level (*Note* this category only includes individuals)
<b>Language Isolation:</b>	Population living in a language isolated household (*Note* to qualify for this category the household may not have a member 14 years old or over that 1) speaks English or 2) speaks a non-English language and speaks English very well)
<b>Single Parent:</b>	Persons living in a single parent household (*Note* with children under the age of 18)

Source: Okaloosa County Department of Growth Management, 2010

It is important to note that these categories are not exclusive. Individuals can be counted in several categories. This data was obtained from the 2010 U.S. Census. The percentages of the population that are included in these categories were extrapolated from the 2010 Census to estimate a more current number. The percentages were multiplied by the 2014 U.S. Census population estimates for Okaloosa County and its municipalities.

**Table 4.02.04.2: Estimated Minority Population in Okaloosa County, 2014**

<b>Jurisdiction</b>	<b>2010 Census Percent Population</b>	<b>2014 Estimate</b>
<b>Okaloosa County</b>	9.1%	16841
<b>Town of Cinco Bayou</b>	15.4%	53
<b>City of Crestview</b>	18.6%	4031
<b>City of Destin</b>	2.2%	278
<b>City of Fort Walton Beach</b>	14.2%	2825
<b>City of Laurel Hill</b>	24.4%	149
<b>City of Mary Esther</b>	4.2%	165
<b>City of Niceville</b>	5.7%	750
<b>Town of Shalimar</b>	3.5%	25
<b>City of Valparaiso</b>	3.8%	195



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<b>Unincorporated Okaloosa County</b>	49.2%	8370
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Source: 2010 Census; U.S. Census Population Division

**Table 4.02.04.3:** Estimated Population Living Below Poverty in Okaloosa County, 2014

Jurisdiction	2010 Census Percent Population	2014 Estimate
<b>Okaloosa County</b>	13.4%	24120
<b>Town of Cinco Bayou</b>	12.2%	45
<b>City of Crestview</b>	13.5%	2561
<b>City of Destin</b>	6.3%	752
<b>City of Fort Walton Beach</b>	8.9%	2158
<b>City of Laurel Hill</b>	31.5%	160
<b>City of Mary Esther</b>	5.2%	198
<b>City of Niceville</b>	10.2%	1563
<b>Town of Shalimar</b>	2.3%	16
<b>City of Valparaiso</b>	8.6%	521
<b>Unincorporated Okaloosa County</b>	9.6%	7974

Source: 2010 Census; U.S. Census Population Division

**Table 4.02.04.4:** Estimated Single Parent Population in Okaloosa County, 2014

Jurisdiction	2010 Census Percent Population	2014 Estimate
<b>Okaloosa County</b>	14.5%	8943
<b>Town of Cinco Bayou</b>	18.9%	22
<b>City of Crestview</b>	19.5%	1102
<b>City of Destin</b>	6.5%	256
<b>City of Fort Walton Beach</b>	18.6%	569
<b>City of Laurel Hill</b>	13.5%	10
<b>City of Mary Esther</b>	5.6%	65
<b>City of Niceville</b>	11.5%	452
<b>Town of Shalimar</b>	9.6%	15
<b>City of Valparaiso</b>	9.8%	126
<b>Unincorporated Okaloosa County</b>	20.15%	2617



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Source: 2010 Census; U.S. Census Population Division

**Table 4.02.04.5:** Estimated Population with a Disability in Okaloosa County, 2014

Jurisdiction	2010 Census Percent Population	2014 Estimate
<b>Okaloosa County</b>	31.4%	62354
<b>Town of Cinco Bayou</b>	28.9%	126
<b>City of Crestview</b>	48.6%	9845
<b>City of Destin</b>	22.3%	2896
<b>City of Fort Walton Beach</b>	32.9%	6001
<b>City of Laurel Hill</b>	53.8%	309
<b>City of Mary Esther</b>	30.5%	1236
<b>City of Niceville</b>	28.9%	2987
<b>Town of Shalimar</b>	22.6%	148
<b>City of Valparaiso</b>	25.6	1598
<b>Unincorporated Okaloosa County</b>	35.6%	25146

Source: 2010 Census; U.S. Census Population Division

**Table 4.02.04.6:** Estimated Population Living in Language Isolation in Okaloosa County, 2014

Language Isolated Jurisdiction	2010 Census Percent Population	2014 Estimate
<b>Okaloosa County</b>	1.2%	2365
<b>Town of Cinco Bayou</b>	.6%	2
<b>City of Crestview</b>	.3%	45
<b>City of Destin</b>	.9%	98
<b>City of Fort Walton Beach</b>	1.2%	198
<b>City of Laurel Hill</b>	.02%	1
<b>City of Mary Esther</b>	.8%	31
<b>City of Niceville</b>	1.9%	189
<b>Town of Shalimar</b>	.4%	4
<b>City of Valparaiso</b>	1.2%	74
<b>Unincorporated Okaloosa County</b>	0.75%	642



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Source: 2010 Census; U.S. Census Population Division

**Table 4.02.04.7:** Estimated Elderly Population in Okaloosa County, 2014

<b>Elderly Jurisdiction</b>	<b>2010 Census Percent Population</b>	<b>2014 Estimate</b>
<b>Okaloosa County</b>	15.6%	39853
<b>Town of Cinco Bayou</b>	9.8%	36
<b>City of Crestview</b>	14.5%	3256
<b>City of Destin</b>	22.9%	3569
<b>City of Fort Walton Beach</b>	18.9%	3569
<b>City of Laurel Hill</b>	11.2%	65
<b>City of Mary Esther</b>	15.9%	598
<b>City of Niceville</b>	13.5%	1984
<b>Town of Shalimar</b>	9.8%	56
<b>City of Valparaiso</b>	13.2%	598
<b>Unincorporated Okaloosa County</b>	18.6% %	13731

Source: 2010 Census; U.S. Census Population Division

**4.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the County because they have already experienced significant flood damage. These properties are located in all the different flood zones and the properties varied from residential to non-residential. The following table depicts the cumulative repetitive loss properties within the jurisdiction of Okaloosa County.



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**Table 4.02.05.1:** Repetitive Loss Properties in Okaloosa County

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
<b>Okaloosa County</b>	\$115,088,983.12	\$16,324,008.69	1514	\$131,412,992	614	39
<b>Unincorporated</b>	\$53,943,596.36	\$10,021,332.84	717	\$63,964,929	305	8
<b>City of Destin</b>	\$45,998,471.70	\$3,705,999.29	473	\$49,704,471	183	10
<b>City of Fort Walton Beach</b>	\$5,496,352.71	\$966,414.65	129	\$6,462,767	53	3
<b>City of Mary Esther</b>	\$1,604,426.40	\$621,388.43	23	\$2,225,815	10	1
<b>City of Niceville</b>	\$927,945.80	\$217,005.83	45	\$1,144,952	17	2
<b>Town of Shalimar</b>	\$6,599,732.45	\$709,936.01	105	\$7,309,668	35	15
<b>City of Valparaiso</b>	\$518,457.70	\$81,931.64	22	\$600,389	11	0

Source: FEMA, 2010

### **4.02.06 Hurricane and Tropical Storm**

All of Okaloosa County and its jurisdictions are vulnerable to hurricanes and tropical storms. The City of Destin and an area of unincorporated Okaloosa County are the most vulnerable to the damaging effects of tropical storms and hurricanes, as they are the only areas in the county located directly on the Gulf of Mexico. The City of Destin and this area would suffer the most destruction in terms of wind damage and storm surge. The City of Niceville, City of Valparaiso, City of Fort Walton Beach, City of Mary Esther, Town of Shalimar, and Town of Cinco Bayou are vulnerable to the effects of storm surge, heavy rains, and high winds during tropical storms and hurricanes even though they are located on the bay. The City of Crestview and City of Laurel Hill are also vulnerable to tropical storms and hurricanes even though they are located in the northern portion of the county and far from coastal waters. The City of Crestview and City of Laurel Hill are vulnerable to hurricane damage in the form of wind damage and heavy rains. High winds can damage structures by removing roofs, siding, and create flying debris out of sources which are not anchored, while heavy rains can lead to flooding. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone for the entire County.



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**Table 4.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within Okaloosa County

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Zone A</b>	93	46	338	0	7
<b>Just Value</b>	\$20,070,000	\$8,788,675	\$154,663,657	\$0	\$5,478,388
<b>Zone B</b>	185	342	1604	5	27
<b>Just Value</b>	\$52,796,990	\$97,097,945	\$760,162,003	\$947,436	\$23,015,357
<b>Zone C</b>	301	758	4279	45	92
<b>Just Value</b>	\$79,311,598	\$170,964,019	\$1,862,439,456	\$4,871,114	\$59,104,977
<b>Zone D</b>	340	1597	12318	290	230
<b>Just Value</b>	\$90,669,178	\$295,375,166	\$3,562,340,958	\$22,654,959	\$114,088,035
<b>Zone E</b>	425	3744	21071	368	444
<b>Just Value</b>	\$109,199,178	\$525,384,207	\$5,576,388,796	\$28,073,512	\$199,182,597

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Table 4.02.06.2:** Evacuation Zones and the Vulnerable Structures within Okaloosa County

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>	<b>Trailer Park</b>	<b>RV Park</b>
<b>Zone A</b>	16	1	0	0
<b>Just Value</b>	\$15,779,750	\$754,838	\$0	\$0
<b>Zone B</b>	79	12	0	0
<b>Just Value</b>	\$72,170,918	\$29,936,182	\$0	\$0
<b>Zone C</b>	280	38	4	1
<b>Just Value</b>	\$301,871,506	\$136,365,054	\$1,525,287	\$152,153
<b>Zone D</b>	506	60	19	1
<b>Just Value</b>	\$434,756,148	\$195,753,372	\$4,392,669	\$152,153
<b>Zone E</b>	1594	213	34	1
<b>Just Value</b>	\$1,203,702,441	\$310,679,895	\$8,296,310	\$152,153



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\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**4.02.07 Storm Surge**

All of the coastal areas of Okaloosa County are vulnerable to storm surge. The jurisdictions that are vulnerable to storm surge and susceptible to damage from this hazard are the City of Destin, City of Fort Walton Beach, City of Mary Esther, Town of Shalimar, City of Valparaiso, City of Niceville, unincorporated Okaloosa County and the Town of Cinco Bayou. The City of Destin and an area of unincorporated Okaloosa County are located on the Gulf of Mexico and are vulnerable to storm surge levels of up to 21 feet above the mean high water line. The City of Niceville, City of Valparaiso, City of Mary Esther, Town of Shalimar, and Town of Cinco Bayou are vulnerable to storm surge from the Choctawhatchee Bay and associated bayous, inlets and sounds, and may reach levels of up to 17.4 feet in some areas. The City of Crestview, the City of Laurel Hill, and the unincorporated areas of north Okaloosa County are not vulnerable to storm surge.

Depending on the severity of the storm, surge levels can vary from a normal high-tide, which would only affect low lying sparsely populated areas, to the complete overflow of Okaloosa Island. This could push water and storm debris into Choctawhatchee Bay and onto the northern shore of the bay and local bayous reaching an elevation of 21 feet above mean high water line. Storm surge levels this high would destroy numerous homes, infrastructure, and critical facilities in the City of Destin, City of Fort Walton Beach, City of Mary Esther, City of Niceville, City of Valparaiso, areas of unincorporated Okaloosa County, Town of Shalimar and Town of Cinco Bayou.

The following tables depict all of Okaloosa County's vulnerable structures to storm surge levels, which correspond with the category of hurricane.

**Table 4.02.07.1:** Okaloosa County's Vulnerable Residential Structures to Storm Surge

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Surge Level 1</b>	91	309	2571	7	46
<b>Just Value</b>	\$33,450,200	\$81,738,740	\$1,588,563,140	\$1,779,220	\$34,366,652
<b>Surge Level 2</b>	254	562	3297	7	76
<b>Just Value</b>	\$71,937,110	\$136,505,476	\$1,928,268,515	\$1,779,220	\$58,609,426
<b>Surge Level 3</b>	320	1308	9649	71	186
<b>Just Value</b>	\$90,881,178	\$248,534,732	\$3,293,229,371	\$6,352,549	\$99,369,565
<b>Surge Level 4</b>	320	1308	9649	62	186
<b>Just Value</b>	\$90,881,178	\$248,534,732	\$3,293,229,371	\$5,465,860	\$99,369,565
<b>Surge Level 5</b>	420	3062	16189	122	321
<b>Just Value</b>	\$108,294,178	\$452,167,581	\$4,766,386,342	\$9,536,403	\$170,245,605



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Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Table 4.02.07.2:** Okaloosa County’s Other Vulnerable Structures to Storm Surge

Total:	Commercial	Government/ Institutional	Trailer Park	RV Park
<b>Surge Level 1</b>	92	23	2	0
<b>Just Value</b>	\$188,728,187	\$398,522,413	\$1,011,076	\$0
<b>Surge Level 2</b>	147	29	2	0
<b>Just Value</b>	\$248,347,345	\$425,079,839	\$1,011,076	\$0
<b>Surge Level 3</b>	266	37	8	1
<b>Just Value</b>	\$331,384,035	\$436,237,951	\$2,936,465	\$152,153
<b>Surge Level 4</b>	342	44	8	1
<b>Just Value</b>	\$391,691,991	\$449,642,763	\$2,936,465	\$152,153
<b>Surge Level 5</b>	1402	122	18	1
<b>Just Value</b>	\$1,131,688,878	\$559,648,813	\$5,725,220	\$152,153

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**4.02.08 Flooding**

For this LMS, the definition of flooding only considers flooding which is the result of rainfall, which includes rain that occurs during a hurricane or other tropical event. All of Okaloosa County and its jurisdictions are vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains can occur in any jurisdiction of the county. The most severe flooding in the county has historically occurred in the areas around Crestview and along the Shoal River, Yellow River and Black Water River in the north end of the county. In Okaloosa County, there are 1664 structures in the AE flood zone, 264 structures in the VE flood zone, and 210 structures in the A flood zone. The cumulative ‘just value’ of those structures in the flood zones is \$1,704,619,650. The following table depicts the vulnerable structures located in the flood zones in Okaloosa County.

**Table 4.02.08.1:** Residential Structures Located in Flood Zones in Okaloosa County

Total:	Condominium	SFR- Townhouse	Single-Family	Mobile Home	Multi-Family
<b>AE Flood Zone</b>	82	165	1172	11	30



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<b>Just Value</b>	\$16,378,800	\$41,602,682	\$529,156,492	\$912,194	\$16,954,425
<b>VE Flood Zone</b>	53	87	82	0	6
<b>Just Value</b>	\$19,044,988	\$28,201,752	\$84,402,947	\$0	\$24,965,473
<b>A Flood Zone</b>	0	10	168	1	0
<b>Just Value</b>	\$0	\$1,096,004	\$27,984,848	\$73,660	\$0

Source: Okaloosa County Department of Growth Management, 2010

**Table 4.02.08.1: Other Structures Located in Flood Zones in Okaloosa County**

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>	<b>Critical Facility</b>
<b>AE Flood Zone</b>	170	29	5
<b>Just Value</b>	\$286,558,010	\$352,008,036	\$14,011,322
<b>VE Flood Zone</b>	29	7	0
<b>Just Value</b>	\$88,138,133	\$82,104,123	\$0
<b>A Flood Zone</b>	19	10	2
<b>Just Value</b>	\$17,097,272	\$71,502,372	\$2,426,117

Source: Okaloosa County Department of Growth Management, 2010

**4.02.09 Dam Safety**

Most of the dams located in the county are found in the unincorporated area of north Okaloosa County. The only jurisdictions vulnerable to flooding as a result of dam failure are the City of Crestview and the City of Laurel Hill because these are the only jurisdictions in the county that have dams located within their jurisdictional boundaries. It is to be noted that other jurisdictions have dams which do not require permitting by the Northwest Florida Water Management District. Therefore, the dams considered in the 2011 LMS are only those regulated by the Northwest Florida Water Management District. Examples of unregulated dams would be an agricultural enclosure for watering of livestock or farming of aquatic species. Failure of these types of dams would cause minimal impacts to structures due to their location in the sparsely populated agricultural areas of the county.

The types of dams found in Okaloosa County are manmade earthen-works usually on manmade lakes and ponds. The dams range in height from 3 feet to a maximum of 27 feet. In general, dams over 10 feet in height are regulated by the Northwest Florida Water Management District. The largest dam in Okaloosa County is 27 feet high and located in the Blackwater Forest on Hurricane Lake. If this dam were to fail, the flooding damage would only affect the forested areas, which are undeveloped and scarcely inhabited.

The specific impacts of permitted dam failure in Okaloosa County is unavailable because there have been no studies conducted on the impact that dam failure would have on the potentially affected areas. Only broad general impacts can be given, which provide an indication of what impacts are expected with permitted dam failure. Homes and roadways in the unincorporated areas of north Okaloosa County, as well as in the City of Crestview and City of Niceville, are



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vulnerable to flooding as a result of a permitted dam failure although the probability of a failure occurring is very low. There are two small dams in unincorporated south Okaloosa County and some homes and roadways in the surrounding area are vulnerable to flooding from dam failure. Non-permitted dams are numerous throughout the county and dam failure is rare.

**4.02.10 Land Erosion**

Most of Okaloosa County and its jurisdictions are vulnerable to land erosion in localized areas and susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of Okaloosa County. The two jurisdictions that are not vulnerable to land erosion are the City of Mary Esther and the Town of Shalimar because they do not have the topography or soil types that lead to land erosion.

Land erosion is generally caused by disturbed soils from construction and agricultural activities and usually isolated to an area less than 1 acre in size. Erodible soils account for 34.7% or 208,961 acres of Okaloosa County's total land area. Some river front homes in the County are vulnerable to erosion but would only affect about 20 homes.

**4.02.11 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in Okaloosa County. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the county.

**Table 4.02.11.1:** Residential Structures Vulnerable to Severe Storms in Okaloosa County

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
	590	2,996	35,746	621
<b>Just Value</b>	\$156,081,251	\$439,029,409	\$8,748,627,511	\$340,559,539

Source: Okaloosa County Department of Growth Management, 2010

**Table 4.02.11.2:** Other Structures Vulnerable to Severe Storms in Okaloosa County

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>	<b>Critical Facilities</b>
	4,880	518	2
<b>Just Value</b>	\$3,529,236,078	\$2,126,968,763	\$593,106



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Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornado and waterspout, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all of those hazard types.

### **4.02.11.01 Tornado and Waterspout**

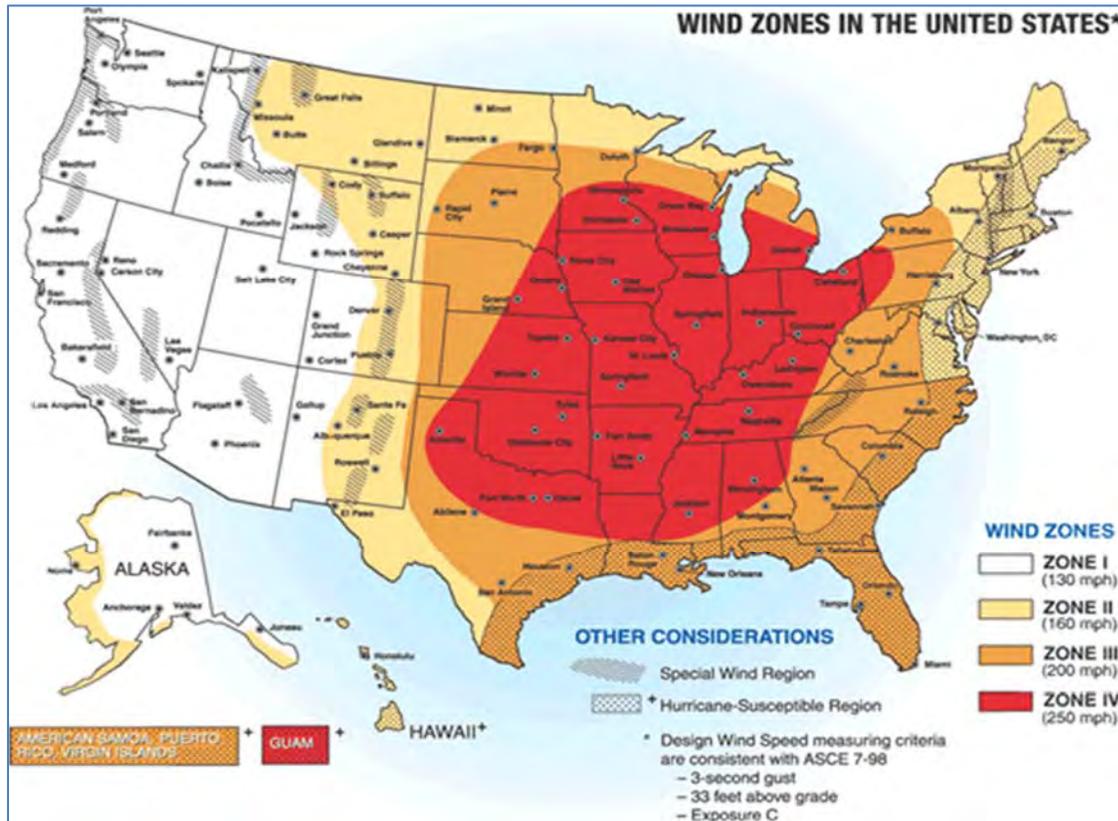
According to FEMA's *Winds in the U.S.* map, all of Okaloosa County is located in Zone III, which means the entire county is susceptible to winds up to 200 mph (see figure below). All of Okaloosa County and its jurisdictions are vulnerable to tornadoes, and all structures within the county are susceptible to the impacts of this hazard due to their unpredictable nature. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County has a medium risk, 1 in 250 per year, of a tornado event occurring. The unincorporated area in the northeastern portion of Blackwater Forest has a high risk, 1 in 100 per year, of a tornado event occurring.

The area's most vulnerable to tornado damage are those with a high density or large population, such as Okaloosa Island, because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage are mobile homes, manufactured housing, poorly constructed or substandard housing and apartment complexes. Manufactured housing and substandard housing are particularly susceptible because of their lack of resistance to high winds, and apartment complexes because of their size and densities.

**Figure 4.02.11.01.1:** Wind Zones in the U.S.



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Source: FEMA, 2010

Because waterspouts occur over water, only the unincorporated coastal areas and City of Destin, City of Fort Walton Beach, City of Mary Esther, Town of Shalimar, Town of Cinco Bayou, City of Niceville, and City of Valparaiso are vulnerable to waterspouts because of their location on the Gulf of Mexico or Choctawhatchee Bay. In general, waterspouts tend to be weaker and smaller than tornadoes. The properties bordered by the water bodies are the most vulnerable to the destructive damage from flying debris. However, the specific impacts on those areas are unavailable due to the lack of relevant studies conducted regarding this hazard.

**4.02.11.02 Thunderstorms and Lightning**

All of Okaloosa County and its jurisdictions are vulnerable to thunderstorms and lightning, and all structures are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

**4.02.11.03 Winter Storms**



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All of Okaloosa County and its jurisdictions are vulnerable to winter storms, and all structures are susceptible to the effects of freezing temperatures. All of the jurisdictions are minimally vulnerable to snow, freezing rain, icing and glazing events because they are so rare.

The specific impacts of winter storms in Okaloosa County are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in Okaloosa County that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **4.02.12 Heat Wave and Drought**

All of Okaloosa County and its jurisdictions are vulnerable to heat waves and drought. The specific impacts of heat waves and drought in Okaloosa County are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

### **4.02.13 Wildfire**

Most of Okaloosa County and its jurisdictions are vulnerable to wildfire due to the proximity of houses and businesses within the wildland/urban interface. The only jurisdictions very minimally vulnerable to wildfire are the Town of Cinco Bayou and the Town of Shalimar because they are completely surrounded by other municipalities.

The homes located on the southern and northern perimeter of Eglin Air Force Base and in the northern unincorporated areas of the county are the most vulnerable because these areas have large acres of open forest land that are historically related to the Long Leaf Pine ecosystem and are naturally dependent on wildfire. Homes located near the wildland/urban interface are most vulnerable to damage from wildfires. Table 4.02.13.1 depicts the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment. There are 6,854 structures in the 'medium' level of concern, with a cumulative 'just value' of \$3,434,512,142. There are 4,754 structures in the 'high' level of concern, with a cumulative 'just value' of \$1,716,560,191.

**Table 4.02.13.1:** Medium to High Wildfire Level of Concern for Residential Structures



**Risk Assessments**

Total:	Condominium	SFR/Gov TH Lease	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
Level 4	0	1	18	2405	456	40
Just Value	\$0	\$17,534,846	\$1,629,549	\$444,674,998	\$29,836,548	\$34,786,331
Level 5	0	1	29	2062	381	31
Just Value	\$0	\$17,534,846	\$3,255,723	\$466,742,154	\$25,898,863	\$42,714,749
Level 6	3	1	1	689	201	7
Just Value	\$707,000	\$17,534,846	\$92,221	\$131,062,697	\$13,242,560	\$20,026,158
Level 7	4	1	5	2960	498	26
Just Value	\$317,580	\$17,534,846	\$516,050	\$427,534,382	\$31,687,104	\$18,097,961
Level 8	1	1	0	759	111	15
Just Value	\$129,000	\$17,534,846	\$0	\$113,626,038	\$7,396,542	\$8,296,158
Level 9	0	1	0	90	16	2
Just Value	\$0	\$17,534,846	\$0	\$15,214,478	\$954,994	\$5,079,389

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Table 4.02.13.2: Medium to High Wildfire Level of Concern for Other Structures**

Total:	Commercial	Government/ Institutional	Trailer Park	RV Park
Level 4	115	50	11	1
Just Value	\$138,128,271	\$472,872,413	\$2,651,357	\$118,626
Level 5	180	64	7	1
Just Value	\$403,647,446	\$613,682,583	\$1,702,156	\$118,626
Level 6	63	34	2	0
Just Value	\$115,002,224	\$419,003,768	\$310,583	\$0
Level 7	125	45	5	0
Just Value	\$144,585,817	\$403,096,091	\$861,817	\$0
Level 8	40	26	3	0
Just Value	\$55,358,514	\$354,814,826	\$1,191,355	\$0
Level 9	10	10	0	0



**Risk Assessments**

<b>Just Value</b>	\$15,523,277	\$59,674,280	\$0	\$0
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Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**4.02.14 Beach Erosion**

The coastal areas of Okaloosa County and the coastal jurisdictions of the City of Destin, City of Fort Walton Beach, City of Valparaiso, City of Niceville, City of Mary Esther, Town of Shalimar and Town of Cinco Bayou are vulnerable to beach erosion and susceptible to the damaging effects of this hazard. Homes located on beach-front or bay-front property are the most vulnerable to beach erosion. Intensive wind and wave action, usually during tropical storms and hurricanes, can accelerate the natural rate of beach erosion.

As previously mentioned, within Okaloosa County’s jurisdiction there are 57.73 miles along the shoreline of Choctawhatchee Bay, 10.63 along the shore of the Gulf of Mexico, and 10.04 miles along Santa Rosa Sound that borders the coast. There are 1.057 structures with a cumulative just value of \$949,487,854 (see Table 4.02.14.1, below) along this cumulative 78.4 miles of shoreline. Residents living in the unincorporated coastal areas and those living in the coastal jurisdictions may witness beach erosion impacting infrastructure, critical facilities, residences, and commercial buildings.

**Table 4.02.14.1: Total Structures Susceptible to Beach Erosion**

	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government /Institutional</b>
<b>Total</b>	65	168	768	12	27	17
<b>Just Value</b>	\$26,700,988	\$36,331,876	\$657,419,433	\$12,631,272	\$125,390,403	\$91,013,882

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**4.02.15 Other Hazards**

As previously stated in the Overall Risk Assessment, sinkholes, expansive soils, earthquake, avalanche, land subsidence, volcano, and tsunamis have been determined to be a minimal risk to Okaloosa County. Therefore, the LMS Committee has not assessed its vulnerability to these hazards. If any of the hazards become a greater risk in Okaloosa County, then the LMS Committee will update this section to reflect those changes.



## Risk Assessments

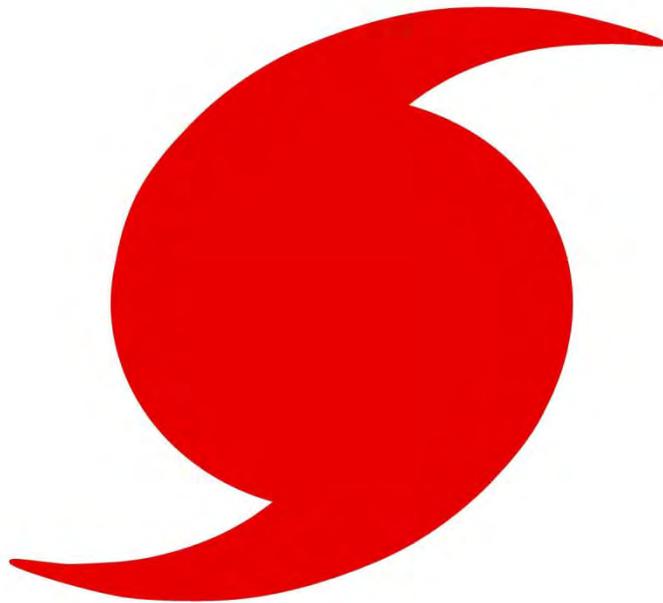
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### **4.02.16 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the County is to the identified hazards from the Overall Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards. In Chapter 5, the jurisdictions within the County are assessed for both their exposure and vulnerability to specific hazards.

# **Chapter 5**

## **Communities**





## Introduction

### Introduction

The purpose of this chapter is to allow each jurisdiction to identify the specific hazards by which it is potentially affect; state the vulnerabilities within the jurisdiction to each specific hazard; and describe the mitigation actions the jurisdiction enacts when the hazard threatens or occurs, or which the jurisdiction is actively enforcing on a daily basis as an effective tool for implementation for National Flood Insurance Program (NFIP) compliance and mitigation against each hazard.

The LMS Committee worked diligently with each jurisdiction to establish an accurate representation of how each prepares for and responds to each hazard affecting the jurisdiction. Mitigation projects for each jurisdiction are found in the Appendix.

The following municipalities/jurisdictions are located within Okaloosa County

1. City of Crestview.....5.01
2. City of Destin .....5.02
3. City of Fort Walton Beach.....5.03
4. City of Laurel Hill .....5.04
5. City of Mary Esther .....5.05
6. City of Niceville .....5.06
7. City of Valparaiso .....5.07
8. Town of Cinco Bayou .....5.08
9. Town of Shalimar.....5.09
10. Unincorporated Okaloosa County.....5.10
11. Eglin Air force Base .....5.11

# Section 5.01

## City of Crestview





## City of Crestview

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### **Section 5.01.02 Vulnerabilities**

#### ***Section 5.01.02.01 Introduction***

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Crestview.

This section includes a brief summary description of the City of Crestview, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Crestview. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Crestview.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Crestview so that mitigation options can be considered in future land use decisions.

#### ***Section 5.01.02.02 Methodology***

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Crestview as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### ***Section 5.01.02.03 Summary Description of the City of Crestview***

The City of Crestview is an incorporated city located in the northern portion of Okaloosa County. As of a 2010 Census it was home to 20,978 residents, which makes it the largest municipality in Okaloosa County by population. The City of Crestview is the most rapidly growing city in Okaloosa County and has been for several years. Most of the existing commercial development is located north of I-10 and concentrated along the corridor of U.S. Highway 85. The majority of the residential subdivisions are located both northeast and northwest of I-10 and U.S. Highway 85. Since 2004, 68 applicants have sought building permits for residential subdivisions in the Crestview area alone. It is reasonable to expect that the City of Crestview and the surrounding area will continue to grow as the population of Eglin Air Force Base expands.

#### ***Section 5.01.02.04 Vulnerable Populations***

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability for further explanation on these vulnerable populations. The table below displays the City of Crestview's vulnerable populations.



**City of Crestview**

**Table 5.01.02.04.1:** Estimated Vulnerable Populations in the City of Crestview, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	14.5%	3256
Language Isolation	.3%	45
Disabled	48.6%	9845
Single Parent	19.5%	1102
Poverty	13.5%	2561
Minority	18.6%	4031

Source: 2010 Census; U.S. Census Population Division

**Section 5.01.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the County because they have already experienced significant flood damage. As of 2015 the City of Crestview does not have any current repetitive loss properties; however, the LMS Committee will update this if this changes in the future.

**Section 5.01.02.06 Hurricane and Tropical Storm**

The City of Crestview is vulnerable to the damaging effects of tropical storms and hurricanes, even though it is located in the northern portion of the county and about 35 miles away from the coast. The City of Crestview would experience destruction in terms of wind damage and pockets of flooding due to the heavy rains. All structures within the City of Crestview’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The City of Crestview does not have designated evacuation zones for the different categories of hurricanes. This is due to their more northerly location away from the coastal areas by the Gulf of Mexico, which is where the storms typically make landfall. Historically, storms generate their power over bodies of water and lose their strength as they make landfall. Therefore, as the storm travels further north in the County, the communities are not impacted as severely as the coastal areas. The specific impacts of hurricanes and tropical storms on the City of Crestview are unable to be provided due to a lack of conducted studies.



**City of Crestview**

**Section 5.01.02.07 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Crestview is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Crestview. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the City of Crestview, there are 9 structures located in the AE flood zone and 4 structures in the A flood zone. The cumulative 'just value' of the structures in the AE and A flood zones is \$1,711,146. The following table depicts the amount of structures located in flood zones.

**Table 5.01.02.07.1:** Structures Located in Flood Zones in the City of Crestview

	<b>AE Flood Zone</b>	<b>Just Value</b>	<b>A Flood Zone</b>	<b>Just Value</b>
<b>Single Family</b>	9	\$1,485,823	4	\$225,323

Source: Okaloosa County Department of Growth Management, 2010

**Section 5.01.02.08 Dam Safety**

The City of Crestview has 28 active permitted dams within its jurisdiction. There are other dams located just outside the City's jurisdictional boundary, and may cause flooding within or spill-over into the city, even though the dam is outside of the city limits. Most of these are small agricultural dams or retention ponds. The specific impacts of dam failure in Okaloosa County is unavailable because there have been no studies conducted on the impact that dam failure would have on the potentially affected areas. Only broad general impacts can be given, which provide an indication of what impacts are expected with dam failure. If one of these dams failed, the area surrounding the dam has to potential to experience flooding and agricultural losses, and may cause residential or highway flooding.

**Section 5.01.02.09 Land Erosion**

The City of Crestview is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Crestview. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

**Section 5.01.02.10 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Crestview. Although it is highly unlikely that all structures will



**City of Crestview**

be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Crestview.

**Table 5.01.02.10.1:** Residential Structures Vulnerable to Severe Storms in the City of Crestview

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
	658	4,104	117
<b>Just Value</b>	\$54,554,868	\$538,409,243	\$53,296,853

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.01.02.10.2:** Other Structures Vulnerable to Severe Storms in the City of Crestview

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>
	451	56
<b>Just Value</b>	\$215,295,972	\$100,349,865

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those special hazards.

**Section 5.01.02.10.01 Tornado**

The City of Crestview is vulnerable to tornadoes, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Crestview that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Crestview are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Crestview, has a medium risk, 1 in 250 per year, of a tornado event occurring.

**Section 5.01.02.10.02 Thunderstorms and Lightning**

The City of Crestview is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-



## City of Crestview

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flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Crestview, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.01.02.10.03 Winter Storms**

The City of Crestview is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Crestview is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Crestview is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Crestview are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Crestview that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.01.02.11 Heat Wave and Drought**

The City of Crestview is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Crestview are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the City of Crestview is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

### **Section 5.01.02.12 Wildfire**

The City of Crestview is vulnerable to wildfire. The majority of the acreage located within the municipality is urban or residential, but vast acres of open forest lands surround the City of Crestview, and these lands consists of natural vegetation historically related to the Longleaf Pine or upland Southeastern forests. Although the City of Crestview is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is low. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following tables depict the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.



**City of Crestview**

**Table 5.01.02.12.1: Medium to High Wildfire Level of Concern for Residential Structures**

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Level 4</b>	7	225	3	7
<b>Just Value</b>	\$651,700	\$35,856,259	\$430,749	\$13,830,698
<b>Level 5</b>	18	194	1	3
<b>Just Value</b>	\$1,587,348	\$30,895,302	\$286,783	\$6,941,452
<b>Level 6</b>	0	83	2	0
<b>Just Value</b>	\$0	\$14,237,174	\$328,659	\$0
<b>Level 7</b>	1	625	1	8
<b>Just Value</b>	\$98,316	\$90,317,399	\$286,783	\$10,084,252
<b>Level 8</b>	0	99	1	5
<b>Just Value</b>	\$0	\$14,278,776	\$286,783	\$6,186,265
<b>Level 9</b>	0	12	0	1
<b>Just Value</b>	\$0	\$1,595,215	\$0	\$4,954,204

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)



**City of Crestview**

**Table 5.01.02.12.2:** Medium to High Wildfire Level of Concern for Other Structures

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Level 4</b>	22	11
<b>Just Value</b>	\$22,813,980	\$36,372,509
<b>Level 5</b>	13	8
<b>Just Value</b>	\$25,929,495	\$25,499,075
<b>Level 6</b>	3	4
<b>Just Value</b>	\$1,050,869	\$14,299,991
<b>Level 7</b>	35	15
<b>Just Value</b>	\$50,095,553	\$44,025,850
<b>Level 8</b>	5	6
<b>Just Value</b>	\$5,914,049	\$17,721,541
<b>Level 9</b>	1	0
<b>Just Value</b>	\$195,170	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.01.02.13 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Crestview. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Crestview, then the LMS Committee will update this section to reflect those changes.

**Section 5.01.02.14 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Crestview is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Crestview**

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**Section 5.01.05 Maps**

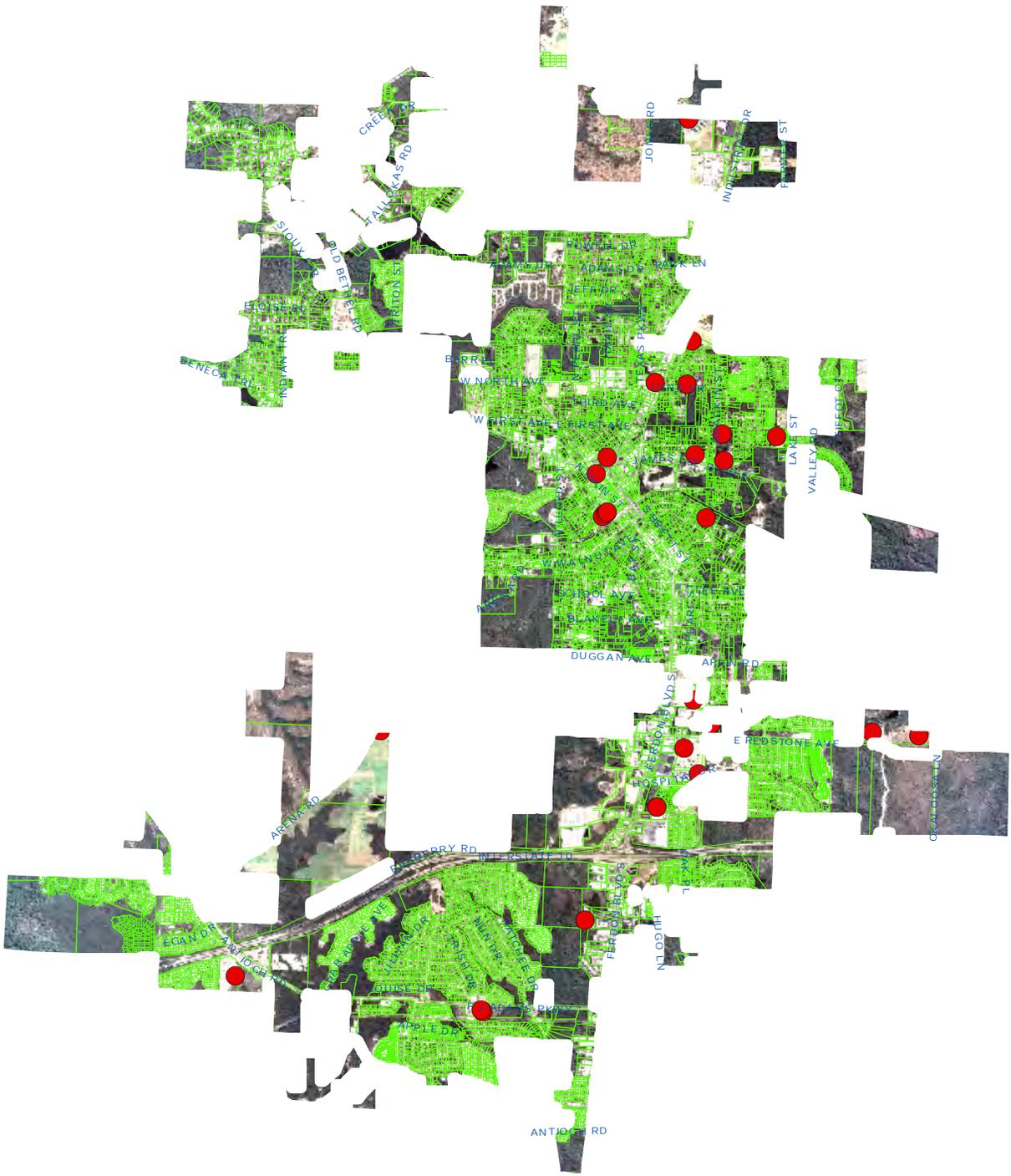
Included in this section are maps of the City of Crestview. They include:

1. Critical Facilities..... 5.01-33
2. Evacuation Zones..... 5.01-34
3. Flood Zones..... 5.01-35
4. Repetitive Loss Properties..... 5.01-36
5. Surge Zones..... 5.01-37
6. Wildfire Level of Concern..... 5.01-38

# City of Crestview Critical Facilities

-  Parcel Lines
-  Critical Facilities

Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION**  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983 (80), NAVD 1988.

**PUBLIC RECORD:**  
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Growth Management  
08/18/2010



# City of Crestview Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

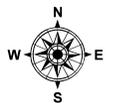
Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983 (83), NAD 1988.

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08/18/2010

# City of Crestview Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

**The City of Crestview does not have any Repetitive Loss Properties in its jurisdiction**

Source: FEMA Map Service Center, Dec 6 2002



**MAP PROJECTION:**  
Lambert Conformal Conic Projections on Spheroids: Florida North (1983) NAD 1983 (80), NAD 1988.

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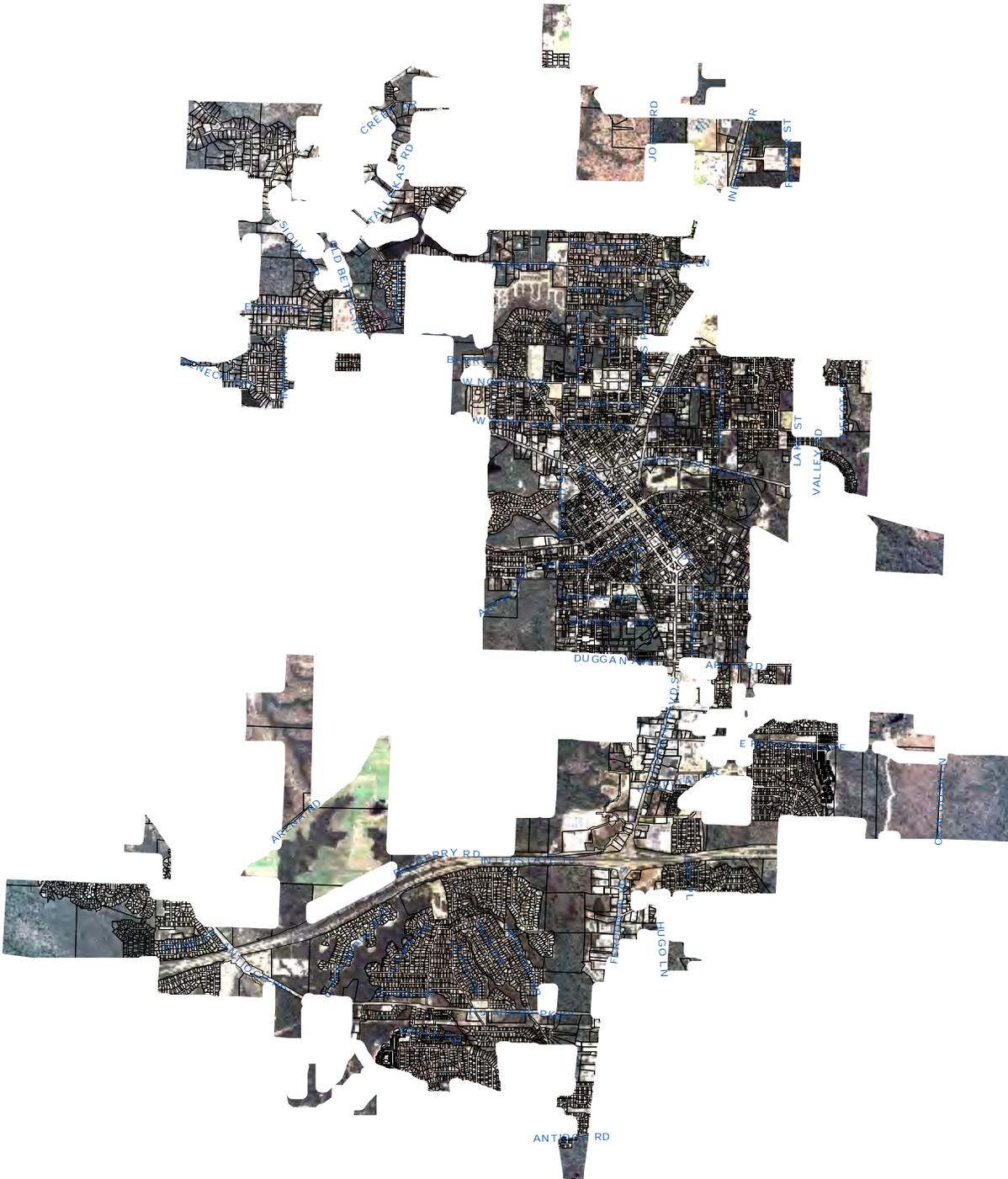
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Growth Management  
08/18/2010

# City of Crestview Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

**Note: There are no Surge Zones in the City Of Crestview**

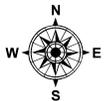
Source: West Florida Regional Planning Council, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections on  
StatePlane: Florida North (8903)  
NAD 1983(83), NAD 1983.

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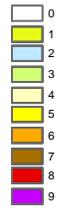


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08/18/2010

# City of Crestview Wildfire Level of Concern

Parcel Lines

Level of Concern



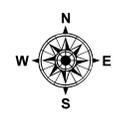
Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections  
StatePlane: Florida North (803)  
NAD 1983(80), NAD 1983

PUBLIC RECORD:  
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**City of Crestview**

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**Section 5.01.06 Post Disaster Redevelopment Plan**

The City of Crestview does not currently have a Post Disaster Redevelopment Plan therefore, the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

# Section 5.02

## City of Destin





## City of Destin

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### **Section 5.02.02 Vulnerabilities**

#### **Section 5.02.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Destin.

This section includes a brief summary description of the City of Destin, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Destin. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Destin.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Destin so that mitigation options can be considered in future land use decisions.

#### **Section 5.02.02.02 Methodology**

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Destin as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.02.02.03 Summary Description of the City of Destin**

The City of Destin is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 12,305 residents. The City of Destin is best known for its beautiful beaches and the thriving tourism industry. Within its jurisdiction, there are 6.71 miles of coastline along the Gulf of Mexico, 8.72 miles of shoreline along Old Pass Lagoon, 1.58 miles along the East Pass, as well as 10.55 miles that border Choctawhatchee Bay on the northern portion of the city. Most of the development in the City of Destin is concentrated adjacent to the Gulf of Mexico and along both sides U.S. Highway 98. Much of the development within the City of Destin serves a seasonal tourist population, so hotels, condominiums, and vacation rentals define much of the development within the city. Per Ken Gallander, AICP, Community Development Director, for the City of Destin, most of the existing and intensive, mixed-use development is located in the Azalea Drive/Airport Road/Commons Boulevard corridor, which is in the western half of the city. The current growth trend of the city can be characterized as slow as best: on average only 12-14 homes are being built per year. This is in such contrast to years prior to 2005, when the growth in the City of Destin was outstanding.



**City of Destin**

**Section 5.02.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County’s Vulnerability for further explanation on these vulnerable populations. The table below displays the City of Destin’s vulnerable populations.

**Table 5.02.02.04.1:** Estimated Vulnerable Populations in the City of Destin, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	22.9%	3569
Language Isolation	.9%	98
Disabled	22.3%	2896
Single Parent	6.5%	256
Poverty	6.3%	752
Minority	2.2%	278

Source: 2010 Census; U.S. Census Population Division

**Section 5.02.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the City of Destin because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the City of Destin.

**Table 5.02.02.05.1:** Repetitive Loss Properties in the City of Destin

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
<b>City of Destin</b>	\$46,526,164.54	\$3,695,813.20	498	\$50,221,977.74	189	10

Source: FEMA, 2010



**City of Destin**

**Table 5.02.02.05.2:** Flood Zones of Repetitive Loss Properties in the City of Destin

Flood Zones	A, AE	V, VE	B, C, X
<b>Total Properties</b>	100	19	80

Source: FEMA, 2010

**Section 5.02.02.06 Hurricane and Tropical Storm**

The City of Destin is vulnerable to the damaging effects of tropical storms and hurricanes as it is the only incorporated city in Okaloosa County located directly on the Gulf of Mexico. The City of Destin would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Destin’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on beach front and bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.02.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within

Total:	Condominium	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
<b>Zone A</b>	93	0	7	0	0
<b>Just Value</b>	\$20,070,000	\$0	\$5,130,912	\$0	\$0
<b>Zone B</b>	146	208	296	0	2
<b>Just Value</b>	\$44,022,000	\$52,807,325	\$229,993,410	\$0	\$1,142,315
<b>Zone C</b>	214	268	888	26	21
<b>Just Value</b>	\$60,732,488	\$79,741,301	\$567,076,320	\$2,424,273	\$12,835,524
<b>Zone D</b>	230	290	1598	26	24
<b>Just Value</b>	\$67,791,488	\$95,055,906	\$870,997,135	\$2,424,273	\$15,270,104
<b>Zone E</b>	288	1307	4663	32	51
<b>Just Value</b>	\$82,959,488	\$201,396,771	\$1,729,680,864	\$2,996,188	\$32,743,048

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Table 5.02.02.06.2:** Evacuation Zones and the Vulnerable Structures within



**City of Destin**

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>	<b>Trailer Park</b>	<b>RV Park</b>
<b>Zone A</b>	3	1	0	0
<b>Just Value</b>	\$9,384,628	\$754,838	\$0	\$0
<b>Zone B</b>	6	1	0	0
<b>Just Value</b>	\$11,203,039	\$754,838	\$0	\$0
<b>Zone C</b>	24	4	1	1
<b>Just Value</b>	\$47,285,884	\$37,679,658	\$203,759	\$152,153
<b>Zone D</b>	31	7	1	1
<b>Just Value</b>	\$55,084,689	\$64,365,164	\$203,759	\$152,153
<b>Zone E</b>	488	20	2	1
<b>Just Value</b>	\$448,253,381	\$109,447,554	\$358,639	\$152,153

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.02.02.07 Storm Surge**

The City of Destin is vulnerable to storm surge and the structures along the Gulf of Mexico and Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 16.1 feet above the mean high water line along some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.

**Table 5.02.02.07.1: Vulnerable Residential Structures to Storm Surge**



**City of Destin**

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Surge Level 1</b>	61	68	460	1	9
<b>Just Value</b>	\$28,103,000	\$20,250,510	\$385,675,087	\$197,334	\$7,162,871
<b>Surge Level 2</b>	164	189	609	1	9
<b>Just Value</b>	\$53,028,000	\$52,726,068	\$536,030,888	\$197,334	\$7,162,871
<b>Surge Level 3</b>	209	266	1288	22	25
<b>Just Value</b>	\$67,938,488	\$77,341,512	\$822,342,281	\$2,134,676	\$16,883,617
<b>Surge Level 4</b>	209	266	1288	13	25
<b>Just Value</b>	\$67,938,488	\$77,341,512	\$822,342,281	\$1,247,987	\$16,883,617
<b>Surge Level 5</b>	283	1263	4472	32	51
<b>Just Value</b>	\$82,054,488	\$189,303,636	\$1,606,289,525	\$2,996,188	\$32,743,048

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Table 5.02.02.07.2: Other Vulnerable Structures to Storm Surge**

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>	<b>RV Park</b>	<b>Trailer Park</b>
<b>Surge Level 1</b>	29	4	0	0
<b>Just Value</b>	\$64,604,209	\$38,980,389	\$0	\$0
<b>Surge Level 2</b>	36	4	0	0
<b>Just Value</b>	\$72,539,267	\$38,980,389	\$0	\$0
<b>Surge Level 3</b>	44	4	1	0
<b>Just Value</b>	\$96,129,995	\$38,980,389	\$152,153	\$0
<b>Surge Level 4</b>	48	5	1	0
<b>Just Value</b>	\$99,604,256	\$39,519,445	\$152,153	\$0
<b>Surge Level 5</b>	476	19	1	2
<b>Just Value</b>	\$438,074,119	\$87,483,210	\$152,153	\$358,639

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.02.02.08 Flooding**



**City of Destin**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Destin is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Destin. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the City of Destin, there are 411 structures located in the AE flood zone and 187 structures in the VE flood zone. The cumulative 'just value' of all the structures located in the AE and VE flood zones is \$409,675,850. The following table depicts the vulnerable structures located in the AE and VE flood zones in the City of Destin.

**Table 5.02.02.08.1:** Structures Located in Flood Zones in the City of Destin

	AE Flood Zone	Just Value	VE Flood Zone	Just Value
<b>Condominium</b>	61	\$12,811,000	38	\$15,075,988
<b>SFR-Townhouse</b>	52	\$14,198,726	78	\$25,357,171
<b>Single-Family</b>	257	\$137,127,229	47	\$67,554,135
<b>Mobile Home</b>	8	\$724,677	0	\$0
<b>Multi-Family</b>	5	\$2,388,572	1	\$2,336,076
<b>Commercial</b>	23	\$39,421,021	21	\$52,568,704
<b>Government/Institutional</b>	3	\$2,944,595	2	\$36,574,850
<b>Critical Facility</b>	2	\$593,106	0	\$0

FEMA Map Service Center, Dec 6 2002

**Section 5.02.02.09 Dam Safety**

The City of Destin has 2 active unpermitted dams within its jurisdiction. A portion of Main Street crossing the outfall of Coleman Lake into the east branch of Joe's Bayou sits on an unpermitted earthen dam which lacks a clay core and shows signs of deterioration. Kelly Street sits on another earthen dam at the outfall of Spring Lake into the southern branch of Joe's Bayou. The Kelly Street outfall was recently reconstructed, and Spring Lake is staged lower than Coleman Lake. While the City of Destin is not susceptible to significant flooding due to dam failure, some consideration may need to be given to the reconstruction of the Coleman Lake dam.

The specific impact of dam failure in the City of Destin is unavailable at this time because there have been no studies conducted on the impact that dam failure would have on the respective areas surrounding the dams. Only broad general impacts can be given, which provide an indication as to what impacts are expected with dam failure.

If one of these small dams in the City of Destin failed, the area surrounding the dam would likely experience flooding of property and roadways, and may result in road closures and in extreme cases, damage to homes.



**City of Destin**

**Section 5.02.02.10 Land Erosion**

The City of Destin is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Destin. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

**Section 5.02.02.11 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Destin. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Destin.

**Table 5.02.02.09.1:** Vulnerable Residential Structures to Severe Storms

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
	398	1,404	5,650	67
<b>Just Value</b>	\$113,666,476	\$230,587,420	\$2,160,543,105	\$42,232,830

**Table 5.02.02.09.1:** Vulnerable Residential Structures to Severe Storms  
Source: Okaloosa County Department of Growth Management, 2010

**Table 5.02.02.09.2:** Other Vulnerable Structures to Severe Storms

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>	<b>Critical Facilities</b>
	1,010	46	2
<b>Just Value</b>	\$982,772,315	\$216,750,379	\$593,106

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and water spouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.02.02.11.01 Tornado and Waterspout**

The City of Destin is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.



## City of Destin

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The areas within the City of Destin that are most vulnerable to tornado damage are those with a high density or large population (such as along the Gulf of Mexico) because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Destin are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Destin, has a medium risk, 1 in 250 per year, of a tornado event occurring. Because waterspouts occur over water, the areas in the City of Destin most susceptible to damage from waterspouts are those located on the Gulf of Mexico and Choctawhatchee Bay.

Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. There are 382 structures along the City of Destin's coastline. The cumulative 'just value' of those structures is \$407,000,370. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable due to the unavailability of relevant studies.

### **Section 5.02.02.11.02 Thunderstorms and Lightning**

The City of Destin is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Destin, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.02.02.11.03 Winter Storms**

The City of Destin is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Destin is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Destin is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Destin are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Destin that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.02.02.12 Heat Wave and Drought**

The City of Destin is vulnerable to heat waves and drought, and everyone living within the jurisdiction is susceptible to heat exhaustion. The specific impacts of heat waves and drought in



**City of Destin**

the City of Destin are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

**Section 5.02.02.13 Wildfire**

Although the City of Destin is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following tables depict the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.01.02.12.1: Medium to High Wildfire Level of Concern for Residential Structures**

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
<b>Level 4</b>	0	0	33	0
<b>Just Value</b>	\$0	\$0	\$18,201,961	\$0
<b>Level 5</b>	0	3	137	3
<b>Just Value</b>	\$0	\$566,376	\$64,434,878	\$2,720,970
<b>Level 6</b>	3	0	20	0
<b>Just Value</b>	\$707,000	\$0	\$9,320,033	\$0
<b>Level 7</b>	0	0	0	0
<b>Just Value</b>	\$0	\$0	\$0	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Table 5.02.02.12.2: Medium to High Wildfire Level of Concern for Other Structures**

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
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**City of Destin**

<b>Level 4</b>	1	2
<b>Just Value</b>	\$3,103,570	\$22,836,441
<b>Level 5</b>	37	8
<b>Just Value</b>	\$94,446,478	\$72,880,325
<b>Level 6</b>	10	2
<b>Just Value</b>	\$19,436,403	\$3,754,884
<b>Level 7</b>	2	0
<b>Just Value</b>	\$1,410,994	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.02.02.14 Beach Erosion**

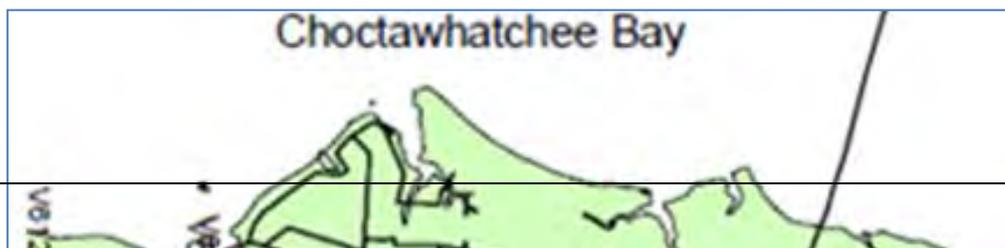
The areas of the City of Destin that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay and Gulf of Mexico. As previously mentioned, within its jurisdiction, there are 7.59 miles of coastline along the Gulf of Mexico as well as 11.22 miles of coastline that border Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. There are 382 structures along the City of Destin’s coastline. The cumulative ‘just value’ of those structures is \$407,000,370 (See Table 5.02.02.13.1, below). The areas where the beaches are already classified as “critically eroded” are more vulnerable and impacted more severely by beach erosion (See Figure 5.02.02.13.1, below).

**Table 5.02.02.13.1: Total Structures Susceptible to Beach Erosion**

	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/Institutional</b>
<b>Total</b>	56	106	200	7	10	3
<b>Just Value</b>	\$25,052,988	\$20,793,402	\$272,517,829	\$10,066,436	\$40,344,164	\$38,225,551

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**Figure 5.02.02.13.1: Critically Eroded Beaches in the City of Destin, 2009**





## City of Destin

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Source: FDEP Bureau of Beaches and Coastal Systems

### ***Section 5.02.02.15 Other Hazards***

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Destin. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Destin, then the LMS Committee will update this section to reflect those changes.

### ***Section 5.02.02.16 Summary***

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Destin is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Destin**

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**Section 5.02.05 Maps**

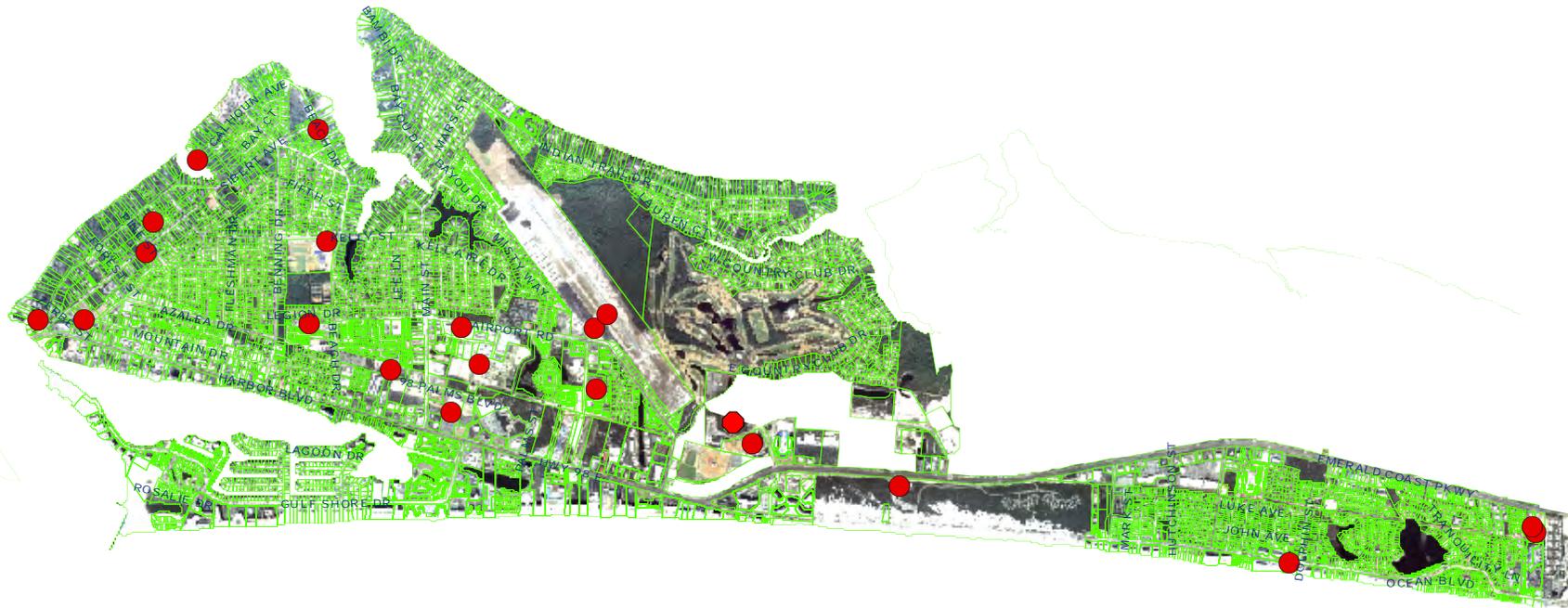
Attached to this page are maps of the City of Destin. They include:

1. Critical Facilities..... 5.02-51
2. Evacuation Zones..... 5.02-52
3. Flood Zones..... 5.02-53
4. Repetitive Loss Properties..... 5.02-54
5. Surge Zones..... 5.02-55
6. Wildfire Level of Concern..... 5.02-56

# City of Destin Critical Facilities

-  Parcel Lines
-  Critical Facilities

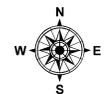
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane: Florida North (0903)  
NAD 1983 (83), NAVD 1988

PUBLIC RECORD:  
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Growth Management  
08/18/2010

# City of Destin Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E
-  Unincorporated

ZONE A = HURRICANE CAT 1

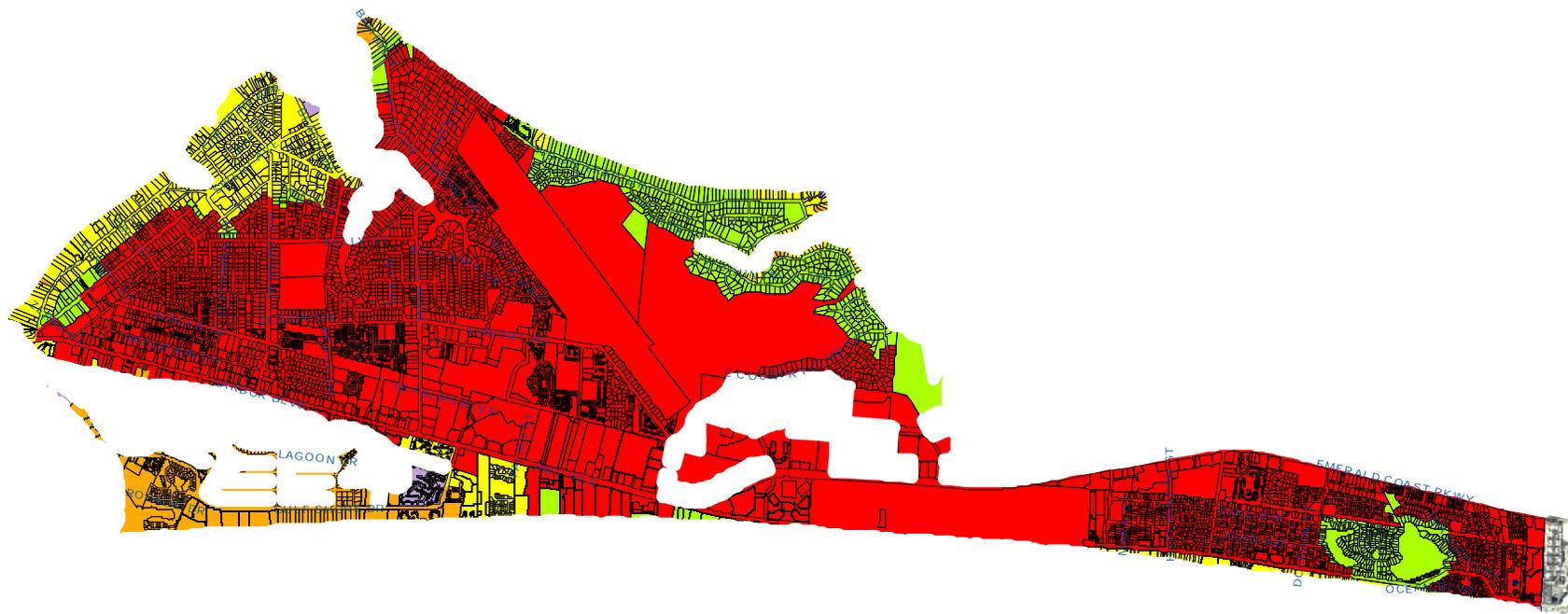
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane: Florida North (9903)  
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08/18/2010



# City of Destin Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

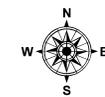
Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane: Florida North (9903)  
NAD 1983 (9), NAVD 1988

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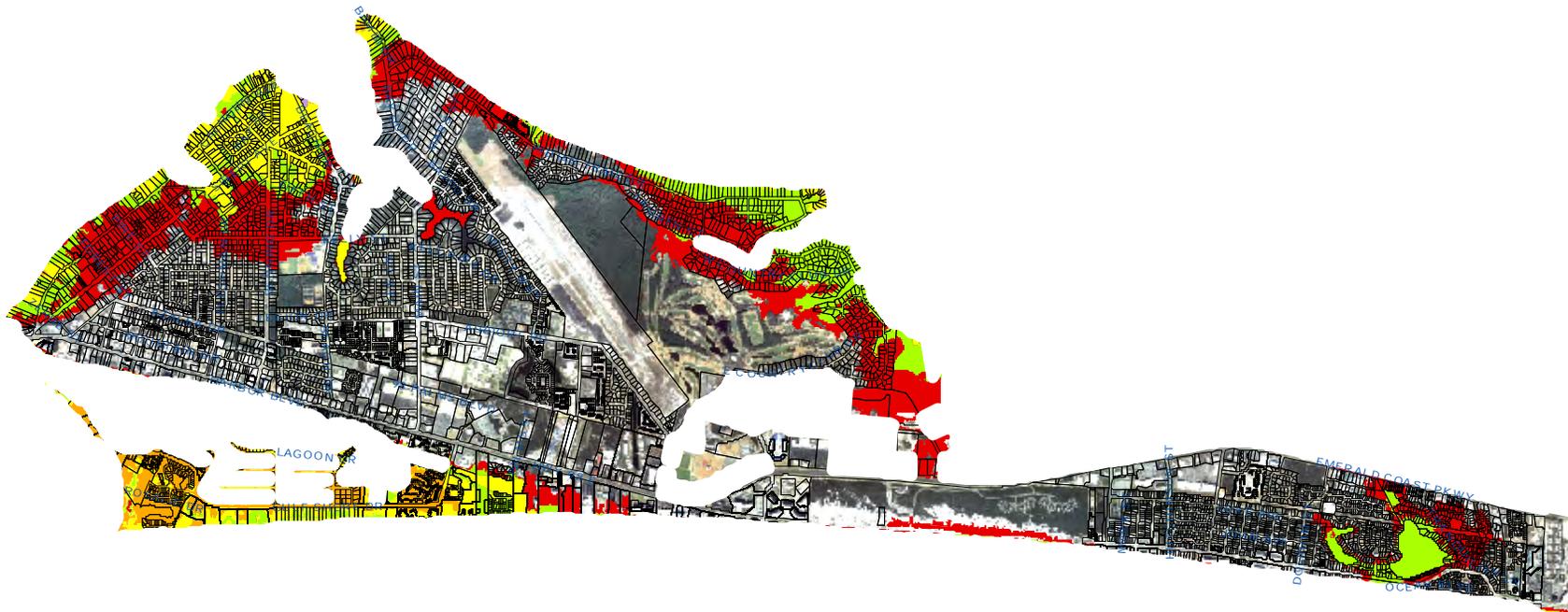


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08/18/2010

# City of Destin Surge Zones

- Parcel Lines
- Category 1
- Category 2
- Category 3
- Category 4
- Category 5

Source: West Florida  
Regional Planning  
Council, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane: Florida North (0903)  
NAD 1983 (9), NAVD 1988

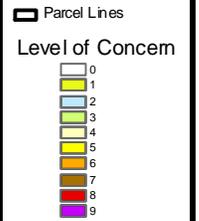
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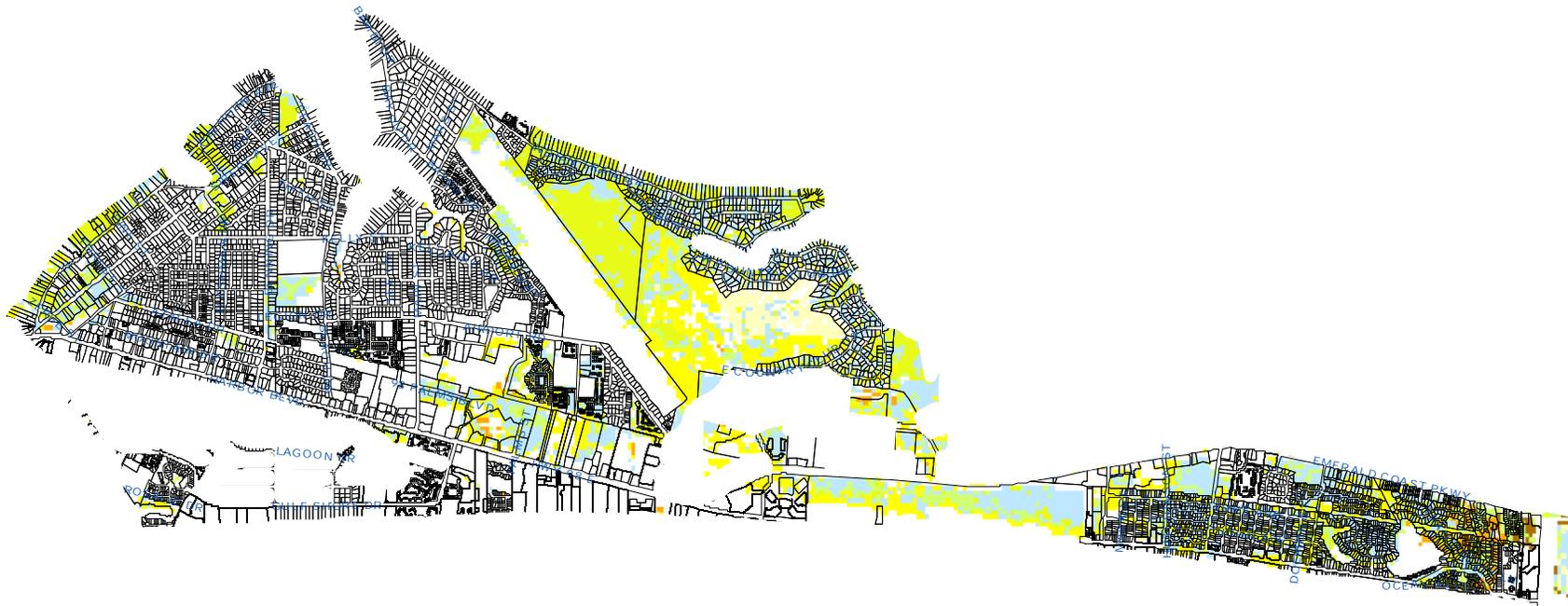


Department of  
Growth Management  
08/18/2010

# City of Destin Wildfire Level of Concern



Source: Florida Division of Forestry, 2010



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08/18/2010



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**Section 5.02.06 Post Disaster Redevelopment Plan**

Attached to this page is the post disaster redevelopment plan adopted by the City of Destin in November of 2004. This plan is still in effect.



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**ARTICLE ONE**

**FORWARD**

In 1987, the United Nations General Assembly passed a resolution calling for a decade dedicated to reducing "loss of life, property damage, and social and economic disruptions caused by natural disasters." To assist in preparing for the International Decade for Natural Disaster Reduction, the Secretary-General appointed an international ad-hoc group of experts. In January, 1990, the group's 25 findings and recommendations for immediate and long-term emergency management priorities for the Decade were completed. The following illustrate the direction and intent of the recommendations for the Decade:

- Most of the world views natural disasters with fatalism. This attitude is wrong and must be changed. Societies, communities, and individuals, prepared through education, training, policy and legislation, and investment can be both disaster resistant and disaster resilient.
- Re-orient government thinking to integrate pre-disaster planning into the mainstream of the government policy and decision-making process, including medical preparedness for disasters, improved building codes, and land use planning.

From the United Nations General Assembly comes a mandate to conduct pre-disaster planning for the events during and following a natural disaster. Of all natural disasters, Destin is most vulnerable to hurricanes due to its coastline and its geographic location. The Florida State Land Development Plan (1989) has an objective that all coastal cities will have developed post-disaster redevelopment plans by 1993. Chapter 163, Part II, Florida Statutes; Rule 9J-5, Florida Administrative Code; and Objective 11.A.8 of Destin's Comprehensive Plan each require the City to prepare a Post-Disaster Redevelopment Plan by 1992. This Plan is a continuation of the City's comprehensive planning efforts and is designed to accommodate and complement the requirements of that Plan. The Post-Disaster Redevelopment Plan is not intended to require a revision of the work already documented by emergency management officials and their planning for the immediate recovery phase after a major disaster.

In the aftermath of a hurricane or other major disaster, the ability of local governments to take effective advantage of opportunities to guide redevelopment in a way that reduces exposure to the effects of future disasters will be strongly influenced by the regulatory environment established prior to the event. In the absence of regulations designed for redevelopment following a major disaster, or clear policies relating to reducing development in high hazard areas, the redevelopment patterns post-disaster will be consistent with those pre-disaster. Attempts to mitigate development in high hazard areas are often constrained by the possibility of litigation resulting from restrictions imposed on the development potential of individual properties.



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A local government's pursuit of the general health, safety, and welfare constitutes a legitimate legal basis for measures designed to reduce the impact of hurricanes/disasters. The actual application of this principle, however, may still subject that government to legal challenges due to alleged interference with private property rights.

By the same token, the failure of a local government to take appropriate mitigative measures may expose it to judicial findings of negligence, subjecting it to substantial liability for damages actually sustained. This is an important reason for local governments to formulate pre-hazard mitigation strategies together with post-hazard redevelopment plans.



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**REDEVELOPMENT**

**ARTICLE TWO  
INTRODUCTION AND PURPOSE**

The City of Destin is periodically threatened by severe weather phenomena: tornadoes, hail storms, flooding, high winds, tropical storms, and hurricanes. A major highway running through the heart of the City and the proximity to major military installations and large bodies of water could cause it to be subject to the effects of man-made disasters (e.g., aircraft or vehicular accidents, radioactive fallout, oil/chemical spills, etc.). Other emergency situations, such as accidents involving hazardous/dangerous materials may also occur. The need for pre-disaster planning is quite clear.

During a major disaster event, many structures will be either damaged or destroyed. The residents of homes will need temporary housing as they pursue financial assistance for repairs or relocation. The City's building division will be besieged with building permit requests. At this point, many questions will arise. Without a process in place, inefficient and inconsistent decision-making may result in poor land use decisions in the turmoil of post-disaster efforts. Coordinated, centralized, informed decision-making, frequent and accurate media communiqués, accurate recordkeeping, and prioritization of recovery activities which are flexible, but never broken, are key points necessary to deal effectively with any catastrophic disaster.

It is recognized that a plan such as this cannot anticipate all of the redevelopment scenarios and problems the City will face. Nor can any local government be expected to anticipate all of the redevelopment scenarios it will face after a major disaster. Recognizing this, it is the goal of this Plan to establish the background of data, requirements, precedence, and sources of information necessary to support and adopt a Post-Disaster Redevelopment Plan and to suggest policies which will guide reconstruction and redevelopment. Thus, this Plan is designed to assist the City when considering alternate policies to guide redevelopment.

Further, it is designed to provide, in cooperation with Federal, State, and County governments, a plan for the purpose of minimizing exposure of human life and public and private property to any type of disaster, whether natural or man-made. Common measures taken to reduce destruction include increasing open space, reducing density and intensity, and limiting public infrastructure and facilities in high hazard areas. Special assessments levied in high hazard areas to cover recovery costs is another possible measure. Pre-and post-disaster planning allows a community to capitalize more fully on mitigation opportunities after a disaster, and when developed and adopted with public involvement prior to a disaster, identifies and alleviates controversial issues that often arise after disasters.



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**ARTICLE THREE**

**DEFINITIONS**

**3.1 Minor Damaged Structure.** A structure that can be made habitable in a short period of time with minimal repairs. Damage may include doors, windows, floors, furnaces, water heaters, and other minor structural damages. The indicator for this category is whether the cost of repair is 25% or less of the replacement cost of the structure at the time of damage.

**3.2 Major Damaged Structure.** A structure that can be made habitable with extensive repairs. Damage may include foundation, roof structure, and major structural components. The indicator for this category is whether cost of repair is greater than 25% and less than 50% of the replacement cost of the structure at the time of damages.

**3.3 Destroyed Structures.** A structure that is a total loss or damaged to such an extent that repairs are not technically or economically feasible, i.e., 50% or more of the replacement cost of the structure at the time of damage or destruction.

Such a structure experiencing total destruction shall be visibly labeled 'condemned' by a local official. Generally, the Federal Emergency Management Agency (F.E.M.A) requires all private structure damaged greater than 50.5% of their pre-disaster replacement value to be rebuilt to existing codes and regulations, including the non-conforming provisions.

**3.4 Damage Assessment Team.** The following shall constitute the City's damage assessment team:

**CORE GROUP:**

- a) City Engineer/Public Works Department
  - will oversee public damages assessment
- b) Building Inspections Division
  - will oversee private property damage assessment
  - Natural Gas, Electric, Water/Sewer, Communications
- c) Utility companies personnel
- d) Local Officials
  - Fire District officials/Okaloosa County Emergency Management personnel/Okaloosa County Sheriff's Dept.



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A damage assessment team's function is to assess losses to property immediately after a disaster. These teams should be identified and trained in advance of a disaster so they will be ready when needed. The Building Official shall, within the limits of access, time, and staffing, visibly placard structures that are unsafe for occupancy or use. (See examples in Appendix D.)

### **FOR HURRICANE LEVELS 3 AND ABOVE, ADD:**

- a) Health officials
- b) Red Cross officials
- c) Okaloosa County property appraisers' office
- d) Real estate appraisers
- e) Insurance agency representatives

**3.5 Post-Disaster Reconstruction Task Force.** A committee composed of the following individuals or their respective designees, reflecting a broad-based representation of community interests:

- a) Building Official
  - Enlists representatives from Okaloosa County property and tax appraisers, insurance agents, utilities inspections
- b) City Engineer
  - Enlists representatives from Gulf Power, Destin Water Users, Okaloosa Gas, communication and solid waste franchisees, and Department of Environmental Protection
- c) City Manager
  - Enlists representatives from City attorneys, City Council, and Chamber of Commerce
- d) Community Development Director
  - Enlists representatives from Okaloosa County Planning Dept., and Northwest Florida Regional Planning Council and enlists representatives as needed



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### e) Emergency Manager

- coordinates with Okaloosa County Emergency Management, Fire District, Sheriff's Department, Public Health Department, Department of Community Affairs, Federal Emergency Management Agency, and all other response agencies; enlists representatives as needed f) Finance Director
- coordinates with city manager, local banks and vendors, and department heads concerning emergency purchasing needs, requirements, and procedures The Reconstruction Task Force shall be responsible for advising and making recommendations to the City Council on a wide range of post-storm redevelopment and reconstruction issues.

**3.6 Coastal High Hazard Area.** A coastal high hazard area (or zone) shall be defined, in accordance with Chapter 163 of the Florida Statutes and Rule 9.J-5.003 of the Florida Administrative Code, as "the evacuation zone for a category 1 hurricane as established in the regional hurricane evacuation study applicable to the local government."

**3.7 Flood Inundation Areas.** Areas designated by the regional hurricane evacuation plan as prone to temporary flooding due to storm surge, and requiring evacuation in the event of a 100-year storm or a Category 3 storm event. Rule 9J-5.003 (60) of the Florida Administrative Code.

**3.8 Mitigation (Long-Term).** Any activities which actually eliminate or reduce the probability of occurrence or the effects of a disaster. It also includes long-term activities which reduce the effects of unavoidable accidents. These activities can occur before, during, and after a disaster and overlap all phases of emergency management. In addition to reducing hazard impacts through mitigative actions and improving preparedness, response and recovery capabilities can also reduce loss of life and property.



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**ARTICLE FOUR**

**PLANNING PHASES**

**4.1 Comprehensive Planning:** Since the Second World War, emergency management has focused primarily on preparedness. But being prepared is only one phase of comprehensive emergency management. The City has the opportunity to plan for emergencies before they strike and to be prepared to aid recovery after a disaster. As a result, the current philosophy in emergency management defines four phases of comprehensive emergency management. They are mitigation, preparedness, response, and recovery. Each phase results from the previous one and establishes the requirements of the next one. Preparedness moves swiftly into response when disaster strikes, and response yields to recovery. Similarly, recovery should trigger mitigation, motivating attempts to prevent or reduce the potential of a future disaster. Finally, the emergency management phases have no beginning or end. The recognition of a threat can motivate mitigation as well as an actual emergency can.

**4.1.1 Existing Mitigative Building Construction Requirements:** The City has adopted the following codes designed to ensure that construction will withstand high wind conditions, reduce risk of flooding, reduce exposure of infrastructure, and provide barrier protection from storm surges:

- Standard Building Codes;
- Coastal Code (Destin Ordinance 181) implements SSTD 10-93 (Deem to Comply Manual of the Southern Building Code Congress International), requiring structures City-wide to be built to withstand 110-mph winds;
- Flood Damage Prevention (Destin Ordinance 111) adopts FEMA standards; establishes minimum ground floor elevation enhanced standards for coastal construction;
- Destin Ordinance 152, Land Development Regulations, requires: a) underground utilities in new subdivisions b) 25' setback from water's edge on bays, bayous;
- Shoreline Protection Zone (Destin Ordinance 047) prohibits major structures forward of protection zone, prohibits destruction of primary dune, and requires restoration.
- Competency standards for contractors (Destin Ordinance 207) requires contractors to pass Okaloosa County BLOCK exam or be state certified (unless grandfathered).



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**4.1.2 Preparedness (To Respond):** Preparedness activities are necessary to the extent that mitigation measures have not or cannot prevent disasters. Preparedness activities include the development of response procedures, design and installation of warning systems, exercising emergency operational procedures, and training of emergency personnel.

Training also includes education of public officials, including administrative officials, the Mayor and members of the City Council. In preparedness, governments, organizations, and individuals develop plans to save lives (includes evacuation and re-entry) and minimize disaster damage.

**4.1.3 Response (To Emergency):** Response activities follow an emergency or disaster. These include, rescue operations, emergency medical/care, shelter programming, and other emergency assistance for casualties. They also seek to reduce the probability of secondary damage and to speed recovery operations.

**4.1.4 Recovery (Short and Long Term):** Recovery activities begin after the disaster and continue until all systems return to a normal or improved level. These include repairs to roads, bridges, electrical power, water/sewer and other public facilities and activities that stabilize and restore normal service to a community. Short-term recovery may include necessary restrictions to heavily damaged areas in order to protect and safeguard public health *and* emergency response personnel while responders return vital life-support systems to minimum operating standards. Long-term may continue for a number of years and may include the complete redevelopment of damaged areas.

**4.2 Redevelopment Planning Policies:** Rule 9J-5 of the Florida Administrative Code requires the City to develop goals and policies and a concurrency management system that will ensure mitigation of impacts concurrent with development. It is likely that the City's Capital Improvements Element (CIE), and the level of service documented within, will be rendered ineffective immediately after a hurricane.

Rule 9J-11.006(1)(a)3.c of the Florida Administrative Code provides for emergency amendments to the local comprehensive plan outside of the twice a year amendment procedures. However, it is unlikely that a planning body will be able to assemble the necessary details to submit and adopt an amendment to the comprehensive plan immediately after a hurricane.

Therefore, a procedure which contemplates this must be considered. An emergency ordinance, an enforced re-entry procedure, or a short-term moratorium on building may be implemented. Incorporating the policies of the local government to be exercised in an emergency can legally reinforce planning activities in an emergency situation.



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**REDEVELOPMENT**

**ARTICLE FIVE POTENTIAL MITIGATION POLICIES**

**5.1 Mitigation Policies:** This Article presents a list of potential policies for hazard mitigation. The City acknowledges that often the strongest of mitigative measures is to designate land for conservation, recreation, or open space; however, due to political, legal, and financial repercussions, this may not be feasible.

**5.2 Future Development or Redevelopment:** The following policies should be instituted for future development or redevelopment in the aftermath of a hurricane or any other type of disaster:

- Changes from residential to commercial uses in order to reduce evacuation needs;
- Reduction in residential density (i.e. from multi-family to single-family);
- Residential redevelopment densities not to exceed pre-disaster development without providing enhanced evacuation methods and routes in order to reduce evacuation times;
- Clustering of development away from the Coastal High Hazard Area (CHHA) to the most protected portions of the lots, including developing new street patterns in an attempt to remove structural and physical patterns which increase the susceptibility of development to the hazards of hurricanes, floods, or other natural disasters;
- Building and rebuilding strictly to current code (including flood insurance standards);
- Relocation of public infrastructure away from the hazard zones;
- Reduction of the pre-disaster density of residential development in the CHHA or flood inundation areas through relocation assistance, zoning incentives, or acquisition of open space as defined by the National Flood Insurance Program;
- Assessment of impact fees for public infrastructure and services in hazard zones;
- Transfer of development rights to reduce density; or



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- Land use amendments reducing the densities in the high hazard areas.

**5.2.1 Development Regulation:** Several different regulations may be developed to assist local governments in the implementation of hazard mitigation policies and plans:

- If applicable, sand-fencing will be required at time of permitting;
- Waived or reduced permitting fees for structural upgrades that mitigate future hazards/damages.

**5.2.1.1 Land Use:** A pragmatic approach is one which seeks to reduce the overall quantity of development at risk (such as reducing development density through land-use amendments).

**5.2.1.1.1 Conventional Zoning:** Reduce the quantity of development exposed.

- Local zoning ordinances must be in accordance with the Comprehensive Plan.
- An increase in the minimum lot size or a reduction in the number of dwelling units permitted per acre would decrease the overall density of development.
- Certain high density uses in high hazard areas can be zoned out and declared non-conforming uses through changes in zoning districts, and, in time, a slow process of land use change might be expected. Land development code language should specify that non-conforming buildings may be rebuilt, but only to current standards.

**5.2.1.1.2 Bonus or Incentive Zoning:** Developers may be granted additional development density if projects incorporate hazard-reduction features. These features may include the purchasing and deeding of high hazard lands to the public, or the provision of design features which may increase the ability of structures to withstand hurricane forces. However, it may counteract other hazard mitigation strategies to encourage or permit additional densities in coastal hazard areas, even if public amenities and hazard-reduction features are provided as compensation.

**5.2.1.1.3 Performance Zoning:** This approach sets standards for each zone based on the permissible effects of a development rather than specifically enumerating the types of uses, dimensions, or densities permitted.

**5.2.2. Land and Property Acquisition:** Public acquisition of land can serve to influence the direction and timing of growth and development in a locality. Outright purchase of land in coastal areas experiencing moderate or high levels of market demand will tend to be prohibitively expensive for most local governments. The locality must be prepared, however, to take



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advantage of below-market sales after a hurricane when some property owners may wish to vacate the hazard area due to the increase in cost of rebuilding.

**5.2.3 Transfer of Development Rights (TDR):** The basic concept underlying Transfer of Development Rights is that ownership of land includes the right to develop the land, a right which may be separated from other ownership rights and transferred to someone else. Under a mandatory program, a locality would simply zone the hurricane hazard area so that fewer units of development are allowed (or prohibit new development entirely), and the owner of the land within this zone would then be permitted to transfer all or some of this unused development density to parcels outside of the hazard-prone areas or to sell the TRDs on the open market to others who own land in areas designated for development. The local government would then permit increased levels of development in the non-hazard prone zone as a result of transferring extra development rights.

**5.2.4 Taxation and Fiscal Incentives:** In contrast to the public acquisition of hurricane-prone lands, a taxation policy might seek to reduce development by decreasing the holding costs of open space and vacant lands, in turn reducing the opportunity cost of not developing such lands for more intensive uses.

**5.2.5 Special Assessments and Impact Fees:** Since storm surge is the most destructive force of any hurricane and causes the most damage, Federal Emergency Management Agency statistics establish that people who build in and inhabit coastal hazard areas impose substantially more costs on the public than those who reside elsewhere. An impact fee could be designed to recoup and mitigate the overall impacts of a project or development on the community at large.

**5.3 Capital Facilities and Public Infrastructure Policy:** Coastal development-its type, location, density, and timing-is highly influenced by capital facilities, such as roads, sewer and water services, electricity. Such public investments have been aptly termed "growth shapers."

**5.3.1 Policies to Prevent Location of Public Facilities in High Risk Areas:** A locality can develop a specific set of capital facilities extension policies designed to avoid high hazard areas, thus reducing the amount of development and property which will be attracted to the area and reducing the potential threats to lives and property. This approach can only become an effective deterrent, however, if development in high hazard areas is dependent upon the existence of public facilities.

**5.3.2. Relocation or Strengthening of Capital Investments After a Hurricane:** It may be possible, if the facilities are sufficiently damaged, that roads and sewers can be rebuilt in areas which are less susceptible to damage from future hurricanes. Even if the facilities are not relocated, they may be repaired and reconstructed in ways that make them stronger or less susceptible to hazards from hurricanes or other disasters. Roads and sewers can be elevated,



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for instance, and sewer and water lines can be flood-proofed. Also, placing power and telephone lines underground after the hurricane may help ensure safer evacuation when the next hurricane threatens.

**5.4 Information Dissemination:** More informed consumers make more rational and allocable efficient market decisions. This implies the need for an additional set of mitigation strategies which aims primarily at supplementing and enlightening individual market decisions regarding hurricane preparedness, recovery, and redevelopment. Attempts to educate the housing consumer about hurricanes might include brochures and other materials distributed to new and prospective residents of the community, informing them about what to look for in a new home or business (such as elevation and flood-proofing). The dissemination of information on the supply side might take the form of construction practice seminars for coastal builders and developers, introducing both conventional and innovative approaches to building and designing structures, and to siting and planning the orientation of buildings in vulnerable locations.



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**REDEVELOPMENT**

**ARTICLE SIX**

**DAMAGE ASSESSMENT PROCESS**

**(Cross-Reference: Destin Disaster Preparedness Plan)**

**6.1 Damage Assessment.** One of the most important parts of Destin's response to an emergency or disaster situation is damage assessment. It is a key step in caring for the long-term needs of the people in the community. The process determines what has happened, what the effects are, which areas are hardest hit, what situations must be given priority, and what types of assistance are needed (e.g. local, state, or federal).

**6.2 Damage Assessment Teams.** Trained observers will be used to assess damage. This will be accomplished by the local Damage Assessment Team (DAT), reference Article 3, Section 3.4. To conduct an accurate damage survey, local governments must have capable DATs. These teams should be identified and trained in advance of the disaster. The composition will vary depending on the severity, type of damage, and the availability of personnel. Each team should have a team leader who makes sure the team has the proper forms, maps with identified areas marked, and transportation. During joint damage assessment activities involving the State/FEMA, the City should have a team member to match up with State and Federal DAT members at all times.

**6.3 Sequence of Events Leading to a Presidential Declaration.** Public Law 100-707, the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, which is the authorization for Federal assistance to local or state governments through a Presidential Declaration of an emergency or major disaster, requires "as a condition of any disaster loan or grant made under the provisions of this Act, the state or local government shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are to be used shall be evaluated and appropriate action shall be taken to mitigate such hazards, including safe land use and construction practices, in accordance with standards prescribed or approved by the President after adequate consultation with appropriate elected officials of general purpose local governments, and the state shall furnish such evidence of compliance with this section as may be required by regulation"(FEMA, 1989). The following sections explain how a Declaration is secured and how local governments get involved.



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**6.3.1 Local Declaration of Emergency.** Local jurisdictions have the authority to declare a local "state of emergency" pursuant to Section 252.38(3)(a)5 of the Florida Statutes. A local state of emergency must be declared prior to requesting response or recovery assistance from the county/state. Doing so informs decision-makers that the emergency situation is beyond the response or recovery capabilities of the local jurisdiction. The State will not initiate the damage assessment process, nor seek a Presidential Declaration for a city that has not declared a local state of emergency.

The enactment of such a declaration would enable municipalities/counties to:

- Enforce re-entry procedures into heavily damaged areas and restrict habitation in those areas until the infrastructure necessary for public health and safety is restored;
- request State assistance, if needed;
- invoke emergency related mutual-aid assistance; and
- waive the procedures and formalities otherwise required of the political subdivision, by law, to respond to the emergency.

These measures pertain to:

- the performance of public works;
- entering into contracts;
- incurring obligations;
- hiring permanent/temporary workers;
- using volunteers;
- securing rental equipment;
- the acquisition and distribution of supplies; and
- the appropriation and expenditure of public funds.



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**6.3.2 Initial Damage Assessment.** Immediately following a disaster, an initial damage assessment must be performed by the City to assess the impact of the disaster. The Public Works Director will be designated to conduct this generalized, preliminary post-disaster damage assessment and provide it to the City administration within 24 hours. (Appendix A, "Windshield Survey" Form.) This assessment should provide a rough estimate of the type and extent of the damage. Often this will require the coordination of the various municipal and county governments, who will also perform their own damage assessments. Once the information has been generated, it should be transmitted to the city administration by telephone or facsimile and followed up with a submittal of a State of Florida Situation Report Form (Appendix B). Often in the aftermath of a major disaster that has generated obvious, extensive damages, the State and FEMA, upon request, will join the local government in completing the initial damage assessment.

**6.3.3 Preliminary State/Local Assessment.** In situations where it is not an obvious conclusion that a disaster has had a major impact on the City, the State will initiate a local damage assessment. The action is taken to document the severity of the impact and justify the need to pursue a request for Presidential Declaration. When the damage is of such a magnitude that it would appear a Declaration is imminent, this assessment would be combined with FEMA, thereby eliminating this step and the assessment process. If this step is initiated, local jurisdictions can expedite the process by having the appropriate maps of the damaged areas, personnel, and transportation available to take State damage assessors to affected sites. The more expeditiously the data can be collected, the quicker a potential disaster Declaration can be obtained.

**6.3.4 State of Emergency by the Governor.** If the City determines the emergency or disaster is beyond its ability to effectively respond, a state of emergency can be declared by the Governor through an executive order or proclamation. The action of the governor will be in support of the local jurisdiction's expressed needs. The Declaration of a state of emergency does the following:

- activates the emergency response, recovery, mitigation phases of the State and local emergency management plans; and
- provides authority for mobilization and deployment of all resources to which the plans refer, pursuant to Section 252.31-60, Florida Statutes, or any other provisions of law relating to emergencies.

**6.3.5 Preliminary Federal/State Damage Assessment.** Prior to recommending a disaster declaration for the City, FEMA will perform a damage assessment to determine if there are sufficient damages to justify a request for a Presidential Declaration. If it is obvious that there is sufficient damage for such a request, FEMA will be asked to participate in a joint local/State preliminary damage assessment to further substantiate the request. This approach will eliminate the need to conduct separate local, State, and Federal assessments. The data collected during



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the preliminary damage assessment will be used by the State when preparing the formal request for Federal disaster aid.

**6.3.6 Request for Presidential Disaster Declaration.** When State and local resources are inadequate to effectively respond to an emergency or major disaster, Public Law 100-707 allows for Federal assistance through a Presidential Disaster Declaration. This assistance is requested through the Governor if the situation meets the criteria for a Declaration. The Governor submits a written request to the President through the Federal Emergency Management Agency, Region IV, in Atlanta, Georgia. If FEMA concurs with the request, it is sent to the President, who determines whether the request will be approved or rejected. The response is transmitted through FEMA, Region IV, back to the Governor.

**6.4 Public and Private Damage Assessment.** In the aftermath of a disaster, both public and private damage assessments must be performed because of the corresponding types of Federal/State assistance available. Each type of assessment is designed to quantify the eligible amount of damage a community incurred. Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Hazard Mitigation Grant Program, creates a new program to fund additional hazard mitigation measures "which substantially reduce the risk of future damage, hardship, loss, or suffering in any area affected by a major disaster." Specifically, this program can be used to relocate susceptible property that was not damaged by a hurricane and prevent it from future damage. Hence, this section provides an opportunity for the disaster area to fund large scale mitigation land use scenarios that previously were not funded by the Federal Emergency Management Agency (FEMA). Section 406 provides an assistance program for public relocation projects such as roadways. Section 406 authorizes "Large In-Lieu Contributions" for public and certain private nonprofit facilities. If the local government or landowner determines that the public welfare would not best be served by repairing, restoring, or replacing the damaged facility, it may elect to receive a contribution not to exceed 65% of the federal contribution of eligible work of repair.

**6.4.1 Public Damages.** With the expansion of FEMA regulations addressing hazard mitigation assistance for public facilities (Hazard Mitigation Grant Program, section 404), it is more important than ever for local governments to have identified mitigation measures prior to a declaration. This includes any damage incurred by a publicly owned structure or facility. This could include roads, bridges, buildings, utilities, etc. To be eligible, the damages must fall in one of the seven basic categories of eligibility. They include:

Category A Debris Clearance -This includes all storm-induced debris on public roads, including the rights of way; other public property; and private property when undertaken by local government forces. It can also cover the cost of public structure demolition when a structure was made unsafe by the disaster.

Category B Emergency Protective Measures -This addresses a need to provide



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emergency measures designed to protect life, safety, property, and health. For example, evacuation, traffic control, barricades, etc.

Category C Road Systems -This includes roads, streets, bridges, culverts, and traffic control devices. The categories of damage might range from some minor damage requiring repairs to complete wash-out or destruction.

Category D Water Control Facilities -This includes dikes, levees, dams, drainage channels, irrigation works, and harbor flushing device.

Category E Public Buildings and Equipment -This includes the damage or destruction to buildings, supplies and/or inventory, vehicles or equipment.

Category F Public Utility Systems -This includes the water system, sanitary sewers, storm drains, light, power, and other utilities.

Category G Other -This includes park and recreational facilities, public facilities under construction, and other public facility damages that do not reasonably fit in one of the six other categories.

**6.4.1.1 Public Damage Assessment Reporting.** Public damage assessment is performed in the field using Form A (Appendix C). It is used to report the damage done on each individual site. Three individual site entries can be made on each form. Once the public damage information has been collected on Form A, Form B is used to summarize, by category, information gathered at all sites that received damage to public property (Appendix C). Documentation of damages by photograph and video camera should also be compiled at this time.

**6.4.2 Private or Business Categories.** The purpose of individual damage assessment is to determine the extent to which individuals and private businesses have been impacted by the disaster. There are two basic categories of eligible damage that can be reported and assessed for damages. They include:

Damage to Private or Individual Dwelling-a person whose residence has been damaged by a disaster may qualify for various forms of disaster assistance. Water damage on the interior or wind damage to shingles, windows, or siding are examples. Mobile homes should be included in this category as a separate entry.

Damage to Businesses-privately owned businesses that were damaged or destroyed by the disaster can qualify for individual assistance programs. Businesses include buildings, inventory, and equipment.



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**6.4.2.1 Individual Assessment Forms.** Performing damage assessments to quantify individual loss and suffering is much different from performing public damage assessments. By using the Habitability Assessment Form (Appendix D), the building official and his team are able to document the extent of individual damages to homes and businesses.



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**ARTICLE SEVEN**

**DISASTER RECONSTRUCTION AND REDEVELOPMENT**

**7.1 Intent:** Following a disaster and enactment of a building moratorium, it is the intent of the City to allow rebuilding and redevelopment in an orderly manner. The City will control the issuance of building permits to manage the location, timing, and sequence of reconstruction and repair. It is further the intent of this Article that the City establish, prior to a disaster, a special Reconstruction Task Force as defined in Article 3, Section 3.5 of this Plan. The Task Force will oversee the recovery and reconstruction process and serve as an advisory body to the City Council on reconstruction/redevelopment issues. The main responsibility of this body will be to identify opportunities to mitigate future storm damage through the management of redevelopment standards. To further the intent of this Article, the City will identify and orchestrate various post-disaster reconstruction resources, while at the same time ensuring maximum local controls over the reconstruction and redevelopment process.

**7.2 Disaster Reconstruction/Redevelopment:** Reconstruction and redevelopment following a disaster address the removal, relocation, or structural modification of damaged structures for both short and long-term repair or replacement. As a condition of any Federal disaster loan or grant, the City shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are to be used shall be evaluated, and appropriate action shall be taken, to mitigate such hazards, including responsible land use and construction practices; thus indicating a long-term, comprehensive approach to mitigation.

**7.2.1 Determination of Damage:** A primary task of the local Damage Assessment Team is to identify structures which, as a result of the disaster event, have been damaged. The local Damage Assessment Team will recommend to the City administration those structures which have: 1) been destroyed; 2) received major damage; and 3) received minor damage. The Building Official will then place each structure in one of the above categories.

**7.2.2 Declaration of a Building Moratorium:** An initial post-storm reconstruction moratorium shall be declared in effect upon the occurrence of both of the following:

**7.2.2.1** The City is declared a disaster area by either the Governor of the State of Florida or the President of the United States.

**7.2.2.2** The Mayor declares a local "state of emergency" and begins the initial building moratorium when the City Council finds that a moratorium is necessary for the protection of lives, safety, and property; or due to the inability of the City to maintain acceptable levels of public order and service. The City Council, based upon the above finding, may extend the initial moratorium until such time as a state of emergency no longer exists.



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**7.2.3 Initial Building Moratorium:** Upon the declaration of a building moratorium, the initial post-moratorium shall be in effect for a minimum period of 72 hours. No building permits shall be issued during this time period. After expiration of this initial moratorium, the following moratoria shall apply:

**7.2.3.1 Destroyed Structure Moratorium:** No building permit shall be issued within thirty (30) days following the expiration of the initial moratorium for the replacement of any structure which has been destroyed, as defined in Section 3.3 of this Plan. All the replacement buildings shall meet the requirements of the current land development codes, Comprehensive Plan, land use map, zoning maps, FEMA Flood Insurance Rate Maps, and all applicable sections of City Ordinances and applicable building codes prior to the issuance of a building permit. Non-conforming land uses destroyed shall be designed and constructed consistent with the current adopted Future Land Use Plan Map, Land Development Code, and building regulations.

**7.2.3.2 Major Damaged Structures Moratorium:** No building permit for repairs of a major damaged structure shall, as defined in Section 4.2 of this Plan, be issued for at least seven (7) days following the expiration of the initial moratorium. All repairs to a major damaged structure shall meet the requirements of the current land development codes, Comprehensive Plan, land use map, zoning maps, FEMA Flood Insurance Rate Maps, and all applicable sections of City Ordinances and applicable building codes prior to the issuance of a building permit; and will be inspected prior to issuance of Certificate of Occupancy.

**7.2.3.3 Minor Damaged Structures Moratorium:** Permits for the repair of minor damaged structures, as defined in Section 4.1 of this Plan, may be issued 48 hours following the expiration of the initial moratorium. All repairs to minor damaged structures shall meet the requirements of the current land development codes, Comprehensive Plan, land use map, zoning maps, FEMA Flood Insurance Rate Maps, and all applicable sections of City Ordinances and applicable building codes prior to the issuance of a building permit.

**7.2.3.4 Outstanding Building Permits Moratorium:** All inspections shall be suspended for a minimum period of thirty (30) days following the expiration of the initial moratorium, unless upon finding by the City Building Official, on a case-by-case basis, with sufficient inspection staff available to adequately inspect the structures, that construction may again resume. All permits issued prior to the disaster event must meet any additional requirements of the current land development codes, Comprehensive Plan, land use map, zoning maps, FEMA Flood Insurance Rate Maps, and all applicable sections of City Ordinances and applicable building codes before building can resume.



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**7.2.3.5 Site Plan Review:** Site plans which have been submitted to the City prior to the disaster shall not be reviewed by the staff, Planning Commission, Technical Review Committee, or City Council for a period of thirty (30) days following the expiration of the initial moratorium. All submitted dates and review periods shall be adjusted accordingly to reflect a time period covered by this thirty (30) day moratorium.

**7.2.3.6 Review Procedures Moratorium:** No new site plans, zoning requests, or subdivision plats shall be accepted by the City for a period of thirty (30) days following the expiration of the initial moratorium. All submittal dates and review periods shall be adjusted accordingly to reflect the time period covered by this thirty (30) day moratorium.

**7.2.3.7 Duration of Moratorium:** All moratoria other than the initial moratorium as in Section 8.2.3 shall be in effect for the length of time described above and may be cancelled or extended by the City Council.

**7.2.4 Emergency Repairs:** While a moratorium is in effect, no construction or reconstruction activities may be undertaken, except in only minor interior repairs and emergency repairs necessary to prevent injury or loss of life or imminent collapse or other substantial additional damage to the structure. For illustrative purposes only, items that constitute minor repair may include temporary roof repairs to avoid further water damage, minor repairs to steps and a temporary shoring up of a structure to avoid imminent collapse.

**7.3 Reconstruction Task Force:** The Reconstruction Task Force, created as defined in Section 3.5 of the Plan, shall be activated and mobilized upon the declaration of the initial building moratorium. The Task Force shall advise and make recommendations to the City administration on a wide range of post-storm reconstruction issues; including evaluating the projected workload for managing the recovery and reconstruction process and recommending the hiring of temporary workers or contracting portions of the workload to specialists. The City Manager shall approve or disapprove such recommendations.

**7.3.1 Responsibilities of the Reconstruction Task Force:** The Reconstruction Task Force's primary function is to receive and review damage reports and other analyses of post-storm circumstances and to compare these circumstances with mitigation opportunities identified prior to the storm to discern appropriate areas for post-storm change and innovation. When needed, the Reconstruction Task Force can review in a more specific fashion alternative mechanisms for bringing these changes about and recommend the coordination of internal and external resources for achieving these ends. The Reconstruction Task Force will use Okaloosa County's adopted Local Mitigation Strategy (LMS) to guide its mitigation proposals. (The LMS is updated yearly by the City of Destin.)



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**7.3.2 Review and Mitigative Recommendations:** In addition to the responsibilities above, the Reconstruction Task Force shall review the nature of damages, identify and evaluate alternative program approaches for repairs and reconstruction, and formulate recommendations for handling community recovery. The Task Force shall also have the following responsibilities:

- Recommend land use and rezoning changes in areas of damage;
- Recommend reduction in residential density (i.e. from multi-family to single family)
- Change from residential to commercial or mixed use in order to reduce evacuation needs;
- Set a calendar of milestones for reconstruction tasks in conjunction with the City administration;
- Ensure that building and rebuilding is strictly to current code;
- Maintain schedule for repairs to critical water, sewer, and other facilities;
- Recommend the expiration or extension of a moratorium for "major" and "minor" repairs;
- Recommend the expiration or extension of a moratorium for new development;
- Evaluate hazards and the effectiveness of mitigation policy and recommend the amendment of policies if necessary;
- Recommend clustering of development on the most protected portions of lots;
- Initiate recommendations for negotiations for relocation and acquisition of property;
- Recommend relocation of public infrastructure and services in hazard zones; and
- Participate in Federal hazard mitigation planning.

The Task Force shall recommend any changes in subdivision regulations and the land development code; i.e., setback, density, height, elevation requirements, building codes, or any other ordinances or land uses which it deems necessary or advisable to prevent a recurrence of a disaster of this nature. Within the coastal high hazard area, the City shall allow no new



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permanent residential structures that do not meet the construction standards in the current Land Development and Building Codes.

**7.3.3 Non-Mitigative Recommendations:** The Reconstruction Task Force may also undertake a similar process for non-mitigative local objectives and opportunities. The Task Force may recommend the City Council's consideration for the following specific opportunities:

- enhancement of local recreational and open space opportunities;
- enhancement of public access to the shoreline;
- enhancement and restoration of local natural ecosystems;
- reduction of traffic congestion, noise, and other traffic-related problems;
- enhancement of the long-term economic vitality of the local commercial and industrial base; and
- other objectives which further the stated goals and policies of the City's Comprehensive Plan and Land Development Code.

**7.4 Conditions for Issuance of Building Permits:** Upon expiration or cancellation of an applicable building moratorium enacted in Section 7.2.2 of this Plan, the following additional requirements, in addition to all applicable land development codes, shall be met prior to issuance of a building permit. Permitting of new development and redevelopment in the coastal high hazard area shall also be in consideration of impacts on hurricane evacuation times.

**7.4.1 Destroyed Structures:** The following additional requirements must be met prior to the issuance of any building permit for construction of a replacement structure:

- Septic system capped/closed and sewer provided to street frontage of lot, if possible.
- A post-storm survey and site plan, as applicable, of the lot and proposed structure.
- Site plan approval as provided by current applicable Land Development Code, including the location of all property lines.



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- On-site inspection of lot by City Building Official or his representative. \*The Building Official shall, after consultation with the Community Development Director, City Engineer, and County Emergency Manager, identify land parcels or lots that are destroyed and replaced by tidal waters and determine if they meet minimum dimensional requirements.
- Water and sewer will be restorable at street frontage of lot.
- Direct, uninterrupted, approved vehicular access to lot.
- Electrical service restorable to building site.
- All debris removed from lot.

**7.4.2 Major Damaged Structures:** The following additional requirements must be met prior to issuance of a building permit for a major damaged structure:

- A post-storm survey and/or site plan, as applicable, of the lot and structure if there is a proposed increase of footprint of a structure over the pre-storm structure. In addition, the following information shall be provided on a survey/site plan:
  1. the location of all property boundary lines
  2. require the upgrading of non-conforming structures
  3. site plan approval
  4. on-site inspection of lot by City Building Official or his representative
  5. water and sewer will be restorable on street frontage of lot -direct, uninterrupted, approved vehicular access to lot -electrical service restorable to building site
  6. septic system capped/closed and sewer provided to frontage of lot, if possible



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**7.4.3 Minor Damaged Structures:** The following additional requirements must be met prior to issuance of a building permit to repair a minor damaged structure:

- A post-storm survey and/or site plan, as applicable, of the lot and structure if there is a proposed increase in the footprint of the structure over the pre-storm structure. In addition, the following information shall be provided on the survey/site plan:
  1. the location of all property boundary lines
  2. site plan approval
  3. on-site inspection of lot by the City Building Official or his representative
  4. vehicular access to lot -all debris removed from lot
  5. septic system capped/closed and sewer provided to frontage of lot, if possible.

**7.5 Policy on Reconstruction of Roads, Easements, and Infrastructure:** Provide public roads, public facilities and services which guarantee to the greatest extent possible the health, safety, and welfare of the community and which do not require future expenditures for the public infrastructure in the Coastal High Hazard Area.

**7.5.1 Public Facilities:** Repair in place facilities which are essential to the immediate health, safety, or welfare of citizens, or work to provide the impaired service to residents through alternative means. The City shall coordinate the planning and provision of emergency water and sewer services with Destin Water Users and Okaloosa County. This shall include, but not be limited to, executing and entering into local agreements, locating and inventorying existing lines, installing meters, and conducting engineering studies to determine the amount of pressure/capability available as compared to required. In case of an emergency disaster affecting water and sewer facilities, contact the Okaloosa County Emergency Management Director. Also, for emergency water supply to critical areas, contact Destin Water Users and South Walton Utilities.

**7.5.2 Public Roads and Easements:** Prior to the consideration of an expenditure of public funds for the repair or construction of City roads which are destroyed or damaged by a disaster, the City shall conduct adequate studies and explore alternative solutions, including, but not limited to, abandonment procedures, special assessment, and condemnation.

**7.5.3 Infrastructure:** No public infrastructure shall be allowed in the coastal high hazard area except for that needed to provide public access to the shoreline, to serve public parks that have been approved by the City, state and federal agencies, and to protect or enhance natural



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resources. Public expenditures in the CHHA shall be limited to maintaining the existing service capacity, except for recreation facilities. Provision of water and sewer service at private expense to existing lots of record will be permitted, as long as such provision does not result in conflict with policies for: criteria adopted for determining when structures can be rebuilt; the land development regulations; and the state policy to limit public expenditures that subsidize development permitted in coastal high hazard areas, except for enhancement of natural resources. New sanitary sewer facilities in the coastal high hazard area shall be flood-proofed.

**7.5.4 Private Roads and Easements:** It shall be the policy of the City not to expend public funds for the repair or reconstruction of any private road or vehicular easement where it is damaged or destroyed as a result of a disaster, except as emergency access for the public health and safety (an emergency protective measure).

**7.6 Acquisition of Property:** The aftermath of a disaster can present an opportunity to achieve substantial progress in hazard mitigation by the rapid acquisition of land. The City will take advantage of opportunities which may arise to acquire or purchase land following a disaster. To this extent, the City will identify priority areas and will develop decision-making and funding mechanisms to ensure their rapid acquisition. The selection of parcels to be purchased based on a criterion of hazard reduction per dollar spent could maximize the use of public money for such a program. The City shall identify acquisition areas which would satisfy multiple community objectives, including, but not limited to, beach access, open space, parks and recreation sites, historic or scenic areas, or areas for location of City facilities and any other use allowed by law.



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**ARTICLE EIGHT**

**FEDERAL ASSISTANCE PROGRAMS AND PROCESS**

**8.1 Federal and State Disaster Aid Programs.** There are a large number of Federal and State programs available to aid in disaster relief and reconstruction. The programs can provide assistance or funds to local government units as well as provide information about assistance that is available to individuals, businesses, families, and non-profit associations. Some programs can only be implemented upon declaration of a major disaster by the President of the United States. Other programs can be made available independently of a Presidential Declaration or a major disaster or emergency.

**8.2 Policy.** It should be the policy of the City to appoint the Emergency Management/Grants Coordinator to be responsible for:

- determining the types of assistance available to the City and the type of assistance most needed
- assisting in the coordination of Federal disaster recovery efforts
- coordinating Federal and State programs of assistance
- informing the community of types of assistance programs available
- recommending to the Recovery Task Force and the City administration programs which are available to the City and then act as facilitator in securing these programs

**8.3 Federal Assistance Process.** When all of the eligible public and individual damages have been assessed, and the request for a Presidential Disaster Declaration has been prepared and approved by the President, a variety of Federal programs can be made available to public entities and individuals. These programs are designed to bring a community and its residents back to a pre-disaster condition. It is important to note that there are no longer separate public and individual disaster declarations. When a Presidential Disaster Declaration is approved, both individuals and public assistance are automatically offered. The following is a brief explanation of both types of assistance.

**8.3.1 Public Assistance.** Public assistance is that part of disaster relief through which the Federal government supplements the efforts of State and local governments to return the disaster area to pre-disaster conditions. These efforts primarily address the repair and restoration of public facilities, infrastructure, or services that have been damaged or destroyed. There are two types of public assistance authorized: "emergency" and "permanent" work. Emergency work includes efforts to save lives, protect property, and maintain operation of



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essential facilities on a short-term basis until permanent restoration can be made. Permanent work involves action necessary to repair, restore, reconstruct, or replace public, and certain private non-profit, facilities damaged or destroyed.

Project application for public assistance may be approved to fund a variety of projects that fall within the eligibility categories identified in Section 7.4.1 of this Plan.

**8.3.2 Flood Insurance Requirements.** One very important element in receiving public assistance are the requirements concerning flood insurance. Public Law 100-707 makes it very clear that all applicants for public assistance must have flood insurance. If they do not have flood insurance at the time of the disaster, eligible cost will be reduced by the maximum amount of flood insurance proceeds that applicant could have received had the facility been fully covered by flood insurance. Also, applicants will be required to commit to maintaining insurance coverage for the total eligible amount of the damages as a condition to receive public assistance. No assistance for any facility will be available in future disasters unless the required insurance has been obtained and maintained.

**8.4 Method of Funding.** Recent changes have streamlined the funding methods for public assistance programs. Currently, there are two types of grants (funding methods) available that are based on the cost of the project, and two funding options available, either of which can be used under each of the grants. Each grant is explained below.

**8.4.1 Large Project Grant.** When the total cost to repair or replace eligible public damage is \$48,000 (adjusted annually according to the Consumer Price Index) or more, a large public grant can be secured. Such grants are used to restore public or private non-profit facilities to their pre-disaster condition.

**8.4.2 Small Project Grant.** When the total cost to repair or replace eligible damage is less than \$48,000, a small project grant can be secured. Once approved, these funds are made totally available at the beginning of the project. At its completion, the applicant certifies that the work is completed. The State will perform a final inspection.

**8.5 Funding Options.** The following funding options can be used by the applicant if they feel it will benefit their situation. They are designed to give the applicant a greater degree of flexibility. Both options can be used under large or small project grants, and are voluntary.

**8.5.1 Alternate Projects.** Often, when a community applies for a large or small grant, they will determine that the public welfare would not best be served by repairing, restoring, reconstructing, or replacing a damaged facility. Under the "alternate project" option, the community could receive 67.5% of the original damage estimate for use on: other public facilities, constructing new facilities, or funding hazard mitigation activities. Funds necessary for completing the alternate project would come from local sources.



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**8.5.2 Improved Projects.** When the applicant decides to exceed the original design and value of a damaged facility instead of simply restoring it to its pre-disaster condition, the "improved project" option can be approved. The applicant could receive 87.5% (Federal/State contribution) of the original damage estimate and provide the remaining funds necessary to complete the project.

**8.6 Public Assistance Process.** The process for securing public assistance for a community site, once a Presidential Declaration has been declared, is described below. The process involves all levels of government at various stages.

**8.6.1 Applicants' Briefing (Step 1).** As soon as possible following the President's Declaration of an emergency of major disaster, the State Coordinating Officer and the State Public Assistance Officer will coordinate the applicants' briefing at the local level. This meeting acquaints the applicants with the public assistance process and project administration. Appropriate City personnel should attend the applicant's briefing (namely, the Finance Officer and the Emergency Management/Grants Manager), who will:

- know the general location of all disaster damages;
- have the authority to sign for Federal assistance for the City, including the "Notice of Interest" form (Appendix F); and
- be responsible for recording data and maintaining documentation of time, repairs, and costs.

**8.6.2 Inspector's Briefing (Step 2).** Once Notice of Interest (NOI) forms are collected, they are reviewed to determine the types of public damages applicants have identified. At this point, Damage Assessment Teams (DAT) are formed based on the need expressed in the NOI's. Each DAT should have Federal/State and local membership. These assessors are briefed on their appropriate procedures to do a site-by-site detail damage assessment, and how to prepare a damage survey report.

**8.6.3 Damage Survey Report Preparation (Step 3).** The DATs are then sent into the field. Each damage site is surveyed and a Project Worksheet is prepared. The FEMA DAT member will prepare the Project Worksheet. The State and local DAT members sign it upon completion, certifying that they concur or do not concur with the scope of work and the estimated repair costs.

**8.6.4 FEMA and State Review (Step 4).** As the Project Worksheets are prepared, they are reviewed by FEMA and the State Public Assistance Officer for completeness. Problems are discussed in an effort to resolve them prior to FEMA's formal review.



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**8.6.5 Application Preparation (Step 5).** Once the State has approved the Project Worksheets, a State Project Application is prepared that includes all of these worksheets, and is submitted to the Disaster Recovery Manager (FEMA) for approval.

**8.6.6 Advance Funds (Step 6).** Once the Project Application has been approved, funds are advanced to the State through a letter of credit. For large project grants, the State then forwards the Federal share of the money (75%) to the approved applicants on a cost reimbursement basis. For small project grants, the entire amount of the proposed project (75% Federal share) is forwarded to the applicant.

**8.6.7 Completion of Work (Step 7).** When the "large project" is completed, the applicant will submit a Project Summary of Documentation Form to the Department of Emergency Management, along with a request for final inspection. Once the State has reviewed the Documentation Form, a final inspection will be scheduled. When a "small project" is completed, the applicant must submit to the DEM a certification that the work has been completed in accordance with the Project Application. If the total amount of the grant was not used, the applicant can use the remaining funds for other appropriate purposes, subject to State approval.

**8.6.8 Final Inspection and Certification (Step 8).** The State will perform the final inspection to ensure the project was completed per the scope of work, and certify that the work and cost are in compliance with the provisions of the FEMA/State Agreement.

**8.6.9 Final Payment (Step 9).** For large projects, once the final inspections are completed and any discrepancies are resolved, the applicant will submit a request for final payment.

**8.6.10 Single Audit Act (Step 10).** All recipients of public assistance will be audited per the requirements of the Single Audit Act of 1984, Circular OMB A-128.

**8.6.11 State Approval of Audit (Step 11).** Once the audits are performed, the State must approve the audit report. All audit exceptions and discrepancies will be resolved prior to closing out the project.

**8.7 Individual Assistance.** After the President signs the disaster Declaration, it is important to inform affected individuals of the programs available to them, and to assist them in obtaining any aid to which they may be entitled. To make it convenient for affected individuals to obtain information and assistance, disaster application centers may be established in each of the declared counties. Representatives of Federal, State, local, and volunteer organizations are then made available at these centers to assist disaster victims applying for assistance. There is a wide range of programs providing disaster assistance to individuals including the following:

**8.7.1 Small Business Administration (SBA).** Once implemented, the SBA Program can offer low interest loans to individuals, businesses, and farmers for refinancing, repair, rehabilitation or



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replacement of damaged property (real and personal). A SBA declaration can be independent or in concert with a Presidential Declaration. There must be a minimum of 25 homes or businesses with 40% or more insured losses and/or 5 businesses with economic or physical losses.

**8.7.2 Temporary Housing.** In the event of a presidentially declared disaster, a Temporary Housing Program may be authorized in order to meet the housing needs of disaster victims. The program has several components, including:

**8.7.2.1 Mortgage and Rental Assistance Program.** Applicable for individuals or families who have received written notice of eviction or foreclosure due to financial hardship caused by a disaster.

**8.7.2.2 Rental Assistance.** Provided to homeowners or renters whose dwelling is determined uninhabitable as a direct result of the disaster.

**8.7.2.3 Minimal Repairs Program.** Provides money for owner-occupied, primary residences which have sustained minor damage, and are unlivable as a direct result of the disaster.

**8.7.2.4 Mobile Homes or Other Readily Fabricated Dwellings.** When all other avenues are exhausted, FEMA may initiate the mobile home program. Such homes are moved to, or near, the disaster site and set up. The State of Florida does not have a temporary housing program. Therefore, FEMA will manage the temporary housing program, should it be needed in Florida.

**8.7.3 Individual and Family Grant Programs.** The Individual and Family Grant Program provides grants up to \$10,000 to help families meet serious needs and necessary expenses that are not covered by other governmental assistance programs, insurance, or other conventional forms of assistance. Financial aid can be provided under the following categories:

- medical expenses
- transportation costs
- home repair
- replacement of essential property
- protective measures
- funeral expenses



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75% of the costs are funded by FEMA and 25% by the State and/or the local government. (In 1997, the state of Florida announced that it would match only 12.5% of the costs of a disaster, leaving the local entity to pay 12.5% of the costs in all future disasters.)

**8.8 Disaster Unemployment Assistance.** Individuals unemployed as a result of a major disaster and not covered by regular State or private unemployment insurance programs, will be eligible for unemployment benefits. The weekly compensation received will not exceed the maximum amount of payment under the Unemployment Compensation Program of Florida, and may be provided until an individual is re-employed, or up to 26 weeks after the major disaster is declared, whichever is the shortest period.

Other individual assistance programs that could be activated, if appropriate, are:

- food coupons (U.S. Department of Agriculture)
- food commodities
- legal services
- crisis counseling
- economic injury loans
- tax information
- emergency conservation measures program
- agriculture assistance
- Veterans assistance
- waiver of penalty for early withdrawal of funds or certain time deposits

**8.9 Conclusion.** This Section is designed to briefly describe the sequence of events necessary to secure assistance following an emergency or disaster. More detailed information is available by consulting the "Public Assistance" manual prepared by the Florida Department of Community Affairs, Division of Emergency Management, and the State of Florida Peace Time Emergency Plan.



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**8.10 Additional References.** Other sources of reference for emergency management and post-disaster redevelopment include:

- Okaloosa County Comprehensive Emergency Plan
- City of Destin Disaster Preparedness Plan
- State of Florida Mutual Aid documents
- Okaloosa County Long-term Mitigation Strategy
- Code of Federal Regulations 44 (Emergency Management and Assistance)
- 1999 Tri-State Hurricane Evacuation Study



**City of Destin**

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**Section 5.02.05 Maps**

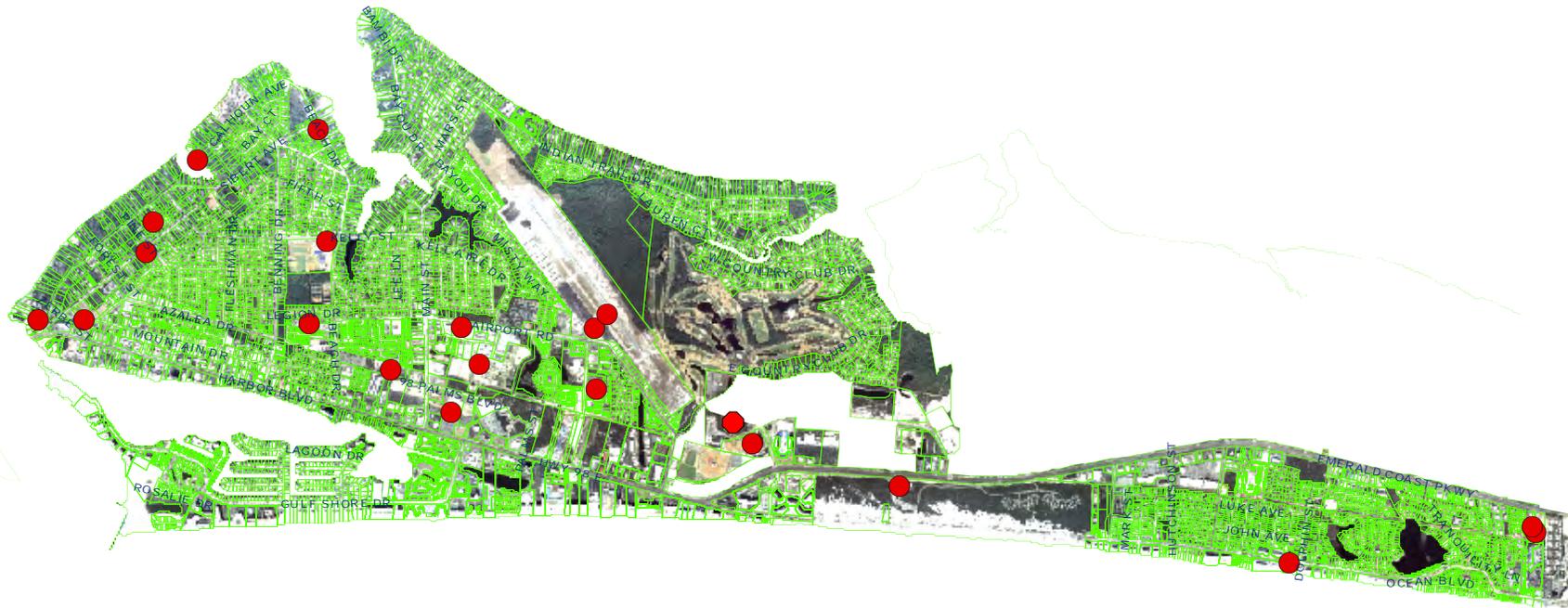
Attached to this page are maps of the City of Destin. They include:

1. Critical Facilities..... 5.02-51
2. Evacuation Zones..... 5.02-52
3. Flood Zones..... 5.02-53
4. Repetitive Loss Properties..... 5.02-54
5. Surge Zones..... 5.02-55
6. Wildfire Level of Concern..... 5.02-56

# City of Destin Critical Facilities

- Parcel Lines
- Critical Facilities

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane: Florida North (0903)  
NAD 1983 (83), NAVD 1988

PUBLIC RECORD:  
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Department of  
Growth Management  
08/18/2010

# City of Destin Evacuation Zones

- Parcel Lines
- Evac Zone A
- Evac Zone B
- Evac Zone C
- Evac Zone D
- Evac Zone E
- Unincorporated

ZONE A = HURRICANE CAT 1

ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



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State plane - Florida North (0903)  
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Department of  
Growth Management  
08/18/2010



# City of Destin Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
Stateplane: Florida North (0903)  
NAD 1983 (9), NAVD 1988

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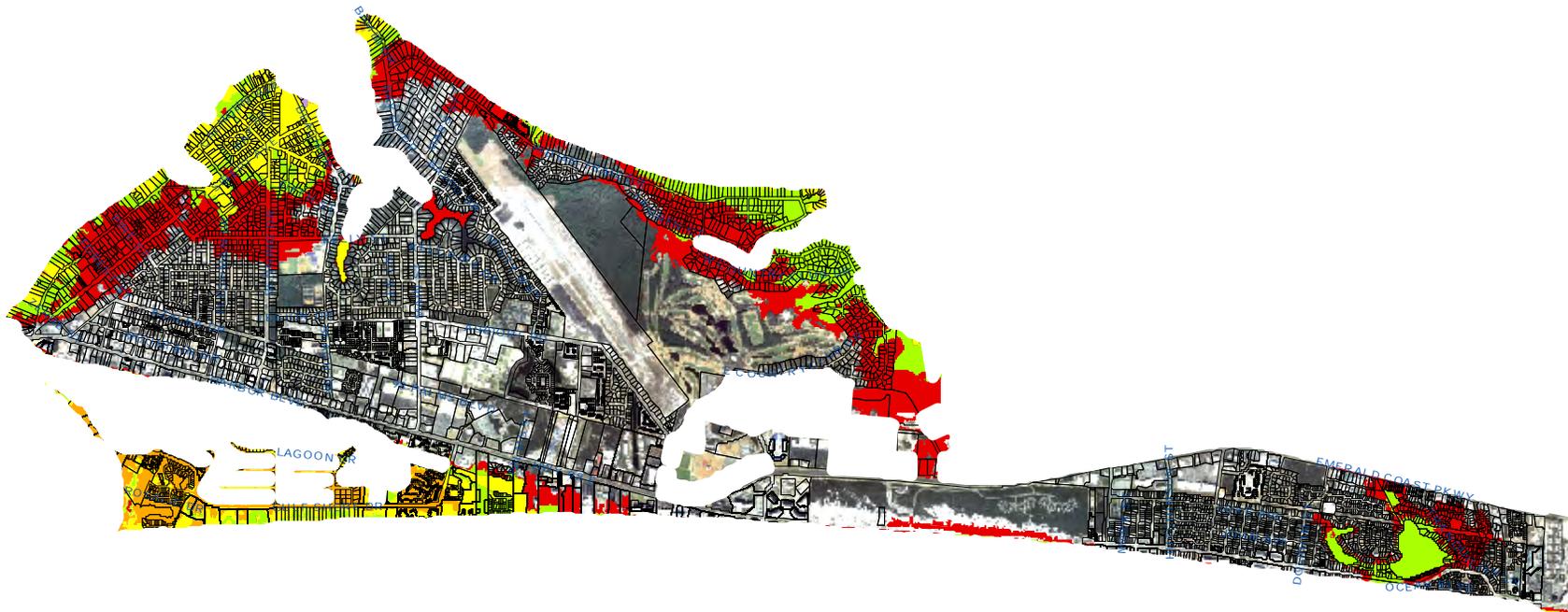


Department of  
Growth Management  
08/18/2010

# City of Destin Surge Zones

- Parcel Lines
- Category 1
- Category 2
- Category 3
- Category 4
- Category 5

Source: West Florida  
Regional Planning  
Council, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane: Florida North (0903)  
NAD 1983 (9), NAVD 1988

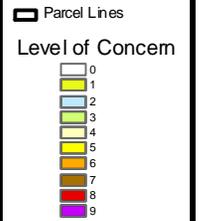
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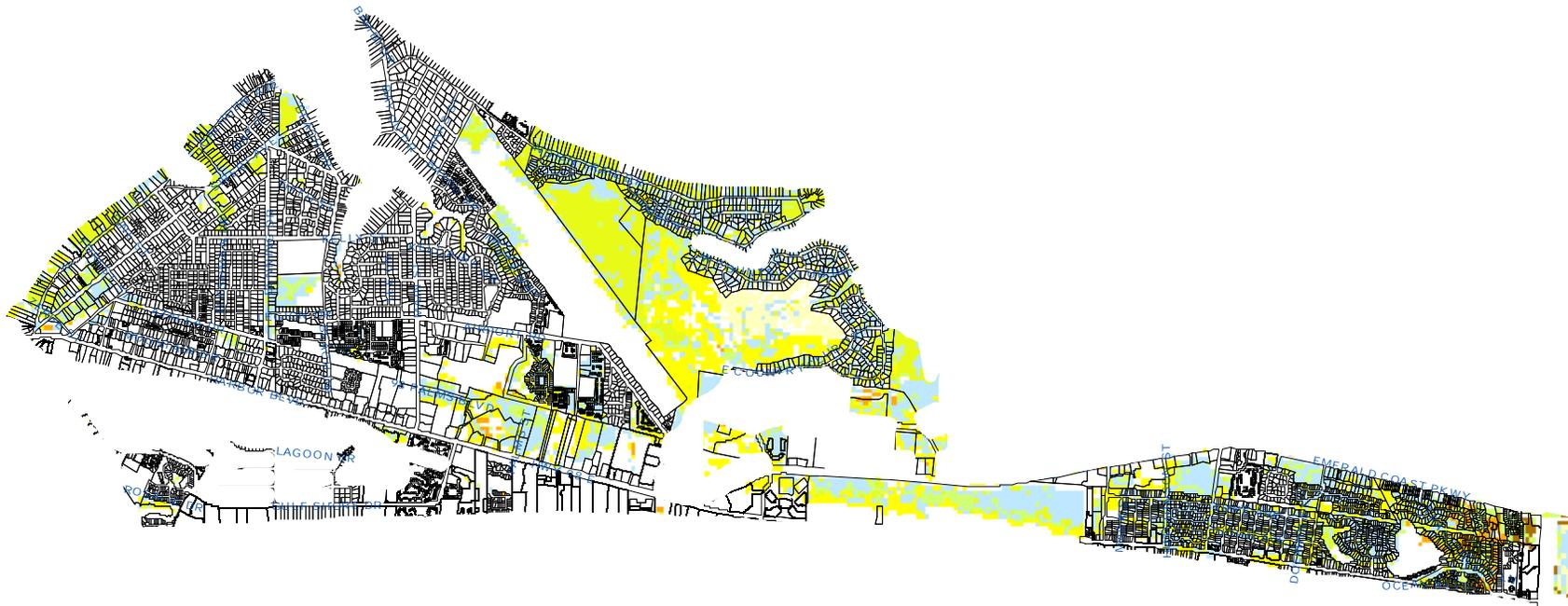


Department of  
Growth Management  
08/18/2010

# City of Destin Wildfire Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
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Department of  
Growth Management  
08/18/2010

# Section 5.03

## City of Fort Walton Beach





## City of Fort Walton Beach

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### **Section 5.03.02 Vulnerabilities**

#### ***Section 5.03.02.01 Introduction***

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Fort Walton Beach.

This section includes a brief summary description of the City of Fort Walton Beach, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Fort Walton Beach. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Fort Walton Beach.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Fort Walton Beach so that mitigation options can be considered in future land use decisions.

#### ***Section 5.03.02.02 Methodology***

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Fort Walton Beach as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### ***Section 5.03.02.03 Summary Description of the City of Fort Walton Beach***

The City of Fort Walton Beach is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 19,507 residents, which makes it the second largest municipality in Okaloosa County by population. Within its jurisdiction, there are 5.43 miles that border Choctawhatchee Bay, 2.17 miles that border Cinco Bayou and 2.56 miles that border Santa Rosa Sound. To characterize the development of the City of Fort Walton Beach, the city has been largely built out, especially along portions of U.S. Highway 98. According to the City of Fort Walton Beach City Planner, most of the development trends within the City of Fort Walton Beach have been in the form of redevelopment in the uptown and midtown areas. There has been some development within the Commerce and Technology Park and a fair amount of waterfront development bordering U.S. Highway 98 and Brooks Street. It is expected that most of the development within the City of Fort Walton Beach will be slow in the coming years and the growth trend will stay in the form of redevelopment.

#### ***Section 5.03.02.04 Vulnerable Populations***

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability



**City of Fort Walton Beach**

for further explanation on these vulnerable populations. The table below displays the City of Fort Walton Beach’s vulnerable populations.

**Table 5.03.02.04.1:** Estimated Vulnerable Populations in the City of Fort Walton Beach, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	18.9%	3569
Language Isolation	1.2%	198
Disabled	32.9%	6001
Single Parent	18.6%	569
Poverty	8.9%	2158
Minority	14.2%	2825

Source: 2010 Census; U.S. Census Population Division

**Section 5.03.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. These properties are more vulnerable to certain hazards than other structures in the City of Fort Walton Beach because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the City of Fort Walton Beach.

**Table 5.03.02.05.1:** Repetitive Loss Properties in the City of Fort Walton Beach

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
City of Fort Walton Beach	\$3,084,659.72	\$581,371.97	118	\$3,666,031.69	49	3

Source: FEMA, 2016

**Table 5.03.02.05.2:** Flood Zones of Repetitive Loss Properties in the City of Fort Walton Beach

Flood Zones	A, AE	V, VE	B, C, X
Totals	34	1	17

Source: FEMA, 2016



**City of Fort Walton Beach**

**Section 5.03.02.06 Hurricane and Tropical Storm**

The City of Fort Walton Beach is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The City of Fort Walton Beach would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Fort Walton Beach's jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.03.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Zone A</b>	0	7	61	0	0
<b>Just Value</b>	\$0	\$1,099,302	\$27,832,245	\$0	\$0
<b>Zone B</b>	1	7	166	0	0
<b>Just Value</b>	\$375,000	\$1,099,302	\$66,370,215	\$0	\$0
<b>Zone C</b>	1	7	166	0	0
<b>Just Value</b>	\$375,000	\$1,099,302	\$66,370,215	\$0	\$0
<b>Zone D</b>	17	64	2305	3	12
<b>Just Value</b>	\$3,509,000	\$11,235,038	\$391,733,239	\$254,843	\$6,041,817
<b>Zone E</b>	38	350	2668	3	82
<b>Just Value</b>	\$5,801,000	\$36,697,748	\$427,575,896	\$254,843	\$24,975,631

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)



**City of Fort Walton Beach**

**Table 5.03.02.06.2:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	2	0
<b>Just Value</b>	\$862,899	\$0
<b>Zone B</b>	22	3
<b>Just Value</b>	\$15,872,198	\$10,942,999
<b>Zone C</b>	49	11
<b>Just Value</b>	\$41,729,638	\$22,616,898
<b>Zone D</b>	94	15
<b>Just Value</b>	\$81,892,033	\$28,357,418
<b>Zone E</b>	420	68
<b>Just Value</b>	\$200,779,053	\$97,594,473

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.03.02.07 Storm Surge**

The City of Fort Walton Beach is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 16.8 feet above the mean high water line along the some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**City of Fort Walton Beach**

**Table 5.03.02.07.1: Vulnerable Residential Structures to Storm Surge**

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Surge Level 1</b>	11	32	328	0	4
<b>Just Value</b>	\$2,905,000	\$7,496,362	\$163,959,600	\$0	\$3,841,325
<b>Surge Level 2</b>	11	34	366	0	4
<b>Just Value</b>	\$2,905,000	\$7,955,760	\$174,581,972	\$0	\$3,841,325
<b>Surge Level 3</b>	17	62	2080	1	12
<b>Just Value</b>	\$3,509,000	\$11,143,018	\$380,132,303	\$99,046	\$6,127,812
<b>Surge Level 4</b>	17	62	2080	1	12
<b>Just Value</b>	\$3,509,000	\$11,143,018	\$380,132,303	\$99,046	\$6,127,812
<b>Surge Level 5</b>	38	364	2705	2	88
<b>Just Value</b>	\$5,801,000	\$37,672,814	\$449,344,621	\$181,175	\$27,479,384

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Table 5.03.02.07.2: Other Vulnerable Structures to Storm Surge**

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>
<b>Surge Level 1</b>	16	5
<b>Just Value</b>	\$18,020,665	\$10,458,543
<b>Surge Level 2</b>	25	6
<b>Just Value</b>	\$23,360,592	\$13,952,006
<b>Surge Level 3</b>	37	10
<b>Just Value</b>	\$37,938,990	\$22,606,669
<b>Surge Level 4</b>	75	13
<b>Just Value</b>	\$78,822,003	\$27,487,071
<b>Surge Level 5</b>	402	67
<b>Just Value</b>	\$193,837,495	\$53,003,282

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)



**City of Fort Walton Beach**

**Section 5.03.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Fort Walton Beach is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Fort Walton Beach. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. There are 188 structures located in the AE flood zone, 11 in the VE flood zone, and 7 in the A flood zone. The cumulative 'just value' for all those structures is \$91,226,104. The following table depicts the vulnerable structures located in the AE and VE flood zones in the City of Fort Walton Beach.

**Table 5.03.02.08.1:** Structures Located in Flood Zones in the City of Fort Walton Beach

	AE Flood Zone	Just Value	VE Flood Zone	Just Value	A Flood Zone	Just Value
<b>Condominium</b>	5	\$1,220,000	0	\$0	0	\$0
<b>SFR-Townhouse</b>	13	\$3,098,556	3	\$444,876	0	\$0
<b>Single-Family</b>	134	\$38,860,077	6	\$3,622,911	0	\$0
<b>Multi-Family</b>	1	\$1,510,637	0	\$0	0	\$0
<b>Commercial</b>	25	\$7,926,781	1	\$282,241	5	\$7,644,534
<b>Government/Institutional</b>	9	\$17,966,062	1	\$4,640,607	2	\$2,424,179
<b>Critical Facility</b>	1	\$1,584,643	0	\$0	0	\$0

Source: Okaloosa County Department of Growth Management, 2010

**Section 5.03.02.09 Land Erosion**

The City of Fort Walton Beach is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Fort Walton Beach. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

**Section 5.03.02.10 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Fort Walton Beach. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally



**City of Fort Walton Beach**

vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Fort Walton Beach.

**Table 5.03.02.10.1:** Vulnerable Residential Structures to Severe Storms in City of Fort Walton Beach

Total:	Condominium	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
	43	391	2,966	0	92
Just Value	\$7,021,000	\$42,307,395	\$531,028,243	\$0	\$33,571,343

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.03.02.10.2:** Other Vulnerable Structures to Severe Storms in City of Fort Walton Beach

Total:	Commercial	Government/Institutional
Surge Level 1	1,084	175
Just Value	\$598,978,252	\$226,781,240

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.03.02.10.01 Tornado and Waterspout**

The City of Fort Walton Beach is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Fort Walton Beach that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Fort Walton Beach are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Fort Walton Beach, has a medium risk, 1 in 250 per year, of a tornado event occurring.

Because waterspouts occur over water, the areas in the City of Fort Walton Beach most susceptible to damage from waterspouts are those located on the Choctawhatchee Bay and Santa Rosa Sound. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable



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## City of Fort Walton Beach

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to damage. There are 145 structures along the City of Fort Walton Beach's coastline. The cumulative 'just value' of those structures is \$78,074,711. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable due to the unavailability of relevant studies.

### **Section 5.03.02.10.02 Thunderstorms and Lightning**

The City of Fort Walton Beach is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Fort Walton Beach, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.03.02.10.03 Winter Storms**

The City of Fort Walton Beach is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Fort Walton Beach is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Fort Walton Beach is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Fort Walton Beach are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Fort Walton Beach that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.03.02.11 Heat Wave and Drought**

The City of Fort Walton Beach is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Fort Walton Beach are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

### **Section 5.03.02.12 Wildfire**



**City of Fort Walton Beach**

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Although the City of Fort Walton Beach is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following tables depict the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.03.02.12.1: Medium to High Wildfire Level of Concern for Residential Structures**

Total:	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
Level 4	2	9	0	1
Just Value	\$204,124	\$2,756,545	\$0	\$4,353,046
Level 5	2	2	1	0
Just Value	\$157,349	\$1,162,787	\$23,442	\$0
Level 6	0	2	0	0
Just Value	\$0	\$456,711	\$0	\$0
Level 7	0	1	0	0
Just Value	\$0	\$236,512	\$0	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)



**City of Fort Walton Beach**

**Table 5.03.02.12.2:** Medium to High Wildfire Level of Concern for Other Structures

Total:	Commercial	Government/ Institutional
Level 4	11	10
Just Value	\$21,010,820	\$30,060,518
Level 5	19	14
Just Value	\$36,742,968	\$50,726,074
Level 6	5	3
Just Value	\$12,689,911	\$20,620,177
Level 7	4	3
Just Value	\$4,376,816	\$10,250,475
Level 8	9	4
Just Value	\$16,766,717	\$18,773,420
Level 9	2	4
Just Value	\$4,468,729	\$19,233,069

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.03.02.13 Beach Erosion**

The areas of the City of Fort Walton Beach that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay and Santa Rosa Sound. As previously mentioned, within its jurisdiction, there are 3.35 miles of coastline along the Choctawhatchee Bay as well as 3.42 miles that border the Santa Rosa Sound. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. There are 145 structures along the City of Fort Walton Beach's coastline. The cumulative 'just value' of those structures is \$78,074,711 (See Table 5.03.02.13.1, below).



**City of Fort Walton Beach**

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**Table 5.03.02.13.1:** Total Structures Susceptible to Beach Erosion

	SFR-Townhouse	Single-Family	Commercial
Total	7	137	1
Just Value	\$1,099,302	\$76,693,168	\$282,241

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
 Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**Section 5.03.02.14 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Fort Walton Beach. Therefore, the City’s vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Fort Walton Beach, then the LMS Committee will update this section to reflect those changes.

**Section 5.03.02.15 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Fort Walton Beach is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Fort Walton Beach**

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**Section 5.03.05 Maps**

Attached to this page are maps of the City of Fort Walton Beach. They include:

1. Critical Facilities..... 5.03-45
2. Evacuation Zones.....5.03-46
3. Flood Zones..... 5.03-47
4. Repetitive Loss Properties.....5.03-48
5. Surge Zones..... 5.03-49
6. Wildfire Level of Concern..... 5.03-50

# City of Fort Walton Beach Critical Facilities

-  Parcel Lines
-  Critical Facilities

Source: Okaloosa County Public Safety, 2010

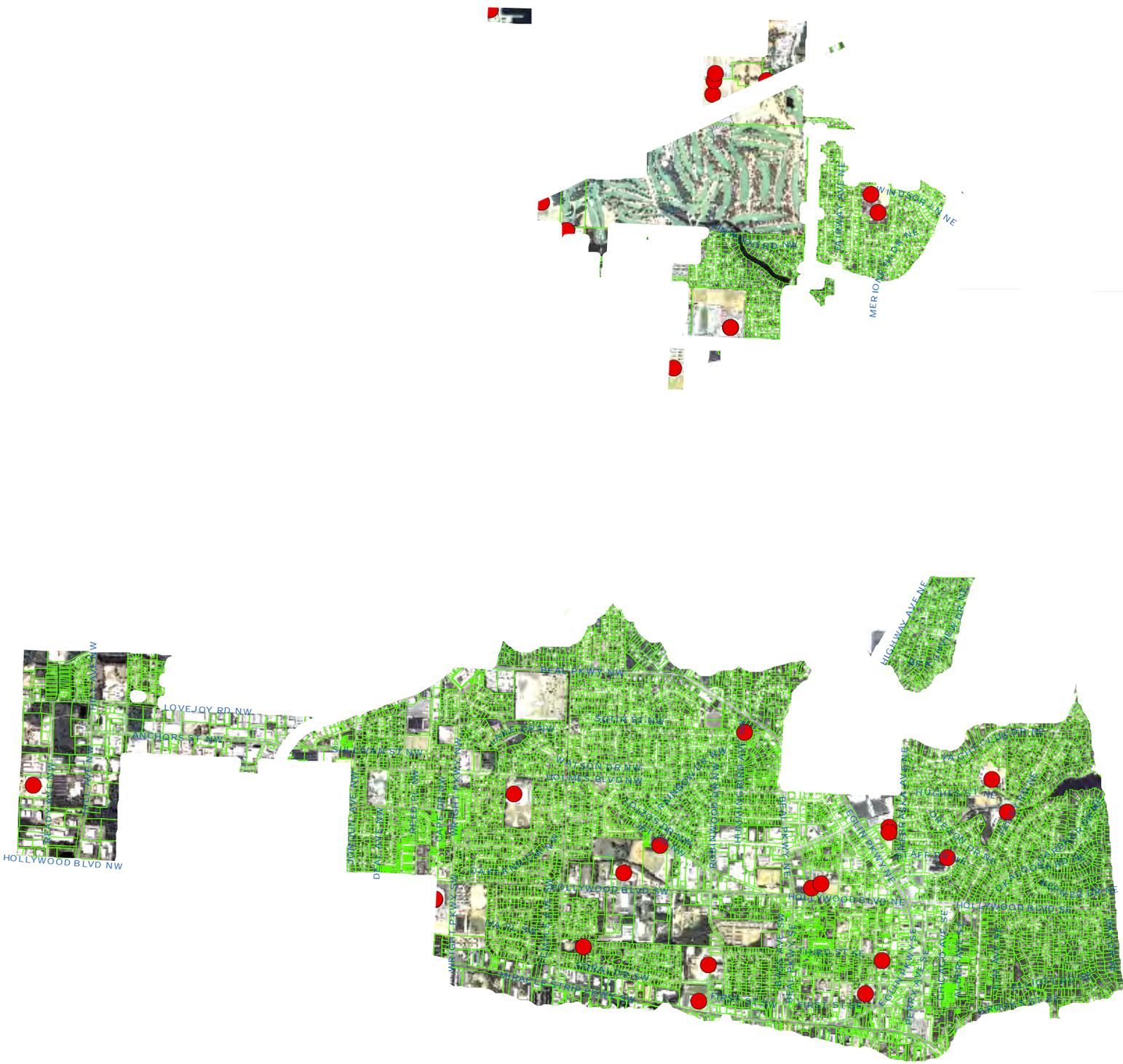
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# City of Fort Walton Beach Evacuation Zones

- Parcel Lines
- Evac Zone A
- Evac Zone B
- Evac Zone C
- Evac Zone D
- Evac Zone E

ZONE A = HURRICANE CAT 1

ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County Public Safety, 2010

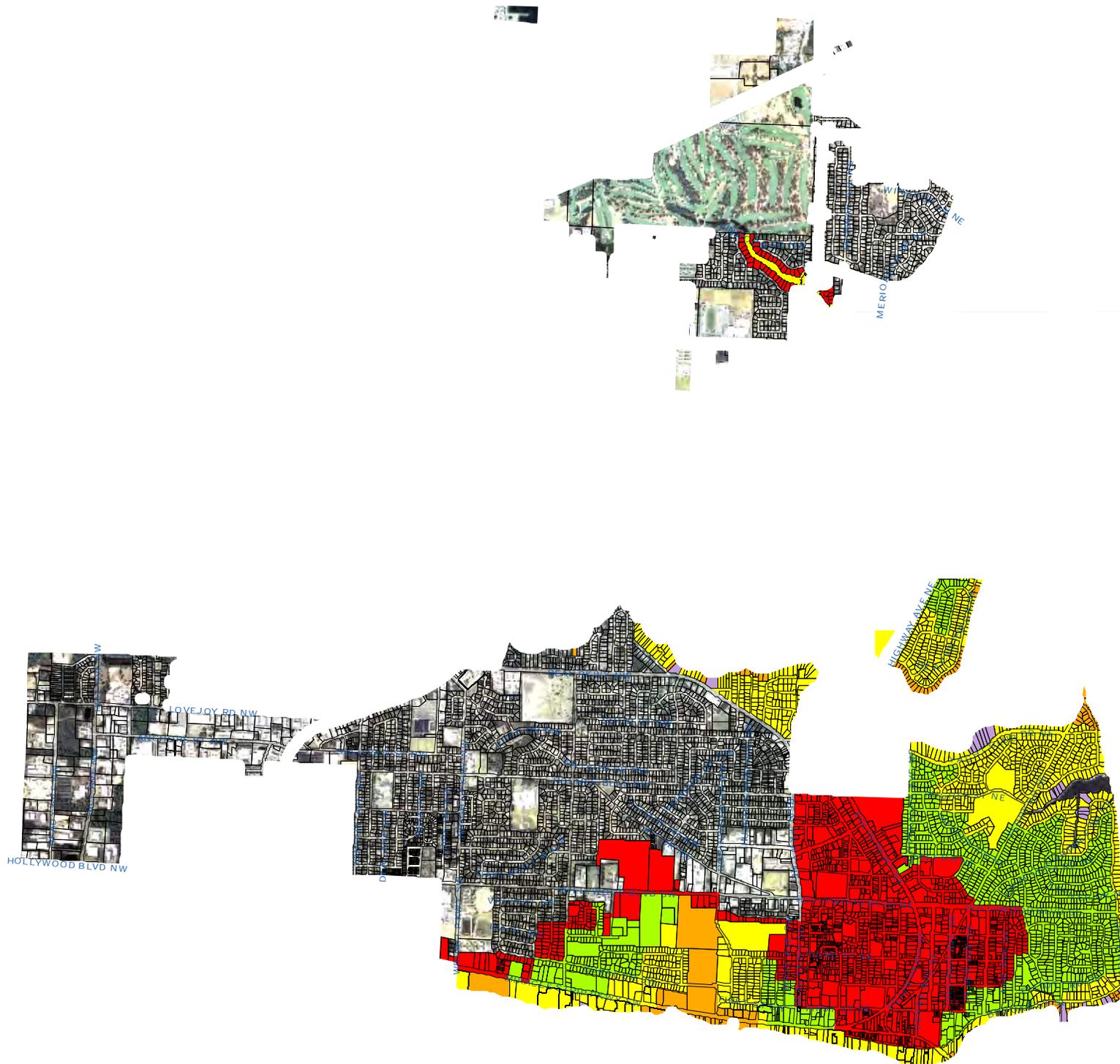
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# City of Fort Walton Beach Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

Source: FEMA Map Service Center, Dec 6 2002

MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (0903)  
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# City of Fort Walton Beach Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

Source: FEMA Map Service Center, Dec 6 2002

MAP PROJECTION:  
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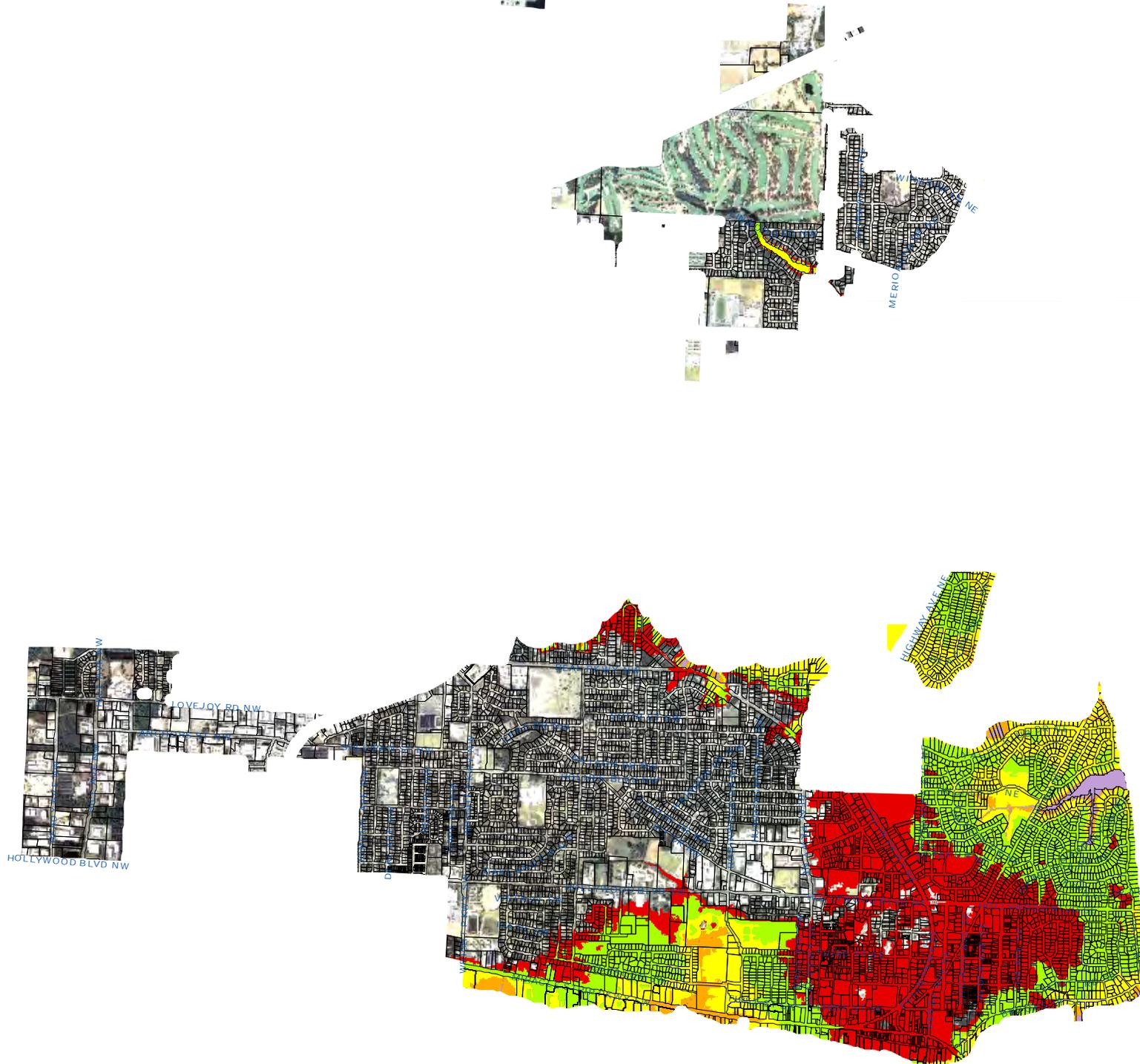
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# City of Fort Walton Beach Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

Source: West Florida Regional Planning Council, 2010



MAP PROJECTION:  
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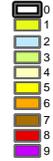


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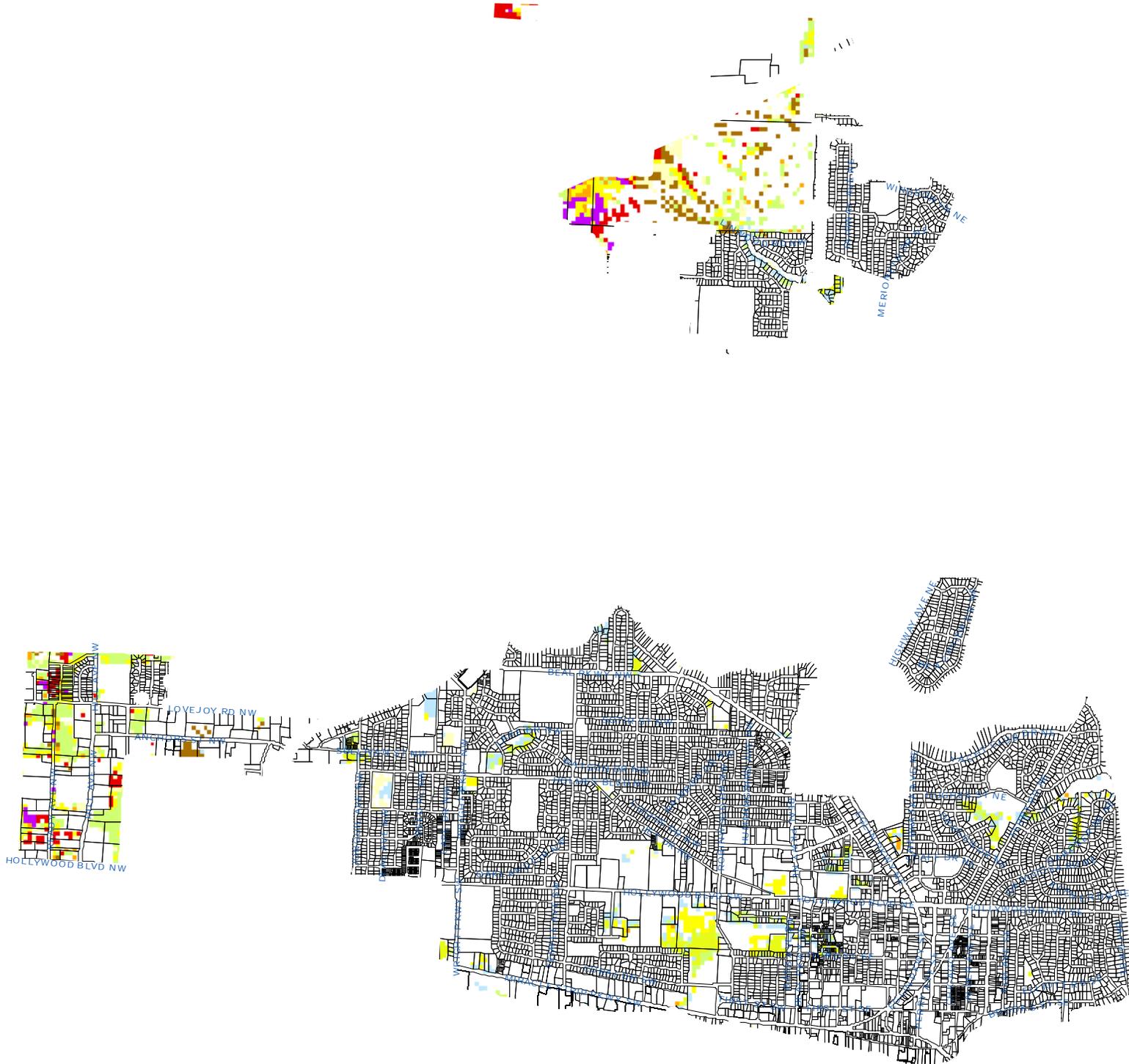
# City of Fort Walton Beach Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
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Stateplane: Florida North (0903)  
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**City of Fort Walton Beach**

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**Section 5.03.06 Post Disaster Redevelopment Plan**

The City of Fort Walton Beach does not currently have a Post Disaster Redevelopment Plan. Therefore, the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

**Section 5.04**

**City of Laurel Hill**





## City of Laurel Hill

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### **Section 5.04.02 Vulnerabilities**

#### **Section 5.04.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Laurel Hill.

This section includes a brief summary description of the City of Laurel Hill, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Laurel Hill. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Laurel Hill.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Laurel Hill so that mitigation options can be considered in future land use decisions.

#### **Section 5.04.02.02 Methodology**

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Laurel Hill as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.04.02.03 Summary Description of the City of Laurel Hill**

The City of Laurel Hill is an incorporated city located in the northeastern portion of Okaloosa County. As of a 2010 Census it was home to 537 residents, which makes it the second smallest municipality in Okaloosa County by population. The City of Laurel Hill is comprised mostly of residential development. There are a few small commercial establishments, such as hair salons and a local diner, but there haven't been any major growth trends in the City, nor are there any expected to occur. Within the city limits is a small industry that manufactures trailers but other than those few commercial and industrial examples, most of the development is residential. The City of Laurel Hill is expected to grow only minimally.

#### **Section 5.04.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability for further explanation on these vulnerable populations. The table below displays the City of Laurel Hill's vulnerable populations.



**City of Laurel Hill**

**Table 5.04.02.04.1:** Estimated Vulnerable Populations in the City of Laurel Hill, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	11.2%	65
Language Isolation	.02%	1
Disabled	53.8%	309
Single Parent	13.5%	10
Poverty	31.5%	160
Minority	24.4%	149

Source: 2010 Census; U.S. Census Population Division

**Section 5.04.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the County because they have already experienced significant flood damage. As of 2015 the City of Laurel Hill does not have any current repetitive loss properties; however, the LMS Committee will update this if this changes in the future.

**Section 5.04.02.06 Hurricane and Tropical Storm**

The City of Laurel Hill is vulnerable to the damaging effects of tropical storms and hurricanes, even though it is located in the very northeast corner of the county and about 50 miles away from the coast. The City of Laurel Hill would experience destruction in terms of wind damage and pockets of flooding due to the heavy rains. All structures within the City of Laurel Hill’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The City of Laurel Hill does not have designated evacuation zones for the different categories of hurricanes. This is due to their more northerly location away from the coastal areas by the Gulf of Mexico, which is where the storms typically make landfall. Historically, storms generate their power over bodies of water and lose their strength as they make landfall. Therefore, as the storm travels further north in the County, the communities are not impacted as severely as the coastal areas. The specific impacts of hurricanes and tropical storms on the City of Laurel Hill are unable to be provided due to a lack of conducted studies.



## City of Laurel Hill

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### ***Section 5.04.02.07 Flooding***

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Laurel Hill is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Laurel Hill. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. Currently, there are no structures located in any of the unnumbered A flood zones in the City of Laurel Hill. However, the LMS Committee will update this if this changes in the future.

### ***Section 5.04.02.08 Dam Safety***

The City of Laurel Hill has 3 active permitted dams within its jurisdiction. Most of these are small agricultural dams. The specific impacts of dam failure in Okaloosa County is unavailable because there have been no studies conducted on the impact that dam failure would have on the potentially affected areas. Only broad general impacts can be given, which provide an indication of what impacts are expected with dam failure. The concern with dam safety is if one of these dams failed, the area surrounding the dam has to potential to experience flooding and agricultural losses.

### ***Section 5.04.02.09 Land Erosion***

The City of Laurel Hill is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Laurel Hill. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of Laurel Hill is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

### ***Section 5.04.02.10 Severe Storms***

In the table below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Laurel Hill. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Laurel Hill.



**City of Laurel Hill**

**Table 5.04.02.10.1:** Residential and Non-residential Structures Vulnerable to Severe Storms in City of Laurel Hill

<b>Total:</b>	<b>Single-Family</b>	<b>Multi Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
	158	2	15	5
<b>Just Value</b>	\$11,722,310	\$202,150	\$1,568,603	\$3,109,970

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.04.02.10.01 Tornado**

The City of Laurel Hill is vulnerable to tornadoes, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Laurel Hill that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Laurel Hill are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Laurel Hill, has a medium risk, 1 in 250 per year, of a tornado event occurring.

**Section 5.04.02.10.02 Thunderstorms and Lightning**

The City of Laurel Hill is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Laurel Hill, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

**Section 5.04.02.10.03 Winter Storms**

The City of Laurel Hill is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Laurel Hill is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Laurel Hill is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Laurel Hill are unavailable because there have been no studies conducted regarding



## City of Laurel Hill

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these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Laurel Hill that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### ***Section 5.04.02.11 Heat Wave and Drought***

The City of Laurel Hill is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Laurel Hill are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

### ***Section 5.04.02.12 Wildfire***

The City of Laurel Hill is only 3.17 square miles, and the majority of this acreage is urban or residential, but vast acres of open forest lands surround the City, and these lands consists of natural vegetation historically related to the Longleaf Pine or upland Southeastern forests. Although the City of Laurel Hill is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is moderately low. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following table depicts the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.



**City of Laurel Hill**

**Table 5.04.02.12.1:** Medium to High Wildfire Level of Concern for Structures

<b>Total:</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Commercial</b>	<b>Government/ Institutional</b>	<b>Trailer Park</b>
<b>Level 4</b>	24	6	1	0	0
<b>Just Value</b>	\$2,528,056	\$356,763	\$423,911	\$0	\$0
<b>Level 5</b>	17	5	1	0	0
<b>Just Value</b>	\$1,612,130	\$361,093	\$423,911	\$0	\$0
<b>Level 6</b>	1	0	1	0	0
<b>Just Value</b>	\$152,981	\$0	\$423,911	\$0	\$0
<b>Level 7</b>	59	19	4	3	1
<b>Just Value</b>	\$5,485,286	\$882,914	\$633,205	\$2,992,541	\$151,194
<b>Level 8</b>	1	2	0	0	0
<b>Just Value</b>	\$224,143	\$195,502	\$0	\$0	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.04.02.13 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Laurel Hill. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Laurel Hill, then the LMS Committee will update this section to reflect those changes.

**Section 5.04.02.14 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Laurel Hill is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Laurel Hill**

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**Section 5.04.05 Maps**

Attached to this page are maps of the City of Laurel Hill. They include:

1. Critical Facilities..... 5.04-28
2. Evacuation Zones.....5.04-29
3. Flood Zones..... 5.04-30
4. Repetitive Loss Properties.....5.04-31
5. Surge Zones..... 5.04-32
6. Wildfire Level of Concern..... 5.04-33



# City of Laurel Hill Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

ZONE A = HURRICANE CAT 1

ZONE B = HURRICANE CAT 2

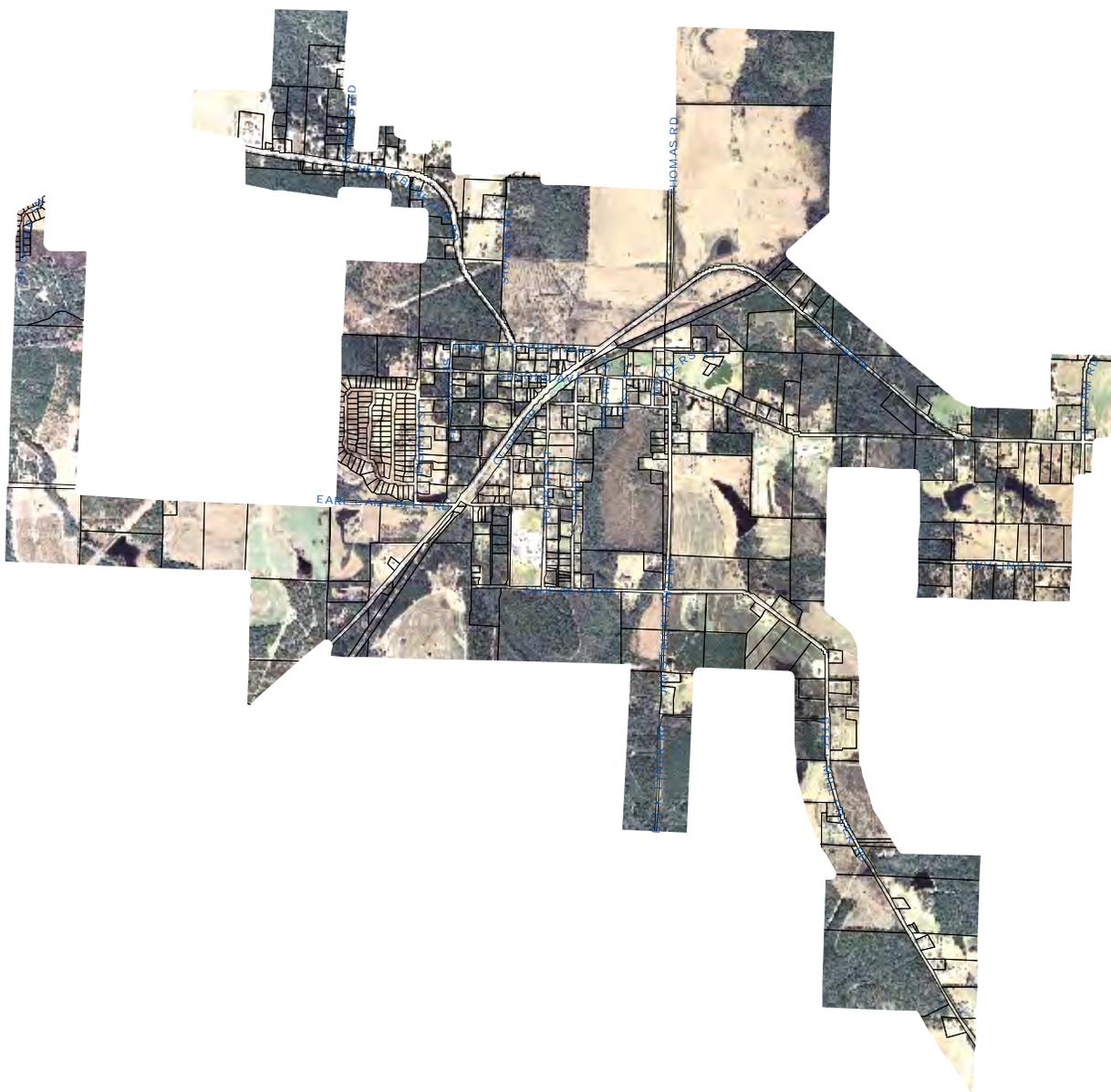
ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

**Note: There are no  
Evacuation Zones  
in the City of Laurel Hill**

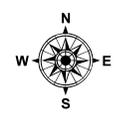
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION  
Lambert Conformal Conic Projection  
StatePlane: Florida North (8003)  
NAD 1983(80), NAVD 1988.

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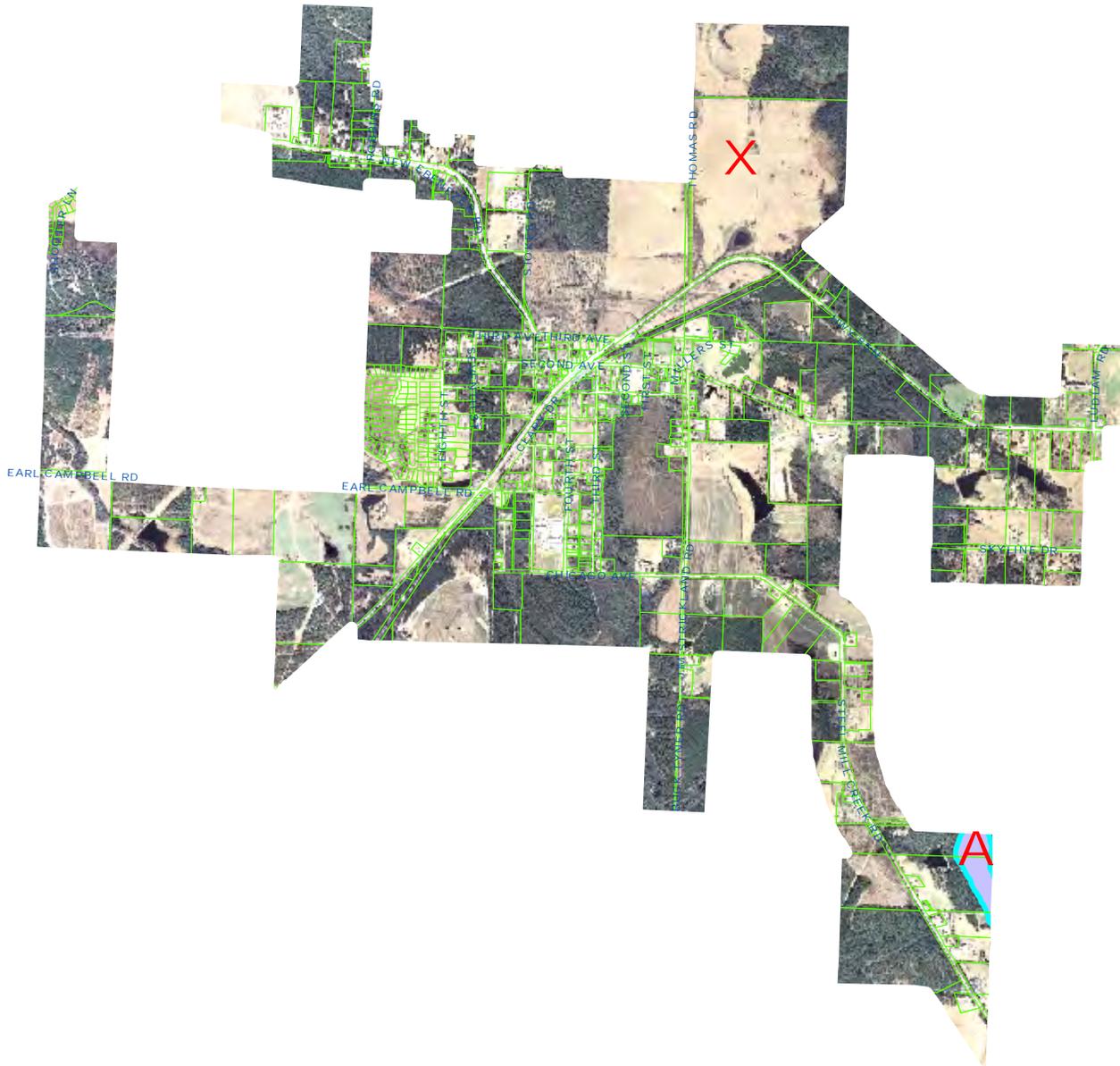


Department of  
Growth Management  
08/18/2010

# City of Laurel Hill Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

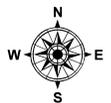
Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projection  
StatePlane: Florida North (803)  
NAD 1983(80), NAD 1988.

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# City of Laurel Hill Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

**Note: The City of Laurel Hill does not have any Repetitive Loss Properties in its jurisdiction**

**Source: FEMA Map Service Center, Dec 6 2002**

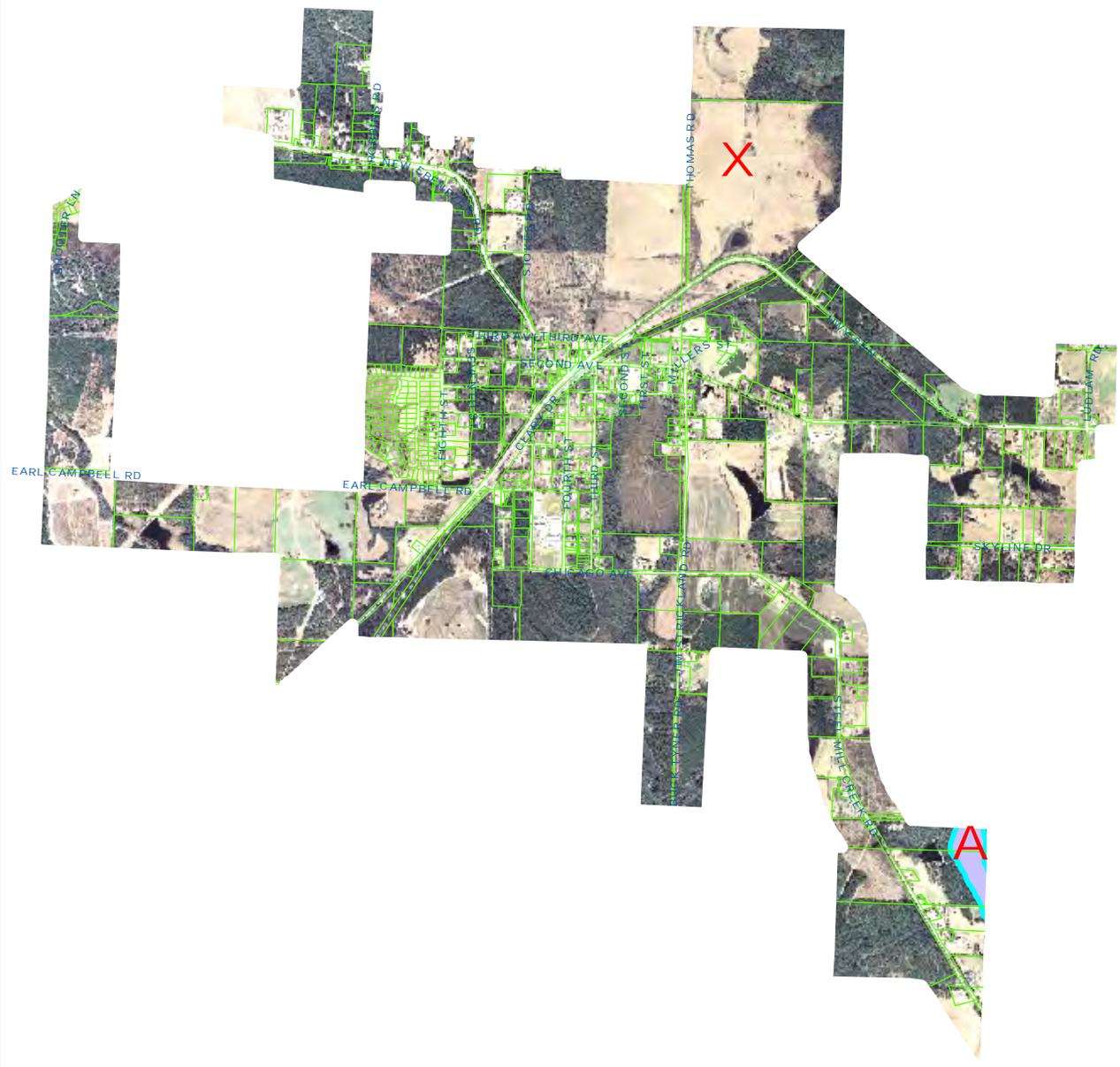
**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
StatePlane: Florida North (803)  
NAD 1983(80), NAD 1988.

**PUBLIC RECORD:**  
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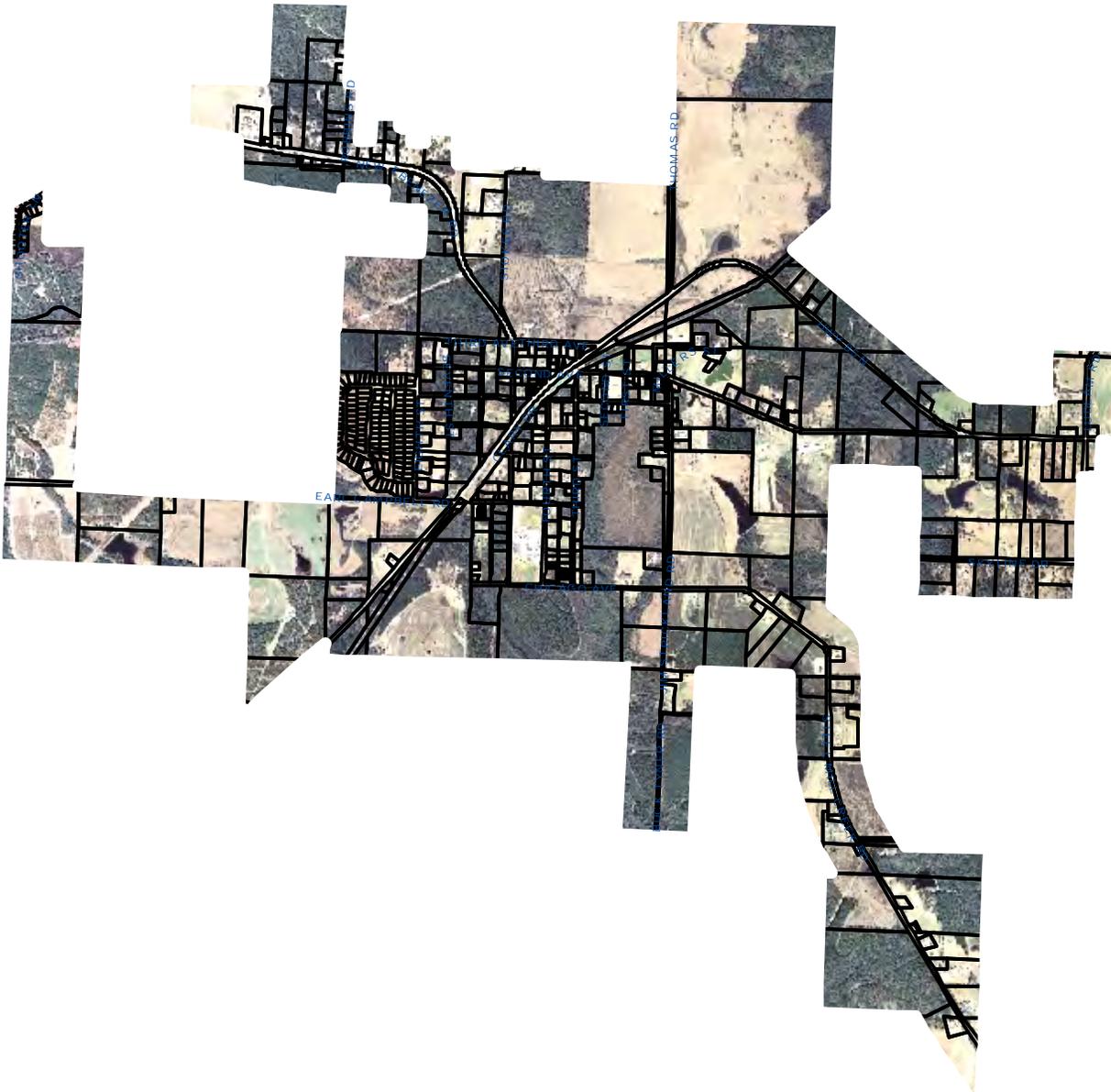


# City of Laurel Hill Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

**Note: There are no  
Surge Zones  
in the City of Laurel Hill**

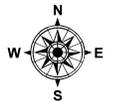
Source: West Florida  
Regional Planning  
Council, 2010



MAP PROJECTION  
Lambert Conformal Conic Projection  
StatePlane: Florida North (8003)  
NAD 1983(80), NAD 1988.

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08/18/2010

# City of Laurel Hill Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION  
Lambert Conformal Conic Projection  
StatePlane: Florida North (8003)  
NAD 1983(80), NAVD 1988.

PUBLIC RECORD:  
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08/18/2010



## City of Laurel Hill

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### **Section 5.04.06 Post Disaster Redevelopment Plan**

The City of Laurel Hill does not currently have a Post Disaster Redevelopment Plan. Therefore, the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

## Section 5.05

### City of Mary Esther





## City of Mary Esther

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### **Section 5.05.02 Vulnerabilities**

#### ***Section 5.05.02.01 Introduction***

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Mary Esther.

This section includes a brief summary description of the City of Mary Esther, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Mary Esther. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Mary Esther.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Mary Esther so that mitigation options can be considered in future land use decisions.

#### ***Section 5.05.02.02 Methodology***

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Mary Esther as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### ***Section 5.05.02.03 Summary Description of the City of Mary Esther***

The City of Mary Esther is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 3,851 residents. Within its jurisdiction, there are 2.92 miles that border the Santa Rosa Sound. Nearly all development in the City of Mary Esther is tightly clustered along the southernmost boundary of the city, which borders Santa Rosa Sound. Since 2004, residential development has been minimal and the majority has been in the form of apartments, condominiums, and town homes.

#### ***Section 5.05.02.04 Vulnerable Populations***

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability for further explanation on these vulnerable populations. The table below displays the City of Mary Esther's vulnerable populations.



**City of Mary Esther**

**Table 5.05.02.04.1:** Estimated Vulnerable Populations in the City of Mary Esther, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	15.9%	598
Language Isolation	.8%	31
Disabled	30.5%	1236
Single Parent	5.6%	65
Poverty	5.2%	198
Minority	4.2%	165

Source: 2010 Census; U.S. Census Population Division

**Section 5.05.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the City of Mary Esther because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the City of Mary Esther.

**Table 5.05.02.05.1:** Repetitive Loss Properties in the City of Mary Esther

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non- Residential Structures
City of Mary Esther	\$1,610,732.82	\$615,082.01	23	\$2,225,814.83	11	0

Source: FEMA, 2016

**Table 5.05.02.05.2:** Flood Zones of Repetitive Loss Properties in the City of Mary Esther

Flood Zones	A,AE	V,VE	B,C,X
Total Properties	6	0	5

Source: FEMA, 2016



**City of Mary Esther**

**Section 5.05.02.06 Hurricane and Tropical Storm**

The City of Mary Esther is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Santa Rosa Sound, near the southern coast of the county. The City of Mary Esther would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Mary Esther's jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following table depicts the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.05.02.06.1:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Condominium</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	0	6	0	1	0
<b>Just Value</b>	\$0	\$1,815,028	\$0	\$181,016	\$0
<b>Zone B</b>	0	47	6	1	0
<b>Just Value</b>	\$0	\$20,759,911	\$2,659,951	\$181,016	\$0
<b>Zone C</b>	0	47	6	3	0
<b>Just Value</b>	\$0	\$20,759,911	\$2,659,951	\$1,890,541	\$0
<b>Zone D</b>	0	103	8	3	0
<b>Just Value</b>	\$0	\$39,956,223	\$3,760,146	\$1,890,541	\$0
<b>Zone E</b>	1	177	12	6	1
<b>Just Value</b>	\$65,000	\$72,719,484	\$5,870,267	\$2,549,121	\$96,124

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.05.02.07 Storm Surge**

The City of Mary Esther is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 17.2 feet above the mean high water line along the some areas boarding the Santa Rosa Sound. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following table depicts the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**City of Mary Esther**

**Table 5.05.02.07.1:** Vulnerable Structures to Storm Surge

<b>Total:</b>	<b>Condominium</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>
<b>Surge Level 1</b>	1	67	9	1
<b>Just Value</b>	\$65,000	\$37,202,702	\$5,255,482	\$1,095,717
<b>Surge Level 2</b>	1	97	9	1
<b>Just Value</b>	\$65,000	\$54,686,205	\$5,255,482	\$1,095,717
<b>Surge Level 3</b>	1	124	9	2
<b>Just Value</b>	\$65,000	\$61,052,047	\$5,255,482	\$1,709,525
<b>Surge Level 4</b>	1	124	9	2
<b>Just Value</b>	\$65,000	\$61,052,047	\$5,255,482	\$1,709,525
<b>Surge Level 5</b>	1	131	10	3
<b>Just Value</b>	\$65,000	\$62,797,766	\$5,491,848	\$1,890,541

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010  
(Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.05.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Mary Esther is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Mary Esther. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the City of Mary Esther, there are 17 structures in the AE flood zone, 1 structure in the VE flood zone, and 6 structures in the A flood zone. The cumulative 'just value' of all those structures in the AE, VE, and A flood zones is \$14,000,118. The following table depicts the vulnerable structures located in the AE, VE, and A flood zones in the City of Mary Esther.

**Table 5.05.02.08.1:** Structures Located in Flood Zones in the City of Mary Esther

	<b>AE Flood Zone</b>	<b>Just Value</b>	<b>VE Flood Zone</b>	<b>Just Value</b>	<b>A Flood Zone</b>	<b>Just Value</b>
<b>Single-Family</b>	10	\$6,889,999	1	\$1,652,216	6	\$659,494
<b>Multi-Family</b>	5	\$3,088,884	0	\$0	0	\$0
<b>Commercial</b>	2	\$1,709,525	0	\$0	0	\$0

Source: Okaloosa County Department of Growth Management, 2010



**City of Mary Esther**

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**Section 5.05.02.09 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Mary Esther. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Mary Esther.

**Table 5.05.02.10.1:** Residential Structures Vulnerable to Severe Storms in City of Mary Esther

<b>Total:</b>	<b>Condominium</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>SFR-Townhouse</b>
	1	6	21	6
<b>Just Value</b>	\$65,000	\$1,815,028	\$11,217,274	\$652,549

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.05.02.10.2:** Other Structures Vulnerable to Severe Storms in City of Mary Esther

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
	163	8
<b>Just Value</b>	\$111,280,886	\$14,143,266

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those special hazards.

**Section 5.05.02.09.01 Tornado and Waterspout**

The City of Mary Esther is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Mary Esther that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Mary Esther are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Mary Esther, has a medium risk, 1 in 250 per year, of a tornado event occurring.



## City of Mary Esther

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Because waterspouts occur over water, the areas in the City of Mary Esther most susceptible damage from waterspouts are those located on the Santa Rosa Sound. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage from flying debris. However, the specific impacts on those areas are unavailable due to the lack of relevant studies conducted regarding this hazard.

### **Section 5.05.02.09.02 Thunderstorms and Lightning**

The City of Mary Esther is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Mary Esther, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.05.02.09.03 Winter Storms**

The City of Mary Esther is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Mary Esther is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Mary Esther is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Mary Esther are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Mary Esther that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.05.02.10 Heat Wave and Drought**

The City of Mary Esther is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Mary Esther are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.



**City of Mary Esther**

**Section 5.05.02.11 Wildfire**

Although the City of Mary Esther is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following tables depict the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.05.02.11.1: Medium to High Wildfire Level of Concern for Structures**

<b>Total:</b>	<b>Condominium</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Level 4</b>	0	17	1	2	5
<b>Just Value</b>	\$0	\$13,824,275	\$614,591	\$6,077,721	\$11,415,258
<b>Level 5</b>	0	18	0	1	1
<b>Just Value</b>	\$0	\$14,110,172	\$0	\$1,095,717	\$1,356,621
<b>Level 6</b>	0	0	0	0	1
<b>Just Value</b>	\$0	\$0	\$0	\$0	\$5,006,836
<b>Level 7</b>	1	3	0	2	1
<b>Just Value</b>	\$65,000	\$1,076,314	\$0	\$6,077,721	\$3,925,800
<b>Level 8</b>	0	3	0	0	3
<b>Just Value</b>	\$0	\$3,033,268	\$0	\$0	\$6,013,927
<b>Level 9</b>	0	1	0	0	0
<b>Just Value</b>	\$0	\$207,032	\$0	\$0	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.05.02.12 Beach Erosion**

The areas of the City of Mary Esther that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are 2.92 miles of coastline along the Santa Rosa Sound. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. Data on the specific impacts of beach erosion on the City of Mary Esther were unavailable because there have been no studies conducted for this municipality. However, the LMS Committee will update this section, regarding the impacts that beach erosion has on structures, to reflect those changes.



## City of Mary Esther

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### ***Section 5.05.02.13 Other Hazards***

As previously stated in the Risk Assessment, the following hazards, land erosion, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Mary Esther. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Mary Esther, then the LMS Committee will update this section to reflect those changes.

### ***Section 5.05.02.14 Summary***

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Mary Esther is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Mary Esther**

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**Section 5.05.06 Maps**

Attached to this page are maps of the City of Mary Esther. They include:

1. Critical Facilities..... 5.05-36
2. Evacuation Zones.....5.05-37
3. Flood Zones.....5.05-38
4. Repetitive Loss Properties.....5.05-39
5. Surge Zones..... 5.05-40
6. Wildfire Level of Concern..... 5.05-41

# City of Mary Esther Critical Facilities

- ▭ Parcel Lines
- Critical Facilities



Source: Okaloosa County  
Public Safety, 2010

MAP PROJECTION:  
Lambert Conformal Conic Projection  
Spheroid: Florida North (1883)  
NAD 1983 GCS NAD83

PUBLIC RECORD:  
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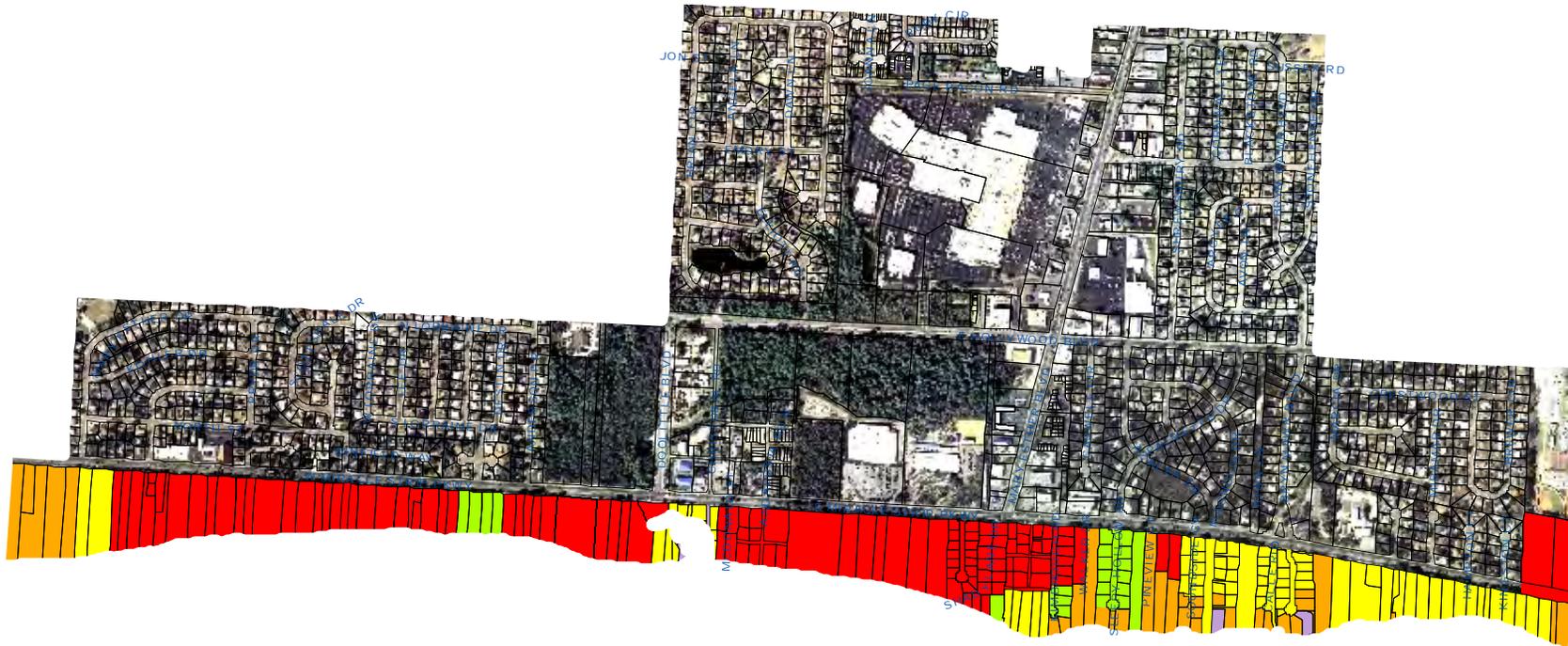
Department of  
Growth Management  
08/18/2010

# City of Mary Esther Evacuation Zones

- Parcel Lines
- Evac Zone A
- Evac Zone B
- Evac Zone C
- Evac Zone D
- Evac Zone E

- ZONE A = HURRICANE CAT 1
- ZONE B = HURRICANE CAT 2
- ZONE C = HURRICANE CAT 3
- ZONE D = HURRICANE CAT 4
- ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

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08/18/2010

# City of Mary Esther Flood Zones

- ▬ Parcel Lines
- ▬ X 500 Year Flood Plain
- ▬ A 100 Year Flood Plain
- ▬ AE 100 Year Flood Plain
- ▬ VE 100 Year Flood Plain

Source: FEMA Map Service Center,  
Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

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Department of  
Growth Management  
08/18/2010

# City of Mary Esther Repetitive Loss Properties

- Parcel Lines
- X 500 Year Flood Plain
- A 100 Year Flood Plain
- AE 100 Year Flood Plain
- VE 100 Year Flood Plain
- Base Flood Elevation  
in a Floodway
- Repetitive Loss  
Properties

Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (83), NAVD 1988

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Department of  
Growth Management  
08/18/2010

# City of Mary Esther Surge Zones

- Parcel Lines
- Category 1
- Category 2
- Category 3
- Category 4
- Category 5

Source: West Florida Regional Planning Council, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

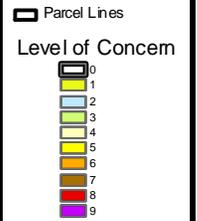
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Growth Management  
08/18/2010

# City of Mary Esther Wildfire Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5903)  
NAD 1983 (83), NAVD 1988

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08/18/2010



**City of Mary Esther**

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**Section 5.05.06 Post Disaster Redevelopment Plan**

Attached to this page is the post disaster redevelopment plan that the City of Mary Esther adopted by the city in June of 2007. This plan is still in effect.



City of Mary Esther Debris Management Plan  
12 June 2007

195 Christobal Road, North  
Mary Esther, FL 32569

PLEASE REVIEW  
AND PROVIDE  
COMMENTS BY  
9/11/07

# CITY OF MARY ESTHER DEBRIS MANAGEMENT PLAN - 07

June 12, 2007

## MISSION

To facilitate and coordinate the removal, collection, and disposal of debris following a disaster, to mitigate against any potential threat to the health, safety, and welfare of the impacted citizens, and expedite recovery efforts in the impacted area, and address any threat of significant damage to improved public or private property.

## SITUATION

Natural and man-made disasters precipitate a variety of debris that includes, but is not limited to, such things as trees, sand, gravel, building/construction materials, vehicles, personal property, etc.

The quantity and type of debris generated from any particular disaster is a function of the location and kind of event experienced, as well as its magnitude, duration, and intensity.

The quantity and type of debris generated, its location, and the size of the area over which it is dispersed directly impacts the type of collection and disposal methods used to address the debris problem, associated costs incurred, and the speed with which the problem can be addressed.

In a major or catastrophic disaster, Mary Esther may have difficulty in locating staff, equipment, and funds to devote to debris removal, in the short as well as long term.

Private contractors play a significant role in the debris removal, collection, reduction, and disposal process.

The debris management program implemented by Mary Esther will be based on the waste management approach of reduction, reuse, reclamation. Resources recovery, incineration, and landfilling, respectively.

## ORGANIZATION AND CONCEPT OF OPERATIONS

The Mary Esther Maintenance Department is responsible for the debris removal function. The Maintenance Department (MD) will work in conjunction with designated support agencies utility companies, waste management firms, and trucking companies, to facilitate the debris clearance, collection, reduction, and disposal needs following a disaster. MD will be responsible for removing debris from the public right-of-way. Only when pre approved and it is deemed in the public interest will MD remove debris from private property. MD will further stage equipment in strategic locations locally as well as regionally, if necessary, to protect the equipment from damage, preserve the decision maker's flexibility for employment of the equipment, and allow for the clearing crews to begin work immediately after the disaster.

Because of the limited quantity of resources and service commitments following the disaster, Mary Esther will be relying heavily on private contractors to remove, collect, and manage

FIRE CHIEF  
INSPECTOR  
CITY CLERK  
MAINT DEPT  
UTILITIES DIV  
FINANCE

debris for reuse, resource recovery, reduction, and disposal. Using private contractors instead of government workers in debris removal activities has a number of benefits. It shifts the burden of conducting the work from Mary Esther to the private sector, freeing up government personnel to devote more time to their regularly assigned duties. Private contracting also stimulates local, regional, and State economies impacted by the storm, as well as maximizes State and local governments' level of financial assistance from the Federal government. Private contracting allows the State and its political subdivisions to more closely tailor their contract services to their specific needs. The entire process (i.e., clearance, collection, transporting, reduction, and disposal, etc.) or segments of the process can be contracted out.

The MD will also develop and maintain a list of approved contractors who have the capability to provide debris removal, collection, and disposal in a cost effective, expeditious, and environmentally sound manner following a disaster.

### STAFF DEVELOPMENT & RESPONSIBILITIES

The City of Mary Esther is responsible for the developing a debris management plan and shall select a "Debris Manager" to coordinate the activities of the "Debris Management Staff". The staff shall be comprised of personnel to perform:

1. Administration (Finance)  
Function: Housekeeping, supplies, equipment, funding, accounting.
2. Contracting and Procurement (Finance)  
Function: Bidding requirements, forms, advertisements for bids, instructions to bidders, contract development.
3. Legal (City Manager, City Attorney)  
Function: Contract review, right of entry permits, community liability condemnation of buildings, land acquisition for temporary staging and reduction sites, land acquisition for disposal sites, insurance.
4. Operations (Maintenance Department)  
Function: Supervision of government and contract resources and overall project management. Recover and re-establish storm water utilities.
5. Engineering (City Manager, Inspection Dept, Maintenance Dept, Fire Dept)  
Function: Detailed damage assessment, identification of project tasks, assignments of tasks, preparation of estimates, plans, specifications, and recommendation of contract award.
6. Public Information (City Clerk)  
Function: Coordinate press releases, contacts with local organizations, individuals and media; and public notices for debris removal and disposal contracts.
7. Utilities (OMI)  
Function: Recover and re-establish water and wastewater utilities.

The staff shall coordinate with all State and Federal agencies responsible for disaster response and recovery operations. The staff will be assigned the task of:

1. Reviewing and updating the Debris Management Plan.
2. Developing an analysis and debris management capability
3. Discourage development in hazardous zones.
4. Develop public information and education programs.
5. Train personnel in debris management techniques.

6. Maintain pre-disaster maps, blueprints, photos and other documents.
7. Make a list of critical facilities (streets, roads, and bridges).
8. Identify non-government groups that could assist (Mary Esther Green, OTNP Committee).

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### CONTRACT AND COOPERATIVE AGREEMENTS

Mary Esther Finance Department is responsible for developing and maintaining contracts for debris removal services on an annual basis.

The Departments will be responsible for managing the debris contract from project inception to completion. Managing the debris contract includes such things as monitoring of performance, contract modifications, inspections, acceptance, payment, and closing out of activities. Mary Esther is encouraged to enter into cooperative agreements with other State agencies and local governments to maximize public assets. The development of such agreements must comply with the guidelines established in their agency procurement manual. All State agencies and local governments that wish to participate in such agreements should be identified prior to the development and implementation of the agreement.

The three types of contracts required are the:

1. Time and Materials Contract. Will be limited to the first 70 hours of operation and only after all State and local equipment has been committed. The price for equipment applies only when the equipment is operating, the City can terminate the contract at its convenience, and the City does not guarantee a minimum number of hours.
2. Lump Sum Contract. The price of the work is fixed unless there is a change in the scope of work to be performed. Lump sum contracts will be calculated on either the "area" method or the "pass" method. The lump sum contract shall only be used when the scope of work is clearly defined and the areas of work can be specifically quantified.
3. The Unit Price Contract. Is the most accurate account of actual quantities removed. Requires field inspectors to eliminate contractor mistakes and in-accuracies. All contractor trucks must be measured. Requires load tickets identifying truck number, contract number, contractor's name, date, time departed site, and estimated volume.

Mary Esther has existing contracts which are attached to this plan as an annex. Mary Esther may establish Mutual Aid Agreements with the following entities to provide assistance with debris removal in the event of a disaster resulting in copious amounts of debris:

- (1) Okaloosa County
- (2) FDOT
- (3) Other volunteering governmental agencies

These agreements may include utilization of personnel, equipment, temporary landfill sites, emergency services, and law enforcement.

Mary Esther will attempt to get certain volunteer (VOAD), State and Federal agencies ready to assist. These agencies include Civic Clubs, Church organizations, Salvation Army, State Department of Transportation, National Guard, scrap dealers, and U.S. Department of Labor. These VOAD organizations will be coordinated by the State.

### SITE SELECTION

Debris storage and reduction sites will be identified and evaluated by interagency site selection teams comprised of a multi-disciplinary staff who are familiar with the area. A listing of appropriate local, State, and Federal contacts will be developed by the appropriate agencies to expedite the formation of the interagency, multi-disciplinary site selection teams.

Initially, debris may be placed in temporary holding areas, determined before the onset of the disaster, until such time as a detailed plan of debris collection and disposal is prepared. This is not anticipated until after the local traffic has been restored. Temporary debris collection sites should be readily accessible by recovery equipment and should not require extensive preparation or coordination for use. Collection sites will be on public property when feasible to facilitate the implementation of the mission and mitigate against any potential liability requirements. Activation of sites will be under the control of the Maintenance Department, and will be coordinated with other recovery efforts through the emergency operations center.

The following is a list of temporary debris storage and reduction sites (TDSR):

1. Old Kaiser Mill Pit
2. Wright Sanitary Landfill

### DEBRIS REMOVAL PRIORITIES

The debris removal process must be initiated promptly and conducted in an orderly, effective manner in order to protect public health and safety following a major or catastrophic event. To achieve this objective, the first priority will be to clear debris from key roads in order to provide access for emergency vehicles and resources into the impacted area. Key roads in Mary Esther are identified as follows:

1. Christobal Road
2. Hollywood Blvd
3. Mary Esther Drive
4. US Hwy 98
5. Roserito Pl
6. Town Ln

The need and demand for critical services will be increased significantly following a disaster. Therefore, the second priority that debris removal resources will be assigned is providing access to critical facilities pre-identified by State and local governments. Critical facilities in Mary Esther have been identified as:

1. Sewer Lift Stations
2. Water Wells/Plants
3. Sewer Plant
4. City Hall/Fire Dept

The third priority for the debris removal teams to address will be the elimination of debris related threats to public health and safety. This will include such things as the repair, demolition, or barricading of heavily damaged and structurally unstable buildings, systems, or facilities that pose a danger to the public. Any actions taken to mitigate or eliminate the threat to the public health and safety must be closely coordinated with the owner or responsible party. If access to the area can be controlled, the necessary actions can be deferred.

#### DEBRIS CLASSIFICATION

To facilitate the debris management process, debris will be segregated by type. It is recommended that the categories of debris established for recovery operations will be standardized. The City will adopt the categories established for recovery operations by the U.S. Army Corps of Engineers following Hurricane Andrew. Debris removed will consist of two broad categories (clean wood debris and construction and demolition debris).

Definition of classifications of debris are as follows:

**Burnable Materials:** Burnable materials will be of two types with separate burn locations:

**Burnable Debris:** Burnable debris includes, but is not limited to, damaged and disturbed trees; bushes and shrubs; broken, partially broken and severed tree limbs; and bushes. Burnable debris consists predominately of trees and vegetation. Burnable debris does not include garbage or construction and demolition material debris.

**Burnable Construction Debris:** Burnable construction and demolition debris consists of non-creosote structural timber, wood products, and other materials designated by the coordinating agency representative.

**Non-burnable Debris:** Non-burnable construction and demolition debris includes, but is not limited to, creosote timber, plastic, glass, rubber and metal products, sheet rock, roofing shingles, carpet, tires, and other materials as may be designated by the coordinating agency. Garbage will be considered non-burnable debris.

**Stumps:** Stumps will be considered tree remnants exceeding 24 inches in diameter; but no taller than 18 inches above grade, to include the stump ball. Any questionable stumps shall be referred to the designated coordinating agency representative for determination of its disposition.

**Ineligible Debris:** Ineligible debris to remain in place includes, but is not limited to, chemicals, petroleum products, paint products, asbestos, and power transformers.

Any material that is found to be classified as hazardous or toxic waste (HTW) shall be reported immediately to the designated coordinating agency representative. At the coordinating agency representative's direction, this material shall be segregated from the remaining debris in such a way as to allow the remaining debris to be loaded and transported. Standing broken utility poles, damaged and downed utility poles and appurtenances, transformers and other electrical material will be reported to the coordinating agency representative. Emergency workers shall exercise due caution with existing overhead and underground utilities and above ground appurtenances, and advise the appropriate authorities of any situation that poses a health or safety risk to workers on site or to the general population.

ESTIMATING DEBRIS QUANTITIES Corp of Engineers

The formula for estimating debris quantity is:  $Q=H(C)(V)(B)(S)$

- H (Households)=Population/3 (3 persons per household)
- C (Category of Storm)=Factor (See table below)
- V (Vegetation Multiplier)= Factor (See table below)
- B (Commercial Density Multiplier)= Factor (See table below)
- S (Precipitation Multiplier)= Factor (See table below)

Hurricane Category	Value of "C" Factor
1	2 CY
2	8 CY
3	26 CY
4	50 CY
5	80 CY

Vegetative Cover	Value of "V" Multiplier
Light	1.1
Medium	1.3
Heavy	1.5

Commercial Density	Value of "B" Multiplier
Light	1.0
Medium	1.2
Heavy	1.3

Precipitation	Value of "S" Multiplier
None to Light	1.0

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### DEBRIS DISPOSAL AND REDUCTION

Once the debris is removed from the damage sites, it will be taken to temporary or permanent land fills. The three methods of disposal are burning, recycling, and grinding/chipping.

Grinding and chipping will be utilized as a viable reduction method. Grinding and chipping reduces the volume on a 4 to 1 ratio. For grinding and chipping to be feasible, 25% of volume remaining must have some benefit or use.

The three primary burning methods are open burning, air curtain pit burning, and incineration. Controlled open burning is a cost-effective method for reducing clean woody debris in rural areas. Burning reduces the volume by 95%, leaving only ash residue to be disposed of. Air curtain pit burning substantially reduces environmental concerns. The blower unit must have adequate air velocity to provide a "curtain effect" to hold smoke in and to feed air to the fire below. Portable incinerators use the same methods as air curtain pit systems. The only difference is that portable incinerators utilize a pre-manufactured pit in lieu of an onsite constructed earth/limestone pit.

Metals, wood, and soils are prime candidates for recycling. Most of the non-ferrous metals are suitable for recycling. Specialized contractors are available to bid on disposal of debris by recycling if it is well sorted.

### SITE CLOSE-OUT PROCEDURES

Each temporary debris staging and reduction site will eventually be emptied of all material and be restored to its previous condition and use.

Before activities begin ground or aerial photos and/or surveys will be taken, important features such as structures, fences, culverts, and landscaping will be noted. Random soil samples will be taken. The site will be checked for volatile organic compounds.

After activities begin, monitoring of air quality and soil samples will take place. Photo, maps, and sketches of the site will be updated and fuel spills will be noted.

At close-out final testing of soil and air quality will be compared to original conditions. All ash will be removed and any remediation actions will be taken.

### DEBRIS MANAGEMENT ACTIONS

The Debris Management Plan is separated into four stages:

1. Normal Operations

Establish pre-existing contract for debris removal services to expedite the implementation of their debris management strategies.

Develop mutual aid agreements with other State agencies and local governments, as appropriate, following guidelines established in agency procurement manual.

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Identify and pre-designate potential debris storage sites for the type and quantity of debris anticipated following a catastrophic event.

Pre identify local and regional critical routes in cooperation with contiguous and regional jurisdictions.

Identify and coordinate with appropriate regulatory agencies regarding potential regulatory issues and emergency response needs.

Develop the necessary right of entry and hold harmless agreements indemnifying all levels of government against any potential claims.

Establish debris assessment process to define scope of problem.

Develop and coordinate pre-scripted announcements with the City Clerk regarding debris removal process, collection times, temporary storage sites use of private contractors, environmental and health issues, etc.

## 2. Increased Readiness

*(A natural or man-made disaster is threatening the local area)*

Review and update plans, standard operating procedures, contracts, and checklists relating to debris removal, storage, reduction, and disposal process.

Alert local departments that have debris removal responsibilities ensuring that personnel, facilities, and equipment are ready and available for emergency use.

Relocate personnel and resources out of harm's way and stage in areas where they can be effectively mobilized.

Review potential local, regional, and debris staging and reduction sites that may be used in the response and recovery phases in the context of the impending threat.

Alert existing debris removal contractor of pending need for their services . Make necessary arrangements to ensure their availability in the event of the disaster.

## 3. Response

Activate debris management plan, coordinate with needs assessment team.

Begin documenting costs.

Coordinate and track resources (public and private).

Establish priorities regarding allocation and use of available resources.

Identify and establish debris temporary storage and disposal sites (local, regional).

Address any legal, environmental, and health issues relating to the debris removal process.

Continue to keep public informed through the PIO.

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#### 4. Recovery

Continue to collect, store, reduce, and dispose of debris generated from the event in a Cost-effective and environmentally responsible manner.

Continue to document costs.

Upon completion of debris removal mission, close out debris storage and reduction sites by developing and implementing the necessary site restoration actions.

Perform necessary audits of operation and submit claim for Federal assistance.

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## SAMPLE DEBRIS PLAN ANNEX

### Table of Contents

Sample:	Notice to public
Sample:	Mutual Aid Agreement
Sample:	Intergovernmental Emergency Mutual Aid Agreement
Sample:	Unit Price Contract
Sample:	Right of Entry Agreement
Sample:	Road Priority List

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MASTER COPY

FILE

*City of Mary Esther*  
**POST-DISASTER  
REDEVELOPMENT PLAN**

JANUARY 6, 1992

Read

Review

J. E. Dorman & Associates, Inc.  
Destin, Florida



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ARTICLE ONE

LEGAL

1.1 Legal:

WHEREAS, the City of Mary Esther is vulnerable to a variety of hazards which result or may result in emergencies causing substantial injury or harm to the population or substantial damage to or loss of property; and

WHEREAS, Chapter 252, F.S., provides the City Council the authority to declare a state of local emergency and take actions necessary to ensure the safety and well being of its residents, visitors and property during emergencies caused by these hazards; and

WHEREAS, the City of Mary Esther has prepared a Comprehensive Plan in compliance with Chapter 163, F.S. and Rule 9J-5, F.A.C.; and

WHEREAS, the City of Mary Esther has adopted its Comprehensive Plan and Objective 11.A.8 requires the City to develop and adopt a Post-Disaster Redevelopment Plan which will reduce or eliminate the exposure of human life and public and private property to natural hazards; now

THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF MARY ESTHER, FLORIDA that this Ordinance is hereby adopted in conformance with Chapter 163, F.S., and Rule 9J-5, F.A.C. and the City adopted Comprehensive Plan and provides an effective date and repeals all provisions of ordinances or resolutions in conflict.

1.2 Title: This Ordinance shall be known as the "The City of Mary Esther Post-Disaster Redevelopment Plan" and also may be known as "Ordinance 92-2".

1.3 Jurisdiction: The lands subject to this Plan shall be the incorporated areas of Mary Esther except lands owned by Federal, State or local political entities.

1.4 Intent: Following a damaging hurricane or any other disaster, and/or enactment of a building moratoria, it is the intent of the City to allow rebuilding and reconstruction in an orderly manner. The City will control the issuance of building permits to manage the location, timing and sequence of reconstruction and repair. It is further the intent of the Post-Disaster Redevelopment Plan that the City establish prior to the disaster event, a special Reconstruction Task Force which will oversee the recovery and reconstruction process and serve as an

advisory body to the City Council. A main responsibility of this body will be to advise the City Council on the policies of the Plan which are structured to mitigate future hurricane damages through the management of reconstruction. To further the intent of this Plan, the City will make every effort to develop its capacity to identify and orchestrate various post-disaster redevelopment, while at the same time ensuring maximum local control over the redevelopment process.

1.5 Effective Date: The effective date of this Ordinance is January 6, 1992.

## ARTICLE TWO

### FOREWORD

In 1987, the United Nations General Assembly passed a resolution calling for a decade dedicated to reducing "loss of life, property damage and social and economic disruptions caused by natural disasters". To assist in preparing for the International Decade for Natural Reduction, the Secretary-General appointed an International Adhoc Group of Experts. In January, 1990, the group's 25 findings and recommendations for immediate and long term emergency management priorities for the Decade were revealed. To illustrate the direction and intent of the ideas behind the Decade, two of the group's findings are presented below:

- Most of the world views natural disasters with fatalism. This attitude is wrong and must be changed. Societies, communities, and individuals, prepared through education, training, policy and legislation, and investment can be both disaster resistant and disaster resilient.
- Reorient government thinking to integrate pre-disaster planning into the mainstream of the government policy and decision making process, including medical preparedness for disasters, improved building codes, and land use planning.

From the United Nations General Assembly comes a mandate to conduct pre-disaster planning for the events during and following a natural disaster. Of all natural disasters, Mary Esther is most vulnerable to hurricanes due to its coastline and its geographic location. The Florida State Land Development Plan (1989) has an objective that all coastal cities will have developed post-disaster redevelopment plans by 1993. Chapter 163, Part II, F.S. and Rule 9J-5 F.A.C and Objective 11.A.8 of the adopted Comprehensive Plan each require the City to prepare a Post-Disaster Redevelopment Plan by 1992. This Plan is a continuation of the City's Comprehensive Planning efforts and is designed to accommodate and compliment the requirements of that Plan. The Post-Disaster Redevelopment Plan is not intended to require a revision of the work already documented by emergency management officials and their planning for the immediate recovery phase after a major disaster.

In the aftermath of a hurricane or other major disaster, the ability of local governments to take effective advantage of opportunities to guide redevelopment in a way that reduces exposure to the effects of future disasters will be strongly

influenced by the regulatory environment established prior to the event. Previously established regulations help to define long-term goals and objectives for the policies that will be implemented during redevelopment. Attempts to mitigate development in high hazard areas are often constrained by the possibility of litigation resulting from restrictions imposed on the development potential of individual properties. A local government's pursuit of the general health, safety and welfare constitutes a legitimate legal basis for measures designed to reduce the impact of hurricanes/disasters, but the actual application of the principle may still subject that government to legal challenges. Property rights questions derive directly from federal constitutional principles which have been incorporated into state constitutions and statutes and include concerns over due process, the taking of private property without just compensation, and equal protection.

By the same token, the failure to take appropriate mitigative measures can potentially expose a local government to judicial findings of negligence, subjecting it to substantial liability for damages actually sustained. This is an important reason for local governments to formulate pre-hazard mitigation strategies together with post-hazard redevelopment plans.

## ARTICLE THREE

### INTRODUCTION AND PURPOSE

The City of Mary Esther is periodically threatened by severe weather phenomena: tornados, hail storms, flooding, high winds and hurricanes. The proximity to major military installations and large bodies of water could cause it to be subject to the effects of man made disasters (e.g. aircraft accidents, radioactive fallout, oil spills, etc.). Other emergency situations, such as accidents involving hazardous/dangerous materials may occur and require pre-disaster planning.

During a major disaster event, many structures will be either damaged or destroyed. The residents of homes will need temporary housing as they pursue financial assistance for repairs or relocation. The local building permitting office will be besieged with building permit requests. At this point, many questions will arise. Without a process in place, inefficient and inconsistent decision making may result in poor land use decisions or spot zoning challenges in the turmoil of post-disaster efforts. Coordinated, centralized, informed decision-making, frequent and accurate media communiques, accurate record keeping and prioritization of recovery activities which are flexible, but never broken, are key points necessary to deal effectively with any massive disaster.

It is recognized that a plan such as this can not anticipate all of the redevelopment scenarios and problems that one will face. Nor can any local government be expected to anticipate all of the redevelopment scenarios it will face after a hurricane or major disaster. Recognizing this, it is the goal of this Plan to establish the background of data, requirements, precedence and sources of information necessary to support and adopt a Post-Disaster Redevelopment Plan and to suggest policies which will guide reconstruction and redevelopment. Thus, this Plan is designed to assist you when considering alternate policies to guide redevelopment. Further, it is designed to provide in cooperation with State, Federal, County and City governments a plan for the purpose of minimizing exposure of human life and public and private property to any type of disaster, whether natural or man-made. Pre and post-disaster planning allows a community to capitalize more fully on mitigation opportunities after a disaster, and when developed and adopted with public involvement prior to a disaster, identifies and alleviates controversial issues that often arise after disasters.

## ARTICLE FOUR

### DEFINITIONS

4.1 Minor Damaged Structures. A structure that can be made habitable in a short period of time with minimal repairs. Damage may include doors, windows, floors, furnaces, water heaters, and other minor structural damage. An indicator for this category is if the cost of repair is 25% or less of the replacement cost at the time of damage.

4.2 Major Damaged Structures. A structure that can be made habitable with extensive repairs. Damage may include foundation, roof structure and major structural components. The indicator for this category is if the cost of repair is greater than 25% and less than 50% of the replacement cost at the time of damage.

4.3 Destroyed Structures. A structure that is a total loss or damaged to such an extent that repairs are not technically or economically feasible, i.e., 50% or more of replacement cost at the time of damage or destruction. Structures experiencing total destruction shall be visibly labeled condemned by a local official. Generally, FEMA requires all private structures damaged greater than 50% of their pre-disaster replacement value to be rebuilt to existing local codes and regulations.

4.4 Damage Assessment Teams. A damage assessment team's function is to assess losses to property immediately after a disaster. These teams should be identified and trained in advance of a disaster so they will be ready when needed. The following are suggestions for disaster assistant team membership:

- a) City engineer
- b) Utility company personnel
- c) Public safety and fire officers
- d) Tax assessor
- e) Building inspectors
- f) Agricultural Extension agents
- g) Health officials
- h) Red Cross officials

- i) Real estate appraisers
- j) Insurance agency representatives

4.5 Post-Disaster Reconstruction Task Force - The Reconstruction Task Force shall be responsible for advising and making recommendations to the City Council on a wide range of post-storm reconstruction/redevelopment issues. The Task Force will be composed of the following individuals, reflecting a broad based representation of community interest and shall be appointed annually by the City Council:

- a) two elected officials
- b) City Manager or his representative
- c) Chief Inspector
- d) Water and Sewer Supervisor
- e) Public safety representative
- f) Fire Department representative
- g) one representative from either or both the real estate or construction industry.

4.6 Coastal High Hazard Area. Coastal high hazard areas shall be defined as any land seaward of the FEMA V-zone elevation line within the City.

## ARTICLE FIVE

### PLANNING PHASES

5.1 Comprehensive Planning: Ever since the Second World War, emergency management has focused primarily on preparedness. But being prepared is only one phase of comprehensive emergency management. The City has the opportunity to deal with emergencies before they strike and the responsibility to aid recovery after a disaster. As a result, current thinking defines four phases of comprehensive emergency management. They are mitigation, preparedness, response and recovery. Each phase results from the previous one and establishes the requirements of the next one, estimates in one phase may overlap those in the previous phase and merge into the next one. Preparedness moves swiftly into response when disaster strikes. Response yields to recovery at different times depending on the extent and kind of damage. Similarly, recovery should trigger mitigation, motivating attempts to prevent or reduce the potential of a next disaster. Finally, the disaster phases know no beginning or end. The recognition of a threat can motivate mitigation as well as an actual emergency can.

5.1.1 Mitigation (Long Term): Any activities which actually eliminate or reduce the probability of occurrence or the effects of a disaster. It also includes long term activities which reduce the effects of unavoidable accidents. These activities can occur before, during and after a disaster and overlap all phases of emergency management. In addition to reducing hazard impacts through mitigation actions, improving preparedness, response and recovery capabilities can also reduce loss of life and property.

5.1.2 Preparedness (To Respond): Preparedness activities are necessary to the extent that mitigation measures have not or can not prevent disasters. Preparedness activities include the development of response procedures, design and installation of warning systems, exercising emergency operational procedures, and training of emergency personnel. Training also includes indoctrination of public officials, including senior administrative and administration officials and members of the City Council. In preparedness, governments, organizations and individuals develop plans to save lives and minimize disaster damage.

5.1.3 Response (To Emergency): Response activities follow an emergency or disaster. These include evacuation, rescue operations, emergency medical/care, shelter programming and other emergency assistance for casualties. They also seek to reduce

the probability of secondary damage and to speed recovery operations.

5.1.4 Recovery (Short and Long-Term): Recovery activities begin after disaster and continue until all systems return to a normal or improved level. These include repairs to roads, bridges, electrical power, water/sewer and other public facilities and activities that restore normal service to a community. Short-term recovery returns vital life-support systems to minimum operating standards. Long-term may continue for a number of years and may include the complete redevelopment of damaged areas.

5.2 Redevelopment Planning Policies: Chapter 9J-5, F.A.C., requires the City develop goals and policies and a concurrency management system that will ensure mitigation of impacts concurrent with development. It is likely that the Capital Improvements Element (CIE) for any given municipality, including Mary Esther, and the levels of service documented within will be rendered immediately ineffective after a hurricane.

Chapter 9J-11.006(1)(a)3.c provides for emergency amendments to the local comprehensive plan outside of the twice a year amendment procedures. However, it is unlikely that a planning staff will be able to assemble the necessary details to submit and adopt an amendment to the comprehensive plan immediately after a hurricane.

Therefore, a procedure which contemplates this must be considered. An emergency ordinance or a short-term moratorium on building may be implemented. Incorporating the policies of the local government to be exercised in an emergency can legally reinforce planning activities in an emergency situation.

## ARTICLE SIX

### POTENTIAL MITIGATION POLICIES

6.1 Mitigation Policies: This article presents a list of potential policies for hazard mitigation. It is useful to divide policies into those which might apply when no future development or rebuilding should take place and those which would be appropriate when conditional development or rebuilding should be allowed. A policy to prohibit development or rebuilding would mean essentially designating land for conservation, recreation or open space uses. In this case, the policy options for the City are few and often not politically or financially feasible.

6.2 Future Development or Rebuilding: The following policies could be instituted to condition future development or rebuilding in the aftermath of a hurricane or any other type of disaster:

- Changes from residential to commercial uses in order to reduce evacuation needs;
- Reduction in residential density (i.e. from multi-family to single-family);
- Clustering of development on the most protected portions of the lots;
- Building and rebuilding strictly to code (including flood insurance standards);
- Relocation of public infrastructure away from hazard zones;
- Assessment of impact fees for public infrastructure and services in hazard zones (including the building of shelters in non-hazard zones); and
- Rezoning which would result in existing development becoming a non-conforming use.

6.2.1 Development Regulation: Several different regulations may be developed and implemented to assist local governments in the implementation of hazard mitigation policies and plans.

6.2.1.1 Zoning: One zoning option for coastal communities is simply to designate hazard areas as open space or conservation zones in which all future development is prohibited. Even if this were a politically feasible option, in coastal areas where

agriculture and other non-developed uses do not yield reasonable economic returns, it invites a constitutional challenge of a "taking" of private property without just compensation. A more pragmatic approach is one which seeks to reduce the overall quantity of development at risk (such as reducing development density through down-zoning).

**6.2.1.1.1 Conventional Zoning:** Reduce the quantity of development exposed.

- Local zoning ordinances must be in accordance with local comprehensive plan.
- An increase in the minimum lot size or a reduction in the number of dwelling units permitted per acre would decrease the overall density of development.
- Certain high density uses in high hazard areas can be zoned out and declared non-conforming uses through changes in zoning districts, and, in time, a slow process of land use change might be expected. A shorter-term approach uses the non-conforming use concept as a way of preparing for and managing reconstruction after a hurricane occurs.

**6.2.1.1.2 Bonus or Incentive Zoning:** Developers may be granted additional development density if projects incorporate hazard-reduction features. These features may include the purchasing and deeding of high hazard lands to the public, or the provision of design features which may increase the ability of structures to withstand hurricane forces. However, it may counteract other hazard mitigation strategies to encourage or permit additional densities in coastal hazard areas, even if public amenities and hazard-reduction features are provided as compensation.

**6.2.1.1.3 Performance Zoning:** This approach sets standards for each zone based on the permissible effects of a development rather than specifically enumerating the types of uses, dimensions or densities permitted. If these prescribed standards are met, any use is allowed in the zone.

**6.2.2 Land and Property Acquisition:** Public acquisition of land can serve to influence the direction and timing of growth and development in a locality. Outright purchase of land in coastal areas experiencing moderate or high levels of market demand will tend to be prohibitively expensive for most local governments. The locality must be prepared, however, to take advantage of bargain sales after a hurricane when some property owners may

wish to vacate the hazard area due to the increase in cost of rebuilding.

**6.2.3 Transfer of Development Rights (TDR):** The basic concept underlying TDR is that ownership of land which includes the right to develop the land, a right which may be separated from other ownership rights and transferred to someone else. Under a mandatory program, a locality would simply zone the hurricane hazard area so that fewer units of development are allowed (or prohibit new development entirely), and the owner of the land within this zone would then be permitted to transfer all or some of this unused development density to parcels outside of the hazard-prone areas or to sell the TRDs on the open market to others who own land in areas designated for development. The local government would then permit increased levels of development in the non-hazard prone zone as a result of possessing extra development rights, thus creating a natural market for transferable development rights.

**6.2.4 Taxation and Fiscal Incentives:** In contrast to the public acquisition of hurricane-prone lands, a taxation policy might seek to reduce development by decreasing the holding costs of open space and vacant lands, in turn reducing the opportunity cost of not developing such lands for more intensive uses.

**6.2.5 Special Assessments and Impact Fees:** People who build in and inhabit coastal hazard areas often impose substantially more costs on the public than those who dwell elsewhere. An impact fee could be designed to recoup and mitigate the overall impacts of a project or development on the community at large.

**6.3 Capital Facilities and Public Infrastructure Policy:** Coastal development - its type, location, density and timing - is highly influenced by capital facilities, such as roads, sewer and water services. Such public investments have been aptly termed "growth shapers".

**6.3.1 Policies to Prevent Location of Public Facilities in High Risk Areas:** A locality can develop an explicit set of capital facilities extension policies designed to avoid high hazard areas, thus reducing the amount of development and property which will be attracted to the area and reducing the potential threats to lives and property. This approach can only become an effective deterrent, however, if development in high hazard areas is dependent upon the existence of public facilities.

**6.3.2 Relocation or Strengthening of Capital Investments After a Hurricane:** It may be possible, if the facilities are sufficiently damaged, that roads and sewers can be rebuilt in areas which are less susceptible to damage from future hurricanes. Even if the facilities are not relocated, they may be repaired and reconstructed in ways which make them stronger or less susceptible to hazards from hurricanes or other disasters. Roads and sewers can be elevated, for instance, and sewer and water lines can be flood-proofed. Also, placing power and telephone lines underground after the hurricane may help ensure safer evacuation when the next hurricane threatens.

**6.4 Information Dissemination:** More informed consumers make more rational and allocable efficient market decisions. This implies the need for an additional set of mitigation strategies which aims primarily at supplementing and enlightening individual market decisions regarding hurricane preparedness, recovery and redevelopment. Attempts to educate the housing consumer about hurricane might include brochures and other materials distributed to new and prospective residents of the community, informing them of the nature and location of hurricane hazards and informing them about what to look for in a new home or business (such as elevation and flood-proofing). The dissemination of information on the supply side might take the form of construction practice seminars for coastal builders and developers, introducing both conventional and innovative approaches to building and designing structures and to siting and planning the orientation of buildings in vulnerable locations.

## ARTICLE SEVEN

### DAMAGE ASSESSMENT PROCESS

7.1 Damage Assessment. One of the most important parts of a City's response to an emergency or disaster situation is damage assessment. It is a key step in caring for the long-term needs of the people in the community. The process determines what has happened, what the effects are, which areas are hardest hit, what situations must be given priority and what types of assistance are needed (e.g. local, state, or federal).

7.2 Damage Assessment Teams. Trained observers should be used to assess damage. This can be accomplished by the local Damage Assessment Team (DAT), reference Article 4, Section 4.4. To conduct an accurate damage survey, local governments must have capable DATs. These teams should be identified and trained in advance of the disaster. The composition will vary depending on the severity, type of damage and the availability of personnel. Each team should have a team leader who makes sure the team has the proper forms, maps with identified areas marked, and transportation. During joint damage assessment activities involving the State/FEMA, the City should have a team member to match up with State and Federal DAT members at all times.

7.3 Sequence of Events Leading to a Presidential Declaration. Public Law 100-707, the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (replaces Public Law 93-288, the Disaster Relief Act of 1974), which is the authorization for Federal assistance to local or State governments through a Presidential Declaration of an emergency or major disaster, requires "as a condition of any disaster loan or grant made under the provisions of this Act, the state or local government shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are to be used shall be evaluated and appropriate action shall be taken to mitigate such hazards, including safe land use and construction practices, in accordance with standards prescribed or approved by the President after adequate consultation with appropriate elected officials of general purpose local governments and the state shall furnish such evidence of compliance with this section as may be required by regulation" (FEMA, 1989). The following sections explain how a Declaration is secured and how local governments get involved.

7.3.1 Initial Damage Assessment. Immediately following a disaster, an initial damage assessment must be performed by the City to assess the impacts of the disaster. An official of the City will be designated to conduct this generalized, preliminary

post-disaster damage assessment and provide to the City Emergency Management Director within 24 hours. This assessment should provide a rough estimate of the type and extent of damage. Often this will require the coordination of the various municipal governments who will also perform their own damage assessments. Once the information has been generated, it should be transmitted to the City Emergency Management Office by telephone or facsimile and followed up with a submittal of a General Emergency Incident Report Form (Appendix A). Often in the aftermath of a major disaster that has generated obvious, extensive damages, the State and FEMA, upon request, will join the local government in completing the initial damage assessment.

**7.3.2 Local Declaration of Emergency.** Local jurisdictions have the authority to declare a local "state of emergency" pursuant to Section 252.38(6)(e), F.S. Even though a local state of emergency declaration can be initiated by a City at any time, it must be declared prior to requesting response or recovery assistance from the County/State. Doing so lets decision-makers know that the emergency situation is beyond the response or recovery capabilities of the local jurisdiction. The State will not initiate the damage assessment process, nor seek a Presidential Declaration for a city that is not declared a local state of emergency.

The enactment of such a declaration would enable municipalities/counties to

- request State assistance, if needed;
- evoke emergency related mutual-aid assistance;
- waive the procedures and formalities otherwise required of the political subdivision by law, to respond to the emergency.

These measures pertain to:

- the performance of public works;
- entering into contracts;
- incurring obligations;
- hiring permanent/temporary workers;
- using volunteers;
- securing rental equipment;

- the acquisition and distribution of supplies; and
- the appropriation and expenditure of public funds.

**7.3.3 Preliminary State/Local Assessment.** In situations where it is not an obvious conclusion that a disaster has had a major impact on a City, the State will initiate a damage assessment with the affected local government. The action is taken to document the severity of the impact and justify the need to pursue a request for Presidential Declaration. When the damage is of such a magnitude that it would appear a Declaration is eminent, this assessment would be combined with FEMA, thereby eliminating this step and the assessment process.

If this step is initiated, local jurisdictions can expedite the process by having the appropriate maps of the damaged areas, personnel, and transportation available to take State damage assessor to effected sites. The more expeditiously the data can be collected, the quicker a potential disaster Declaration can be obtained.

**7.3.4 State of Emergency by the Governor.** If a city determines the emergency or disaster is beyond their ability to effectively respond, a state of emergency can be declared by the Governor through an executive order or proclamation. The action of the governor will be in support of the local jurisdictions expressed needs. The Declaration of a state of emergency does the following:

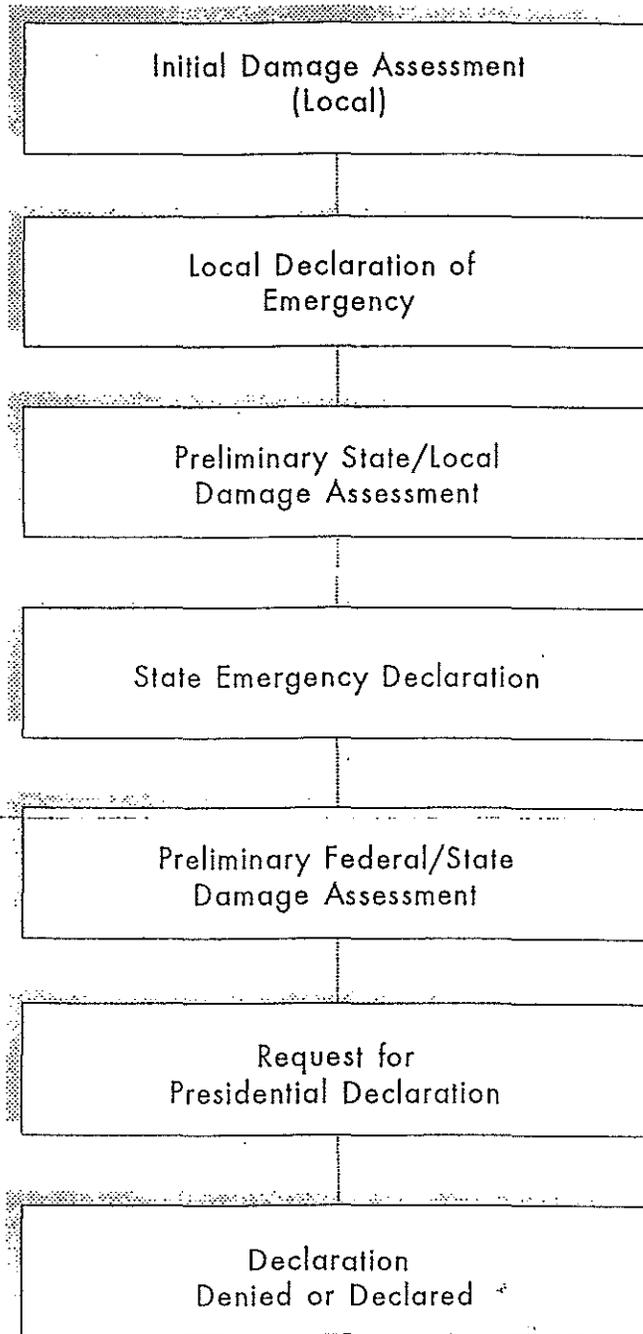
- activates the emergency response, recovery, mitigation phases of the State and local emergency management plans; and
- provides authority for mobilization and deployment of all resources to which the plans refer, pursuant to Section 252.31-60, F.S., or any other provisions of law relating to emergencies.

**7.3.5 Preliminary Federal/State Damage Assessment.** Prior to recommending a disaster declaration for a city, FEMA will perform a damage assessment to determine if there is sufficient damages to justify a request for a Presidential Declaration. If it is obvious that there is sufficient damage for such a request, FEMA will be asked to participate in a joint local/State preliminary damage assessment to further substantiate the request. This approach will eliminate the need to conduct separate local, State, and Federal assessments. The data collected during the preliminary damage assessment will be used by the State when

preparing the formal request for Federal disaster aid.

**7.3.6 Request for Presidential Disaster Declaration.** When State and local resources are inadequate to effectively respond to an emergency or major disaster, public law 100-707, allows for Federal assistance through a Presidential Disaster Declaration. This assistance is requested through the Governor if the situation meets the criteria for a Declaration. The Governor submits a written request to the President through the Federal Emergency Management Agency, Region IV, in Atlanta, Georgia. If FEMA concurs with the request, it is sent to the President, who determines whether the request will be approved or rejected. The response is transmitted through FEMA, Region IV, back to the Governor.

# SEQUENCE OF EVENTS LEADING TO A PRESIDENTIAL DECLARATION



7.4 Public and Private Damage Assessment. In the aftermath of a disaster, both public and private damage assessments must be performed because of the corresponding types of Federal/State assistance available. Each type of assessment is designed to quantify the eligible amount of damage a community incurred. Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Hazard Mitigation Grant Program, creates a new program to fund additional hazard mitigation measures "which substantially reduce the risk of future damage, hardship, loss or suffering in any area affected by a major disaster". Specifically, this program can be used to relocate susceptible property that was not damaged by a hurricane and prevent it from future damage. Hence, this section provides an opportunity for the disaster area to fund large scale mitigation land use scenarios that previously were not funded by FEMA (FEMA, 1989). Section 406 provides an assistance program for public entities. This program provides funding for public relocation projects such as roadways. Section 406 authorizes "Large In-Lieu Contributions" for public and certain private non-profit facilities. If the local government or landowner determines that the public welfare would not best be served by repairing, restoring, or replacing the damaged facility, it may elect to receive a contribution not to exceed 65% of the federal contribution of eligible work of repair.

7.4.1 Public Damages. With the expansion of FEMA regulations addressing hazard mitigation assistance for public facilities (Hazard Mitigation Grant Program, section 404), it is more important than ever for local governments to have identified mitigation measures prior to a declaration. This includes any damage incurred by a publicly owned structure or facility which is owned by a public entity. This could include roads, bridges, buildings, utilities, etc. To be eligible, the damages must fall in one of the seven basic categories of eligibility. They include:

Debris Clearance - this category includes all storm induced debris on: public roads, including the rights-of-way; other public property; and private property when undertaken by local government forces. It can also cover the cost of public structure demolition when a structure was made unsafe by the disaster.

Protected Measures - this category addresses a need to provide emergency measures designed to protect life, safety, property and health. For example, evacuation, traffic control, barricades, etc.

Road Systems - this category includes roads, streets, bridges, culverts and traffic control devices. The categories of damage might range from some minor damage requiring repairs to complete washout or destruction.

Water Control Facilities - eligible damages under this category include dikes, levies, dams, drainage channels and irrigation works.

Public Building and Equipment - this should include the number and cost of buildings, supplies and/or inventory and vehicle or equipment damaged or destroyed.

Public Utility Systems - public utility systems that sustain damage could include the water system, sanitary sewer, storm drains, light and power and other utilities.

Other - the "other" category includes park and recreational facilities, public facilities under construction, and other public facility damages that do not reasonably fit in one of the six other categories.

7.4.1.1 Public Damage Assessment Reporting. Public damage assessment is performed in the field using Form A (Appendix B). It is used to report the damage done on each individual site. Four individual site entries can be made on each Form. Once the public damage information has been collected on Form A, Form B is used to summarize, by category, information gathered at all sites within each political jurisdiction within the city that received damage to public property (Appendix C).

7.4.2 Private or Business Categories. The purpose of individual damage assessment is to determine the extent to which individuals and private business have been impacted by the disaster. There are two basic categories of eligible individual damage that can be reported and assessed for damages. They include:

Damage to Private or Individual Dwelling - a person whose residence has been damaged due to a disaster may qualify for various forms of disaster assistance. Water damage on the interior or wind damage to shingles, windows or siding are examples. Mobile homes should be included in this category as a separate entry. When damage assessor go into the field, they will estimate the victim's insurance coverage, estimate the victim's income, and determine the inhabitability and type of the victim's home.

Damages to Business and Agriculture - privately owned business that were damaged or destroyed by the disaster can qualify for individual assistance programs. Businesses include buildings, inventory and equipment. Agricultural damage should consist of partial and total damage to farm buildings, the number of livestock missing or destroyed and the number of acres of crops destroyed.

- . 7.4.2.1 Individual Assessment Forms. Performing damage assessments to quantify individual loss and suffering is much different from performing public damage assessments. By using Forms C & D and instructions on Appendixes D and E, assessors are able to document the extent of individual damages to homes, businesses, agriculture and jobs.

## ARTICLE EIGHT

### DISASTER RECONSTRUCTION AND REDEVELOPMENT

**8.1 Intent:** Following a damaging disaster and enactment of a building moratorium, it is the intent of the City to allow rebuilding and redevelopment in an orderly manner. The City will control the issuance of building permits to manage the locations, timing and sequence of reconstruction and repair. It is further the intent of this Article that the City establish, prior to a disaster, a special Reconstruction Task Force as defined in Article 4, Section 4.5 of this Plan. The Task Force will oversee the recovery and reconstruction process and serve as an advisory body to the City Council on reconstruction/redevelopment issues. The main responsibility of this body will be to identify opportunities to mitigate future storm damages through the management of redevelopment standards. To further the intent of this Section, the City will make effort to develop its capacity to identify and orchestrate various post-disaster reconstruction resources, while at the same time ensuring maximum local controls over the reconstruction and redevelopment process.

**8.2 Disaster Reconstruction/Redevelopment:** Disaster reconstruction/redevelopment addresses the removal, relocation or structural modification of damaged structures for both short and long-term repair or replacement. As a condition of any Federal disaster loan or grant, the City shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are to be used shall be evaluated and appropriate action shall be taken to mitigate such hazards, including safe land use and construction practices; thus indicating a long-term, comprehensive approach to mitigation.

**8.2.1 Determination of Damage:** A primary task of the local damage assessment team is to identify structures which, as a result of the disaster event, have been damaged. The local damage assessment team will recommend to the Building Inspector those structures which have: 1) been destroyed; 2) received major damage; or 3) received minor damage. The Building Inspector will then inspect the damaged structure and place each structure in one of the above categories.

**8.2.2 Declaration of a Building Moratorium:** The initial post-storm reconstruction moratorium shall be declared in effect upon the occurrence of the following:

8.2.2.1 The City is declared a disaster area by either the Governor of the State of Florida or the President of the United States.

8.2.2.2 The City Council declares a local "state of emergency" and begins the initial building moratorium when the Council finds that a moratorium is necessary for the protection of lives, safety and property, or due to the inability of the City to maintain acceptable levels of public order and service. The City Council, based upon the above finding, may extend the initial moratorium until such time as a state of emergency no longer exists.

8.2.3 Initial Building Moratorium: Upon the declaration of a building moratorium, the initial post-moratorium shall be in effect for a minimum period of 48 hours. No building permits shall be issued during this time period. After expiration of this initial moratorium, the following moratorium shall apply:

8.2.3.1 Destroyed Structure Moratorium: No building permit shall be issued within thirty (30) days following the expiration of the initial moratorium for the replacement of any structure which has been destroyed, as defined in Section 4.3 of this Plan. All the replacement buildings shall be subject to meeting all the requirements of the Land Use Codes, zoning ordinances, zoning maps and all applicable sections of City and Municipal Ordinances and applicable codes prior to the issuance of a building permit. Non-conforming uses destroyed shall be designed and constructed consistent with the adopted Future Land Use Plan Map, Land Development Code and current building regulations.

8.2.3.2 Major Damaged Structures Moratorium: No building permit for repairs of a major damaged structure shall, as defined in Section 4.2 of this Plan, be issued for at least seven (7) days following the expiration of the initial moratorium. All repairs to a major damaged structure shall meet the requirements of the Land Use Codes, zoning ordinances, zoning maps and all applicable sections of City and Municipal Ordinances and applicable building codes prior to the issuance of a building permit. All non-conforming structures must be upgraded and will be inspected prior to issuance of Certificate of Occupancy.

8.2.3.3 Minor Damaged Structures Moratorium: Permits for the repair of minor damaged structures, as defined in Section 4.1 of this Plan, may be issued 48 hours following the expiration of the initial moratorium. All repairs to minor damaged structures shall meet the requirements of the Land Use Codes, zoning

ordinances, zoning maps and all applicable sections of City and Municipal Ordinances and applicable codes prior to issuance of a building permit.

**8.2.3.4 Outstanding Building Permits Moratorium:** All building permits which were issued prior to the storm event shall be revoked and shall not be reissued for a minimum period of thirty (30) days following the expiration of the initial moratorium, unless upon finding by the Chief Building Inspector on a case-by-case basis that sufficient inspection staff is available to adequately inspect the structures, should construction again resume. All permits issued prior to the disaster event must meet additional requirements of the Land Use Codes, zoning ordinances, and zoning maps before building can resume. Application for building permits revoked in this Section shall be reissued at no charge.

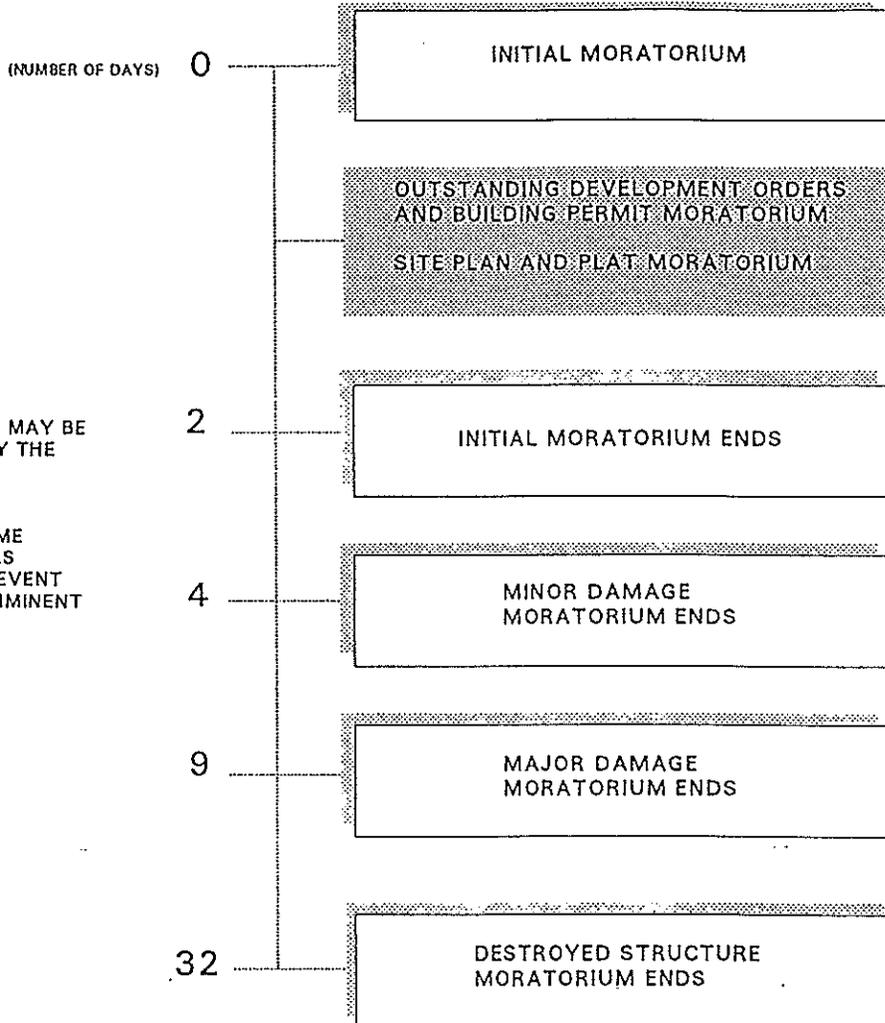
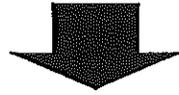
**8.2.3.5 Site Plan Review:** Site plans which have been submitted to the City prior to the disaster shall not be reviewed by the staff, Planning and Zoning Board or City Council for a period of thirty (30) days following the expiration of initial moratorium. All submitted dates and review periods shall be adjusted accordingly to reflect a time period covered by the thirty (30) day moratorium.

**8.2.3.6 Review Procedures Moratorium:** No new site plans, zoning requests or subdivision plats shall be accepted by the City for a period of thirty (30) days following the expiration of the initial moratorium. All submittal dates and review periods shall be adjusted accordingly to reflect the time period covered by this thirty (30) day moratorium.

**8.2.3.7 Duration of Moratorium:** All moratoriums other than the initial moratorium as in Section 9.2.3 shall be in effect for the length of time described above and may be cancelled or extended by the City Council.

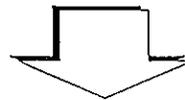
**8.2.4 Emergency Repairs:** While a moratorium is in effect, no construction or reconstruction activities may be undertaken, except in only minor interior repairs and emergency repairs necessary to prevent injury or loss of life or imminent collapse or other substantial additional damage to a structure. For illustrative purposes only, items that constitute minor repair may include temporary roof repairs to avoid further water damage, minor repairs to steps and a temporary shoring up of a structure to avoid imminent collapse.

# DISASTER



\* DURATION OF MORATORIUM MAY BE CANCELLED OR EXTENDED BY THE CITY COUNCIL.

EMERGENCY REPAIRS ANYTIME (EX. MINOR INTERIOR REPAIRS REPAIRS NECESSARY TO PREVENT INJURY, LOSS OF LIFE OR IMMINENT COLLAPSE.)



PRE-DISASTER STATUS

**8.3 Reconstruction Task Force:** The Reconstruction Task Force, created as defined in Section 4.5 of the Plan, shall be activated and mobilized upon the declaration of the initial building moratorium. The Task Force shall advise and make recommendations to the City Council on a wide range of post-storm reconstruction issues.

**8.3.1 Responsibilities of the Reconstruction Task Force:** The Reconstruction Task Force's primary function is to receive and review damage reports and other analysis of post-storm circumstances and to compare these circumstances with mitigation opportunities identified prior to the storm to discern appropriate areas for post-storm change and innovation. When needed, the Reconstruction Task Force can review in a more specific fashion alternative mechanisms for bringing these changes about and recommend the coordination of internal and external resources for achieving these ends.

**8.3.2 Review and Mitigative Recommendations:** In addition to the responsibilities above, the Reconstruction Task Force shall review the nature of damages, identify and evaluate alternative program approaches for repairs and reconstruction, and formulate recommendations for handling community recovery. The Task Force shall also have the following responsibilities:

- Recommend rezoning changes in areas of damage
- Reduction in residential density (i.e. from multi-family to single-family)
- Change from residential to commercial or mixed use in order to reduce evacuation needs
- Set a calendar of milestones for reconstruction tasks in conjunction with the City Council and Department Heads
- Insure building and rebuilding is strictly to code
- Initiate requests for repairs to critical water, sewer and other facilities
- Recommend the expiration or extension of a moratorium for a "major" and "minor" repairs
- Recommend the lifting or extension of a moratorium for new development
- Evaluate hazards and the effectiveness of mitigation policy and recommend the amendment of

policies if necessary

- Recommend clustering of development on the most protected portions of lots
- Initiate recommendations for negotiations for relocation and acquisition of property
- Recommend relocation of public infrastructure and services in hazard zones
- Participate in Federal hazard mitigation planning

The Task Force shall recommend any changes in zoning, subdivision regulation, setback, density, elevation requirements, building codes or any other ordinances or land uses which it deems necessary or advisable to prevent a recurrence of a disaster of this nature. Within the coastal high hazard area, the City shall allow no new permanent residential structures which do not meet the construction standards established in the Land Development Code.

**8.3.3 Non-Mitigative Recommendations:** The Reconstruction Task Force may also undertake a similar process for non-mitigative local objectives and opportunities. The Task Force may recommend the City Council's consideration for the following specific opportunities:

- enhancement of local recreational and open space opportunities
- enhancement of public access to Santa Rosa Sound
- enhancement and restoration of local natural ecosystems
- reduction of traffic congestion, noise, and other traffic-related problems
- enhancement of the long-term economic vitality of the local commercial and industrial base
- other objectives which further the stated goals and policies of the City's Comprehensive Plan and Land Development Codes.

**8.4 Conditions for Issuance of Building Permits:** Upon expiration or cancellation of an applicable building moratorium enacted in Section 9.2 of this Plan, the following additional

requirements, in addition to all applicable planning and zoning codes, shall be met prior to issuance of a building permit. Permitting of new development and redevelopment in the coastal high hazard area shall also be in consideration of impacts on hurricane evacuation times.

**8.4.1 Destroyed Structures:** The following additional requirements must be met prior to the issuance of any building permit for construction of a new structure.

- A post-storm survey and/or site plans as applicable, of the lot and proposed structure.
- Site plan approval as provided by applicable planning and zoning ordinances, zoning maps and LDC.
- On-site inspection of lot by Chief Building Inspector or his representative.
- Water and sewer will be restorable at street frontage of lot.
- Direct, uninterrupted, approved vehicular access to lot.
- Electrical service restorable to building site.
- All debris removed from lot.
- Septic system improvement permits issued, if required.

**8.4.2 Major Damaged Structures:** The following additional requirements must be met prior to issuance of a building permit for a major damaged structure.

- A post-storm survey and/or site plan, as applicable, of the lot and structure if there is a proposed increase of footprint of a structure over the pre-storm structure. In addition, the following information shall be provided on a survey/site plan:
  - the location of all property boundary lines
  - require the upgrading of non-conforming structures
  - site plan approval

- on-site inspection of lot by the Chief Building Inspector or his representative
- water and sewer will be restorable on street frontage of lot
- direct, uninterrupted, approved vehicular access to lot
- electrical service restorable to building site
- septic system improvement permits issued, if required

**8.4.3 Minor Damaged Structures:** The following additional requirements must be met prior to issuance of a building permit to repair a minor damaged structure:

- A post-storm survey and/or site plan, as applicable, of the lot and structure if there is a proposed increase in the footprint of the structure over the pre-storm structure. In addition, the following information shall be provided on the survey/site plan:
  - the location of all property boundary lines
  - site plan approval
  - on-site inspection of lot by the Chief Building Inspector or his representative
  - vehicular access to lot
  - all debris removed from lot
  - septic system improvement permits issued, if required.

**8.5 Policy on Reconstruction of Roads, Easements and Infrastructure:** Provide roads, public facilities and services which guarantee to the greatest extent possible the health, safety and welfare of the community and which does not require future expenditures for the public infrastructure in the Coastal High Hazard Area.

**8.5.1 Public Facilities:** Repair in place facilities which are essential to the immediate health, safety, or welfare of citizens, or work to provide the impaired service to residents

through alternative means. The City shall coordinate the planning and provision of emergency water and sewer services with Okaloosa County and the City of Fort Walton Beach. This shall include, but is not limited to, executing and entering into local agreements, locating and inventorying existing lines, installing meters and conducting engineering studies to determine the amount of pressure/capability available as compared to required. In case of an emergency disaster effecting water and sewer facilities, contact the County Emergency Management Director at 651-0314 (office), 664-8152 (beeper), 244-2522 (home) or 582-1239 (cellular). Also, for emergency water supply to critical areas, contact Fort Walton Beach Public Works Department at 243-3141 (City Hall), 243-2070 (field office) or 863-2266 (home). For sewer only, contact Environmental Waste Systems at 862-7141 (office) or 244-3878 (home).

**8.5.2 Public Roads and Easements:** Prior to the consideration of an expenditure of public funds for the repair or construction of City roads which are destroyed or damaged by a disaster, the City shall conduct adequate studies and explore alternative solutions, including, but not limited to, abandonment procedures, special assessment and condemnation.

**8.5.3 Infrastructure:** No public infrastructure shall be allowed in the coastal high hazard area, except for that needed to provide public access to the shoreline, to serve public parks that have been approved by the City, state and federal agencies, and protect or enhance natural resources. Public expenditures in the CHHA shall be limited to maintaining the existing service capacity, except for recreation facilities. Provision of water and sewer service at private expense to existing lots or record will be permitted, as long as such provision does not result in conflict with policies for: criteria adopted for determining when structures can be rebuilt; the land development regulations; and the state policy to limit public expenditures that subsidize development permitted in coastal high hazard areas, except for enhancement of natural resources. New sanitary sewer facilities in the coastal high hazard area shall be flood-proofed.

**8.5.4 Private Roads and Easements:** It shall be the policy of the City not to expend public funds for the repair reconstruction of any private road or vehicular easement where it is damaged or destroyed as a result of a disaster, except in conjunction with the repair and maintenance of the City's water and sewer system.

**8.6 Acquisition of Property:** The aftermath of a disaster can present an opportunity to achieve substantial progress in hazard mitigation by the rapid acquisition of land. The City will take

advantage of opportunities which may arise to acquire or purchase land following disaster. To this extent, the City will establish purpose and identify in advance where priority areas are located and will develop in advance decision making and funding mechanisms to ensure rapid acquisition. The selection of parcels to be purchased based on a criterion of hazard reduction per dollar spent could maximize the use of public money for such a program. The City shall identify objectives acquisition areas which would satisfy multiple community objectives, including, but not limited to, open space, parks and recreation sites, historic or scenic areas, or areas for location of City facilities and any other use allowed by law.

## ARTICLE NINE

### FEDERAL ASSISTANCE PROGRAMS AND PROCESS

9.1 Federal and State Disaster Aid Programs. Following a major disaster, there are a large number of Federal and State programs available to aid in disaster relief and reconstruction. The programs can provide assistance or funds to local government units as well as providing information about assistance that is available to individuals, business, families and non-profit associations. Some programs can only be implemented upon declaration of a major disaster by the President of the United States. Other programs can be made available independently of a Presidential Declaration or a major disaster or emergency.

9.2 Policy. It should be the policy of the City to appoint an assistant facilitator-consultant who, as directed by the City, will be responsible:

- determining the types of assistance available to the City and the type of assistance most need
- assisting in the coordination of Federal disaster recovery efforts
- coordinating Federal and State programs of assistance
- informing the community of types of assistance programs available
- recommending to the Recovery Task Force and the City Council programs which are available to the City and then act as facilitator in securing these programs

9.3 Federal Assistance Process. When all of the eligible public and individual damages have been assessed, and the request for a Presidential Disaster Declaration has been prepared and approved by the President, a variety of Federal programs can be made available to public entities and individuals. These programs are designed to bring a community, and its residents, back to a pre-disaster condition. It is important to note that there is no longer separate public and individual disaster declarations. When a Presidential Disaster Declaration is approved, both individuals and public assistance are automatically offered. The following is a brief explanation of both types of assistance.

**9.3.1 Public Assistance.** Public assistance is that part of disaster relief through which the Federal government supplements the efforts of State and local governments to return the disaster area to pre-disaster conditions. These efforts primarily address the repair and restoration of public facilities, infrastructure, or services which have been damaged or destroyed. There are two types of public assistance authorized: "emergency" and "permanent" work. Emergency work includes efforts to save lives, protect property and maintain operation of essential facilities on a short-term basis until permanent restoration can be made. Permanent work involves action necessary to repair, restore, restruct or replace public, and certain private non-profit, facilities damaged or destroyed.

Project application for public assistance may be approved to fund a variety of projects that fall within the eligibility categories identified in Section 7.4.1 of this Plan.

**9.3.2 Flood Insurance Requirements.** One very important element in receiving public assistance are the requirements concerning flood insurance. Public Law 100-707 makes it very clear that all applicants for public assistance must have flood insurance. If they do not have flood insurance at the time of the disaster, eligible cost will be reduced by the maximum amount of flood insurance proceeds the applicant could have received had the facility been fully covered by flood insurance. Also, applicants will be required to commit to maintaining insurance coverage for the total eligible amount of the damaged as a condition to receive public assistance. No assistance for any facility will be available in future disasters, unless the required insurance has been obtained and maintained.

**9.4 Method of Funding.** Recent changes in Public Law 93-288 (Public Law 100-707) have streamlined the funding methods for public assistance programs. Currently, there are two types of grants (funding methods) available that are based on the cost of the project, and two funding options available, either of which can be used under each of the grants. Each grant is explained below.

**9.4.1 Large Project Grant.** When the total cost to repair or replace eligible public damage is \$36,500.00 (adjusted annually according to the Consumer Price Index) or more, a large public grant can be secured. Such grants are used to restore public or private non-profit facilities to their pre-disaster condition.

9.4.2 Small Project Grant. When the total cost to repair or replace eligible damage is less than \$36,500.00, a small project grant can be secured. Once approved, these funds are made totally available to the beginning of the project. At its completion, the applicant certifies the work is completed. The State will perform a final inspection.

9.5 Funding Options. The following funding options can be used by the applicant if they feel it will benefit their situation. They are designed to give the applicant a greater degree of flexibility. Both options can be used under large or small project grants, and are voluntary.

9.5.1 Alternate Projects. Often, when a community applies for a large or small grant, they will determine that the public welfare would not be best served by repairing, restoring, reconstructing, or replacing a damaged facility. Under the "alternate project" option, they community could receive 67.5% of the original damage estimate for use on: other public facilities; constructing new facilities; or, funding hazard mitigation activities. Funds necessary for completing the alternate project would come from local sources.

9.5.2 Improved Projects. When the applicant decides to exceed the original design and value of a damaged facility instead of simply restoring to its pre-disaster condition, the "improved project" option can be approved. The applicant could receive 87.5% (Federal/State contribution) of the original damage estimate and provide the remaining funds necessary to complete the project.

9.6 Public Assistance Process. The process for securing public assistance for a community site, once a Presidential Declaration has been declared, is described below. The process involves all levels of government at various stages.

9.6.1 Applicants Briefing (Step 1). As soon as possible, following the President's Declaration of an emergency or major disaster, the State Coordinating Officer and the State Public Assistance Officer will coordinate an applicant's briefing at the local level. This meeting acquaints the applicants with a public assistance process and project administration. Appropriate City personnel should attend the applicant's briefing, including those who will:

- know the general location of all disaster damages;
- have the authority to sign for Federal assistance for the City, including the "Notice of Interest" form (Appendix F); and
- be responsible for recording data and maintaining documentation of time, repairs and costs.

9.6.2 Inspector's Briefing (Step 2). Once Notice of Interest (NOI) forms are collected, they are reviewed to determine the types of public damages applicants have identified. At this point, Damage Assessment Teams (DAT) are formed based on the need expressed on the NOIs. Each DAT should have Federal/State and local membership. These assessors are briefed on their appropriate procedures to do a site-by-site detail damage assessment, and how to prepare a damaged survey report.

9.6.3 Damage Survey Report Preparation (Step 3). The DATs are then sent into the field. Each damage site is surveyed and a Damage Survey Report (DSR) is prepared. The FEMA DAT member will prepare the DSR. The State and local DAT members sign the DSR upon completion, certifying that they concur or do not concur with the scope of work and the estimated repair costs.

9.6.4 FEMA and State Review (Step 4). As the DSRs are prepared, they are reviewed by FEMA and the State Public Assistance Officer for completeness. Problems are discussed in an effort to resolve them prior to FEMA's formal review.

9.6.5 Application Preparation (Step 5). Once the State has approved the DSRs, a State Project Application is prepared that includes all DSRs, and submitted to the Disaster Recovery Manager (FEMA) for approval.

9.6.6 Advance Funds (Step 6). Once the Project Application has been approved, funds are advanced to the State through a letter of credit. For (large project) grants, the State then forwards the money to the approved applicants on a cost reimbursement basis. For (small project) grants, the entire amount of the proposed project is forwarded to the applicant.

9.6.7 Completion of Work (Step 7). When the "large project" is completed, the applicant will submit a Project Summary of Documentation Form to DEM, along with request for final inspection. Once, the State has reviewed the Documentation Form,

a final inspection will be scheduled. When a "small project" is completed, the applicant must submit to the DEM a certification that the work has been completed in accordance with the Project Application. If the total amount of the grant was not used, the applicant can use the remaining funds for other appropriate purposes, subject to State approval.

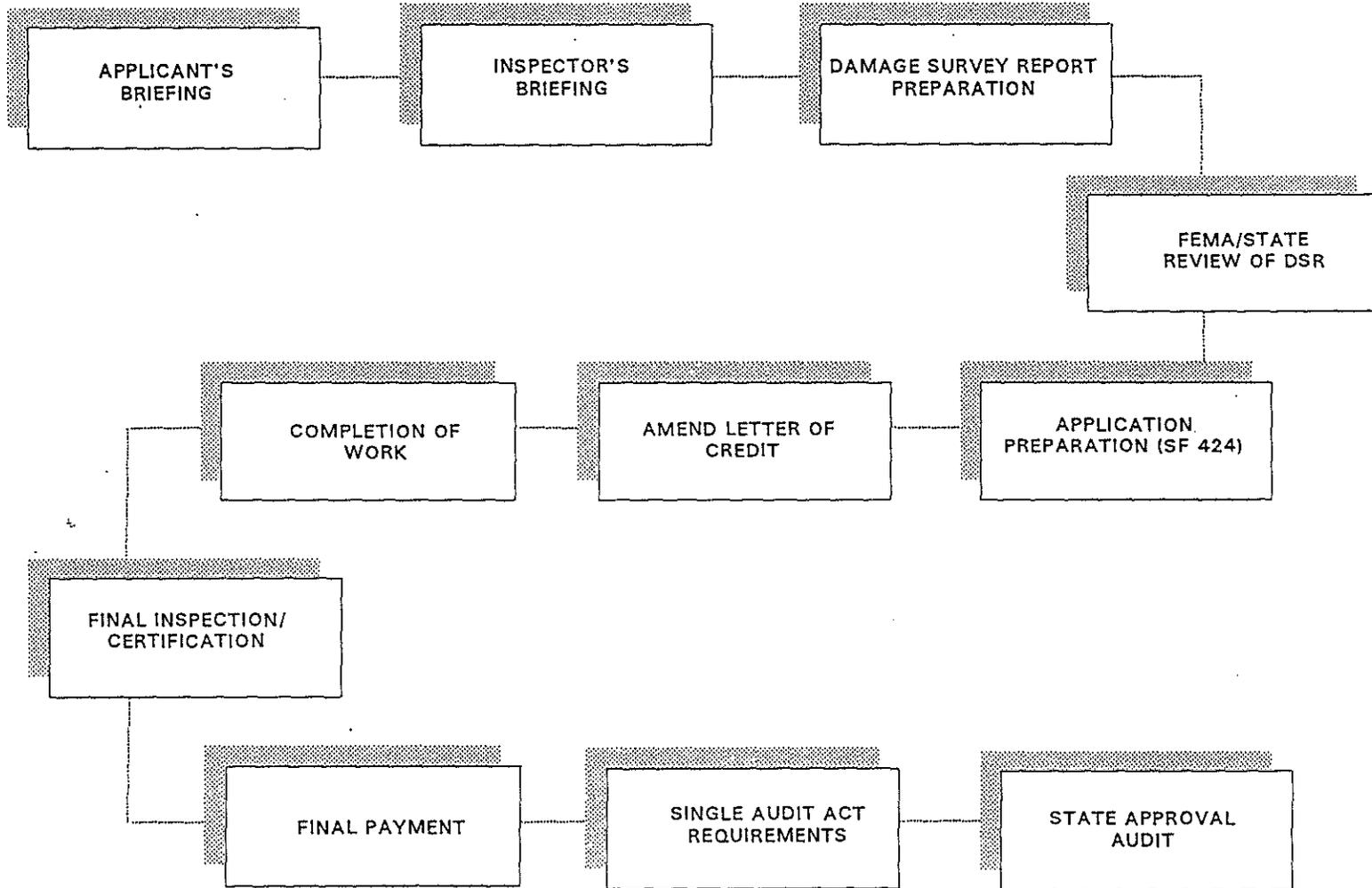
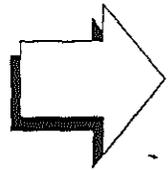
9.6.8 Final Inspection and Certification (Step 8). The State will perform the final inspection to ensure the project was completed per the scope of work, and certify that the work and cost are in compliance with the provisions of the FEMA/State Agreement.

9.6.9 Final Payment (Step 9). For large projects, once the final inspections are completed and any discrepancies are resolved, the applicant will submit a request for final payment.

9.6.10 Single Audit Act (Step 10). All recipients of public assistance will be audited per the requirements of the Single Audit Act of 1984, Circular OMB A-128.

9.6.11 State Approval of Audit (Step 11). Once the audits are performed, the State must approve the audit report. All audit exceptions and discrepancies will be resolved prior to closing out the project.

# PUBLIC ASSISTANCE FLOW CHART



**9.7 Individual Assistance.** After the President signs the disaster Declaration, it is important to inform affected individuals of the programs available to them, and to assist them in obtaining any aid to which they may be entitled. To make it convenient for affected individuals to obtain information and assistance, disaster application centers may be established in each of the declared Counties. Representatives of Federal, State, local and volunteer organizations are then made available at these centers to assist disaster victims applying for assistance. There is a wide range of programs providing disaster assistance to individuals including the following:

**9.7.1 Small Business Administration (SBA).** Once implemented, the SBA program can offer low interest loans to individuals, business and farmers for refinancing, repair, rehabilitation or replacement of damaged property (real and personal). A SBA declaration can be independently or in concert with a Presidential Declaration. There must be a minimum of 25 homes or businesses with 40% or more insured losses and/or 5 business with substantial economic or physical losses.

**9.7.2 Temporary Housing.** In the event of a presidentially declared disaster, a Temporary Housing Program may be authorized in order to meet the housing needs of disaster victims. The Program has several components including:

**9.7.2.1 Mortgage and Rental Assistance Program.** Applicable for individuals or families who have received written notice of eviction or foreclosure due to financial hardship caused by the disaster.

**9.7.2.2 Rental Assistance.** Provided to homeowners of renters whose dwelling is determined unlivable as a direct result of the disaster.

**9.7.2.3 Minimal Repairs Program.** Provides money for an owner occupied, primary residences which have sustained minor damage, and are unlivable as a direct result of the disaster.

**9.7.2.4 Mobile Homes or Other Readily Fabricated Dwellings.** When all other avenues are exhausted, FEMA may initiate the mobile home program. Such homes are moved to, or near, the disaster site and set-up. The State of Florida does not have a temporary housing program. Therefore, FEMA will manage the temporary housing program, should it be needed in Florida.

9.7.3 Individual and Family Grant Programs. The Individual and Family Grant Program provides grants up to \$10,000.00 to help families meet serious needs and necessary expenses that are not covered by other governmental assistance programs, insurance or other conventional forms of assistance. Financial aid can be provided under the following categories

- medical expenses;
- transportation costs;
- home repair;
- replacement of essential property;
- protective measures; and
- funeral expenses.

75% of the costs are funded by FEMA and 25% by the State and/or the local government.

9.8 Disaster Unemployment Assistance. Individuals unemployed as a result of a major disaster, and not covered by regular State or private unemployment insurance programs, will be eligible for unemployment benefits. The weekly compensation received will not exceed the maximum amount of payment under the Unemployment Compensation Program of Florida, and may be provided until an individual is re-employed, or up to 26 weeks after the major disaster is declared, whichever is the shortest period.

Other individual assistance programs that could be activated, if appropriate, are:

- food coupons (U.S. Department of Agriculture)
- food commodities
- legal services
- crisis counseling
- economic injury loans
- tax information
- emergency conservation measures program
- agriculture assistance

- Veterans Assistance
- Cora Brown Fund
- waiver of penalty for early withdrawal of funds or certain time deposits

9.9 Conclusion. This Article is designed to briefly described the sequence of events necessary to secure assistance following an emergency or disaster. More detailed information is available by consulting the "disaster assistance manual" (prepared by the Florida Department of Community Affairs, Division of Emergency Management), and the State of Florida Peace Time Emergency Plan (1985 version). Copies of these documents can be obtained through the Division of Emergency Management, 2740 Centerview Drive, Tallahassee, Florida 32399-2100, or by telephone at 904-487-4915.

**GENERAL EMERGENCY  
INCIDENT REPORT FORM**

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*APPENDIX A*

**POST-DISASTER REDEVELOPMENT PLAN**

# GENERAL EMERGENCY INCIDENT REPORT FORMAT

DATE		TIME
AGENCY	PERSON	COMMUNICATION/SYSTEM
INCIDENT DATE/TIME	INCIDENT TYPE	LOCATION/COUNTY/CITY/LOCALITY

INCIDENT CONCLUDED DATE/TIME	OR CONTINUES
------------------------------	--------------

	FATALITIES	
	INJURED (HOSPITALIZED)	LOCATION
	INJURED OTHER	

	HOMES DESTROYED		DAMAGED
	BUSINESS DESTROYED		DAMAGED
	OTHER DESTROYED		DAMAGED

EVACUATION NEEDED	Yes No	EVACUATION NOW OCCURRING	Yes No	SHELTERS OPENED	Yes No
-------------------	-----------	--------------------------	-----------	-----------------	-----------

NUMBER TO BE EVACUATED			
NUMBER OF SHELTERS			
TOTAL EXPECTED TO EVACUATE			
RED CROSS <input type="checkbox"/>	COUNTY <input type="checkbox"/>	DHRS <input type="checkbox"/>	OTHER (DESCRIBE) <input type="checkbox"/>

SHELTER NAME(S)	LOCATIONS

## REQUEST FOR STATE ASSISTANCE

STATE ASSISTANCE REQUESTED	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Needed	Describe.
----------------------------	--	-----------

**PUBLIC PROPERTY PRELIMINARY  
DAMAGE ASSESSMENT ESTIMATE  
FORM AND INSTRUCTIONS**

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*APPENDIX B*

**POST-DISASTER REDEVELOPMENT PLAN**

Public damage assessment is performed in the field using Form A. It is to be used to report the damage done on each individual site. Four individual site entries can be made on each Form A. Brief instructions on how to fill out Form A follows:

DATE: Date form is filled out.

COUNTY: County damage occurred in.

NAME OF APPLICANT: Governmental jurisdiction filling out form.

NAME OF LOCAL CONTACT: Person state/federal personnel should contact.

PHONE NUMBER: Telephone number of contact person.

SITE NUMBER: Sequential number assigned the site.

CATEGORY: The appropriate eligible category (A-G).

LOCATION: Best applicable address available.

DESCRIPTION OF DAMAGE: Brief, but concise description of damage.

IMPACT: Describe impact damage is having on community system.

PERCENT COMPLETE: Percent of repair already undertaken.

COST ESTIMATE: Estimated cost to replace/repair damage.

# PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT ESTIMATE

DATE \_\_\_\_\_ COUNTY \_\_\_\_\_

## APPLICANT INFORMATION

NAME OF APPLICANT	NAME OF LOCAL CONTACT	PHONE NUMBER
-------------------	-----------------------	--------------

## DAMAGE CATEGORIES

- |                        |                             |          |
|------------------------|-----------------------------|----------|
| A. DEBRIS CLEARANCE    | D. WATER CONTROL FACILITIES | G. OTHER |
| B. PROTECTIVE MEASURES | E. BUILDING AND EQUIPMENT   |          |
| C. ROADS SYSTEM        | F. PUBLIC UTILITY SYSTEM    |          |

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
----------	----------	---

DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
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DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
----------	----------	---

DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

NAME OF INSPECTOR	AGENCY	PHONE NUMBER(S)
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**PUBLIC PROPERTY PRELIMINARY  
DAMAGE ASSESSMENT SUMMARY  
FORM AND INSTRUCTIONS**

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*APPENDIX C*

**POST-DISASTER REDEVELOPMENT PLAN**

Once the public damage information has been collected on Form A, Form B is used to summarize, by category, information gathered at all sites within a given political jurisdiction. Form B must be completed for each political jurisdiction within the county that received damage to public property. Brief instructions for completing Form B are as follows:

DATE: Date form is filled out.

COUNTY: County damage occurred in.

NAME OF APPLICANT: Political jurisdiction filling out form.

NAME OF LOCAL CONTACT: Appropriate contact person.

PHONE NUMBER: Telephone number of local person.

POPULATION: Population of applicant's jurisdiction.

TOTAL BUDGET: Total budget of applicant and current balance.

DEPARTMENT BUDGET: Leave blank.

YTD EXPEND: Leave blank.

DATE FY BEGINS: Date local fiscal year begins.

CATEGORY: Appropriate categories (A-G).

NUMBER OF SITES: List the number of sites per category.

TYPES OF DAMAGE: Brief summary of damages.

COST ESTIMATE: Estimated cost to repair/replace category summary.

FUND/ACCOUNT: Leave blank unless there is a contingency fund. Enter total.

AVAILABLE BALANCE: Enter balance of contingency fund.

GENERAL IMPACT 1-2-3: Answer questions briefly.

RESPONSE CAPABILITY: Provide brief explanation.

IMPACT ON PUBLIC SERVICES IF DECLARATION IS NOT MADE: Provide brief explanation.

NAME OF INSPECTORS: Name of person who did inspection.

AGENCY: Who the inspector works for.

PHONE NUMBER: Telephone number of inspector.

# PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT ESTIMATE

DATE

NAME OF APPLICANT		NAME OF LOCAL CONTACT		PHONE NUMBER
COUNTY	POPULATION	TOTAL BUDGET	DATE FY BEGINS	
DEPARTMENT BUDGET			YTD EXPENDITURES	

CATEGORY	NO. OF SITES	TYPES OF DAMAGE	COST ESTIMATE	LOCAL FUND RECOVERY ACCOUNT	BALANCE

**A. GENERAL IMPACT**

1. Identify and describe damages which constitute a health and/or safety hazard to the general public.
2. Population adversely affected directly or indirectly by the loss of public facilities or damages.
3. What economic activities are affected by the loss of public facility or damages?

**B. RESPONSE CAPABILITY**

Can the applicant respond and recover from the damages quickly and without degradation of public services? Describe.

**C. IMPACT ON PUBLIC SERVICES IF DECLARATION IS NOT MADE**

(e.g. referral of permanent repairs, impact on ongoing services and capital improvements, etc.) Describe.

NAME OF INSPECTOR	AGENCY	PHONE NUMBER(S)
-------------------	--------	-----------------

**PRELIMINARY HOUSING DAMAGE  
ASSESSMENT ESTIMATES  
FORM AND INSTRUCTIONS**

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*APPENDIX D*

**POST-DISASTER REDEVELOPMENT PLAN**

Performing damage assessment to quantify individual loss and suffering is much different from performing public damage assessment. By using Forms C and D, assessors are able to document the extent of individual damages to homes, businesses and jobs. Brief instructions for filling out each form follow, starting with C.

HEADING: Fill in the city, county, state, and type of disaster.

COLUMN (a): Enter house or apartment number for each unit.

COLUMN (b): Enter best address available for each structure.

COLUMNS (c-d): Check if home is primary or secondary residence.

COLUMNS (e-g): Check if home is a single family, multi-family or mobile home.

COLUMNS (h-i): Check if residence is owner occupied or rented.

COLUMN (j): Check if damage to home is minor, meaning dwelling is uninhabitable, but can be repaired in two days at less than \$3,000.00.

COLUMN (k): Major, meaning it will take two or more days, not exceeding \$3,000.00.

COLUMN (l): Destroyed, meaning it is not feasible to repair.

COLUMN (m): Inaccessible/no utilities are available.

COLUMN (n): Inhabitable - affected - the basic living unit is unaffected, but a porch, garage, etc., is damaged.

COLUMNS (o-p): Write in the height of the water over the first or second floor.

COLUMN (q): Is the damage site suitable for a mobile home?

COLUMNS (r-t): Check the appropriate column if estimated owner income is low, medium, or high.

COLUMN (u): Check if the basic living unit is substandard.

COLUMN (v): Enter the percent of insured loss.

**BUSINESS AND INDUSTRY  
PRELIMINARY DAMAGE ASSESSMENT  
RECORD FORM AND INSTRUCTIONS**

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*APPENDIX E*

**POST-DISASTER REDEVELOPMENT PLAN**

COLUMN (20): Enter number of employees who will be entitled to receive unemployment insurance.

COLUMN (21): Determine the number of employees needing Disaster Unemployment Assistance by subtracting Column 20 from 18.

COLUMN (22): Determine the estimated days employees needing Disaster Unemployment Assistance will be out of work.

# NOTICE OF INTEREST

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*APPENDIX F*

POST-DISASTER REDEVELOPMENT PLAN

NOTICE OF INTEREST  
IN APPLYING FOR FEDERAL DISASTER ASSISTANCE

OMB NO. 3067-0033

DECLARATION NUMBER	PROJECT APPLICATION NUMBER	NOI DATE
FEMA - DR		

THE PURPOSE OF THIS FORM IS TO LIST DAMAGES TO PROPERTY AND FACILITIES SO THAT INSPECTORS MAY BE APPROPRIATELY ASSIGNED FOR A FORMAL SURVEY.

REQUIREMENTS FOR FEDERAL DAMAGE SURVEY

A. DEBRIS CLEARANCE

- On public roads/streets including ROW
- Other Public Property
- Private Property  
*(When undertaken by local Govt. forces)*
- Structure Demolition

B. PROTECTIVE MEASURES

- Life and Safety
- Property
- Health
- Stream/Drainage

C. ROAD SYSTEM

- Roads     Streets     Traffic Ctrl
- Bridges    Culverts    Other

D. WATER CONTROL FACILITIES

- Dikes                       Dams
- Drainage                   Irrigation
- Levees                     Other

E. BUILDINGS AND EQUIPMENT

- Buildings and Equipment
- Supplies or Inventory
- Vehicles or other equipment
- Transportation Systems
- Other

F. PUBLIC UTILITY SYSTEMS

- Water
- Sanitary Sewerage
- Storm Drainage
- Light/Power
- Other

G. OTHER (Not in the above categories)

- Park Facilities
- Recreational Facilities

\* Indicate type of facility      NOTE: If private non-profit, provide name of facility and/or private non-profit owner.

NAME OF POLITICAL SUBDIVISION OR ELIGIBLE APPLICANT	PRIVATE NON-PROFIT	COUNTY

AGENT/TITLE

---

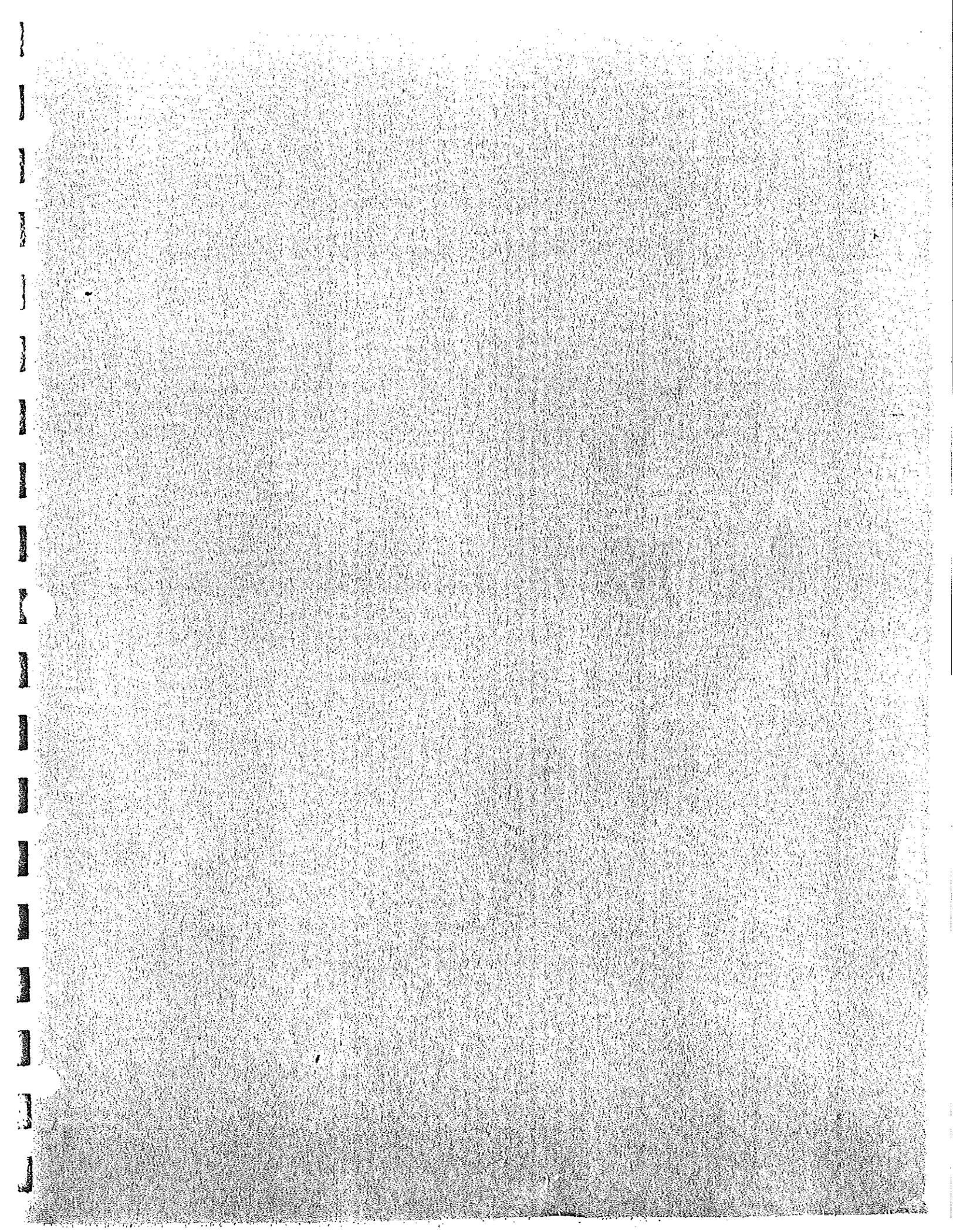
BUSINESS ADDRESS (include Zip Code)

---

BUSINESS TELEPHONE (include Area Code and extension)	HOME TELEPHONE (include Area Code)







# Section 5.06

## City of Niceville





## City of Niceville

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### **Section 5.06.02 Vulnerabilities**

#### **Section 5.06.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Niceville.

This section includes a brief summary description of the City of Niceville, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Niceville. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Niceville.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Niceville so that mitigation options can be considered in future land use decisions.

#### **Section 5.06.02.02 Methodology**

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Niceville as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.06.02.03 Summary Description of the City of Niceville**

The City of Niceville is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 12,749 residents. Within its jurisdiction, there are .56 mile that border Choctawhatchee Bay, 2.6 miles that border Rocky Bayou, and 7.96 miles of shoreline that border Boggy Bayou. Most of the development in the City of Niceville is clustered around Choctawhatchee Bay and along U.S. Highway 20, or John Simms Parkway. Nearly all commercial development borders both sides of U.S. Highway 20 while most of the existing residential development is located on Highway 285 North, Highway 85-N, and within subdivisions along Choctawhatchee Bay in the south end of the city. Most recently, the City of Niceville has several residential subdivisions under construction near Highway 285 N. According to the building official for the City of Niceville, he anticipates a steady growth in the coming years as military families move to the area. Several commercial establishments have applied for permits within the city and residential subdivisions are expected to increase.

#### **Section 5.06.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability



**City of Niceville**

for further explanation on these vulnerable populations. The table below displays the City of Niceville’s vulnerable populations.

**Table 5.06.02.04.1:** Estimated Vulnerable Populations in the City of Niceville, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	13.5%	1984
Language Isolation	1.9%	189
Disabled	28.9%	2987
Single Parent	11.5%	452
Poverty	10.2%	1563
Minority	5.7%	750

Source: 2010 Census; U.S. Census Population Division

**Section 5.06.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the City of Niceville because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the City of Niceville.

**Table 5.06.02.05.1:** Repetitive Loss Properties in the City of Niceville

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
City of Niceville	\$695,582.67	\$121,525.64	33	\$817,108.31	12	2

Source: FEMA, 2016

**Table 5.06.02.05.2:** Flood Zones of Repetitive Loss Properties in the City of Niceville

Flood Zones	A,AE	V,VE	B,C,X
Total Properties	8	2	4

Source: FEMA, 2016



**City of Niceville**

**Section 5.06.02.06 Hurricane and Tropical Storm**

The City of Niceville is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The City of Niceville would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Niceville's jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.06.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Zone A</b>	25	89	0	5
<b>Just Value</b>	\$4,171,328	\$33,921,160	\$0	\$5,224,509
<b>Zone B</b>	36	117	1	6
<b>Just Value</b>	\$7,093,324	\$48,754,457	\$114,676	\$4,032,853
<b>Zone C</b>	36	117	1	6
<b>Just Value</b>	\$7,093,324	\$48,754,457	\$114,676	\$4,032,853
<b>Zone D</b>	147	866	35	13
<b>Just Value</b>	\$31,101,906	\$247,780,068	\$2,132,200	\$6,760,966
<b>Zone E</b>	158	1049	80	32
<b>Just Value</b>	\$32,519,505	\$277,382,292	\$4,656,242	\$10,576,267

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)



**City of Niceville**

**Table 5.06.02.06.2:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	7	0
<b>Just Value</b>	\$2,013,651	\$0
<b>Zone B</b>	25	1
<b>Just Value</b>	\$10,955,061	\$109,774
<b>Zone C</b>	46	3
<b>Just Value</b>	\$18,331,730	\$240,860
<b>Zone D</b>	60	3
<b>Just Value</b>	\$24,587,841	\$240,860
<b>Zone E</b>	100	3
<b>Just Value</b>	\$42,594,515	\$240,860

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.06.02.07 Storm Surge**

The City of Niceville is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 16.4 feet above the mean high water line along the some areas boarding the Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**City of Niceville**

**Table 5.06.02.07.1: Vulnerable Residential Structures to Storm Surge**

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Surge Level 1</b>	71	212	1	6
<b>Just Value</b>	\$19,334,550	\$104,000,314	\$114,676	\$3,585,688
<b>Surge Level 2</b>	73	227	1	9
<b>Just Value</b>	\$19,649,434	\$110,137,332	\$114,676	\$5,863,215
<b>Surge Level 3</b>	133	712	23	13
<b>Just Value</b>	\$28,871,155	\$217,633,790	\$1,426,605	\$6,998,230
<b>Surge Level 4</b>	133	712	23	13
<b>Just Value</b>	\$28,871,155	\$217,633,790	\$1,426,605	\$6,998,230
<b>Surge Level 5</b>	138	859	45	13
<b>Just Value</b>	\$29,563,546	\$248,337,968	\$2,659,706	\$6,998,230

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Table 5.06.02.07.2: Other Vulnerable Structures to Storm Surge**

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Surge Level 1</b>	17	0
<b>Just Value</b>	\$7,379,710	\$0
<b>Surge Level 2</b>	21	1
<b>Just Value</b>	\$10,006,260	\$109,774
<b>Surge Level 3</b>	42	3
<b>Just Value</b>	\$16,537,281	\$240,860
<b>Surge Level 4</b>	40	3
<b>Just Value</b>	\$21,153,475	\$240,860
<b>Surge Level 5</b>	59	3
<b>Just Value</b>	\$27,022,736	\$240,860

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.06.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Niceville is vulnerable to flooding and susceptible to damage



**City of Niceville**

from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Niceville. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the City of Niceville, there are 146 structures located in the AE flood zone and 3 structures in the A flood zone. The cumulative 'just value' of all those structures in the AE and A flood zones is \$58,825,567. The following table depicts the vulnerable structures located in the AE and A flood zones in the City of Niceville.

**Table 5.06.02.08.1:** Structures Located in Flood Zones in the City of Niceville

	<b>AE Flood Zone</b>	<b>Just Value</b>	<b>A Flood Zone</b>	<b>Just Value</b>
<b>SFR-Townhouse</b>	15	\$2,687,869	0	\$0
<b>Single-Family</b>	87	\$37,903,874	3	\$670,692
<b>Multi-Family</b>	5	\$2,962,875	0	\$0
<b>Commercial</b>	36	\$14,359,397	0	\$0
<b>Government/Institutional</b>	3	\$240,860	0	\$0

Source: Okaloosa County Department of Growth Management, 2010

**Section 5.06.02.09 Land Erosion**

The City of Niceville is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Niceville. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

**Section 5.06.02.10 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Niceville. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Niceville.



**City of Niceville**

**Table 5.06.02.10.1:** Vulnerable Residential Structures to Severe Storms in City of Niceville

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>	<b>Condominium</b>
	155	2,043	0	38	1
<b>Just Value</b>	\$32,550,471	\$588,588,053	\$0	\$15,637,760	\$116,000

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.06.02.10.2:** Other Vulnerable Structures to Severe Storms in City of Niceville

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
	331	46
<b>Just Value</b>	\$153,610,212	\$60,225,714

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.06.02.10.01 Tornado and Waterspout**

The City of Niceville is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Niceville that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Niceville are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Niceville, has a medium risk, 1 in 250 per year, of a tornado event occurring.

Because waterspouts occur over water, the areas in the City of Niceville most susceptible damage from waterspouts are those located on the Choctawhatchee Bay. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage. There are 37 structures along the City of Niceville's coastline. The cumulative 'just value' of those structures is \$23,029,663. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable.



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**City of Niceville**

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**Section 5.06.02.10.02 Thunderstorms and Lightning**

The City of Niceville is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Niceville, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

**Section 5.06.02.10.03 Winter Storms**

The City of Niceville is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Niceville is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Niceville is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Niceville are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Niceville that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

**Section 5.06.02.11 Heat Wave and Drought**

The City of Niceville is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Niceville are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

**Section 5.06.02.12 Wildfire**

Although the City of Niceville is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following table depicts the structures with 'medium



**City of Niceville**

(levels 4-6) to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.06.02.12.1: Medium to High Wildfire Level of Concern for Structures**

<b>Total:</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Level 4</b>	9	2	4	1
<b>Just Value</b>	\$3,651,536	\$2,396,129	\$3,095,964	\$801,265
<b>Level 5</b>	31	1	8	4
<b>Just Value</b>	\$12,764,004	\$2,008,421	\$5,323,704	\$7,645,565
<b>Level 6</b>	4	0	3	3
<b>Just Value</b>	\$2,250,005	\$0	\$2,297,376	\$2,262,670
<b>Level 7</b>	0	0	2	1
<b>Just Value</b>	\$0	\$0	\$1,041,962	\$8,211,176

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.06.02.13 Beach Erosion**

The areas of the City of Niceville that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are 11.95 miles of coastline along the Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. There are 37 structures along the City of Niceville's coastline. The cumulative 'just value' of those structures is \$23,029,663 (See Table 5.06.02.13.1, below).

**Table 5.06.02.13.1: Total Structures Susceptible to Beach Erosion**

	<b>Single-Family</b>
<b>Total</b>	37
<b>Just Value</b>	\$23,029,663

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.



**City of Niceville**

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***Section 5.06.02.14 Other Hazards***

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Niceville. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Niceville, then the LMS Committee will update this section to reflect those changes.

***Section 5.06.02.15 Summary***

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Niceville is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Niceville**

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**Section 5.06.05 Maps**

Attached to this page are maps of the City of Niceville. They include:

1. Critical Facilities..... 5.06-38
2. Evacuation Zones..... 5.06-39
3. Flood Zones..... 5.06-40
4. Repetitive Loss Properties..... 5.06-41
5. Surge Zones..... 5.06-42
6. Wildfire Level of Concern..... 5.06-43

# City of Niceville Critical Facilities

-  Parcel Lines
-  Critical Facilities

Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (0903)  
NAD 1983 (93), NAVD 1988

**PUBLIC RECORD:**  
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Department of  
Growth Management  
08/18/2010

# City of Niceville Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

ZONE A = HURRICANE CAT 1

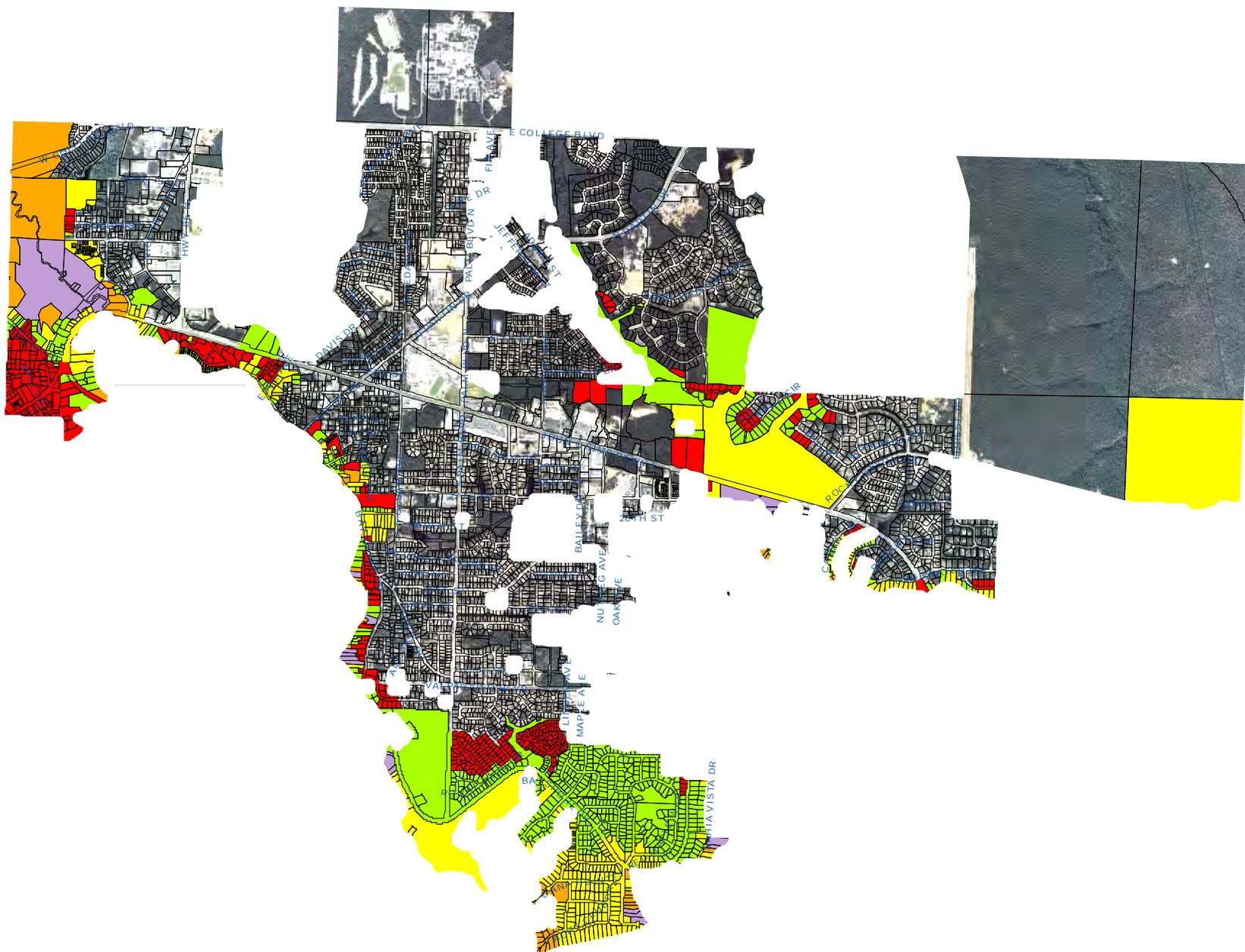
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
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State plane - Florida North (5003)  
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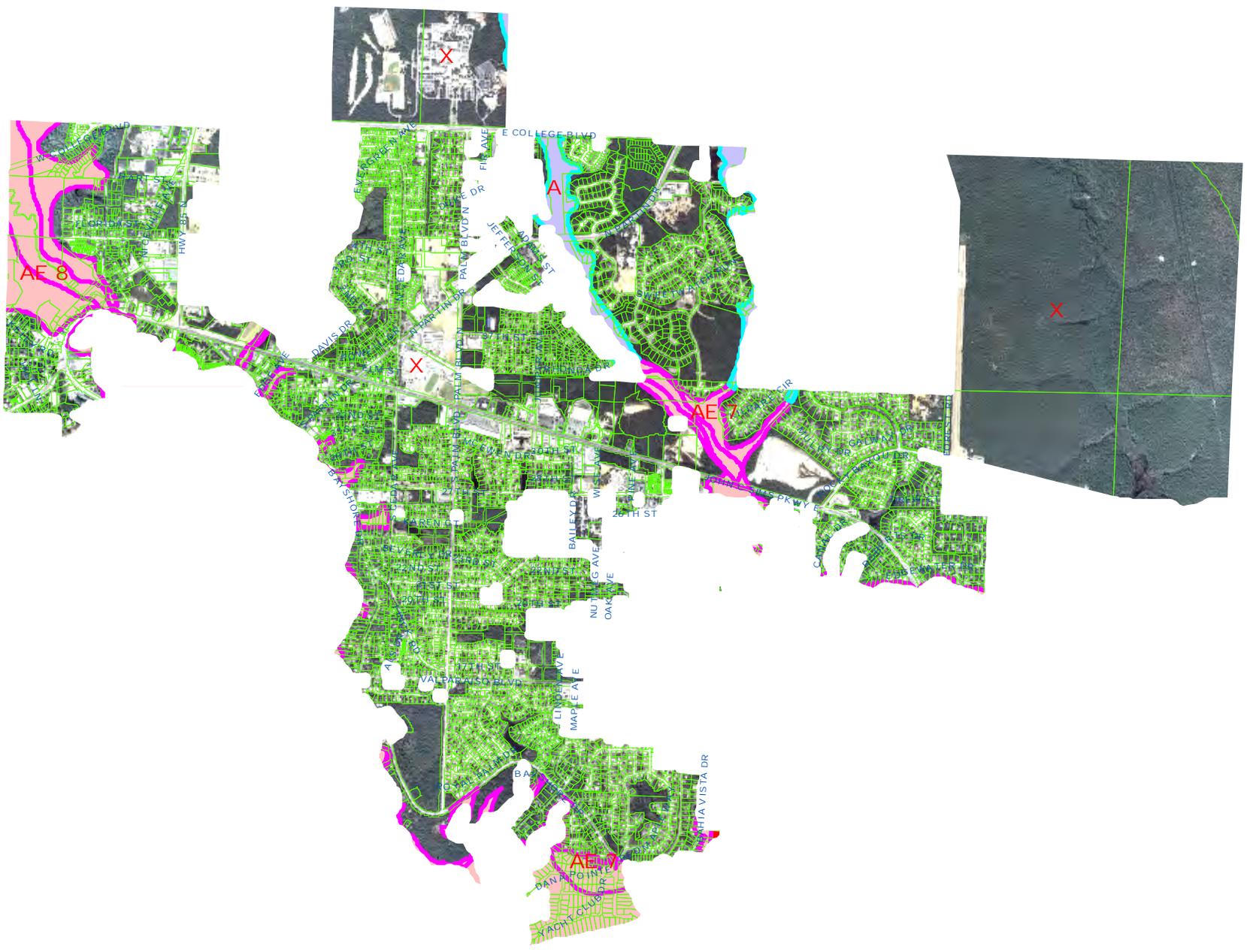


Department of  
Growth Management  
08/18/2010

# City of Niceville Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

Source: FEMA Map Service Center,  
Dec 6 2002



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (9), NAVD 1988

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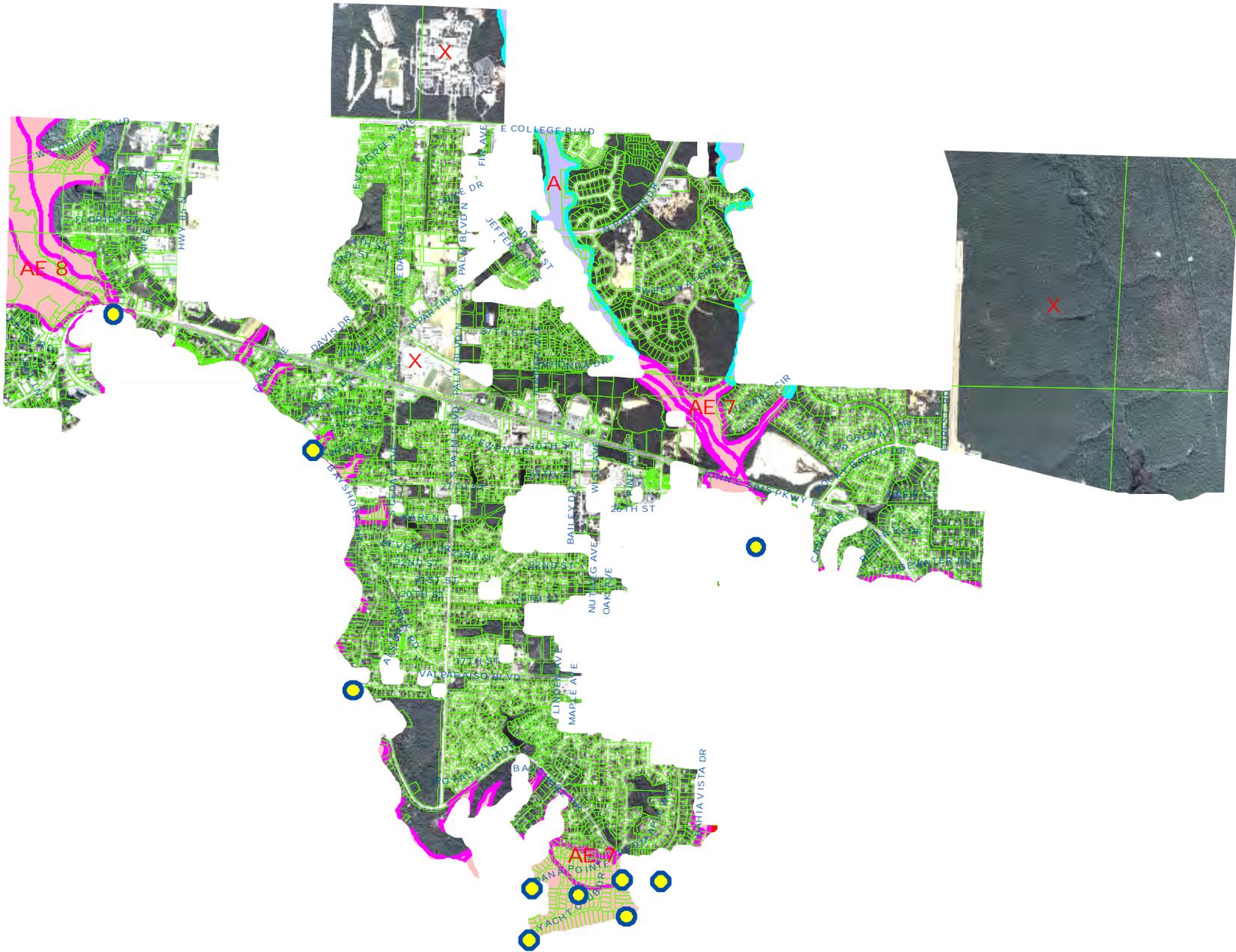


Department of  
Growth Management  
08/18/2010

# City of Niceville Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

Source: FEMA Map Service Center,  
Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (9), NAVD 1988

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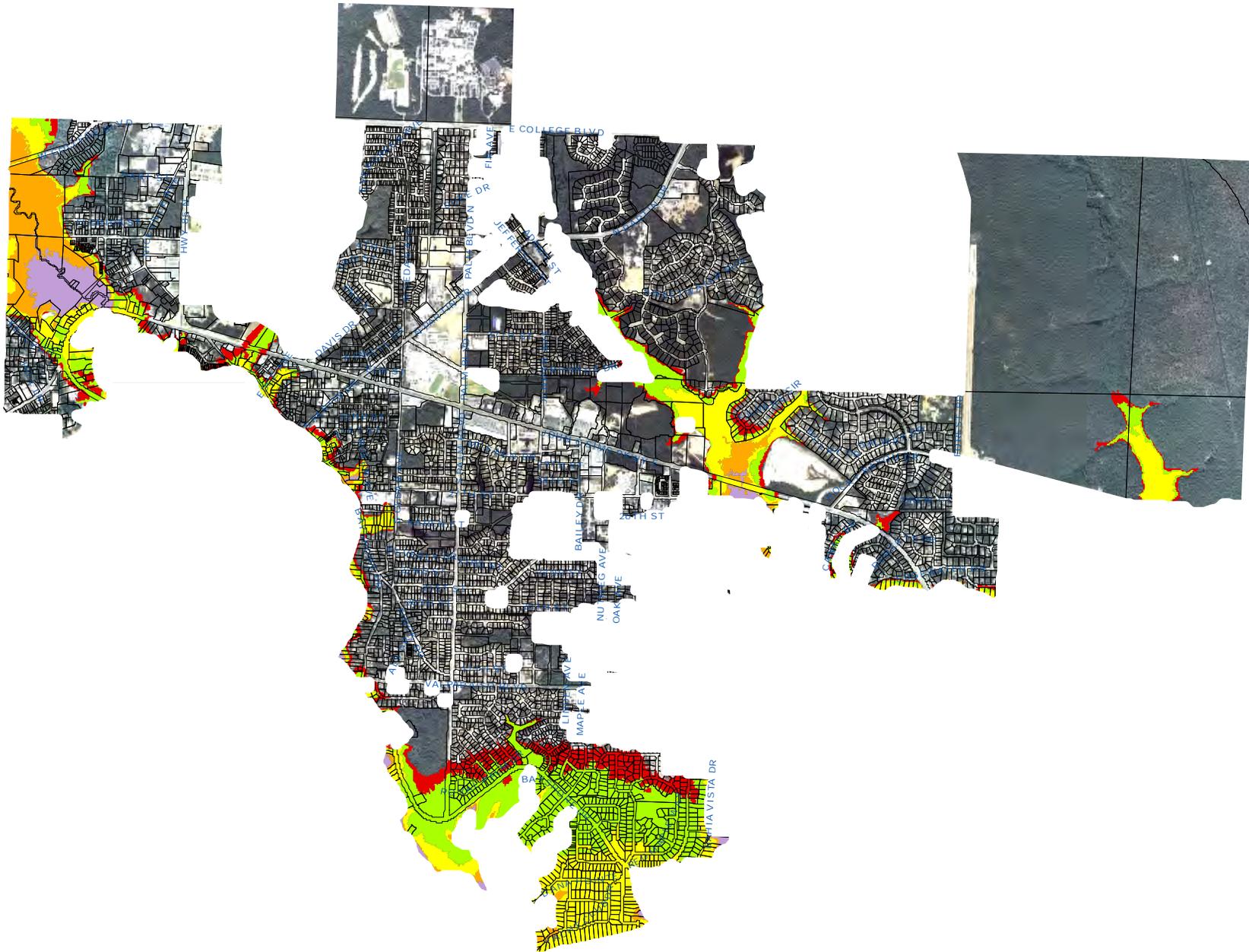


Department of  
Growth Management  
08/18/2010

# City of Niceville Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

Source: West Florida  
Regional Planning  
Council, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (5903)  
NAD 1983 (93), NAVD 1988

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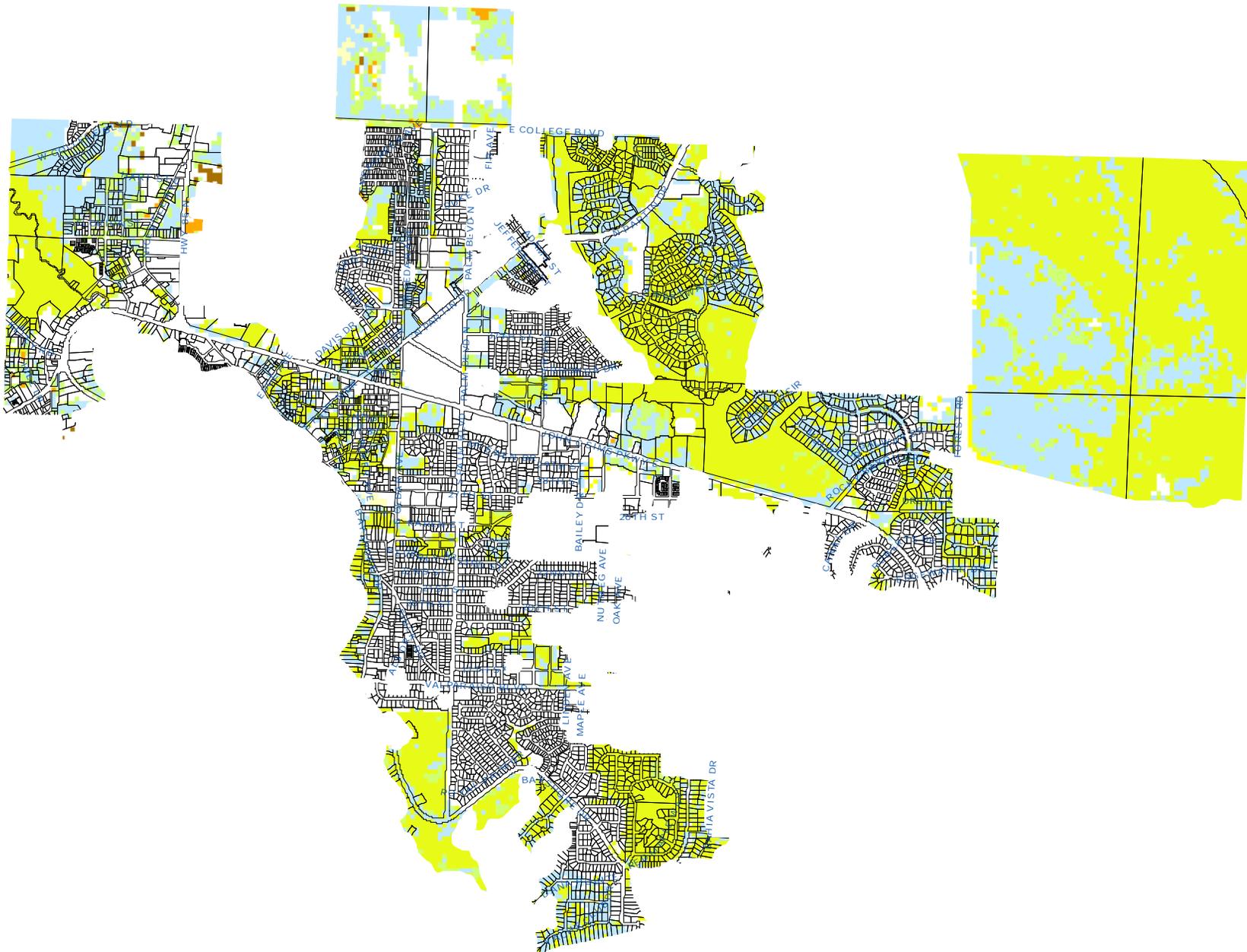
# City of Niceville Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

PUBLIC RECORD:  
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Growth Management  
08/18/2010



**City of Niceville**

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**Section 5.06.06 Post Disaster Redevelopment Plan**

Attached to this page is the post disaster redevelopment plan adopted by the City of Niceville in December of 1992. This plan is still in effect.

ORDINANCE NO. 92-25

AN ORDINANCE ADOPTING THE POST DISASTER REDEVELOPMENT PLAN FOR THE CITY OF NICEVILLE, FLORIDA; REPEALING CONFLICTING ORDINANCES; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Niceville is vulnerable to a variety of natural hazards which result or may result in emergencies causing substantial injury or harm to the population or substantial damage to or loss of property; and

WHEREAS, Chapter 252, Florida Statutes, provides the City Council the authority to declare a state of local emergency and take actions necessary to ensure the safety and well being of its residents, visitors, and property during emergencies caused by these hazards; and

WHEREAS, the City of Niceville has prepared a Comprehensive Plan in compliance with Chapter 163 of the Florida Statutes and 9J-5, of the Florida Administrative Codes; and

WHEREAS, the City of Niceville has adopted its Comprehensive Plan as Ordinance Number 90-10 and became effective on July 18, 1990; and

WHEREAS, Comprehensive Plan Objective 11.A.8 as adopted, requires the City to develop and adopt a Post Disaster Redevelopment Plan.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NICEVILLE, FLORIDA:

ARTICLE 1. INTENT

Following a damaging hurricane, or other natural disaster, and enactment of a building moratoria, it is the intent of the City to allow rebuilding and reconstruction in an orderly manner. The City will control the issuance of building permits to manage the location, timing, and sequence of reconstruction and repair. It is further the intent of the Post Disaster Redevelopment Plan that the City establish prior to the hurricane, or other natural disaster, a special post disaster redevelopment task force which will oversee the recovery and reconstruction process and serve as advisory body to the City Council. A main responsibility of this body will be to advise the Council on the policies of the plan which are structured as to mitigate future hurricane, or other natural disaster damages through the management of reconstruction. To further the intent of this plan, the City will make every effort to develop its capacity to identify and orchestrate various post-disaster

redevelopment resources, while at the same time ensuring maximum local control over the redevelopment process.

ARTICLE 2. THE PLAN

The Post Disaster Redevelopment Plan is attached hereto and is a part of this Ordinance.

ARTICLE 3. CONFLICT

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

ARTICLE 4. EFFECTIVE DATE

This ordinance shall become effective immediately upon its adoption according to law.

ADOPTED in Special session this 10<sup>th</sup> day of December, 1992.

Randall W. W. W.  
MAYOR

ATTEST:

George H. Ireland  
CITY CLERK

POST DISASTER REDEVELOPMENT PLAN

CITY OF NICEVILLE, FLORIDA

- INTENT: To provide for the health, safety and welfare of the City of Niceville through sound pre and post-disaster redevelopment policies which promote the reduction in loss of life and property.
- AUTHORITY: The Post Disaster Redevelopment Plan for the City of Niceville, Florida, is adopted by the City Council of Niceville as Ordinance No. 92-25 in accordance with Objective 11.A.8 of the Comprehensive Plan.
- GOAL 1 Reestablish the economic and social viability of the City of Niceville in a timely and orderly fashion.
- Objective 1.1 Create a post disaster redevelopment task force to guide pre-disaster and post-disaster implementation of the Post Disaster Redevelopment Plan (PDRP).
- Policy 1.1.1 The Post Disaster Redevelopment Task Force is hereby created by this ordinance. The emergency command center for the task force will be the City of Niceville Public Safety Building, or as designated by the City Manager.
- Policy 1.1.2 The task force shall include the following members, or as designated by the City Manager:
- City Manager
  - Chief of Police
  - Fire Chief
  - Director of Public Works
  - Building Inspector
  - City Clerk
  - Emergency Management Director
- Objective 1.2 Conduct a post-disaster assessment and survey utilizing the survey instrument approved by the City of Niceville in accordance with the Okaloosa County Peacetime Emergency Plan.
- Policy 1.2.1 The City Manager or his designee shall conduct a generalized preliminary post-disaster damage assessment and provide information to the Okaloosa County Emergency Management Director within 24 hours.

Policy 1.2.2 The survey instrument will be used to provide a uniform procedure for establishing the following terms: destroyed, major damage, and minor damage.

These terms will be used throughout the Post Disaster Redevelopment Plan as criteria in various policies.

Destroyed is when the cost of repair, replacement, or relocation of a structure exceeds 50% of its pre-disaster replacement value.

Major damage is when the cost of repair, replacement, or relocation of a structure is between 25% - 50% of its pre-disaster replacement value.

Minor damage is when the cost of repair, replacement, or relocation of a structure is less than 25% of its pre-disaster replacement value.

Policy 1.2.3 The City Manager or his designee shall evaluate immediate revenue sources needed for emergency repairs.

Policy 1.2.4 The City Manager or his designee shall apply for state or federal disaster relief grant and loan programs.

Policy 1.2.5 The City Manager or his designee shall be the liaison with the federal mitigation officer who will review public and private requests for assistance to apprise him/her of the City of Niceville's policies of redevelopment.

Policy 1.2.6 The City Manager or his designee shall participate in the preparation/modification of the Section 409 Hazard Mitigation Plan.

Objective 1.3 Establish necessary personnel and procedures for planning that accommodate the emergency nature of redevelopment.

Policy 1.3.1 Structures experiencing total destruction shall be visibly labeled condemned by the Building Inspector.

Policy 1.3.2 The City will evaluate the long-term needs for capital facilities planning immediately following a hurricane, or other natural disaster.

Policy 1.3.3 As soon as possible, if necessary, an amendment to the Capital Improvements Element of the Comprehensive Plan will be transmitted to the

Department of Community Affairs for a determination of consistency.

Policy 1.3.4 City Staff will initiate the coordination with state and federal staff to obtain assistance in relocation of public facilities or repairing them in place.

Policy 1.3.5 The Post Disaster Redevelopment Task Force may identify and designate areas that can be used for residential relocation housing outside of the Hurricane Vulnerability Zone (HVZ).

Objective 1.4 Establish a schedule that allows an orderly procession of reviewing private and public redevelopment proposals after a hurricane, or other natural disaster.

Policy 1.4.1 Effective immediately upon the declaration of a County wide disaster area by the County or the Governor of Florida, a moratorium on all previously approved development orders, building permits and review procedures in progress will be instituted. Moratoriums will be lifted according to the following policy priorities:

- \* 5 days after the state of emergency has been lifted, public facilities subject to major damage and which create a public threat to the health, safety, and welfare shall be able to apply for building permits for repair. Public or private structures destroyed that pose an immediate threat to residents if they collapse, should be immediately assessed for insurance purposes and destroyed. The review of the permits is subject to the policies listed under Goals 2 and 3 below. Private facilities which require minor repairs, may apply for repair permits.

- \* 30 days after the state of emergency has been lifted, private or public facilities which were destroyed (damage in excess of 50% of the replacement value) may apply for building permits. The review of the permits is subject to the policies listed under Goals 2 and 3.

- \* 45 days after the state of emergency has been lifted, previously approved development orders and review procedures will revert to their pre-disaster status.

Policy 1.4.2 The Post Disaster Redevelopment Task Force may recommend the extension or reduction of the

duration of the above time frames as deemed necessary to the City Council.

GOAL 2 Reduce the loss of life and property in any future hurricane, or other natural disaster.

Objective 2.1 Permitting and certification of structures will be required to ensure adherence with redevelopment policies limiting the potential for future loss of property.

Policy 2.1.1 Except for facilities requiring access to the waterfront and those needed to maintain or improve hurricane, or other natural disaster evacuation times, all public facilities destroyed in the V-zone shall be relocated.

Policy 2.1.2 Replace bulkheads and seawalls with nonstructural forms of shoreline stabilization, except where such replacement would endanger human health, safety or welfare.

Policy 2.1.3 Coordinate with private utilities to floodproof replacement of utilities.

Objective 2.2 Establish a procedure to review proposals for redevelopment of private structures and policies to guide redevelopment decisions.

Policy 2.2.1 The procedure to guide the timing of redevelopment is set forth in Goal 1. The review of redevelopment permits for structures destroyed shall be guided by the following redevelopment priorities:

- \* Reduce the pre-disaster density of destroyed residential development in the Coastal High Hazard Area (CHHA) through relocation assistance.
- \* Encourage the relocation of all nonresidential structures destroyed in the CHHA to outside of the CHHA through relocation assistance.
- \* Nonresidential structures destroyed in the CHHA and rebuilt in the CHHA, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes and prohibited, via property restrictions, from purchasing flood and wind insurance underwritten by the federal government.

- \* Structures destroyed outside of the CHHA but within the HVZ and rebuilt, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes.
- \* All structures experiencing major damage, if redeveloped within the HVZ, will be required to be inspected prior to the issuance of a Certificate of Occupancy to ensure conformance with building code regulations.
- \* Coordinate the redevelopment of shoreline areas with the Florida Department of Natural Resources.
- \* Certificates of Occupancy and permitting of redevelopment to pre-disaster square footages of private structures which were destroyed, shall be conditioned upon the immediate provision of services to that structure necessary for health and safety.

Policy 2.2.2

The review of redevelopment permits for structures experiencing major damage, or proposing more than 50% of value in major additions or changes to the pre-disaster existing structure, shall be guided by the following redevelopment priorities:

- \* Where feasible, reduce the pre-disaster density of residential development which experienced major damage.
- \* Encourage the relocation of structures experiencing major damage in the CHHA to outside of the CHHA.
- \* Structures experiencing major damage in the CHHA and rebuilt in the CHHA, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes and prohibited from purchasing flood and wind insurance underwritten by the federal government.
- \* Structures experiencing major damage and rebuilt, outside of the CHHA but within the HVZ, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes.
- \* All structures experiencing major damage, if redeveloped within the HVZ, will be required to

be inspected prior to issuance of Certificate of Occupancy to ensure conformance with building code regulations.

- \* Nonconforming uses (according to the adopted Comprehensive Plan and Future Land Use Map, zoning code or building codes) damaged outside of the CHHA but within the HVZ, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes.
- \* Certificates of Occupancy and permitting of redevelopment to pre-disaster square footages of private structures which experienced major damage, shall be conditioned upon the immediate provision of services to that structure necessary for health and safety.
- \* Coordinate the redevelopment of shoreline areas with the Florida Department of Natural Resources.

Policy 2.2.3

The review of redevelopment permits for structures experiencing minor damage shall be guided by the following redevelopment priorities:

- \* Structures experiencing minor damage in the HVZ, including the CHHA, shall be allowed to rebuild to pre-disaster square footages consistent with the existing land use plan map and current building regulations.
- \* Certificates of Occupancy and permitting of redevelopment to pre-disaster square footages of private structures which experienced minor damage, shall be conditioned upon the immediate provision of services to that structure necessary for health and safety.

Policy 2.2.4

All private redevelopment which was destroyed or suffered major damage shall be guided by the following redevelopment priorities:

- \* Develop new street patterns in hardest hit areas to accommodate the clustering of structures away from the CHHA and attempt to remove structural/physical patterns which increase the susceptibility of development to hurricane, or other natural disaster hazards.
- \* Residential redevelopment densities shall not exceed preexisting development without the provision of enhanced evacuation methods, in

order to maintain or reduce future evacuation time.

- \* In the HVZ, redevelopment floor area ratios for commercial and office development shall not exceed those established in the adopted Comprehensive Plan and Future Land Use Map, in order to reduce potential future property damage.
- \* Prohibit the rebuilding and relocation of mobile homes and manufactured housing in the CHHA.
- \* Discourage mobile homes and manufactured housing within the HVZ unless they are proven to be able to withstand sustained winds of 130 m.p.h., and in compliance with local, county, and state building requirements.
- \* Where lots are destroyed and replaced by tidal waters, those parcels will be condemned by the Building Inspector.
- \* The replacement/repair of private beach or beach stabilization structures shall be the responsibility of the property owner.
- \* Repairs to structures receiving major or minor damage which were established on the National Register of Historic Places, the State Inventory of Historic Places, or the State of Florida Master File, and who's restoration would cause the structure to lose its designation, will not be required to redevelop in such a way as to lose that designation if approved by the Building Inspector.

GOAL 3 Provide public facilities and services which guarantee to the greatest extent possible the health, safety, and welfare of the citizens of the City of Niceville and which do not require future expenditure for public infrastructure in the CHHA.

Objective 3.1 Based upon the inventory of damage and the definitions provided, the review of permits for relocation/repair shall be guided by the following policies:

Policy 3.1.2 Repair in place facilities which are essential to the immediate health, safety, or welfare of citizens, or work to provide the impaired service to residents through alternative means.

- Policy 3.1.3 Public facilities destroyed or suffering major damage in the CHHA shall be relocated out of the CHHA consistent with the adopted Comprehensive Plan and Future Land Use Map and rebuilt to current local, state, and federal construction standards.
- Policy 3.1.4 Public facilities which must function during a hurricane, or other natural disaster, such as hospitals, blood banks, police and fire stations, electrical power-generating substations and plants, communication facilities and emergency command center shall be relocated from the CHHA if they were destroyed or suffered major damage, regardless of the adopted Comprehensive Plan and Future Land Use Map designation.
- Policy 3.1.5 Public facilities which experienced minor damage in the CHHA shall be rebuilt in place to current local, state, and federal construction standards.
- Policy 3.1.6 Public facilities destroyed or suffering major damage outside of the CHHA but within the HVZ shall be rebuilt in place or relocated consistent with the adopted Comprehensive Plan and Future Land Use Map and current local, state, and federal construction standards.

Okaloosa County P.E.P.

12.3 Reporting Procedures

Damage reports will be issued to the EOC by radio. Damage assessment boards will be continually updated as verbal reports are received. Written reports will be submitted at the end of each day. The reports will be compiled by the Special Projects Coordinator.

Local agencies will also use the Red Cross Damage Assessment Forms. Local agencies will submit reports to their respective Director of Emergency Management. These reports will be forwarded to Okaloosa County EOC.

Seperate reports (using the standard form) will be compiled for public property. This will provide information for filing public disaster assistance requests for public property.

In incidents where a decloration has not been declared by the Governor, damage assessment informatin will be compiled and reported as previously discussed.



FORM A

PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT ESTIMATE			DATE	
PART I - APPLICANT INFORMATION				
COUNTY	NAME OF APPLICANT	NAME OF LOCAL CONTACT	PHONE NO.	
PART II - SITE INFORMATION				
KEY FOR DAMAGE CATEGORY (Use appropriate letters in the "category" blocks below.)				
a. DEBRIS CLEARANCE	d. WATER CONTROL FACILITIES		g. OTHER	
b. PROTECTIVE MEASURES	e. BUILDINGS AND EQUIPMENT			
c. ROADS SYSTEM	f. PUBLIC UTILITY SYSTEMS			
SITE NO.	CATE-GORY	LOCATION (Use map location, address, etc.)		
DESCRIPTION OF DAMAGE				
IMPACT:			% Complete	Cost Estimate
SITE NO.	CATE-GORY	LOCATION (Use map location, address, etc.)		
DESCRIPTION OF DAMAGE				
IMPACT:			% Complete	Cost Estimate
SITE NO.	CATE-GORY	LOCATION (Use map location, address, etc.)		
DESCRIPTION OF DAMAGE				
IMPACT:			% Complete	Cost Estimate
SITE NO.	CATE-GORY	LOCATION (Use map location, address, etc.)		
DESCRIPTION OF DAMAGE				
IMPACT:			% Complete	Cost Estimate
NAME OF INSPECTOR	AGENCY		PHONE NO. OFFICE	HOME

-16-

FIGURE 12-2

PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT SUMMARY				DATE:	
PART I - APPLICANT INFORMATION					
COUNTY	NAME OF APPLICANT		NAME OF LOCAL CONTACT		PHONE NO.
POPULATION	TOTAL BUDGET	DEPARTMENT BUDGET	YTD EXPEND.	DATE FY BEGINS	
PART II - COST ESTIMATE-SUMMARY (COMPLETE SITE ESTIMATE BEFORE SUMMARIZING BELOW)					
CATE- GORY	NO. OF SITES	TYPES OF DAMAGE	COST ESTIMATE	POTENTIAL LOCAL FUNDS FOR RECOVERY	
				FUND/ACCOUNT	AVAILABLE BALANCE
			TOTAL	TOTAL	

PART III - DISASTER IMPACTS (USE SEPARATE SHEETS IF NECESSARY)

GENERAL IMPACT

1. Identify and describe damages which constitute a health and/or safety hazard to the general public.
2. Population adversely affected directly or indirectly by the loss of public facilities or damages.
3. What economic activities are affected by the loss of public facility or damages?

B. RESPONSE CAPABILITY: Can the applicant respond and recover from the damages quickly and without degradation of public services? Describe.

C. IMPACT ON PUBLIC SERVICES IF DECLARATION IS NOT MADE: e.g., Deferral of permanent repairs, Impact on ongoing services and capital improvements, etc. Describe.

NAME OF INSPECTOR	AGENCY	PHONE NO.
-------------------	--------	-----------

FIGURE 12-3

# Section 5.07

## City of Valparaiso





## City of Valparaiso

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### **Section 5.07.02 Vulnerabilities**

#### **Section 5.07.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Valparaiso.

This section includes a brief summary description of the City of Valparaiso, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Valparaiso. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Valparaiso.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Valparaiso so that mitigation options can be considered in future land use decisions.

#### **Section 5.07.02.02 Methodology**

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Valparaiso as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.07.02.03 Summary Description of the City of Valparaiso**

The City of Valparaiso is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 5,036 residents. Within its jurisdiction, there are 6.81 miles of shoreline that border on Boggy Bayou. The City of Valparaiso has largely been built out. The majority of existing development within the city is located south of U.S. Highway 20, also known as John Simms Parkway and along the Choctawhatchee Bay. Any new form of development within the City of Valparaiso will necessarily be redevelopment, and the city has seen some of this as apartment complexes have replaced single family homes. According to Carl Scott, the City Administrator for the City of Valparaiso, there is some capacity for commercial development along John Simms Parkway, but the city does not anticipate rapid growth or major new developments.

#### **Section 5.07.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability



**City of Valparaiso**

for further explanation on these vulnerable populations. The table below displays the City of Valparaiso's vulnerable populations.

**Table 5.07.02.04.1:** Estimated Vulnerable Populations in the City of Valparaiso, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	13.2%	598
Language Isolation	1.2%	74
Disabled	25.6	1598
Single Parent	9.8%	126
Poverty	8.6%	521
Minority	3.8%	195

Source: 2010 Census; U.S. Census Population Division

**Section 5.07.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the City of Valparaiso because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the City of Valparaiso.

**Table 5.07.02.05.1:** Repetitive Loss Properties in the City of Valparaiso

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
<b>City of Valparaiso</b>	\$484,147.03	\$89,523.43	19	\$573,670.46	9	0

Source: FEMA, 2010



**City of Valparaiso**

**Table 5.07.02.05.2:** Flood Zones of Repetitive Loss Properties in the City of Valparaiso

Flood Zones	A,AE	V,VE	B,C,X
<b>Total Properties</b>	6	0	3

Source: FEMA, 2010

**Section 5.07.02.06 Hurricane and Tropical Storm**

The City of Valparaiso is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The City of Valparaiso would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Valparaiso’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.07.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within  
\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)

Total:	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
<b>Zone A</b>	0	0	0	0
<b>Just Value</b>	\$0	\$0	\$0	\$0
<b>Zone B</b>	12	72	0	0
<b>Just Value</b>	\$3,290,590	\$25,880,627	\$0	\$0
<b>Zone C</b>	74	152	0	1
<b>Just Value</b>	\$13,426,041	\$44,072,825	\$0	\$1,654,769
<b>Zone D</b>	123	251	1	6
<b>Just Value</b>	\$19,558,600	\$63,158,018	\$158,311	\$4,036,598
<b>Zone E</b>	140	1286	4	59
<b>Just Value</b>	\$21,553,674	\$200,397,175	\$369,140	\$11,088,910

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Table 5.07.02.06.2:** Evacuation Zones and the Vulnerable Structures within



**City of Valparaiso**

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>	<b>Trailer Park</b>
<b>Zone A</b>	0	0	0
<b>Just Value</b>	\$0	\$0	\$0
<b>Zone B</b>	3	1	0
<b>Just Value</b>	\$2,237,619	\$7,469	\$0
<b>Zone C</b>	4	2	0
<b>Just Value</b>	\$2,928,459	\$175,963	\$0
<b>Zone D</b>	9	2	0
<b>Just Value</b>	\$4,364,495	\$175,963	\$0
<b>Zone E</b>	85	20	1
<b>Just Value</b>	\$29,890,786	\$270,729,103	\$205,302

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.07.02.07 Storm Surge**

The City of Valparaiso is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 16.8 feet above the mean high water line along the some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**City of Valparaiso**

**Table 5.07.02.07.1:** Vulnerable Structures to Storm Surge

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/Institutional</b>
<b>Surge Level 1</b>	29	81	0	4	2
<b>Just Value</b>	\$7,196,090	\$37,974,193	\$0	\$2,928,459	\$175,963
<b>Surge Level 2</b>	38	87	0	4	4
<b>Just Value</b>	\$8,666,098	\$39,430,024	\$0	\$2,928,459	\$2,928,459
<b>Surge Level 3</b>	81	220	5	5	3
<b>Just Value</b>	\$14,605,103	\$63,054,396	\$2,840,447	\$3,414,275	\$338,240
<b>Surge Level 4</b>	81	220	5	9	3
<b>Just Value</b>	\$14,605,103	\$63,054,396	\$2,840,447	\$5,279,227	\$338,240
<b>Surge Level 5</b>	123	368	5	9	4
<b>Just Value</b>	\$20,055,142	\$88,448,364	\$2,840,447	\$5,279,227	\$5,382,791

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.07.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Valparaiso is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Valparaiso. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the City of Valparaiso, there are 46 structures in the AE flood zone and 15 structures in the A flood zone. The cumulative ‘just value’ of those structures in the AE and A flood zones is \$13,747,503. The following table depicts the vulnerable structures located in the AE and A flood zones in the City of Valparaiso.

**Table 5.07.02.08.1:** Structures Located in Flood Zones in the City of Valparaiso

	<b>AE Flood Zone</b>	<b>Just Value</b>	<b>A Flood Zone</b>	<b>Just Value</b>
<b>SFR-Townhouse</b>	29	\$5,317,131	0	\$0
<b>Single-Family</b>	10	\$3,372,023	15	\$1,468,111
<b>Commercial</b>	5	\$3,414,275	0	\$0
<b>Government/Institutional</b>	2	\$175,963	0	\$0

Source: Okaloosa County Department of Growth Management, 2010

**Section 5.07.02.09 Land Erosion**



**City of Valparaiso**

The City of Valparaiso is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Valparaiso. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

**Section 5.07.02.10 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Valparaiso. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Valparaiso.

**Table 5.07.02.10.1:** Residential Structures Vulnerable to Severe Storms in City of Valparaiso

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
	1	30	251	0
<b>Just Value</b>	\$4,689,705	\$5,317,156	\$63,647,156	0

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.07.02.10.2:** Other Structures Vulnerable to Severe Storms in City of Valparaiso

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>
	14	26
<b>Just Value</b>	\$8,693,502	\$19,724,704

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.07.02.10.01 Tornado and Waterspout**

The City of Valparaiso is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.



## City of Valparaiso

The areas within the City of Valparaiso that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Valparaiso are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Valparaiso, has a medium risk, 1 in 250 per year, of a tornado event occurring.

Because waterspouts occur over water, the areas in the City of Valparaiso most susceptible to damage from waterspouts are those located on the Choctawhatchee Bay. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage from flying debris. However, the specific impacts on those areas are unavailable due to the lack of relevant studies conducted regarding this hazard.

### **Section 5.07.02.10.02 Thunderstorms and Lightning**

The City of Valparaiso is vulnerable to thunderstorms and lightning, and all structures within its jurisdiction are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Valparaiso, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.07.02.10.03 Winter Storms**

The City of Valparaiso is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Valparaiso is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Valparaiso is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Valparaiso are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Valparaiso that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.07.02.11 Heat Wave and Drought**

The City of Valparaiso is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Valparaiso are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these



**City of Valparaiso**

hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the City of Valparaiso is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

**Section 5.07.02.12 Wildfire**

Although the City of Valparaiso is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following table depicts the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.07.02.12.1: Medium to High Wildfire Level of Concern for Structures**

Total:	Single-Family	Multi-Family	Commercial	Government/ Institutional
Level 4	12	0	0	2
Just Value	\$2,302,599	\$0	\$0	\$5,206,828
Level 5	3	1	2	1
Just Value	\$548,406	\$1,196,151	\$1,205,099	\$5,044,551
Level 6	3	0	1	2
Just Value	\$686,821	\$0	\$719,283	\$5,052,020
Level 7	1	0	1	2
Just Value	\$239,249	\$0	\$357,917	\$5,206,828

Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.07.02.13 Beach Erosion**

The areas of the City of Valparaiso that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are 9.81 miles of coastline along the Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. Data on the specific impacts of beach erosion on the City of Valparaiso were unavailable because there have been no studies conducted for this



## City of Valparaiso

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municipality. However, the LMS Committee will update this section, regarding the impacts that beach erosion has on structures, to reflect those changes.

### ***Section 5.07.02.14 Other Hazards***

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Valparaiso. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Valparaiso, then the LMS Committee will update this section to reflect those changes.

### ***Section 5.07.02.15 Summary***

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Valparaiso is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Valparaiso**

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**Section 5.07.05 Maps**

Attached to this page are maps of the City of Valparaiso. They include:

1. Critical Facilities..... 5.07-42
2. Evacuation Zones..... 5.07-43
3. Flood Zones..... 5.07-44
4. Repetitive Loss Properties..... 5.07-45
5. Surge Zones..... 5.07-46
6. Wildfire Level of Concern..... 5.07-47

# City of Valparaiso Critical Facilities

-  Parcel Lines
-  Critical Facilities

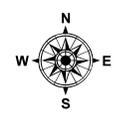
Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION**  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAVD 1988.

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08/18/2010

# City of Valparaiso Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

ZONE A = HURRICANE CAT 1

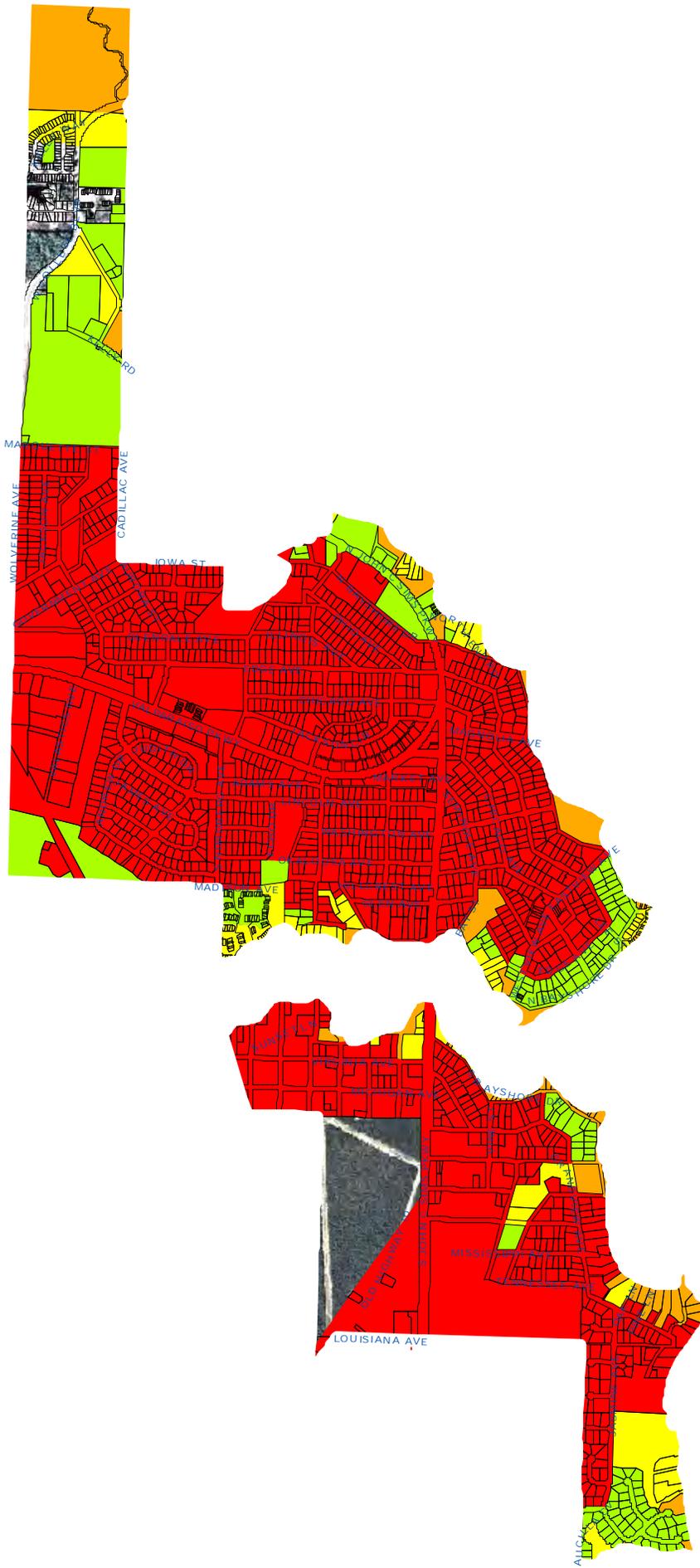
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

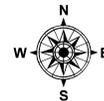
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION  
Lambert Conformal Conic Projection  
StatePlane: Florida North (8303)  
NAD 1983(83), NAD 1988.

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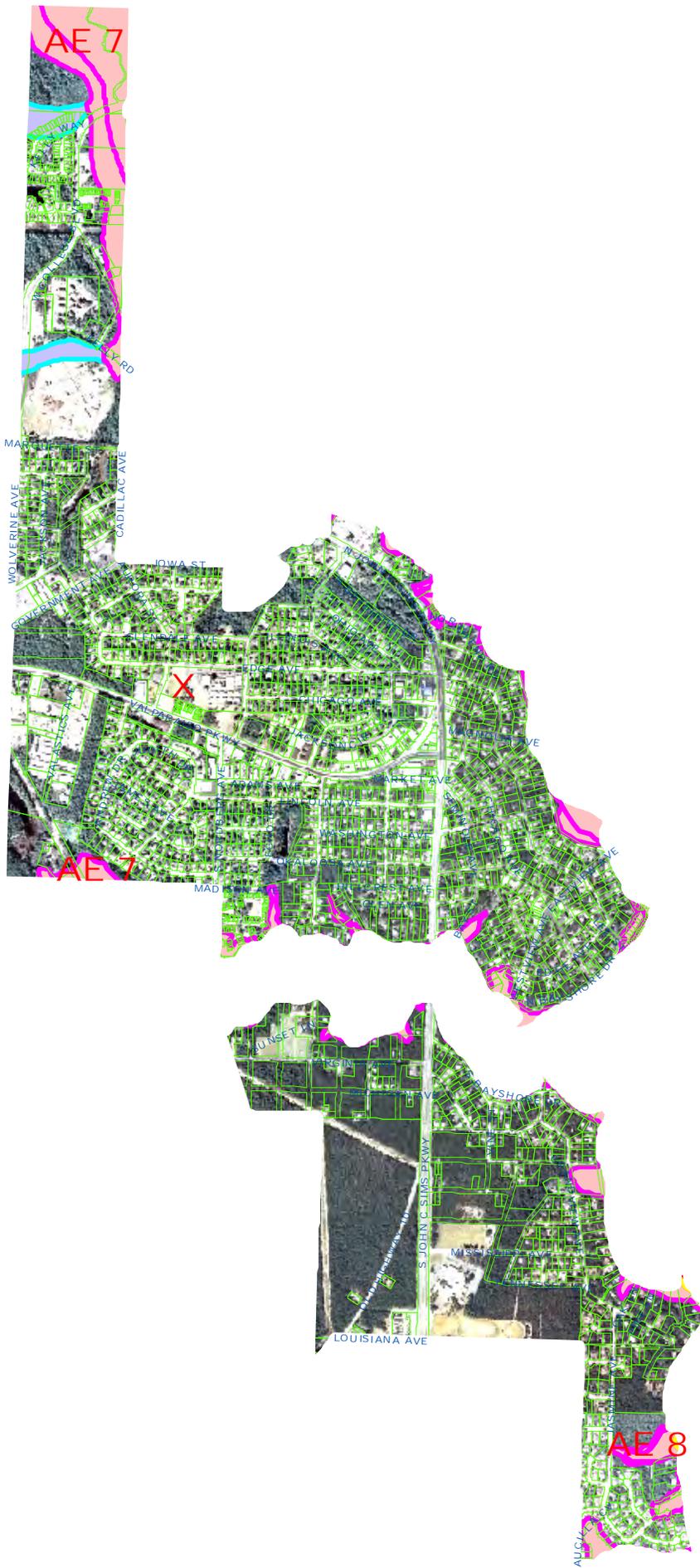


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# City of Valparaiso Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projected on  
StatePlane: Florida North (8903)  
NAD 1983(83), NAD 1988.

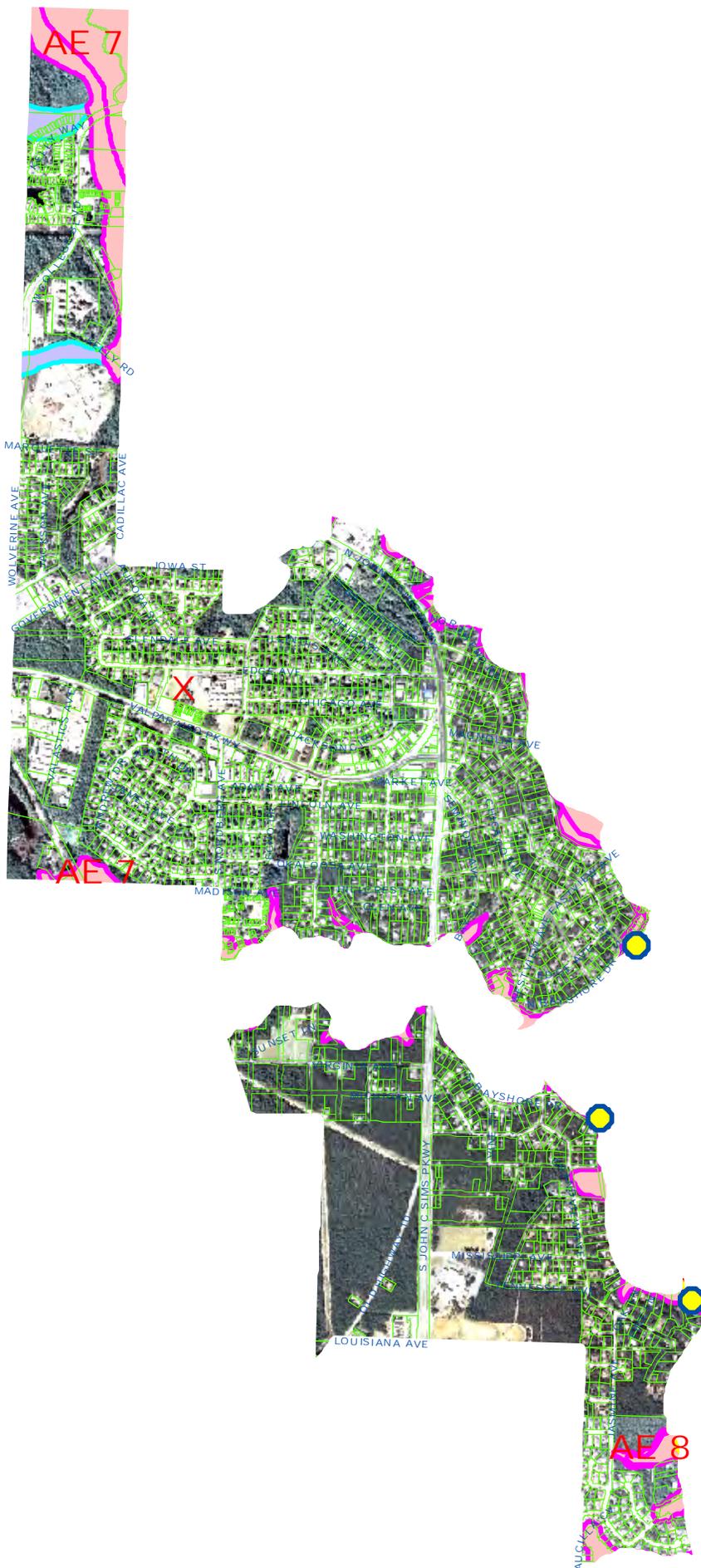
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# City of Valparaiso Repetitive Loss Properties



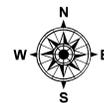
- Parcel Lines
- X 500 Year Flood Plain
- A 100 Year Flood Plain
- AE 100 Year Flood Plain
- VE 100 Year Flood Plain
- Base Flood Elevation in a Floodway
- Repetitive Loss Properties

Source: FEMA Map  
Service Center,  
Dec 6 2002

MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAD 1988.

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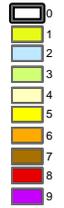
Department of  
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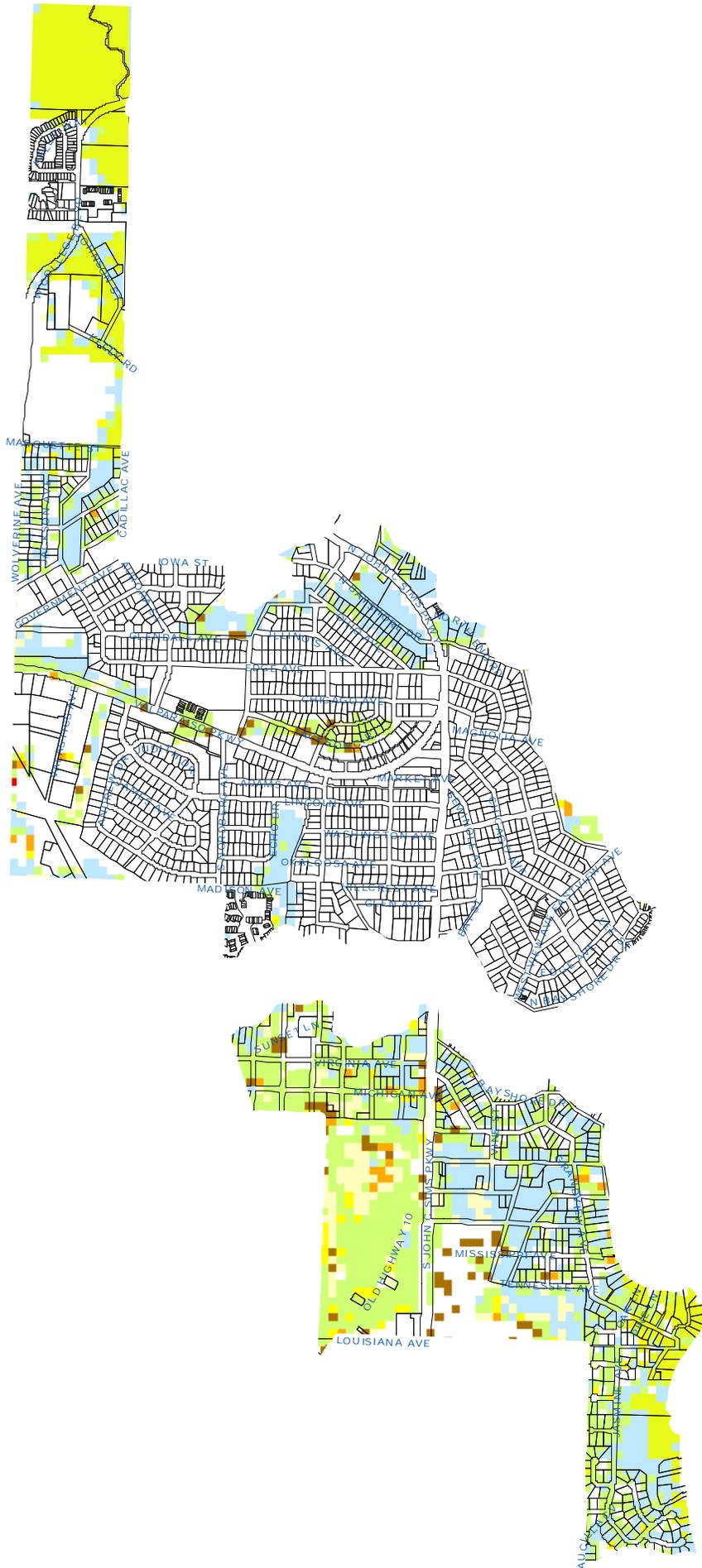
# City of Valparaiso Wildfire Level of Concern

Parcel Lines

Level of Concern



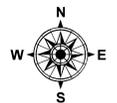
Source: Florida Division  
of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
StatePlane: Florida North (8303)  
NAD 1983(83), NAD 1988.

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**City of Valparaiso**

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**Section 5.07.06 Post Disaster Redevelopment Plan**

The City of Valparaiso does not currently have a Post Disaster Redevelopment Plan. Therefore the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

**Section 5.08**

**Town of Cinco Bayou**





## Town of Cinco Bayou

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### **Section 5.08.02 Vulnerabilities**

#### ***Section 5.08.02.01 Introduction***

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the Town of Cinco Bayou.

This section includes a brief summary description of the Town of Cinco Bayou, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the Town of Cinco Bayou. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the Town of Cinco Bayou.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the Town of Cinco Bayou so that mitigation options can be considered in future land use decisions.

#### ***Section 5.08.02.02 Methodology***

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the Town of Cinco Bayou as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### ***Section 5.08.02.03 Summary Description of the Town of Cinco Bayou***

The Town of Cinco Bayou is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 383 residents, which makes it the smallest municipality in Okaloosa County by population. The Town of Cinco Bayou is surrounded by the City of Fort Walton Beach. Within its jurisdiction, there are .71 miles of shoreline that border Cinco Bayou. The Town of Cinco Bayou is virtually built out. There are only two residential lots that remain undeveloped and just one commercial lot open for development. Most of the recent development within the Town of Cinco Bayou has been in the form of redevelopment and renovation of commercial establishments. The town was recently awarded a Community Development Block Grant for commercial revitalization of the streetscape along Eglin Parkway. The revitalization includes relocating above ground utilities to underground and adding pavers to sidewalks and landscaping. The project will be conducted in two phases. The Town of Cinco Bayou hopes to receive another grant to extend the project out to the Cinco Bayou Bridge. The future development trends within the Town of Cinco Bayou will necessarily be revitalization of both commercial and residential buildings, and the upgrading of public infrastructure.



**Town of Cinco Bayou**

**Section 5.08.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County’s Vulnerability for further explanation on these vulnerable populations. The table below displays the Town of Cinco Bayou’s vulnerable populations.

**Table 5.08.02.04.1:** Estimated Vulnerable Populations in the Town of Cinco Bayou, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	9.8%	36
Language Isolation	.6%	2
Disabled	28.9%	126
Single Parent	18.9%	22
Poverty	12.2%	45
Minority	15.4%	53

Source: 2010 Census; U.S. Census Population Division

**Section 5.08.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the County because they have already experienced significant flood damage. As of 2015 the Town of Cinco Bayou does not have any current repetitive loss properties; however, the Okaloosa County Staff will update this if this changes in the future.

**Section 5.08.02.06 Hurricane and Tropical Storm**

The Town of Cinco Bayou is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The Town of Cinco Bayou would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the Town of Cinco Bayou’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.



**Town of Cinco Bayou**

**Table 5.08.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
<b>Zone A</b>	0	0	1	0
<b>Just Value</b>	\$0	\$0	\$477,962	\$0
<b>Zone B</b>	1	0	3	1
<b>Just Value</b>	\$58,700	\$0	\$1,028,123	\$176,245
<b>Zone C</b>	1	6	3	1
<b>Just Value</b>	\$58,700	\$1,399,772	\$1,028,123	\$176,245
<b>Zone D</b>	2	93	38	9
<b>Just Value</b>	\$214,700	\$13,702,551	\$7,610,246	\$2,503,164
<b>Zone E</b>	2	116	43	11
<b>Just Value</b>	\$214,700	\$16,385,949	\$7,870,585	\$2,778,876

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Table 5.08.02.06.2:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	0	0
<b>Just Value</b>	\$0	\$0
<b>Zone B</b>	1	1
<b>Just Value</b>	\$1,315,088	\$496,384
<b>Zone C</b>	8	2
<b>Just Value</b>	\$4,834,610	\$843,672
<b>Zone D</b>	28	2
<b>Just Value</b>	\$11,815,577	\$843,672
<b>Zone E</b>	50	2
<b>Just Value</b>	\$21,666,773	\$843,672

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)



**Town of Cinco Bayou**

**Section 5.08.02.07 Storm Surge**

The Town of Cinco Bayou is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 17.4 feet above the mean high water line along the some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.

**Table 5.08.02.07.1: Vulnerable Residential Structures to Storm Surge**

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
<b>Surge Level 1</b>	2	13	13	1
<b>Just Value</b>	\$214,700	\$3,987,659	\$4,636,878	\$614,270
<b>Surge Level 2</b>	2	14	13	1
<b>Just Value</b>	\$214,700	\$4,375,516	\$4,636,878	\$614,270
<b>Surge Level 3</b>	2	93	37	5
<b>Just Value</b>	\$214,700	\$13,702,551	\$7,535,022	\$1,197,302
<b>Surge Level 4</b>	2	93	37	5
<b>Just Value</b>	\$214,700	\$13,702,551	\$7,535,022	\$1,197,302
<b>Surge Level 5</b>	2	95	43	11
<b>Just Value</b>	\$214,700	\$13,936,703	\$7,870,585	\$2,778,876

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)



**Town of Cinco Bayou**

**Table 5.08.02.07.2:** Other Vulnerable Structures to Storm Surge

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Surge Level 1</b>	1	2
<b>Just Value</b>	\$1,315,088	\$843,672
<b>Surge Level 2</b>	1	2
<b>Just Value</b>	\$1,315,088	\$843,672
<b>Surge Level 3</b>	7	2
<b>Just Value</b>	\$3,268,580	\$843,672
<b>Surge Level 4</b>	11	2
<b>Just Value</b>	\$5,622,570	\$843,672
<b>Surge Level 5</b>	52	2
<b>Just Value</b>	\$22,706,960	\$843,672

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010  
(Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.08.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The Town of Cinco Bayou is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the Town of Cinco Bayou. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the Town of Cinco Bayou, there are 5 structures located in the AE flood zone. The cumulative 'just value' of those structures is \$2,358,996. The following table depicts the vulnerable structures located in the AE flood zone in the Town of Cinco Bayou.

**Table 5.08.02.08.1:** Structures Located in Flood Zones in the Town of Cinco Bayou

	<b>Total in Flood Zone AE</b>	<b>Just Value</b>
<b>Condominium</b>	1	\$58,700
<b>Commercial</b>	2	\$1,456,624
<b>Government/Institutional</b>	2	\$843,672

Source: Okaloosa County Department of Growth Management, 2010



**Town of Cinco Bayou**

**Section 5.08.02.09 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the Town of Cinco Bayou. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the Town of Cinco Bayou.

**Table 5.08.02.09.1:** Vulnerable Residential Structures to Severe Storms in Town of Cinco Bayou

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
	3	211	86	22
<b>Just Value</b>	\$273,400	\$30,322,652	\$15,741,170	\$5,557,752

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.08.02.09.1:** Other Vulnerable Structures to Severe Storms in Town of Cinco Bayou

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>
	108	9
<b>Just Value</b>	\$52,342,945	\$3,322,160

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.08.02.09.01 Tornado and Waterspout**

The Town of Cinco Bayou is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the Town of Cinco Bayou that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the Town of Cinco Bayou are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the Town of Cinco Bayou, has a medium risk, 1 in 250 per year, of a tornado event occurring.



## Town of Cinco Bayou

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Because waterspouts occur over water, the areas in the Town of Cinco Bayou most susceptible to damage from waterspouts are those located on the Choctawhatchee Bay. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage. There are 15 structures along the Town of Cinco Bayou's coastline. The cumulative 'just value' of those structures is \$5,782,915. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable due to the unavailability of relevant studies.

### **Section 5.08.02.09.02 Thunderstorms and Lightning**

The Town of Cinco Bayou is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the Town of Cinco Bayou, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.08.02.09.03 Winter Storms**

The Town of Cinco Bayou is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The Town of Cinco Bayou is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the Town of Cinco Bayou is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the Town of Cinco Bayou are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the Town of Cinco Bayou that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.08.02.10 Heat Wave and Drought**

The Town of Cinco Bayou is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the Town of Cinco Bayou are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.



**Town of Cinco Bayou**

**Section 5.08.02.11 Beach Erosion**

The areas of the Town of Cinco Bayou that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are .71 miles of coastline along the Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. There are 15 structures along the Town of Cinco Bayou's coastline. The cumulative 'just value' of those structures is \$5,782,915 (See Table 5.08.02.11.1, below).

**Table 5.08.02.11.1: Total Structures Susceptible to Beach Erosion**

	Condominium	SFR-Townhouse	Single-Family	Multi-Family	Government/ Institutional
<b>Total</b>	1	3	9	1	1
<b>Just Value</b>	\$156,000	\$1,193,862	\$3,471,495	\$614,270	\$347,288

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**Section 5.08.02.12 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, land erosion, sinkholes, expansive soils, dam safety, wildfire, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the Town of Cinco Bayou. Therefore, the Town's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the Town of Cinco Bayou, then the LMS Committee will update this section to reflect those changes.

**Section 5.08.02.13 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the Town of Cinco Bayou is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**Town of Cinco Bayou**

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**Section 5.08.05 Maps**

Attached to this page are maps of the Town of Cinco Bayou. They include:

1. Critical Facilities..... 5.08-34
2. Evacuation Zones.....5.08-35
3. Flood Zones..... 5.08-36
4. Repetitive Loss Properties.....5.08-37
5. Surge Zones..... 5.08-38
6. Wildfire Level of Concern..... 5.08-39

# Town of Cinco Bayou Critical Facilities

- ▭ Parcel Lines
- Critical Facilities

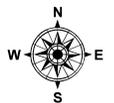
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAD 1988.

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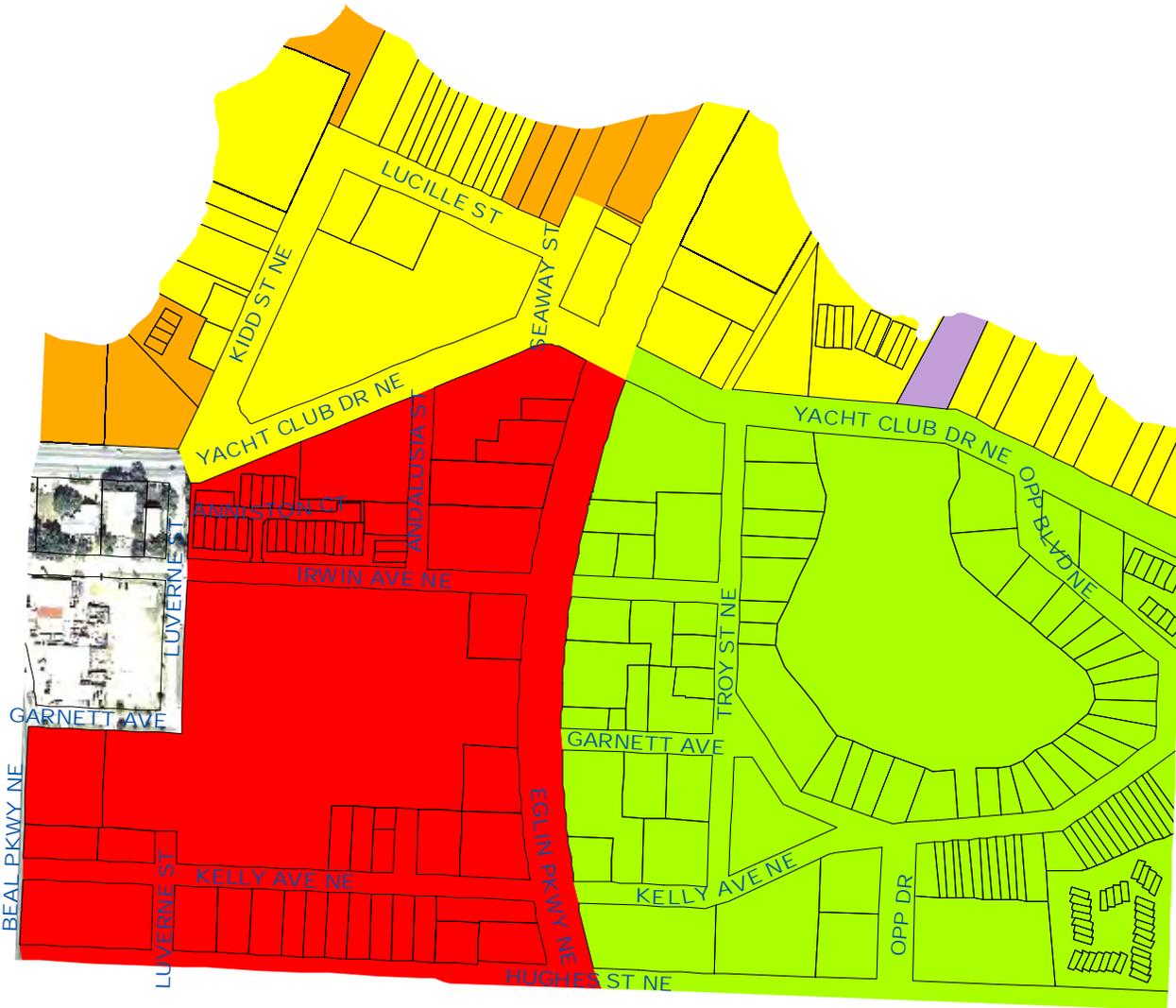
Department of  
Growth Management  
08/18/2010

# Town of Cinco Bayou Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

- ZONE A = HURRICANE CAT 1
- ZONE B = HURRICANE CAT 2
- ZONE C = HURRICANE CAT 3
- ZONE D = HURRICANE CAT 4
- ZONE E = HURRICANE CAT 5

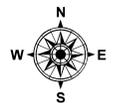
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections  
StatePlane: Florida North (8303)  
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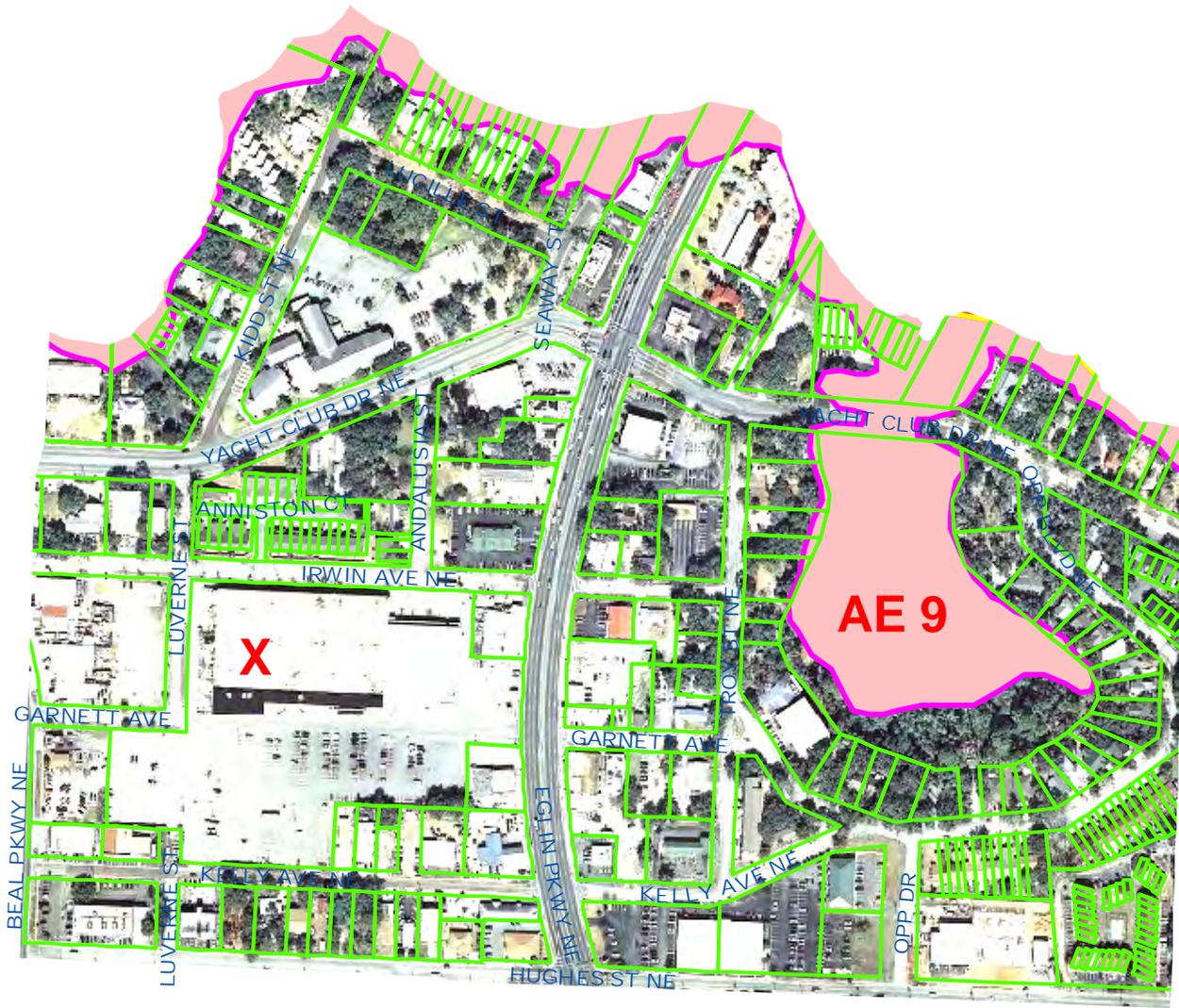


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# Town of Cinco Bayou Flood Zones

- Parcel Lines
- X 500 Year Flood Plain
- A 100 Year Flood Plain
- AE 100 Year Flood Plain
- VE 100 Year Flood Plain

Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAVD 1988.

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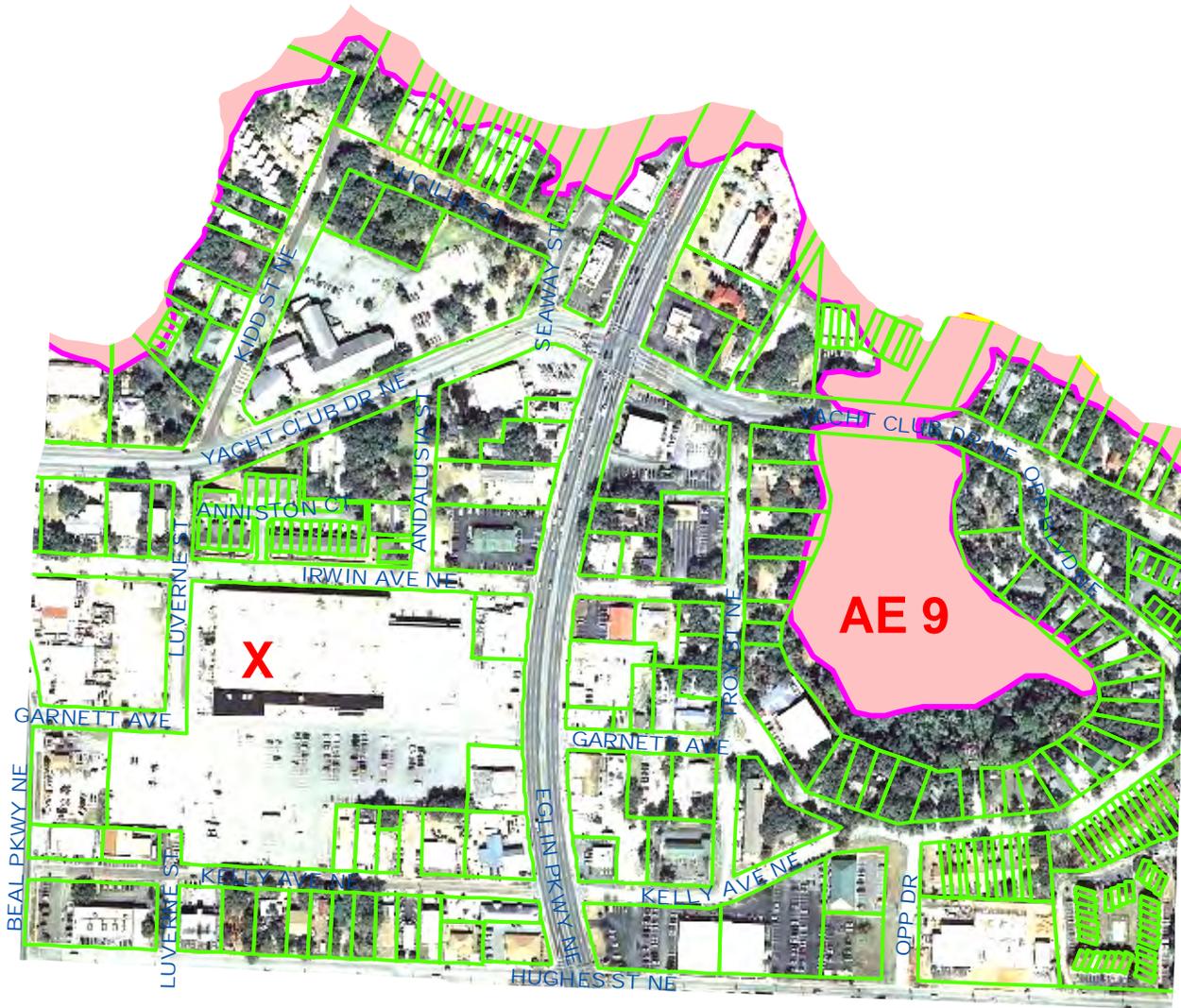
Department of  
Growth Management  
08/18/2010

# Town of Cinco Bayou Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

**The Town of Cinco Bayou does not have any Repetitive Loss Properties in its jurisdiction**

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections on Spheroids - Florida North (1983) NAD 1983 (80), NAD 1988.

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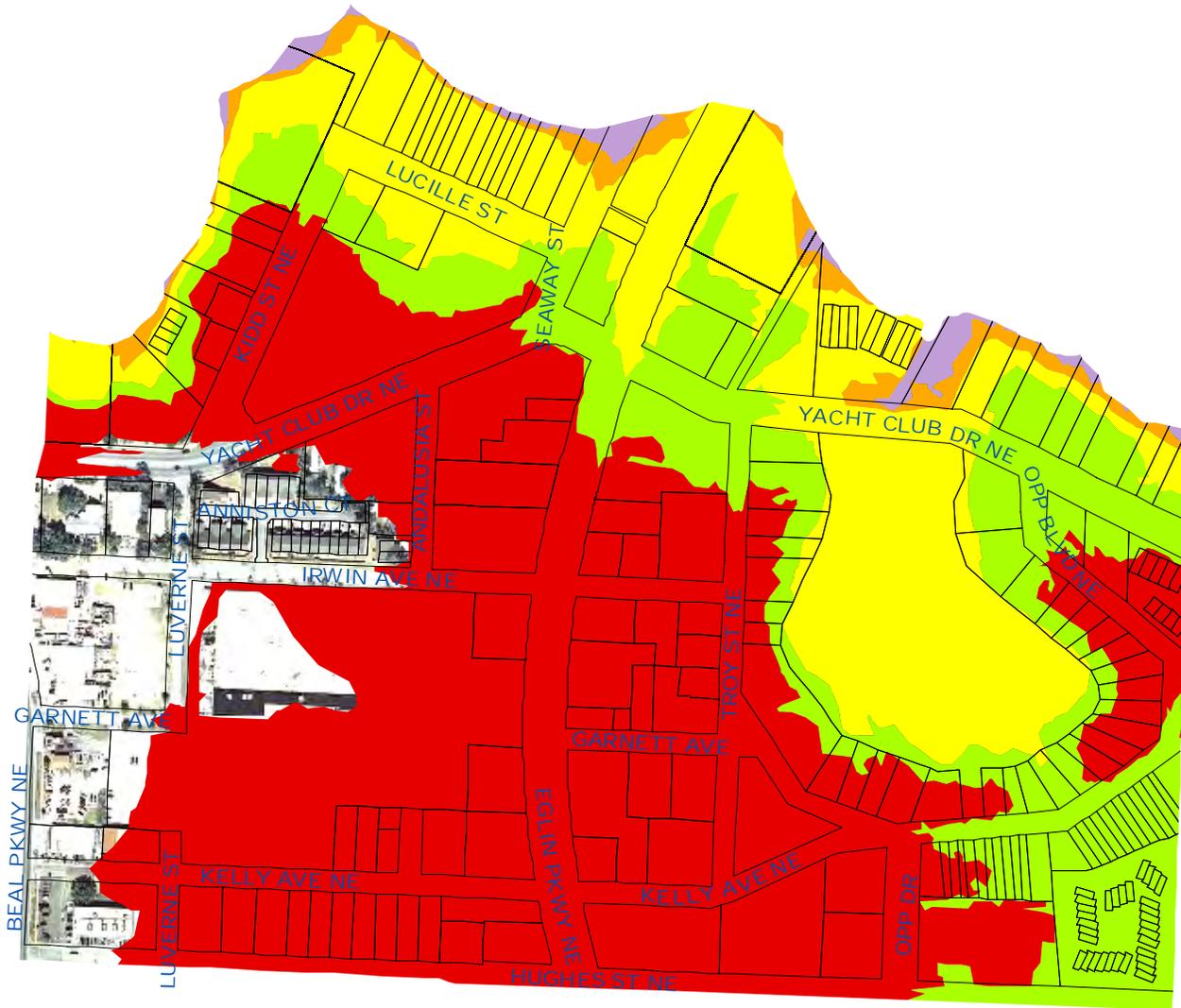


Department of  
Growth Management  
08/18/2010

# Town of Cinco Bayou Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

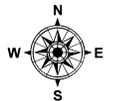
Source: West Florida  
Regional Planning  
Council, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAD 1988.

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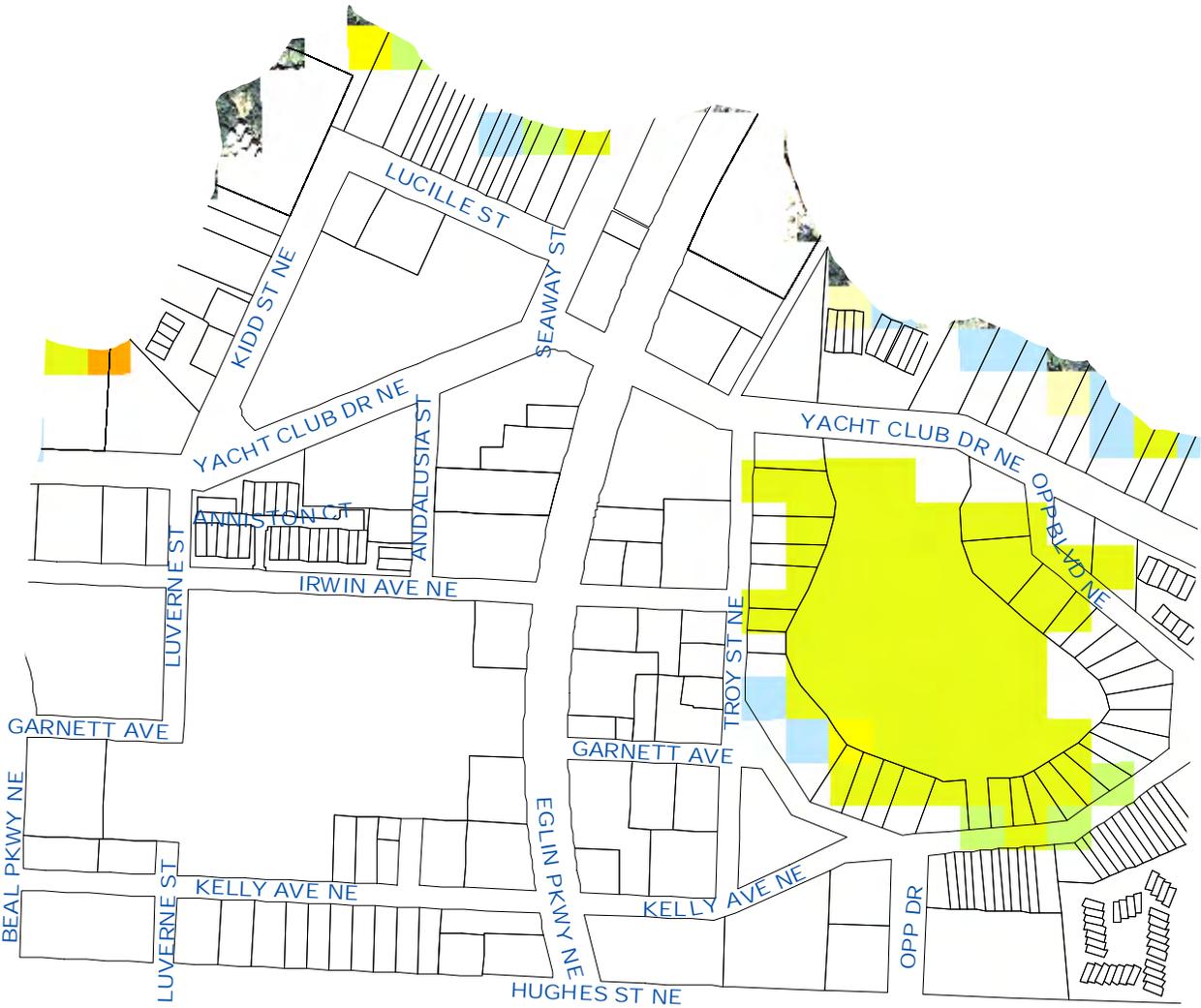
# Town of Cinco Bayou Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
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Spheroids - Florida North (1983)  
NAD 1983 (80), NAD 1988.

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08/18/2010



## Town of Cinco Bayou

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### **Section 5.08.06 Post Disaster Redevelopment Plan**

The Town of Cinco Bayou does not currently have a Post Disaster Redevelopment Plan. Therefore the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

# Section 5.09

## Town of Shalimar





## Town of Shalimar

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### **Section 5.09.02 Vulnerabilities**

#### **Section 5.09.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the Town of Shalimar.

This section includes a brief summary description of the Town of Shalimar, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the Town of Shalimar. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the Town of Shalimar.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the Town of Shalimar so that mitigation options can be considered in future land use decisions.

#### **Section 5.09.02.02 Methodology**

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the Town of Shalimar as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.09.02.03 Summary Description of the Town of Shalimar**

The Town of Shalimar is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 717 residents, which makes it one of the smallest municipalities in Okaloosa County by population. Within its jurisdiction, there are 1.69 miles of shoreline that border Garnier Bayou. The Town of Shalimar is largely built out. The majority of the existing residential development is clustered around Garnier Bayou. According to Tom Burns, the Town Manager for Shalimar, there are only a few residential lots open for construction as all other land has been developed. The development within the town will therefore necessarily be focused on redevelopment, such as new businesses moving into vacant restaurants and commercial office buildings.

#### **Section 5.09.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability for further explanation on these vulnerable populations. The table below displays the Town of Shalimar's vulnerable populations.



**Town of Shalimar**

**Table 5.09.02.04.1:** Estimated Vulnerable Populations in the Town of Shalimar, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	9.8%	56
Language Isolation	.4%	4
Disabled	22.6%	148
Single Parent	9.6%	15
Poverty	2.3%	16
Minority	3.5%	25

Source: 2010 Census; U.S. Census Population Division

**Section 5.09.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the Town of Shalimar because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the Town of Shalimar.

**Table 5.09.02.05.1:** Repetitive Loss Properties in the Town of Shalimar

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
<b>Town of Shalimar</b>	\$1,481,019.79	\$526,975.17	70	\$2,007,994.96	35	0

Source: FEMA, 2016

**Table 5.09.02.05.2:** Flood Zones of Repetitive Loss Properties in the Town of Shalimar

Flood Zones	A,AE	V,VE	B,C,X
<b>Total Properties</b>	28	1	6

Source: FEMA, 2016



**Town of Shalimar**

**Section 5.09.02.06 Hurricane and Tropical Storm**

The Town of Shalimar is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The Town of Shalimar would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the Town of Shalimar’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following table depicts the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.09.02.06.1:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	14	7	1	0
<b>Just Value</b>	\$3,518,045	\$5,416,126	\$1,515,633	\$0
<b>Zone B</b>	51	51	1	0
<b>Just Value</b>	\$25,167,061	\$25,167,061	\$1,515,633	\$0
<b>Zone C</b>	87	75	32	4
<b>Just Value</b>	\$20,465,918	\$28,588,109	\$23,457,204	\$6,206,205
<b>Zone D</b>	116	215	35	6
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$29,511,158	\$11,909,460
<b>Zone E</b>	116	215	40	7
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$30,865,367	\$14,592,353

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.09.02.07 Storm Surge**

The Town of Shalimar is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 17.7 feet above the mean high water line along the some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following table depicts the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**Town of Shalimar**

**Table 5.09.02.07.1:** Vulnerable Structures to Storm Surge

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Commercial</b>	<b>Government/Institutional</b>
<b>Surge Level 1</b>	79	28	1	0
<b>Just Value</b>	\$19,510,193	\$21,198,250	\$1,515,633	\$0
<b>Surge Level 2</b>	91	44	1	0
<b>Just Value</b>	\$22,434,819	\$24,701,218	\$1,515,633	\$0
<b>Surge Level 3</b>	116	215	26	3
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$20,091,848	\$4,962,582
<b>Surge Level 4</b>	116	215	21	4
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$12,523,683	\$6,206,205
<b>Surge Level 5</b>	116	215	40	7
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$30,865,367	\$13,383,847

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.09.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The Town of Shalimar is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the Town of Shalimar. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the Town of Shalimar, there are 71 structures in the AE flood zone and 2 structures in the VE flood zone. The cumulative 'just value' of those structures in the AE and VE flood zones is \$28,785,941. The following table depicts the vulnerable structures located in the AE and VE flood zones in the Town of Shalimar.

**Table 5.09.02.08.1:** Structures Located in Flood Zones in the Town of Shalimar

	<b>Total in Flood Zone AE</b>	<b>Just Value</b>	<b>Total in Flood Zone VE</b>	<b>Just Value</b>
<b>SFR-Townhouse</b>	26	\$5761203	2	\$469,469
<b>Single-Family</b>	41	\$18,436,603	0	\$0
<b>Commercial</b>	4	\$4,118,666	0	\$0

Source: Okaloosa County Department of Growth Management, 2010



**Town of Shalimar**

**Section 5.09.02.09 Severe Storms**

In the table below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the Town of Shalimar. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the Town of Shalimar.

**Table 5.09.02.09.1:** Structures Vulnerable to Severe Storms in Town of Shalimar

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/Institutional</b>
	29	41	10	44	14
<b>Just Value</b>	\$6,320,497	\$18,436,603	\$8,320,408	\$34,984,033	\$26,767,694

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspout, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.09.02.09.01 Tornado and Waterspout**

The Town of Shalimar is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the Town of Shalimar that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the Town of Shalimar are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the Town of Shalimar, has a medium risk, 1 in 250 per year, of a tornado event occurring.

Because waterspouts occur over water, the areas in the Town of Shalimar most susceptible to damage from waterspouts are those located on the Choctawhatchee Bay. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage. There are 56 structures along the Town of Shalimar's coastline. The cumulative 'just value' of those structures is \$17,052,301. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable due to the unavailability of relevant studies.



## Town of Shalimar

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### **Section 5.09.02.09.02 Thunderstorms and Lightning**

The Town of Shalimar is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the Town of Shalimar, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.09.02.09.03 Winter Storms**

The Town of Shalimar is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The Town of Shalimar is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the Town of Shalimar is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the Town of Shalimar are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the Town of Shalimar that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.09.02.10 Heat Wave and Drought**

The Town of Shalimar is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the Town of Shalimar are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the Town of Shalimar is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

### **Section 5.09.02.11 Beach Erosion**

The areas of the Town of Shalimar that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are 1.69 miles of coastline along the Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes



**Town of Shalimar**

resulting in complete destruction. There are 56 structures along the Town of Shalimar’s coastline. The cumulative ‘just value’ of those structures is \$17,052,301 (See Table 5.09.02.11.1, below).

**Table 5.09.02.11.1: Total Structures Susceptible to Beach Erosion**

	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Commercial</b>
<b>Total</b>	51	4	1
<b>Just Value</b>	\$13,021,917	\$2,514,751	\$1,515,633

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
 Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**Section 5.09.02.12 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, land erosion, sinkholes, expansive soils, dam safety, wildfire, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the Town of Shalimar. Therefore, the Town’s vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the Town of Shalimar, then the LMS Committee will update this section to reflect those changes.

**Section 5.09.02.13 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the Town of Shalimar is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**Town of Shalimar**

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**Section 5.09.05 Maps**

Attached to this page are maps of the Town of Shalimar. They include:

1. Critical Facilities..... 5.09-32
2. Evacuation Zones.....5.09-33
3. Flood Zones.....5.09-34
4. Repetitive Loss Properties.....5.09-35
5. Surge Zones..... 5.09-36
6. Wildfire Level of Concern..... 5.09-37

# Town of Shalimar Critical Facilities

- ▭ Parcel Lines
- Critical Facilities

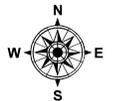
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION  
Lambert Conformal Conic Projected on  
StatePlane: Florida North (8303)  
NAD 1983(83), NAD 1983

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Department of  
Growth Management  
08/18/2010

# Town of Shalimar Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

ZONE A = HURRICANE CAT 1

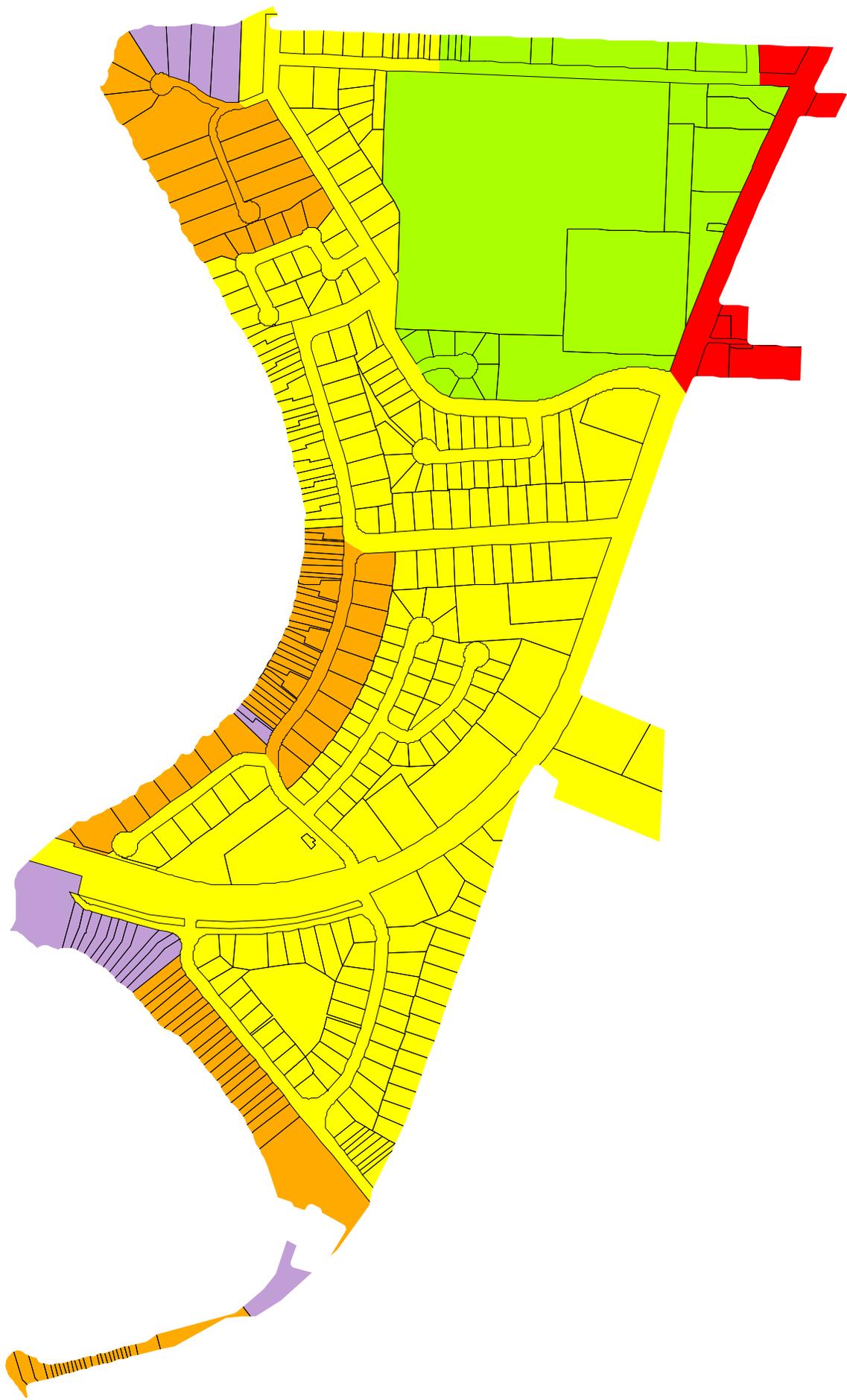
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

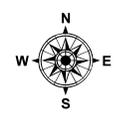
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
StatePlane: Florida North (1983)  
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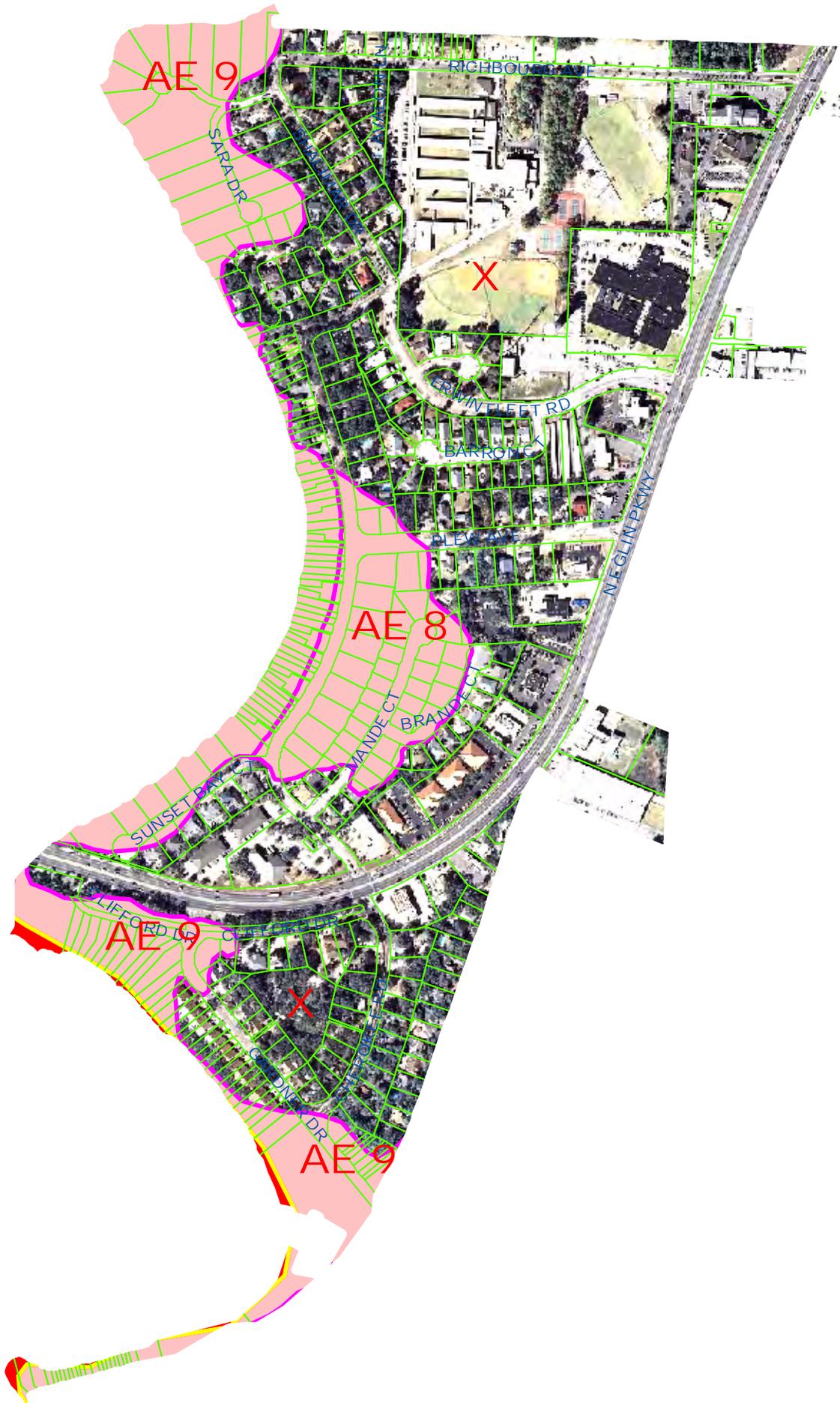


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# Town of Shalimar Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections  
StatePlane: Florida North (1983)  
NAD 1983(80), NAD 1983

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# Town of Shalimar Repetitive Loss Properties



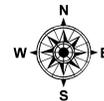
- ▭ Parcel Lines
- ▭ X 500 Year Flood Plain
- ▭ A 100 Year Flood Plain
- ▭ AE 100 Year Flood Plain
- ▭ VE 100 Year Flood Plain
- Base Flood Elevation in a Floodway
- Repetitive Loss Properties

Source: FEMA Map  
Service Center,  
Dec 6 2002

MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983 (80), NAVD 1988.

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Growth Management  
08/18/2010



**City of Fort Walton Beach**

**Section 5.03.02.06 Hurricane and Tropical Storm**

The City of Fort Walton Beach is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The City of Fort Walton Beach would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Fort Walton Beach's jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.03.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Zone A</b>	0	7	61	0	0
<b>Just Value</b>	\$0	\$1,099,302	\$27,832,245	\$0	\$0
<b>Zone B</b>	1	7	166	0	0
<b>Just Value</b>	\$375,000	\$1,099,302	\$66,370,215	\$0	\$0
<b>Zone C</b>	1	7	166	0	0
<b>Just Value</b>	\$375,000	\$1,099,302	\$66,370,215	\$0	\$0
<b>Zone D</b>	17	64	2305	3	12
<b>Just Value</b>	\$3,509,000	\$11,235,038	\$391,733,239	\$254,843	\$6,041,817
<b>Zone E</b>	38	350	2668	3	82
<b>Just Value</b>	\$5,801,000	\$36,697,748	\$427,575,896	\$254,843	\$24,975,631

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)



**City of Fort Walton Beach**

**Table 5.03.02.06.2:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	2	0
<b>Just Value</b>	\$862,899	\$0
<b>Zone B</b>	22	3
<b>Just Value</b>	\$15,872,198	\$10,942,999
<b>Zone C</b>	49	11
<b>Just Value</b>	\$41,729,638	\$22,616,898
<b>Zone D</b>	94	15
<b>Just Value</b>	\$81,892,033	\$28,357,418
<b>Zone E</b>	420	68
<b>Just Value</b>	\$200,779,053	\$97,594,473

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.03.02.07 Storm Surge**

The City of Fort Walton Beach is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 16.8 feet above the mean high water line along the some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**City of Fort Walton Beach**

**Table 5.03.02.07.1: Vulnerable Residential Structures to Storm Surge**

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Surge Level 1</b>	11	32	328	0	4
<b>Just Value</b>	\$2,905,000	\$7,496,362	\$163,959,600	\$0	\$3,841,325
<b>Surge Level 2</b>	11	34	366	0	4
<b>Just Value</b>	\$2,905,000	\$7,955,760	\$174,581,972	\$0	\$3,841,325
<b>Surge Level 3</b>	17	62	2080	1	12
<b>Just Value</b>	\$3,509,000	\$11,143,018	\$380,132,303	\$99,046	\$6,127,812
<b>Surge Level 4</b>	17	62	2080	1	12
<b>Just Value</b>	\$3,509,000	\$11,143,018	\$380,132,303	\$99,046	\$6,127,812
<b>Surge Level 5</b>	38	364	2705	2	88
<b>Just Value</b>	\$5,801,000	\$37,672,814	\$449,344,621	\$181,175	\$27,479,384

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Table 5.03.02.07.2: Other Vulnerable Structures to Storm Surge**

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>
<b>Surge Level 1</b>	16	5
<b>Just Value</b>	\$18,020,665	\$10,458,543
<b>Surge Level 2</b>	25	6
<b>Just Value</b>	\$23,360,592	\$13,952,006
<b>Surge Level 3</b>	37	10
<b>Just Value</b>	\$37,938,990	\$22,606,669
<b>Surge Level 4</b>	75	13
<b>Just Value</b>	\$78,822,003	\$27,487,071
<b>Surge Level 5</b>	402	67
<b>Just Value</b>	\$193,837,495	\$53,003,282

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)



**City of Fort Walton Beach**

**Section 5.03.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Fort Walton Beach is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Fort Walton Beach. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. There are 188 structures located in the AE flood zone, 11 in the VE flood zone, and 7 in the A flood zone. The cumulative 'just value' for all those structures is \$91,226,104. The following table depicts the vulnerable structures located in the AE and VE flood zones in the City of Fort Walton Beach.

**Table 5.03.02.08.1:** Structures Located in Flood Zones in the City of Fort Walton Beach

	AE Flood Zone	Just Value	VE Flood Zone	Just Value	A Flood Zone	Just Value
<b>Condominium</b>	5	\$1,220,000	0	\$0	0	\$0
<b>SFR-Townhouse</b>	13	\$3,098,556	3	\$444,876	0	\$0
<b>Single-Family</b>	134	\$38,860,077	6	\$3,622,911	0	\$0
<b>Multi-Family</b>	1	\$1,510,637	0	\$0	0	\$0
<b>Commercial</b>	25	\$7,926,781	1	\$282,241	5	\$7,644,534
<b>Government/Institutional</b>	9	\$17,966,062	1	\$4,640,607	2	\$2,424,179
<b>Critical Facility</b>	1	\$1,584,643	0	\$0	0	\$0

Source: Okaloosa County Department of Growth Management, 2010

**Section 5.03.02.09 Land Erosion**

The City of Fort Walton Beach is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Fort Walton Beach. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

**Section 5.03.02.10 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Fort Walton Beach. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally



**City of Fort Walton Beach**

vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Fort Walton Beach.

**Table 5.03.02.10.1:** Vulnerable Residential Structures to Severe Storms in City of Fort Walton Beach

Total:	Condominium	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
	43	391	2,966	0	92
Just Value	\$7,021,000	\$42,307,395	\$531,028,243	\$0	\$33,571,343

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.03.02.10.2:** Other Vulnerable Structures to Severe Storms in City of Fort Walton Beach

Total:	Commercial	Government/Institutional
Surge Level 1	1,084	175
Just Value	\$598,978,252	\$226,781,240

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.03.02.10.01 Tornado and Waterspout**

The City of Fort Walton Beach is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Fort Walton Beach that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Fort Walton Beach are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Fort Walton Beach, has a medium risk, 1 in 250 per year, of a tornado event occurring.

Because waterspouts occur over water, the areas in the City of Fort Walton Beach most susceptible to damage from waterspouts are those located on the Choctawhatchee Bay and Santa Rosa Sound. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable



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## City of Fort Walton Beach

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to damage. There are 145 structures along the City of Fort Walton Beach's coastline. The cumulative 'just value' of those structures is \$78,074,711. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable due to the unavailability of relevant studies.

### **Section 5.03.02.10.02 Thunderstorms and Lightning**

The City of Fort Walton Beach is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Fort Walton Beach, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.03.02.10.03 Winter Storms**

The City of Fort Walton Beach is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Fort Walton Beach is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Fort Walton Beach is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Fort Walton Beach are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Fort Walton Beach that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.03.02.11 Heat Wave and Drought**

The City of Fort Walton Beach is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Fort Walton Beach are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

### **Section 5.03.02.12 Wildfire**



**City of Fort Walton Beach**

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Although the City of Fort Walton Beach is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following tables depict the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.03.02.12.1: Medium to High Wildfire Level of Concern for Residential Structures**

Total:	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
Level 4	2	9	0	1
Just Value	\$204,124	\$2,756,545	\$0	\$4,353,046
Level 5	2	2	1	0
Just Value	\$157,349	\$1,162,787	\$23,442	\$0
Level 6	0	2	0	0
Just Value	\$0	\$456,711	\$0	\$0
Level 7	0	1	0	0
Just Value	\$0	\$236,512	\$0	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)



**City of Fort Walton Beach**

**Table 5.03.02.12.2:** Medium to High Wildfire Level of Concern for Other Structures

Total:	Commercial	Government/ Institutional
Level 4	11	10
Just Value	\$21,010,820	\$30,060,518
Level 5	19	14
Just Value	\$36,742,968	\$50,726,074
Level 6	5	3
Just Value	\$12,689,911	\$20,620,177
Level 7	4	3
Just Value	\$4,376,816	\$10,250,475
Level 8	9	4
Just Value	\$16,766,717	\$18,773,420
Level 9	2	4
Just Value	\$4,468,729	\$19,233,069

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.03.02.13 Beach Erosion**

The areas of the City of Fort Walton Beach that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay and Santa Rosa Sound. As previously mentioned, within its jurisdiction, there are 3.35 miles of coastline along the Choctawhatchee Bay as well as 3.42 miles that border the Santa Rosa Sound. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. There are 145 structures along the City of Fort Walton Beach's coastline. The cumulative 'just value' of those structures is \$78,074,711 (See Table 5.03.02.13.1, below).



**City of Fort Walton Beach**

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**Table 5.03.02.13.1:** Total Structures Susceptible to Beach Erosion

	SFR-Townhouse	Single-Family	Commercial
Total	7	137	1
Just Value	\$1,099,302	\$76,693,168	\$282,241

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
 Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**Section 5.03.02.14 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Fort Walton Beach. Therefore, the City’s vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Fort Walton Beach, then the LMS Committee will update this section to reflect those changes.

**Section 5.03.02.15 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Fort Walton Beach is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Fort Walton Beach**

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**Section 5.03.05 Maps**

Attached to this page are maps of the City of Fort Walton Beach. They include:

1. Critical Facilities..... 5.03-45
2. Evacuation Zones.....5.03-46
3. Flood Zones..... 5.03-47
4. Repetitive Loss Properties.....5.03-48
5. Surge Zones..... 5.03-49
6. Wildfire Level of Concern..... 5.03-50

# City of Fort Walton Beach Critical Facilities

-  Parcel Lines
-  Critical Facilities

Source: Okaloosa County Public Safety, 2010

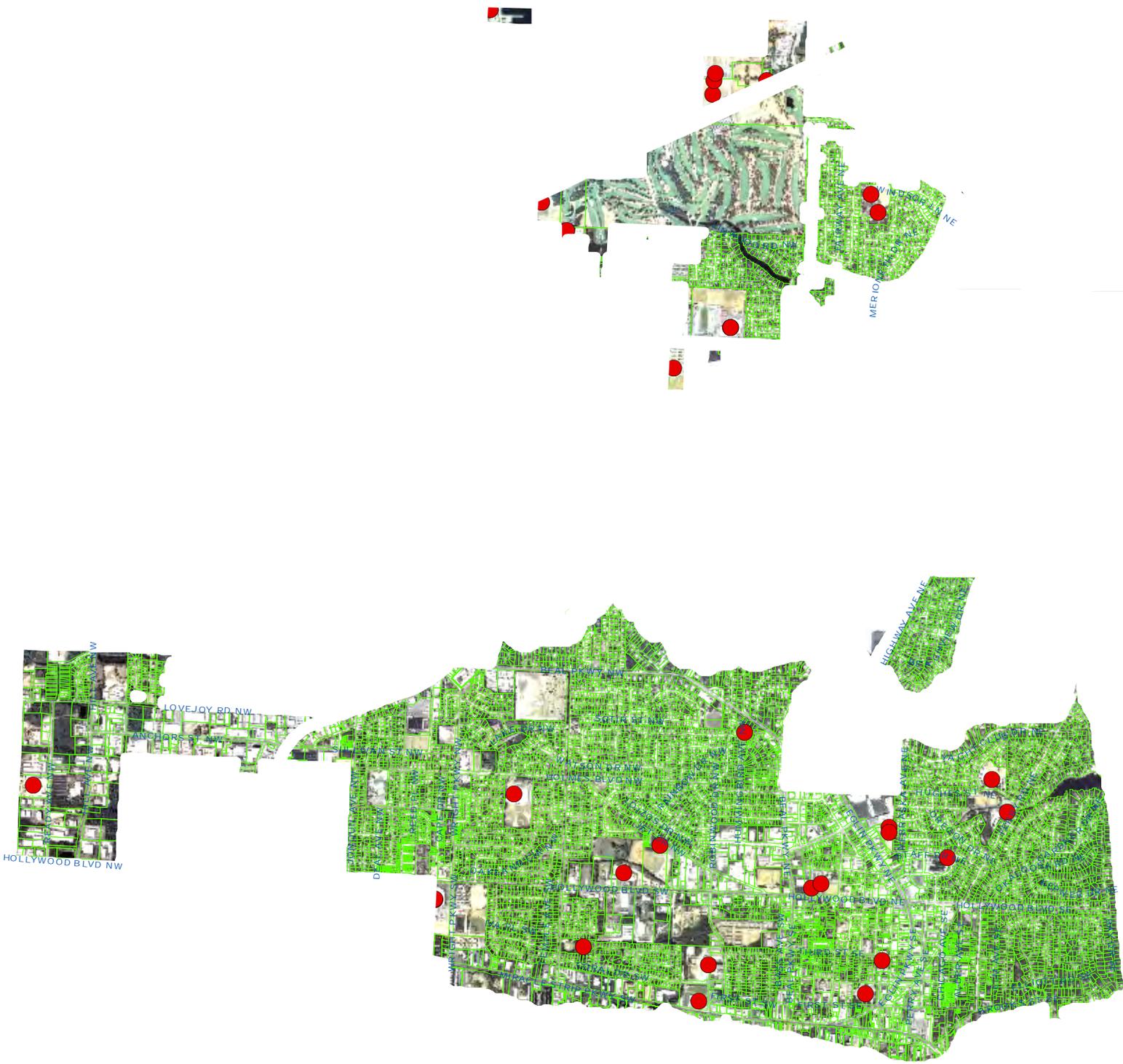
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Lambert Conformal Conic Projection  
Stateplane: Florida North (0903)  
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Department of Growth Management  
08/18/2010



# City of Fort Walton Beach Evacuation Zones

- Parcel Lines
- Evac Zone A
- Evac Zone B
- Evac Zone C
- Evac Zone D
- Evac Zone E

ZONE A = HURRICANE CAT 1

ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County Public Safety, 2010

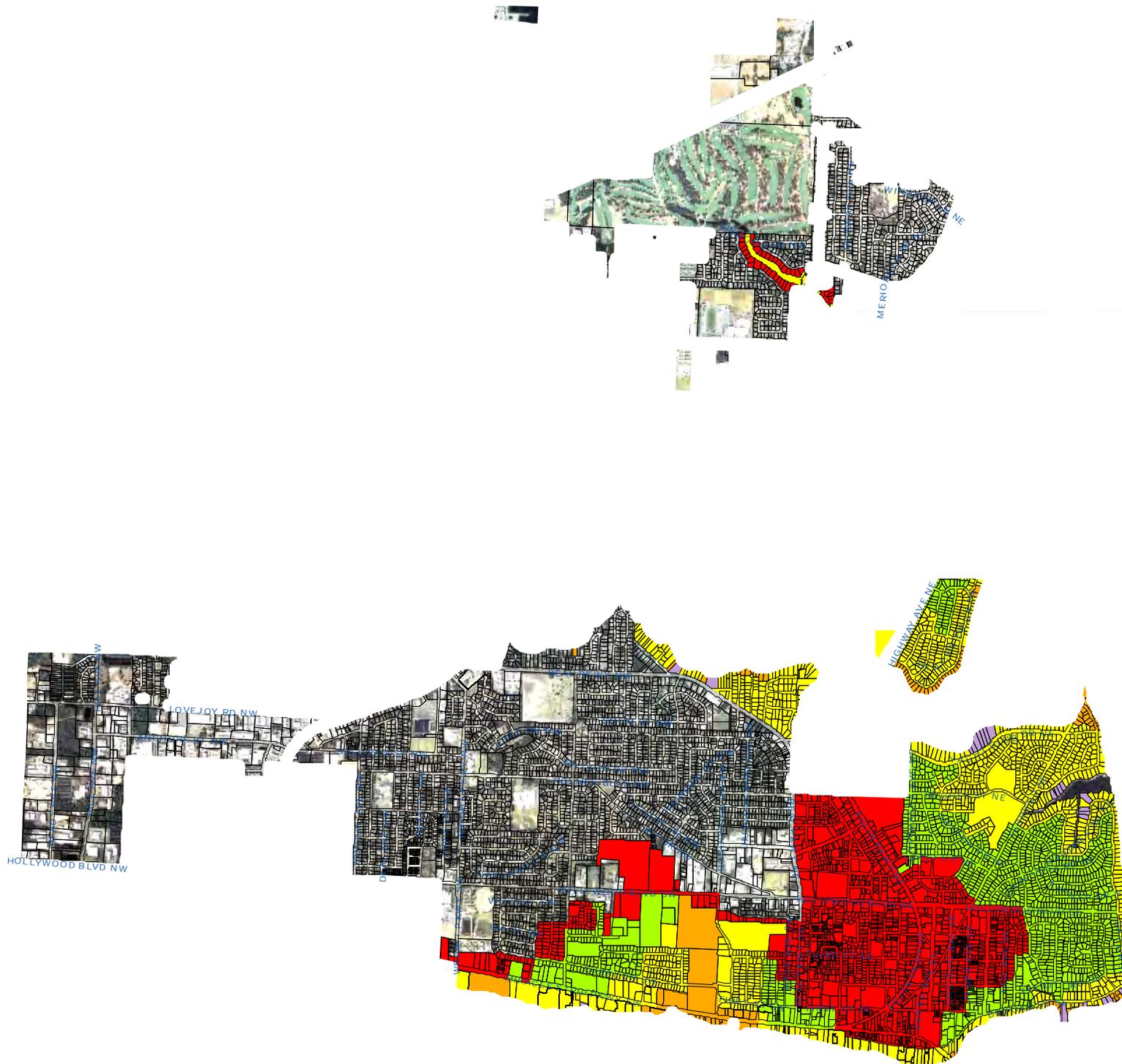
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# City of Fort Walton Beach Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

Source: FEMA Map Service Center, Dec 6 2002

MAP PROJECTION:  
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# City of Fort Walton Beach Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

Source: FEMA Map Service Center, Dec 6 2002

MAP PROJECTION:  
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State plane - Florida North (0903)  
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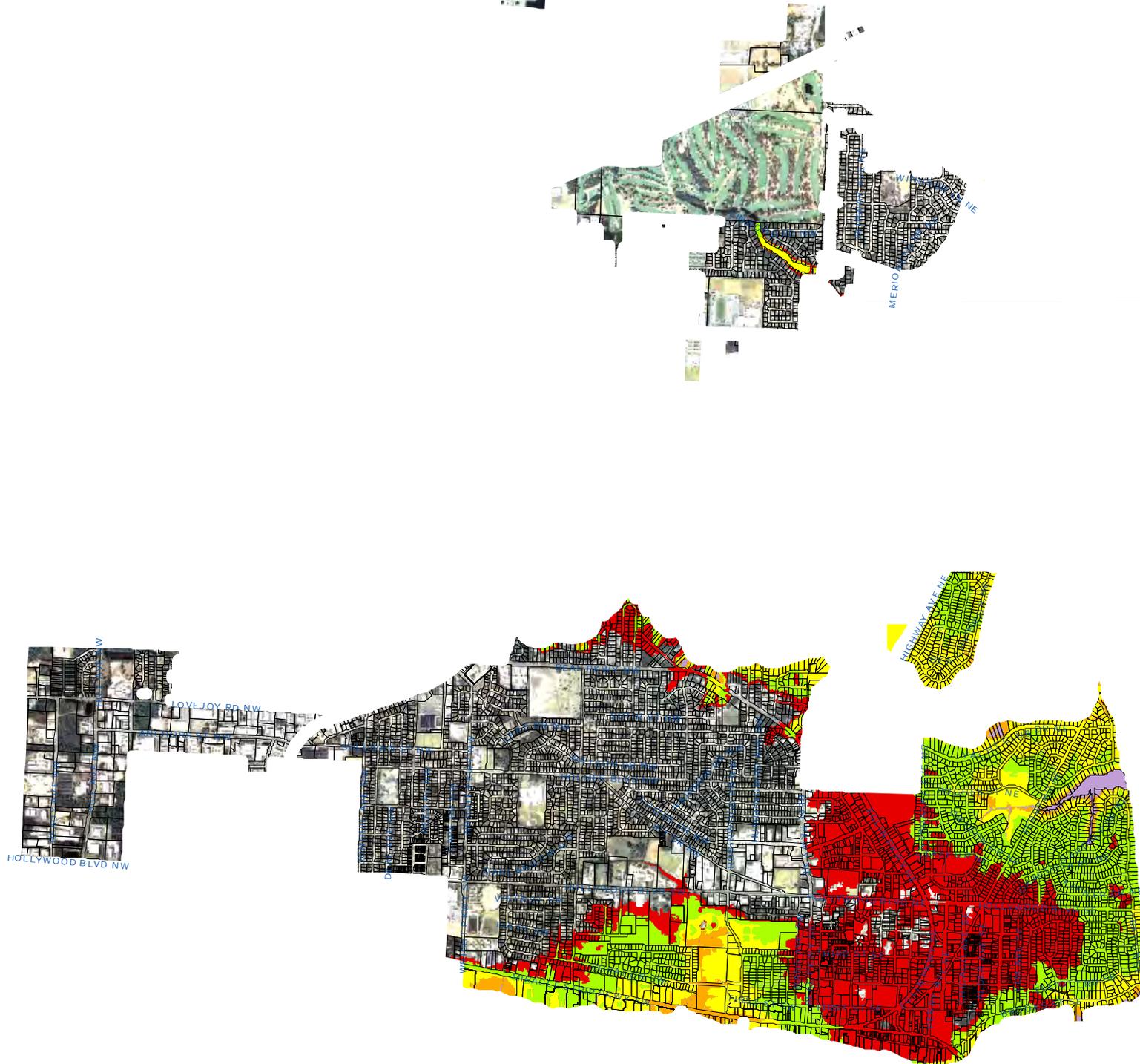
Department of Growth Management  
08/18/2010



# City of Fort Walton Beach Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

Source: West Florida Regional Planning Council, 2010



**MAP PROJECTION:**  
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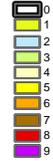


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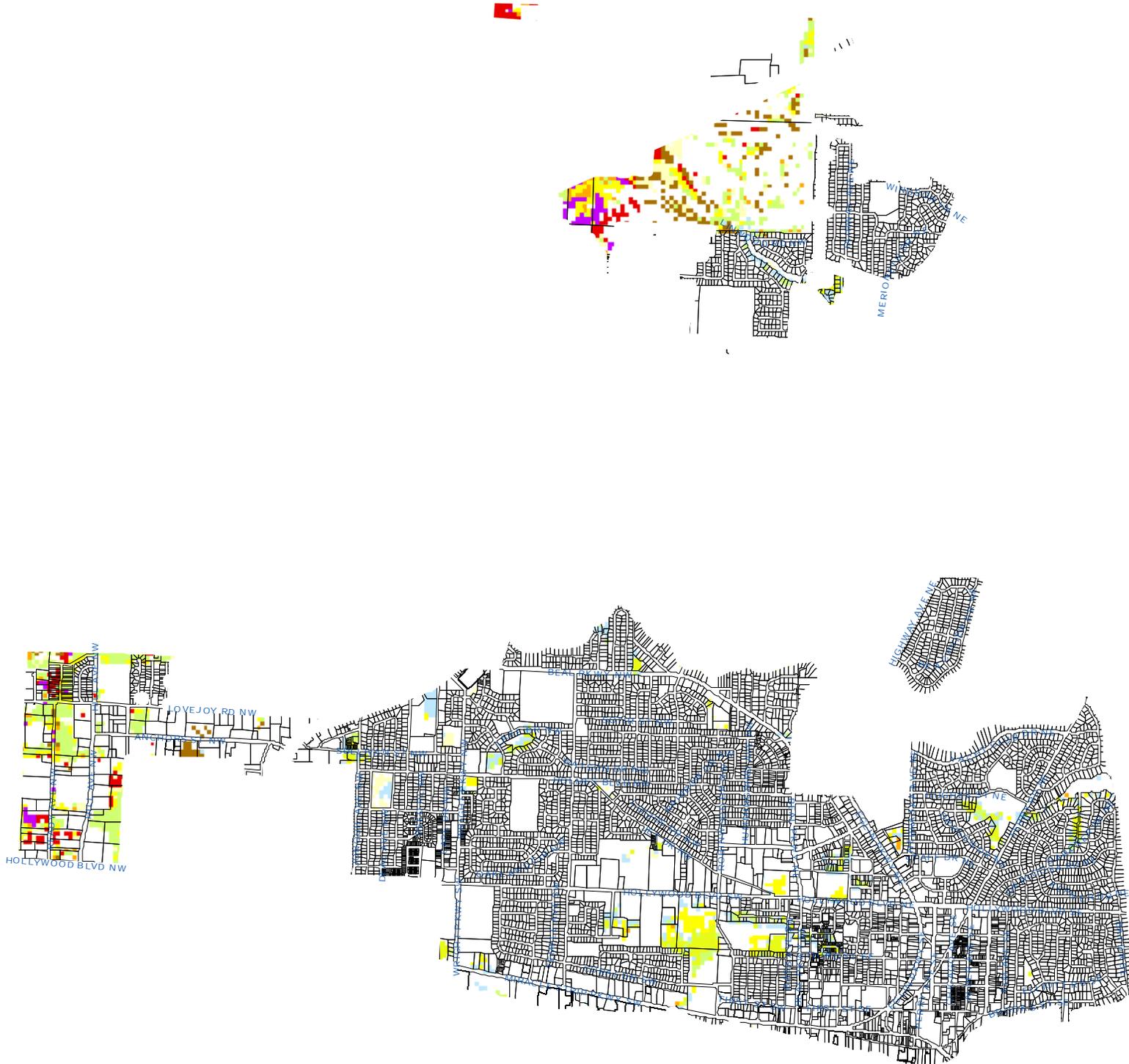
# City of Fort Walton Beach Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
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Stateplane: Florida North (0903)  
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**City of Fort Walton Beach**

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**Section 5.03.06 Post Disaster Redevelopment Plan**

The City of Fort Walton Beach does not currently have a Post Disaster Redevelopment Plan. Therefore, the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

**Section 5.04**

**City of Laurel Hill**





## City of Laurel Hill

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### **Section 5.04.02 Vulnerabilities**

#### **Section 5.04.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Laurel Hill.

This section includes a brief summary description of the City of Laurel Hill, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Laurel Hill. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Laurel Hill.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Laurel Hill so that mitigation options can be considered in future land use decisions.

#### **Section 5.04.02.02 Methodology**

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Laurel Hill as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.04.02.03 Summary Description of the City of Laurel Hill**

The City of Laurel Hill is an incorporated city located in the northeastern portion of Okaloosa County. As of a 2010 Census it was home to 537 residents, which makes it the second smallest municipality in Okaloosa County by population. The City of Laurel Hill is comprised mostly of residential development. There are a few small commercial establishments, such as hair salons and a local diner, but there haven't been any major growth trends in the City, nor are there any expected to occur. Within the city limits is a small industry that manufactures trailers but other than those few commercial and industrial examples, most of the development is residential. The City of Laurel Hill is expected to grow only minimally.

#### **Section 5.04.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability for further explanation on these vulnerable populations. The table below displays the City of Laurel Hill's vulnerable populations.



**City of Laurel Hill**

**Table 5.04.02.04.1:** Estimated Vulnerable Populations in the City of Laurel Hill, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	11.2%	65
Language Isolation	.02%	1
Disabled	53.8%	309
Single Parent	13.5%	10
Poverty	31.5%	160
Minority	24.4%	149

Source: 2010 Census; U.S. Census Population Division

**Section 5.04.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the County because they have already experienced significant flood damage. As of 2015 the City of Laurel Hill does not have any current repetitive loss properties; however, the LMS Committee will update this if this changes in the future.

**Section 5.04.02.06 Hurricane and Tropical Storm**

The City of Laurel Hill is vulnerable to the damaging effects of tropical storms and hurricanes, even though it is located in the very northeast corner of the county and about 50 miles away from the coast. The City of Laurel Hill would experience destruction in terms of wind damage and pockets of flooding due to the heavy rains. All structures within the City of Laurel Hill’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The City of Laurel Hill does not have designated evacuation zones for the different categories of hurricanes. This is due to their more northerly location away from the coastal areas by the Gulf of Mexico, which is where the storms typically make landfall. Historically, storms generate their power over bodies of water and lose their strength as they make landfall. Therefore, as the storm travels further north in the County, the communities are not impacted as severely as the coastal areas. The specific impacts of hurricanes and tropical storms on the City of Laurel Hill are unable to be provided due to a lack of conducted studies.



## City of Laurel Hill

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### ***Section 5.04.02.07 Flooding***

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Laurel Hill is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Laurel Hill. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. Currently, there are no structures located in any of the unnumbered A flood zones in the City of Laurel Hill. However, the LMS Committee will update this if this changes in the future.

### ***Section 5.04.02.08 Dam Safety***

The City of Laurel Hill has 3 active permitted dams within its jurisdiction. Most of these are small agricultural dams. The specific impacts of dam failure in Okaloosa County is unavailable because there have been no studies conducted on the impact that dam failure would have on the potentially affected areas. Only broad general impacts can be given, which provide an indication of what impacts are expected with dam failure. The concern with dam safety is if one of these dams failed, the area surrounding the dam has to potential to experience flooding and agricultural losses.

### ***Section 5.04.02.09 Land Erosion***

The City of Laurel Hill is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Laurel Hill. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of Laurel Hill is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

### ***Section 5.04.02.10 Severe Storms***

In the table below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Laurel Hill. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Laurel Hill.



**City of Laurel Hill**

**Table 5.04.02.10.1:** Residential and Non-residential Structures Vulnerable to Severe Storms in City of Laurel Hill

<b>Total:</b>	<b>Single-Family</b>	<b>Multi Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
	158	2	15	5
<b>Just Value</b>	\$11,722,310	\$202,150	\$1,568,603	\$3,109,970

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.04.02.10.01 Tornado**

The City of Laurel Hill is vulnerable to tornadoes, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Laurel Hill that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Laurel Hill are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Laurel Hill, has a medium risk, 1 in 250 per year, of a tornado event occurring.

**Section 5.04.02.10.02 Thunderstorms and Lightning**

The City of Laurel Hill is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Laurel Hill, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

**Section 5.04.02.10.03 Winter Storms**

The City of Laurel Hill is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Laurel Hill is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Laurel Hill is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Laurel Hill are unavailable because there have been no studies conducted regarding



## City of Laurel Hill

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these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Laurel Hill that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### ***Section 5.04.02.11 Heat Wave and Drought***

The City of Laurel Hill is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Laurel Hill are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

### ***Section 5.04.02.12 Wildfire***

The City of Laurel Hill is only 3.17 square miles, and the majority of this acreage is urban or residential, but vast acres of open forest lands surround the City, and these lands consists of natural vegetation historically related to the Longleaf Pine or upland Southeastern forests. Although the City of Laurel Hill is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is moderately low. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following table depicts the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.



**City of Laurel Hill**

**Table 5.04.02.12.1:** Medium to High Wildfire Level of Concern for Structures

<b>Total:</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Commercial</b>	<b>Government/ Institutional</b>	<b>Trailer Park</b>
<b>Level 4</b>	24	6	1	0	0
<b>Just Value</b>	\$2,528,056	\$356,763	\$423,911	\$0	\$0
<b>Level 5</b>	17	5	1	0	0
<b>Just Value</b>	\$1,612,130	\$361,093	\$423,911	\$0	\$0
<b>Level 6</b>	1	0	1	0	0
<b>Just Value</b>	\$152,981	\$0	\$423,911	\$0	\$0
<b>Level 7</b>	59	19	4	3	1
<b>Just Value</b>	\$5,485,286	\$882,914	\$633,205	\$2,992,541	\$151,194
<b>Level 8</b>	1	2	0	0	0
<b>Just Value</b>	\$224,143	\$195,502	\$0	\$0	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.04.02.13 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Laurel Hill. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Laurel Hill, then the LMS Committee will update this section to reflect those changes.

**Section 5.04.02.14 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Laurel Hill is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Laurel Hill**

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**Section 5.04.05 Maps**

Attached to this page are maps of the City of Laurel Hill. They include:

1. Critical Facilities..... 5.04-28
2. Evacuation Zones.....5.04-29
3. Flood Zones..... 5.04-30
4. Repetitive Loss Properties.....5.04-31
5. Surge Zones..... 5.04-32
6. Wildfire Level of Concern..... 5.04-33



# City of Laurel Hill Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

ZONE A = HURRICANE CAT 1

ZONE B = HURRICANE CAT 2

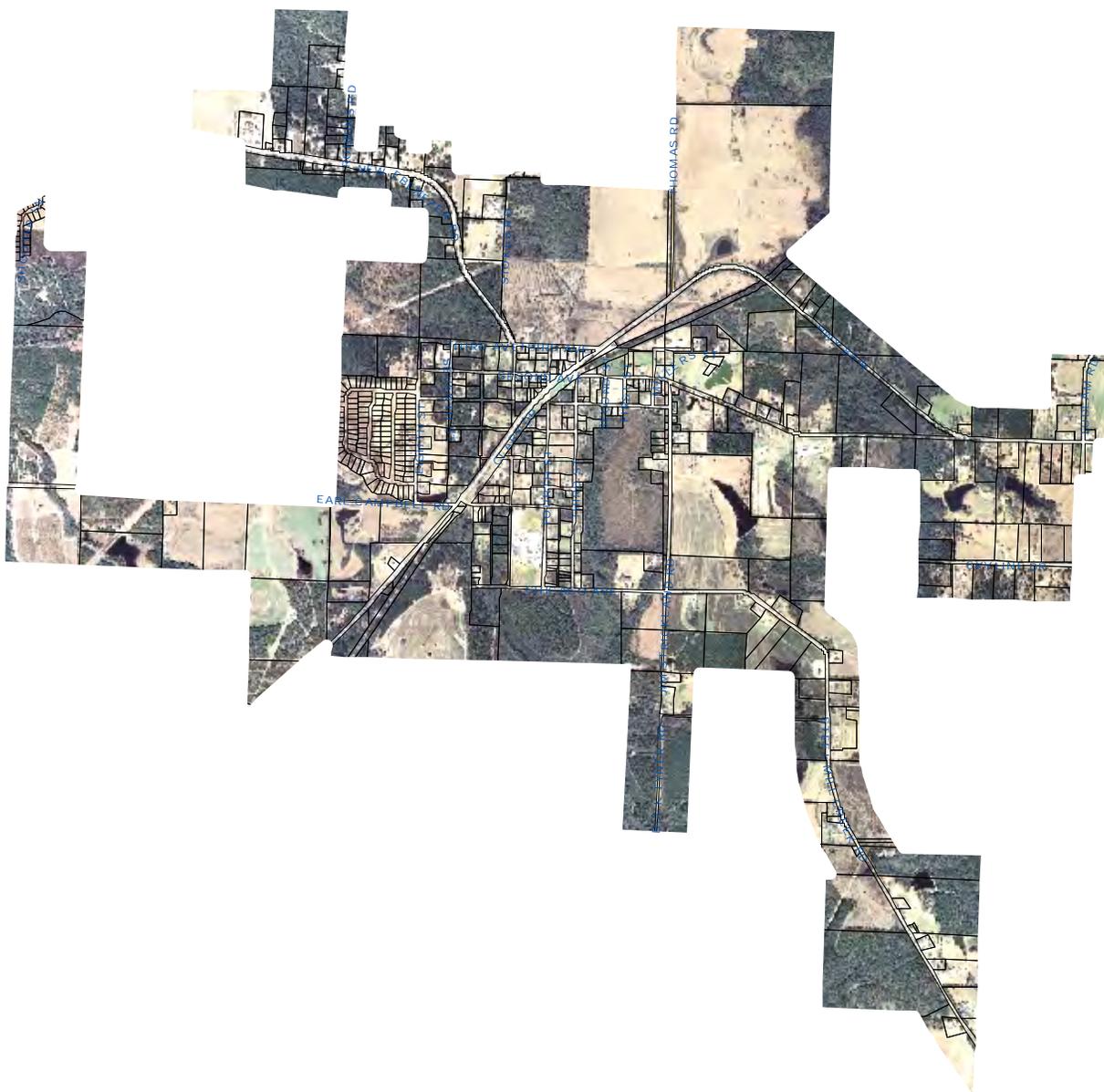
ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

**Note: There are no  
Evacuation Zones  
in the City of Laurel Hill**

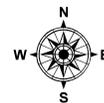
Source: Okaloosa County  
Public Safety, 2010



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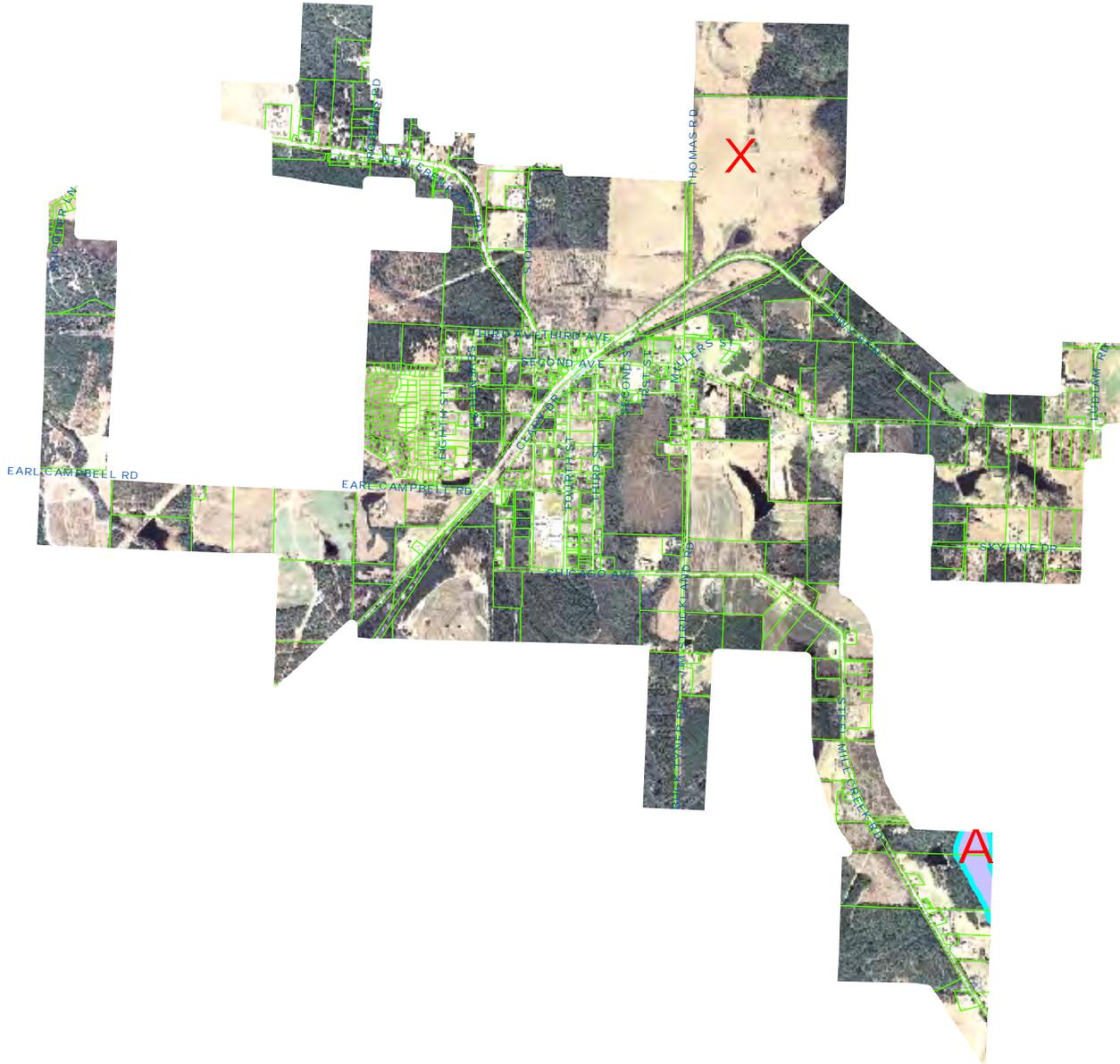


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# City of Laurel Hill Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

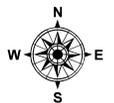
Source: FEMA Map  
Service Center,  
Dec 6 2002



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# City of Laurel Hill Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

**Note: The City of Laurel Hill does not have any Repetitive Loss Properties in its jurisdiction**

**Source: FEMA Map Service Center, Dec 6 2002**

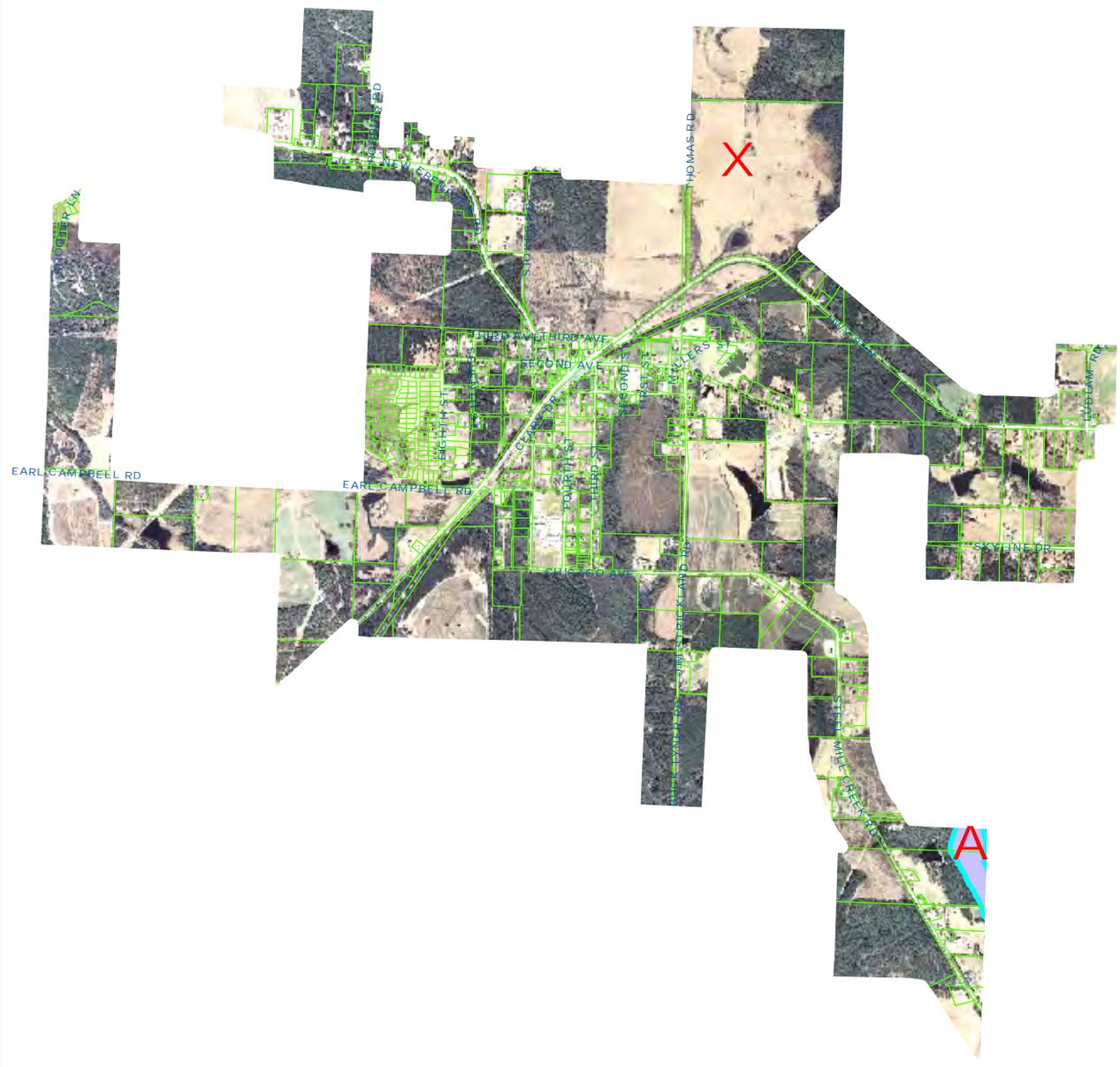
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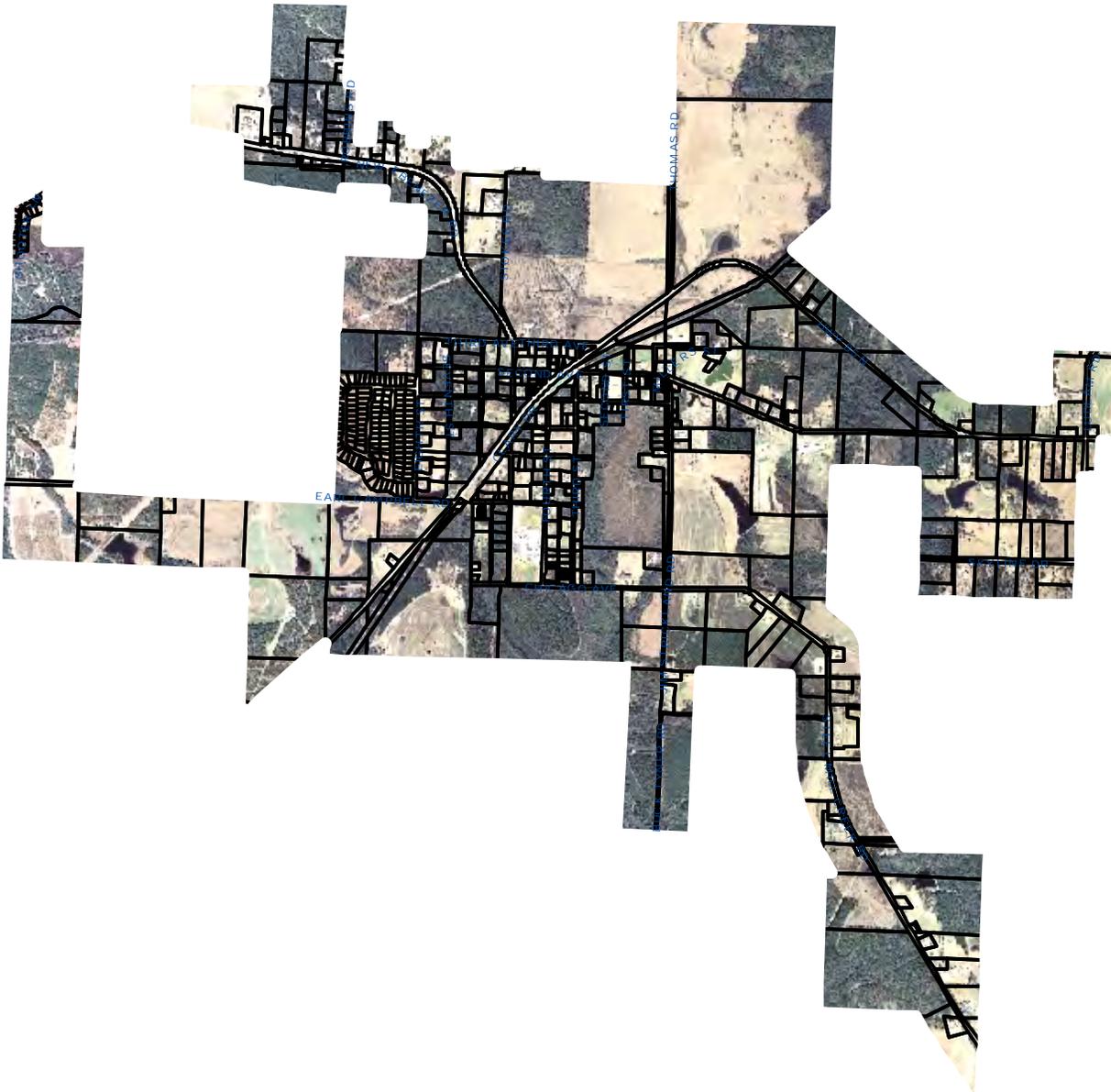


# City of Laurel Hill Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

**Note: There are no  
Surge Zones  
in the City of Laurel Hill**

Source: West Florida  
Regional Planning  
Council, 2010



MAP PROJECTION  
Lambert Conformal Conic Projection  
StatePlane: Florida North (8003)  
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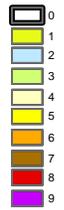


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# City of Laurel Hill Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division  
of Forestry, 2010



MAP PROJECTION  
Lambert Conformal Conic Projection  
StatePlane: Florida North (8003)  
NAD 1983(80), NAVD 1988.

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## City of Laurel Hill

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### **Section 5.04.06 Post Disaster Redevelopment Plan**

The City of Laurel Hill does not currently have a Post Disaster Redevelopment Plan. Therefore, the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

# Section 5.05

## City of Mary Esther





## City of Mary Esther

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### **Section 5.05.02 Vulnerabilities**

#### ***Section 5.05.02.01 Introduction***

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Mary Esther.

This section includes a brief summary description of the City of Mary Esther, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Mary Esther. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Mary Esther.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Mary Esther so that mitigation options can be considered in future land use decisions.

#### ***Section 5.05.02.02 Methodology***

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Mary Esther as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### ***Section 5.05.02.03 Summary Description of the City of Mary Esther***

The City of Mary Esther is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 3,851 residents. Within its jurisdiction, there are 2.92 miles that border the Santa Rosa Sound. Nearly all development in the City of Mary Esther is tightly clustered along the southernmost boundary of the city, which borders Santa Rosa Sound. Since 2004, residential development has been minimal and the majority has been in the form of apartments, condominiums, and town homes.

#### ***Section 5.05.02.04 Vulnerable Populations***

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability for further explanation on these vulnerable populations. The table below displays the City of Mary Esther's vulnerable populations.



**City of Mary Esther**

**Table 5.05.02.04.1:** Estimated Vulnerable Populations in the City of Mary Esther, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	15.9%	598
Language Isolation	.8%	31
Disabled	30.5%	1236
Single Parent	5.6%	65
Poverty	5.2%	198
Minority	4.2%	165

Source: 2010 Census; U.S. Census Population Division

**Section 5.05.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the City of Mary Esther because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the City of Mary Esther.

**Table 5.05.02.05.1:** Repetitive Loss Properties in the City of Mary Esther

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
City of Mary Esther	\$1,610,732.82	\$615,082.01	23	\$2,225,814.83	11	0

Source: FEMA, 2016

**Table 5.05.02.05.2:** Flood Zones of Repetitive Loss Properties in the City of Mary Esther

Flood Zones	A,AE	V,VE	B,C,X
Total Properties	6	0	5

Source: FEMA, 2016



**City of Mary Esther**

**Section 5.05.02.06 Hurricane and Tropical Storm**

The City of Mary Esther is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Santa Rosa Sound, near the southern coast of the county. The City of Mary Esther would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Mary Esther's jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following table depicts the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.05.02.06.1:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Condominium</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	0	6	0	1	0
<b>Just Value</b>	\$0	\$1,815,028	\$0	\$181,016	\$0
<b>Zone B</b>	0	47	6	1	0
<b>Just Value</b>	\$0	\$20,759,911	\$2,659,951	\$181,016	\$0
<b>Zone C</b>	0	47	6	3	0
<b>Just Value</b>	\$0	\$20,759,911	\$2,659,951	\$1,890,541	\$0
<b>Zone D</b>	0	103	8	3	0
<b>Just Value</b>	\$0	\$39,956,223	\$3,760,146	\$1,890,541	\$0
<b>Zone E</b>	1	177	12	6	1
<b>Just Value</b>	\$65,000	\$72,719,484	\$5,870,267	\$2,549,121	\$96,124

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.05.02.07 Storm Surge**

The City of Mary Esther is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 17.2 feet above the mean high water line along the some areas boarding the Santa Rosa Sound. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following table depicts the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**City of Mary Esther**

**Table 5.05.02.07.1:** Vulnerable Structures to Storm Surge

<b>Total:</b>	<b>Condominium</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>
<b>Surge Level 1</b>	1	67	9	1
<b>Just Value</b>	\$65,000	\$37,202,702	\$5,255,482	\$1,095,717
<b>Surge Level 2</b>	1	97	9	1
<b>Just Value</b>	\$65,000	\$54,686,205	\$5,255,482	\$1,095,717
<b>Surge Level 3</b>	1	124	9	2
<b>Just Value</b>	\$65,000	\$61,052,047	\$5,255,482	\$1,709,525
<b>Surge Level 4</b>	1	124	9	2
<b>Just Value</b>	\$65,000	\$61,052,047	\$5,255,482	\$1,709,525
<b>Surge Level 5</b>	1	131	10	3
<b>Just Value</b>	\$65,000	\$62,797,766	\$5,491,848	\$1,890,541

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010  
(Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.05.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Mary Esther is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Mary Esther. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the City of Mary Esther, there are 17 structures in the AE flood zone, 1 structure in the VE flood zone, and 6 structures in the A flood zone. The cumulative 'just value' of all those structures in the AE, VE, and A flood zones is \$14,000,118. The following table depicts the vulnerable structures located in the AE, VE, and A flood zones in the City of Mary Esther.

**Table 5.05.02.08.1:** Structures Located in Flood Zones in the City of Mary Esther

	<b>AE Flood Zone</b>	<b>Just Value</b>	<b>VE Flood Zone</b>	<b>Just Value</b>	<b>A Flood Zone</b>	<b>Just Value</b>
<b>Single-Family</b>	10	\$6,889,999	1	\$1,652,216	6	\$659,494
<b>Multi-Family</b>	5	\$3,088,884	0	\$0	0	\$0
<b>Commercial</b>	2	\$1,709,525	0	\$0	0	\$0

Source: Okaloosa County Department of Growth Management, 2010



**City of Mary Esther**

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**Section 5.05.02.09 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Mary Esther. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Mary Esther.

**Table 5.05.02.10.1:** Residential Structures Vulnerable to Severe Storms in City of Mary Esther

<b>Total:</b>	<b>Condominium</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>SFR-Townhouse</b>
	1	6	21	6
<b>Just Value</b>	\$65,000	\$1,815,028	\$11,217,274	\$652,549

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.05.02.10.2:** Other Structures Vulnerable to Severe Storms in City of Mary Esther

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
	163	8
<b>Just Value</b>	\$111,280,886	\$14,143,266

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those special hazards.

**Section 5.05.02.09.01 Tornado and Waterspout**

The City of Mary Esther is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Mary Esther that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Mary Esther are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Mary Esther, has a medium risk, 1 in 250 per year, of a tornado event occurring.



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## City of Mary Esther

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Because waterspouts occur over water, the areas in the City of Mary Esther most susceptible damage from waterspouts are those located on the Santa Rosa Sound. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage from flying debris. However, the specific impacts on those areas are unavailable due to the lack of relevant studies conducted regarding this hazard.

### **Section 5.05.02.09.02 Thunderstorms and Lightning**

The City of Mary Esther is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Mary Esther, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.05.02.09.03 Winter Storms**

The City of Mary Esther is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Mary Esther is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Mary Esther is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Mary Esther are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Mary Esther that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.05.02.10 Heat Wave and Drought**

The City of Mary Esther is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Mary Esther are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.



**City of Mary Esther**

**Section 5.05.02.11 Wildfire**

Although the City of Mary Esther is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following tables depict the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.05.02.11.1: Medium to High Wildfire Level of Concern for Structures**

<b>Total:</b>	<b>Condominium</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Level 4</b>	0	17	1	2	5
<b>Just Value</b>	\$0	\$13,824,275	\$614,591	\$6,077,721	\$11,415,258
<b>Level 5</b>	0	18	0	1	1
<b>Just Value</b>	\$0	\$14,110,172	\$0	\$1,095,717	\$1,356,621
<b>Level 6</b>	0	0	0	0	1
<b>Just Value</b>	\$0	\$0	\$0	\$0	\$5,006,836
<b>Level 7</b>	1	3	0	2	1
<b>Just Value</b>	\$65,000	\$1,076,314	\$0	\$6,077,721	\$3,925,800
<b>Level 8</b>	0	3	0	0	3
<b>Just Value</b>	\$0	\$3,033,268	\$0	\$0	\$6,013,927
<b>Level 9</b>	0	1	0	0	0
<b>Just Value</b>	\$0	\$207,032	\$0	\$0	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.05.02.12 Beach Erosion**

The areas of the City of Mary Esther that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are 2.92 miles of coastline along the Santa Rosa Sound. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. Data on the specific impacts of beach erosion on the City of Mary Esther were unavailable because there have been no studies conducted for this municipality. However, the LMS Committee will update this section, regarding the impacts that beach erosion has on structures, to reflect those changes.



## City of Mary Esther

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### ***Section 5.05.02.13 Other Hazards***

As previously stated in the Risk Assessment, the following hazards, land erosion, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Mary Esther. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Mary Esther, then the LMS Committee will update this section to reflect those changes.

### ***Section 5.05.02.14 Summary***

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Mary Esther is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Mary Esther**

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**Section 5.05.06 Maps**

Attached to this page are maps of the City of Mary Esther. They include:

1. Critical Facilities..... 5.05-36
2. Evacuation Zones..... 5.05-37
3. Flood Zones..... 5.05-38
4. Repetitive Loss Properties..... 5.05-39
5. Surge Zones..... 5.05-40
6. Wildfire Level of Concern..... 5.05-41

# City of Mary Esther Critical Facilities

- Parcel Lines
- Critical Facilities



Source: Okaloosa County  
Public Safety, 2010

MAP PROJECTION:  
Lambert Conformal Conic Projection  
Spheroid: Florida North (1883)  
NAD 1983 GCS NAD83

PUBLIC RECORD:  
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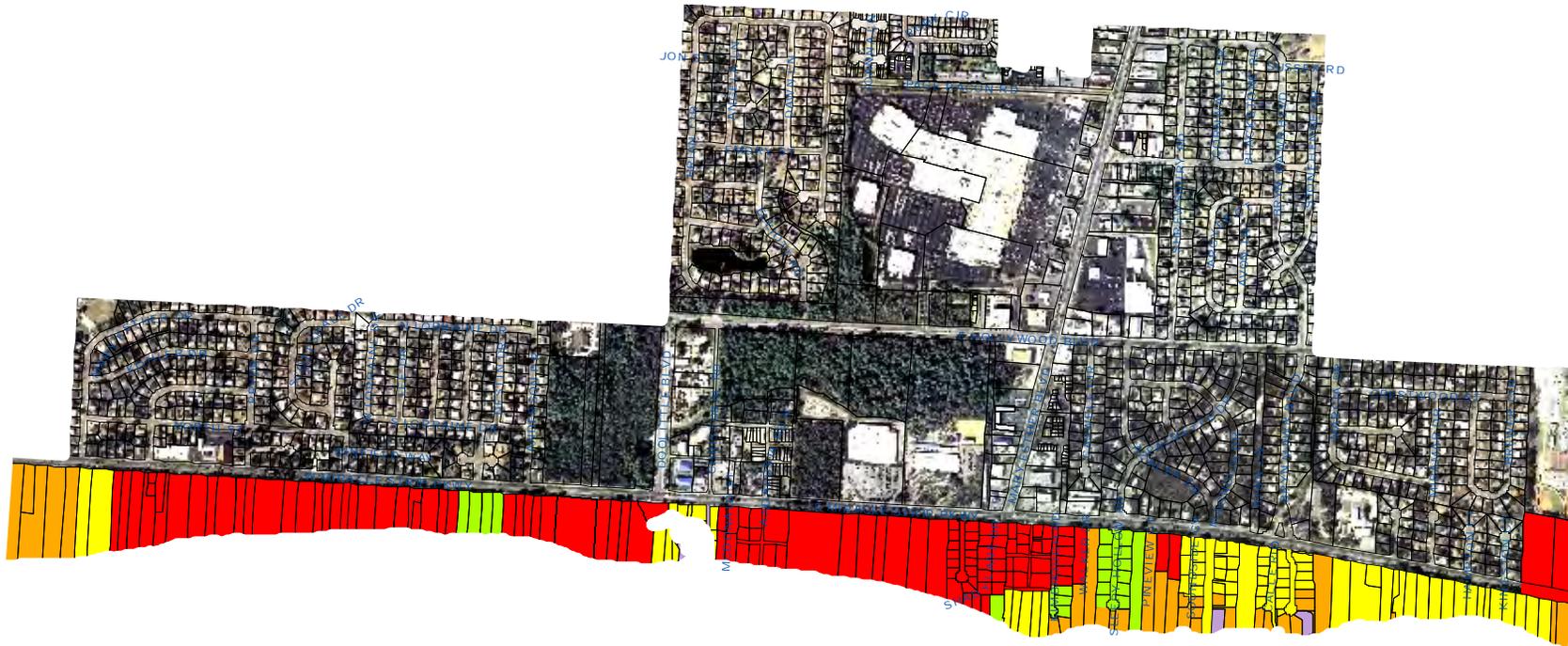
Department of  
Growth Management  
08/18/2010

# City of Mary Esther Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

- ZONE A = HURRICANE CAT 1
- ZONE B = HURRICANE CAT 2
- ZONE C = HURRICANE CAT 3
- ZONE D = HURRICANE CAT 4
- ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (83), NAVD 1988

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# City of Mary Esther Flood Zones

- ▬ Parcel Lines
- ▬ X 500 Year Flood Plain
- ▬ A 100 Year Flood Plain
- ▬ AE 100 Year Flood Plain
- ▬ VE 100 Year Flood Plain

Source: FEMA Map Service Center,  
Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

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# City of Mary Esther Repetitive Loss Properties

- Parcel Lines
- X 500 Year Flood Plain
- A 100 Year Flood Plain
- AE 100 Year Flood Plain
- VE 100 Year Flood Plain
- Base Flood Elevation  
in a Floodway
- Repetitive Loss  
Properties

Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (83), NAVD 1988

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Growth Management  
08/18/2010

# City of Mary Esther Surge Zones

- Parcel Lines
- Category 1
- Category 2
- Category 3
- Category 4
- Category 5

Source: West Florida Regional Planning Council, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
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# City of Mary Esther Wildfire Level of Concern

Parcel Lines

Level of Concern



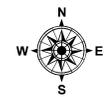
Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5903)  
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**City of Mary Esther**

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**Section 5.05.06 Post Disaster Redevelopment Plan**

Attached to this page is the post disaster redevelopment plan that the City of Mary Esther adopted by the city in June of 2007. This plan is still in effect.



City of Mary Esther Debris Management Plan  
12 June 2007

195 Christobal Road, North  
Mary Esther, FL 32569

PLEASE REVIEW  
AND PROVIDE  
COMMENTS BY  
9/11/07

# CITY OF MARY ESTHER DEBRIS MANAGEMENT PLAN - 07

June 12, 2007

## MISSION

To facilitate and coordinate the removal, collection, and disposal of debris following a disaster, to mitigate against any potential threat to the health, safety, and welfare of the impacted citizens, and expedite recovery efforts in the impacted area, and address any threat of significant damage to improved public or private property.

## SITUATION

Natural and man-made disasters precipitate a variety of debris that includes, but is not limited to, such things as trees, sand, gravel, building/construction materials, vehicles, personal property, etc.

The quantity and type of debris generated from any particular disaster is a function of the location and kind of event experienced, as well as its magnitude, duration, and intensity.

The quantity and type of debris generated, its location, and the size of the area over which it is dispersed directly impacts the type of collection and disposal methods used to address the debris problem, associated costs incurred, and the speed with which the problem can be addressed.

In a major or catastrophic disaster, Mary Esther may have difficulty in locating staff, equipment, and funds to devote to debris removal, in the short as well as long term.

Private contractors play a significant role in the debris removal, collection, reduction, and disposal process.

The debris management program implemented by Mary Esther will be based on the waste management approach of reduction, reuse, reclamation. Resources recovery, incineration, and landfilling, respectively.

## ORGANIZATION AND CONCEPT OF OPERATIONS

The Mary Esther Maintenance Department is responsible for the debris removal function. The Maintenance Department (MD) will work in conjunction with designated support agencies utility companies, waste management firms, and trucking companies, to facilitate the debris clearance, collection, reduction, and disposal needs following a disaster. MD will be responsible for removing debris from the public right-of-way. Only when pre approved and it is deemed in the public interest will MD remove debris from private property. MD will further stage equipment in strategic locations locally as well as regionally, if necessary, to protect the equipment from damage, preserve the decision maker's flexibility for employment of the equipment, and allow for the clearing crews to begin work immediately after the disaster.

Because of the limited quantity of resources and service commitments following the disaster, Mary Esther will be relying heavily on private contractors to remove, collect, and manage

FIRE CHIEF  
INSPECTOR  
CITY CLERK  
MAINT DEPT  
UTILITIES DIV  
FINANCE

debris for reuse, resource recovery, reduction, and disposal. Using private contractors instead of government workers in debris removal activities has a number of benefits. It shifts the burden of conducting the work from Mary Esther to the private sector, freeing up government personnel to devote more time to their regularly assigned duties. Private contracting also stimulates local, regional, and State economies impacted by the storm, as well as maximizes State and local governments' level of financial assistance from the Federal government. Private contracting allows the State and its political subdivisions to more closely tailor their contract services to their specific needs. The entire process (i.e., clearance, collection, transporting, reduction, and disposal, etc.) or segments of the process can be contracted out.

The MD will also develop and maintain a list of approved contractors who have the capability to provide debris removal, collection, and disposal in a cost effective, expeditious, and environmentally sound manner following a disaster.

### STAFF DEVELOPMENT & RESPONSIBILITIES

The City of Mary Esther is responsible for the developing a debris management plan and shall select a "Debris Manager" to coordinate the activities of the "Debris Management Staff". The staff shall be comprised of personnel to perform:

1. Administration (Finance)  
Function: Housekeeping, supplies, equipment, funding, accounting.
2. Contracting and Procurement (Finance)  
Function: Bidding requirements, forms, advertisements for bids, instructions to bidders, contract development.
3. Legal (City Manager, City Attorney)  
Function: Contract review, right of entry permits, community liability condemnation of buildings, land acquisition for temporary staging and reduction sites, land acquisition for disposal sites, insurance.
4. Operations (Maintenance Department)  
Function: Supervision of government and contract resources and overall project management. Recover and re-establish storm water utilities.
5. Engineering (City Manager, Inspection Dept, Maintenance Dept, Fire Dept)  
Function: Detailed damage assessment, identification of project tasks, assignments of tasks, preparation of estimates, plans, specifications, and recommendation of contract award.
6. Public Information (City Clerk)  
Function: Coordinate press releases, contacts with local organizations, individuals and media; and public notices for debris removal and disposal contracts.
7. Utilities (OMI)  
Function: Recover and re-establish water and wastewater utilities.

The staff shall coordinate with all State and Federal agencies responsible for disaster response and recovery operations. The staff will be assigned the task of:

1. Reviewing and updating the Debris Management Plan.
2. Developing an analysis and debris management capability
3. Discourage development in hazardous zones.
4. Develop public information and education programs.
5. Train personnel in debris management techniques.

6. Maintain pre-disaster maps, blueprints, photos and other documents.
7. Make a list of critical facilities (streets, roads, and bridges).
8. Identify non-government groups that could assist (Mary Esther Green, OTNP Committee).

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### CONTRACT AND COOPERATIVE AGREEMENTS

Mary Esther Finance Department is responsible for developing and maintaining contracts for debris removal services on an annual basis.

The Departments will be responsible for managing the debris contract from project inception to completion. Managing the debris contract includes such things as monitoring of performance, contract modifications, inspections, acceptance, payment, and closing out of activities. Mary Esther is encouraged to enter into cooperative agreements with other State agencies and local governments to maximize public assets. The development of such agreements must comply with the guidelines established in their agency procurement manual. All State agencies and local governments that wish to participate in such agreements should be identified prior to the development and implementation of the agreement.

The three types of contracts required are the:

1. Time and Materials Contract. Will be limited to the first 70 hours of operation and only after all State and local equipment has been committed. The price for equipment applies only when the equipment is operating, the City can terminate the contract at its convenience, and the City does not guarantee a minimum number of hours.
2. Lump Sum Contract. The price of the work is fixed unless there is a change in the scope of work to be performed. Lump sum contracts will be calculated on either the "area" method or the "pass" method. The lump sum contract shall only be used when the scope of work is clearly defined and the areas of work can be specifically quantified.
3. The Unit Price Contract. Is the most accurate account of actual quantities removed. Requires field inspectors to eliminate contractor mistakes and in-accuracies. All contractor trucks must be measured. Requires load tickets identifying truck number, contract number, contractor's name, date, time departed site, and estimated volume.

Mary Esther has existing contracts which are attached to this plan as an annex. Mary Esther may establish Mutual Aid Agreements with the following entities to provide assistance with debris removal in the event of a disaster resulting in copious amounts of debris:

- (1) Okaloosa County
- (2) FDOT
- (3) Other volunteering governmental agencies

These agreements may include utilization of personnel, equipment, temporary landfill sites, emergency services, and law enforcement.

Mary Esther will attempt to get certain volunteer (VOAD), State and Federal agencies ready to assist. These agencies include Civic Clubs, Church organizations, Salvation Army, State Department of Transportation, National Guard, scrap dealers, and U.S. Department of Labor. These VOAD organizations will be coordinated by the State.

### SITE SELECTION

Debris storage and reduction sites will be identified and evaluated by interagency site selection teams comprised of a multi-disciplinary staff who are familiar with the area. A listing of appropriate local, State, and Federal contacts will be developed by the appropriate agencies to expedite the formation of the interagency, multi-disciplinary site selection teams.

Initially, debris may be placed in temporary holding areas, determined before the onset of the disaster, until such time as a detailed plan of debris collection and disposal is prepared. This is not anticipated until after the local traffic has been restored. Temporary debris collection sites should be readily accessible by recovery equipment and should not require extensive preparation or coordination for use. Collection sites will be on public property when feasible to facilitate the implementation of the mission and mitigate against any potential liability requirements. Activation of sites will be under the control of the Maintenance Department, and will be coordinated with other recovery efforts through the emergency operations center.

The following is a list of temporary debris storage and reduction sites (TDSR):

1. Old Kaiser Mill Pit
2. Wright Sanitary Landfill

### DEBRIS REMOVAL PRIORITIES

The debris removal process must be initiated promptly and conducted in an orderly, effective manner in order to protect public health and safety following a major or catastrophic event. To achieve this objective, the first priority will be to clear debris from key roads in order to provide access for emergency vehicles and resources into the impacted area. Key roads in Mary Esther are identified as follows:

1. Christobal Road
2. Hollywood Blvd
3. Mary Esther Drive
4. US Hwy 98
5. Roserito Pl
6. Town Ln

The need and demand for critical services will be increased significantly following a disaster. Therefore, the second priority that debris removal resources will be assigned is providing access to critical facilities pre-identified by State and local governments. Critical facilities in Mary Esther have been identified as:

1. Sewer Lift Stations
2. Water Wells/Plants
3. Sewer Plant
4. City Hall/Fire Dept

The third priority for the debris removal teams to address will be the elimination of debris related threats to public health and safety. This will include such things as the repair, demolition, or barricading of heavily damaged and structurally unstable buildings, systems, or facilities that pose a danger to the public. Any actions taken to mitigate or eliminate the threat to the public health and safety must be closely coordinated with the owner or responsible party. If access to the area can be controlled, the necessary actions can be deferred.

#### DEBRIS CLASSIFICATION

To facilitate the debris management process, debris will be segregated by type. It is recommended that the categories of debris established for recovery operations will be standardized. The City will adopt the categories established for recovery operations by the U.S. Army Corps of Engineers following Hurricane Andrew. Debris removed will consist of two broad categories (clean wood debris and construction and demolition debris).

Definition of classifications of debris are as follows:

**Burnable Materials:** Burnable materials will be of two types with separate burn locations:

**Burnable Debris:** Burnable debris includes, but is not limited to, damaged and disturbed trees; bushes and shrubs; broken, partially broken and severed tree limbs; and bushes. Burnable debris consists predominately of trees and vegetation. Burnable debris does not include garbage or construction and demolition material debris.

**Burnable Construction Debris:** Burnable construction and demolition debris consists of non-creosote structural timber, wood products, and other materials designated by the coordinating agency representative.

**Non-burnable Debris:** Non-burnable construction and demolition debris includes, but is not limited to, creosote timber, plastic, glass, rubber and metal products, sheet rock, roofing shingles, carpet, tires, and other materials as may be designated by the coordinating agency. Garbage will be considered non-burnable debris.

**Stumps:** Stumps will be considered tree remnants exceeding 24 inches in diameter; but no taller than 18 inches above grade, to include the stump ball. Any questionable stumps shall be referred to the designated coordinating agency representative for determination of its disposition.

**Ineligible Debris:** Ineligible debris to remain in place includes, but is not limited to, chemicals, petroleum products, paint products, asbestos, and power transformers.

Any material that is found to be classified as hazardous or toxic waste (HTW) shall be reported immediately to the designated coordinating agency representative. At the coordinating agency representative's direction, this material shall be segregated from the remaining debris in such a way as to allow the remaining debris to be loaded and transported. Standing broken utility poles, damaged and downed utility poles and appurtenances, transformers and other electrical material will be reported to the coordinating agency representative. Emergency workers shall exercise due caution with existing overhead and underground utilities and above ground appurtenances, and advise the appropriate authorities of any situation that poses a health or safety risk to workers on site or to the general population.

ESTIMATING DEBRIS QUANTITIES Corp of Engineers

The formula for estimating debris quantity is:  $Q=H(C)(V)(B)(S)$

- H (Households)=Population/3 (3 persons per household)
- C (Category of Storm)=Factor (See table below)
- V (Vegetation Multiplier)= Factor (See table below)
- B (Commercial Density Multiplier)= Factor (See table below)
- S (Precipitation Multiplier)= Factor (See table below)

Hurricane Category	Value of "C" Factor
1	2 CY
2	8 CY
3	26 CY
4	50 CY
5	80 CY

Vegetative Cover	Value of "V" Multiplier
Light	1.1
Medium	1.3
Heavy	1.5

Commercial Density	Value of "B" Multiplier
Light	1.0
Medium	1.2
Heavy	1.3

Precipitation	Value of "S" Multiplier
None to Light	1.0

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### DEBRIS DISPOSAL AND REDUCTION

Once the debris is removed from the damage sites, it will be taken to temporary or permanent land fills. The three methods of disposal are burning, recycling, and grinding/chipping.

Grinding and chipping will be utilized as a viable reduction method. Grinding and chipping reduces the volume on a 4 to 1 ratio. For grinding and chipping to be feasible, 25% of volume remaining must have some benefit or use.

The three primary burning methods are open burning, air curtain pit burning, and incineration. Controlled open burning is a cost-effective method for reducing clean woody debris in rural areas. Burning reduces the volume by 95%, leaving only ash residue to be disposed of. Air curtain pit burning substantially reduces environmental concerns. The blower unit must have adequate air velocity to provide a "curtain effect" to hold smoke in and to feed air to the fire below. Portable incinerators use the same methods as air curtain pit systems. The only difference is that portable incinerators utilize a pre-manufactured pit in lieu of an onsite constructed earth/limestone pit.

Metals, wood, and soils are prime candidates for recycling. Most of the non-ferrous metals are suitable for recycling. Specialized contractors are available to bid on disposal of debris by recycling if it is well sorted.

### SITE CLOSE-OUT PROCEDURES

Each temporary debris staging and reduction site will eventually be emptied of all material and be restored to its previous condition and use.

Before activities begin ground or aerial photos and/or surveys will be taken, important features such as structures, fences, culverts, and landscaping will be noted. Random soil samples will be taken. The site will be checked for volatile organic compounds.

After activities begin, monitoring of air quality and soil samples will take place. Photo, maps, and sketches of the site will be updated and fuel spills will be noted.

At close-out final testing of soil and air quality will be compared to original conditions. All ash will be removed and any remediation actions will be taken.

### DEBRIS MANAGEMENT ACTIONS

The Debris Management Plan is separated into four stages:

1. Normal Operations

Establish pre-existing contract for debris removal services to expedite the implementation of their debris management strategies.

Develop mutual aid agreements with other State agencies and local governments, as appropriate, following guidelines established in agency procurement manual.

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Identify and pre-designate potential debris storage sites for the type and quantity of debris anticipated following a catastrophic event.

Pre identify local and regional critical routes in cooperation with contiguous and regional jurisdictions.

Identify and coordinate with appropriate regulatory agencies regarding potential regulatory issues and emergency response needs.

Develop the necessary right of entry and hold harmless agreements indemnifying all levels of government against any potential claims.

Establish debris assessment process to define scope of problem.

Develop and coordinate pre-scripted announcements with the City Clerk regarding debris removal process, collection times, temporary storage sites use of private contractors, environmental and health issues, etc.

## 2. Increased Readiness

*(A natural or man-made disaster is threatening the local area)*

Review and update plans, standard operating procedures, contracts, and checklists relating to debris removal, storage, reduction, and disposal process.

Alert local departments that have debris removal responsibilities ensuring that personnel, facilities, and equipment are ready and available for emergency use.

Relocate personnel and resources out of harm's way and stage in areas where they can be effectively mobilized.

Review potential local, regional, and debris staging and reduction sites that may be used in the response and recovery phases in the context of the impending threat.

Alert existing debris removal contractor of pending need for their services . Make necessary arrangements to ensure their availability in the event of the disaster.

## 3. Response

Activate debris management plan, coordinate with needs assessment team.

Begin documenting costs.

Coordinate and track resources (public and private).

Establish priorities regarding allocation and use of available resources.

Identify and establish debris temporary storage and disposal sites (local, regional).

Address any legal, environmental, and health issues relating to the debris removal process.

Continue to keep public informed through the PIO.

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#### 4. Recovery

Continue to collect, store, reduce, and dispose of debris generated from the event in a Cost-effective and environmentally responsible manner.

Continue to document costs.

Upon completion of debris removal mission, close out debris storage and reduction sites by developing and implementing the necessary site restoration actions.

Perform necessary audits of operation and submit claim for Federal assistance.

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## SAMPLE DEBRIS PLAN ANNEX

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Sample:	Notice to public
Sample:	Mutual Aid Agreement
Sample:	Intergovernmental Emergency Mutual Aid Agreement
Sample:	Unit Price Contract
Sample:	Right of Entry Agreement
Sample:	Road Priority List

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MASTER COPY

FILE

*City of Mary Esther*  
**POST-DISASTER  
REDEVELOPMENT PLAN**

JANUARY 6, 1992

Read

Review

J. E. Dorman & Associates, Inc.  
Destin, Florida



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ARTICLE ONE

LEGAL

1.1 Legal:

WHEREAS, the City of Mary Esther is vulnerable to a variety of hazards which result or may result in emergencies causing substantial injury or harm to the population or substantial damage to or loss of property; and

WHEREAS, Chapter 252, F.S., provides the City Council the authority to declare a state of local emergency and take actions necessary to ensure the safety and well being of its residents, visitors and property during emergencies caused by these hazards; and

WHEREAS, the City of Mary Esther has prepared a Comprehensive Plan in compliance with Chapter 163, F.S. and Rule 9J-5, F.A.C.; and

WHEREAS, the City of Mary Esther has adopted its Comprehensive Plan and Objective 11.A.8 requires the City to develop and adopt a Post-Disaster Redevelopment Plan which will reduce or eliminate the exposure of human life and public and private property to natural hazards; now

THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF MARY ESTHER, FLORIDA that this Ordinance is hereby adopted in conformance with Chapter 163, F.S., and Rule 9J-5, F.A.C. and the City adopted Comprehensive Plan and provides an effective date and repeals all provisions of ordinances or resolutions in conflict.

1.2 Title: This Ordinance shall be known as the "The City of Mary Esther Post-Disaster Redevelopment Plan" and also may be known as "Ordinance 92-2".

1.3 Jurisdiction: The lands subject to this Plan shall be the incorporated areas of Mary Esther except lands owned by Federal, State or local political entities.

1.4 Intent: Following a damaging hurricane or any other disaster, and/or enactment of a building moratoria, it is the intent of the City to allow rebuilding and reconstruction in an orderly manner. The City will control the issuance of building permits to manage the location, timing and sequence of reconstruction and repair. It is further the intent of the Post-Disaster Redevelopment Plan that the City establish prior to the disaster event, a special Reconstruction Task Force which will oversee the recovery and reconstruction process and serve as an

advisory body to the City Council. A main responsibility of this body will be to advise the City Council on the policies of the Plan which are structured to mitigate future hurricane damages through the management of reconstruction. To further the intent of this Plan, the City will make every effort to develop its capacity to identify and orchestrate various post-disaster redevelopment, while at the same time ensuring maximum local control over the redevelopment process.

1.5 Effective Date: The effective date of this Ordinance is January 6, 1992.

## ARTICLE TWO

### FOREWORD

In 1987, the United Nations General Assembly passed a resolution calling for a decade dedicated to reducing "loss of life, property damage and social and economic disruptions caused by natural disasters". To assist in preparing for the International Decade for Natural Reduction, the Secretary-General appointed an International Adhoc Group of Experts. In January, 1990, the group's 25 findings and recommendations for immediate and long term emergency management priorities for the Decade were revealed. To illustrate the direction and intent of the ideas behind the Decade, two of the group's findings are presented below:

- Most of the world views natural disasters with fatalism. This attitude is wrong and must be changed. Societies, communities, and individuals, prepared through education, training, policy and legislation, and investment can be both disaster resistant and disaster resilient.
- Reorient government thinking to integrate pre-disaster planning into the mainstream of the government policy and decision making process, including medical preparedness for disasters, improved building codes, and land use planning.

From the United Nations General Assembly comes a mandate to conduct pre-disaster planning for the events during and following a natural disaster. Of all natural disasters, Mary Esther is most vulnerable to hurricanes due to its coastline and its geographic location. The Florida State Land Development Plan (1989) has an objective that all coastal cities will have developed post-disaster redevelopment plans by 1993. Chapter 163, Part II, F.S. and Rule 9J-5 F.A.C and Objective 11.A.8 of the adopted Comprehensive Plan each require the City to prepare a Post-Disaster Redevelopment Plan by 1992. This Plan is a continuation of the City's Comprehensive Planning efforts and is designed to accommodate and compliment the requirements of that Plan. The Post-Disaster Redevelopment Plan is not intended to require a revision of the work already documented by emergency management officials and their planning for the immediate recovery phase after a major disaster.

In the aftermath of a hurricane or other major disaster, the ability of local governments to take effective advantage of opportunities to guide redevelopment in a way that reduces exposure to the effects of future disasters will be strongly

influenced by the regulatory environment established prior to the event. Previously established regulations help to define long-term goals and objectives for the policies that will be implemented during redevelopment. Attempts to mitigate development in high hazard areas are often constrained by the possibility of litigation resulting from restrictions imposed on the development potential of individual properties. A local government's pursuit of the general health, safety and welfare constitutes a legitimate legal basis for measures designed to reduce the impact of hurricanes/disasters, but the actual application of the principle may still subject that government to legal challenges. Property rights questions derive directly from federal constitutional principles which have been incorporated into state constitutions and statutes and include concerns over due process, the taking of private property without just compensation, and equal protection.

By the same token, the failure to take appropriate mitigative measures can potentially expose a local government to judicial findings of negligence, subjecting it to substantial liability for damages actually sustained. This is an important reason for local governments to formulate pre-hazard mitigation strategies together with post-hazard redevelopment plans.

## ARTICLE THREE

### INTRODUCTION AND PURPOSE

The City of Mary Esther is periodically threatened by severe weather phenomena: tornados, hail storms, flooding, high winds and hurricanes. The proximity to major military installations and large bodies of water could cause it to be subject to the effects of man made disasters (e.g. aircraft accidents, radioactive fallout, oil spills, etc.). Other emergency situations, such as accidents involving hazardous/dangerous materials may occur and require pre-disaster planning.

During a major disaster event, many structures will be either damaged or destroyed. The residents of homes will need temporary housing as they pursue financial assistance for repairs or relocation. The local building permitting office will be besieged with building permit requests. At this point, many questions will arise. Without a process in place, inefficient and inconsistent decision making may result in poor land use decisions or spot zoning challenges in the turmoil of post-disaster efforts. Coordinated, centralized, informed decision-making, frequent and accurate media communiques, accurate record keeping and prioritization of recovery activities which are flexible, but never broken, are key points necessary to deal effectively with any massive disaster.

It is recognized that a plan such as this can not anticipate all of the redevelopment scenarios and problems that one will face. Nor can any local government be expected to anticipate all of the redevelopment scenarios it will face after a hurricane or major disaster. Recognizing this, it is the goal of this Plan to establish the background of data, requirements, precedence and sources of information necessary to support and adopt a Post-Disaster Redevelopment Plan and to suggest policies which will guide reconstruction and redevelopment. Thus, this Plan is designed to assist you when considering alternate policies to guide redevelopment. Further, it is designed to provide in cooperation with State, Federal, County and City governments a plan for the purpose of minimizing exposure of human life and public and private property to any type of disaster, whether natural or man-made. Pre and post-disaster planning allows a community to capitalize more fully on mitigation opportunities after a disaster, and when developed and adopted with public involvement prior to a disaster, identifies and alleviates controversial issues that often arise after disasters.

## ARTICLE FOUR

### DEFINITIONS

4.1 Minor Damaged Structures. A structure that can be made habitable in a short period of time with minimal repairs. Damage may include doors, windows, floors, furnaces, water heaters, and other minor structural damage. An indicator for this category is if the cost of repair is 25% or less of the replacement cost at the time of damage.

4.2 Major Damaged Structures. A structure that can be made habitable with extensive repairs. Damage may include foundation, roof structure and major structural components. The indicator for this category is if the cost of repair is greater than 25% and less than 50% of the replacement cost at the time of damage.

4.3 Destroyed Structures. A structure that is a total loss or damaged to such an extent that repairs are not technically or economically feasible, i.e., 50% or more of replacement cost at the time of damage or destruction. Structures experiencing total destruction shall be visibly labeled condemned by a local official. Generally, FEMA requires all private structures damaged greater than 50% of their pre-disaster replacement value to be rebuilt to existing local codes and regulations.

4.4 Damage Assessment Teams. A damage assessment team's function is to assess losses to property immediately after a disaster. These teams should be identified and trained in advance of a disaster so they will be ready when needed. The following are suggestions for disaster assistant team membership:

- a) City engineer
- b) Utility company personnel
- c) Public safety and fire officers
- d) Tax assessor
- e) Building inspectors
- f) Agricultural Extension agents
- g) Health officials
- h) Red Cross officials

- i) Real estate appraisers
- j) Insurance agency representatives

4.5 Post-Disaster Reconstruction Task Force - The Reconstruction Task Force shall be responsible for advising and making recommendations to the City Council on a wide range of post-storm reconstruction/redevelopment issues. The Task Force will be composed of the following individuals, reflecting a broad based representation of community interest and shall be appointed annually by the City Council:

- a) two elected officials
- b) City Manager or his representative
- c) Chief Inspector
- d) Water and Sewer Supervisor
- e) Public safety representative
- f) Fire Department representative
- g) one representative from either or both the real estate or construction industry.

4.6 Coastal High Hazard Area. Coastal high hazard areas shall be defined as any land seaward of the FEMA V-zone elevation line within the City.

## ARTICLE FIVE

### PLANNING PHASES

**5.1 Comprehensive Planning:** Ever since the Second World War, emergency management has focused primarily on preparedness. But being prepared is only one phase of comprehensive emergency management. The City has the opportunity to deal with emergencies before they strike and the responsibility to aid recovery after a disaster. As a result, current thinking defines four phases of comprehensive emergency management. They are mitigation, preparedness, response and recovery. Each phase results from the previous one and establishes the requirements of the next one, estimates in one phase may overlap those in the previous phase and merge into the next one. Preparedness moves swiftly into response when disaster strikes. Response yields to recovery at different times depending on the extent and kind of damage. Similarly, recovery should trigger mitigation, motivating attempts to prevent or reduce the potential of a next disaster. Finally, the disaster phases know no beginning or end. The recognition of a threat can motivate mitigation as well as an actual emergency can.

**5.1.1 Mitigation (Long Term):** Any activities which actually eliminate or reduce the probability of occurrence or the effects of a disaster. It also includes long term activities which reduce the effects of unavoidable accidents. These activities can occur before, during and after a disaster and overlap all phases of emergency management. In addition to reducing hazard impacts through mitigation actions, improving preparedness, response and recovery capabilities can also reduce loss of life and property.

**5.1.2 Preparedness (To Respond):** Preparedness activities are necessary to the extent that mitigation measures have not or can not prevent disasters. Preparedness activities include the development of response procedures, design and installation of warning systems, exercising emergency operational procedures, and training of emergency personnel. Training also includes indoctrination of public officials, including senior administrative and administration officials and members of the City Council. In preparedness, governments, organizations and individuals develop plans to save lives and minimize disaster damage.

**5.1.3 Response (To Emergency):** Response activities follow an emergency or disaster. These include evacuation, rescue operations, emergency medical/care, shelter programming and other emergency assistance for casualties. They also seek to reduce

the probability of secondary damage and to speed recovery operations.

5.1.4 Recovery (Short and Long-Term): Recovery activities begin after disaster and continue until all systems return to a normal or improved level. These include repairs to roads, bridges, electrical power, water/sewer and other public facilities and activities that restore normal service to a community. Short-term recovery returns vital life-support systems to minimum operating standards. Long-term may continue for a number of years and may include the complete redevelopment of damaged areas.

5.2 Redevelopment Planning Policies: Chapter 9J-5, F.A.C., requires the City develop goals and policies and a concurrency management system that will ensure mitigation of impacts concurrent with development. It is likely that the Capital Improvements Element (CIE) for any given municipality, including Mary Esther, and the levels of service documented within will be rendered immediately ineffective after a hurricane.

Chapter 9J-11.006(1)(a)3.c provides for emergency amendments to the local comprehensive plan outside of the twice a year amendment procedures. However, it is unlikely that a planning staff will be able to assemble the necessary details to submit and adopt an amendment to the comprehensive plan immediately after a hurricane.

Therefore, a procedure which contemplates this must be considered. An emergency ordinance or a short-term moratorium on building may be implemented. Incorporating the policies of the local government to be exercised in an emergency can legally reinforce planning activities in an emergency situation.

## ARTICLE SIX

### POTENTIAL MITIGATION POLICIES

6.1 Mitigation Policies: This article presents a list of potential policies for hazard mitigation. It is useful to divide policies into those which might apply when no future development or rebuilding should take place and those which would be appropriate when conditional development or rebuilding should be allowed. A policy to prohibit development or rebuilding would mean essentially designating land for conservation, recreation or open space uses. In this case, the policy options for the City are few and often not politically or financially feasible.

6.2 Future Development or Rebuilding: The following policies could be instituted to condition future development or rebuilding in the aftermath of a hurricane or any other type of disaster:

- Changes from residential to commercial uses in order to reduce evacuation needs;
- Reduction in residential density (i.e. from multi-family to single-family);
- Clustering of development on the most protected portions of the lots;
- Building and rebuilding strictly to code (including flood insurance standards);
- Relocation of public infrastructure away from hazard zones;
- Assessment of impact fees for public infrastructure and services in hazard zones (including the building of shelters in non-hazard zones); and
- Rezoning which would result in existing development becoming a non-conforming use.

6.2.1 Development Regulation: Several different regulations may be developed and implemented to assist local governments in the implementation of hazard mitigation policies and plans.

6.2.1.1 Zoning: One zoning option for coastal communities is simply to designate hazard areas as open space or conservation zones in which all future development is prohibited. Even if this were a politically feasible option, in coastal areas where

agriculture and other non-developed uses do not yield reasonable economic returns, it invites a constitutional challenge of a "taking" of private property without just compensation. A more pragmatic approach is one which seeks to reduce the overall quantity of development at risk (such as reducing development density through down-zoning).

**6.2.1.1.1 Conventional Zoning:** Reduce the quantity of development exposed.

- Local zoning ordinances must be in accordance with local comprehensive plan.
- An increase in the minimum lot size or a reduction in the number of dwelling units permitted per acre would decrease the overall density of development.
- Certain high density uses in high hazard areas can be zoned out and declared non-conforming uses through changes in zoning districts, and, in time, a slow process of land use change might be expected. A shorter-term approach uses the non-conforming use concept as a way of preparing for and managing reconstruction after a hurricane occurs.

**6.2.1.1.2 Bonus or Incentive Zoning:** Developers may be granted additional development density if projects incorporate hazard-reduction features. These features may include the purchasing and deeding of high hazard lands to the public, or the provision of design features which may increase the ability of structures to withstand hurricane forces. However, it may counteract other hazard mitigation strategies to encourage or permit additional densities in coastal hazard areas, even if public amenities and hazard-reduction features are provided as compensation.

**6.2.1.1.3 Performance Zoning:** This approach sets standards for each zone based on the permissible effects of a development rather than specifically enumerating the types of uses, dimensions or densities permitted. If these prescribed standards are met, any use is allowed in the zone.

**6.2.2 Land and Property Acquisition:** Public acquisition of land can serve to influence the direction and timing of growth and development in a locality. Outright purchase of land in coastal areas experiencing moderate or high levels of market demand will tend to be prohibitively expensive for most local governments. The locality must be prepared, however, to take advantage of bargain sales after a hurricane when some property owners may

wish to vacate the hazard area due to the increase in cost of rebuilding.

**6.2.3 Transfer of Development Rights (TDR):** The basic concept underlying TDR is that ownership of land which includes the right to develop the land, a right which may be separated from other ownership rights and transferred to someone else. Under a mandatory program, a locality would simply zone the hurricane hazard area so that fewer units of development are allowed (or prohibit new development entirely), and the owner of the land within this zone would then be permitted to transfer all or some of this unused development density to parcels outside of the hazard-prone areas or to sell the TRDs on the open market to others who own land in areas designated for development. The local government would then permit increased levels of development in the non-hazard prone zone as a result of possessing extra development rights, thus creating a natural market for transferable development rights.

**6.2.4 Taxation and Fiscal Incentives:** In contrast to the public acquisition of hurricane-prone lands, a taxation policy might seek to reduce development by decreasing the holding costs of open space and vacant lands, in turn reducing the opportunity cost of not developing such lands for more intensive uses.

**6.2.5 Special Assessments and Impact Fees:** People who build in and inhabit coastal hazard areas often impose substantially more costs on the public than those who dwell elsewhere. An impact fee could be designed to recoup and mitigate the overall impacts of a project or development on the community at large.

**6.3 Capital Facilities and Public Infrastructure Policy:** Coastal development - its type, location, density and timing - is highly influenced by capital facilities, such as roads, sewer and water services. Such public investments have been aptly termed "growth shapers".

**6.3.1 Policies to Prevent Location of Public Facilities in High Risk Areas:** A locality can develop an explicit set of capital facilities extension policies designed to avoid high hazard areas, thus reducing the amount of development and property which will be attracted to the area and reducing the potential threats to lives and property. This approach can only become an effective deterrent, however, if development in high hazard areas is dependent upon the existence of public facilities.

**6.3.2 Relocation or Strengthening of Capital Investments After a Hurricane:** It may be possible, if the facilities are sufficiently damaged, that roads and sewers can be rebuilt in areas which are less susceptible to damage from future hurricanes. Even if the facilities are not relocated, they may be repaired and reconstructed in ways which make them stronger or less susceptible to hazards from hurricanes or other disasters. Roads and sewers can be elevated, for instance, and sewer and water lines can be flood-proofed. Also, placing power and telephone lines underground after the hurricane may help ensure safer evacuation when the next hurricane threatens.

**6.4 Information Dissemination:** More informed consumers make more rational and allocable efficient market decisions. This implies the need for an additional set of mitigation strategies which aims primarily at supplementing and enlightening individual market decisions regarding hurricane preparedness, recovery and redevelopment. Attempts to educate the housing consumer about hurricane might include brochures and other materials distributed to new and prospective residents of the community, informing them of the nature and location of hurricane hazards and informing them about what to look for in a new home or business (such as elevation and flood-proofing). The dissemination of information on the supply side might take the form of construction practice seminars for coastal builders and developers, introducing both conventional and innovative approaches to building and designing structures and to siting and planning the orientation of buildings in vulnerable locations.

## ARTICLE SEVEN

### DAMAGE ASSESSMENT PROCESS

7.1 Damage Assessment. One of the most important parts of a City's response to an emergency or disaster situation is damage assessment. It is a key step in caring for the long-term needs of the people in the community. The process determines what has happened, what the effects are, which areas are hardest hit, what situations must be given priority and what types of assistance are needed (e.g. local, state, or federal).

7.2 Damage Assessment Teams. Trained observers should be used to assess damage. This can be accomplished by the local Damage Assessment Team (DAT), reference Article 4, Section 4.4. To conduct an accurate damage survey, local governments must have capable DATs. These teams should be identified and trained in advance of the disaster. The composition will vary depending on the severity, type of damage and the availability of personnel. Each team should have a team leader who makes sure the team has the proper forms, maps with identified areas marked, and transportation. During joint damage assessment activities involving the State/FEMA, the City should have a team member to match up with State and Federal DAT members at all times.

7.3 Sequence of Events Leading to a Presidential Declaration. Public Law 100-707, the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (replaces Public Law 93-288, the Disaster Relief Act of 1974), which is the authorization for Federal assistance to local or State governments through a Presidential Declaration of an emergency or major disaster, requires "as a condition of any disaster loan or grant made under the provisions of this Act, the state or local government shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are to be used shall be evaluated and appropriate action shall be taken to mitigate such hazards, including safe land use and construction practices, in accordance with standards prescribed or approved by the President after adequate consultation with appropriate elected officials of general purpose local governments and the state shall furnish such evidence of compliance with this section as may be required by regulation" (FEMA, 1989). The following sections explain how a Declaration is secured and how local governments get involved.

7.3.1 Initial Damage Assessment. Immediately following a disaster, an initial damage assessment must be performed by the City to assess the impacts of the disaster. An official of the City will be designated to conduct this generalized, preliminary

post-disaster damage assessment and provide to the City Emergency Management Director within 24 hours. This assessment should provide a rough estimate of the type and extent of damage. Often this will require the coordination of the various municipal governments who will also perform their own damage assessments. Once the information has been generated, it should be transmitted to the City Emergency Management Office by telephone or facsimile and followed up with a submittal of a General Emergency Incident Report Form (Appendix A). Often in the aftermath of a major disaster that has generated obvious, extensive damages, the State and FEMA, upon request, will join the local government in completing the initial damage assessment.

**7.3.2 Local Declaration of Emergency.** Local jurisdictions have the authority to declare a local "state of emergency" pursuant to Section 252.38(6)(e), F.S. Even though a local state of emergency declaration can be initiated by a City at any time, it must be declared prior to requesting response or recovery assistance from the County/State. Doing so lets decision-makers know that the emergency situation is beyond the response or recovery capabilities of the local jurisdiction. The State will not initiate the damage assessment process, nor seek a Presidential Declaration for a city that is not declared a local state of emergency.

The enactment of such a declaration would enable municipalities/counties to

- request State assistance, if needed;
- evoke emergency related mutual-aid assistance;
- waive the procedures and formalities otherwise required of the political subdivision by law, to respond to the emergency.

These measures pertain to:

- the performance of public works;
- entering into contracts;
- incurring obligations;
- hiring permanent/temporary workers;
- using volunteers;
- securing rental equipment;

- the acquisition and distribution of supplies; and
- the appropriation and expenditure of public funds.

7.3.3 Preliminary State/Local Assessment. In situations where it is not an obvious conclusion that a disaster has had a major impact on a City, the State will initiate a damage assessment with the affected local government. The action is taken to document the severity of the impact and justify the need to pursue a request for Presidential Declaration. When the damage is of such a magnitude that it would appear a Declaration is eminent, this assessment would be combined with FEMA, thereby eliminating this step and the assessment process.

If this step is initiated, local jurisdictions can expedite the process by having the appropriate maps of the damaged areas, personnel, and transportation available to take State damage assessor to effected sites. The more expeditiously the data can be collected, the quicker a potential disaster Declaration can be obtained.

7.3.4 State of Emergency by the Governor. If a city determines the emergency or disaster is beyond their ability to effectively respond, a state of emergency can be declared by the Governor through an executive order or proclamation. The action of the governor will be in support of the local jurisdictions expressed needs. The Declaration of a state of emergency does the following:

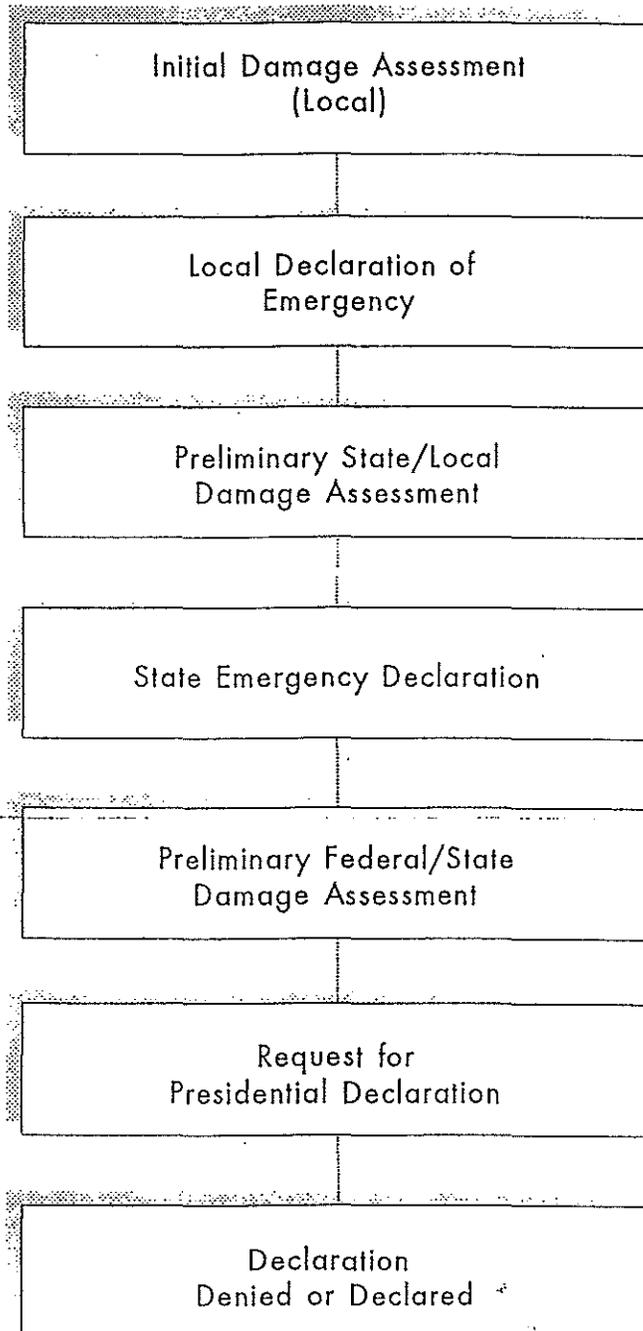
- activates the emergency response, recovery, mitigation phases of the State and local emergency management plans; and
- provides authority for mobilization and deployment of all resources to which the plans refer, pursuant to Section 252.31-60, F.S., or any other provisions of law relating to emergencies.

7.3.5 Preliminary Federal/State Damage Assessment. Prior to recommending a disaster declaration for a city, FEMA will perform a damage assessment to determine if there is sufficient damages to justify a request for a Presidential Declaration. If it is obvious that there is sufficient damage for such a request, FEMA will be asked to participate in a joint local/State preliminary damage assessment to further substantiate the request. This approach will eliminate the need to conduct separate local, State, and Federal assessments. The data collected during the preliminary damage assessment will be used by the State when

preparing the formal request for Federal disaster aid.

**7.3.6 Request for Presidential Disaster Declaration.** When State and local resources are inadequate to effectively respond to an emergency or major disaster, public law 100-707, allows for Federal assistance through a Presidential Disaster Declaration. This assistance is requested through the Governor if the situation meets the criteria for a Declaration. The Governor submits a written request to the President through the Federal Emergency Management Agency, Region IV, in Atlanta, Georgia. If FEMA concurs with the request, it is sent to the President, who determines whether the request will be approved or rejected. The response is transmitted through FEMA, Region IV, back to the Governor.

# SEQUENCE OF EVENTS LEADING TO A PRESIDENTIAL DECLARATION



7.4 Public and Private Damage Assessment. In the aftermath of a disaster, both public and private damage assessments must be performed because of the corresponding types of Federal/State assistance available. Each type of assessment is designed to quantify the eligible amount of damage a community incurred. Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Hazard Mitigation Grant Program, creates a new program to fund additional hazard mitigation measures "which substantially reduce the risk of future damage, hardship, loss or suffering in any area affected by a major disaster". Specifically, this program can be used to relocate susceptible property that was not damaged by a hurricane and prevent it from future damage. Hence, this section provides an opportunity for the disaster area to fund large scale mitigation land use scenarios that previously were not funded by FEMA (FEMA, 1989). Section 406 provides an assistance program for public entities. This program provides funding for public relocation projects such as roadways. Section 406 authorizes "Large In-Lieu Contributions" for public and certain private non-profit facilities. If the local government or landowner determines that the public welfare would not best be served by repairing, restoring, or replacing the damaged facility, it may elect to receive a contribution not to exceed 65% of the federal contribution of eligible work of repair.

7.4.1 Public Damages. With the expansion of FEMA regulations addressing hazard mitigation assistance for public facilities (Hazard Mitigation Grant Program, section 404), it is more important than ever for local governments to have identified mitigation measures prior to a declaration. This includes any damage incurred by a publicly owned structure or facility which is owned by a public entity. This could include roads, bridges, buildings, utilities, etc. To be eligible, the damages must fall in one of the seven basic categories of eligibility. They include:

Debris Clearance - this category includes all storm induced debris on: public roads, including the rights-of-way; other public property; and private property when undertaken by local government forces. It can also cover the cost of public structure demolition when a structure was made unsafe by the disaster.

Protected Measures - this category addresses a need to provide emergency measures designed to protect life, safety, property and health. For example, evacuation, traffic control, barricades, etc.

Road Systems - this category includes roads, streets, bridges, culverts and traffic control devices. The categories of damage might range from some minor damage requiring repairs to complete washout or destruction.

Water Control Facilities - eligible damages under this category include dikes, levies, dams, drainage channels and irrigation works.

Public Building and Equipment - this should include the number and cost of buildings, supplies and/or inventory and vehicle or equipment damaged or destroyed.

Public Utility Systems - public utility systems that sustain damage could include the water system, sanitary sewer, storm drains, light and power and other utilities.

Other - the "other" category includes park and recreational facilities, public facilities under construction, and other public facility damages that do not reasonably fit in one of the six other categories.

7.4.1.1 Public Damage Assessment Reporting. Public damage assessment is performed in the field using Form A (Appendix B). It is used to report the damage done on each individual site. Four individual site entries can be made on each Form. Once the public damage information has been collected on Form A, Form B is used to summarize, by category, information gathered at all sites within each political jurisdiction within the city that received damage to public property (Appendix C).

7.4.2 Private or Business Categories. The purpose of individual damage assessment is to determine the extent to which individuals and private business have been impacted by the disaster. There are two basic categories of eligible individual damage that can be reported and assessed for damages. They include:

Damage to Private or Individual Dwelling - a person whose residence has been damaged due to a disaster may qualify for various forms of disaster assistance. Water damage on the interior or wind damage to shingles, windows or siding are examples. Mobile homes should be included in this category as a separate entry. When damage assessors go into the field, they will estimate the victim's insurance coverage, estimate the victim's income, and determine the inhabitability and type of the victim's home.

Damages to Business and Agriculture - privately owned business that were damaged or destroyed by the disaster can qualify for individual assistance programs. Businesses include buildings, inventory and equipment. Agricultural damage should consist of partial and total damage to farm buildings, the number of livestock missing or destroyed and the number of acres of crops destroyed.

- . 7.4.2.1 Individual Assessment Forms. Performing damage assessments to quantify individual loss and suffering is much different from performing public damage assessments. By using Forms C & D and instructions on Appendixes D and E, assessors are able to document the extent of individual damages to homes, businesses, agriculture and jobs.

## ARTICLE EIGHT

### DISASTER RECONSTRUCTION AND REDEVELOPMENT

**8.1 Intent:** Following a damaging disaster and enactment of a building moratorium, it is the intent of the City to allow rebuilding and redevelopment in an orderly manner. The City will control the issuance of building permits to manage the locations, timing and sequence of reconstruction and repair. It is further the intent of this Article that the City establish, prior to a disaster, a special Reconstruction Task Force as defined in Article 4, Section 4.5 of this Plan. The Task Force will oversee the recovery and reconstruction process and serve as an advisory body to the City Council on reconstruction/redevelopment issues. The main responsibility of this body will be to identify opportunities to mitigate future storm damages through the management of redevelopment standards. To further the intent of this Section, the City will make effort to develop its capacity to identify and orchestrate various post-disaster reconstruction resources, while at the same time ensuring maximum local controls over the reconstruction and redevelopment process.

**8.2 Disaster Reconstruction/Redevelopment:** Disaster reconstruction/redevelopment addresses the removal, relocation or structural modification of damaged structures for both short and long-term repair or replacement. As a condition of any Federal disaster loan or grant, the City shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are to be used shall be evaluated and appropriate action shall be taken to mitigate such hazards, including safe land use and construction practices; thus indicating a long-term, comprehensive approach to mitigation.

**8.2.1 Determination of Damage:** A primary task of the local damage assessment team is to identify structures which, as a result of the disaster event, have been damaged. The local damage assessment team will recommend to the Building Inspector those structures which have: 1) been destroyed; 2) received major damage; or 3) received minor damage. The Building Inspector will then inspect the damaged structure and place each structure in one of the above categories.

**8.2.2 Declaration of a Building Moratorium:** The initial post-storm reconstruction moratorium shall be declared in effect upon the occurrence of the following:

8.2.2.1 The City is declared a disaster area by either the Governor of the State of Florida or the President of the United States.

8.2.2.2 The City Council declares a local "state of emergency" and begins the initial building moratorium when the Council finds that a moratorium is necessary for the protection of lives, safety and property, or due to the inability of the City to maintain acceptable levels of public order and service. The City Council, based upon the above finding, may extend the initial moratorium until such time as a state of emergency no longer exists.

8.2.3 Initial Building Moratorium: Upon the declaration of a building moratorium, the initial post-moratorium shall be in effect for a minimum period of 48 hours. No building permits shall be issued during this time period. After expiration of this initial moratorium, the following moratorium shall apply:

8.2.3.1 Destroyed Structure Moratorium: No building permit shall be issued within thirty (30) days following the expiration of the initial moratorium for the replacement of any structure which has been destroyed, as defined in Section 4.3 of this Plan. All the replacement buildings shall be subject to meeting all the requirements of the Land Use Codes, zoning ordinances, zoning maps and all applicable sections of City and Municipal Ordinances and applicable codes prior to the issuance of a building permit. Non-conforming uses destroyed shall be designed and constructed consistent with the adopted Future Land Use Plan Map, Land Development Code and current building regulations.

8.2.3.2 Major Damaged Structures Moratorium: No building permit for repairs of a major damaged structure shall, as defined in Section 4.2 of this Plan, be issued for at least seven (7) days following the expiration of the initial moratorium. All repairs to a major damaged structure shall meet the requirements of the Land Use Codes, zoning ordinances, zoning maps and all applicable sections of City and Municipal Ordinances and applicable building codes prior to the issuance of a building permit. All non-conforming structures must be upgraded and will be inspected prior to issuance of Certificate of Occupancy.

8.2.3.3 Minor Damaged Structures Moratorium: Permits for the repair of minor damaged structures, as defined in Section 4.1 of this Plan, may be issued 48 hours following the expiration of the initial moratorium. All repairs to minor damaged structures shall meet the requirements of the Land Use Codes, zoning

ordinances, zoning maps and all applicable sections of City and Municipal Ordinances and applicable codes prior to issuance of a building permit.

**8.2.3.4 Outstanding Building Permits Moratorium:** All building permits which were issued prior to the storm event shall be revoked and shall not be reissued for a minimum period of thirty (30) days following the expiration of the initial moratorium, unless upon finding by the Chief Building Inspector on a case-by-case basis that sufficient inspection staff is available to adequately inspect the structures, should construction again resume. All permits issued prior to the disaster event must meet additional requirements of the Land Use Codes, zoning ordinances, and zoning maps before building can resume. Application for building permits revoked in this Section shall be reissued at no charge.

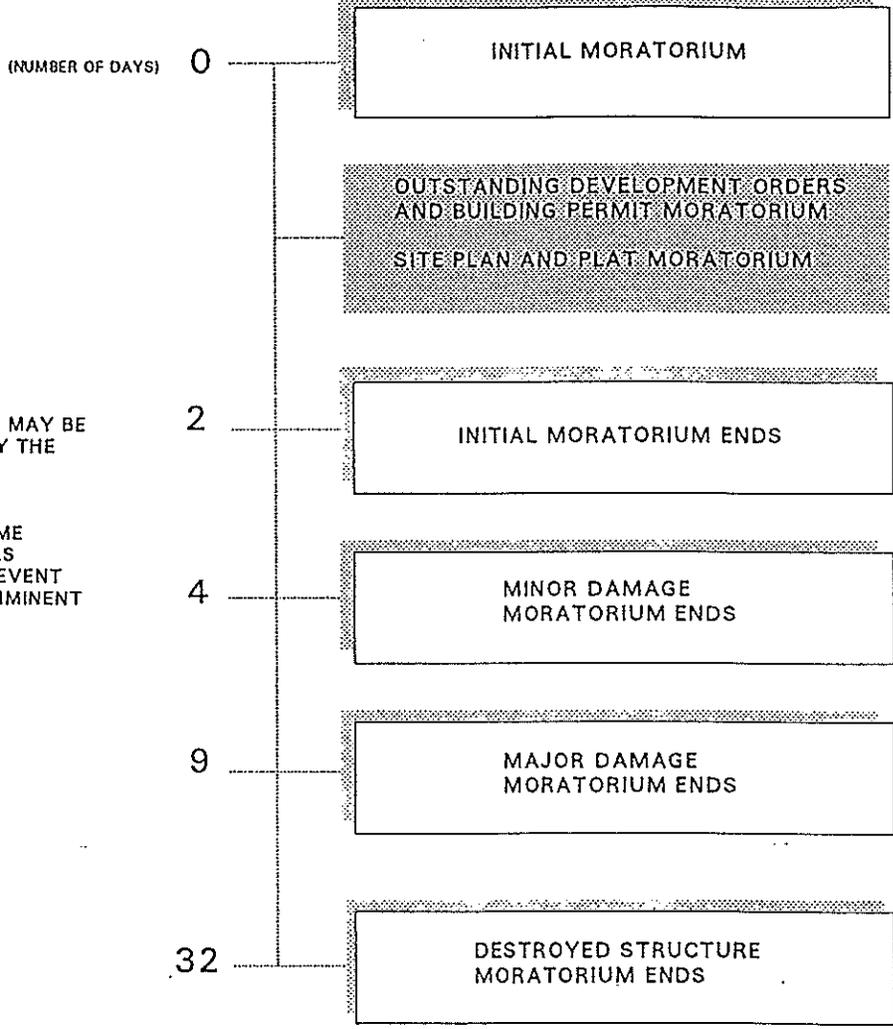
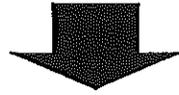
**8.2.3.5 Site Plan Review:** Site plans which have been submitted to the City prior to the disaster shall not be reviewed by the staff, Planning and Zoning Board or City Council for a period of thirty (30) days following the expiration of initial moratorium. All submitted dates and review periods shall be adjusted accordingly to reflect a time period covered by the thirty (30) day moratorium.

**8.2.3.6 Review Procedures Moratorium:** No new site plans, zoning requests or subdivision plats shall be accepted by the City for a period of thirty (30) days following the expiration of the initial moratorium. All submittal dates and review periods shall be adjusted accordingly to reflect the time period covered by this thirty (30) day moratorium.

**8.2.3.7 Duration of Moratorium:** All moratoriums other than the initial moratorium as in Section 9.2.3 shall be in effect for the length of time described above and may be cancelled or extended by the City Council.

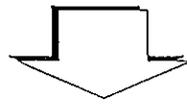
**8.2.4 Emergency Repairs:** While a moratorium is in effect, no construction or reconstruction activities may be undertaken, except in only minor interior repairs and emergency repairs necessary to prevent injury or loss of life or imminent collapse or other substantial additional damage to a structure. For illustrative purposes only, items that constitute minor repair may include temporary roof repairs to avoid further water damage, minor repairs to steps and a temporary shoring up of a structure to avoid imminent collapse.

# DISASTER



\* DURATION OF MORATORIUM MAY BE CANCELLED OR EXTENDED BY THE CITY COUNCIL.

EMERGENCY REPAIRS ANYTIME (EX. MINOR INTERIOR REPAIRS REPAIRS NECESSARY TO PREVENT INJURY, LOSS OF LIFE OR IMMINENT COLLAPSE.)



# PRE-DISASTER STATUS

**8.3 Reconstruction Task Force:** The Reconstruction Task Force, created as defined in Section 4.5 of the Plan, shall be activated and mobilized upon the declaration of the initial building moratorium. The Task Force shall advise and make recommendations to the City Council on a wide range of post-storm reconstruction issues.

**8.3.1 Responsibilities of the Reconstruction Task Force:** The Reconstruction Task Force's primary function is to receive and review damage reports and other analysis of post-storm circumstances and to compare these circumstances with mitigation opportunities identified prior to the storm to discern appropriate areas for post-storm change and innovation. When needed, the Reconstruction Task Force can review in a more specific fashion alternative mechanisms for bringing these changes about and recommend the coordination of internal and external resources for achieving these ends.

**8.3.2 Review and Mitigative Recommendations:** In addition to the responsibilities above, the Reconstruction Task Force shall review the nature of damages, identify and evaluate alternative program approaches for repairs and reconstruction, and formulate recommendations for handling community recovery. The Task Force shall also have the following responsibilities:

- Recommend rezoning changes in areas of damage
- Reduction in residential density (i.e. from multi-family to single-family)
- Change from residential to commercial or mixed use in order to reduce evacuation needs
- Set a calendar of milestones for reconstruction tasks in conjunction with the City Council and Department Heads
- Insure building and rebuilding is strictly to code
- Initiate requests for repairs to critical water, sewer and other facilities
- Recommend the expiration or extension of a moratorium for a "major" and "minor" repairs
- Recommend the lifting or extension of a moratorium for new development
- Evaluate hazards and the effectiveness of mitigation policy and recommend the amendment of

policies if necessary

- Recommend clustering of development on the most protected portions of lots
- Initiate recommendations for negotiations for relocation and acquisition of property
- Recommend relocation of public infrastructure and services in hazard zones
- Participate in Federal hazard mitigation planning

The Task Force shall recommend any changes in zoning, subdivision regulation, setback, density, elevation requirements, building codes or any other ordinances or land uses which it deems necessary or advisable to prevent a recurrence of a disaster of this nature. Within the coastal high hazard area, the City shall allow no new permanent residential structures which do not meet the construction standards established in the Land Development Code.

**8.3.3 Non-Mitigative Recommendations:** The Reconstruction Task Force may also undertake a similar process for non-mitigative local objectives and opportunities. The Task Force may recommend the City Council's consideration for the following specific opportunities:

- enhancement of local recreational and open space opportunities
- enhancement of public access to Santa Rosa Sound
- enhancement and restoration of local natural ecosystems
- reduction of traffic congestion, noise, and other traffic-related problems
- enhancement of the long-term economic vitality of the local commercial and industrial base
- other objectives which further the stated goals and policies of the City's Comprehensive Plan and Land Development Codes.

**8.4 Conditions for Issuance of Building Permits:** Upon expiration or cancellation of an applicable building moratorium enacted in Section 9.2 of this Plan, the following additional

requirements, in addition to all applicable planning and zoning codes, shall be met prior to issuance of a building permit. Permitting of new development and redevelopment in the coastal high hazard area shall also be in consideration of impacts on hurricane evacuation times.

**8.4.1 Destroyed Structures:** The following additional requirements must be met prior to the issuance of any building permit for construction of a new structure.

- A post-storm survey and/or site plans as applicable, of the lot and proposed structure.
- Site plan approval as provided by applicable planning and zoning ordinances, zoning maps and LDC.
- On-site inspection of lot by Chief Building Inspector or his representative.
- Water and sewer will be restorable at street frontage of lot.
- Direct, uninterrupted, approved vehicular access to lot.
- Electrical service restorable to building site.
- All debris removed from lot.
- Septic system improvement permits issued, if required.

**8.4.2 Major Damaged Structures:** The following additional requirements must be met prior to issuance of a building permit for a major damaged structure.

- A post-storm survey and/or site plan, as applicable, of the lot and structure if there is a proposed increase of footprint of a structure over the pre-storm structure. In addition, the following information shall be provided on a survey/site plan:
  - the location of all property boundary lines
  - require the upgrading of non-conforming structures
  - site plan approval

- on-site inspection of lot by the Chief Building Inspector or his representative
- water and sewer will be restorable on street frontage of lot
- direct, uninterrupted, approved vehicular access to lot
- electrical service restorable to building site
- septic system improvement permits issued, if required

**8.4.3 Minor Damaged Structures:** The following additional requirements must be met prior to issuance of a building permit to repair a minor damaged structure:

- A post-storm survey and/or site plan, as applicable, of the lot and structure if there is a proposed increase in the footprint of the structure over the pre-storm structure. In addition, the following information shall be provided on the survey/site plan:
  - the location of all property boundary lines
  - site plan approval
  - on-site inspection of lot by the Chief Building Inspector or his representative
  - vehicular access to lot
  - all debris removed from lot
  - septic system improvement permits issued, if required.

**8.5 Policy on Reconstruction of Roads, Easements and Infrastructure:** Provide roads, public facilities and services which guarantee to the greatest extent possible the health, safety and welfare of the community and which does not require future expenditures for the public infrastructure in the Coastal High Hazard Area.

**8.5.1 Public Facilities:** Repair in place facilities which are essential to the immediate health, safety, or welfare of citizens, or work to provide the impaired service to residents

through alternative means. The City shall coordinate the planning and provision of emergency water and sewer services with Okaloosa County and the City of Fort Walton Beach. This shall include, but is not limited to, executing and entering into local agreements, locating and inventorying existing lines, installing meters and conducting engineering studies to determine the amount of pressure/capability available as compared to required. In case of an emergency disaster effecting water and sewer facilities, contact the County Emergency Management Director at 651-0314 (office), 664-8152 (beeper), 244-2522 (home) or 582-1239 (cellular). Also, for emergency water supply to critical areas, contact Fort Walton Beach Public Works Department at 243-3141 (City Hall), 243-2070 (field office) or 863-2266 (home). For sewer only, contact Environmental Waste Systems at 862-7141 (office) or 244-3878 (home).

**8.5.2 Public Roads and Easements:** Prior to the consideration of an expenditure of public funds for the repair or construction of City roads which are destroyed or damaged by a disaster, the City shall conduct adequate studies and explore alternative solutions, including, but not limited to, abandonment procedures, special assessment and condemnation.

**8.5.3 Infrastructure:** No public infrastructure shall be allowed in the coastal high hazard area, except for that needed to provide public access to the shoreline, to serve public parks that have been approved by the City, state and federal agencies, and protect or enhance natural resources. Public expenditures in the CHHA shall be limited to maintaining the existing service capacity, except for recreation facilities. Provision of water and sewer service at private expense to existing lots or record will be permitted, as long as such provision does not result in conflict with policies for: criteria adopted for determining when structures can be rebuilt; the land development regulations; and the state policy to limit public expenditures that subsidize development permitted in coastal high hazard areas, except for enhancement of natural resources. New sanitary sewer facilities in the coastal high hazard area shall be flood-proofed.

**8.5.4 Private Roads and Easements:** It shall be the policy of the City not to expend public funds for the repair reconstruction of any private road or vehicular easement where it is damaged or destroyed as a result of a disaster, except in conjunction with the repair and maintenance of the City's water and sewer system.

**8.6 Acquisition of Property:** The aftermath of a disaster can present an opportunity to achieve substantial progress in hazard mitigation by the rapid acquisition of land. The City will take

advantage of opportunities which may arise to acquire or purchase land following disaster. To this extent, the City will establish purpose and identify in advance where priority areas are located and will develop in advance decision making and funding mechanisms to ensure rapid acquisition. The selection of parcels to be purchased based on a criterion of hazard reduction per dollar spent could maximize the use of public money for such a program. The City shall identify objectives acquisition areas which would satisfy multiple community objectives, including, but not limited to, open space, parks and recreation sites, historic or scenic areas, or areas for location of City facilities and any other use allowed by law.

## ARTICLE NINE

### FEDERAL ASSISTANCE PROGRAMS AND PROCESS

9.1 Federal and State Disaster Aid Programs. Following a major disaster, there are a large number of Federal and State programs available to aid in disaster relief and reconstruction. The programs can provide assistance or funds to local government units as well as providing information about assistance that is available to individuals, business, families and non-profit associations. Some programs can only be implemented upon declaration of a major disaster by the President of the United States. Other programs can be made available independently of a Presidential Declaration or a major disaster or emergency.

9.2 Policy. It should be the policy of the City to appoint an assistant facilitator-consultant who, as directed by the City, will be responsible:

- determining the types of assistance available to the City and the type of assistance most need
- assisting in the coordination of Federal disaster recovery efforts
- coordinating Federal and State programs of assistance
- informing the community of types of assistance programs available
- recommending to the Recovery Task Force and the City Council programs which are available to the City and then act as facilitator in securing these programs

9.3 Federal Assistance Process. When all of the eligible public and individual damages have been assessed, and the request for a Presidential Disaster Declaration has been prepared and approved by the President, a variety of Federal programs can be made available to public entities and individuals. These programs are designed to bring a community, and its residents, back to a pre-disaster condition. It is important to note that there is no longer separate public and individual disaster declarations. When a Presidential Disaster Declaration is approved, both individuals and public assistance are automatically offered. The following is a brief explanation of both types of assistance.

**9.3.1 Public Assistance.** Public assistance is that part of disaster relief through which the Federal government supplements the efforts of State and local governments to return the disaster area to pre-disaster conditions. These efforts primarily address the repair and restoration of public facilities, infrastructure, or services which have been damaged or destroyed. There are two types of public assistance authorized: "emergency" and "permanent" work. Emergency work includes efforts to save lives, protect property and maintain operation of essential facilities on a short-term basis until permanent restoration can be made. Permanent work involves action necessary to repair, restore, restruct or replace public, and certain private non-profit, facilities damaged or destroyed.

Project application for public assistance may be approved to fund a variety of projects that fall within the eligibility categories identified in Section 7.4.1 of this Plan.

**9.3.2 Flood Insurance Requirements.** One very important element in receiving public assistance are the requirements concerning flood insurance. Public Law 100-707 makes it very clear that all applicants for public assistance must have flood insurance. If they do not have flood insurance at the time of the disaster, eligible cost will be reduced by the maximum amount of flood insurance proceeds the applicant could have received had the facility been fully covered by flood insurance. Also, applicants will be required to commit to maintaining insurance coverage for the total eligible amount of the damaged as a condition to receive public assistance. No assistance for any facility will be available in future disasters, unless the required insurance has been obtained and maintained.

**9.4 Method of Funding.** Recent changes in Public Law 93-288 (Public Law 100-707) have streamlined the funding methods for public assistance programs. Currently, there are two types of grants (funding methods) available that are based on the cost of the project, and two funding options available, either of which can be used under each of the grants. Each grant is explained below.

**9.4.1 Large Project Grant.** When the total cost to repair or replace eligible public damage is \$36,500.00 (adjusted annually according to the Consumer Price Index) or more, a large public grant can be secured. Such grants are used to restore public or private non-profit facilities to their pre-disaster condition.

9.4.2 Small Project Grant. When the total cost to repair or replace eligible damage is less than \$36,500.00, a small project grant can be secured. Once approved, these funds are made totally available to the beginning of the project. At its completion, the applicant certifies the work is completed. The State will perform a final inspection.

9.5 Funding Options. The following funding options can be used by the applicant if they feel it will benefit their situation. They are designed to give the applicant a greater degree of flexibility. Both options can be used under large or small project grants, and are voluntary.

9.5.1 Alternate Projects. Often, when a community applies for a large or small grant, they will determine that the public welfare would not be best served by repairing, restoring, reconstructing, or replacing a damaged facility. Under the "alternate project" option, they community could receive 67.5% of the original damage estimate for use on: other public facilities; constructing new facilities; or, funding hazard mitigation activities. Funds necessary for completing the alternate project would come from local sources.

9.5.2 Improved Projects. When the applicant decides to exceed the original design and value of a damaged facility instead of simply restoring to its pre-disaster condition, the "improved project" option can be approved. The applicant could receive 87.5% (Federal/State contribution) of the original damage estimate and provide the remaining funds necessary to complete the project.

9.6 Public Assistance Process. The process for securing public assistance for a community site, once a Presidential Declaration has been declared, is described below. The process involves all levels of government at various stages.

9.6.1 Applicants Briefing (Step 1). As soon as possible, following the President's Declaration of an emergency or major disaster, the State Coordinating Officer and the State Public Assistance Officer will coordinate an applicant's briefing at the local level. This meeting acquaints the applicants with a public assistance process and project administration. Appropriate City personnel should attend the applicant's briefing, including those who will:

- know the general location of all disaster damages;
- have the authority to sign for Federal assistance for the City, including the "Notice of Interest" form (Appendix F); and
- be responsible for recording data and maintaining documentation of time, repairs and costs.

9.6.2 Inspector's Briefing (Step 2). Once Notice of Interest (NOI) forms are collected, they are reviewed to determine the types of public damages applicants have identified. At this point, Damage Assessment Teams (DAT) are formed based on the need expressed on the NOIs. Each DAT should have Federal/State and local membership. These assessors are briefed on their appropriate procedures to do a site-by-site detail damage assessment, and how to prepare a damaged survey report.

9.6.3 Damage Survey Report Preparation (Step 3). The DATs are then sent into the field. Each damage site is surveyed and a Damage Survey Report (DSR) is prepared. The FEMA DAT member will prepare the DSR. The State and local DAT members sign the DSR upon completion, certifying that they concur or do not concur with the scope of work and the estimated repair costs.

9.6.4 FEMA and State Review (Step 4). As the DSRs are prepared, they are reviewed by FEMA and the State Public Assistance Officer for completeness. Problems are discussed in an effort to resolve them prior to FEMA's formal review.

9.6.5 Application Preparation (Step 5). Once the State has approved the DSRs, a State Project Application is prepared that includes all DSRs, and submitted to the Disaster Recovery Manager (FEMA) for approval.

9.6.6 Advance Funds (Step 6). Once the Project Application has been approved, funds are advanced to the State through a letter of credit. For (large project) grants, the State then forwards the money to the approved applicants on a cost reimbursement basis. For (small project) grants, the entire amount of the proposed project is forwarded to the applicant.

9.6.7 Completion of Work (Step 7). When the "large project" is completed, the applicant will submit a Project Summary of Documentation Form to DEM, along with request for final inspection. Once the State has reviewed the Documentation Form,

a final inspection will be scheduled. When a "small project" is completed, the applicant must submit to the DEM a certification that the work has been completed in accordance with the Project Application. If the total amount of the grant was not used, the applicant can use the remaining funds for other appropriate purposes, subject to State approval.

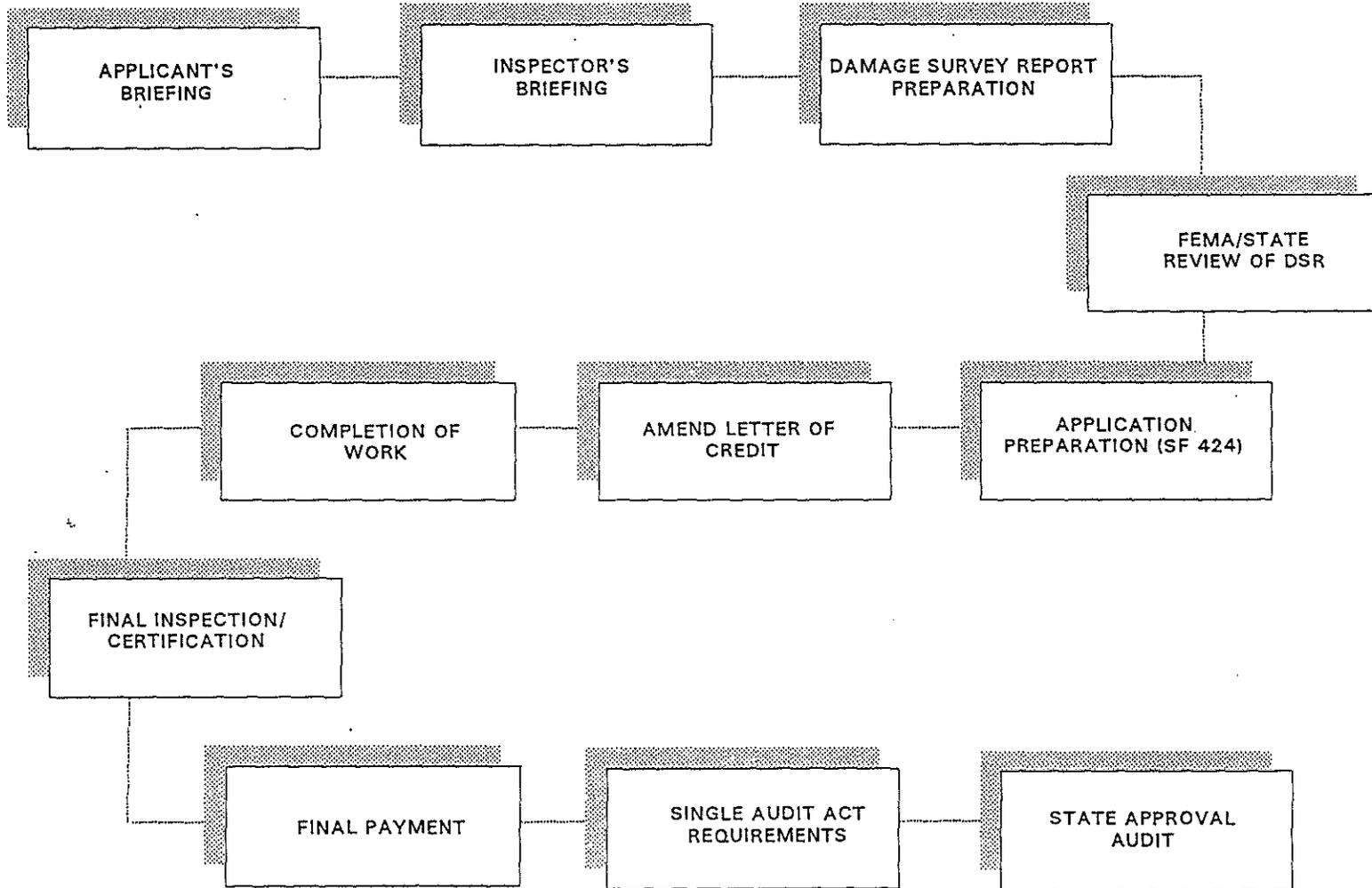
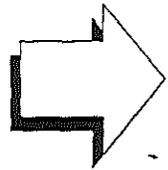
9.6.8 Final Inspection and Certification (Step 8). The State will perform the final inspection to ensure the project was completed per the scope of work, and certify that the work and cost are in compliance with the provisions of the FEMA/State Agreement.

9.6.9 Final Payment (Step 9). For large projects, once the final inspections are completed and any discrepancies are resolved, the applicant will submit a request for final payment.

9.6.10 Single Audit Act (Step 10). All recipients of public assistance will be audited per the requirements of the Single Audit Act of 1984, Circular OMB A-128.

9.6.11 State Approval of Audit (Step 11). Once the audits are performed, the State must approve the audit report. All audit exceptions and discrepancies will be resolved prior to closing out the project.

# PUBLIC ASSISTANCE FLOW CHART



**9.7 Individual Assistance.** After the President signs the disaster Declaration, it is important to inform affected individuals of the programs available to them, and to assist them in obtaining any aid to which they may be entitled. To make it convenient for affected individuals to obtain information and assistance, disaster application centers may be established in each of the declared Counties. Representatives of Federal, State, local and volunteer organizations are then made available at these centers to assist disaster victims applying for assistance. There is a wide range of programs providing disaster assistance to individuals including the following:

**9.7.1 Small Business Administration (SBA).** Once implemented, the SBA program can offer low interest loans to individuals, business and farmers for refinancing, repair, rehabilitation or replacement of damaged property (real and personal). A SBA declaration can be independently or in concert with a Presidential Declaration. There must be a minimum of 25 homes or businesses with 40% or more insured losses and/or 5 business with substantial economic or physical losses.

**9.7.2 Temporary Housing.** In the event of a presidentially declared disaster, a Temporary Housing Program may be authorized in order to meet the housing needs of disaster victims. The Program has several components including:

**9.7.2.1 Mortgage and Rental Assistance Program.** Applicable for individuals or families who have received written notice of eviction or foreclosure due to financial hardship caused by the disaster.

**9.7.2.2 Rental Assistance.** Provided to homeowners of renters whose dwelling is determined unlivable as a direct result of the disaster.

**9.7.2.3 Minimal Repairs Program.** Provides money for an owner occupied, primary residences which have sustained minor damage, and are unlivable as a direct result of the disaster.

**9.7.2.4 Mobile Homes or Other Readily Fabricated Dwellings.** When all other avenues are exhausted, FEMA may initiate the mobile home program. Such homes are moved to, or near, the disaster site and set-up. The State of Florida does not have a temporary housing program. Therefore, FEMA will manage the temporary housing program, should it be needed in Florida.

9.7.3 Individual and Family Grant Programs. The Individual and Family Grant Program provides grants up to \$10,000.00 to help families meet serious needs and necessary expenses that are not covered by other governmental assistance programs, insurance or other conventional forms of assistance. Financial aid can be provided under the following categories

- medical expenses;
- transportation costs;
- home repair;
- replacement of essential property;
- protective measures; and
- funeral expenses.

75% of the costs are funded by FEMA and 25% by the State and/or the local government.

9.8 Disaster Unemployment Assistance. Individuals unemployed as a result of a major disaster, and not covered by regular State or private unemployment insurance programs, will be eligible for unemployment benefits. The weekly compensation received will not exceed the maximum amount of payment under the Unemployment Compensation Program of Florida, and may be provided until an individual is re-employed, or up to 26 weeks after the major disaster is declared, whichever is the shortest period.

Other individual assistance programs that could be activated, if appropriate, are:

- food coupons (U.S. Department of Agriculture)
- food commodities
- legal services
- crisis counseling
- economic injury loans
- tax information
- emergency conservation measures program
- agriculture assistance

- Veterans Assistance
- Cora Brown Fund
- waiver of penalty for early withdrawal of funds or certain time deposits

9.9 Conclusion. This Article is designed to briefly described the sequence of events necessary to secure assistance following an emergency or disaster. More detailed information is available by consulting the "disaster assistance manual" (prepared by the Florida Department of Community Affairs, Division of Emergency Management), and the State of Florida Peace Time Emergency Plan (1985 version). Copies of these documents can be obtained through the Division of Emergency Management, 2740 Centerview Drive, Tallahassee, Florida 32399-2100, or by telephone at 904-487-4915.

**GENERAL EMERGENCY  
INCIDENT REPORT FORM**

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*APPENDIX A*

**POST-DISASTER REDEVELOPMENT PLAN**

# GENERAL EMERGENCY INCIDENT REPORT FORMAT

DATE		TIME
AGENCY	PERSON	COMMUNICATION/SYSTEM
INCIDENT DATE/TIME	INCIDENT TYPE	LOCATION/COUNTY/CITY/LOCALITY

INCIDENT CONCLUDED DATE/TIME	OR CONTINUES
------------------------------	--------------

	FATALITIES	
	INJURED (HOSPITALIZED)	LOCATION
	INJURED OTHER	

	HOMES DESTROYED		DAMAGED
	BUSINESS DESTROYED		DAMAGED
	OTHER DESTROYED		DAMAGED

EVACUATION NEEDED	Yes No	EVACUATION NOW OCCURRING	Yes No	SHELTERS OPENED	Yes No
-------------------	-----------	--------------------------	-----------	-----------------	-----------

NUMBER TO BE EVACUATED			
NUMBER OF SHELTERS			
TOTAL EXPECTED TO EVACUATE			
RED CROSS <input type="checkbox"/>	COUNTY <input type="checkbox"/>	DHRS <input type="checkbox"/>	OTHER (DESCRIBE) <input type="checkbox"/>

SHELTER NAME(S)	LOCATIONS

## REQUEST FOR STATE ASSISTANCE

STATE ASSISTANCE REQUESTED	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Needed	Describe.
----------------------------	--	-----------

**PUBLIC PROPERTY PRELIMINARY  
DAMAGE ASSESSMENT ESTIMATE  
FORM AND INSTRUCTIONS**

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*APPENDIX B*

**POST-DISASTER REDEVELOPMENT PLAN**

Public damage assessment is performed in the field using Form A. It is to be used to report the damage done on each individual site. Four individual site entries can be made on each Form A. Brief instructions on how to fill out Form A follows:

DATE: Date form is filled out.

COUNTY: County damage occurred in.

NAME OF APPLICANT: Governmental jurisdiction filling out form.

NAME OF LOCAL CONTACT: Person state/federal personnel should contact.

PHONE NUMBER: Telephone number of contact person.

SITE NUMBER: Sequential number assigned the site.

CATEGORY: The appropriate eligible category (A-G).

LOCATION: Best applicable address available.

DESCRIPTION OF DAMAGE: Brief, but concise description of damage.

IMPACT: Describe impact damage is having on community system.

PERCENT COMPLETE: Percent of repair already undertaken.

COST ESTIMATE: Estimated cost to replace/repair damage.

# PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT ESTIMATE

DATE \_\_\_\_\_ COUNTY \_\_\_\_\_

## APPLICANT INFORMATION

NAME OF APPLICANT	NAME OF LOCAL CONTACT	PHONE NUMBER
-------------------	-----------------------	--------------

## DAMAGE CATEGORIES

- |                        |                             |          |
|------------------------|-----------------------------|----------|
| A. DEBRIS CLEARANCE    | D. WATER CONTROL FACILITIES | G. OTHER |
| B. PROTECTIVE MEASURES | E. BUILDING AND EQUIPMENT   |          |
| C. ROADS SYSTEM        | F. PUBLIC UTILITY SYSTEM    |          |

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
----------	----------	---

DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
----------	----------	---

DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
----------	----------	---

DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

NAME OF INSPECTOR	AGENCY	PHONE NUMBER(S)
-------------------	--------	-----------------

**PUBLIC PROPERTY PRELIMINARY  
DAMAGE ASSESSMENT SUMMARY  
FORM AND INSTRUCTIONS**

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*APPENDIX C*

**POST-DISASTER REDEVELOPMENT PLAN**

Once the public damage information has been collected on Form A, Form B is used to summarize, by category, information gathered at all sites within a given political jurisdiction. Form B must be completed for each political jurisdiction within the county that received damage to public property. Brief instructions for completing Form B are as follows:

DATE: Date form is filled out.

COUNTY: County damage occurred in.

NAME OF APPLICANT: Political jurisdiction filling out form.

NAME OF LOCAL CONTACT: Appropriate contact person.

PHONE NUMBER: Telephone number of local person.

POPULATION: Population of applicant's jurisdiction.

TOTAL BUDGET: Total budget of applicant and current balance.

DEPARTMENT BUDGET: Leave blank.

YTD EXPEND: Leave blank.

DATE FY BEGINS: Date local fiscal year begins.

CATEGORY: Appropriate categories (A-G).

NUMBER OF SITES: List the number of sites per category.

TYPES OF DAMAGE: Brief summary of damages.

COST ESTIMATE: Estimated cost to repair/replace category summary.

FUND/ACCOUNT: Leave blank unless there is a contingency fund. Enter total.

AVAILABLE BALANCE: Enter balance of contingency fund.

GENERAL IMPACT 1-2-3: Answer questions briefly.

RESPONSE CAPABILITY: Provide brief explanation.

IMPACT ON PUBLIC SERVICES  
IF DECLARATION IS NOT MADE: Provide brief explanation.

NAME OF INSPECTORS: Name of person who did inspection.

AGENCY: Who the inspector works for.

PHONE NUMBER: Telephone number of inspector.

# PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT ESTIMATE

DATE

NAME OF APPLICANT		NAME OF LOCAL CONTACT		PHONE NUMBER
COUNTY	POPULATION	TOTAL BUDGET	DATE FY BEGINS	
DEPARTMENT BUDGET			YTD EXPENDITURES	

CATEGORY	NO. OF SITES	TYPES OF DAMAGE	COST ESTIMATE	LOCAL FUND RECOVERY ACCOUNT	BALANCE

**A. GENERAL IMPACT**

1. Identify and describe damages which constitute a health and/or safety hazard to the general public.
2. Population adversely affected directly or indirectly by the loss of public facilities or damages.
3. What economic activities are affected by the loss of public facility or damages?

**B. RESPONSE CAPABILITY**

Can the applicant respond and recover from the damages quickly and without degradation of public services? Describe.

**C. IMPACT ON PUBLIC SERVICES IF DECLARATION IS NOT MADE**

(e.g. referral of permanent repairs, impact on ongoing services and capital improvements, etc.) Describe.

NAME OF INSPECTOR	AGENCY	PHONE NUMBER(S)
-------------------	--------	-----------------

**PRELIMINARY HOUSING DAMAGE  
ASSESSMENT ESTIMATES  
FORM AND INSTRUCTIONS**

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*APPENDIX D*

**POST-DISASTER REDEVELOPMENT PLAN**

Performing damage assessment to quantify individual loss and suffering is much different from performing public damage assessment. By using Forms C and D, assessors are able to document the extent of individual damages to homes, businesses and jobs. Brief instructions for filling out each form follow, starting with C.

HEADING: Fill in the city, county, state, and type of disaster.

COLUMN (a): Enter house or apartment number for each unit.

COLUMN (b): Enter best address available for each structure.

COLUMNS (c-d): Check if home is primary or secondary residence.

COLUMNS (e-g): Check if home is a single family, multi-family or mobile home.

COLUMNS (h-i): Check if residence is owner occupied or rented.

COLUMN (j): Check if damage to home is minor, meaning dwelling is uninhabitable, but can be repaired in two days at less than \$3,000.00.

COLUMN (k): Major, meaning it will take two or more days, not exceeding \$3,000.00.

COLUMN (l): Destroyed, meaning it is not feasible to repair.

COLUMN (m): Inaccessible/no utilities are available.

COLUMN (n): Inhabitable - affected - the basic living unit is unaffected, but a porch, garage, etc., is damaged.

COLUMNS (o-p): Write in the height of the water over the first or second floor.

COLUMN (q): Is the damage site suitable for a mobile home?

COLUMNS (r-t): Check the appropriate column if estimated owner income is low, medium, or high.

COLUMN (u): Check if the basic living unit is substandard.

COLUMN (v): Enter the percent of insured loss.

**BUSINESS AND INDUSTRY  
PRELIMINARY DAMAGE ASSESSMENT  
RECORD FORM AND INSTRUCTIONS**

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*APPENDIX E*

**POST-DISASTER REDEVELOPMENT PLAN**

COLUMN (20): Enter number of employees who will be entitled to receive unemployment insurance.

COLUMN (21): Determine the number of employees needing Disaster Unemployment Assistance by subtracting Column 20 from 18.

COLUMN (22): Determine the estimated days employees needing Disaster Unemployment Assistance will be out of work.

# NOTICE OF INTEREST

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*APPENDIX F*

POST-DISASTER REDEVELOPMENT PLAN

NOTICE OF INTEREST  
IN APPLYING FOR FEDERAL DISASTER ASSISTANCE

OMB NO. 3067-0033

DECLARATION NUMBER	PROJECT APPLICATION NUMBER	NOI DATE
FEMA - DR		

THE PURPOSE OF THIS FORM IS TO LIST DAMAGES TO PROPERTY AND FACILITIES SO THAT INSPECTORS MAY BE APPROPRIATELY ASSIGNED FOR A FORMAL SURVEY.

REQUIREMENTS FOR FEDERAL DAMAGE SURVEY

A. DEBRIS CLEARANCE

- On public roads/streets including ROW
- Other Public Property
- Private Property  
*(When undertaken by local Govt. forces)*
- Structure Demolition

B. PROTECTIVE MEASURES

- Life and Safety
- Property
- Health
- Stream/Drainage

C. ROAD SYSTEM

- Roads     Streets     Traffic Ctrl
- Bridges    Culverts    Other

D. WATER CONTROL FACILITIES

- Dikes                       Dams
- Drainage                 Irrigation
- Levees                    Other

E. BUILDINGS AND EQUIPMENT

- Buildings and Equipment
- Supplies or Inventory
- Vehicles or other equipment
- Transportation Systems
- Other

F. PUBLIC UTILITY SYSTEMS

- Water
- Sanitary Sewerage
- Storm Drainage
- Light/Power
- Other

G. OTHER (Not in the above categories)

- Park Facilities
- Recreational Facilities

\* Indicate type of facility      NOTE: If private non-profit, provide name of facility and/or private non-profit owner.

NAME OF POLITICAL SUBDIVISION OR ELIGIBLE APPLICANT	PRIVATE NON-PROFIT	COUNTY

AGENT/TITLE

---

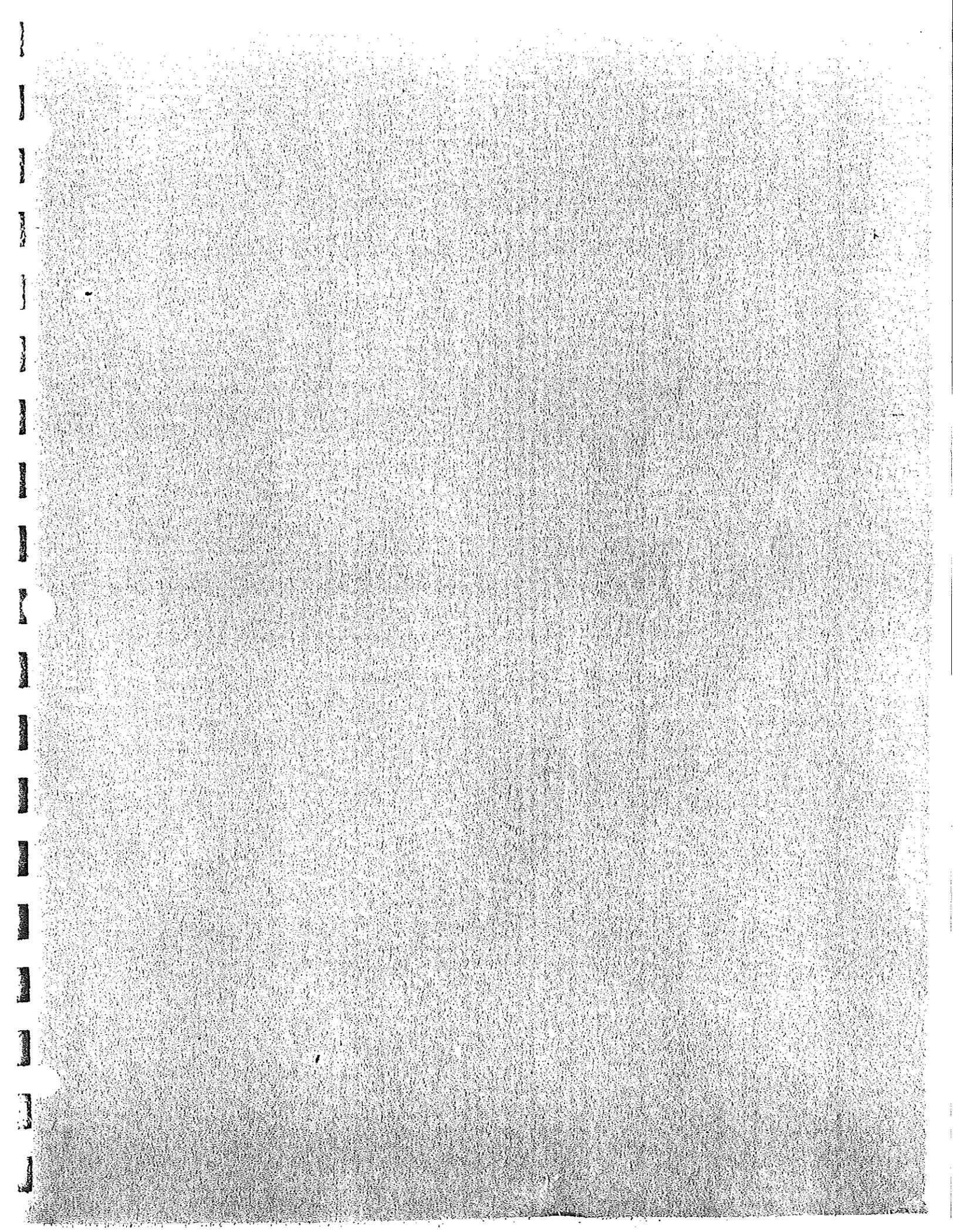
BUSINESS ADDRESS (include Zip Code)

---

BUSINESS TELEPHONE (include Area Code and extension)	HOME TELEPHONE (include Area Code)







# Section 5.06

## City of Niceville





## City of Niceville

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### **Section 5.06.02 Vulnerabilities**

#### **Section 5.06.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Niceville.

This section includes a brief summary description of the City of Niceville, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Niceville. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Niceville.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Niceville so that mitigation options can be considered in future land use decisions.

#### **Section 5.06.02.02 Methodology**

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Niceville as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.06.02.03 Summary Description of the City of Niceville**

The City of Niceville is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 12,749 residents. Within its jurisdiction, there are .56 mile that border Choctawhatchee Bay, 2.6 miles that border Rocky Bayou, and 7.96 miles of shoreline that border Boggy Bayou. Most of the development in the City of Niceville is clustered around Choctawhatchee Bay and along U.S. Highway 20, or John Simms Parkway. Nearly all commercial development borders both sides of U.S. Highway 20 while most of the existing residential development is located on Highway 285 North, Highway 85-N, and within subdivisions along Choctawhatchee Bay in the south end of the city. Most recently, the City of Niceville has several residential subdivisions under construction near Highway 285 N. According to the building official for the City of Niceville, he anticipates a steady growth in the coming years as military families move to the area. Several commercial establishments have applied for permits within the city and residential subdivisions are expected to increase.

#### **Section 5.06.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability



**City of Niceville**

for further explanation on these vulnerable populations. The table below displays the City of Niceville’s vulnerable populations.

**Table 5.06.02.04.1:** Estimated Vulnerable Populations in the City of Niceville, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	13.5%	1984
Language Isolation	1.9%	189
Disabled	28.9%	2987
Single Parent	11.5%	452
Poverty	10.2%	1563
Minority	5.7%	750

Source: 2010 Census; U.S. Census Population Division

**Section 5.06.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the City of Niceville because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the City of Niceville.

**Table 5.06.02.05.1:** Repetitive Loss Properties in the City of Niceville

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
City of Niceville	\$695,582.67	\$121,525.64	33	\$817,108.31	12	2

Source: FEMA, 2016

**Table 5.06.02.05.2:** Flood Zones of Repetitive Loss Properties in the City of Niceville

Flood Zones	A,AE	V,VE	B,C,X
Total Properties	8	2	4

Source: FEMA, 2016



**City of Niceville**

**Section 5.06.02.06 Hurricane and Tropical Storm**

The City of Niceville is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The City of Niceville would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Niceville's jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.06.02.06.1: Evacuation Zones and the Vulnerable Residential Structures within**

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Zone A</b>	25	89	0	5
<b>Just Value</b>	\$4,171,328	\$33,921,160	\$0	\$5,224,509
<b>Zone B</b>	36	117	1	6
<b>Just Value</b>	\$7,093,324	\$48,754,457	\$114,676	\$4,032,853
<b>Zone C</b>	36	117	1	6
<b>Just Value</b>	\$7,093,324	\$48,754,457	\$114,676	\$4,032,853
<b>Zone D</b>	147	866	35	13
<b>Just Value</b>	\$31,101,906	\$247,780,068	\$2,132,200	\$6,760,966
<b>Zone E</b>	158	1049	80	32
<b>Just Value</b>	\$32,519,505	\$277,382,292	\$4,656,242	\$10,576,267

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)



**City of Niceville**

**Table 5.06.02.06.2:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	7	0
<b>Just Value</b>	\$2,013,651	\$0
<b>Zone B</b>	25	1
<b>Just Value</b>	\$10,955,061	\$109,774
<b>Zone C</b>	46	3
<b>Just Value</b>	\$18,331,730	\$240,860
<b>Zone D</b>	60	3
<b>Just Value</b>	\$24,587,841	\$240,860
<b>Zone E</b>	100	3
<b>Just Value</b>	\$42,594,515	\$240,860

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.06.02.07 Storm Surge**

The City of Niceville is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 16.4 feet above the mean high water line along the some areas boarding the Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**City of Niceville**

**Table 5.06.02.07.1: Vulnerable Residential Structures to Storm Surge**

Total:	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
<b>Surge Level 1</b>	71	212	1	6
<b>Just Value</b>	\$19,334,550	\$104,000,314	\$114,676	\$3,585,688
<b>Surge Level 2</b>	73	227	1	9
<b>Just Value</b>	\$19,649,434	\$110,137,332	\$114,676	\$5,863,215
<b>Surge Level 3</b>	133	712	23	13
<b>Just Value</b>	\$28,871,155	\$217,633,790	\$1,426,605	\$6,998,230
<b>Surge Level 4</b>	133	712	23	13
<b>Just Value</b>	\$28,871,155	\$217,633,790	\$1,426,605	\$6,998,230
<b>Surge Level 5</b>	138	859	45	13
<b>Just Value</b>	\$29,563,546	\$248,337,968	\$2,659,706	\$6,998,230

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Table 5.06.02.07.2: Other Vulnerable Structures to Storm Surge**

Total:	Commercial	Government/ Institutional
<b>Surge Level 1</b>	17	0
<b>Just Value</b>	\$7,379,710	\$0
<b>Surge Level 2</b>	21	1
<b>Just Value</b>	\$10,006,260	\$109,774
<b>Surge Level 3</b>	42	3
<b>Just Value</b>	\$16,537,281	\$240,860
<b>Surge Level 4</b>	40	3
<b>Just Value</b>	\$21,153,475	\$240,860
<b>Surge Level 5</b>	59	3
<b>Just Value</b>	\$27,022,736	\$240,860

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.06.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Niceville is vulnerable to flooding and susceptible to damage



**City of Niceville**

from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Niceville. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the City of Niceville, there are 146 structures located in the AE flood zone and 3 structures in the A flood zone. The cumulative 'just value' of all those structures in the AE and A flood zones is \$58,825,567. The following table depicts the vulnerable structures located in the AE and A flood zones in the City of Niceville.

**Table 5.06.02.08.1:** Structures Located in Flood Zones in the City of Niceville

	<b>AE Flood Zone</b>	<b>Just Value</b>	<b>A Flood Zone</b>	<b>Just Value</b>
<b>SFR-Townhouse</b>	15	\$2,687,869	0	\$0
<b>Single-Family</b>	87	\$37,903,874	3	\$670,692
<b>Multi-Family</b>	5	\$2,962,875	0	\$0
<b>Commercial</b>	36	\$14,359,397	0	\$0
<b>Government/Institutional</b>	3	\$240,860	0	\$0

Source: Okaloosa County Department of Growth Management, 2010

**Section 5.06.02.09 Land Erosion**

The City of Niceville is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Niceville. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

**Section 5.06.02.10 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Niceville. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Niceville.



**City of Niceville**

**Table 5.06.02.10.1:** Vulnerable Residential Structures to Severe Storms in City of Niceville

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>	<b>Condominium</b>
	155	2,043	0	38	1
<b>Just Value</b>	\$32,550,471	\$588,588,053	\$0	\$15,637,760	\$116,000

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.06.02.10.2:** Other Vulnerable Structures to Severe Storms in City of Niceville

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
	331	46
<b>Just Value</b>	\$153,610,212	\$60,225,714

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.06.02.10.01 Tornado and Waterspout**

The City of Niceville is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the City of Niceville that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Niceville are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Niceville, has a medium risk, 1 in 250 per year, of a tornado event occurring.

Because waterspouts occur over water, the areas in the City of Niceville most susceptible damage from waterspouts are those located on the Choctawhatchee Bay. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage. There are 37 structures along the City of Niceville's coastline. The cumulative 'just value' of those structures is \$23,029,663. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable.



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**City of Niceville**

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**Section 5.06.02.10.02 Thunderstorms and Lightning**

The City of Niceville is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Niceville, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

**Section 5.06.02.10.03 Winter Storms**

The City of Niceville is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Niceville is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Niceville is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Niceville are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Niceville that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

**Section 5.06.02.11 Heat Wave and Drought**

The City of Niceville is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Niceville are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

**Section 5.06.02.12 Wildfire**

Although the City of Niceville is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following table depicts the structures with 'medium



**City of Niceville**

(levels 4-6) to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.06.02.12.1: Medium to High Wildfire Level of Concern for Structures**

<b>Total:</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Level 4</b>	9	2	4	1
<b>Just Value</b>	\$3,651,536	\$2,396,129	\$3,095,964	\$801,265
<b>Level 5</b>	31	1	8	4
<b>Just Value</b>	\$12,764,004	\$2,008,421	\$5,323,704	\$7,645,565
<b>Level 6</b>	4	0	3	3
<b>Just Value</b>	\$2,250,005	\$0	\$2,297,376	\$2,262,670
<b>Level 7</b>	0	0	2	1
<b>Just Value</b>	\$0	\$0	\$1,041,962	\$8,211,176

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.06.02.13 Beach Erosion**

The areas of the City of Niceville that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are 11.95 miles of coastline along the Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. There are 37 structures along the City of Niceville's coastline. The cumulative 'just value' of those structures is \$23,029,663 (See Table 5.06.02.13.1, below).

**Table 5.06.02.13.1: Total Structures Susceptible to Beach Erosion**

	<b>Single-Family</b>
<b>Total</b>	37
<b>Just Value</b>	\$23,029,663

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.



**City of Niceville**

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***Section 5.06.02.14 Other Hazards***

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Niceville. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Niceville, then the LMS Committee will update this section to reflect those changes.

***Section 5.06.02.15 Summary***

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Niceville is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Niceville**

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**Section 5.06.05 Maps**

Attached to this page are maps of the City of Niceville. They include:

1. Critical Facilities..... 5.06-38
2. Evacuation Zones..... 5.06-39
3. Flood Zones..... 5.06-40
4. Repetitive Loss Properties..... 5.06-41
5. Surge Zones..... 5.06-42
6. Wildfire Level of Concern..... 5.06-43

# City of Niceville Critical Facilities

-  Parcel Lines
-  Critical Facilities

Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

**PUBLIC RECORD:**  
This map was created by Okaloosa County GIS and is in the public domain plus we are to Chapter 119, Florida Statute.

**DISCLAIMER:**  
Okaloosa County hereby expresses its disclaimer any liability for errors or omissions in these maps, indexes or legends.



Department of  
Growth Management  
08/18/2010

# City of Niceville Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

ZONE A = HURRICANE CAT 1

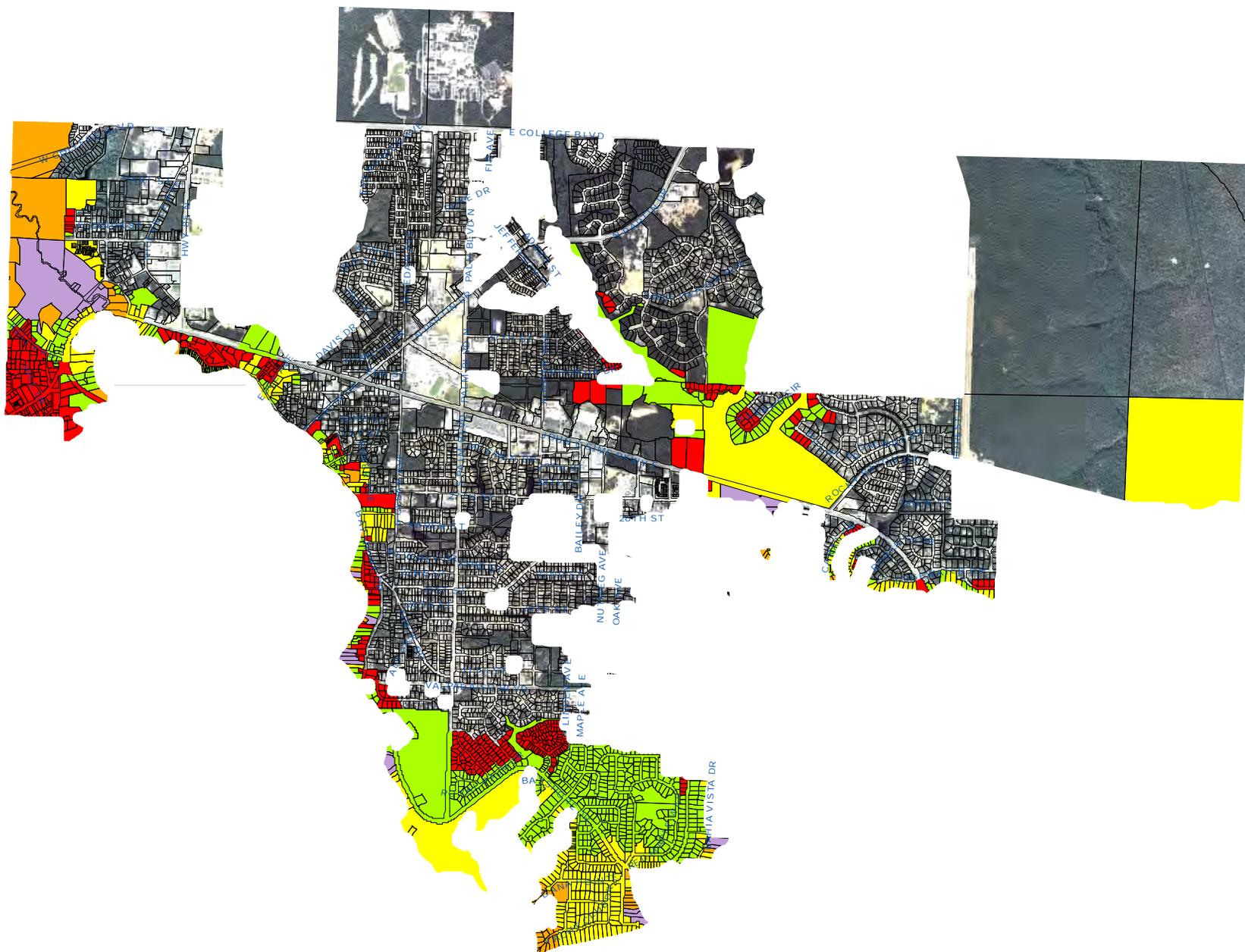
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



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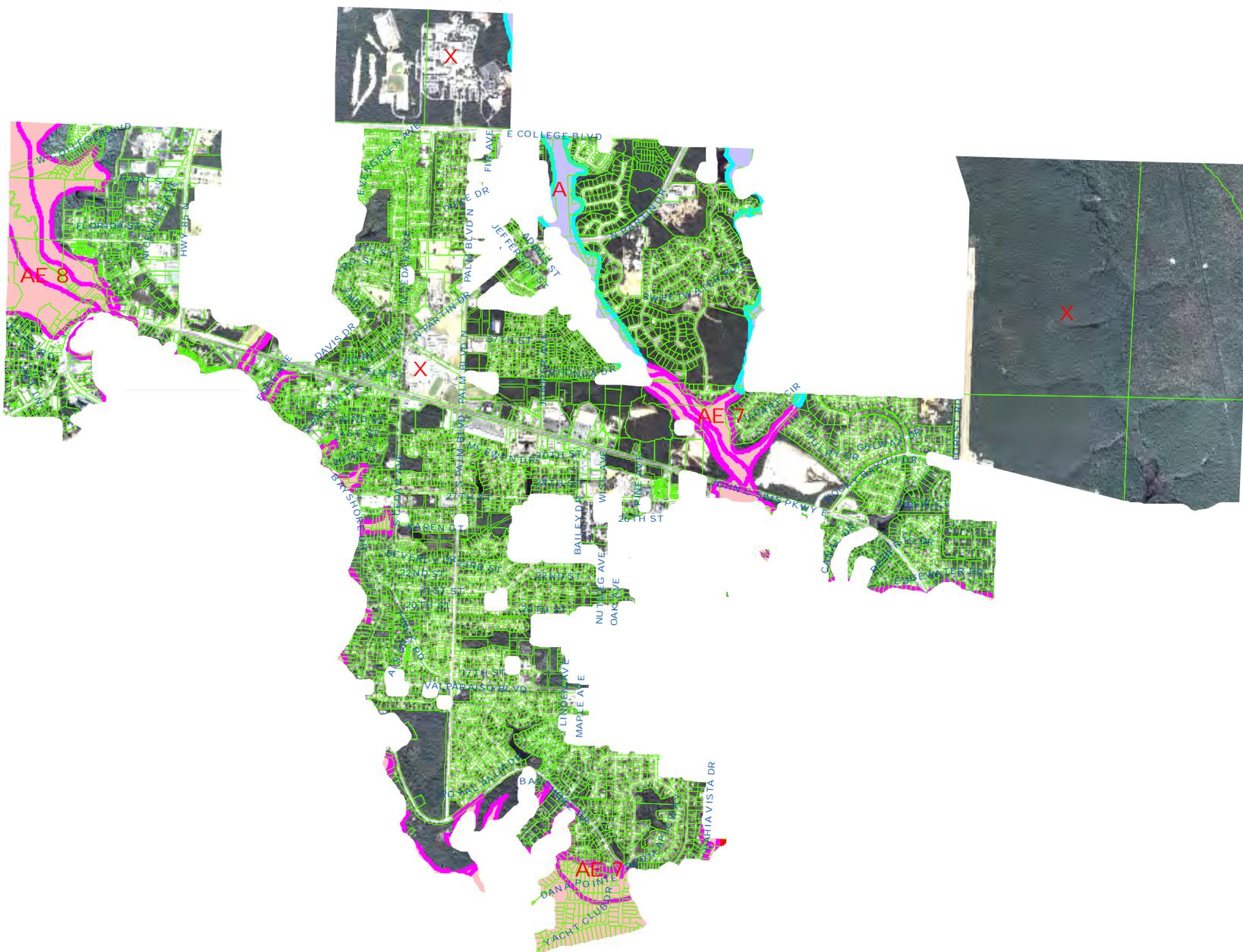


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# City of Niceville Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

Source: FEMA Map Service Center,  
Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (9), NAVD 1988

PUBLIC RECORD:  
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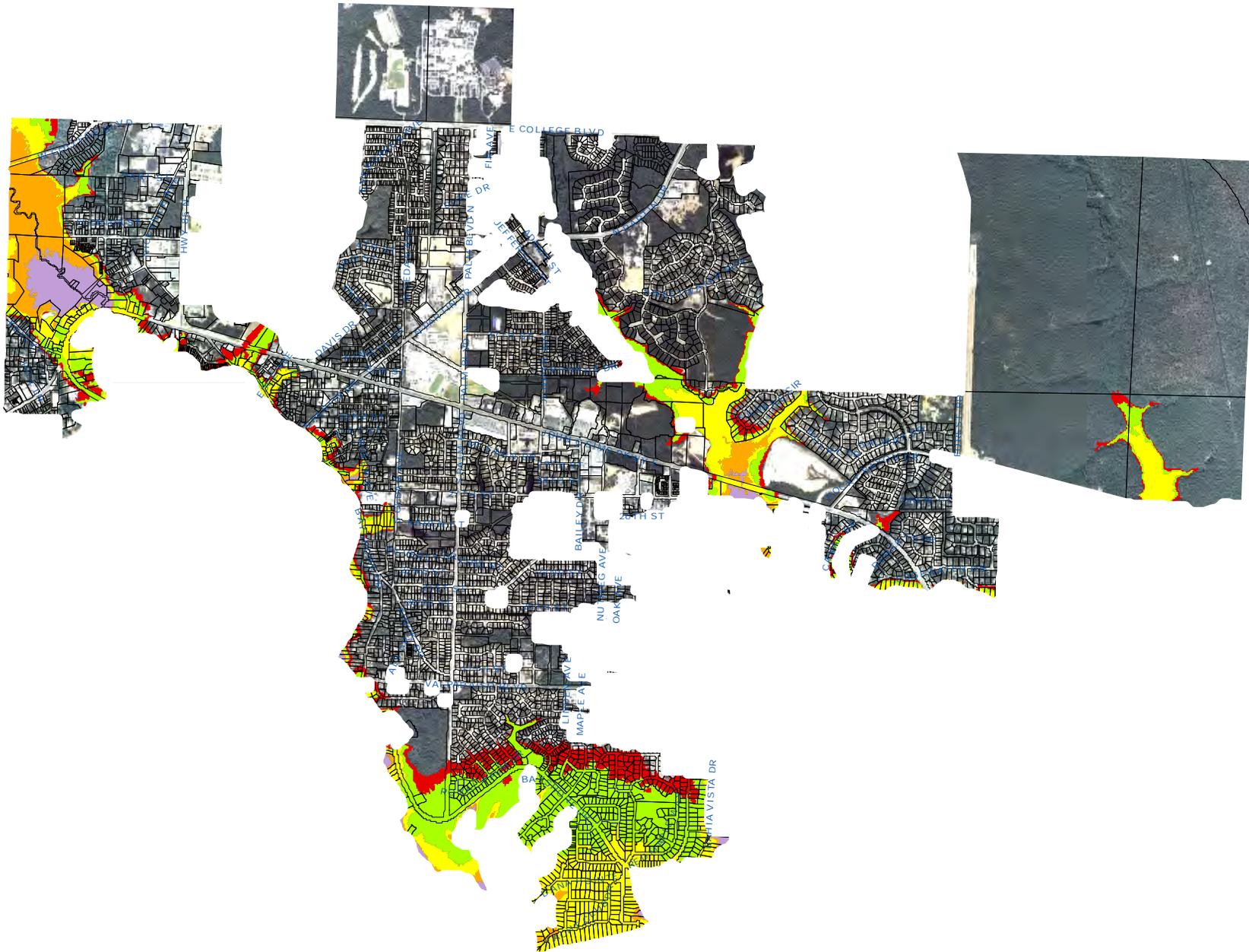
Department of  
Growth Management  
08/18/2010



# City of Niceville Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

Source: West Florida  
Regional Planning  
Council, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

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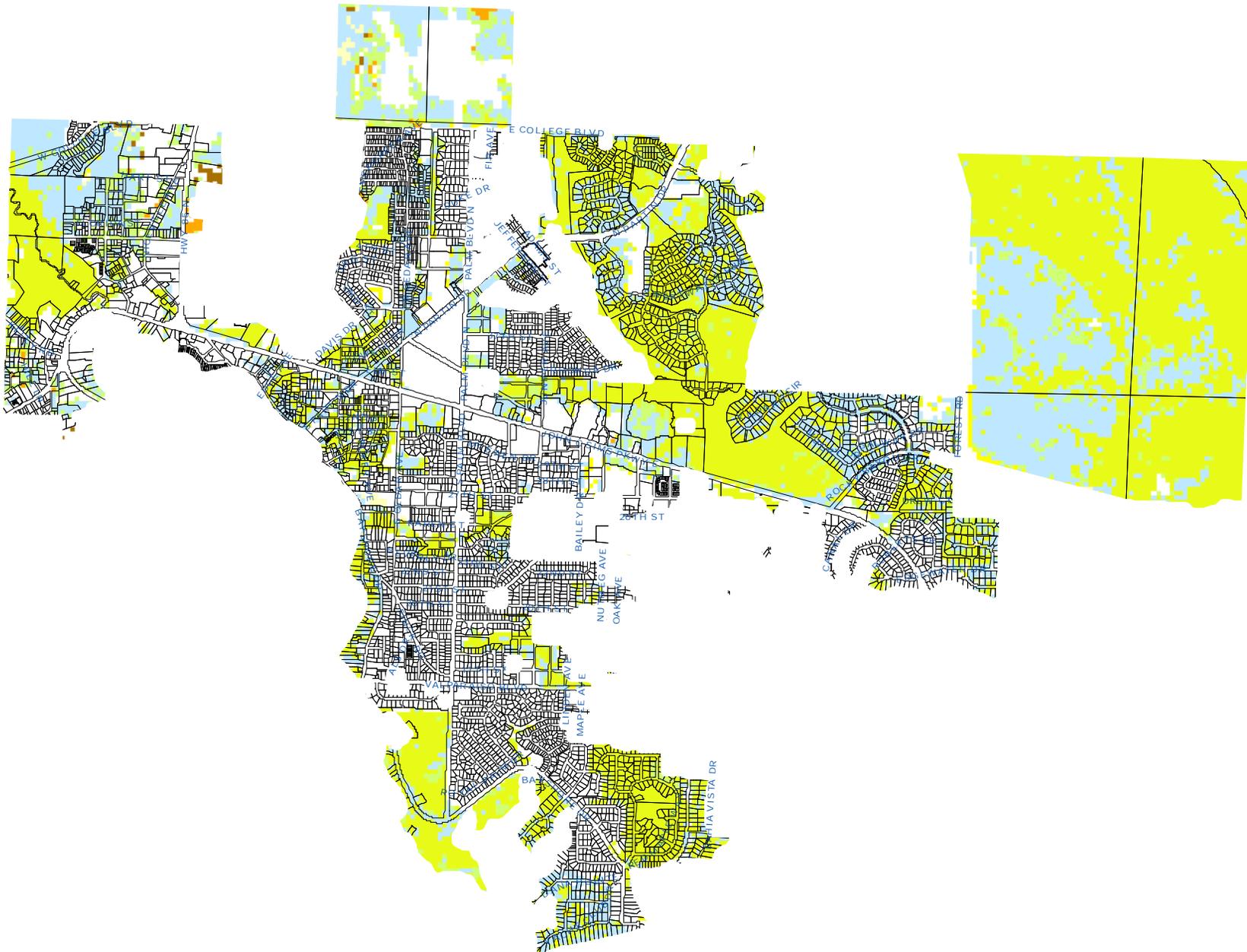
# City of Niceville Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

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**City of Niceville**

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**Section 5.06.06 Post Disaster Redevelopment Plan**

Attached to this page is the post disaster redevelopment plan adopted by the City of Niceville in December of 1992. This plan is still in effect.

ORDINANCE NO. 92-25

AN ORDINANCE ADOPTING THE POST DISASTER REDEVELOPMENT PLAN FOR THE CITY OF NICEVILLE, FLORIDA; REPEALING CONFLICTING ORDINANCES; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Niceville is vulnerable to a variety of natural hazards which result or may result in emergencies causing substantial injury or harm to the population or substantial damage to or loss of property; and

WHEREAS, Chapter 252, Florida Statutes, provides the City Council the authority to declare a state of local emergency and take actions necessary to ensure the safety and well being of its residents, visitors, and property during emergencies caused by these hazards; and

WHEREAS, the City of Niceville has prepared a Comprehensive Plan in compliance with Chapter 163 of the Florida Statutes and 9J-5, of the Florida Administrative Codes; and

WHEREAS, the City of Niceville has adopted its Comprehensive Plan as Ordinance Number 90-10 and became effective on July 18, 1990; and

WHEREAS, Comprehensive Plan Objective 11.A.8 as adopted, requires the City to develop and adopt a Post Disaster Redevelopment Plan.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF NICEVILLE, FLORIDA:

ARTICLE 1. INTENT

Following a damaging hurricane, or other natural disaster, and enactment of a building moratoria, it is the intent of the City to allow rebuilding and reconstruction in an orderly manner. The City will control the issuance of building permits to manage the location, timing, and sequence of reconstruction and repair. It is further the intent of the Post Disaster Redevelopment Plan that the City establish prior to the hurricane, or other natural disaster, a special post disaster redevelopment task force which will oversee the recovery and reconstruction process and serve as advisory body to the City Council. A main responsibility of this body will be to advise the Council on the policies of the plan which are structured as to mitigate future hurricane, or other natural disaster damages through the management of reconstruction. To further the intent of this plan, the City will make every effort to develop its capacity to identify and orchestrate various post-disaster

redevelopment resources, while at the same time ensuring maximum local control over the redevelopment process.

ARTICLE 2. THE PLAN

The Post Disaster Redevelopment Plan is attached hereto and is a part of this Ordinance.

ARTICLE 3. CONFLICT

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

ARTICLE 4. EFFECTIVE DATE

This ordinance shall become effective immediately upon its adoption according to law.

ADOPTED in Special session this 10<sup>th</sup> day of December, 1992.

Randall W. W. W.  
MAYOR

ATTEST:

George H. Ireland  
CITY CLERK

POST DISASTER REDEVELOPMENT PLAN

CITY OF NICEVILLE, FLORIDA

- INTENT: To provide for the health, safety and welfare of the City of Niceville through sound pre and post-disaster redevelopment policies which promote the reduction in loss of life and property.
- AUTHORITY: The Post Disaster Redevelopment Plan for the City of Niceville, Florida, is adopted by the City Council of Niceville as Ordinance No. 92-25 in accordance with Objective 11.A.8 of the Comprehensive Plan.
- GOAL 1 Reestablish the economic and social viability of the City of Niceville in a timely and orderly fashion.
- Objective 1.1 Create a post disaster redevelopment task force to guide pre-disaster and post-disaster implementation of the Post Disaster Redevelopment Plan (PDRP).
- Policy 1.1.1 The Post Disaster Redevelopment Task Force is hereby created by this ordinance. The emergency command center for the task force will be the City of Niceville Public Safety Building, or as designated by the City Manager.
- Policy 1.1.2 The task force shall include the following members, or as designated by the City Manager:
- City Manager
  - Chief of Police
  - Fire Chief
  - Director of Public Works
  - Building Inspector
  - City Clerk
  - Emergency Management Director
- Objective 1.2 Conduct a post-disaster assessment and survey utilizing the survey instrument approved by the City of Niceville in accordance with the Okaloosa County Peacetime Emergency Plan.
- Policy 1.2.1 The City Manager or his designee shall conduct a generalized preliminary post-disaster damage assessment and provide information to the Okaloosa County Emergency Management Director within 24 hours.

Policy 1.2.2 The survey instrument will be used to provide a uniform procedure for establishing the following terms: destroyed, major damage, and minor damage.

These terms will be used throughout the Post Disaster Redevelopment Plan as criteria in various policies.

Destroyed is when the cost of repair, replacement, or relocation of a structure exceeds 50% of its pre-disaster replacement value.

Major damage is when the cost of repair, replacement, or relocation of a structure is between 25% - 50% of its pre-disaster replacement value.

Minor damage is when the cost of repair, replacement, or relocation of a structure is less than 25% of its pre-disaster replacement value.

Policy 1.2.3 The City Manager or his designee shall evaluate immediate revenue sources needed for emergency repairs.

Policy 1.2.4 The City Manager or his designee shall apply for state or federal disaster relief grant and loan programs.

Policy 1.2.5 The City Manager or his designee shall be the liaison with the federal mitigation officer who will review public and private requests for assistance to apprise him/her of the City of Niceville's policies of redevelopment.

Policy 1.2.6 The City Manager or his designee shall participate in the preparation/modification of the Section 409 Hazard Mitigation Plan.

Objective 1.3 Establish necessary personnel and procedures for planning that accommodate the emergency nature of redevelopment.

Policy 1.3.1 Structures experiencing total destruction shall be visibly labeled condemned by the Building Inspector.

Policy 1.3.2 The City will evaluate the long-term needs for capital facilities planning immediately following a hurricane, or other natural disaster.

Policy 1.3.3 As soon as possible, if necessary, an amendment to the Capital Improvements Element of the Comprehensive Plan will be transmitted to the

Department of Community Affairs for a determination of consistency.

Policy 1.3.4 City Staff will initiate the coordination with state and federal staff to obtain assistance in relocation of public facilities or repairing them in place.

Policy 1.3.5 The Post Disaster Redevelopment Task Force may identify and designate areas that can be used for residential relocation housing outside of the Hurricane Vulnerability Zone (HVZ).

Objective 1.4 Establish a schedule that allows an orderly procession of reviewing private and public redevelopment proposals after a hurricane, or other natural disaster.

Policy 1.4.1 Effective immediately upon the declaration of a County wide disaster area by the County or the Governor of Florida, a moratorium on all previously approved development orders, building permits and review procedures in progress will be instituted. Moratoriums will be lifted according to the following policy priorities:

- \* 5 days after the state of emergency has been lifted, public facilities subject to major damage and which create a public threat to the health, safety, and welfare shall be able to apply for building permits for repair. Public or private structures destroyed that pose an immediate threat to residents if they collapse, should be immediately assessed for insurance purposes and destroyed. The review of the permits is subject to the policies listed under Goals 2 and 3 below. Private facilities which require minor repairs, may apply for repair permits.

- \* 30 days after the state of emergency has been lifted, private or public facilities which were destroyed (damage in excess of 50% of the replacement value) may apply for building permits. The review of the permits is subject to the policies listed under Goals 2 and 3.

- \* 45 days after the state of emergency has been lifted, previously approved development orders and review procedures will revert to their pre-disaster status.

Policy 1.4.2 The Post Disaster Redevelopment Task Force may recommend the extension or reduction of the

duration of the above time frames as deemed necessary to the City Council.

GOAL 2 Reduce the loss of life and property in any future hurricane, or other natural disaster.

Objective 2.1 Permitting and certification of structures will be required to ensure adherence with redevelopment policies limiting the potential for future loss of property.

Policy 2.1.1 Except for facilities requiring access to the waterfront and those needed to maintain or improve hurricane, or other natural disaster evacuation times, all public facilities destroyed in the V-zone shall be relocated.

Policy 2.1.2 Replace bulkheads and seawalls with nonstructural forms of shoreline stabilization, except where such replacement would endanger human health, safety or welfare.

Policy 2.1.3 Coordinate with private utilities to floodproof replacement of utilities.

Objective 2.2 Establish a procedure to review proposals for redevelopment of private structures and policies to guide redevelopment decisions.

Policy 2.2.1 The procedure to guide the timing of redevelopment is set forth in Goal 1. The review of redevelopment permits for structures destroyed shall be guided by the following redevelopment priorities:

- \* Reduce the pre-disaster density of destroyed residential development in the Coastal High Hazard Area (CHHA) through relocation assistance.
- \* Encourage the relocation of all nonresidential structures destroyed in the CHHA to outside of the CHHA through relocation assistance.
- \* Nonresidential structures destroyed in the CHHA and rebuilt in the CHHA, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes and prohibited, via property restrictions, from purchasing flood and wind insurance underwritten by the federal government.

- \* Structures destroyed outside of the CHHA but within the HVZ and rebuilt, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes.
- \* All structures experiencing major damage, if redeveloped within the HVZ, will be required to be inspected prior to the issuance of a Certificate of Occupancy to ensure conformance with building code regulations.
- \* Coordinate the redevelopment of shoreline areas with the Florida Department of Natural Resources.
- \* Certificates of Occupancy and permitting of redevelopment to pre-disaster square footages of private structures which were destroyed, shall be conditioned upon the immediate provision of services to that structure necessary for health and safety.

Policy 2.2.2

The review of redevelopment permits for structures experiencing major damage, or proposing more than 50% of value in major additions or changes to the pre-disaster existing structure, shall be guided by the following redevelopment priorities:

- \* Where feasible, reduce the pre-disaster density of residential development which experienced major damage.
- \* Encourage the relocation of structures experiencing major damage in the CHHA to outside of the CHHA.
- \* Structures experiencing major damage in the CHHA and rebuilt in the CHHA, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes and prohibited from purchasing flood and wind insurance underwritten by the federal government.
- \* Structures experiencing major damage and rebuilt, outside of the CHHA but within the HVZ, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes.
- \* All structures experiencing major damage, if redeveloped within the HVZ, will be required to

be inspected prior to issuance of Certificate of Occupancy to ensure conformance with building code regulations.

- \* Nonconforming uses (according to the adopted Comprehensive Plan and Future Land Use Map, zoning code or building codes) damaged outside of the CHHA but within the HVZ, shall be designed and constructed consistent with the adopted Comprehensive Plan and Future Land Use Map and current building codes.
- \* Certificates of Occupancy and permitting of redevelopment to pre-disaster square footages of private structures which experienced major damage, shall be conditioned upon the immediate provision of services to that structure necessary for health and safety.
- \* Coordinate the redevelopment of shoreline areas with the Florida Department of Natural Resources.

Policy 2.2.3

The review of redevelopment permits for structures experiencing minor damage shall be guided by the following redevelopment priorities:

- \* Structures experiencing minor damage in the HVZ, including the CHHA, shall be allowed to rebuild to pre-disaster square footages consistent with the existing land use plan map and current building regulations.
- \* Certificates of Occupancy and permitting of redevelopment to pre-disaster square footages of private structures which experienced minor damage, shall be conditioned upon the immediate provision of services to that structure necessary for health and safety.

Policy 2.2.4

All private redevelopment which was destroyed or suffered major damage shall be guided by the following redevelopment priorities:

- \* Develop new street patterns in hardest hit areas to accommodate the clustering of structures away from the CHHA and attempt to remove structural/physical patterns which increase the susceptibility of development to hurricane, or other natural disaster hazards.
- \* Residential redevelopment densities shall not exceed preexisting development without the provision of enhanced evacuation methods, in

order to maintain or reduce future evacuation time.

- \* In the HVZ, redevelopment floor area ratios for commercial and office development shall not exceed those established in the adopted Comprehensive Plan and Future Land Use Map, in order to reduce potential future property damage.
- \* Prohibit the rebuilding and relocation of mobile homes and manufactured housing in the CHHA.
- \* Discourage mobile homes and manufactured housing within the HVZ unless they are proven to be able to withstand sustained winds of 130 m.p.h., and in compliance with local, county, and state building requirements.
- \* Where lots are destroyed and replaced by tidal waters, those parcels will be condemned by the Building Inspector.
- \* The replacement/repair of private beach or beach stabilization structures shall be the responsibility of the property owner.
- \* Repairs to structures receiving major or minor damage which were established on the National Register of Historic Places, the State Inventory of Historic Places, or the State of Florida Master File, and who's restoration would cause the structure to lose its designation, will not be required to redevelop in such a way as to lose that designation if approved by the Building Inspector.

GOAL 3 Provide public facilities and services which guarantee to the greatest extent possible the health, safety, and welfare of the citizens of the City of Niceville and which do not require future expenditure for public infrastructure in the CHHA.

Objective 3.1 Based upon the inventory of damage and the definitions provided, the review of permits for relocation/repair shall be guided by the following policies:

Policy 3.1.2 Repair in place facilities which are essential to the immediate health, safety, or welfare of citizens, or work to provide the impaired service to residents through alternative means.

- Policy 3.1.3 Public facilities destroyed or suffering major damage in the CHHA shall be relocated out of the CHHA consistent with the adopted Comprehensive Plan and Future Land Use Map and rebuilt to current local, state, and federal construction standards.
- Policy 3.1.4 Public facilities which must function during a hurricane, or other natural disaster, such as hospitals, blood banks, police and fire stations, electrical power-generating substations and plants, communication facilities and emergency command center shall be relocated from the CHHA if they were destroyed or suffered major damage, regardless of the adopted Comprehensive Plan and Future Land Use Map designation.
- Policy 3.1.5 Public facilities which experienced minor damage in the CHHA shall be rebuilt in place to current local, state, and federal construction standards.
- Policy 3.1.6 Public facilities destroyed or suffering major damage outside of the CHHA but within the HVZ shall be rebuilt in place or relocated consistent with the adopted Comprehensive Plan and Future Land Use Map and current local, state, and federal construction standards.

Okaloosa County P.E.P.

12.3 Reporting Procedures

Damage reports will be issued to the EOC by radio. Damage assessment boards will be continually updated as verbal reports are received. Written reports will be submitted at the end of each day. The reports will be compiled by the Special Projects Coordinator.

Local agencies will also use the Red Cross Damage Assessment Forms. Local agencies will submit reports to their respective Director of Emergency Management. These reports will be forwarded to Okaloosa County EOC.

Seperate reports (using the standard form) will be compiled for public property. This will provide information for filing public disaster assistance requests for public property.

In incidents where a decloration has not been declared by the Governor, damage assessment informatin will be compiled and reported as previously discussed.



FORM A

PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT ESTIMATE			DATE	
PART I - APPLICANT INFORMATION				
COUNTY	NAME OF APPLICANT	NAME OF LOCAL CONTACT	PHONE NO.	
PART II - SITE INFORMATION				
KEY FOR DAMAGE CATEGORY (Use appropriate letters in the "category" blocks below.)				
a. DEBRIS CLEARANCE	d. WATER CONTROL FACILITIES	g. OTHER		
b. PROTECTIVE MEASURES	e. BUILDINGS AND EQUIPMENT			
c. ROADS SYSTEM	f. PUBLIC UTILITY SYSTEMS			
SITE NO.	CATE-GORY	LOCATION (Use map location, address, etc.)		
DESCRIPTION OF DAMAGE				
IMPACT:			% Complete	Cost Estimate
SITE NO.	CATE-GORY	LOCATION (Use map location, address, etc.)		
DESCRIPTION OF DAMAGE				
IMPACT:			% Complete	Cost Estimate
SITE NO.	CATE-GORY	LOCATION (Use map location, address, etc.)		
DESCRIPTION OF DAMAGE				
IMPACT:			% Complete	Cost Estimate
SITE NO.	CATE-GORY	LOCATION (Use map location, address, etc.)		
DESCRIPTION OF DAMAGE				
IMPACT:			% Complete	Cost Estimate
NAME OF INSPECTOR	AGENCY		PHONE NO. OFFICE	HOME

-16-

FIGURE 12-2



# Section 5.07

## City of Valparaiso





## City of Valparaiso

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### **Section 5.07.02 Vulnerabilities**

#### **Section 5.07.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the City of Valparaiso.

This section includes a brief summary description of the City of Valparaiso, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the City of Valparaiso. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the City of Valparaiso.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the City of Valparaiso so that mitigation options can be considered in future land use decisions.

#### **Section 5.07.02.02 Methodology**

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the City of Valparaiso as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.07.02.03 Summary Description of the City of Valparaiso**

The City of Valparaiso is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 5,036 residents. Within its jurisdiction, there are 6.81 miles of shoreline that border on Boggy Bayou. The City of Valparaiso has largely been built out. The majority of existing development within the city is located south of U.S. Highway 20, also known as John Simms Parkway and along the Choctawhatchee Bay. Any new form of development within the City of Valparaiso will necessarily be redevelopment, and the city has seen some of this as apartment complexes have replaced single family homes. According to Carl Scott, the City Administrator for the City of Valparaiso, there is some capacity for commercial development along John Simms Parkway, but the city does not anticipate rapid growth or major new developments.

#### **Section 5.07.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability



**City of Valparaiso**

for further explanation on these vulnerable populations. The table below displays the City of Valparaiso's vulnerable populations.

**Table 5.07.02.04.1:** Estimated Vulnerable Populations in the City of Valparaiso, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	13.2%	598
Language Isolation	1.2%	74
Disabled	25.6	1598
Single Parent	9.8%	126
Poverty	8.6%	521
Minority	3.8%	195

Source: 2010 Census; U.S. Census Population Division

**Section 5.07.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the City of Valparaiso because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the City of Valparaiso.

**Table 5.07.02.05.1:** Repetitive Loss Properties in the City of Valparaiso

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
<b>City of Valparaiso</b>	\$484,147.03	\$89,523.43	19	\$573,670.46	9	0

Source: FEMA, 2010



**City of Valparaiso**

**Table 5.07.02.05.2:** Flood Zones of Repetitive Loss Properties in the City of Valparaiso

Flood Zones	A,AE	V,VE	B,C,X
<b>Total Properties</b>	6	0	3

Source: FEMA, 2010

**Section 5.07.02.06 Hurricane and Tropical Storm**

The City of Valparaiso is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The City of Valparaiso would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the City of Valparaiso’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.07.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within  
\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)

Total:	SFR-Townhouse	Single-Family	Mobile Home	Multi-Family
<b>Zone A</b>	0	0	0	0
<b>Just Value</b>	\$0	\$0	\$0	\$0
<b>Zone B</b>	12	72	0	0
<b>Just Value</b>	\$3,290,590	\$25,880,627	\$0	\$0
<b>Zone C</b>	74	152	0	1
<b>Just Value</b>	\$13,426,041	\$44,072,825	\$0	\$1,654,769
<b>Zone D</b>	123	251	1	6
<b>Just Value</b>	\$19,558,600	\$63,158,018	\$158,311	\$4,036,598
<b>Zone E</b>	140	1286	4	59
<b>Just Value</b>	\$21,553,674	\$200,397,175	\$369,140	\$11,088,910

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Table 5.07.02.06.2:** Evacuation Zones and the Vulnerable Structures within



**City of Valparaiso**

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>	<b>Trailer Park</b>
<b>Zone A</b>	0	0	0
<b>Just Value</b>	\$0	\$0	\$0
<b>Zone B</b>	3	1	0
<b>Just Value</b>	\$2,237,619	\$7,469	\$0
<b>Zone C</b>	4	2	0
<b>Just Value</b>	\$2,928,459	\$175,963	\$0
<b>Zone D</b>	9	2	0
<b>Just Value</b>	\$4,364,495	\$175,963	\$0
<b>Zone E</b>	85	20	1
<b>Just Value</b>	\$29,890,786	\$270,729,103	\$205,302

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.07.02.07 Storm Surge**

The City of Valparaiso is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 16.8 feet above the mean high water line along the some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**City of Valparaiso**

**Table 5.07.02.07.1:** Vulnerable Structures to Storm Surge

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/Institutional</b>
<b>Surge Level 1</b>	29	81	0	4	2
<b>Just Value</b>	\$7,196,090	\$37,974,193	\$0	\$2,928,459	\$175,963
<b>Surge Level 2</b>	38	87	0	4	4
<b>Just Value</b>	\$8,666,098	\$39,430,024	\$0	\$2,928,459	\$2,928,459
<b>Surge Level 3</b>	81	220	5	5	3
<b>Just Value</b>	\$14,605,103	\$63,054,396	\$2,840,447	\$3,414,275	\$338,240
<b>Surge Level 4</b>	81	220	5	9	3
<b>Just Value</b>	\$14,605,103	\$63,054,396	\$2,840,447	\$5,279,227	\$338,240
<b>Surge Level 5</b>	123	368	5	9	4
<b>Just Value</b>	\$20,055,142	\$88,448,364	\$2,840,447	\$5,279,227	\$5,382,791

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.07.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The City of Valparaiso is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the City of Valparaiso. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the City of Valparaiso, there are 46 structures in the AE flood zone and 15 structures in the A flood zone. The cumulative 'just value' of those structures in the AE and A flood zones is \$13,747,503. The following table depicts the vulnerable structures located in the AE and A flood zones in the City of Valparaiso.

**Table 5.07.02.08.1:** Structures Located in Flood Zones in the City of Valparaiso

	<b>AE Flood Zone</b>	<b>Just Value</b>	<b>A Flood Zone</b>	<b>Just Value</b>
<b>SFR-Townhouse</b>	29	\$5,317,131	0	\$0
<b>Single-Family</b>	10	\$3,372,023	15	\$1,468,111
<b>Commercial</b>	5	\$3,414,275	0	\$0
<b>Government/Institutional</b>	2	\$175,963	0	\$0

Source: Okaloosa County Department of Growth Management, 2010

**Section 5.07.02.09 Land Erosion**



**City of Valparaiso**

The City of Valparaiso is vulnerable to land erosion in some localized areas, and some structures are susceptible to damage from this hazard. The soil types and topography that leads to land erosion can be found in various parts of the City of Valparaiso. The areas that are most susceptible to land erosion are those with steep slopes and which have highly erodible soil types. Land erosion in the City of is generally caused by disturbed soils from construction activities and usually isolated to an area less than 1 acre in size.

**Section 5.07.02.10 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the City of Valparaiso. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the City of Valparaiso.

**Table 5.07.02.10.1:** Residential Structures Vulnerable to Severe Storms in City of Valparaiso

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
	1	30	251	0
<b>Just Value</b>	\$4,689,705	\$5,317,156	\$63,647,156	0

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.07.02.10.2:** Other Structures Vulnerable to Severe Storms in City of Valparaiso

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>
	14	26
<b>Just Value</b>	\$8,693,502	\$19,724,704

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.07.02.10.01 Tornado and Waterspout**

The City of Valparaiso is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.



## City of Valparaiso

The areas within the City of Valparaiso that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the City of Valparaiso are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the City of Valparaiso, has a medium risk, 1 in 250 per year, of a tornado event occurring.

Because waterspouts occur over water, the areas in the City of Valparaiso most susceptible to damage from waterspouts are those located on the Choctawhatchee Bay. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage from flying debris. However, the specific impacts on those areas are unavailable due to the lack of relevant studies conducted regarding this hazard.

### **Section 5.07.02.10.02 Thunderstorms and Lightning**

The City of Valparaiso is vulnerable to thunderstorms and lightning, and all structures within its jurisdiction are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the City of Valparaiso, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.07.02.10.03 Winter Storms**

The City of Valparaiso is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The City of Valparaiso is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the City of Valparaiso is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the City of Valparaiso are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the City of Valparaiso that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.07.02.11 Heat Wave and Drought**

The City of Valparaiso is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the City of Valparaiso are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these



**City of Valparaiso**

hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the City of Valparaiso is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

**Section 5.07.02.12 Wildfire**

Although the City of Valparaiso is susceptible to wildfire, as previously mentioned in the City's Hazard Assessment, it appears that the future risk of wildfire is minimal. The areas and populations that are most vulnerable to the danger and destruction of wildfire are the ones with inadequate infrastructure, inaccessibility to critical facilities or firefighting resource locations, and located in the wildland-urban interface. The following table depicts the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.07.02.12.1: Medium to High Wildfire Level of Concern for Structures**

Total:	Single-Family	Multi-Family	Commercial	Government/ Institutional
Level 4	12	0	0	2
Just Value	\$2,302,599	\$0	\$0	\$5,206,828
Level 5	3	1	2	1
Just Value	\$548,406	\$1,196,151	\$1,205,099	\$5,044,551
Level 6	3	0	1	2
Just Value	\$686,821	\$0	\$719,283	\$5,052,020
Level 7	1	0	1	2
Just Value	\$239,249	\$0	\$357,917	\$5,206,828

Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.07.02.13 Beach Erosion**

The areas of the City of Valparaiso that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are 9.81 miles of coastline along the Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. Data on the specific impacts of beach erosion on the City of Valparaiso were unavailable because there have been no studies conducted for this



## City of Valparaiso

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municipality. However, the LMS Committee will update this section, regarding the impacts that beach erosion has on structures, to reflect those changes.

### ***Section 5.07.02.14 Other Hazards***

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, dam safety, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the City of Valparaiso. Therefore, the City's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the City of Valparaiso, then the LMS Committee will update this section to reflect those changes.

### ***Section 5.07.02.15 Summary***

The vulnerability assessment section of this LMS document highlighted how vulnerable the City of Valparaiso is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**City of Valparaiso**

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**Section 5.07.05 Maps**

Attached to this page are maps of the City of Valparaiso. They include:

1. Critical Facilities..... 5.07-42
2. Evacuation Zones..... 5.07-43
3. Flood Zones..... 5.07-44
4. Repetitive Loss Properties..... 5.07-45
5. Surge Zones..... 5.07-46
6. Wildfire Level of Concern..... 5.07-47

# City of Valparaiso Critical Facilities

-  Parcel Lines
-  Critical Facilities

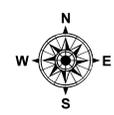
Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION**  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAVD 1988.

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08/18/2010

# City of Valparaiso Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

ZONE A = HURRICANE CAT 1

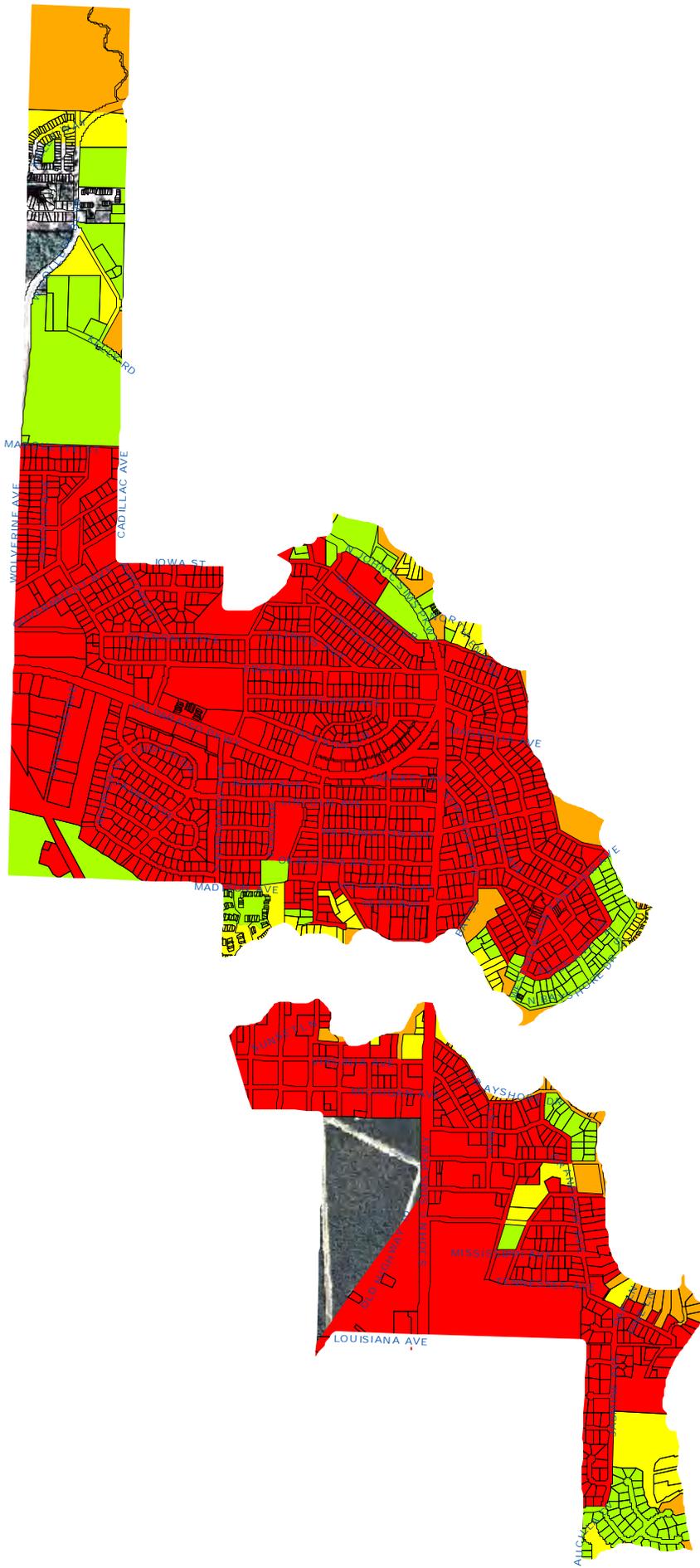
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

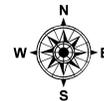
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION  
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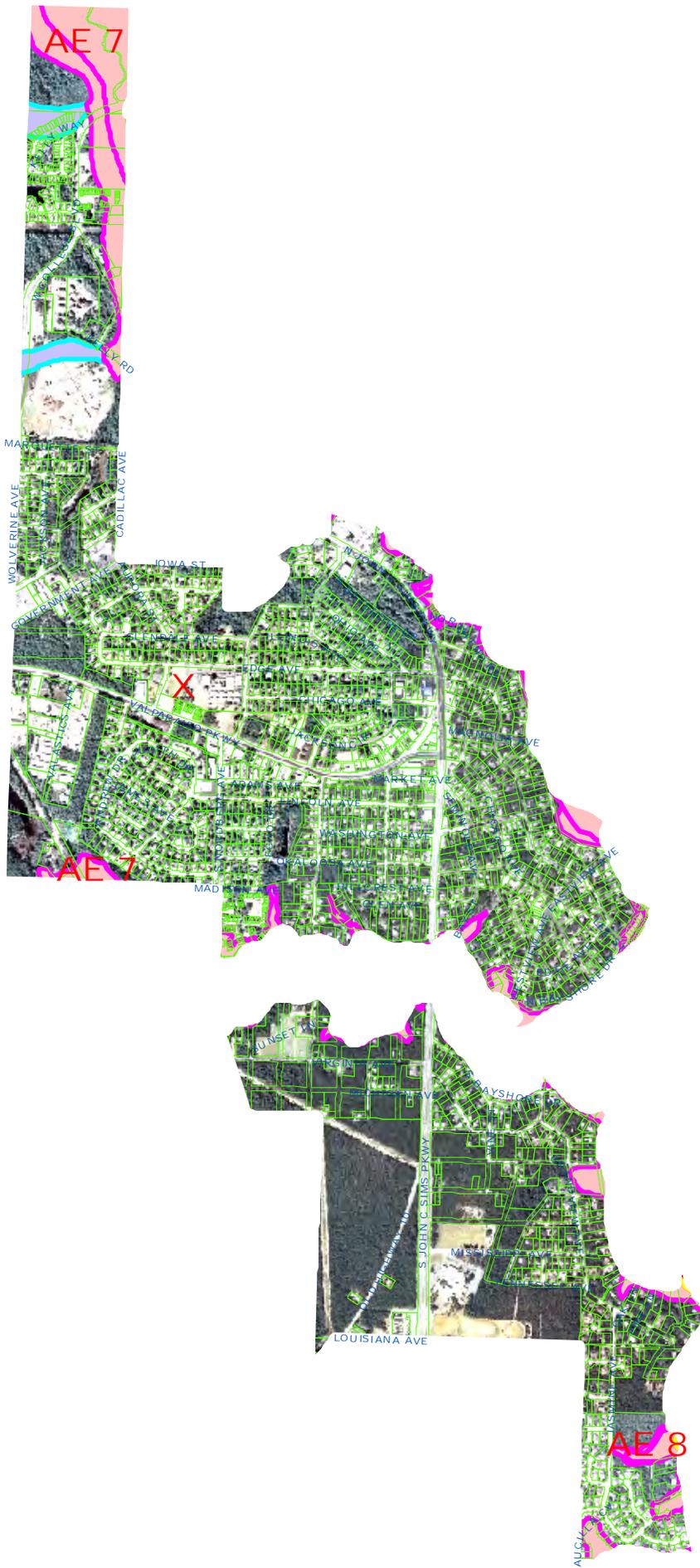


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# City of Valparaiso Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids - Florida North (1983)  
NAD 1983(80), NAD 1983

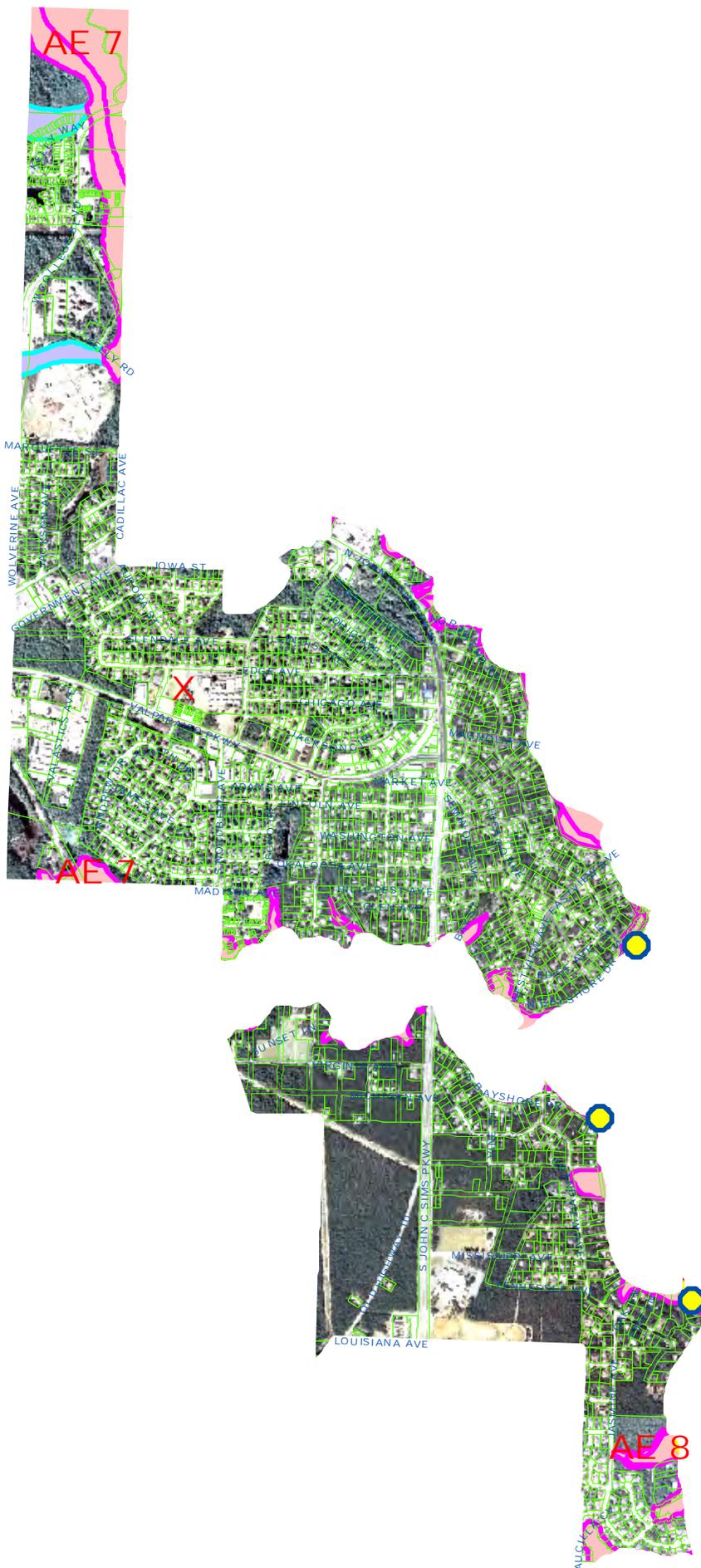
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# City of Valparaiso Repetitive Loss Properties



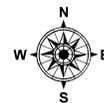
- Parcel Lines
- X 500 Year Flood Plain
- A 100 Year Flood Plain
- AE 100 Year Flood Plain
- VE 100 Year Flood Plain
- Base Flood Elevation in a Floodway
- Repetitive Loss Properties

Source: FEMA Map  
Service Center,  
Dec 6 2002

MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAD 1988.

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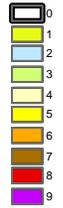
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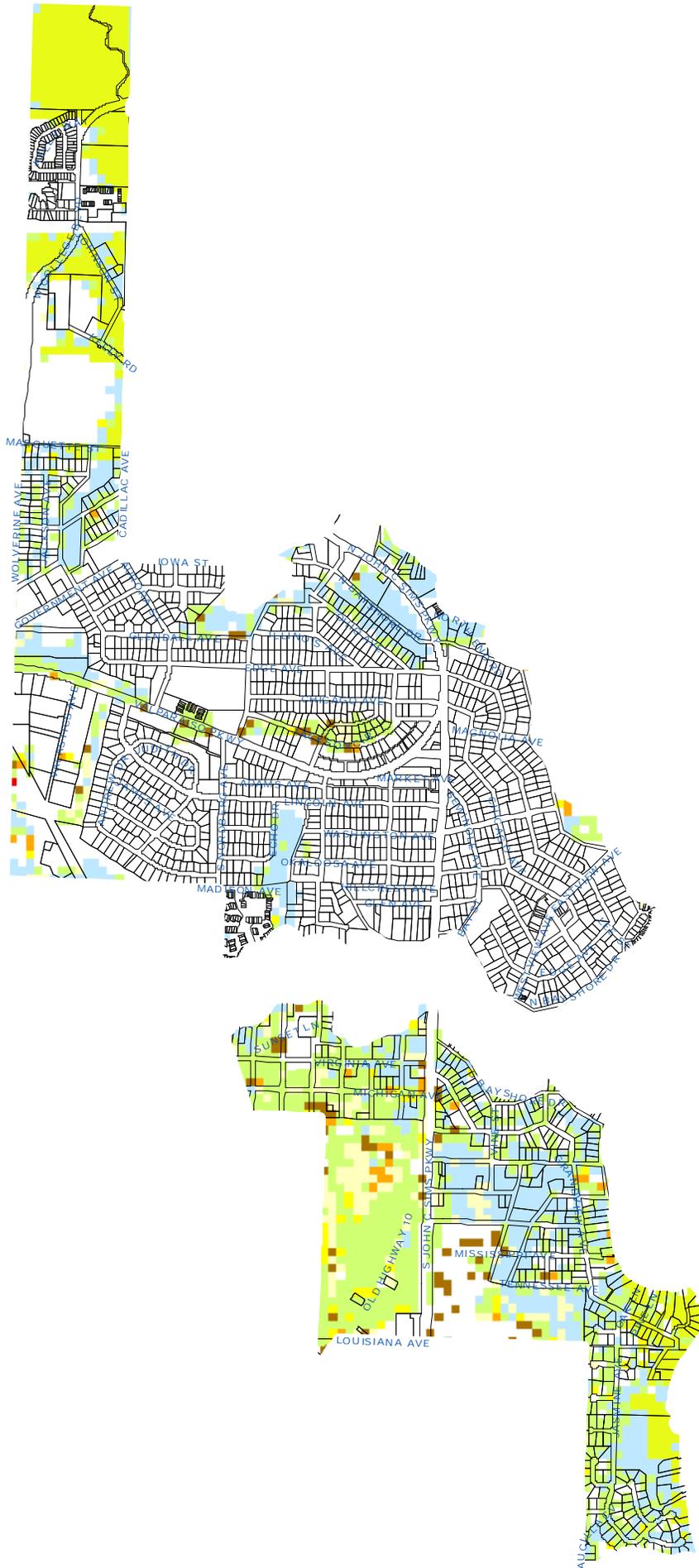
# City of Valparaiso Wildfire Level of Concern

Parcel Lines

Level of Concern



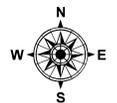
Source: Florida Division  
of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
StatePlane: Florida North (8303)  
NAD 1983(83), NAD 1988.

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**City of Valparaiso**

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**Section 5.07.06 Post Disaster Redevelopment Plan**

The City of Valparaiso does not currently have a Post Disaster Redevelopment Plan. Therefore the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

**Section 5.08**

**Town of Cinco Bayou**





## Town of Cinco Bayou

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### **Section 5.08.02 Vulnerabilities**

#### ***Section 5.08.02.01 Introduction***

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the Town of Cinco Bayou.

This section includes a brief summary description of the Town of Cinco Bayou, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the Town of Cinco Bayou. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the Town of Cinco Bayou.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the Town of Cinco Bayou so that mitigation options can be considered in future land use decisions.

#### ***Section 5.08.02.02 Methodology***

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the Town of Cinco Bayou as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### ***Section 5.08.02.03 Summary Description of the Town of Cinco Bayou***

The Town of Cinco Bayou is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 383 residents, which makes it the smallest municipality in Okaloosa County by population. The Town of Cinco Bayou is surrounded by the City of Fort Walton Beach. Within its jurisdiction, there are .71 miles of shoreline that border Cinco Bayou. The Town of Cinco Bayou is virtually built out. There are only two residential lots that remain undeveloped and just one commercial lot open for development. Most of the recent development within the Town of Cinco Bayou has been in the form of redevelopment and renovation of commercial establishments. The town was recently awarded a Community Development Block Grant for commercial revitalization of the streetscape along Eglin Parkway. The revitalization includes relocating above ground utilities to underground and adding pavers to sidewalks and landscaping. The project will be conducted in two phases. The Town of Cinco Bayou hopes to receive another grant to extend the project out to the Cinco Bayou Bridge. The future development trends within the Town of Cinco Bayou will necessarily be revitalization of both commercial and residential buildings, and the upgrading of public infrastructure.



**Town of Cinco Bayou**

**Section 5.08.02.04 Vulnerable Populations**

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County’s Vulnerability for further explanation on these vulnerable populations. The table below displays the Town of Cinco Bayou’s vulnerable populations.

**Table 5.08.02.04.1:** Estimated Vulnerable Populations in the Town of Cinco Bayou, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	9.8%	36
Language Isolation	.6%	2
Disabled	28.9%	126
Single Parent	18.9%	22
Poverty	12.2%	45
Minority	15.4%	53

Source: 2010 Census; U.S. Census Population Division

**Section 5.08.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the County because they have already experienced significant flood damage. As of 2015 the Town of Cinco Bayou does not have any current repetitive loss properties; however, the Okaloosa County Staff will update this if this changes in the future.

**Section 5.08.02.06 Hurricane and Tropical Storm**

The Town of Cinco Bayou is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The Town of Cinco Bayou would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the Town of Cinco Bayou’s jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following tables depict the hurricane evacuation zones and the vulnerable structures located within each zone.



**Town of Cinco Bayou**

**Table 5.08.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
<b>Zone A</b>	0	0	1	0
<b>Just Value</b>	\$0	\$0	\$477,962	\$0
<b>Zone B</b>	1	0	3	1
<b>Just Value</b>	\$58,700	\$0	\$1,028,123	\$176,245
<b>Zone C</b>	1	6	3	1
<b>Just Value</b>	\$58,700	\$1,399,772	\$1,028,123	\$176,245
<b>Zone D</b>	2	93	38	9
<b>Just Value</b>	\$214,700	\$13,702,551	\$7,610,246	\$2,503,164
<b>Zone E</b>	2	116	43	11
<b>Just Value</b>	\$214,700	\$16,385,949	\$7,870,585	\$2,778,876

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Table 5.08.02.06.2:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	0	0
<b>Just Value</b>	\$0	\$0
<b>Zone B</b>	1	1
<b>Just Value</b>	\$1,315,088	\$496,384
<b>Zone C</b>	8	2
<b>Just Value</b>	\$4,834,610	\$843,672
<b>Zone D</b>	28	2
<b>Just Value</b>	\$11,815,577	\$843,672
<b>Zone E</b>	50	2
<b>Just Value</b>	\$21,666,773	\$843,672

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)



**Town of Cinco Bayou**

**Section 5.08.02.07 Storm Surge**

The Town of Cinco Bayou is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 17.4 feet above the mean high water line along the some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following tables depict the vulnerable structures to storm surge levels, which correspond with the category of hurricane.

**Table 5.08.02.07.1: Vulnerable Residential Structures to Storm Surge**

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
<b>Surge Level 1</b>	2	13	13	1
<b>Just Value</b>	\$214,700	\$3,987,659	\$4,636,878	\$614,270
<b>Surge Level 2</b>	2	14	13	1
<b>Just Value</b>	\$214,700	\$4,375,516	\$4,636,878	\$614,270
<b>Surge Level 3</b>	2	93	37	5
<b>Just Value</b>	\$214,700	\$13,702,551	\$7,535,022	\$1,197,302
<b>Surge Level 4</b>	2	93	37	5
<b>Just Value</b>	\$214,700	\$13,702,551	\$7,535,022	\$1,197,302
<b>Surge Level 5</b>	2	95	43	11
<b>Just Value</b>	\$214,700	\$13,936,703	\$7,870,585	\$2,778,876

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)



**Town of Cinco Bayou**

**Table 5.08.02.07.2: Other Vulnerable Structures to Storm Surge**

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Surge Level 1</b>	1	2
<b>Just Value</b>	\$1,315,088	\$843,672
<b>Surge Level 2</b>	1	2
<b>Just Value</b>	\$1,315,088	\$843,672
<b>Surge Level 3</b>	7	2
<b>Just Value</b>	\$3,268,580	\$843,672
<b>Surge Level 4</b>	11	2
<b>Just Value</b>	\$5,622,570	\$843,672
<b>Surge Level 5</b>	52	2
<b>Just Value</b>	\$22,706,960	\$843,672

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010  
(Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.08.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The Town of Cinco Bayou is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the Town of Cinco Bayou. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the Town of Cinco Bayou, there are 5 structures located in the AE flood zone. The cumulative 'just value' of those structures is \$2,358,996. The following table depicts the vulnerable structures located in the AE flood zone in the Town of Cinco Bayou.

**Table 5.08.02.08.1: Structures Located in Flood Zones in the Town of Cinco Bayou**

	<b>Total in Flood Zone AE</b>	<b>Just Value</b>
<b>Condominium</b>	1	\$58,700
<b>Commercial</b>	2	\$1,456,624
<b>Government/Institutional</b>	2	\$843,672

Source: Okaloosa County Department of Growth Management, 2010



**Town of Cinco Bayou**

**Section 5.08.02.09 Severe Storms**

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the Town of Cinco Bayou. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the Town of Cinco Bayou.

**Table 5.08.02.09.1:** Vulnerable Residential Structures to Severe Storms in Town of Cinco Bayou

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
	3	211	86	22
<b>Just Value</b>	\$273,400	\$30,322,652	\$15,741,170	\$5,557,752

Source: Okaloosa County Department of Growth Management, 2010

**Table 5.08.02.09.1:** Other Vulnerable Structures to Severe Storms in Town of Cinco Bayou

<b>Total:</b>	<b>Commercial</b>	<b>Government/Institutional</b>
	108	9
<b>Just Value</b>	\$52,342,945	\$3,322,160

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.08.02.09.01 Tornado and Waterspout**

The Town of Cinco Bayou is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the Town of Cinco Bayou that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the Town of Cinco Bayou are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the Town of Cinco Bayou, has a medium risk, 1 in 250 per year, of a tornado event occurring.



## Town of Cinco Bayou

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Because waterspouts occur over water, the areas in the Town of Cinco Bayou most susceptible to damage from waterspouts are those located on the Choctawhatchee Bay. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage. There are 15 structures along the Town of Cinco Bayou's coastline. The cumulative 'just value' of those structures is \$5,782,915. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable due to the unavailability of relevant studies.

### **Section 5.08.02.09.02 Thunderstorms and Lightning**

The Town of Cinco Bayou is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the Town of Cinco Bayou, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.08.02.09.03 Winter Storms**

The Town of Cinco Bayou is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The Town of Cinco Bayou is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the Town of Cinco Bayou is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the Town of Cinco Bayou are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the Town of Cinco Bayou that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.08.02.10 Heat Wave and Drought**

The Town of Cinco Bayou is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the Town of Cinco Bayou are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.



**Town of Cinco Bayou**

**Section 5.08.02.11 Beach Erosion**

The areas of the Town of Cinco Bayou that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are .71 miles of coastline along the Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes resulting in complete destruction. There are 15 structures along the Town of Cinco Bayou's coastline. The cumulative 'just value' of those structures is \$5,782,915 (See Table 5.08.02.11.1, below).

**Table 5.08.02.11.1: Total Structures Susceptible to Beach Erosion**

	Condominium	SFR-Townhouse	Single-Family	Multi-Family	Government/ Institutional
<b>Total</b>	1	3	9	1	1
<b>Just Value</b>	\$156,000	\$1,193,862	\$3,471,495	\$614,270	\$347,288

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**Section 5.08.02.12 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, land erosion, sinkholes, expansive soils, dam safety, wildfire, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the Town of Cinco Bayou. Therefore, the Town's vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the Town of Cinco Bayou, then the LMS Committee will update this section to reflect those changes.

**Section 5.08.02.13 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the Town of Cinco Bayou is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**Town of Cinco Bayou**

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**Section 5.08.05 Maps**

Attached to this page are maps of the Town of Cinco Bayou. They include:

1. Critical Facilities..... 5.08-34
2. Evacuation Zones.....5.08-35
3. Flood Zones..... 5.08-36
4. Repetitive Loss Properties.....5.08-37
5. Surge Zones..... 5.08-38
6. Wildfire Level of Concern..... 5.08-39

# Town of Cinco Bayou Critical Facilities

- ▭ Parcel Lines
- Critical Facilities

Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION**  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAD 1988.

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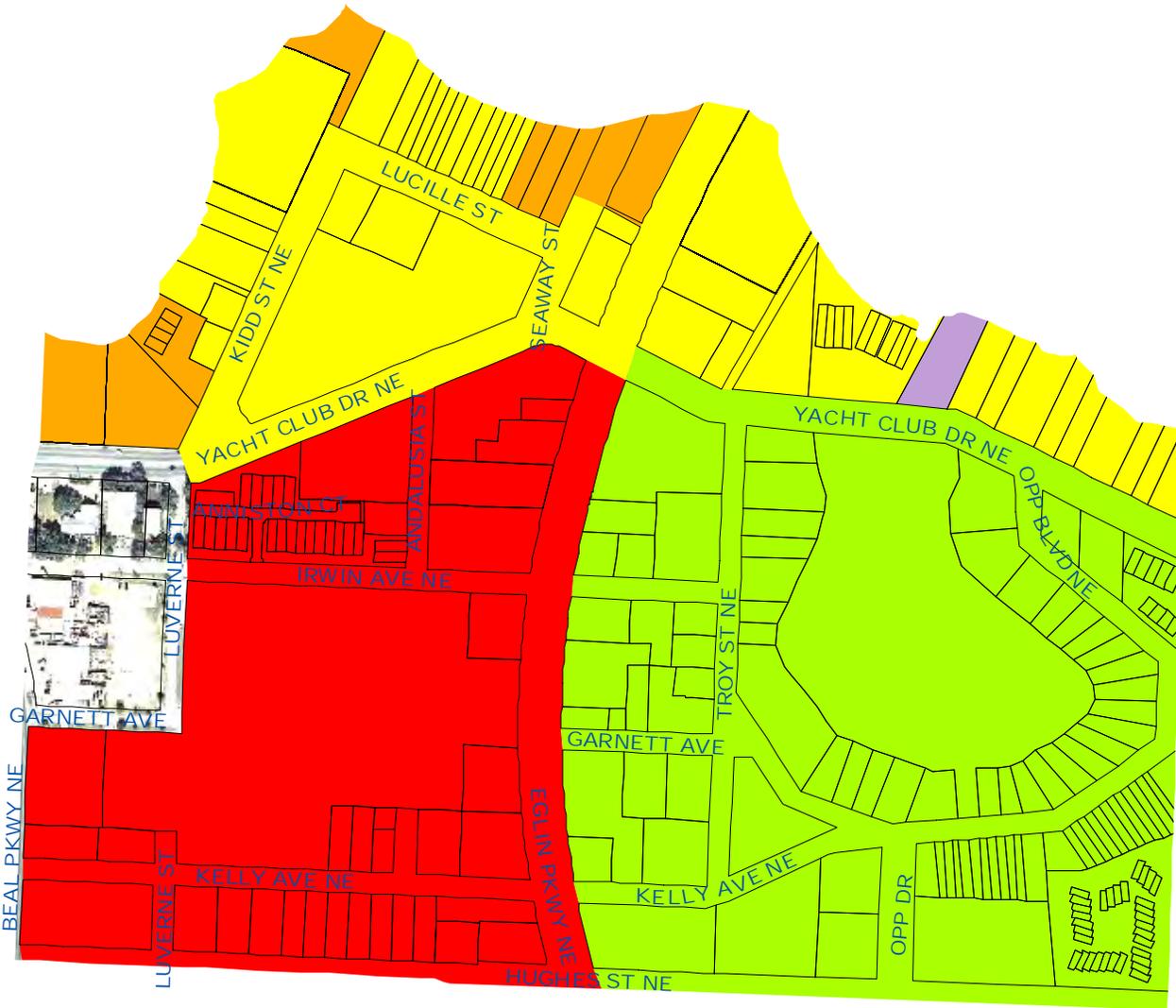
Department of  
Growth Management  
08/18/2010

# Town of Cinco Bayou Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

- ZONE A = HURRICANE CAT 1
- ZONE B = HURRICANE CAT 2
- ZONE C = HURRICANE CAT 3
- ZONE D = HURRICANE CAT 4
- ZONE E = HURRICANE CAT 5

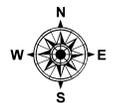
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections  
StatePlane: Florida North (1983)  
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# Town of Cinco Bayou Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

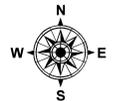
Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
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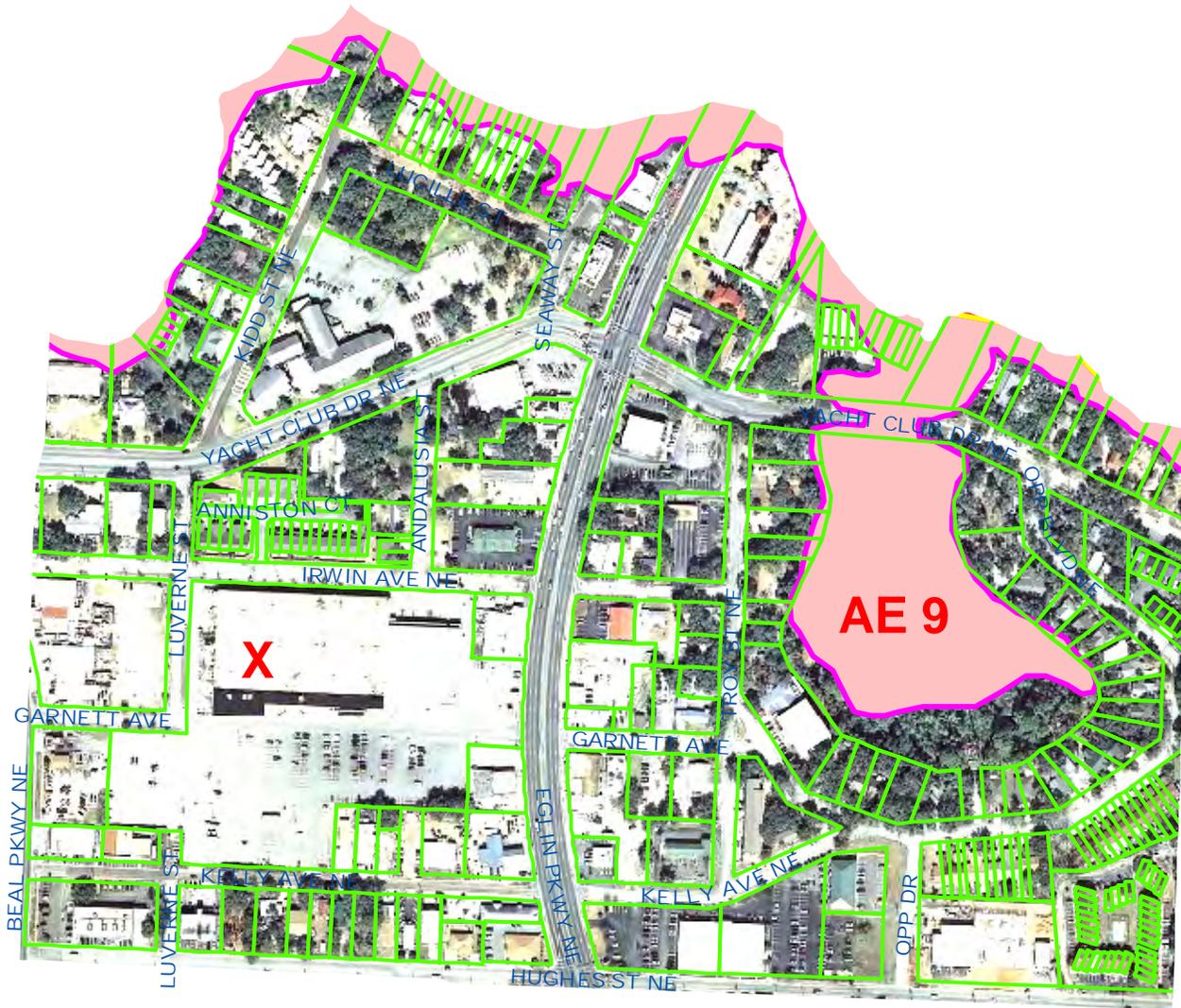
Department of  
Growth Management  
08/18/2010

# Town of Cinco Bayou Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Repetitive Loss Properties

**The Town of Cinco Bayou does not have any Repetitive Loss Properties in its jurisdiction**

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections on Spheroids: Florida North (1983) NAD 1983 (80), NAVD 1988.

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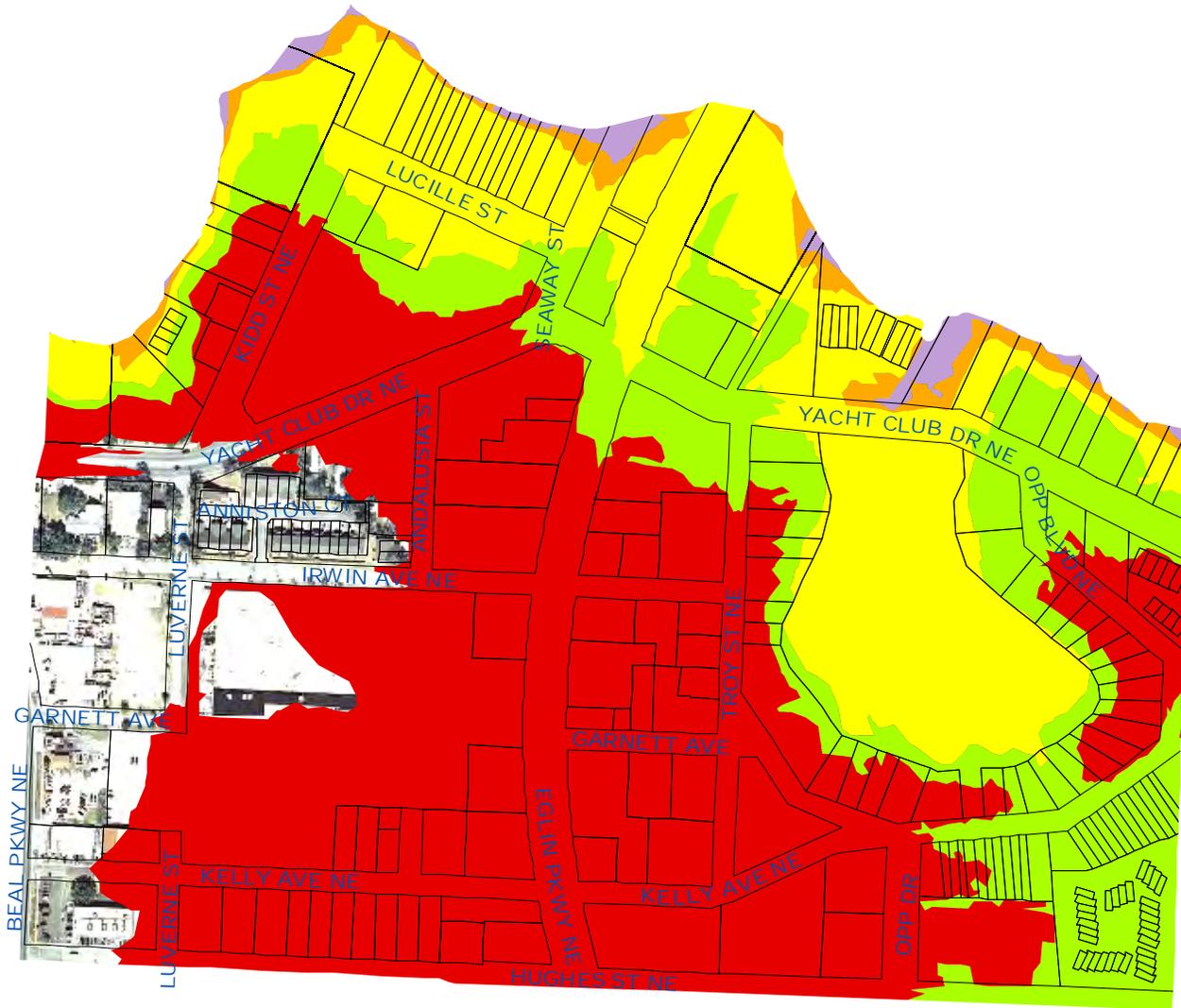


Department of  
Growth Management  
08/18/2010

# Town of Cinco Bayou Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

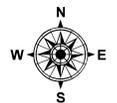
Source: West Florida  
Regional Planning  
Council, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
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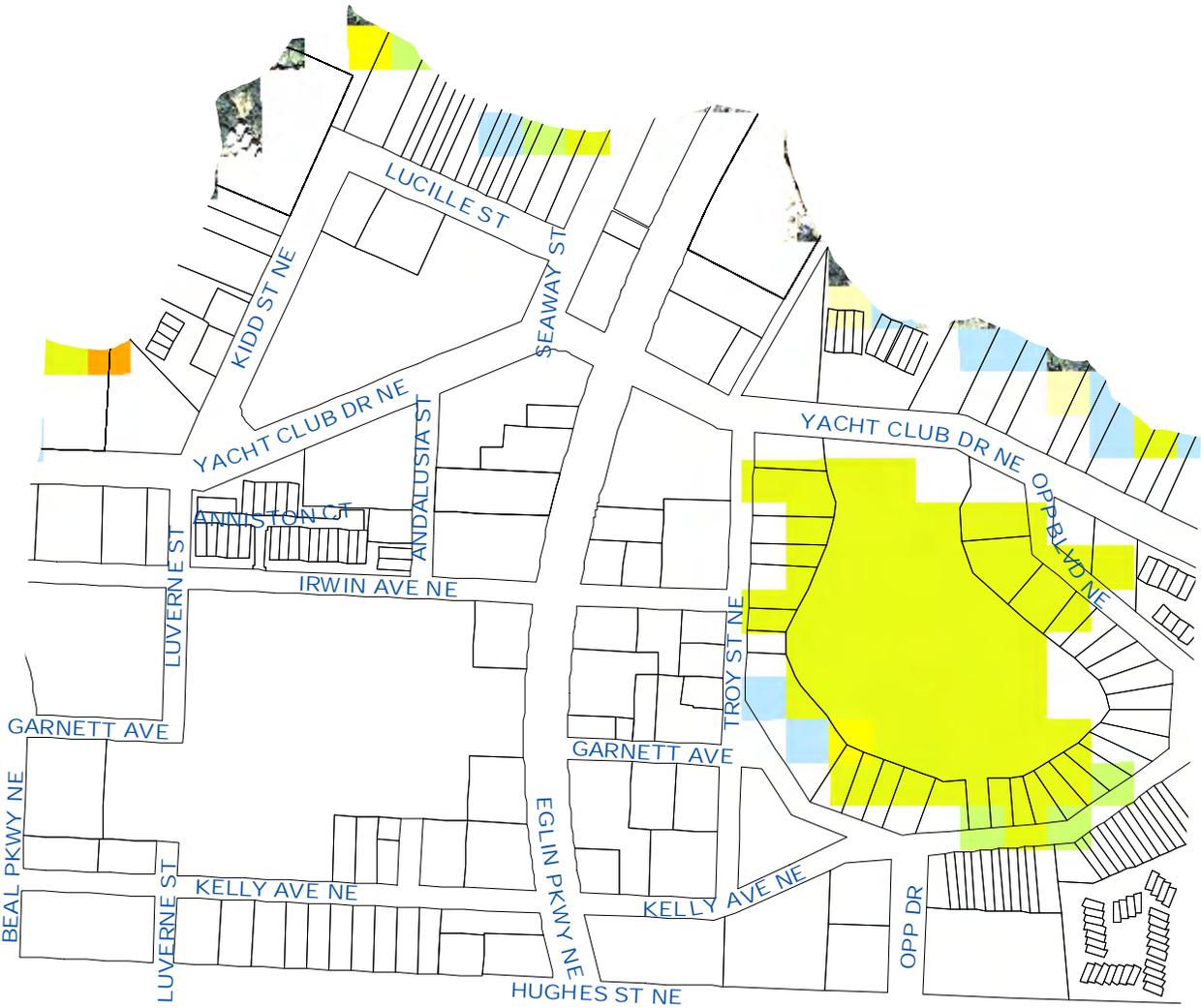
# Town of Cinco Bayou Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections on  
Spheroids - Florida North (1983)  
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08/18/2010



## Town of Cinco Bayou

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### **Section 5.08.06 Post Disaster Redevelopment Plan**

The Town of Cinco Bayou does not currently have a Post Disaster Redevelopment Plan. Therefore the city will abide by the Okaloosa County Post Disaster Redevelopment Plan (PDRP) and submit the required data per the PDRP requirements.

# Section 5.09

## Town of Shalimar





## Town of Shalimar

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### **Section 5.09.02 Vulnerabilities**

#### ***Section 5.09.02.01 Introduction***

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the Town of Shalimar.

This section includes a brief summary description of the Town of Shalimar, as well as its vulnerability to the identified hazards and the impact of each hazard. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties within the Town of Shalimar. Additionally, the section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the Town of Shalimar.

The main intent of this section is to provide an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the Town of Shalimar so that mitigation options can be considered in future land use decisions.

#### ***Section 5.09.02.02 Methodology***

The Okaloosa County Staff used the same methods, of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard, for the Town of Shalimar as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### ***Section 5.09.02.03 Summary Description of the Town of Shalimar***

The Town of Shalimar is an incorporated city located in the southern portion of Okaloosa County. As of a 2010 Census it was home to 717 residents, which makes it one of the smallest municipalities in Okaloosa County by population. Within its jurisdiction, there are 1.69 miles of shoreline that border Garnier Bayou. The Town of Shalimar is largely built out. The majority of the existing residential development is clustered around Garnier Bayou. According to Tom Burns, the Town Manager for Shalimar, there are only a few residential lots open for construction as all other land has been developed. The development within the town will therefore necessarily be focused on redevelopment, such as new businesses moving into vacant restaurants and commercial office buildings.

#### ***Section 5.09.02.04 Vulnerable Populations***

Hazards do not affect the entire population the same. Therefore, special attention needs to be given to the more vulnerable populations. Please refer back to the overall County's Vulnerability for further explanation on these vulnerable populations. The table below displays the Town of Shalimar's vulnerable populations.



**Town of Shalimar**

**Table 5.09.02.04.1:** Estimated Vulnerable Populations in the Town of Shalimar, 2010

Population	2010 Census Percent Population	2014 Estimate
Elderly	9.8%	56
Language Isolation	.4%	4
Disabled	22.6%	148
Single Parent	9.6%	15
Poverty	2.3%	16
Minority	3.5%	25

Source: 2010 Census; U.S. Census Population Division

**Section 5.09.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the Town of Shalimar because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the Town of Shalimar.

**Table 5.09.02.05.1:** Repetitive Loss Properties in the Town of Shalimar

	Total Building Payment	Total Contents Payment	Total Losses Claimed	Total Paid	Residential Structures	Non-Residential Structures
<b>Town of Shalimar</b>	\$1,481,019.79	\$526,975.17	70	\$2,007,994.96	35	0

Source: FEMA, 2016

**Table 5.09.02.05.2:** Flood Zones of Repetitive Loss Properties in the Town of Shalimar

Flood Zones	A,AE	V,VE	B,C,X
<b>Total Properties</b>	28	1	6

Source: FEMA, 2016



**Town of Shalimar**

**Section 5.09.02.06 Hurricane and Tropical Storm**

The Town of Shalimar is vulnerable to the damaging effects of tropical storms and hurricanes as it is located on the Choctawhatchee Bay, near the southern coast of the county. The Town of Shalimar would experience destruction in terms of wind damage, heavy rains, and storm surge during a tropical storm or hurricane. All structures within the Town of Shalimar's jurisdiction are susceptible to damage in the form of flooding due to heavy rains and strong storm surge. High winds can damage structures by removing roofs and siding, and create flying debris out of sources which are not anchored. The most vulnerable homes are those located on bay front lots. The following table depicts the hurricane evacuation zones and the vulnerable structures located within each zone.

**Table 5.09.02.06.1:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Commercial</b>	<b>Government/ Institutional</b>
<b>Zone A</b>	14	7	1	0
<b>Just Value</b>	\$3,518,045	\$5,416,126	\$1,515,633	\$0
<b>Zone B</b>	51	51	1	0
<b>Just Value</b>	\$25,167,061	\$25,167,061	\$1,515,633	\$0
<b>Zone C</b>	87	75	32	4
<b>Just Value</b>	\$20,465,918	\$28,588,109	\$23,457,204	\$6,206,205
<b>Zone D</b>	116	215	35	6
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$29,511,158	\$11,909,460
<b>Zone E</b>	116	215	40	7
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$30,865,367	\$14,592,353

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Section 5.09.02.07 Storm Surge**

The Town of Shalimar is vulnerable to storm surge and the structures along the Choctawhatchee Bay are the most susceptible to damage from this hazard. The strongest storm surge level during a Category 5 hurricane would be 17.7 feet above the mean high water line along the some areas boarding Choctawhatchee Bay. This would severely flood numerous homes, infrastructure, and commercial structures in this area. The following table depicts the vulnerable structures to storm surge levels, which correspond with the category of hurricane.



**Town of Shalimar**

**Table 5.09.02.07.1:** Vulnerable Structures to Storm Surge

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Commercial</b>	<b>Government/Institutional</b>
<b>Surge Level 1</b>	79	28	1	0
<b>Just Value</b>	\$19,510,193	\$21,198,250	\$1,515,633	\$0
<b>Surge Level 2</b>	91	44	1	0
<b>Just Value</b>	\$22,434,819	\$24,701,218	\$1,515,633	\$0
<b>Surge Level 3</b>	116	215	26	3
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$20,091,848	\$4,962,582
<b>Surge Level 4</b>	116	215	21	4
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$12,523,683	\$6,206,205
<b>Surge Level 5</b>	116	215	40	7
<b>Just Value</b>	\$25,627,123	\$57,270,526	\$30,865,367	\$13,383,847

Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.09.02.08 Flooding**

Our definition of flooding only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. The Town of Shalimar is vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains is the most commonly observed type of flooding in the Town of Shalimar. During a hurricane, tropical storm or severe storm heavy rains might cause some homes to flood particularly in low lying areas or those with poor drainage systems. In the Town of Shalimar, there are 71 structures in the AE flood zone and 2 structures in the VE flood zone. The cumulative 'just value' of those structures in the AE and VE flood zones is \$28,785,941. The following table depicts the vulnerable structures located in the AE and VE flood zones in the Town of Shalimar.

**Table 5.09.02.08.1:** Structures Located in Flood Zones in the Town of Shalimar

	<b>Total in Flood Zone AE</b>	<b>Just Value</b>	<b>Total in Flood Zone VE</b>	<b>Just Value</b>
<b>SFR-Townhouse</b>	26	\$5761203	2	\$469,469
<b>Single-Family</b>	41	\$18,436,603	0	\$0
<b>Commercial</b>	4	\$4,118,666	0	\$0

Source: Okaloosa County Department of Growth Management, 2010



**Town of Shalimar**

**Section 5.09.02.09 Severe Storms**

In the table below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the Town of Shalimar. Although it is highly unlikely that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the Town of Shalimar.

**Table 5.09.02.09.1:** Structures Vulnerable to Severe Storms in Town of Shalimar

<b>Total:</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Commercial</b>	<b>Government/Institutional</b>
	29	41	10	44	14
<b>Just Value</b>	\$6,320,497	\$18,436,603	\$8,320,408	\$34,984,033	\$26,767,694

Source: Okaloosa County Department of Growth Management, 2010

Since severe storms includes tornadoes and waterspout, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all those hazards.

**Section 5.09.02.09.01 Tornado and Waterspout**

The Town of Shalimar is vulnerable to tornadoes and waterspouts, and all structures within its jurisdiction are susceptible to the impacts of this hazard due to their unpredictable nature.

The areas within the Town of Shalimar that are most vulnerable to tornado damage are those with a high density or large population because the damage rate increases as a function of population density. The types of structures most vulnerable to tornado damage within the Town of Shalimar are poorly constructed housing, apartment complexes, and condominiums because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of Okaloosa County, including the Town of Shalimar, has a medium risk, 1 in 250 per year, of a tornado event occurring.

Because waterspouts occur over water, the areas in the Town of Shalimar most susceptible to damage from waterspouts are those located on the Choctawhatchee Bay. Waterspouts tend to not last very long, but their high winds can result in damage from flying debris. The properties bordered by the water bodies are the most vulnerable to damage. There are 56 structures along the Town of Shalimar's coastline. The cumulative 'just value' of those structures is \$17,052,301. The surrounding areas to the coastline are susceptible to damage from flying debris as well, but the specific impacts on those areas are unavailable due to the unavailability of relevant studies.



## Town of Shalimar

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### **Section 5.09.02.09.02 Thunderstorms and Lightning**

The Town of Shalimar is vulnerable to thunderstorms and lightning, and all structures within its jurisdictions are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. Thunderstorm damage can include traffic accidents on wet roads, flash-flooding, lightning damage to electronics and structures, lightning strikes on people, and wind and hail damage to structures. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County, including the Town of Shalimar, has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.09.02.09.03 Winter Storms**

The Town of Shalimar is vulnerable to winter storms, and all structures within its jurisdiction are susceptible to the effects of freezing temperatures. The Town of Shalimar is vulnerable to snow, freezing rain, icing and glazing events but because these events are so rare, the Town of Shalimar is unlikely to suffer serious damage from this hazard. The specific impacts of winter storms in the Town of Shalimar are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in the Town of Shalimar that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.09.02.10 Heat Wave and Drought**

The Town of Shalimar is vulnerable to heat waves and drought. The specific impacts of heat waves and drought in the Town of Shalimar are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the Town of Shalimar is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.

### **Section 5.09.02.11 Beach Erosion**

The areas of the Town of Shalimar that are vulnerable to the effects of beach erosion are the properties that border the Choctawhatchee Bay. As previously mentioned, within its jurisdiction, there are 1.69 miles of coastline along the Choctawhatchee Bay. The populations that reside, work, run businesses, or own property in these parcels are the most affected by beach erosion. Beach erosion undermines the integrity of infrastructure, beachfront homes and businesses, and other structures by washing away the sediments that support the structural foundation sometimes



**Town of Shalimar**

resulting in complete destruction. There are 56 structures along the Town of Shalimar’s coastline. The cumulative ‘just value’ of those structures is \$17,052,301 (See Table 5.09.02.11.1, below).

**Table 5.09.02.11.1: Total Structures Susceptible to Beach Erosion**

	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Commercial</b>
<b>Total</b>	51	4	1
<b>Just Value</b>	\$13,021,917	\$2,514,751	\$1,515,633

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
 Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**Section 5.09.02.12 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, land erosion, sinkholes, expansive soils, dam safety, wildfire, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to the Town of Shalimar. Therefore, the Town’s vulnerability to these hazards has not been assessed. If any of the hazards become a greater risk in the Town of Shalimar, then the LMS Committee will update this section to reflect those changes.

**Section 5.09.02.13 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the Town of Shalimar is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



**Town of Shalimar**

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**Section 5.09.05 Maps**

Attached to this page are maps of the Town of Shalimar. They include:

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2. Evacuation Zones.....5.09-33
3. Flood Zones.....5.09-34
4. Repetitive Loss Properties.....5.09-35
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# Town of Shalimar Critical Facilities

-  Parcel Lines
-  Critical Facilities

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION  
Lambert Conformal Conic Projected on  
StatePlane: Florida North (8303)  
NAD 1983(83), NAD 1983

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Department of  
Growth Management  
08/18/2010

# Town of Shalimar Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

ZONE A = HURRICANE CAT 1

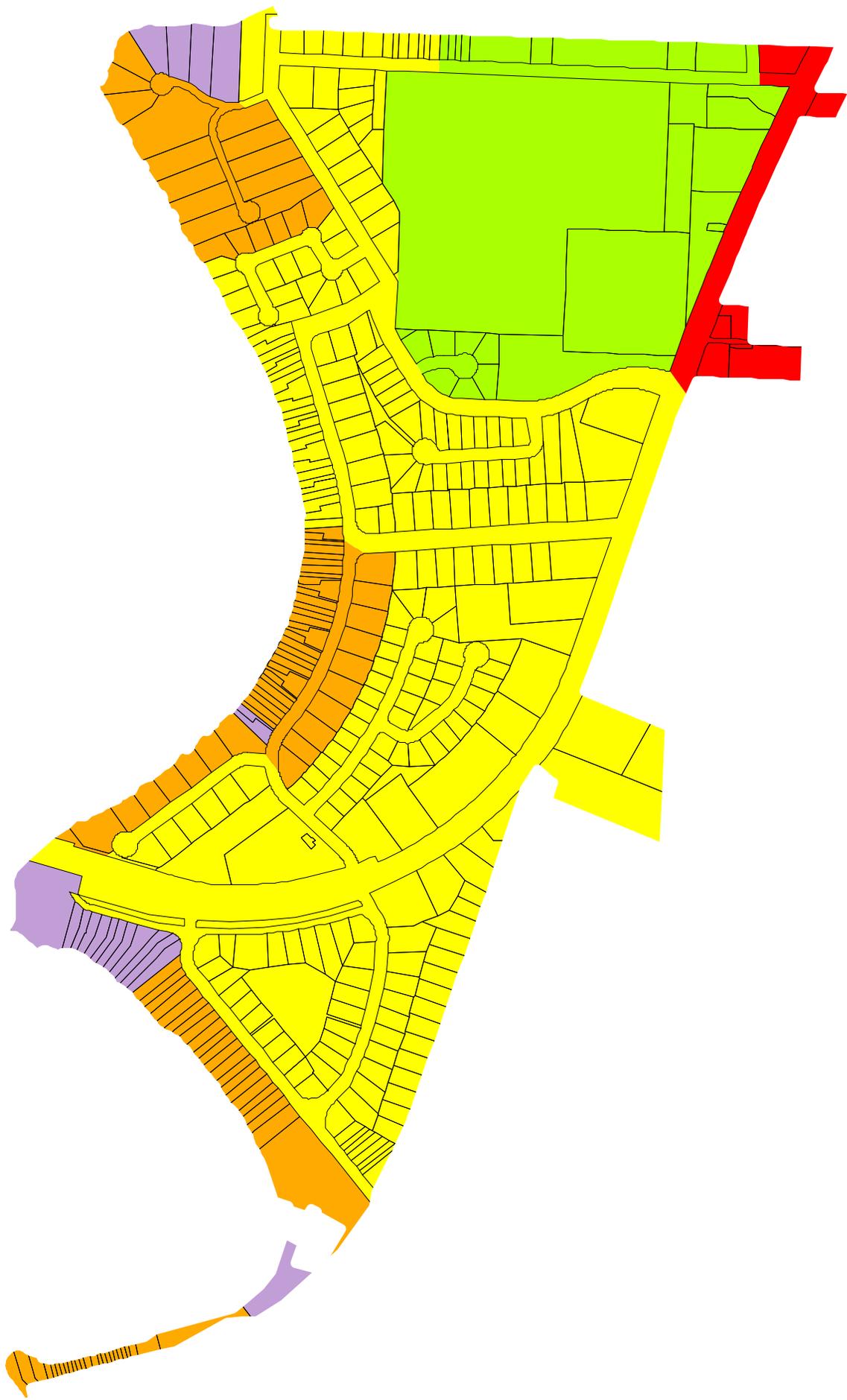
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

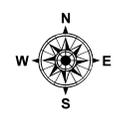
Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections  
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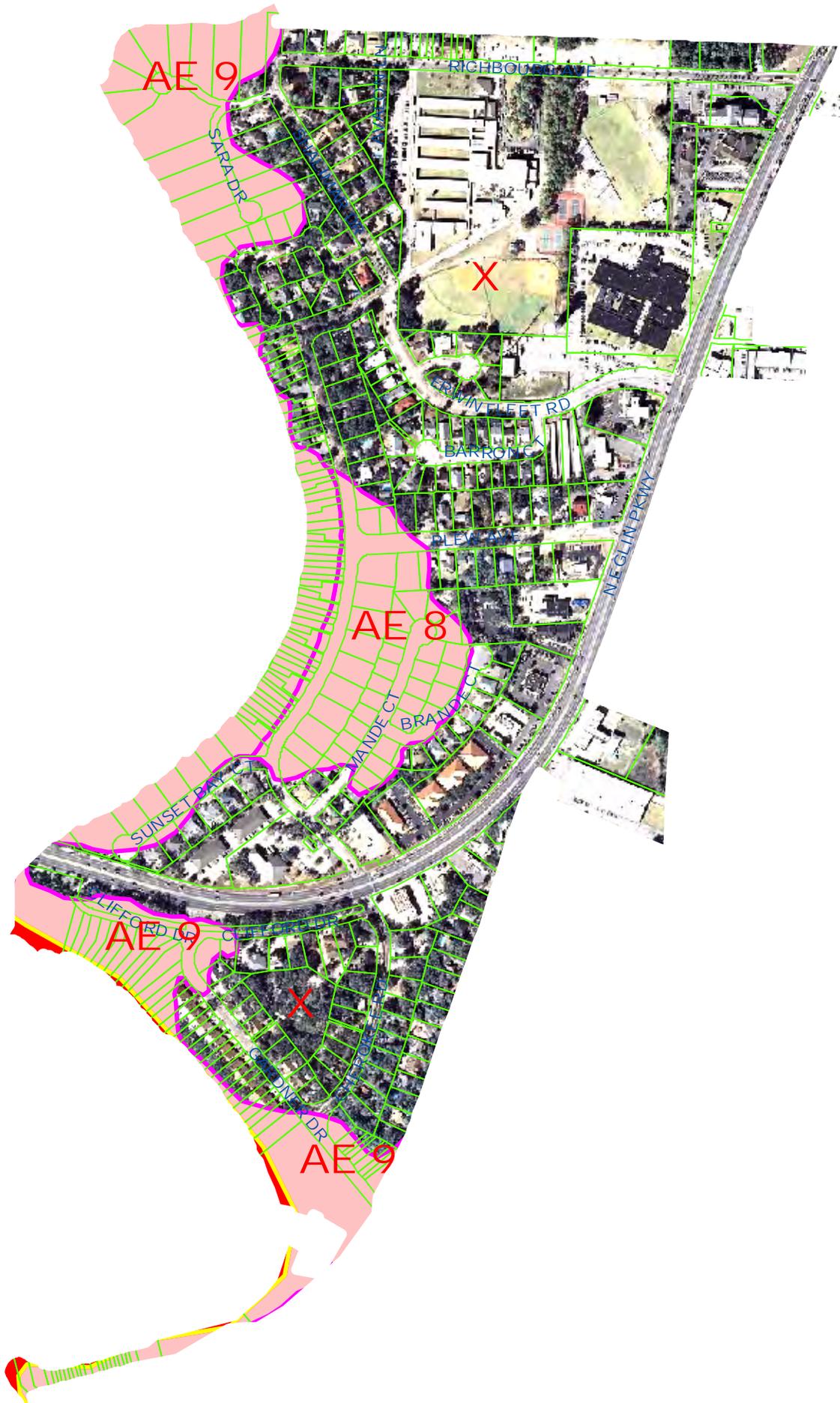


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08/18/2010

# Town of Shalimar Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983(80), NAVD 1988.

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# Town of Shalimar Repetitive Loss Properties



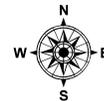
- Parcel Lines
- X 500 Year Flood Plain
- A 100 Year Flood Plain
- AE 100 Year Flood Plain
- VE 100 Year Flood Plain
- Base Flood Elevation in a Floodway
- Repetitive Loss Properties

Source: FEMA Map  
Service Center,  
Dec 6 2002

MAP PROJECTION  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
NAD 1983 (80), NAVD 1988.

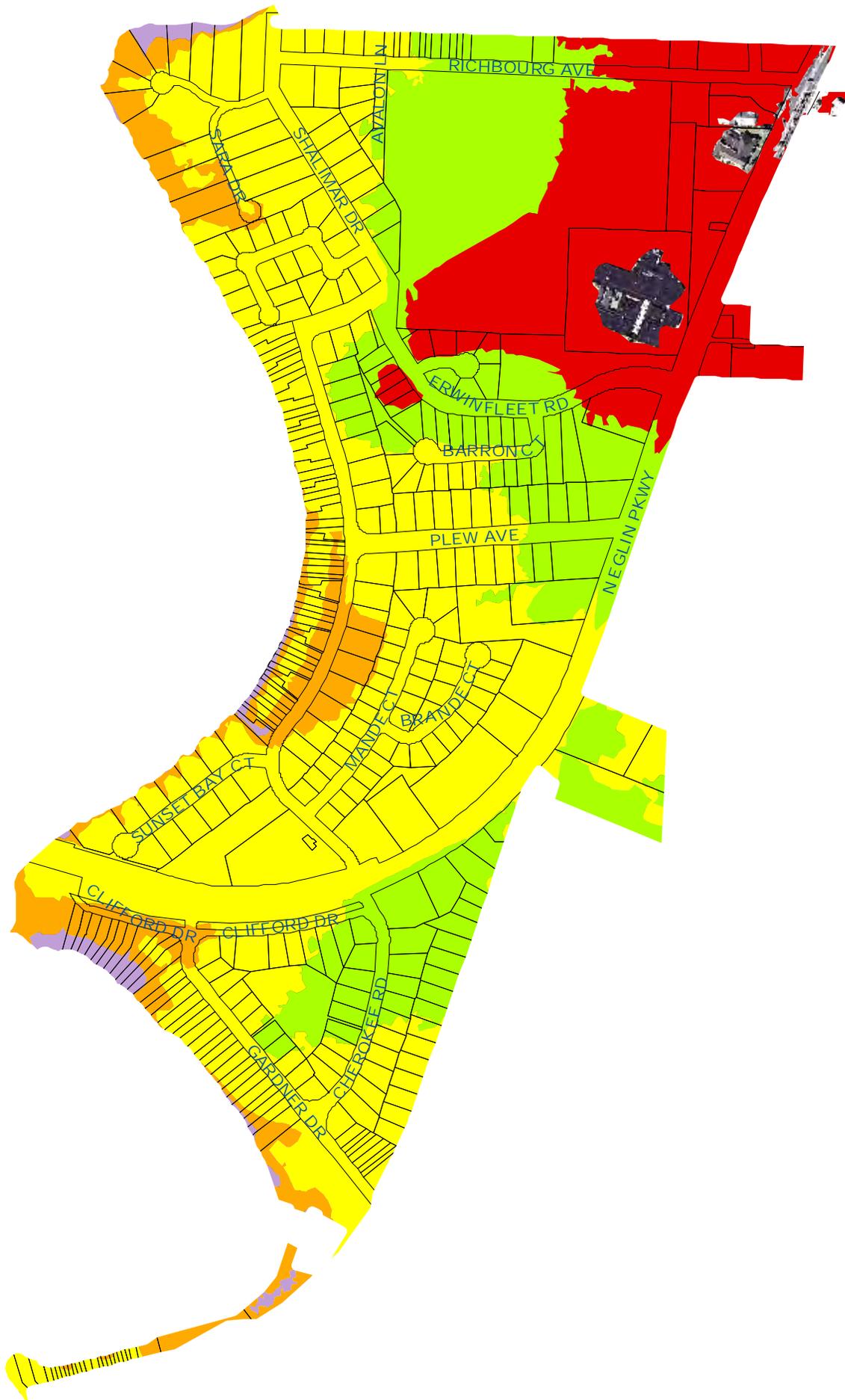
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08/18/2010

# Town of Shalimar Surge Zones



-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

Source: West Florida Regional Planning Council, 2010

MAP PROJECTION:  
Lambert Conformal Conic Projections  
Datums: Florida North (1983)  
NAD 1983 (83), NAD 1983

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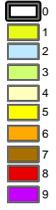


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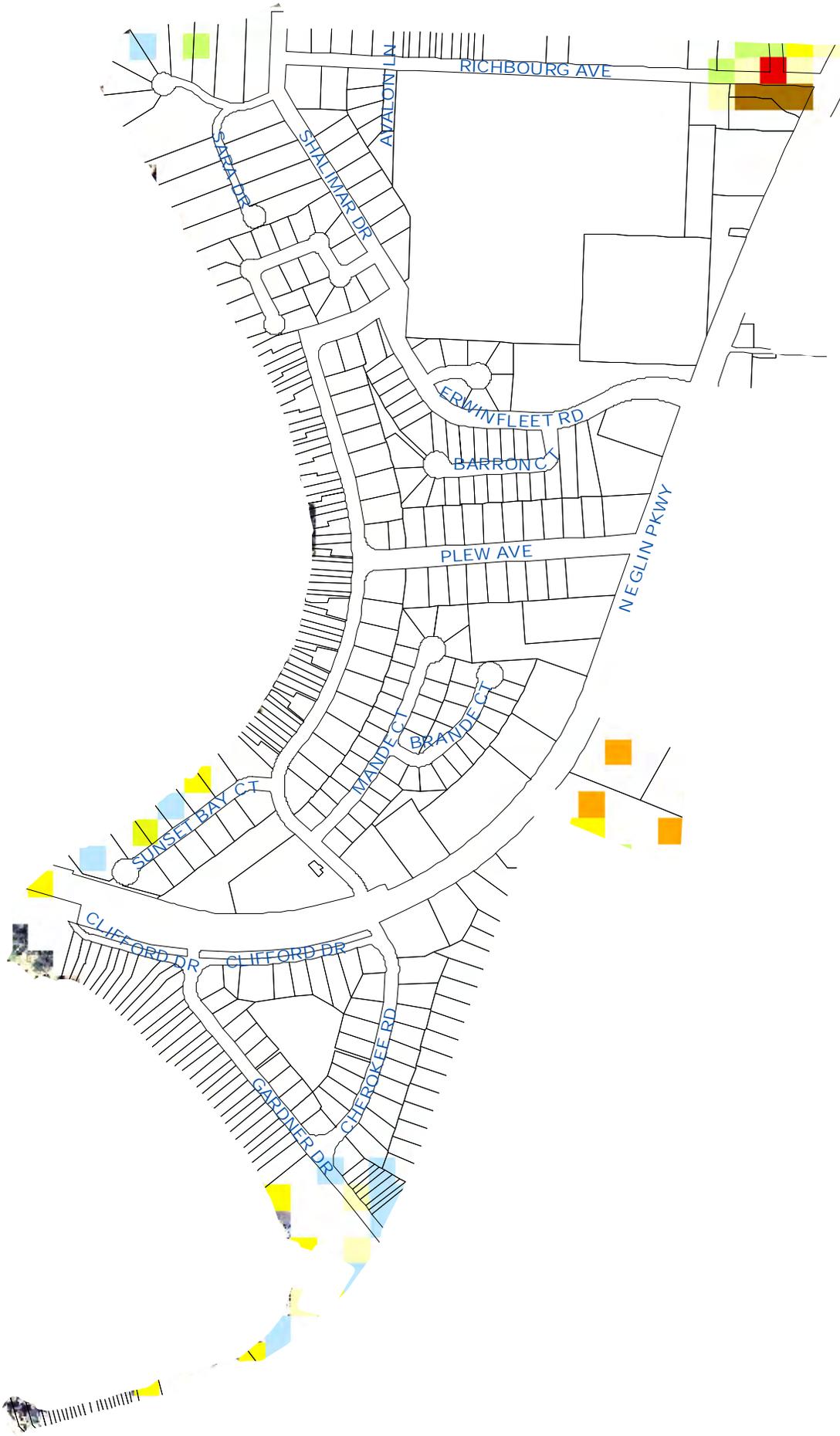
# Town of Shalimar Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections  
StatePlane: Florida North (803)  
NAD 1983(80), NAD 1988.

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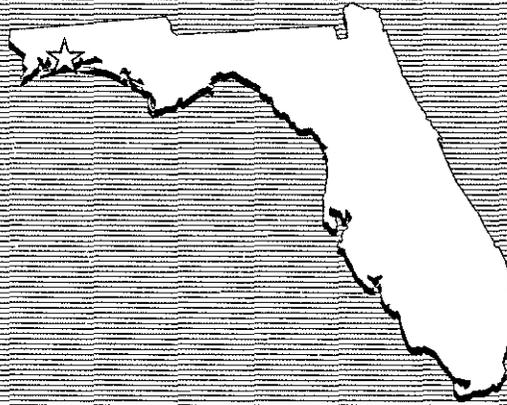


**Town of Shalimar**

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**Section 5.09.06 Post Disaster Redevelopment Plan**

Attached to this page is the post disaster redevelopment plan adopted by the Town of Shalimar in July of 1992. This plan is still in effect.



# *Town of Shalimar*

## **POST - DISASTER REDEVELOPMENT PLAN**

*prepared by*

**J.E. Dorman & Associates, Inc.  
Destin, Florida**

July 21, 1992



July 21, 1992

**Town of Shalimar  
Post Disaster Redevelopment Plan**

**ORDINANCE 92-09**

*prepared for the*

**Town of Shalimar**

*by*

J.E. Dorman & Associates, Inc.  
Destin, Florida

*on behalf of the*

**Mayor and Town Commission**

Preparation of this document was aided through financial assistance received from the State of Florida under the Small Municipalities Supplemental Planning Assistance Grant Program authorized by Chapter 91-113, Laws of Florida, and administered by the Florida Department of Community Affairs.



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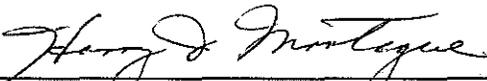
<u>ARTICLE</u>	<u>SECTION</u>	<u>TOPIC</u>	
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- APPENDIX F - Notice of Interest Form

1.4 **Intent:** Following a damaging hurricane or any other disaster, and/or enactment of a building moratoria, it is the intent of the Town to allow rebuilding and reconstruction in an orderly manner. The Town in coordination with the County will control the issuance of building permits to manage the location, timing and sequence of reconstruction and repair. It is further the intent of the Post-Disaster Redevelopment Plan that the Town establish prior to the disaster event, a special Reconstruction Task Force which will oversee the recovery and reconstruction process and serve as an advisory body to the Town Commission. A main responsibility of the body will be to advise the Town Commission on the policies of the Plan which are structures to mitigate future hurricane damages through the management of reconstruction. To further the intent of this Plan, the Town will make every effort to develop its capacity to identify and orchestrate various post-disaster redevelopment, while at the same time ensuring maximum local control over the redevelopment process.

1.5 **Effective Date:** The effective date of this Ordinance is July 21, 1992.

  
\_\_\_\_\_  
Mayor Harry V. Montague

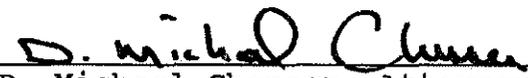
ATTEST:

  
\_\_\_\_\_  
Jean Wilkinson, Town Clerk

July 15, 1992  
Date of First Reading

July 21, 1992  
Date of Second & Final Reading

Reviewed and approved as to form only  
by the Town Attorney

  
\_\_\_\_\_  
D. Michael Chesser, Attorney

ORDINANCE 92-09

AN ORDINANCE ADOPTING THE POST-DISASTER REDEVELOPMENT PLAN

1.1 LEGAL:

**WHEREAS**, the Town of Shalimar is vulnerable to a variety of hazards which result or may result in emergencies causing substantial injury or harm to the population or substantial damage to or loss of property; and

**WHEREAS**, the Town of Shalimar shall cooperate with Okaloosa County so as to manage and implement the "Peace Time Emergency Plan, Okaloosa County, Florida", and utilize the recommendations and guidance provided in the Tri-State Hurricane Evacuation Study, Appendix C, Transportation Analysis, June 1986, by the U. S. Army Corps of Engineers, Mobile District; and

**WHEREAS**, Chapter 252, F.S., provides the Town Commission the authority to declare a state of local emergency and take actions necessary to ensure the safety and well being of its residents, visitors and property during emergencies caused by these hazards; and

**WHEREAS**, the Town of Shalimar has prepared a Comprehensive Plan in compliance with Chapter 163, F.S. and Rule 9J-5, F.A.C.; and

**WHEREAS**, the Town of Shalimar has adopted its Comprehensive Plan and Objective 11.A.8 requires the Town to develop and adopt a Post-Disaster Redevelopment Plan which will reduce or eliminate the exposure of human life and public and private property to natural hazards; now

**THEREFORE**, BE IT ORDAINED BY THE TOWN COMMISSION OF SHALIMAR, FLORIDA that this Ordinance is hereby adopted in conformance with Chapter 163, F.S., and Rule 9J-5, F.A.C. and the Town adopted Comprehensive Plan and provides an effective date and repeals all provisions of ordinances or resolutions in conflict.

1.2 Title: This Ordinance shall be known as "The Town of Shalimar Post-Disaster Redevelopment Plan" and also may be known as Ordinance No. 92-09.

1.3 Jurisdiction: The lands subject to this Plan shall be the incorporated areas of Shalimar except lands owned by Federal, State or local political entities.

## ARTICLE TWO

### FOREWORD

In 1987, the United Nations General Assembly passed a resolution calling for a decade dedicated to reducing "loss of life, property damage and social and economic disruptions caused by natural disasters". To assist in preparing for the International Decade for Natural Disaster Reduction, the Secretary-General appointed an International Adhoc Group of Experts. In January, 1990, the group's 25 findings and recommendations for immediate and long term emergency management priorities for the Decade were revealed. To illustrate the direction and intent of the ideas behind the Decade, two of the group's findings are presented below:

- Most of the world views natural disasters with fatalism. This attitude is wrong and must be changed. Societies, communities, and individuals, prepared through education, training, policy and legislation, and investment can be both disaster resistant and disaster resilient.
- Reorient government thinking to integrate pre-disaster planning into the mainstream of the government policy and decision making process, including medical preparedness for disasters, improved building codes, and land use planning.

From the United Nations General Assembly comes a mandate to conduct pre-disaster planning for the events during and following a natural disaster. Of all natural disasters, Shalimar is most vulnerable to hurricanes due to its coastline and its geographic location. The Florida State Land Development Plan (1989) has an objective that all coastal cities will have developed post-disaster redevelopment plans by 1993. Chapter 163, Part II, F.S. and Rule 9J-5 F.A.C and Objective 11.A.8 of the adopted Comprehensive Plan each require the Town to prepare a Post-Disaster Redevelopment Plan by 1992. This Plan is a continuation of the Town's Comprehensive Planning efforts and is designed to accommodate and compliment the requirements of that Plan. The Post-Disaster Redevelopment Plan is not intended to require a revision of the work already documented by emergency management officials and their planning for the immediate recovery phase after a major disaster.

In the aftermath of a hurricane or other major disaster, the ability of local governments to take effective advantage of opportunities to guide redevelopment in a way that reduces exposure to the effects of future disasters will be strongly

influenced by the regulatory environment established prior to the event. Previously established regulations help to define long-term goals and objectives for the policies that will be implemented during redevelopment. Attempts to mitigate development in high hazard areas are often constrained by the possibility of litigation resulting from restrictions imposed on the development potential of individual properties. A local government's pursuit of the general health, safety and welfare constitutes a legitimate legal basis for measures designed to reduce the impact of hurricanes/disasters, but the actual application of the principle may still subject that government to legal challenges. Property rights questions derive directly from federal constitutional principles which have been incorporated into state constitutions and statutes and include concerns over due process, the taking of private property without just compensation, and equal protection.

By the same token, the failure to take appropriate mitigative measures can potentially expose a local government to judicial findings of negligence, subjecting it to substantial liability for damages actually sustained. This is an important reason for local governments to formulate pre-hazard mitigation strategies together with post-hazard redevelopment plans.

## ARTICLE THREE

### INTRODUCTION AND PURPOSE

The Town of Shalimar is periodically threatened by severe weather phenomena: tornados, hail storms, flooding, high winds and hurricanes. A major highway running through the heart of the Town and the proximity to major military installations and large bodies of water could cause it to be subject to the effects of man-made disasters (e.g. aircraft or vehicular accidents, radioactive fall-out, oil spills, etc.). Other emergency situations, such as accidents involving hazardous/dangerous materials may occur and require pre-disaster planning.

During a major disaster event, many structures will be either damaged or destroyed. The residents of homes will need temporary housing as they pursue financial assistance for repairs or relocation. The local building permitting office will be besieged with building permit requests. At this point, many questions will arise. Without a process in place, inefficient and inconsistent decision making may result in poor land use decisions or spot zoning challenges in the turmoil of post-disaster efforts. Coordinated, centralized, informed decision-making, frequent and accurate media communiques, accurate record keeping and prioritization of recovery activities which are flexible, but never broken, are key points necessary to deal effectively with any massive disaster.

It is recognized that a plan such as this can not anticipate all of the redevelopment scenarios and problems that one will face. Nor can any local government be expected to anticipate all of the redevelopment scenarios it will face after a hurricane or major disaster. Recognizing this, it is the goal of this Plan to establish the background of data, requirements, precedence and sources of information necessary to support and adopt a Post-Disaster Redevelopment Plan and to suggest policies which will guide reconstruction and redevelopment. Thus, this Plan is designed to assist you when considering alternate policies to guide redevelopment. Further, it is designed to provide in cooperation with State, Federal, County and Town governments a plan for the purpose of minimizing exposure of human life and public and private property to any type of disaster, whether natural or man-made. Pre and post-disaster planning allows a community to capitalize more fully on mitigation opportunities after a disaster, and when developed and adopted with public involvement prior to a disaster, identifies and alleviates controversial issues that often arise after disasters.

DONT WALK

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ARTICLE FOUR

DEFINITIONS

4.1 Minor Damaged Structures. A structure that can be made habitable in a short period of time with minimal repairs. Damage may include doors, windows, floors, furnaces, water heaters, and other minor structural damages. An indicator for this category is if the cost of repair is 25% or less of the replacement cost at the time of damages.

4.2 Major Damaged Structures. A structure that can be made habitable with extensive repairs. Damage may include foundation, roof structure and major structural components. The indicator for this category is if the cost of repair is greater than 25% and less than 50% of the replacement cost at the time of damage.

4.3 Destroyed Structures. A structure that is a total loss or damaged to such an extent that repairs are not technically or economically feasible, i.e., 50% or more of replacement cost at the time of damage or destruction. Structures experiencing total destruction shall be visibly labeled condemned by a local official. Generally, FEMA requires all private structures damaged greater than 50% of their pre-disaster replacement value to be rebuilt to existing local codes and regulations.

4.4 Damage Assessment Teams. A damage assessment team's function is to assess losses to property immediately after a disaster. These teams should be identified and trained in advance of a disaster so they will be ready when needed. The following are suggestions for disaster assistant team membership:

- a) Mayor
- b) Special Services Commissioner ✓
- c) Streets and Roads Commissioner
- d) County engineer or his representative ✓
- e) Utility company personnel
- f) Public safety and fire officials
- g) Tax assessor representative
- h) County building inspectors

- i) Health officials
- j) Red Cross officials
- k) Real estate appraisers
- l) Insurance agency representatives

**4.5 Post-Disaster Reconstruction Task Force** - The Reconstruction Task Force shall be responsible for advising and making recommendations to the Town Commission on a wide range of post-storm reconstruction/redevelopment issues. The Task Force should be composed of the following individuals, reflecting a broad based representation of community interests:

- a) Mayor
- b) Special Services Commissioner
- c) Streets and Roads Commissioner
- d) Town Clerk
- e) County building inspector
- f) County water and sewer representative
- g) Public Safety Representative
- h) Fire Department Representative
- i) One representative from either or both the real estate or construction industry.

**4.6 Coastal High Hazard Area**. Coastal high hazard areas shall be defined as any land seaward of the FEMA V-zone elevation line within the Town.

## ARTICLE FIVE

### PLANNING PHASES

**5.1 Comprehensive Planning:** Ever since the Second World War, emergency management has focused primarily on preparedness. But being prepared is only one phase of comprehensive emergency management. The Town has the opportunity to deal with emergencies before they strike and the responsibility to aid recovery after a disaster. As a result, current thinking defines four phases of comprehensive emergency management. They are mitigation, preparedness, response and recovery. Each phase results from the previous one and establishes the requirements of the next one; estimates in one phase may overlap those in the previous phase and merge into the next one. Preparedness moves swiftly into response when disaster strikes. Response yields to recovery at different times depending on the extent and kind of damage. Similarly, recovery should trigger mitigation, motivating attempts to prevent or reduce the potential of a next disaster. Finally, the disaster phases know no beginning or end. The recognition of a threat can motivate mitigation as well as an actual emergency can.

**5.1.1 Mitigation (Long Term):** Any activities which actually eliminate or reduce the probability of occurrence or the effects of a disaster. It also includes long term activities which reduce the effects of unavoidable accidents. These activities can occur before, during and after a disaster and overlap all phases of emergency management. In addition to reducing hazard impacts through mitigation actions, improving preparedness, response and recovery capabilities can also reduce loss of life and property.

**5.1.2 Preparedness (To Respond):** Preparedness activities are necessary to the extent that mitigation measures have not or can not prevent disasters. Preparedness activities include the development of response procedures, design and installation of warning systems, exercising emergency operational procedures, and training of emergency personnel. Training also includes indoctrination of public officials, including administrative officials, the Mayor and members of the Town Commission. In preparedness, governments, organizations and individuals develop plans to save lives and minimize disaster damage.

**5.1.3 Response (To Emergency):** Response activities follow an emergency or disaster. These include evacuation, rescue operations, emergency medical/care, shelter programming and other emergency assistance for casualties. They also seek to reduce

the probability of secondary damage and to speed recovery operations.

**5.1.4 Recovery (Short and Long-Term):** Recovery activities begin after disaster and continue until all systems return to a normal or improved level. These include repairs to roads, bridges, electrical power, water/sewer and other public facilities and activities that restore normal service to a community. Short-term recovery returns vital life-support systems to minimum operating standards. Long-term may continue for a number of years and may include the complete redevelopment of damaged areas.

**5.2 Redevelopment Planning Policies:** Chapter 9J-5, F.A.C., requires the Town develop goals and policies and a concurrency management system that will ensure mitigation of impacts concurrent with development. It is likely that the Capital Improvements Element (CIE) for any given municipality, including Shalimar, and the levels of service documented within will be rendered immediately ineffective after a hurricane.

Chapter 9J-11.006(1)(a)3.c provides for emergency amendments to the local comprehensive plan outside of the twice a year amendment procedures. However, it is unlikely that a planning body will be able to assemble the necessary details to submit and adopt an amendment to the comprehensive plan immediately after a hurricane.

Therefore, a procedure which contemplates this must be considered. An emergency ordinance or a short-term moratorium on building may be implemented. Incorporating the policies of the local government to be exercised in an emergency can legally reinforce planning activities in an emergency situation.

## ARTICLE SIX

### POTENTIAL MITIGATION POLICIES

**6.1 Mitigation Policies:** This article presents a list of potential policies for hazard mitigation. It is useful to divide policies into those which might apply when no future development or rebuilding should take place and those which would be appropriate when conditional development or rebuilding should be allowed. A policy to prohibit development or rebuilding would mean essentially designating land for conservation, recreation or open space uses. In this case, the policy options for the Town are few and often not politically or financially feasible.

**6.2 Future Development or Rebuilding:** The following policies could be instituted to condition future development or rebuilding in the aftermath of a hurricane or any other type of disaster:

- Changes from residential to commercial uses in order to reduce evacuation needs;
- Reduction in residential density (i.e. from multi-family to single-family);
- Clustering of development on the most protected portions of the lots;
- Building and rebuilding strictly to code (including flood insurance standards);
- Relocation of public infrastructure away from hazard zones;
- Assessment of impact fees for public infrastructure and services in hazard zones (including the building of shelters in non-hazard zones); and
- Rezoning which would result in existing development becoming a non-conforming use.

**6.2.1 Development Regulation:** Several different regulations may be developed and implemented to assist local governments in the implementation of hazard mitigation policies and plans.

**6.2.1.1 Zoning:** One zoning option for coastal communities is simply to designate hazard areas as open space or conservation zones in which all future development is prohibited. Even if this were a politically feasible option, in coastal areas where

agriculture and other non-developed uses do not yield reasonable economic returns, it invites a constitutional challenge of a "taking" of private property without just compensation. A more pragmatic approach is one which seeks to reduce the overall quantity of development at risk (such as reducing development density through down-zoning).

**6.2.1.1.1 Conventional Zoning:** Reduce the quantity of development exposed.

- Local zoning ordinances must be in accordance with the local comprehensive plan.
- An increase in the minimum lot size or a reduction in the number of dwelling units permitted per acre would decrease the overall density of development.
- Certain high density uses in high hazard areas can be zoned out and declared non-conforming uses through changes in zoning districts, and, in time, a slow process of land use change might be expected. A shorter-term approach uses the non-conforming use concept as a way of preparing for and managing reconstruction after a hurricane occurs.

**6.2.1.1.2 Bonus or Incentive Zoning:** Developers may be granted additional development density if projects incorporate hazard-reduction features. These features may include the purchasing and deeding of high hazard lands to the public, or the provision of design features which may increase the ability of structures to withstand hurricane forces. However, it may counteract other hazard mitigation strategies to encourage or permit additional densities in coastal hazard areas, even if public amenities and hazard-reduction features are provided as compensation.

**6.2.1.1.3 Performance Zoning:** This approach sets standards for each zone based on the permissible effects of a development rather than specifically enumerating the types of uses, dimensions or densities permitted. If these prescribed standards are met, any use is allowed in the zone.

**6.2.2 Land and Property Acquisition:** Public acquisition of land can serve to influence the direction and timing of growth and development in a locality. Outright purchase of land in coastal areas experiencing moderate or high levels of market demand will tend to be prohibitively expensive for most local governments. The locality must be prepared, however, to take advantage of bargain sales after a hurricane when some property owners may

wish to vacate the hazard area due to the increase in cost of rebuilding.

**6.2.3 Transfer of Development Rights (TDR):** The basic concept underlying TDR is that ownership of land which includes the right to develop the land, a right which may be separated from other ownership rights and transferred to someone else. Under a mandatory program, a locality would simply zone the hurricane hazard area so that fewer units of development are allowed (or prohibit new development entirely), and the owner of the land within this zone would then be permitted to transfer all or some of this unused development density to parcels outside of the hazard-prone areas or to sell the TRDs on the open market to others who own land in areas designated for development. The local government would then permit increased levels of development in the non-hazard prone zone as a result of possessing extra development rights, thus creating a natural market for transferable development rights.

**6.2.4 Taxation and Fiscal Incentives:** In contrast to the public acquisition of hurricane-prone lands, a taxation policy might seek to reduce development by decreasing the holding costs of open space and vacant lands, in turn reducing the opportunity cost of not developing such lands for more intensive uses.

**6.2.5 Special Assessments and Impact Fees:** People who build in and inhabit coastal hazard areas often impose substantially more costs on the public than those who dwell elsewhere. An impact fee could be designed to recoup and mitigate the overall impacts of a project or development on the community at large.

**6.3 Capital Facilities and Public Infrastructure Policy:** Coastal development - its type, location, density and timing - is highly influenced by capital facilities, such as roads, sewer and water services. Such public investments have been aptly termed "growth shapers".

**6.3.1 Policies to Prevent Location of Public Facilities in High Risk Areas:** A locality can develop an explicit set of capital facilities extension policies designed to avoid high hazard areas, thus reducing the amount of development and property which will be attracted to the area and reducing the potential threats to lives and property. This approach can only become an effective deterrent, however, if development in high hazard areas is dependent upon the existence of public facilities.

**6.3.2 Relocation or Strengthening of Capital Investments After a Hurricane:** It may be possible, if the facilities are sufficiently damaged, that roads and sewers can be rebuilt in areas which are less susceptible to damage from future hurricanes. Even if the facilities are not relocated, they may be repaired and reconstructed in ways which make them stronger or less susceptible to hazards from hurricanes or other disasters. Roads and sewers can be elevated, for instance, and sewer and water lines can be flood-proofed. Also, placing power and telephone lines underground after the hurricane may help ensure safer evacuation when the next hurricane threatens.

**6.4 Information Dissemination:** More informed consumers make more rational and allocable efficient market decisions. This implies the need for an additional set of mitigation strategies which aims primarily at supplementing and enlightening individual market decisions regarding hurricane preparedness, recovery and redevelopment. Attempts to educate the housing consumer about hurricane might include brochures and other materials distributed to new and prospective residents of the community, informing them of the nature and location of hurricane hazards and informing them about what to look for in a new home or business (such as elevation and flood-proofing). The dissemination of information on the supply side might take the form of construction practice seminars for coastal builders and developers, introducing both conventional and innovative approaches to building and designing structures and to siting and planning the orientation of buildings in vulnerable locations.

## ARTICLE SEVEN

### DAMAGE ASSESSMENT PROCESS

7.1 Damage Assessment. One of the most important parts of the Town's response to an emergency or disaster situation is damage assessment. It is a key step in caring for the long-term needs of the people in the community. The process determines what has happened, what the effects are, which areas are hardest hit, what situations must be given priority and what types of assistance are needed (e.g. local, state, or federal).

7.2 Damage Assessment Teams. Trained observers should be used to assess damage. This can be accomplished by the local Damage Assessment Team (DAT), reference Article 4, Section 4.4. To conduct an accurate damage survey, local governments must have capable DATs. These teams should be identified and trained in advance of the disaster. The composition will vary depending on the severity, type of damage and the availability of personnel. Each team should have a team leader who makes sure the team has the proper forms, maps with identified areas marked, and transportation. During joint damage assessment activities involving the State/FEMA, the Town should have a team member to match up with State and Federal DAT members at all times.

7.3 Sequence of Events Leading to a Presidential Declaration. Public Law 100-707, the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (replaces Public Law 93-288, the Disaster Relief Act of 1974), which is the authorization for Federal assistance to local or State governments through a Presidential Declaration of an emergency or major disaster, requires "as a condition of any disaster loan or grant made under the provisions of this Act, the state or local government shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are to be used shall be evaluated and appropriate action shall be taken to mitigate such hazards, including safe land use and construction practices, in accordance with standards prescribed or approved by the President after adequate consultation with appropriate elected officials of general purpose local governments and the state shall furnish such evidence of compliance with this section as may be required by regulation" (FEMA, 1989). The following sections explain how a Declaration is secured and how local governments get involved.

7.3.1 Initial Damage Assessment. Immediately following a disaster, an initial damage assessment must be performed by the Town to assess the impact of the disaster. An official of the Town will be designated to conduct this generalized, preliminary

post-disaster damage assessment and provide it to the Town Administration within 24 hours. This assessment should provide a rough estimate of the type and extent of damage. Often this will require the coordination of the various municipal and County governments who will also perform their own damage assessments. Once the information has been generated, it should be transmitted to the Town Administration by telephone or facsimile and followed up with a submittal of a General Emergency Incident Report Form (Appendix A). Often in the aftermath of a major disaster that has generated obvious, extensive damages, the State and FEMA, upon request, will join the local government in completing the initial damage assessment.

**7.3.2 Local Declaration of Emergency.** Local jurisdictions have the authority to declare a local "state of emergency" pursuant to Section 252.38(6)(e), F.S. Even though a local state of emergency declaration can be initiated by the Town at any time, it must be declared prior to requesting response or recovery assistance from the County/State. Doing so lets decision-makers know that the emergency situation is beyond the response or recovery capabilities of the local jurisdiction. The State will not initiate the damage assessment process, nor seek a Presidential Declaration for a town that is not declared a local state of emergency.

The enactment of such a declaration would enable municipalities/counties to

- request State assistance, if needed;
- evoke emergency related mutual-aid assistance;
- waive the procedures and formalities otherwise required of the political subdivision by law, to respond to the emergency.

These measures pertain to:

- the performance of public works;
- entering into contracts;
- incurring obligations;
- hiring permanent/temporary workers;
- using volunteers;
- securing rental equipment;

- the acquisition and distribution of supplies; and
- the appropriation and expenditure of public funds.

**7.3.3 Preliminary State/Local Assessment.** In situations where it is not an obvious conclusion that a disaster has had a major impact on the Town, the State will initiate a damage assessment with the affected local government. The action is taken to document the severity of the impact and justify the need to pursue a request for Presidential Declaration. When the damage is of such a magnitude that it would appear a Declaration is imminent, this assessment would be combined with FEMA, thereby eliminating this step and the assessment process.

If this step is initiated, local jurisdictions can expedite the process by having the appropriate maps of the damaged areas, personnel, and transportation available to take State damage assessor to affected sites. The more expeditiously the data can be collected, the quicker a potential disaster Declaration can be obtained.

**7.3.4 State of Emergency by the Governor.** If the Town determines the emergency or disaster is beyond its ability to effectively respond, a state of emergency can be declared by the Governor through an executive order or proclamation. The action of the governor will be in support of the local jurisdiction's expressed needs. The Declaration of a state of emergency does the following:

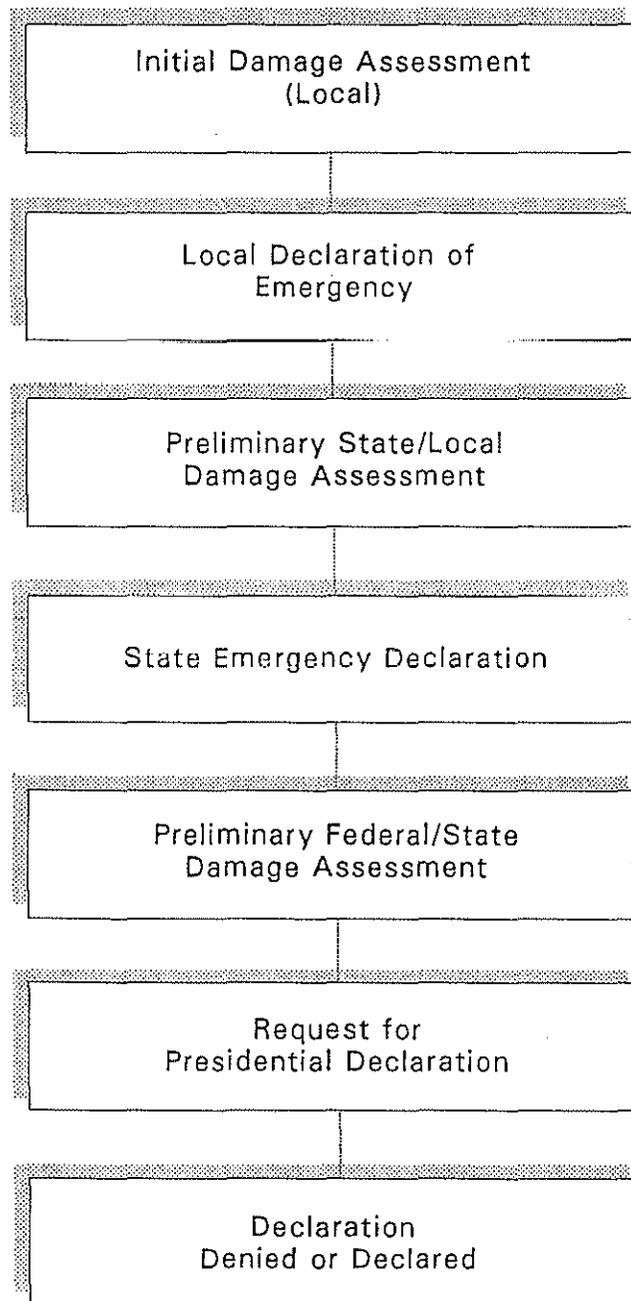
- activates the emergency response, recovery, mitigation phases of the State and local emergency management plans; and
- provides authority for mobilization and deployment of all resources to which the plans refer, pursuant to Section 252.31-60, F.S., or any other provisions of law relating to emergencies.

**7.3.5 Preliminary Federal/State Damage Assessment.** Prior to recommending a disaster declaration for the Town, FEMA will perform a damage assessment to determine if there are sufficient damages to justify a request for a Presidential Declaration. If it is obvious that there is sufficient damage for such a request, FEMA will be asked to participate in a joint local/State preliminary damage assessment to further substantiate the request. This approach will eliminate the need to conduct separate local, State, and Federal assessments. The data collected during the preliminary damage assessment will be used by the State when

preparing the formal request for Federal disaster aid.

**7.3.6 Request for Presidential Disaster Declaration.** When State and local resources are inadequate to effectively respond to an emergency or major disaster, public law 100-707, allows for Federal assistance through a Presidential Disaster Declaration. This assistance is requested through the Governor if the situation meets the criteria for a Declaration. The Governor submits a written request to the President through the Federal Emergency Management Agency, Region IV, in Atlanta, Georgia. If FEMA concurs with the request, it is sent to the President, who determines whether the request will be approved or rejected. The response is transmitted through FEMA, Region IV, back to the Governor.

# SEQUENCE OF EVENTS LEADING TO A PRESIDENTIAL DECLARATION



**7.4 Public and Private Damage Assessment.** In the aftermath of a disaster, both public and private damage assessments must be performed because of the corresponding types of Federal/State assistance available. Each type of assessment is designed to quantify the eligible amount of damage a community incurred. Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Hazard Mitigation Grant Program, creates a new program to fund additional hazard mitigation measures "which substantially reduce the risk of future damage, hardship, loss or suffering in any area affected by a major disaster". Specifically, this program can be used to relocate susceptible property that was not damaged by a hurricane and prevent it from future damage. Hence, this section provides an opportunity for the disaster area to fund large scale mitigation land use scenarios that previously were not funded by FEMA (FEMA, 1989). Section 406 provides an assistance program for public entities. This program provides funding for public relocation projects such as roadways. Section 406 authorizes "Large In-Lieu Contributions" for public and certain private non-profit facilities. If the local government or landowner determines that the public welfare would not best be served by repairing, restoring, or replacing the damaged facility, it may elect to receive a contribution not to exceed 65% of the federal contribution of eligible work of repair.

**7.4.1 Public Damages.** With the expansion of FEMA regulations addressing hazard mitigation assistance for public facilities (Hazard Mitigation Grant Program, section 404), it is more important than ever for local governments to have identified mitigation measures prior to a declaration. This includes any damage incurred by a publicly owned structure or facility which is owned by a public entity. This could include roads, bridges, buildings, utilities, etc. To be eligible, the damages must fall in one of the seven basic categories of eligibility. They include:

Debris Clearance - this category includes all storm induced debris on: public roads, including the rights-of-way; other public property; and private property when undertaken by local government forces. It can also cover the cost of public structure demolition when a structure was made unsafe by the disaster.

Protected Measures - this category addresses a need to provide emergency measures designed to protect life, safety, property and health. For example, evacuation, traffic control, barricades, etc.

Road Systems - this category includes roads, streets, bridges, culverts and traffic control devices. The categories of damage might range from some minor damage requiring repairs to complete wash-out or destruction.

Water Control Facilities - eligible damages under this category include dikes, levies, dams, drainage channels and irrigation works.

Public Building and Equipment - this should include the number and cost of buildings, supplies and/or inventory and vehicle or equipment damaged or destroyed.

Public Utility Systems - public utility systems that sustain damage could include the water system, sanitary sewer, storm drains, light and power and other utilities.

Other - the "other" category includes park and recreational facilities, public facilities under construction, and other public facility damages that do not reasonably fit in one of the six other categories.

**7.4.1.1 Public Damage Assessment Reporting.** Public damage assessment is performed in the field using Form A (Appendix B). It is used to report the damage done on each individual site. Three individual site entries can be made on each Form. Once the public damage information has been collected on Form A, Form B is used to summarize, by category, information gathered at all sites for each political jurisdiction within the Town that received damage to public property (Appendix C).

**7.4.2 Private or Business Categories.** The purpose of individual damage assessment is to determine the extent to which individuals and private businesses have been impacted by the disaster. There are two basic categories of eligible individual damage that can be reported and assessed for damages. They include:

Damage to Private or Individual Dwelling - a person whose residence has been damaged due to a disaster may qualify for various forms of disaster assistance. Water damage on the interior or wind damage to shingles, windows or siding are examples. Mobile homes should be included in this category as a separate entry. When damage assessors go into the field, they will estimate the victim's insurance coverage, estimate the victim's income, and determine the inhabitability and type of the victim's home.

Damages to Businesses - privately owned businesses that

were damaged or destroyed by the disaster can qualify for individual assistance programs. Businesses include buildings, inventory and equipment.

**7.4.2.1 Individual Assessment Forms.** Performing damage assessments to quantify individual loss and suffering is much different from performing public damage assessments. By using Forms C & D and instructions on Appendixes D and E, assessors are able to document the extent of individual damages to homes, businesses, agriculture and jobs.

## ARTICLE EIGHT

### DISASTER RECONSTRUCTION AND REDEVELOPMENT

**8.1 Intent:** Following a damaging disaster and enactment of a building moratorium, it is the intent of the Town to allow rebuilding and redevelopment in an orderly manner. The Town will control the issuance of building permits to manage the locations, timing and sequence of reconstruction and repair. It is further the intent of this Article that the Town establish, prior to a disaster, a special Reconstruction Task Force as defined in Article 4, Section 4.5 of this Plan. The Task Force will oversee the recovery and reconstruction process and serve as an advisory body to the Town Commission on reconstruction/redevelopment issues. The main responsibility of this body will be to identify opportunities to mitigate future storm damages through the management of redevelopment standards. To further the intent of this Section, the Town will make effort to develop its capacity to identify and orchestrate various post-disaster reconstruction resources, while at the same time ensuring maximum local controls over the reconstruction and redevelopment process.

**8.2 Disaster Reconstruction/Redevelopment:** Disaster reconstruction/redevelopment addresses the removal, relocation or structural modification of damaged structures for both short and long-term repair or replacement. As a condition of any Federal disaster loan or grant, the Town shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are to be used shall be evaluated and appropriate action shall be taken to mitigate such hazards, including safe land use and construction practices; thus indicating a long-term, comprehensive approach to mitigation.

**8.2.1 Determination of Damage:** A primary task of the local Damage Assessment Team is to identify structures which, as a result of the disaster event, have been damaged. The local Damage Assessment Team will recommend to the Town Administration and the County Building Inspector those structures which have: 1) been destroyed; 2) received major damage; or 3) received minor damage. The Building Inspector will then inspect the damaged structure and place each structure in one of the above categories.

**8.2.2 Declaration of a Building Moratorium:** The initial post-storm reconstruction moratorium shall be declared in effect upon the occurrence of the following:

8.2.2.1 The Town is declared a disaster area by either the Governor of the State of Florida or the President of the United States.

8.2.2.2 The Town Commission declares a local "state of emergency" and begins the initial building moratorium when the Commission finds that a moratorium is necessary for the protection of lives, safety and property, or due to the inability of the Town to maintain acceptable levels of public order and service. The Town Commission, based upon the above finding, may extend the initial moratorium until such time as a state of emergency no longer exists.

8.2.3 Initial Building Moratorium: Upon the declaration of a building moratorium, the initial post-moratorium shall be in effect for a minimum period of 48 hours. No building permits shall be issued during this time period. After expiration of this initial moratorium, the following moratorium shall apply:

8.2.3.1 Destroyed Structure Moratorium: No building permit shall be issued within thirty (30) days following the expiration of the initial moratorium for the replacement of any structure which has been destroyed, as defined in Section 4.3 of this Plan. All the replacement buildings shall be subject to meeting all the requirements of the Land Use Codes, zoning ordinances, zoning maps and all applicable sections of Town and Municipal Ordinances and applicable codes prior to the issuance of a building permit. Non-conforming uses destroyed shall be designed and constructed consistent with the adopted Future Land Use Plan Map, Land Development Code and current building regulations.

8.2.3.2 Major Damaged Structures Moratorium: No building permit for repairs of a major damaged structure shall, as defined in Section 4.2 of this Plan, be issued for at least seven (7) days following the expiration of the initial moratorium. All repairs to a major damaged structure shall meet the requirements of the Land Use Codes, zoning ordinances, zoning maps and all applicable sections of Town and Municipal Ordinances and applicable building codes prior to the issuance of a building permit. All non-conforming structures must be upgraded and will be inspected prior to issuance of Certificate of Occupancy.

8.2.3.3 Minor Damaged Structures Moratorium: Permits for the repair of minor damaged structures, as defined in Section 4.1 of this Plan, may be issued 48 hours following the expiration of the initial moratorium. All repairs to minor damaged structures shall meet the requirements of the Land Use Codes, zoning

ordinances, zoning maps and all applicable sections of Town and Municipal Ordinances and applicable codes prior to issuance of a building permit.

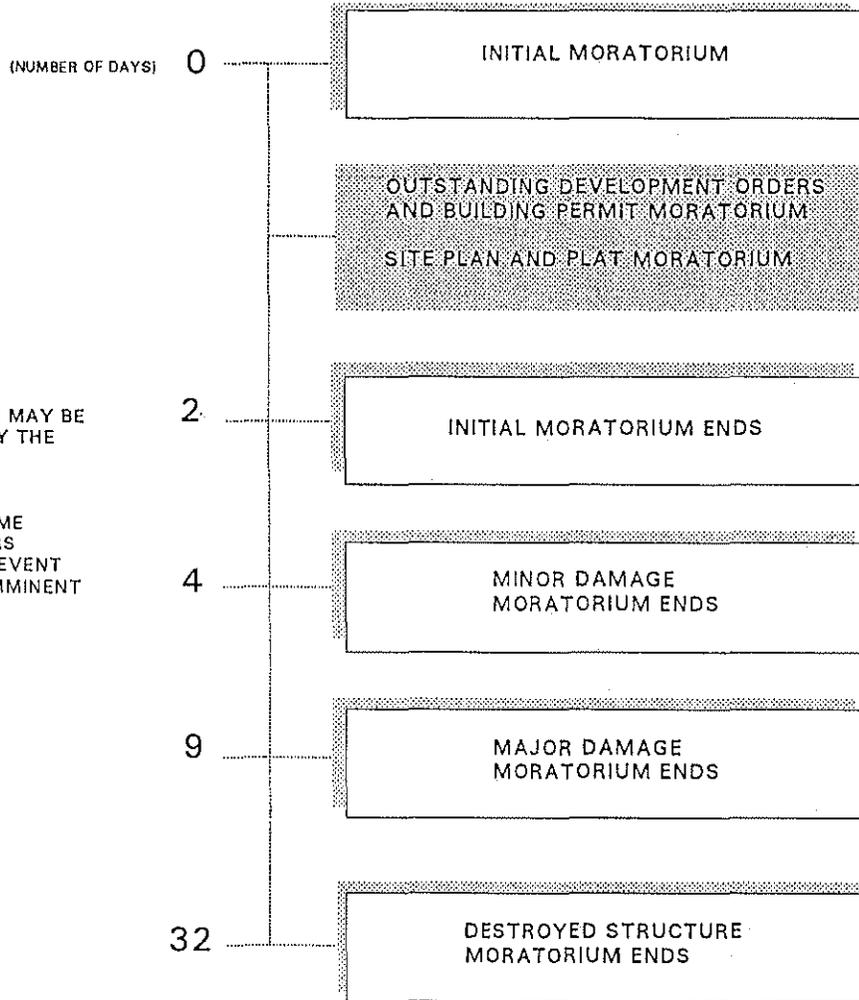
**8.2.3.4 Outstanding Building Permits Moratorium:** All building permits which were issued prior to the storm event shall be revoked and shall not be reissued for a minimum period of thirty (30) days following the expiration of the initial moratorium, unless upon finding by the County Building Inspector on a case-by-case basis that sufficient inspection staff is available to adequately inspect the structures, should construction again resume. All permits issued prior to the disaster event must meet additional requirements of the Land Use Codes, zoning ordinances, and zoning maps before building can resume. Application for building permits revoked in this Section may be reissued at no charge.

**8.2.3.5 Site Plan Review:** Site plans which have been submitted to the Town prior to the disaster shall not be reviewed by the staff, Planning and Zoning Board or Town Commission for a period of thirty (30) days following the expiration of initial moratorium. All submitted dates and review periods shall be adjusted accordingly to reflect a time period covered by the thirty (30) day moratorium.

**8.2.3.6 Review Procedures Moratorium:** No new site plans, zoning requests or subdivision plats shall be accepted by the Town for a period of thirty (30) days following the expiration of the initial moratorium. All submittal dates and review periods shall be adjusted accordingly to reflect the time period covered by this thirty (30) day moratorium.

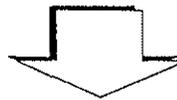
**8.2.3.7 Duration of Moratorium:** All moratoriums other than the initial moratorium as in Section 8.2.3 shall be in effect for the length of time described above and may be cancelled or extended by the Town Commission.

**8.2.4 Emergency Repairs:** While a moratorium is in effect, no construction or reconstruction activities may be undertaken, except in only minor interior repairs and emergency repairs necessary to prevent injury or loss of life or imminent collapse or other substantial additional damage to a structure. For illustrative purposes only, items that constitute minor repair may include temporary roof repairs to avoid further water damage, minor repairs to steps and a temporary shoring up of a structure to avoid imminent collapse.



\* DURATION OF MORATORIUM MAY BE CANCELLED OR EXTENDED BY THE TOWN COMMISSION.

EMERGENCY REPAIRS ANYTIME (EX. MINOR INTERIOR REPAIRS REPAIRS NECESSARY TO PREVENT INJURY, LOSS OF LIFE OR IMMINENT COLLAPSE.)



PRE-DISASTER STATUS

**8.3 Reconstruction Task Force:** The Reconstruction Task Force, created as defined in Section 4.5 of the Plan, shall be activated and mobilized upon the declaration of the initial building moratorium. The Task Force shall advise and make recommendations to the Town Administration on a wide range of post-storm reconstruction issues.

**8.3.1 Responsibilities of the Reconstruction Task Force:** The Reconstruction Task Force's primary function is to receive and review damage reports and other analysis of post-storm circumstances and to compare these circumstances with mitigation opportunities identified prior to the storm to discern appropriate areas for post-storm change and innovation. When needed, the Reconstruction Task Force can review in a more specific fashion alternative mechanisms for bringing these changes about and recommend the coordination of internal and external resources for achieving these ends.

**8.3.2 Review and Mitigative Recommendations:** In addition to the responsibilities above, the Reconstruction Task Force shall review the nature of damages, identify and evaluate alternative program approaches for repairs and reconstruction, and formulate recommendations for handling community recovery. The Task Force shall also have the following responsibilities:

- Recommend rezoning changes in areas of damage
- Reduction in residential density (i.e. from multi-family to single-family)
- Change from residential to commercial or mixed use in order to reduce evacuation needs
- Set a calendar of milestones for reconstruction tasks in conjunction with the Town Administration
- Insure building and rebuilding is strictly to code
- Initiate requests for repairs to critical water, sewer and other facilities
- Recommend the expiration or extension of a moratorium for "major" and "minor" repairs
- Recommend the lifting or extension of a moratorium for new development
- Evaluate hazards and the effectiveness of mitigation policy and recommend the amendment of policies if necessary

- Recommend clustering of development on the most protected portions of lots
- Initiate recommendations for negotiations for relocation and acquisition of property
- Recommend relocation of public infrastructure and services in hazard zones
- Participate in Federal hazard mitigation planning

The Task Force shall recommend any changes in zoning, subdivision regulation, setback, density, elevation requirements, building codes or any other ordinances or land uses which it deems necessary or advisable to prevent a recurrence of a disaster of this nature. Within the coastal high hazard area, the Town shall allow no new permanent residential structures which do not meet the construction standards established in the Land Development Code.

**8.3.3 Non-Mitigative Recommendations:** The Reconstruction Task Force may also undertake a similar process for non-mitigative local objectives and opportunities. The Task Force may recommend the Town Commission's consideration for the following specific opportunities:

- enhancement of local recreational and open space opportunities
- enhancement of public access to the Shoreline
- enhancement and restoration of local natural ecosystems
- reduction of traffic congestion, noise, and other traffic-related problems
- enhancement of the long-term economic vitality of the local commercial and industrial base
- other objectives which further the stated goals and policies of the Town's Comprehensive Plan and Land Development Code

**8.4 Conditions for Issuance of Building Permits:** Upon expiration or cancellation of an applicable building moratorium enacted in Section 8.2 of this Plan, the following additional requirements, in addition to all applicable planning and zoning

codes, shall be met prior to issuance of a building permit. Permitting of new development and redevelopment in the coastal high hazard area shall also be in consideration of impacts on hurricane evacuation times.

**8.4.1 Destroyed Structures:** The following additional requirements must be met prior to the issuance of any building permit for construction of a new structure.

- A post-storm survey and/or site plan as applicable, of the lot and proposed structure.
- Site plan approval as provided by applicable planning and zoning ordinances, zoning maps and LDC.
- On-site inspection of lot by County Building Inspector or his representative.
- Water and sewer will be restorable at street frontage of lot.
- Direct, uninterrupted, approved vehicular access to lot.
- Electrical service restorable to building site.
- All debris removed from lot.
- Septic system improvement permits issued, if required.

**8.4.2 Major Damaged Structures:** The following additional requirements must be met prior to issuance of a building permit for a major damaged structure.

- A post-storm survey and/or site plan, as applicable, of the lot and structure if there is a proposed increase of footprint of a structure over the pre-storm structure. In addition, the following information shall be provided on a survey/site plan:
  - the location of all property boundary lines
  - require the upgrading of non-conforming structures
  - site plan approval

- on-site inspection of lot by the County Building Inspector or his representative
- water and sewer will be restorable on street frontage of lot
- direct, uninterrupted, approved vehicular access to lot
- electrical service restorable to building site
- septic system improvement permits issued, if required

**8.4.3 Minor Damaged Structures:** The following additional requirements must be met prior to issuance of a building permit to repair a minor damaged structure:

- A post-storm survey and/or site plan, as applicable, of the lot and structure if there is a proposed increase in the footprint of the structure over the pre-storm structure. In addition, the following information shall be provided on the survey/site plan:
  - the location of all property boundary lines
  - site plan approval
  - on-site inspection of lot by the County Building Inspector or his representative
  - vehicular access to lot
  - all debris removed from lot
  - septic system improvement permits issued, if required.

**8.5 Policy on Reconstruction of Roads, Easements and Infrastructure:** Provide roads, public facilities and services which guarantee to the greatest extent possible the health, safety and welfare of the community and which does not require future expenditures for the public infrastructure in the Coastal High Hazard Area.

**8.5.1 Public Facilities:** Repair in place facilities which are essential to the immediate health, safety, or welfare of citizens, or work to provide the impaired service to residents

through alternative means. The Town shall coordinate the planning and provision of emergency water and sewer services with Okaloosa County. This shall include, but is not limited to, executing and entering into local agreements, locating and inventorying existing lines, installing meters and conducting engineering studies to determine the amount of pressure/capability available as compared to required. In case of an emergency disaster affecting water and sewer facilities, contact the County Emergency Management Director at 651-7150 (office), 664-8152 (beeper), 244-2522 (home) or 582-1239 (cellular). Also, for emergency water supply to critical areas, contact Okaloosa County Water and Sewer at 651-7171 or 651-7174 (nights and holidays).

**8.5.2 Public Roads and Easements:** Prior to the consideration of an expenditure of public funds for the repair or construction of Town roads which are destroyed or damaged by a disaster, the Town shall conduct adequate studies and explore alternative solutions, including, but not limited to, abandonment procedures, special assessment and condemnation.

**8.5.3 Infrastructure:** No public infrastructure shall be allowed in the coastal high hazard area, except for that needed to provide public access to the shoreline, to serve public parks that have been approved by the Town, state and federal agencies, and protect or enhance natural resources. Public expenditures in the CHHA shall be limited to maintaining the existing service capacity, except for recreation facilities. Provision of water and sewer service at private expense to existing lots of record will be permitted, as long as such provision does not result in conflict with policies for: criteria adopted for determining when structures can be rebuilt; the land development regulations; and the state policy to limit public expenditures that subsidize development permitted in coastal high hazard areas, except for enhancement of natural resources. New sanitary sewer facilities in the coastal high hazard area shall be flood-proofed.

**8.5.4 Private Roads and Easements:** It shall be the policy of the Town not to expend public funds for the repair reconstruction of any private road or vehicular easement where it is damaged or destroyed as a result of a disaster, except in conjunction with the repair and maintenance of the County's water and sewer system.

**8.6 Acquisition of Property:** The aftermath of a disaster can present an opportunity to achieve substantial progress in hazard mitigation by the rapid acquisition of land. The Town will take advantage of opportunities which may arise to acquire or purchase

land following disaster. To this extent, the Town will establish purpose and identify in advance where priority areas are located and will develop in advance decision making and funding mechanisms to ensure rapid acquisition. The selection of parcels to be purchased based on a criterion of hazard reduction per dollar spent could maximize the use of public money for such a program. The Town shall identify acquisition areas which would satisfy multiple community objectives, including, but not limited to, open space, parks and recreation sites, historic or scenic areas, or areas for location of Town facilities and any other use allowed by law.

## ARTICLE NINE

### FEDERAL ASSISTANCE PROGRAMS AND PROCESS

9.1 Federal and State Disaster Aid Programs. Following a major disaster, there are a large number of Federal and State programs available to aid in disaster relief and reconstruction. The programs can provide assistance or funds to local government units as well as providing information about assistance that is available to individuals, businesses, families and non-profit associations. Some programs can only be implemented upon declaration of a major disaster by the President of the United States. Other programs can be made available independently of a Presidential Declaration or a major disaster or emergency.

9.2 Policy. It should be the policy of the Town to appoint a facilitator who, as directed by the Town, will be responsible for:

- determining the types of assistance available to the Town and the type of assistance most needed
- assisting in the coordination of Federal disaster recovery efforts
- coordinating Federal and State programs of assistance
- informing the community of types of assistance programs available
- recommending to the Recovery Task Force and the Town Administration programs which are available to the Town and then act as facilitator in securing these programs

9.3 Federal Assistance Process. When all of the eligible public and individual damages have been assessed, and the request for a Presidential Disaster Declaration has been prepared and approved by the President, a variety of Federal programs can be made available to public entities and individuals. These programs are designed to bring a community, and its residents, back to a pre-disaster condition. It is important to note that there are no longer separate public and individual disaster declarations. When a Presidential Disaster Declaration is approved, both individuals and public assistance are automatically offered. The following is a brief explanation of both types of assistance.

**9.3.1 Public Assistance.** Public assistance is that part of disaster relief through which the Federal government supplements the efforts of State and local governments to return the disaster area to pre-disaster conditions. These efforts primarily address the repair and restoration of public facilities, infrastructure, or services which have been damaged or destroyed. There are two types of public assistance authorized: "emergency" and "permanent" work. Emergency work includes efforts to save lives, protect property and maintain operation of essential facilities on a short-term basis until permanent restoration can be made. Permanent work involves action necessary to repair, restore, restruct or replace public, and certain private non-profit facilities damaged or destroyed.

Project application for public assistance may be approved to fund a variety of projects that fall within the eligibility categories identified in Section 7.4.1 of this Plan.

**9.3.2 Flood Insurance Requirements.** One very important element in receiving public assistance are the requirements concerning flood insurance. Public Law 100-707 makes it very clear that all applicants for public assistance must have flood insurance. If they do not have flood insurance at the time of the disaster, eligible cost will be reduced by the maximum amount of flood insurance proceeds the applicant could have received had the facility been fully covered by flood insurance. Also, applicants will be required to commit to maintaining insurance coverage for the total eligible amount of the damaged as a condition to receive public assistance. No assistance for any facility will be available in future disasters, unless the required insurance has been obtained and maintained.

**9.4 Method of Funding.** Recent changes in Public Law 93-288 (Public Law 100-707) have streamlined the funding methods for public assistance programs. Currently, there are two types of grants (funding methods) available that are based on the cost of the project, and two funding options available, either of which can be used under each of the grants. Each grant is explained below.

**9.4.1 Large Project Grant.** When the total cost to repair or replace eligible public damage is \$36,500.00 (adjusted annually according to the Consumer Price Index) or more, a large public grant can be secured. Such grants are used to restore public or private non-profit facilities to their pre-disaster condition.

**9.4.2 Small Project Grant.** When the total cost to repair or replace eligible damage is less than \$36,500.00, a small project grant can be secured. Once approved, these funds are made totally available at the beginning of the project. At its completion, the applicant certifies the work is completed. The State will perform a final inspection.

**9.5 Funding Options.** The following funding options can be used by the applicant if they feel it will benefit their situation. They are designed to give the applicant a greater degree of flexibility. Both options can be used under large or small project grants, and are voluntary.

**9.5.1 Alternate Projects.** Often, when a community applies for a large or small grant, they will determine that the public welfare would not be best served by repairing, restoring, reconstructing, or replacing a damaged facility. Under the "alternate project" option, the community could receive 67.5% of the original damage estimate for use on: other public facilities; constructing new facilities; or, funding hazard mitigation activities. Funds necessary for completing the alternate project would come from local sources.

**9.5.2 Improved Projects.** When the applicant decides to exceed the original design and value of a damaged facility instead of simply restoring it to its pre-disaster condition, the "improved project" option can be approved. The applicant could receive 87.5% (Federal/State contribution) of the original damage estimate and provide the remaining funds necessary to complete the project.

**9.6 Public Assistance Process.** The process for securing public assistance for a community site, once a Presidential Declaration has been declared, is described below. The process involves all levels of government at various stages.

**9.6.1 Applicants Briefing (Step 1).** As soon as possible, following the President's Declaration of an emergency or major disaster, the State Coordinating Officer and the State Public Assistance Officer will coordinate an applicant's briefing at the local level. This meeting acquaints the applicants with a public assistance process and project administration. Appropriate Town personnel should attend the applicant's briefing, including those who will:

- know the general location of all disaster damages;
- have the authority to sign for Federal assistance for the Town, including the "Notice of Interest" form (Appendix F); and
- be responsible for recording data and maintaining documentation of time, repairs and costs.

**9.6.2 Inspector's Briefing (Step 2).** Once Notice of Interest (NOI) forms are collected, they are reviewed to determine the types of public damages applicants have identified. At this point, Damage Assessment Teams (DAT) are formed based on the need expressed on the NOIs. Each DAT should have Federal/State and local membership. These assessors are briefed on their appropriate procedures to do a site-by-site detail damage assessment, and how to prepare a damaged survey report.

**9.6.3 Damage Survey Report Preparation (Step 3).** The DATs are then sent into the field. Each damage site is surveyed and a Damage Survey Report (DSR) is prepared. The FEMA DAT member will prepare the DSR. The State and local DAT members sign the DSR upon completion, certifying that they concur or do not concur with the scope of work and the estimated repair costs.

**9.6.4 FEMA and State Review (Step 4).** As the DSRs are prepared, they are reviewed by FEMA and the State Public Assistance Officer for completeness. Problems are discussed in an effort to resolve them prior to FEMA's formal review.

**9.6.5 Application Preparation (Step 5).** Once the State has approved the DSRs, a State Project Application is prepared that includes all DSRs, and submitted to the Disaster Recovery Manager (FEMA) for approval.

**9.6.6 Advance Funds (Step 6).** Once the Project Application has been approved, funds are advanced to the State through a letter of credit. For (large project) grants, the State then forwards the money to the approved applicants on a cost reimbursement basis. For (small project) grants, the entire amount of the proposed project is forwarded to the applicant.

**9.6.7 Completion of Work (Step 7).** When the "large project" is completed, the applicant will submit a Project Summary of Documentation Form to DEM, along with request for final inspection. Once the State has reviewed the Documentation Form,

a final inspection will be scheduled. When a "small project" is completed, the applicant must submit to the DEM a certification that the work has been completed in accordance with the Project Application. If the total amount of the grant was not used, the applicant can use the remaining funds for other appropriate purposes, subject to State approval.

**9.6.8 Final Inspection and Certification (Step 8).** The State will perform the final inspection to ensure the project was completed per the scope of work, and certify that the work and cost are in compliance with the provisions of the FEMA/State Agreement.

**9.6.9 Final Payment (Step 9).** For large projects, once the final inspections are completed and any discrepancies are resolved, the applicant will submit a request for final payment.

**9.6.10 Single Audit Act (Step 10).** All recipients of public assistance will be audited per the requirements of the Single Audit Act of 1984, Circular OMB A-128.

**9.6.11 State Approval of Audit (Step 11).** Once the audits are performed, the State must approve the audit report. All audit exceptions and discrepancies will be resolved prior to closing out the project.

Public damage assessment is performed in the field using Form A. It is to be used to report the damage done on each individual site. Three individual site entries can be made on each Form A. Brief instructions on how to fill out Form A follows:

DATE: Date form is filled out.

COUNTY: County damage occurred in.

NAME OF APPLICANT: Governmental jurisdiction filling out form.

NAME OF LOCAL CONTACT: Person state/federal personnel should contact.

PHONE NUMBER: Telephone number of contact person.

SITE NUMBER: Sequential number assigned the site.

CATEGORY: The appropriate eligible category (A-G).

LOCATION: Best applicable address available.

DESCRIPTION OF DAMAGE: Brief, but concise description of damage.

IMPACT: Describe impact damage is having on community system.

PERCENT COMPLETE: Percent of repair already undertaken.

COST ESTIMATE: Estimated cost to replace/repair damage.

**9.7 Individual Assistance.** After the President signs the disaster Declaration, it is important to inform affected individuals of the programs available to them, and to assist them in obtaining any aid to which they may be entitled. To make it convenient for affected individuals to obtain information and assistance, disaster application centers may be established in each of the declared Counties. Representatives of Federal, State, local and volunteer organizations are then made available at these centers to assist disaster victims applying for assistance. There is a wide range of programs providing disaster assistance to individuals including the following:

**9.7.1 Small Business Administration (SBA).** Once implemented, the SBA program can offer low interest loans to individuals, business and farmers for refinancing, repair, rehabilitation or replacement of damaged property (real and personal). A SBA declaration can be independently or in concert with a Presidential Declaration. There must be a minimum of 25 homes or businesses with 40% or more insured losses and/or 5 business with substantial economic or physical losses.

**9.7.2 Temporary Housing.** In the event of a presidentially declared disaster, a Temporary Housing Program may be authorized in order to meet the housing needs of disaster victims. The Program has several components including:

**9.7.2.1 Mortgage and Rental Assistance Program.** Applicable for individuals or families who have received written notice of eviction or foreclosure due to financial hardship caused by the disaster.

**9.7.2.2 Rental Assistance.** Provided to homeowners of renters whose dwelling is determined unlivable as a direct result of the disaster.

**9.7.2.3 Minimal Repairs Program.** Provides money for owner-occupied, primary residences which have sustained minor damage, and are unlivable as a direct result of the disaster.

**9.7.2.4 Mobile Homes or Other Readily Fabricated Dwellings.** When all other avenues are exhausted, FEMA may initiate the mobile home program. Such homes are moved to, or near, the disaster site and set-up. The State of Florida does not have a temporary housing program. Therefore, FEMA will manage the temporary housing program, should it be needed in Florida.

**9.7.3 Individual and Family Grant Programs.** The Individual and Family Grant Program provides grants up to \$10,000.00 to help families meet serious needs and necessary expenses that are not covered by other governmental assistance programs, insurance or other conventional forms of assistance. Financial aid can be provided under the following categories

- medical expenses;
- transportation costs;
- home repair;
- replacement of essential property;
- protective measures; and
- funeral expenses.

75% of the costs are funded by FEMA and 25% by the State and/or the local government.

**9.8 Disaster Unemployment Assistance.** Individuals unemployed as a result of a major disaster, and not covered by regular State or private unemployment insurance programs, will be eligible for unemployment benefits. The weekly compensation received will not exceed the maximum amount of payment under the Unemployment Compensation Program of Florida, and may be provided until an individual is re-employed, or up to 26 weeks after the major disaster is declared, whichever is the shortest period.

Other individual assistance programs that could be activated, if appropriate, are:

- food coupons (U.S. Department of Agriculture)
- food commodities
- legal services
- crisis counseling
- economic injury loans
- tax information
- emergency conservation measures program
- agriculture assistance

- Veterans Assistance
- Cora Brown Fund
- waiver of penalty for early withdrawal of funds or certain time deposits

9.9 Conclusion. This Section is designed to briefly describe the sequence of events necessary to secure assistance following an emergency or disaster. More detailed information is available by consulting the "disaster assistance manual" (prepared by the Florida Department of Community Affairs, Division of Emergency Management), and the State of Florida Peace Time Emergency Plan (1985 version). Copies of these documents can be obtained through the Division of Emergency Management, 2740 Centerview Drive, Tallahassee, Florida 32399-2100, or by telephone at 904-487-4915.

# **GENERAL EMERGENCY INCIDENT REPORT FORM**

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*APPENDIX A*

POST-DISASTER REDEVELOPMENT PLAN

## GENERAL EMERGENCY INCIDENT REPORT FORMAT

DATE		TIME
AGENCY	PERSON	COMMUNICATION/SYSTEM
INCIDENT DATE/TIME	INCIDENT TYPE	LOCATION/COUNTY/CITY/LOCALITY

INCIDENT CONCLUDED DATE/TIME	OR CONTINUES
------------------------------	--------------

	FATALITIES	
	INJURED (HOSPITALIZED)	LOCATION
	INJURED OTHER	

	HOMES DESTROYED		DAMAGED
	BUSINESS DESTROYED		DAMAGED
	OTHER DESTROYED		DAMAGED

EVACUATION NEEDED	Yes No	EVACUATION NOW OCCURRING	Yes No	SHELTERS OPENED	Yes No
-------------------	-----------	--------------------------	-----------	-----------------	-----------

NUMBER TO BE EVACUATED NUMBER OF SHELTERS TOTAL EXPECTED TO EVACUATE			
RED CROSS <input type="checkbox"/>	COUNTY <input type="checkbox"/>	DHRS <input type="checkbox"/>	OTHER (DESCRIBE) <input type="checkbox"/>

SHELTER NAME(S)	LOCATIONS

### REQUEST FOR STATE ASSISTANCE

STATE ASSISTANCE REQUESTED	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Needed	Describe.
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**PUBLIC PROPERTY PRELIMINARY  
DAMAGE ASSESSMENT ESTIMATE  
FORM AND INSTRUCTIONS**

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*APPENDIX B*

POST-DISASTER REDEVELOPMENT PLAN

Once the public damage information has been collected on Form A, Form B is used to summarize, by category, information gathered at all sites within a given political jurisdiction. Form B must be completed for each political jurisdiction within the Town that received damage to public property. Brief instructions for completing Form B are as follows:

DATE: Date form is filled out.

TOWN: Town/County damage occurred in.

NAME OF APPLICANT: Political jurisdiction filling out form.

NAME OF LOCAL CONTACT: Appropriate contact person.

PHONE NUMBER: Telephone number of local person.

POPULATION: Population of applicant's jurisdiction.

TOTAL BUDGET: Total budget of applicant and current balance.

DEPARTMENT BUDGET: Leave blank.

YTD EXPEND: Leave blank.

DATE FY BEGINS: Date local fiscal year begins.

CATEGORY: Appropriate categories (A-G).

NUMBER OF SITES: List the number of sites per category.

TYPES OF DAMAGE: Brief summary of damages.

COST ESTIMATE: Estimated cost to repair/replace category summary.

FUND/ACCOUNT: Leave blank unless there is a contingency fund. Enter total.

AVAILABLE BALANCE: Enter balance of contingency fund.

GENERAL IMPACT 1-2-3: Answer questions briefly.

RESPONSE CAPABILITY: Provide brief explanation.

IMPACT ON PUBLIC SERVICES

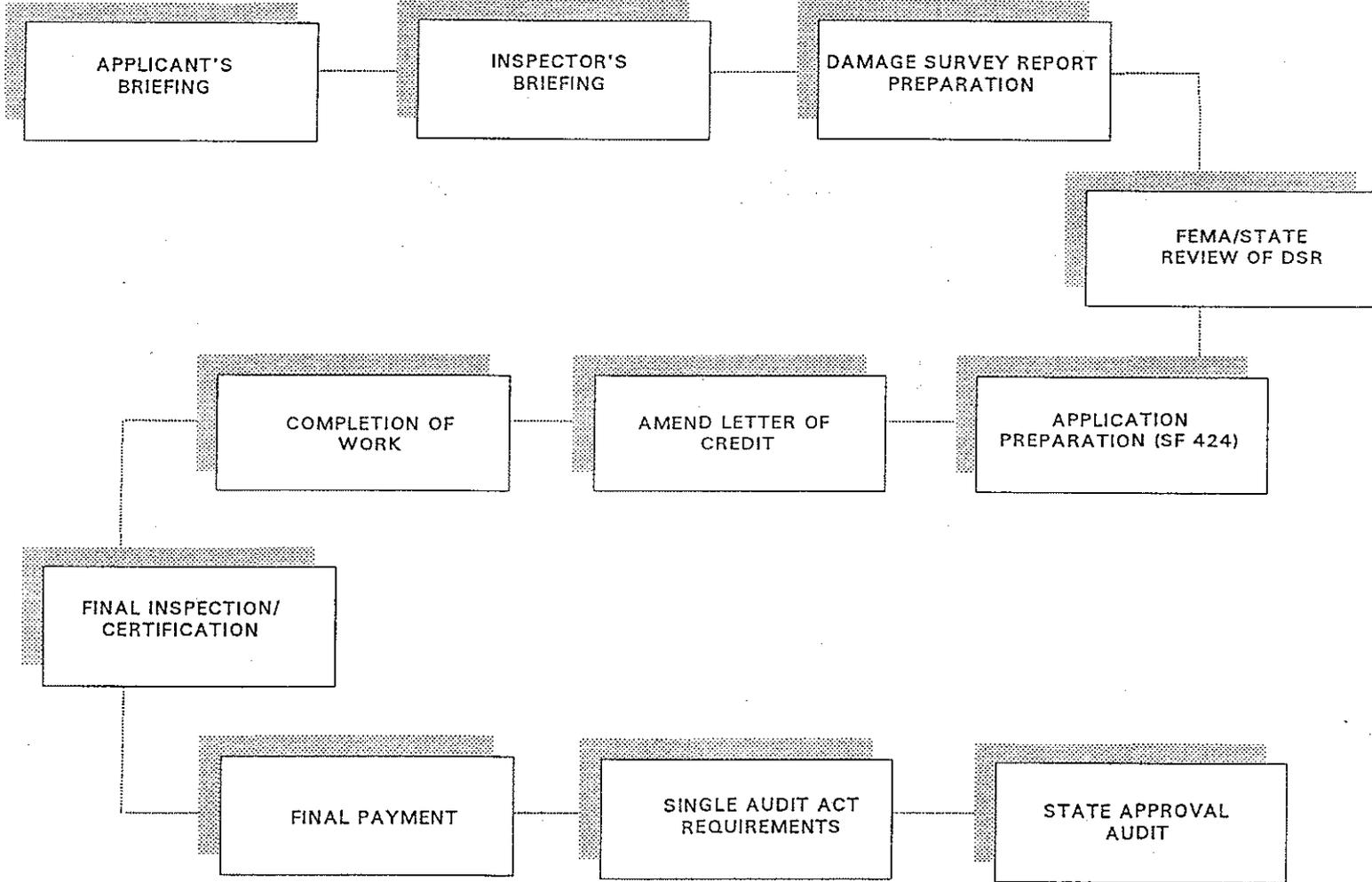
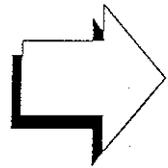
IF DECLARATION IS NOT MADE: Provide brief explanation.

NAME OF INSPECTORS: Name of person who did inspection.

AGENCY: Who the inspector works for.

PHONE NUMBER: Telephone number of inspector.

# PUBLIC ASSISTANCE FLOW CHART



# PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT ESTIMATE

DATE

NAME OF APPLICANT		NAME OF LOCAL CONTACT		PHONE NUMBER
COUNTY	POPULATION	TOTAL BUDGET	DATE FY BEGINS	
DEPARTMENT BUDGET			YTD EXPENDITURES	

CATEGORY	NO. OF SITES	TYPES OF DAMAGE	COST ESTIMATE	LOCAL FUND RECOVERY	
				ACCOUNT	BALANCE

**A. GENERAL IMPACT**

1. Identify and describe damages which constitute a health and/or safety hazard to the general public.
2. Population adversely affected directly or indirectly by the loss of public facilities or damages.
3. What economic activities are affected by the loss of public facility or damages?

**B. RESPONSE CAPABILITY**

Can the applicant respond and recover from the damages quickly and without degradation of public services? Describe.

**C. IMPACT ON PUBLIC SERVICES IF DECLARATION IS NOT MADE**

(e.g. referral of permanent repairs, impact on ongoing services and capital improvements, etc.) Describe.

NAME OF INSPECTOR	AGENCY	PHONE NUMBER(S)
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**PUBLIC PROPERTY PRELIMINARY  
DAMAGE ASSESSMENT SUMMARY  
FORM AND INSTRUCTIONS**

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*APPENDIX C*

POST-DISASTER REDEVELOPMENT PLAN

# PUBLIC PROPERTY PRELIMINARY DAMAGE ASSESSMENT ESTIMATE

DATE \_\_\_\_\_ COUNTY \_\_\_\_\_

## APPLICANT INFORMATION

NAME OF APPLICANT	NAME OF LOCAL CONTACT	PHONE NUMBER
-------------------	-----------------------	--------------

## DAMAGE CATEGORIES

- |                        |                             |          |
|------------------------|-----------------------------|----------|
| A. DEBRIS CLEARANCE    | D. WATER CONTROL FACILITIES | G. OTHER |
| B. PROTECTIVE MEASURES | E. BUILDING AND EQUIPMENT   |          |
| C. ROADS SYSTEM        | F. PUBLIC UTILITY SYSTEM    |          |

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
----------	----------	---

DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
----------	----------	---

DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

SITE NO.	CATEGORY	LOCATION (Use map, location, address, etc.)
----------	----------	---

DESCRIPTION OF DAMAGE

IMPACT	% COMPLETE	COST ESTIMATE
--------	------------	---------------

NAME OF INSPECTOR	AGENCY	PHONE NUMBER(S)
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**PRELIMINARY HOUSING DAMAGE  
ASSESSMENT ESTIMATES  
FORM AND INSTRUCTIONS**

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*APPENDIX D*

POST-DISASTER REDEVELOPMENT PLAN

Performing damage assessment to quantify individual loss and suffering is much different from performing public damage assessment. By using Forms C and D, assessors are able to document the extent of individual damages to homes, businesses and jobs. Brief instructions for filling out each form follows, starting with Form C.

HEADING: Fill in the town, county, state, and type disaster.

COLUMN (a): Enter house or apartment number for each unit.

COLUMN (b): Enter best address available for each structure.

COLUMNS (c-d): Check if home is primary or secondary residence.

COLUMNS (h-i): Check if home is single family, multi-family or mobile home.

COLUMN (j): Check if damage to home is minor, meaning dwelling is uninhabitable, but can be repaired in two days, at less than \$3,000.00.

COLUMN (k): Major, meaning it will take two or more days, and exceeds \$3,000.00.

COLUMN (l): Destroyed, meaning it is not feasible to repair.

COLUMN (m): Inaccessible/no utilities are available.

COLUMN (n): Inhabitable - affected - the basic living unit is unaffected, but porch, garage, etc., is damaged.

COLUMNS (o-p): Write in the height of the water over the first or second floor.

COLUMN (q): Is the damage site suitable for a mobile home?

COLUMNS (r-t): Check the appropriate column if estimated owner income is low, medium, or high.

COLUMN (u): Check if the basic living unit is substandard.

COLUMN (v): Enter the percent of insured loss.

The instruction for Form D are as follows:

**BUSINESS AND INDUSTRY  
PRELIMINARY DAMAGE ASSESSMENT  
RECORD FORM AND INSTRUCTIONS**

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*APPENDIX E*

POST-DISASTER REDEVELOPMENT PLAN



The instructions for Form D are as follows:

HEADING: Fill in affected town, county, state, type of disaster, designation of disaster assessment team.

COLUMN (1): Enter name of business or plant.

COLUMN (2): Enter the best available address.

COLUMN (3): Provide one or two word description of business type.

COLUMN (4): Is this business only one of its kind in the community?

COLUMN (5): Does business provide a direct service to the community (e.g. food, gas, medical)?

COLUMN (6): Is damaged business a major community employer?

COLUMN (7): If loss of business impacts community in other fashion, provide description on back of form.

COLUMN (8): Operable, but affected - business is damaged, but still operable.

COLUMN (9): Inoperable, but it would only require minor repairs for business to become operable.

COLUMN (10): Inoperable, requiring major repairs for the business to resume.

COLUMN (11): Inoperable and not feasible to repair - destroyed.

COLUMN (12): If business is inaccessible due to isolation by way of water, roads, etc.

COLUMN (13): If business has no utilities and cannot operate.

COLUMN (14): Enter the level of water depth over the main floor.

COLUMN (15): Provide the amount of insured loss to the business.

COLUMN (16): Determine how many days the business will be out of operation.

COLUMN (17): Total employment provide by the business.

COLUMN (18): Determine how many employees are unemployed in the business due to the disaster.

COLUMN (19): Estimate the number of days employees will be out of work.

COLUMN (20): Enter number of employees who will be entitled to receive unemployment insurance.

COLUMN (21): Determine the number of employees needing Disaster Unemployment Assistance by subtracting Column 20 from 18.

COLUMN (22): Determine the estimated days employees needing Disaster Unemployment Assistance will be out of work.

# NOTICE OF INTEREST

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*APPENDIX F*

POST-DISASTER REDEVELOPMENT PLAN

NOTICE OF INTEREST  
IN APPLYING FOR FEDERAL DISASTER ASSISTANCE

OMB NO. 3067-0033

DECLARATION NUMBER	PROJECT APPLICATION NUMBER	NOI DATE
FEMA - DR		

THE PURPOSE OF THIS FORM IS TO LIST DAMAGES TO PROPERTY AND FACILITIES SO THAT INSPECTORS MAY BE APPROPRIATELY ASSIGNED FOR A FORMAL SURVEY.

REQUIREMENTS FOR FEDERAL DAMAGE SURVEY

A. DEBRIS CLEARANCE

- On public roads/streets including ROW
- Other Public Property
- Private Property  
*(When undertaken by local Govt. forces)*
- Structure Demolition

B. PROTECTIVE MEASURES

- Life and Safety
- Property
- Health
- Stream/Drainage

C. ROAD SYSTEM

- Roads     Streets     Traffic Ctrl
- Bridges     Culverts     Other

D. WATER CONTROL FACILITIES

- Dikes                       Dams
- Drainage                 Irrigation
- Levees                     Other

E. BUILDINGS AND EQUIPMENT

- Buildings and Equipment
- Supplies or Inventory
- Vehicles or other equipment
- Transportation Systems
- Other

F. PUBLIC UTILITY SYSTEMS

- Water
- Sanitary Sewerage
- Storm Drainage
- Light/Power
- Other

G. OTHER (Not in the above categories)

- Park Facilities
- Recreational Facilities

\* Indicate type of facility      NOTE: If private non-profit, provide name of facility and/or private non-profit owner.

NAME OF POLITICAL SUBDIVISION OR ELIGIBLE APPLICANT	PRIVATE NON-PROFIT	COUNTY

AGENT/TITLE

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BUSINESS ADDRESS (include Zip Code)

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BUSINESS TELEPHONE (include Area Code and extension)	HOME TELEPHONE (include Area Code)



**Section 5.10**

**Unincorporated Okaloosa County**





## Unincorporated Okaloosa County

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### **Section 5.10.02 Vulnerabilities**

#### **Section 5.10.02.01 Introduction**

The intent of this section is to provide a vulnerability assessment for the potential damage and estimated loss to building structures in the unincorporated areas of Okaloosa County.

This section includes a brief summary description of the unincorporated county's vulnerability to each hazard and the impact of each hazard on the unincorporated areas. It also describes the vulnerability in terms of the types and numbers of repetitive loss properties in the identified hazard areas. Additionally, this section describes vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area.

The section also provides an estimate of potential dollar losses to vulnerable structures and a description of the methodology used to complete the estimate. Lastly, this section describes vulnerability in terms of providing a general description of land uses and development trends within the various jurisdictions so that mitigation options can be considered in future land use decisions.

#### **Section 5.10.02.02 Methodology**

The Okaloosa County Staff used the same methods of quantifying the estimated dollar losses to the vulnerable structures potentially impacted by each hazard for the unincorporated areas of Okaloosa County as the overall County. Therefore, please refer to Okaloosa County's Overall Vulnerabilities, Section 4.02.02, for more information.

#### **Section 5.10.02.03 Summary Description of Unincorporated Okaloosa County**

The unincorporated areas of Okaloosa County house the largest concentration of residents with a total estimated population of 180,822 based on a 2010 Census. There are approximately 53,143 parcels of land in the unincorporated areas that have a "Just Value" of approximately \$10,333,259,032.

Okaloosa County is split into three geographic tiers; south county, Eglin Air Force Base and Hurlburt Field, and north county. The unincorporated areas of the south county are located directly on the Gulf of Mexico, Choctawhatchee Bay, and Santa Rosa Sound. Due to the presence of Eglin Air Force Base, most of the unincorporated population is geographically constricted to living on pockets of non-federal lands that are located mostly as enclaves or in between the municipalities. There are 3.04 miles of coastline along the Gulf of Mexico, 48.48 miles along the Choctawhatchee Bay, and 12.36 miles along the Santa Rosa Sound.

Okaloosa County also has a significant portion (45%) of unincorporated land that is federally owned and part of Eglin Air Force Base and Hurlburt Field. Utilities and public infrastructure, housing, research facilities, aircraft operations, and other components on the bases are federally controlled. Although these areas are equally vulnerable to the impacts of natural disasters,



**Unincorporated Okaloosa County**

particularly flooding, storm surge, and hurricanes, the County does not control mitigation activities in these areas.

**Section 5.10.02.04 Vulnerable Populations**

Hazards do not uniformly affect the entire population. Therefore, special attention needs to be given to the more vulnerable populations. In general, the selected populations are more vulnerable to some of the hazards due to their more limited mobility and resources to prepare before and respond after a hazard. In particular, populations that are language isolated may not be able to understand the important hazard information being communicated to them. Special mitigation efforts targeted at these populations may be necessary. Please refer back to the overall County’s Vulnerability Assessment for further explanation on these vulnerable populations. The following categories listed below have been determined to be the vulnerable populations in this analysis.

**Table 5.10.02.04.1:** Estimated Vulnerable Populations in Unincorporated Okaloosa County, 2014

<b>Population</b>	<b>2010 Census Percent Population</b>	<b>2014 Estimate</b>
<b>Elderly</b>	18.6% %	13731
<b>Language Isolation</b>	0.75%	642
<b>Disabled</b>	35.6%	25146
<b>Single Parent</b>	20.15%	2617
<b>Poverty</b>	9.6%	7974
<b>Minority</b>	49.2%	8370

Note: The table was generated through the extrapolation of U.S. Census data (it is only an estimate).  
Source: 2010 Census; U.S. Census Population Division

**Section 5.10.02.05 Repetitive Loss Properties**

According to FEMA, a *repetitive loss structure* is “an NFIP-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978” (FEMA, 2010). The hazards of hurricanes, tropical storms, storm surge, flooding, and thunderstorms are responsible for repetitive loss properties. Historically, these properties are more vulnerable to certain hazards than other structures in the County because they have already experienced significant flood damage. The following tables depict the repetitive loss properties and their flood zones in the unincorporated areas in Okaloosa County.



**Unincorporated Okaloosa County**

**Table 5.10.02.05.1:** Repetitive Loss Properties in Okaloosa County’s Unincorporated Area

	<b>Total Building Payment</b>	<b>Total Contents Payment</b>	<b>Total Losses Claimed</b>	<b>Total Paid</b>
<b>Unincorporated</b>	\$56,785,038.03	\$9,005,406.17	726	\$65,790,444.20

Source: FEMA, 2012

**Table 5.10.02.05.2:** Flood Zones of Repetitive Loss Properties in Okaloosa County’s Unincorporated Area

<b>Flood Zones</b>	<b>A,AE</b>	<b>V,VE</b>	<b>B,C,X</b>
<b>Total Properties</b>	154	17	138

Source: FEMA, 2016

**Section 5.10.02.06 Hurricane and Tropical Storm**

While all of the unincorporated areas of Okaloosa County are vulnerable to hurricanes and tropical storms, only Okaloosa Island (an unincorporated coastal resort community located on Santa Rosa Island, a barrier island located between Destin and the Okaloosa/Santa Rosa County line) is located *directly* on the Gulf of Mexico. These areas, as well as those located on Choctawhatchee Bay and associated bayous and inlets, are vulnerable to the most damaging effects of storm surge, heavy rains, and winds during a hurricane or tropical storm. The unincorporated areas in north Okaloosa County are vulnerable to hurricane damage in the form of heavy rains and substantial winds. In the area north of Eglin Air Force Base, outside of the incorporated boundaries of Crestview and Laurel Hill, are thousands of homes and hundreds of businesses. Okaloosa County has a varied topographical terrain, ranging from sea level in the south to elevations over 200 feet in the north. The whole county may experience heavy rains and wind damage during a hurricane or tropical storm. High winds damage structures by removing roofs, siding, and create flying debris out of sources that are not anchored.

The following tables depict the evacuation zones for hurricanes and the vulnerable structures within each zone.



**Unincorporated Okaloosa County**

**Table 5.10.02.06.1:** Evacuation Zones and the Vulnerable Residential Structures within

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Zone A</b>	0	0	167	0	2
<b>Just Value</b>	\$0	\$0	\$80,070,224	\$0	\$253,879
<b>Zone B</b>	37	28	852	4	12
<b>Just Value</b>	\$8,341,290	\$7,640,343	\$342,208,199	\$832,760	\$15,003,993
<b>Zone C</b>	85	280	2831	18	57
<b>Just Value</b>	\$18,145,410	\$47,738,361	\$1,085,789,496	\$2,332,165	\$37,745,635
<b>Zone D</b>	91	764	6942	225	158
<b>Just Value</b>	\$19,153,990	\$99,094,042	\$1,883,835,503	\$17,685,332	\$75,715,240
<b>Zone E</b>	96	1557	10970	249	197
<b>Just Value</b>	\$20,158,990	\$191,203,437	\$2,803,491,974	\$19,797,099	\$111,149,598

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone A = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)

**Table 5.10.02.06.2:** Evacuation Zones and the Vulnerable Structures within

<b>Total:</b>	<b>Commercial</b>	<b>Government / Institutional</b>	<b>Trailer Park</b>
<b>Zone A</b>	2	0	0
<b>Just Value</b>	\$1,821,923	\$0	\$0
<b>Zone B</b>	20	3	0
<b>Just Value</b>	\$28,891,264	\$15,394,568	\$0
<b>Zone C</b>	114	10	3
<b>Just Value</b>	\$161,413,440	\$65,849,302	\$1,321,528
<b>Zone D</b>	246	18	18
<b>Just Value</b>	\$225,609,814	\$85,672,303	\$4,188,910
<b>Zone E</b>	405	27	31
<b>Just Value</b>	\$427,103,445	\$57,974,073	\$7,732,369

\*Note\* Evacuation Zones correspond with Hurricane Categories (Ex. Evacuation Zone A = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the evacuation zones and property appraiser data)



**Unincorporated Okaloosa County**

**Section 5.10.02.07 Storm Surge**

All of the coastal areas of unincorporated Okaloosa County are vulnerable to the damaging effects of storm surge, with Okaloosa Island and the structures located *directly* on the Gulf of Mexico being the most vulnerable to storm surge. The structures located in the unincorporated areas of Choctawhatchee Bay and associated bayous and inlets are vulnerable to storm surge as well.

Depending on the severity of the storm, storm surge levels can vary from a normal high-tide, which would only affect low lying sparsely populated areas, to the complete overflow of Okaloosa Island. This could push water and storm debris into Choctawhatchee Bay and onto the northern shore of the bay and local bayous reaching an elevation of 21 feet above mean high water line. Storm surge levels this high would destroy numerous homes, infrastructure, and critical facilities. The following tables depict the vulnerable structures to storm surge.

In 1994 Hurricane Opal made landfall on Pensacola Beach, Florida. The main impact from Opal was from storm surge. A combination of storm surge and breaking waves inundated portions of the western Florida Panhandle coast to a depth of 10 to 20 ft. The surge pushed the sand dunes on Okaloosa Island into Choctawhatchee Bay. Storm surge was responsible for the bulk of the \$3 billion in damage attributed to Opal in the United States. (NOAA: Hurricane History)

**Table 5.10.02.07.1: Vulnerable Residential Structures to Storm Surge**

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Surge Level 1</b>	16	17	1382	5	17
<b>Just Value</b>	\$2,162,500	\$3,963,376	\$833,916,116	\$1,467,210	\$13,907,016
<b>Surge Level 2</b>	76	123	1854	5	44
<b>Just Value</b>	\$15,724,410	\$20,697,781	\$984,063,998	\$1,467,210	\$35,872,263
<b>Surge Level 3</b>	91	557	4973	25	117
<b>Just Value</b>	\$19,153,990	\$77,244,270	\$1,684,209,006	\$2,692,222	\$60,066,675
<b>Surge Level 4</b>	91	557	4973	25	117
<b>Just Value</b>	\$19,153,990	\$77,244,270	\$1,684,209,006	\$2,692,222	\$60,066,675
<b>Surge Level 5</b>	96	963	7396	43	143
<b>Just Value</b>	\$20,158,990	\$136,008,617	\$2,246,026,987	\$3,699,334	\$91,913,772

\*Note\* Storm Surge Zones correspond with Hurricane Categories (Ex. Storm Surge Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)



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**Table 5.10.02.07.2: Other Vulnerable Structures to Storm Surge**

<b>Total:</b>	<b>Commercial</b>	<b>Government / Institutional</b>	<b>Trailer Park</b>
<b>Surge Level 1</b>	23	10	2
<b>Just Value</b>	\$91,868,706	\$348,063,846	\$1,011,076
<b>Surge Level 2</b>	58	12	2
<b>Just Value</b>	\$135,586,329	\$368,265,539	\$1,011,076
<b>Surge Level 3</b>	103	12	8
<b>Just Value</b>	\$152,293,541	\$368,265,539	\$2,936,465
<b>Surge Level 4</b>	136	14	8
<b>Just Value</b>	\$166,977,252	\$375,007,270	\$2,936,465
<b>Surge Level 5</b>	361	20	16
<b>Just Value</b>	\$412,012,433	\$399,311,151	\$5,366,581

\*Note\* Storm Surge Zones correspond with Hurricane Categories (Ex. Storm Surge Zone 1 = Category 1 Hurricane)  
Source: West Florida Regional Planning Council & Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the surge levels and property appraiser data)

**Section 5.10.02.08 Flooding**

As used in this section, the term “flooding” only considers flooding that is a result of rainfall, which includes tropical rains during a hurricane. All of the unincorporated areas of Okaloosa County are vulnerable to flooding and susceptible to damage from this hazard. Localized roadway flooding from heavy rains can occur in all the areas of the county.

The southern tier of the county is affected by flooding due to heavy rain events. Since this tier is largely developed, an additional factor of flooding comes from inadequate storm water drains which were installed prior to current standards. Flooding in this area can range from flooding a few yards and streets to the flooding of homes and businesses.

The northern tier of the county is vulnerable to flooding caused by hurricanes, tropical storms and heavy rain events as well. Pockets of this area have been developed and have some flooding due to inadequate storm water facilities. Flooding in the northern tier can range from flooding of streets and yards to flooding of homes up to a depth of 6 feet. It is to be noted that the most severe flooding would only affect approximately 100 homes.

The following table depicts the structures located in the 1 % chance per year (AE and A) and velocity (VE), flood zones in Okaloosa County’s unincorporated area.



**Unincorporated Okaloosa County**

**Table 5.10.02.08.1:** Structures Located in Flood Zones in the unincorporated Okaloosa County

	Total in Flood Zone AE	Just Value	Total in Flood Zone VE	Just Value	Total in Flood Zone A	Just Value
<b>Condominium</b>	15	\$2,289,100	15	\$3,969,000	0	\$0
<b>SFR-Townhouse</b>	30	\$10,539,197	4	\$1,930,236	10	\$1,096,004
<b>Single-Family</b>	624	\$285,080,864	28	\$11,573,685	140	\$25,186,551
<b>Mobile Home</b>	3	\$187,517	0	\$0	1	\$73,660
<b>Multi-Family</b>	14	\$7,003,457	5	\$22,629,397	0	\$0
<b>Commercial</b>	73	\$104,944,347	7	\$35,287,188	14	\$9,452,738
<b>Government/Institutional</b>	10	\$329,836,884	4	\$40,888,666	8	\$69,078,193
<b>Critical Facility</b>	2	\$11,833,573	0	\$0	2	\$2,426,117

Source: Okaloosa County Department of Growth Management, 2010 and Okaloosa County Property Appraiser Office, 2010

A number of measures are available to help mitigate flood damage. These include:

- Elevation of new and substantially rebuilt structures above established base flood elevations
- Elevation of infrastructure (e.g., roads, lift stations, etc) above established base flood elevations
- Floodproofing of structures that exist below base flood elevations
- Relocation of structures and infrastructure out of the 100-Year Floodplain
- Implementation of public warning/notification systems to avoid or minimize injury or loss of life and property damage
- Restrict development in substantially intact floodplain areas
- Purchase of fee simple title to, or development restricting easements over, properties in floodplains.

As shown by Sections 5.10.04.2 through 5.10.04.10, Okaloosa County has utilized all of the above measures to varying degrees as part of its floodplain and growth management programs. It is important to note, however, that the degree to which a measure is implemented is sometimes dependent on practicality and/or funding. For example, Okaloosa County requires that the finished floor elevation of all structures within the 100-Year Floodplain be a minimum of 1 foot above the established base flood level; it does not require that the finished floor elevations of all structures be elevated 3 feet above the base flood elevation. This is due to the practicality of requiring large amounts of fill onto small lots undergoing development. Not only are there



## Unincorporated Okaloosa County

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potential construction problems with establishing slopes and other site characteristics, the overuse of fill can exacerbate existing flooding problems, particularly when dealing with infill type developments in older areas whose stormwater systems pre-date modern requirements. Similarly, as older homes are updated, the County requires the entire structure to meet current elevation requirements when the renovations/additions exceed 50% of the value of the original structure. The County does not require this level of retroactive elevating if the value of the work being performed is less than 50% of the value of the original structure, as this would place a serious constraint on redevelopment activities that could, in some areas, help preempt blight conditions.

In deciding which, and to what extent, flood mitigation measures will be implemented, Okaloosa County balances the cost (whether to individual property owners or to the taxpayers at large for public projects) with the benefit. While no formal formulae have been established, the underlying philosophy is that flood mitigation should be kept attainable by the average property owner and, in the case of public projects, should not cause an inordinate tax burden.

### ***Section 5.10.02.09 Dam Safety***

Most of the dams located in the county are found in the unincorporated area of north Okaloosa County. These dams are manmade earthen-works dams usually on manmade lakes and ponds. The dams range in height above natural grade from 3 feet to a maximum of 27 feet. In general dams over 10 feet in height are regulated by the Northwest Florida Water Management District. The largest dam in the unincorporated is 27 feet high and located in the Blackwater Forest on Hurricane Lake. If this dam were to fail, the flooding damage would only affect the forested areas, which are undeveloped and scarcely inhabited.

The specific impacts of dam failure in Okaloosa County is unavailable because there have been no studies conducted on the impact that dam failure would have on the potentially affected areas. Only broad general impacts can be given, which provide an indication of what impacts are expected with dam failure. Homes and roadways in the unincorporated areas of north Okaloosa County are vulnerable to flooding as a result of dam failure although the probability of a failure occurring is very low. There are two small dams in unincorporated south Okaloosa County and some homes and roadways in the area surrounding them are vulnerable to flooding from dam failure.

### ***Section 5.10.02.10 Land Erosion***

Unincorporated Okaloosa County is vulnerable to land erosion in localized areas. Land erosion is generally caused by disturbed soils from construction and agricultural activities and usually isolated to an area less than 1 acre in size. Some river front homes in unincorporated Okaloosa County are vulnerable to erosion but would only affect about 20 homes.

### ***Section 5.10.02.11 Severe Storms***

In the tables below, the estimated cost of damage to residential and non-residential structures in the event of a severe storm is provided. The numbers and estimated value represents the total number of structures in the unincorporated areas of Okaloosa County. Although it is highly unlikely



**Unincorporated Okaloosa County**

that all structures will be impacted during a singular severe storm event, all structures are equally vulnerable to severe storms and so it was deemed appropriate to list all structures in the unincorporated county.

**Table 5.10.02.11.1:** Residential Structures Vulnerable to Severe Storms in Unincorporated Okaloosa County

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Multi-Family</b>
	143	112	20,218	238
<b>Just Value</b>	\$30,249,670	\$36,416,401	\$4,710,885,325	\$161,829,667

Storms in Unincorporated Okaloosa County  
Source: Okaloosa County Department of Growth Management, 2010 and Okaloosa County Property Appraiser, 2010

**Table 5.10.02.11.2:** Other Structures Vulnerable to Severe Storms in Okaloosa County

<b>Total:</b>	<b>Commercial</b>	<b>Government / Institutional</b>
	1,666	133
<b>Just Value</b>	\$1,369,710,358	\$1,455,793,77

Source: Okaloosa County Department of Growth Management, 2010 and Okaloosa County Property Appraiser, 2010

Since severe storms includes tornadoes and waterspouts, thunderstorms and lightning, and winter storms, the values listed in the tables above apply to all of those special hazard types.

**Section 5.10.02.11.01 Tornado and Waterspout**

All of unincorporated Okaloosa County is vulnerable to tornado damage, and all structures within the unincorporated areas are susceptible to their impacts due to the unpredictable nature of this hazard. The unincorporated areas most vulnerable to tornado damage are those with a high density or large population, such as Okaloosa Island, because the damage rate increases as a function of population density. The types of structures most vulnerable to damage are mobile homes, manufactured housing, poorly constructed or substandard housing and apartment complexes are especially susceptible to damage from a tornado. Manufactured housing and substandard housing are exceptionally susceptible because of their lack of resistance to high winds, and apartment complexes because of their size and densities. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, nearly all of the unincorporated Okaloosa County has a medium risk, 1 in 250 per year, of a tornado event occurring. Near the northwestern portion of the Blackwater



## Unincorporated Okaloosa County

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River State Forest, the unincorporated area has a high risk, 1 in 100 per year, of a tornado event occurring.

All of the coastal unincorporated areas along the Gulf of Mexico and Choctawhatchee Bay are vulnerable to waterspouts because although they form over water, they can move onshore and damage coastal structures. The specific impacts of waterspouts in Okaloosa County are unavailable because there have been no studies conducted regarding this hazard's impacts in the County.

### **Section 5.10.02.11.02 Thunderstorms and Lightning**

All of unincorporated Okaloosa County is vulnerable to thunderstorms and lightning, and all structures within the unincorporated area are susceptible to the damaging effects of wind, hail, and lightning associated with severe thunderstorms. According to the Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS) study in 2005, all of Okaloosa County has the threat of a thunderstorm or lightning event occurring, in terms of causing economic damage or loss of over \$50, of 1 in 50 per year.

### **Section 5.10.02.11.03 Winter Storms**

All of the unincorporated areas in Okaloosa County are vulnerable to winter storms, and all structures are susceptible to the effects of freezing temperatures. All of the unincorporated areas are minimally vulnerable to snow, freezing rain, icing and glazing events because they are so rare. The specific impacts of winter storms in Okaloosa County are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. Only broad general impacts of this hazard can be given, which provide an indication of what impacts are expected with winter storms. The homes in Okaloosa County that are most vulnerable to winter storms are those with unprotected or under-protected water pipes and homes in which plumbing and insulation is inadequate. Unmitigated older structures and manufactured housing are also very vulnerable.

### **Section 5.10.02.12 Heat Wave and Drought**

The entire unincorporated area is vulnerable to heat wave and drought. The specific impacts of heat wave and drought in Okaloosa County are unavailable because there have been no studies conducted regarding these hazards' impacts in the County. In addition, the nature of these hazards tends to only affect the populations without adequate cooling systems in their homes, low income, elderly, children, and outside workers. Only broad general impacts of these hazards can be given, which provide an indication of what impacts are expected with heat wave and drought. Everyone living within the county is susceptible to heat exhaustion. All households are susceptible to power outages due to increased electricity demand during periods of extreme heat. Electrical system failures due to demand would only enhance problems for the entire population, especially for the vulnerable populations. All water bodies and municipal water supplies are susceptible to declining water levels and water shortages due to drought.



**Unincorporated Okaloosa County**

**Section 5.10.02.13 Wildfire**

All of the unincorporated areas in Okaloosa County are vulnerable to wildfire due to the proximity of houses and businesses within the wildland/urban interface. The homes located on the southern and northern perimeter of Eglin Air Force Base and in the northern unincorporated areas of the county are the most vulnerable because these areas have large acres of open forest land that are historically related to the Long Leaf Pine ecosystem and naturally dependent on wildfire. Homes located near the wildland/urban interface are most vulnerable to damage from wildfires. The following tables depict the structures with 'medium (levels 4-6)' to 'high (levels 7-9)' wildfire level of concern. Levels 0-3 were determined to be of such minimal to low vulnerability to wildfire they were not included in this assessment.

**Table 5.10.02.13.1: Medium to High Wildfire Level of Concern for Residential Structures**

<b>Total:</b>	<b>Condominium</b>	<b>SFR-Townhouse</b>	<b>Single-Family</b>	<b>Mobile Home</b>	<b>Multi-Family</b>
<b>Level 4</b>	0	9	2076	447	29
<b>Just Value</b>	\$0	\$773,725	\$365,553,767	\$29,049,036	\$13,591,867
<b>Level 5</b>	0	6	1660	374	23
<b>Just Value</b>	\$0	\$944,650	\$341,214,475	\$25,227,545	\$29,847,755
<b>Level 6</b>	0	1	576	199	7
<b>Just Value</b>	\$0	\$92,221	\$103,958,972	\$12,913,901	\$20,026,158
<b>Level 7</b>	3	4	2271	478	18
<b>Just Value</b>	\$252,580	\$417,734	\$330,179,622	\$30,517,407	\$8,013,709
<b>Level 8</b>	1	0	656	108	10
<b>Just Value</b>	\$129,000	\$0	\$96,089,851	\$6,914,257	\$2,109,893
<b>Level 9</b>	0	0	77	16	1
<b>Just Value</b>	\$0	\$0	\$13,412,231	\$954,994	\$125,185

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)



**Unincorporated Okaloosa County**

**Table 5.10.02.13.2:** Medium to High Wildfire Level of Concern for Structures

<b>Total:</b>	<b>Commercial</b>	<b>Government/ Institutional</b>	<b>Trailer Park</b>	<b>RV Park</b>
<b>Level 4</b>	74	19	11	1
<b>Just Value</b>	\$81,602,305	\$366,179,594	\$2,651,357	\$118,626
<b>Level 5</b>	99	28	7	1
<b>Just Value</b>	\$238,480,074	\$450,530,372	\$1,702,156	\$118,626
<b>Level 6</b>	40	19	2	0
<b>Just Value</b>	\$78,384,471	\$368,007,190	\$310,583	\$0
<b>Level 7</b>	75	20	4	0
<b>Just Value</b>	\$80,591,649	\$328,483,421	\$710,623	\$0
<b>Level 8</b>	26	13	3	0
<b>Just Value</b>	\$32,677,748	\$312,305,938	\$1,191,355	\$0
<b>Level 9</b>	7	6	0	0
<b>Just Value</b>	\$10,859,378	\$40,441,211	\$0	\$0

Source: Florida Division of Forestry and Okaloosa County Property Appraiser, 2010 (Okaloosa County Staff generated table from overlaying the wildfire level of concern and property appraiser data)

**Section 5.10.02.14 Beach Erosion**

All of the coastal unincorporated areas in Okaloosa County are vulnerable to beach erosion. Homes located on beach-front or bay-front property are the most vulnerable to beach erosion. Intensive wind and wave action, usually during tropical storms and hurricanes, can accelerate the natural rate of beach erosion. The majority of the unincorporated population that resides in the southern portion of the county lives in the coastal areas. Therefore, beach erosion impacts infrastructure, critical facilities, residences and commercial buildings. Hurricanes, tropical storms and severe storms can cause beach erosion. The following table depicts the vulnerable structures to beach erosion in Okaloosa County's unincorporated area.



**Unincorporated Okaloosa County**

**Table 5.10.02.14.1:** Total Structures Susceptible to Beach Erosion

	Condominium	SFR-Townhouse	Single-Family	Multi-Family	Commercial	Government /Institutional
<b>Total</b>	8	1	381	4	15	13
<b>Just Value</b>	\$1,492,000	\$223,393	\$279,192,527	\$1,950,566	\$83,248,365	\$52,441,043

Source: Okaloosa County Department of Growth Management and Okaloosa County Property Appraiser  
 Note: Table was generated from Property Appraiser data based on the structures that were determined to be located along the coastal areas in Okaloosa County.

**Section 5.10.02.15 Other Hazards**

As previously stated in the Risk Assessment, the following hazards, sinkholes, expansive soils, earthquake, avalanche, land subsidence, volcano, and tsunami have been determined to be a minimal risk to Okaloosa County. Therefore, the County has not assessed its vulnerability to these hazards. If any of the hazards become a greater risk in the unincorporated Okaloosa County, then the LMS Committee will update this section to reflect those changes.

**Section 5.10.02.16 Summary**

The vulnerability assessment section of this LMS document highlighted how vulnerable the unincorporated Okaloosa County is to the identified hazards from the Risk Assessment. It discussed the vulnerable populations, repetitive loss properties, and structure and infrastructure damages associated with these hazards.



## Unincorporated Okaloosa County

---

### Section 5.10.05 Maps

Attached to this page are maps of Okaloosa County. They include:

1. North Okaloosa Critical Facilities ... 5.10-64
2. North Okaloosa Evacuation Zones. .... 5.10-65
3. North Okaloosa Flood Zones ..... 5.10-66
4. North Okaloosa Repetitive Loss Properties..... 5.10-67
5. North Okaloosa Flood Zones and Dams ..... 5.10-68
6. North Okaloosa Surge Zones..... 5.10-69
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9. South Okaloosa Evacuation Zones ..... 5.10-72
10. South Okaloosa Flood Zone Zones..... 5.10-73
11. South Okaloosa Repetitive Loss Properties ..... 5.10-74
12. South Okaloosa Flood Zones and Dams..... 5.10-75
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15. Unincorporated Florosa Critical Facilities ..... 5.10-78
16. Unincorporated Florosa Evacuation Zones ..... 5.10-79
17. Unincorporated Florosa Flood Zones ..... 5.10-80
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20. Unincorporated Florosa Wildfire Level of Concern ..... 5.10-83
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Properties..... 5.10-87
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29. Unincorporated Bluewater Bay Flood Zones..... 5.10-92
30. Unincorporated Bluewater Repetitive Loss Properties ... 5.10-93
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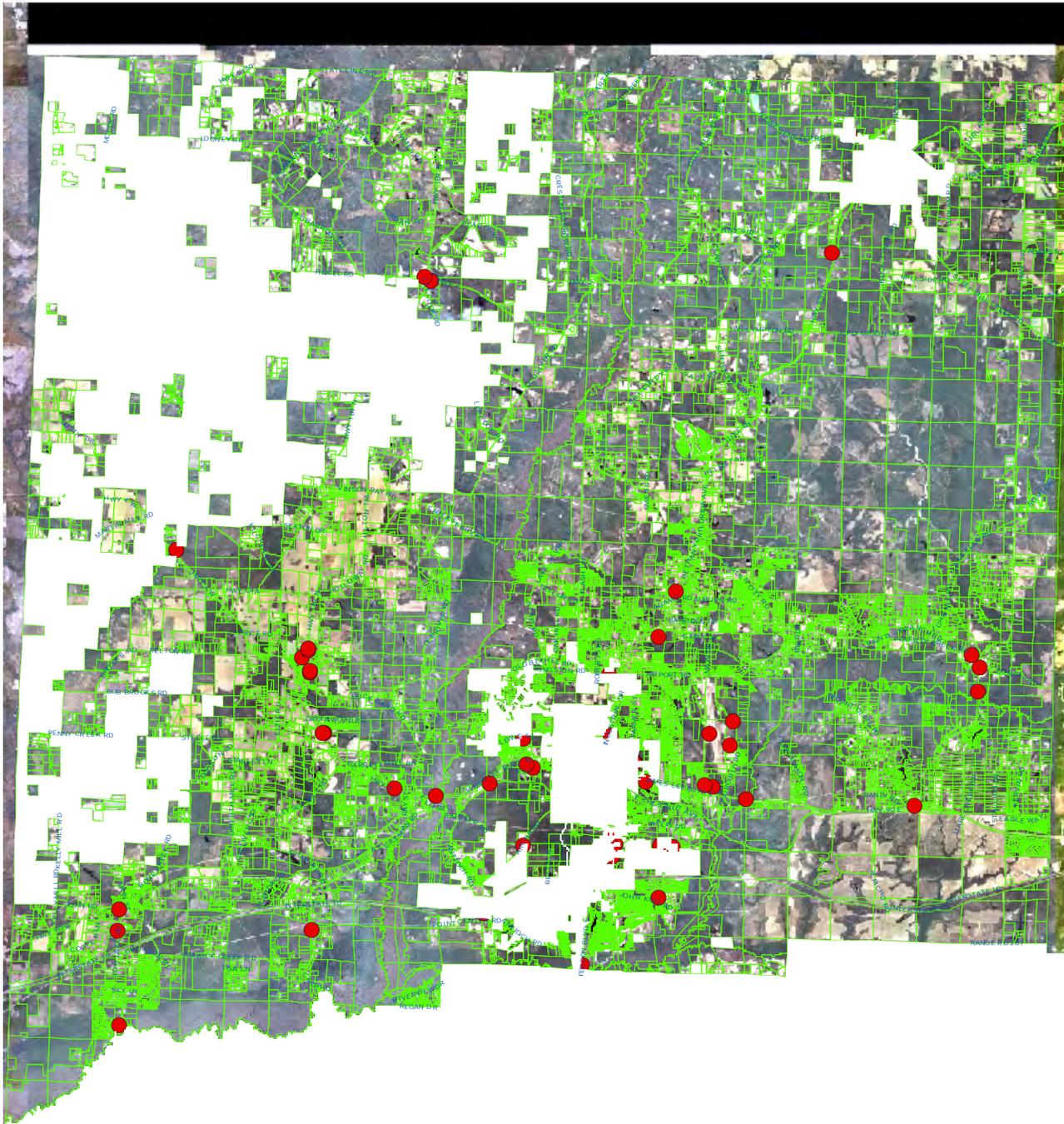
### Unincorporated Okaloosa County

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# North Okaloosa Critical Facilities

- Parcel Lines
- Critical Facilities



Source: Okaloosa County Public Safety, 2010

MAP PROJECTION  
Lambert Conformal Conic Projected on  
StatePlane: Florida North (8303)  
NAD 1983(83), NAVD 1988.

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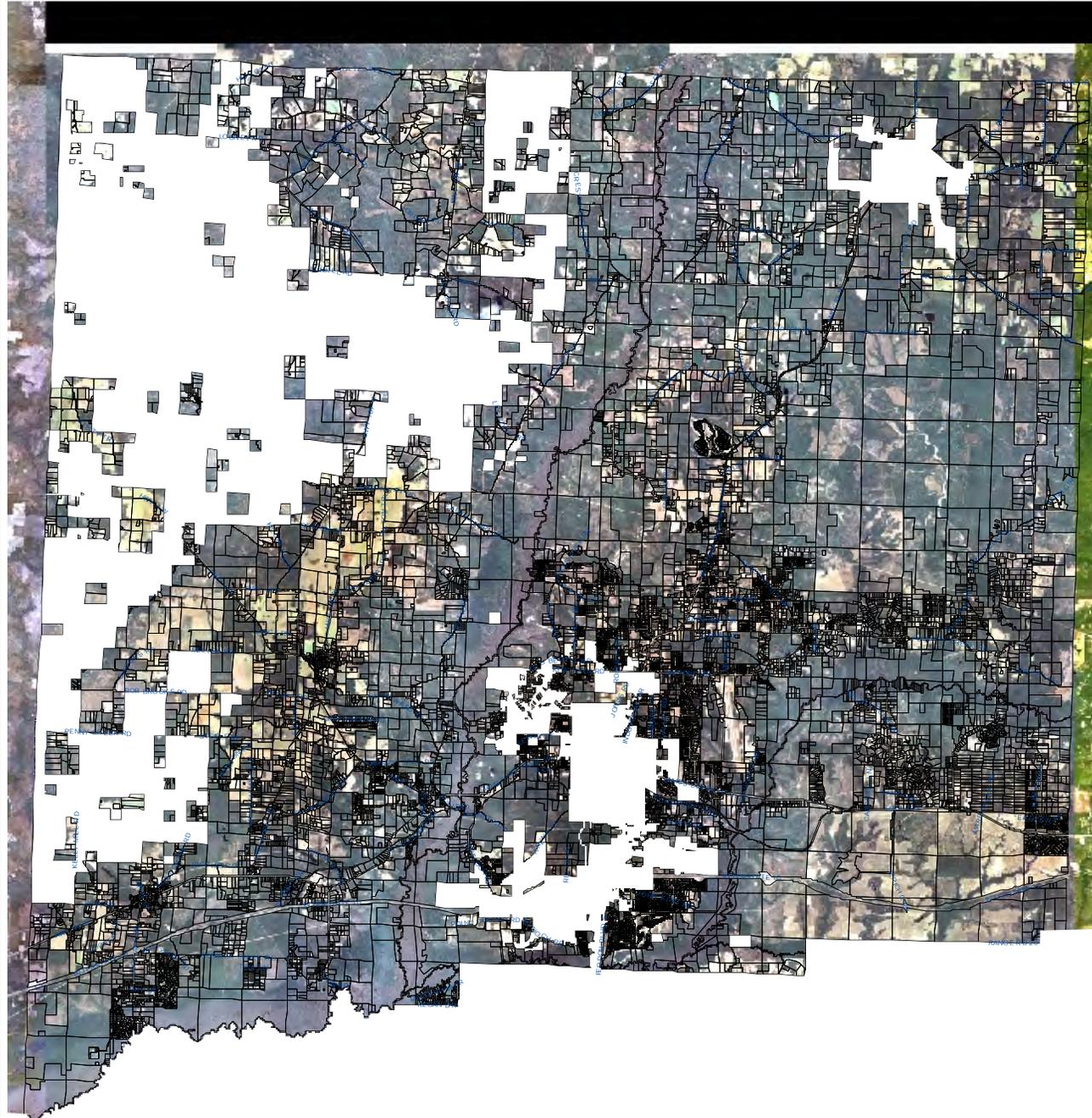
# North Okaloosa Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E

- ZONE A = HURRICANE CAT 1
- ZONE B = HURRICANE CAT 2
- ZONE C = HURRICANE CAT 3
- ZONE D = HURRICANE CAT 4
- ZONE E = HURRICANE CAT 5

**Note: There are no Evacuation Zones in the North End of the County**

Source: Okaloosa County Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
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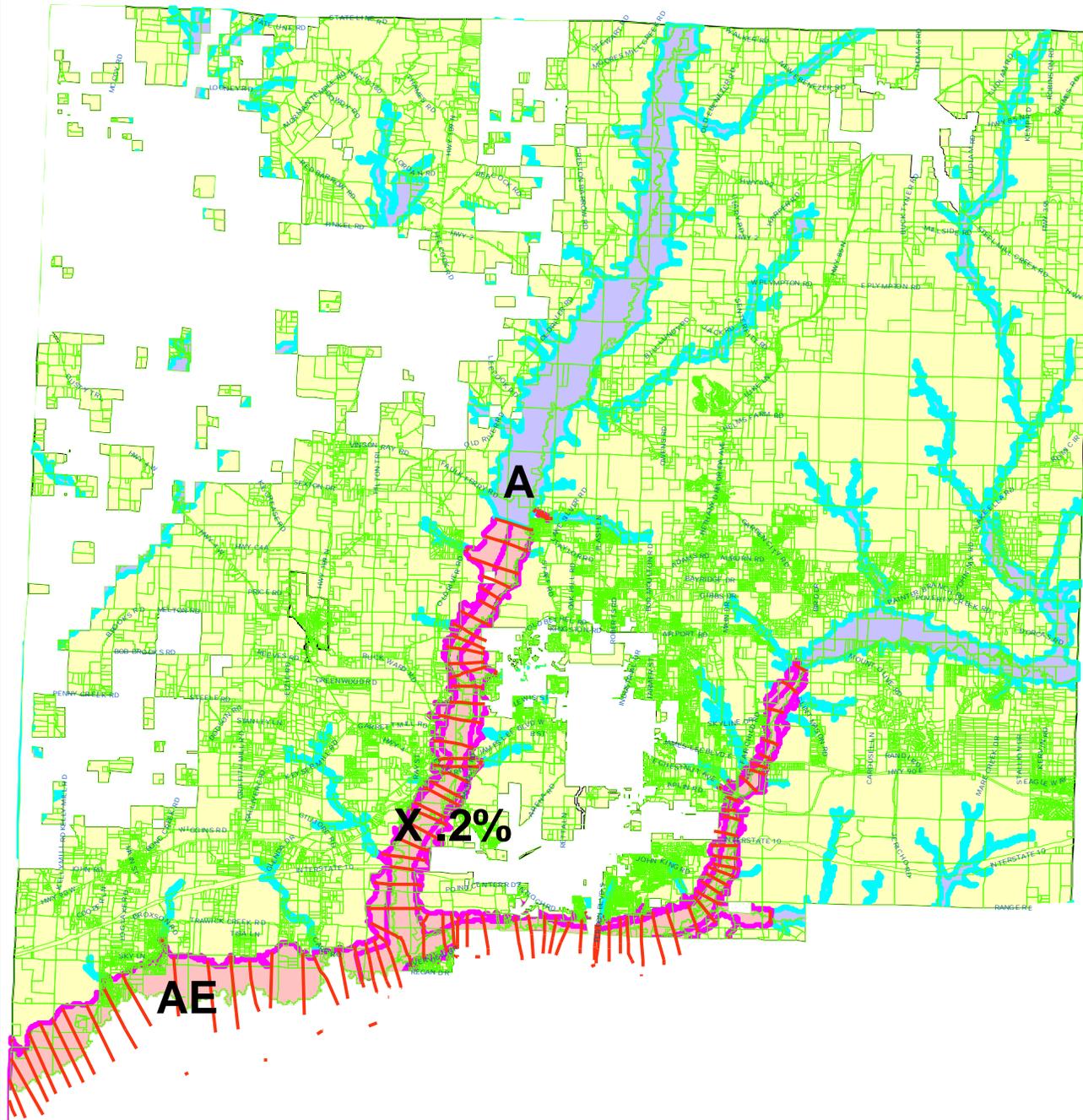


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# North Okaloosa Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Unincorporated

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
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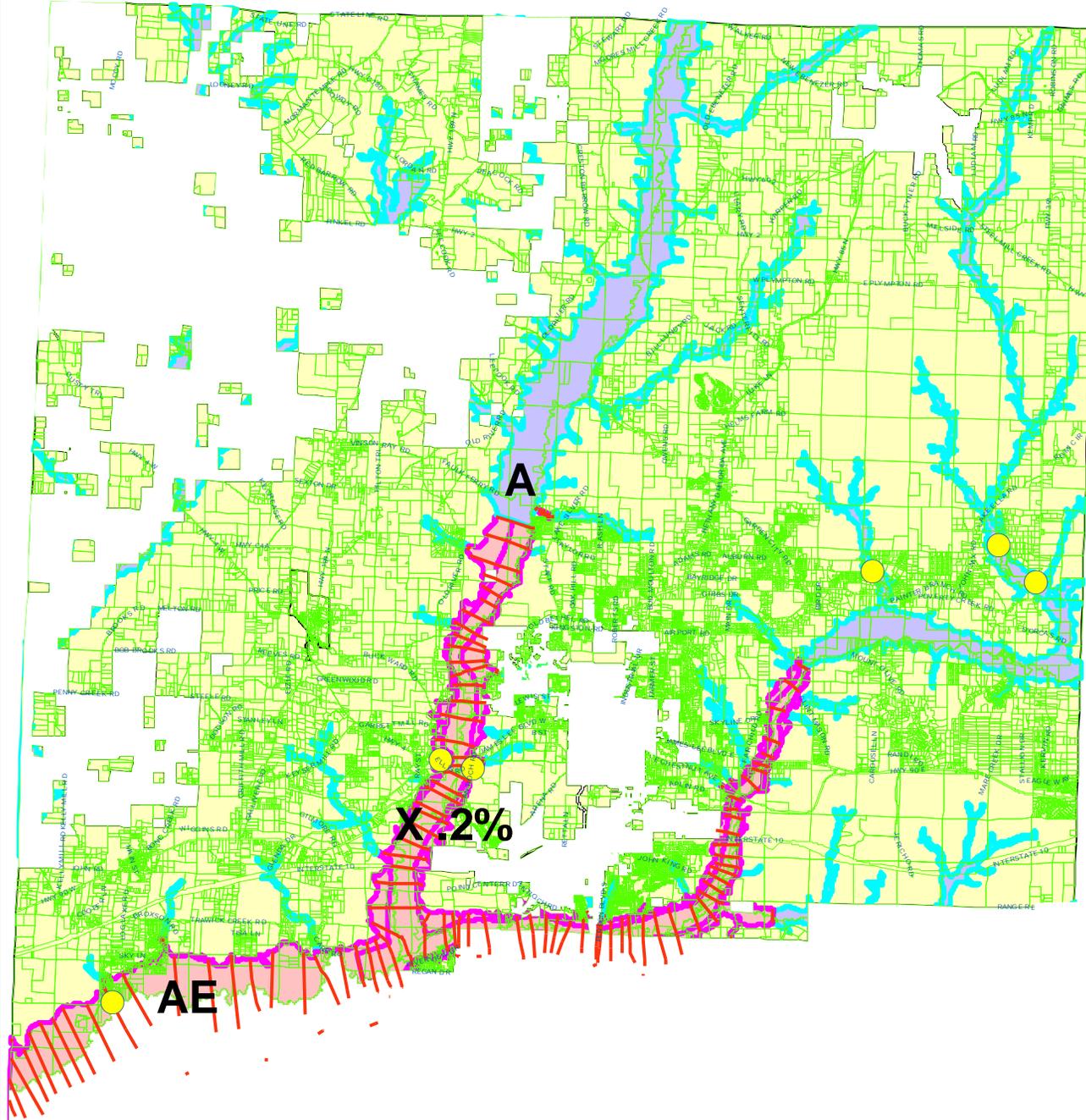


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# North Okaloosa Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Unincorporated
-  Repetitive Loss Properties

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION:  
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Spheroids: Florida North (1983)  
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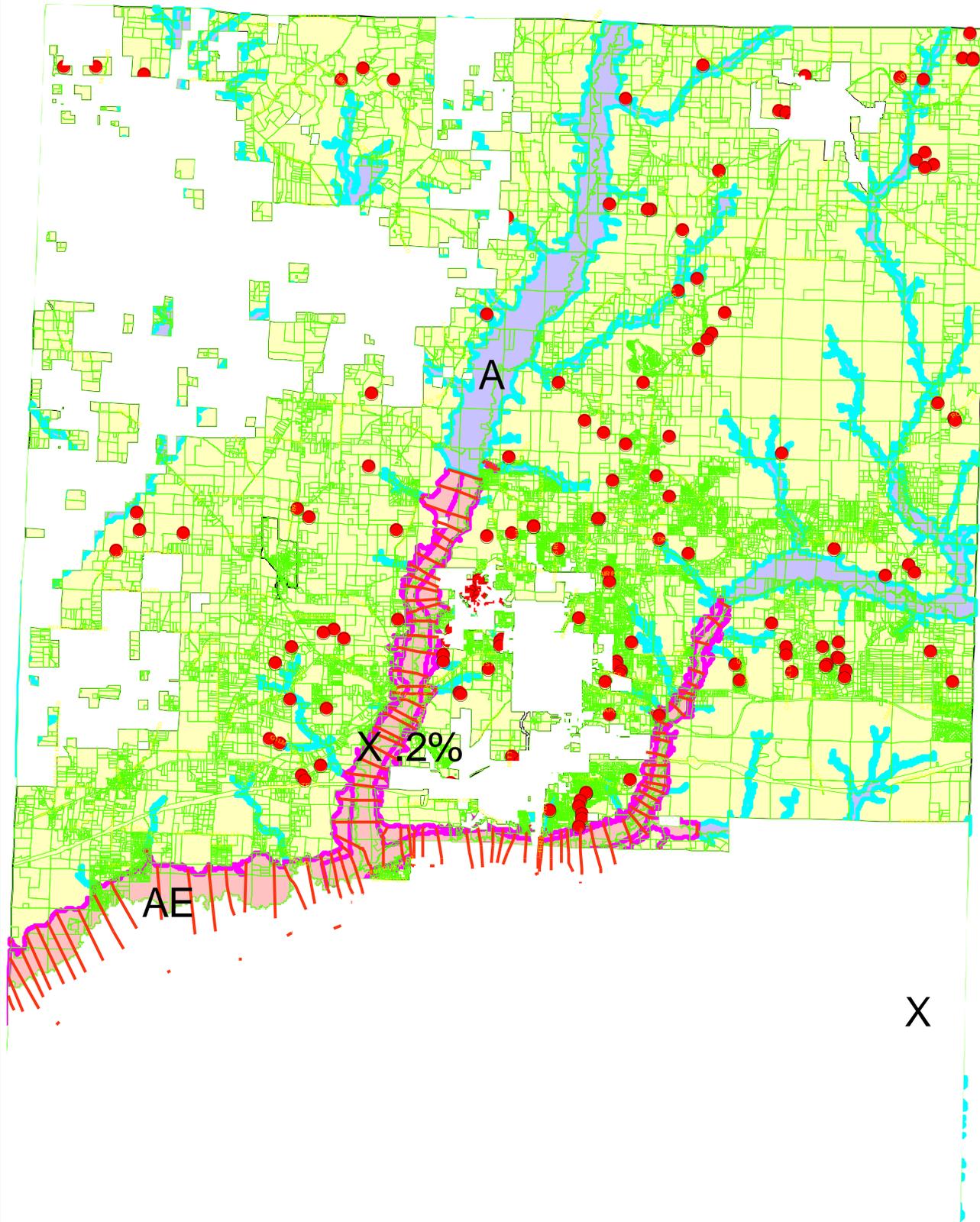


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# North Okaloosa Flood Zones & Dam Sites

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Dams
-  Unincorporated

Source: North West Florida Water Management District FEMA Map Service Center, Dec 6 2002



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Lambert Conformal Conic Projections on  
Spheroids: Florida North (1983)  
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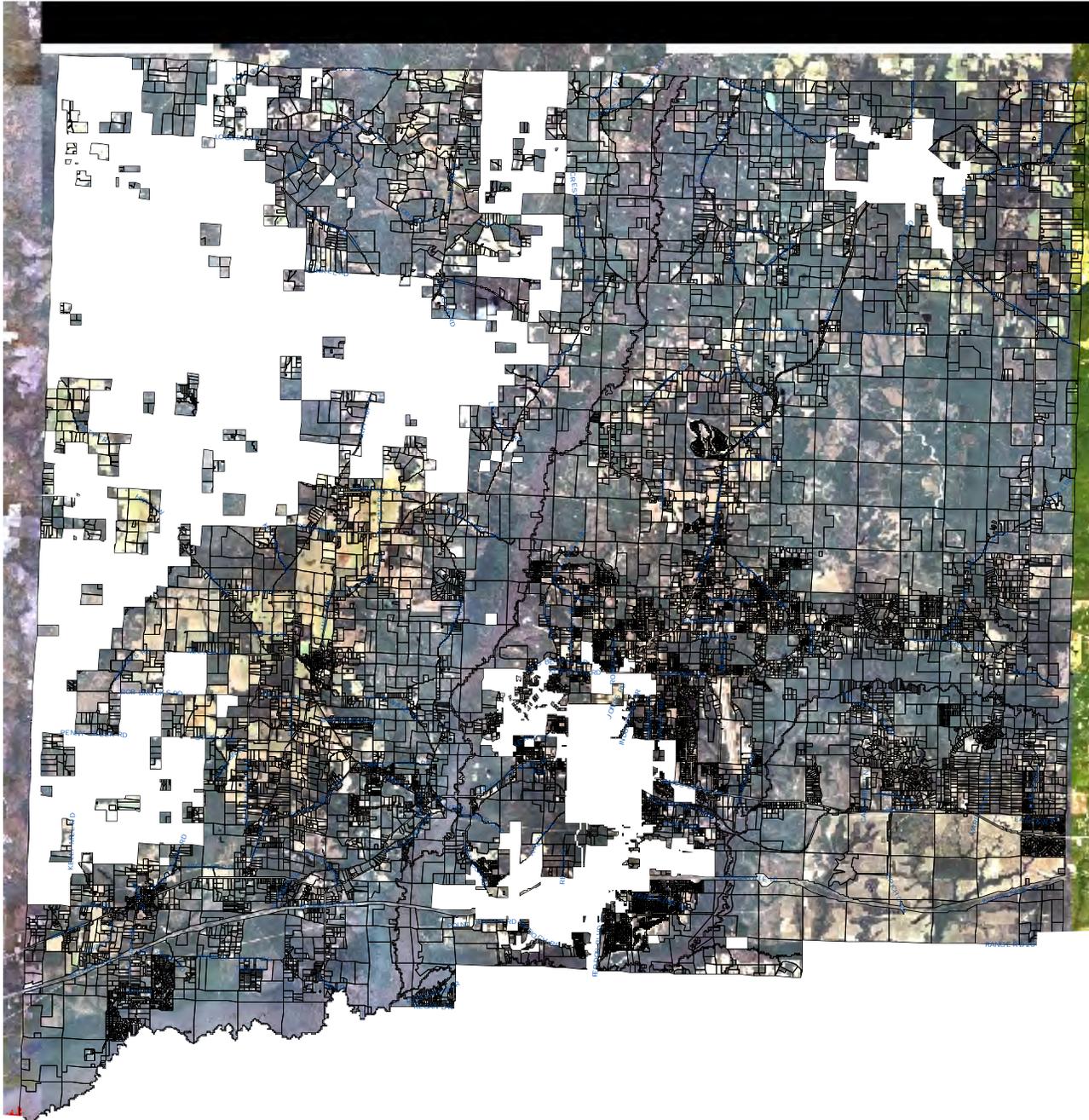
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# North Okaloosa Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5

**Note: There are no Surge Zones in the North End of the County**

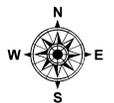
Source: West Florida Regional Planning Council, 2010



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Lambert Conformal Conic Projections on  
Spheroids - Florida North (1983)  
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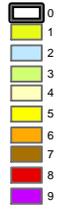


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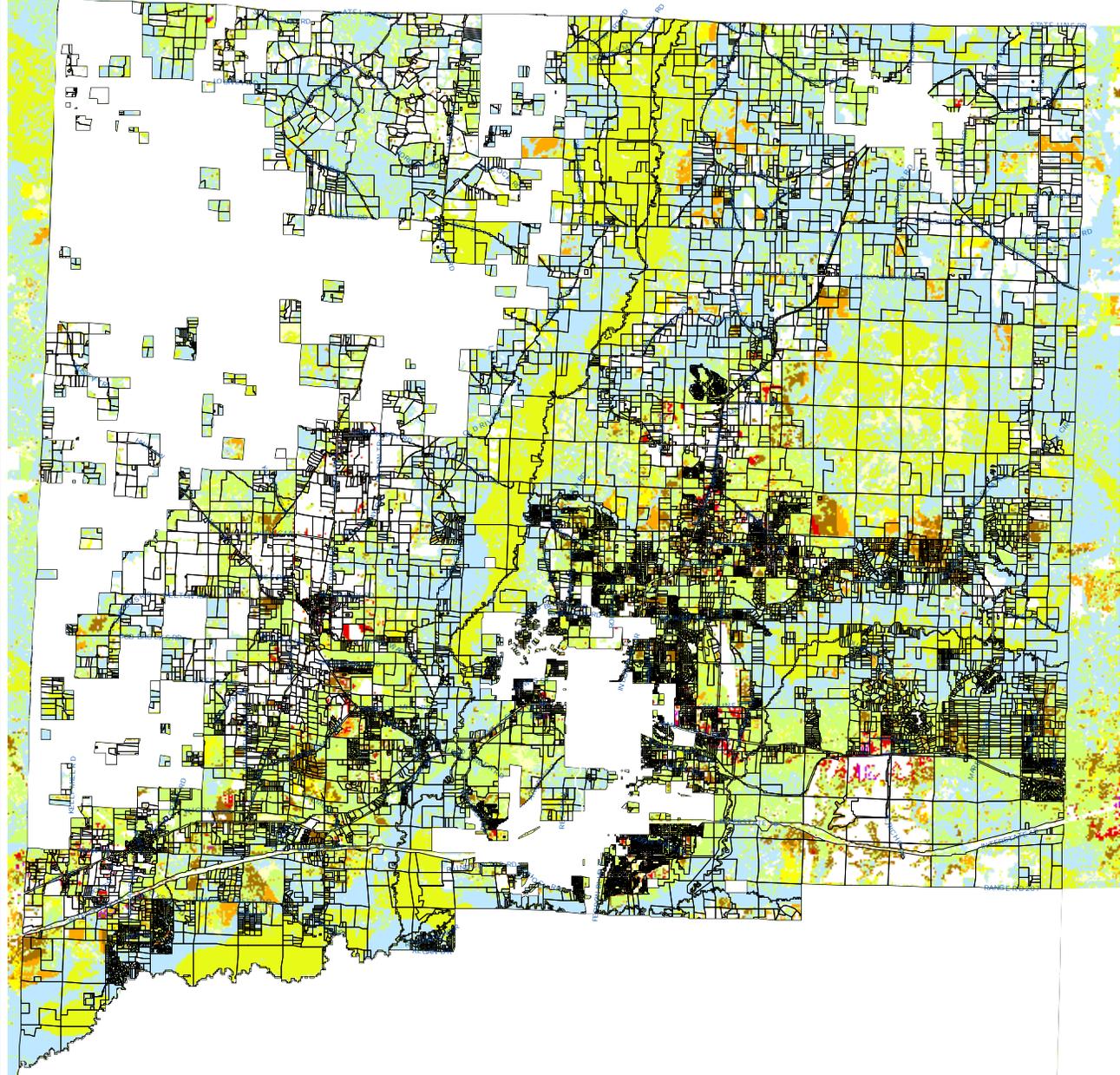
# North Okaloosa Wildfire Level of Concern

Parcel Lines

Level of Concern



Source: Florida Division of Forestry, 2010



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Spheroids: Florida North (1883)  
NAD 1983(83), NAD 1988.

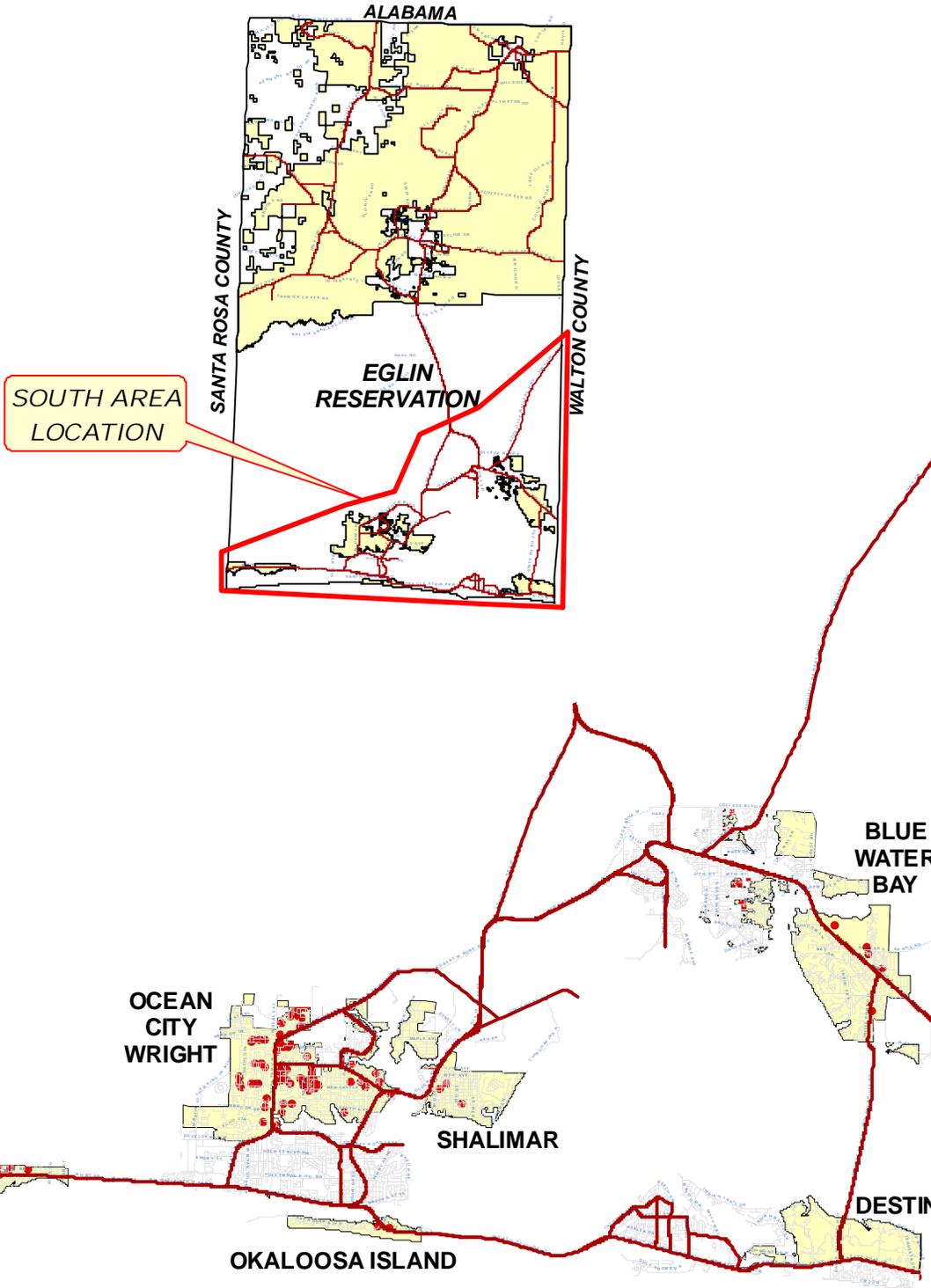
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# LOCATION MAP



## South Okaloosa Critical Facilities

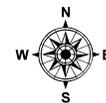
- Critical Facilities
- Unincorporated

Source: Okaloosa County Public Safety, 2010

MAP PROJECTION  
Lambert Conformal Conic Projections on  
StatePlane: Florida North (803)  
NAD 1983(80), NAD 1983

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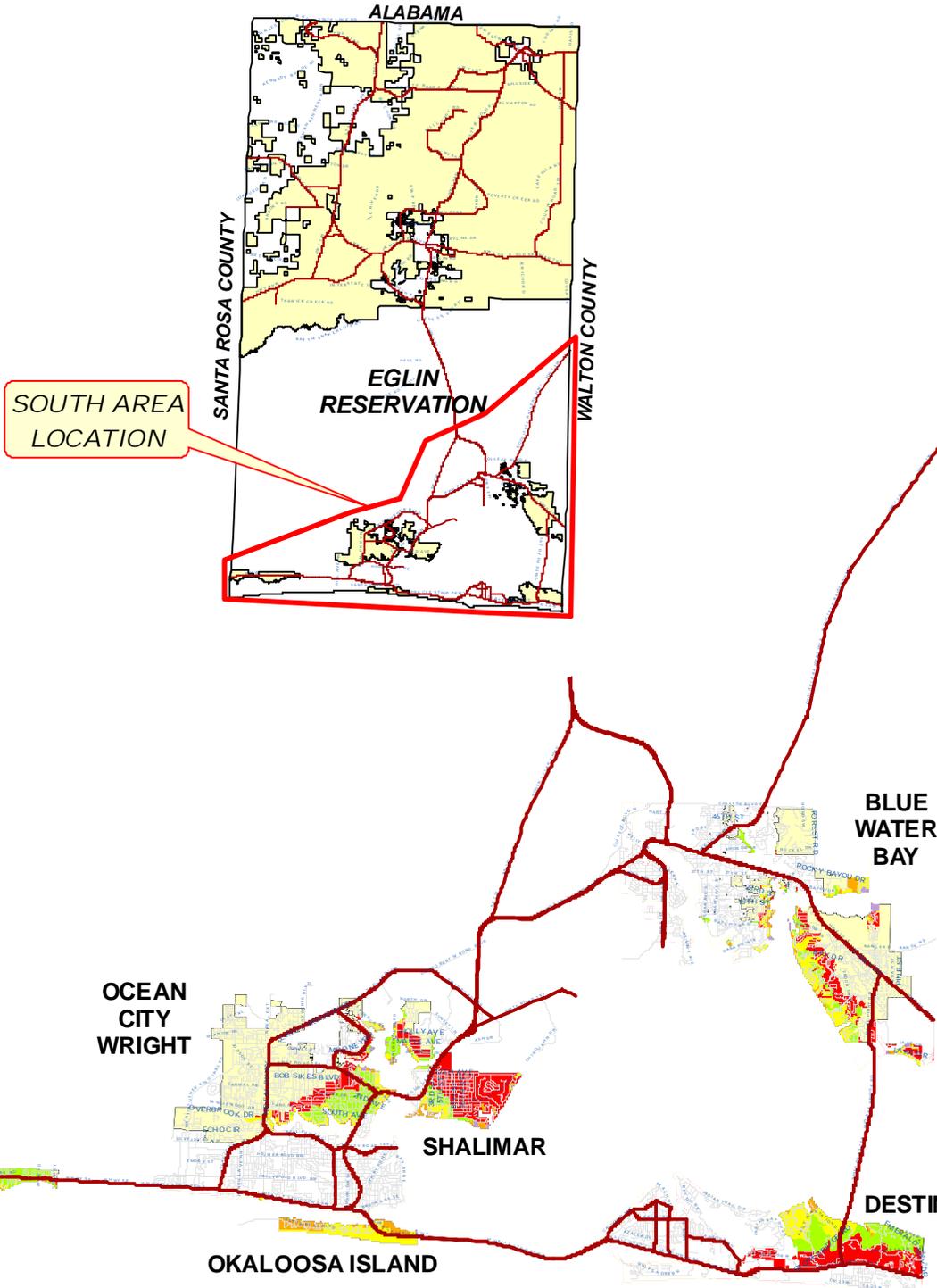
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**NOTE: SEE INDIVIDUAL AREA MAPS FOR MORE DETAIL  
PAGES 5.10-78 THRU 5.10-114**

# LOCATION MAP



## South Okaloosa Evacuation Zones

- Parcel Lines
- Evac Zone A
- Evac Zone B
- Evac Zone C
- Evac Zone D
- Evac Zone E
- Unincorporated

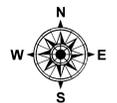
- ZONE A = HURRICANE CAT 1
- ZONE B = HURRICANE CAT 2
- ZONE C = HURRICANE CAT 3
- ZONE D = HURRICANE CAT 4
- ZONE E = HURRICANE CAT 5

Source: Okaloosa County Public Safety, 2010

MAP PROJECTION  
Lambert Conformal Conic Projections on Spheroids - Florida North (1983) NAD 1983 (80), NAVD 1988.

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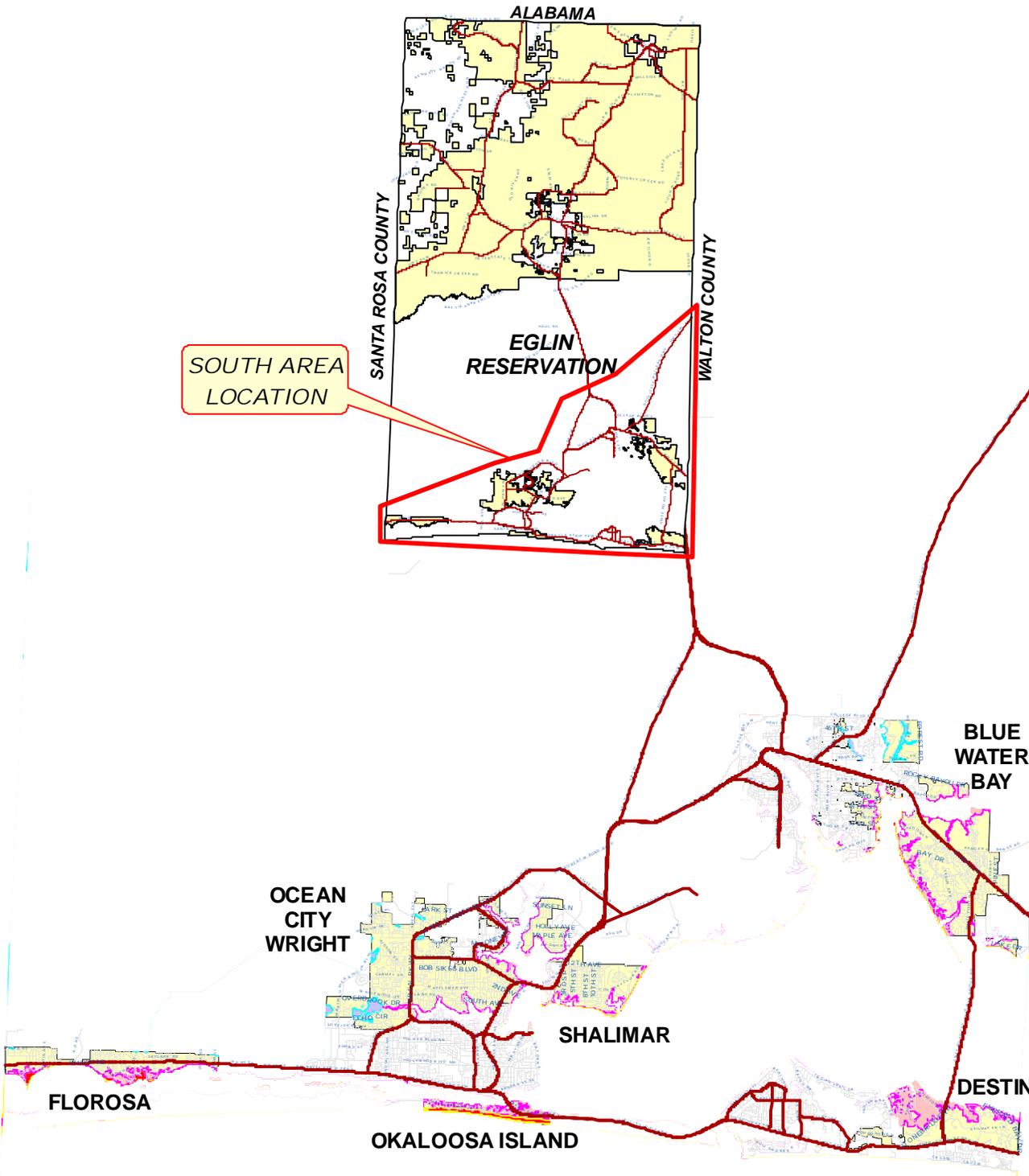
**NOTE: SEE INDIVIDUAL AREA MAPS FOR MORE DETAIL  
PAGES 5.10-78 THRU 5.10-114**

# LOCATION MAP

## South Okaloosa Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Unincorporated

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projection  
StatePlane: Florida North (803)  
NAD 1983(83), NAD 1983

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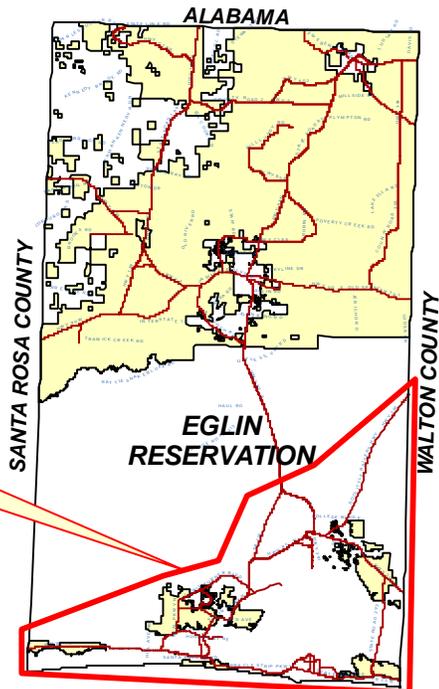


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**NOTE: SEE INDIVIDUAL AREA MAPS FOR MORE DETAIL  
PAGES 5.10-78 THRU 5.10-114**

# LOCATION MAP

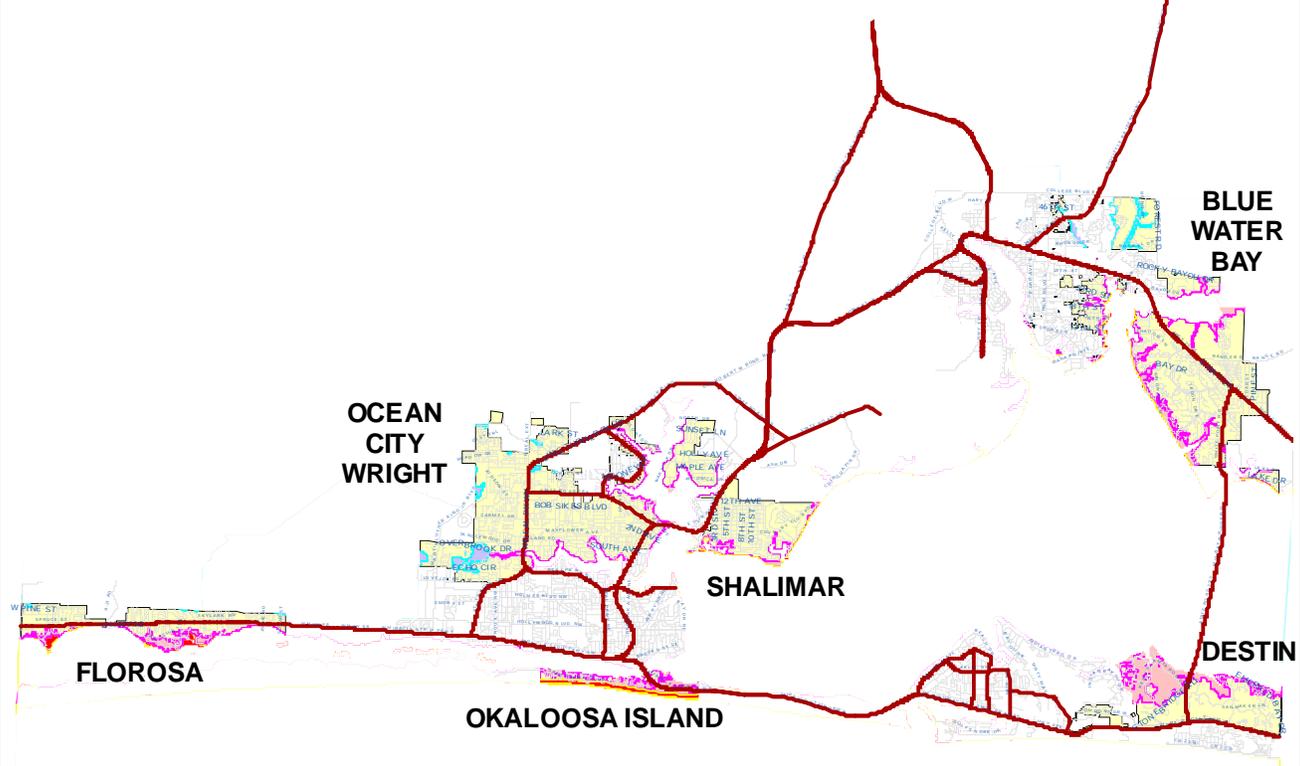
## South Okaloosa Repetitive Loss Properties



SOUTH AREA LOCATION

- Parcel Lines
- X 500 Year Flood Plain
- A 100 Year Flood Plain
- AE 100 Year Flood Plain
- VE 100 Year Flood Plain
- Base Flood Elevation in a Floodway
- Unincorporated
- Repetitive Loss Properties

Source: FEMA Map Service Center, Dec 6 2002



MAP PROJECTION  
Lambert Conformal Conic Projections on Spheroids - Florida North (1983)  
NAD 1983(80), NAVD 1988.

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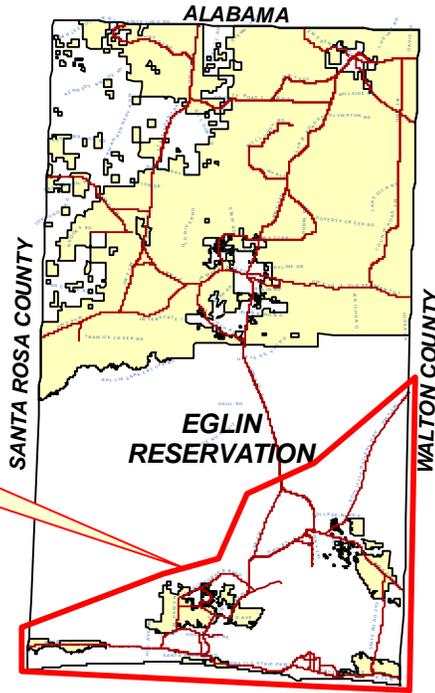
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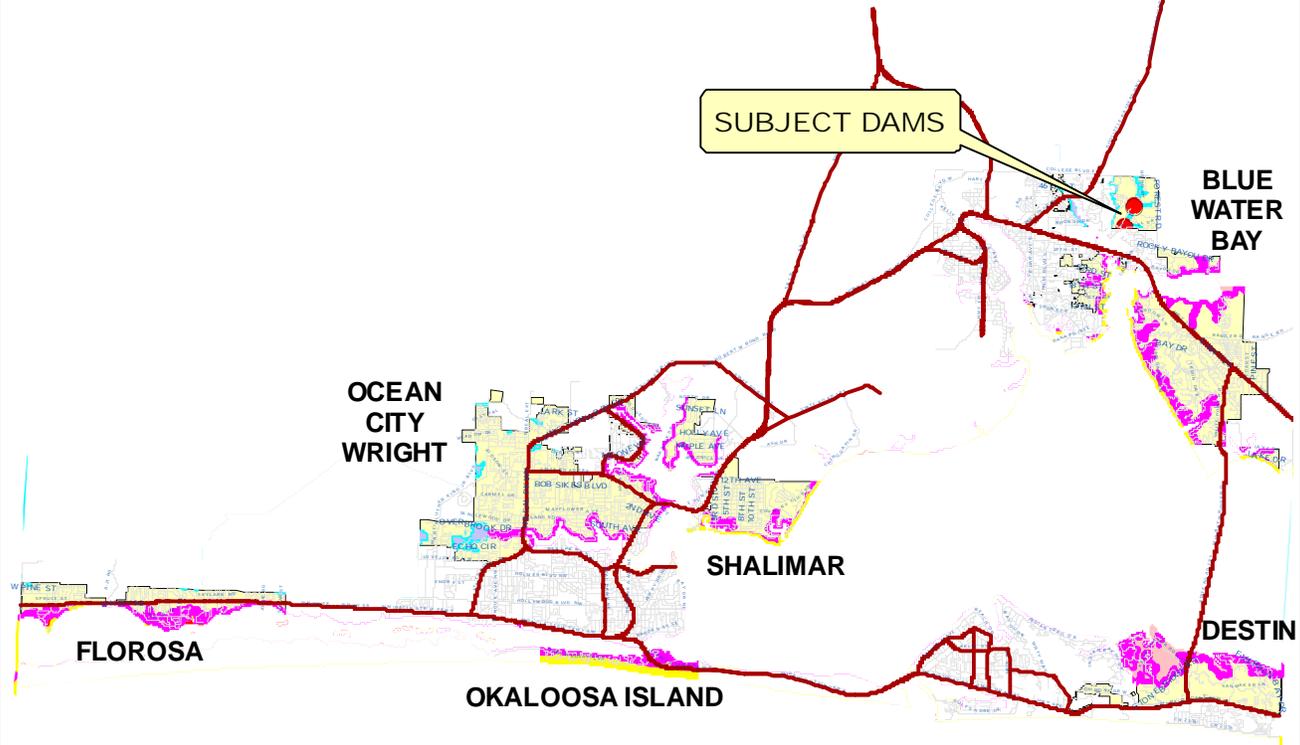
**NOTE: SEE INDIVIDUAL AREA MAPS FOR MORE DETAIL  
PAGES 5.10-78 THRU 5.10-114**

# LOCATION MAP



SOUTH AREA  
LOCATION

SUBJECT DAMS



## South Okaloosa Flood Zones & Dam Sites

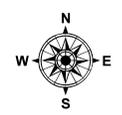
- █ Parcel Lines
- █ X 500 Year Flood Plain
- █ A 100 Year Flood Plain
- █ AE 100 Year Flood Plain
- █ VE 100 Year Flood Plain
- Base Flood Elevation in a Floodway
- Dams
- █ Unincorporated

Source: North West Florida Water Management District FEMA Map Service Center, Dec 6 2002

MAP PROJECTION  
Lambert Conformal Conic Projections on Spheroids - Florida North (1983) NAD 1983(80), NAVD 1988.

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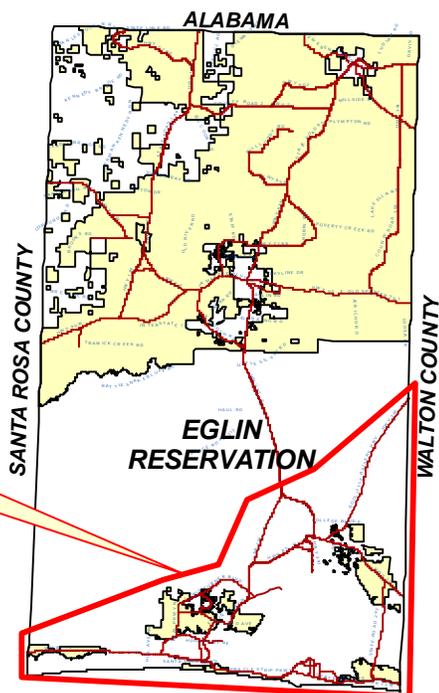
**NOTE: SEE INDIVIDUAL AREA MAPS FOR MORE DETAIL PAGES 5.10-78 THRU 5.10-114**

LOCATION MAP

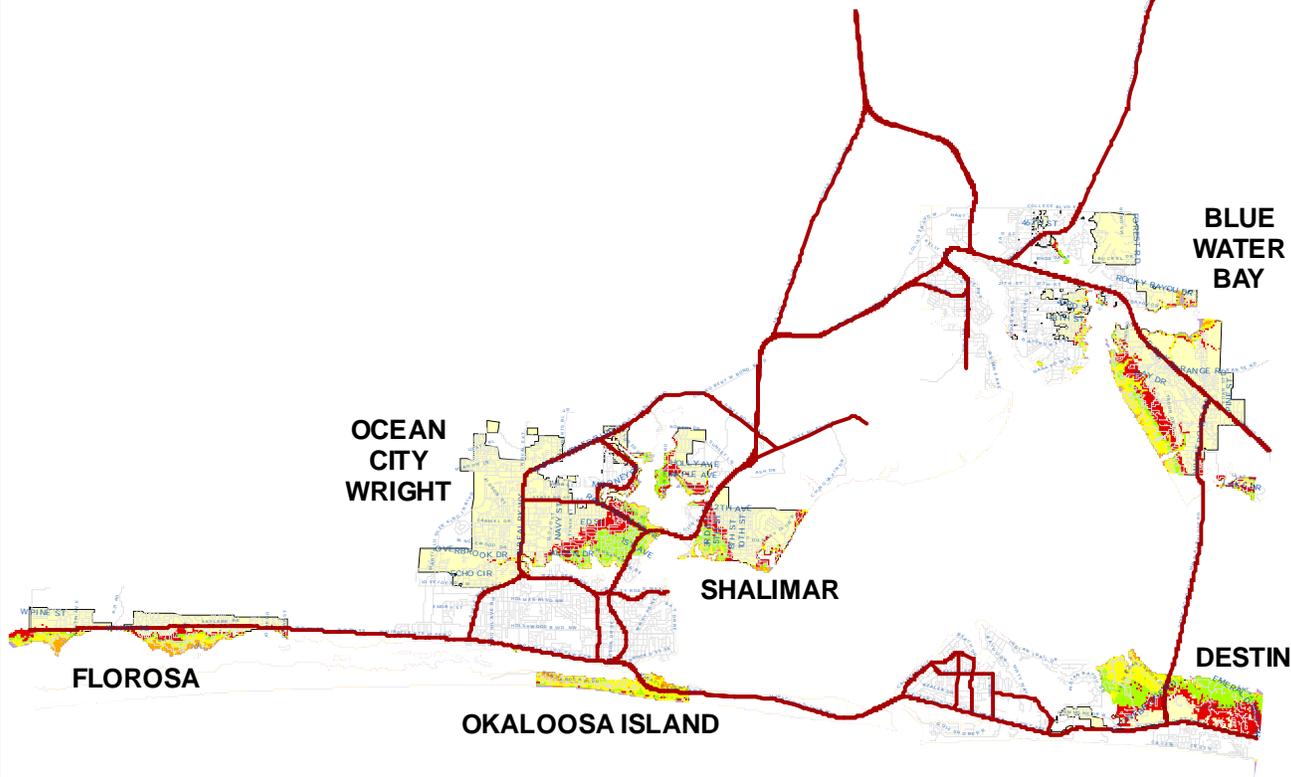
South Okaloosa Surge Zones

- Category 1
- Category 2
- Category 3
- Category 4
- Category 5
- Unincorporated

Source: West Florida Regional Planning Council, 2010



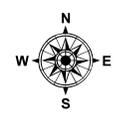
SOUTH AREA LOCATION



MAP PROJECTION  
Lambert Conformal Conic Projected on  
StatePlane: Florida North (8303)  
NAD 1983(83), NAD 1983

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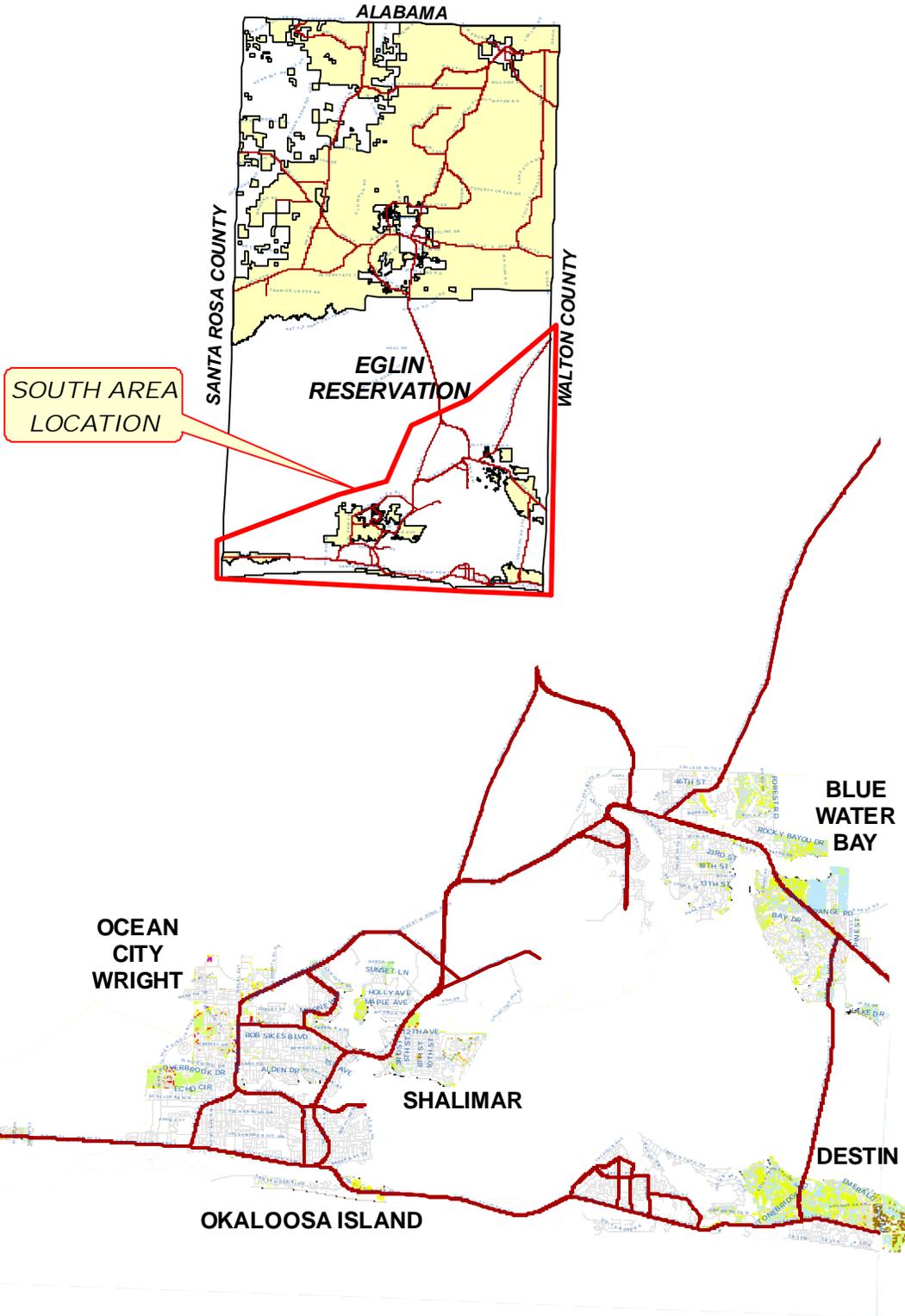
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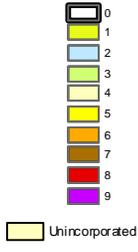
**NOTE: SEE INDIVIDUAL AREA MAPS FOR MORE DETAIL  
PAGES 5.10-78 THRU 5.10-114**

LOCATION MAP



South Okaloosa Wildfire Level of Concern

Level of Concern



Source: Florida Division of Forestry, 2010

MAP PROJECTION:  
Lambert Conformal Conic Projection  
Spheroid: Florida North (0203)  
NAD 1983 (83), NAVD 1988.

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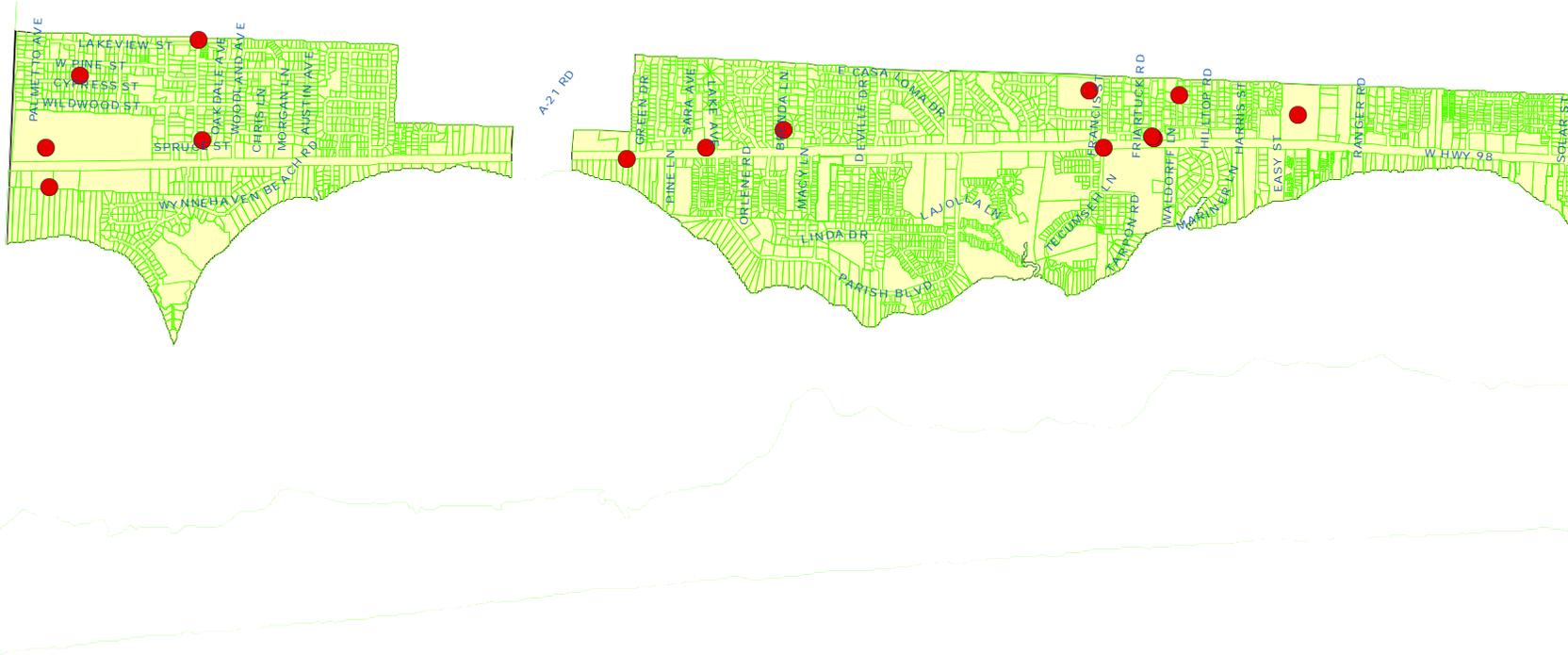
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**NOTE: SEE INDIVIDUAL AREA MAPS FOR MORE DETAIL  
PAGES 5.10-78 THRU 5.10-114**

**Florosa  
Critical  
Facilities**

-  Parcel Lines
-  Critical Facilities
-  Unincorporated

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (8303)  
NAD 1983 (83), NAVD 1988

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# Florosa Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E
-  Unincorporated

ZONE A = HURRICANE CAT 1

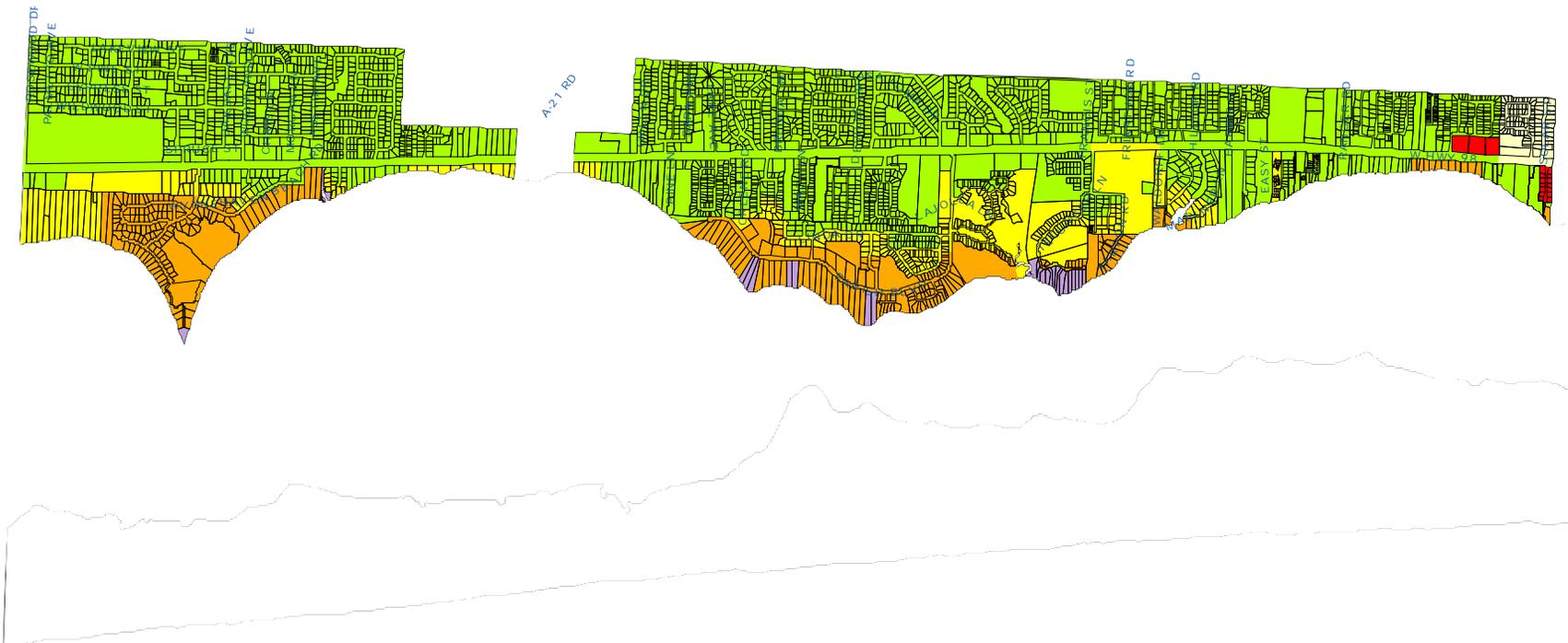
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (1983)  
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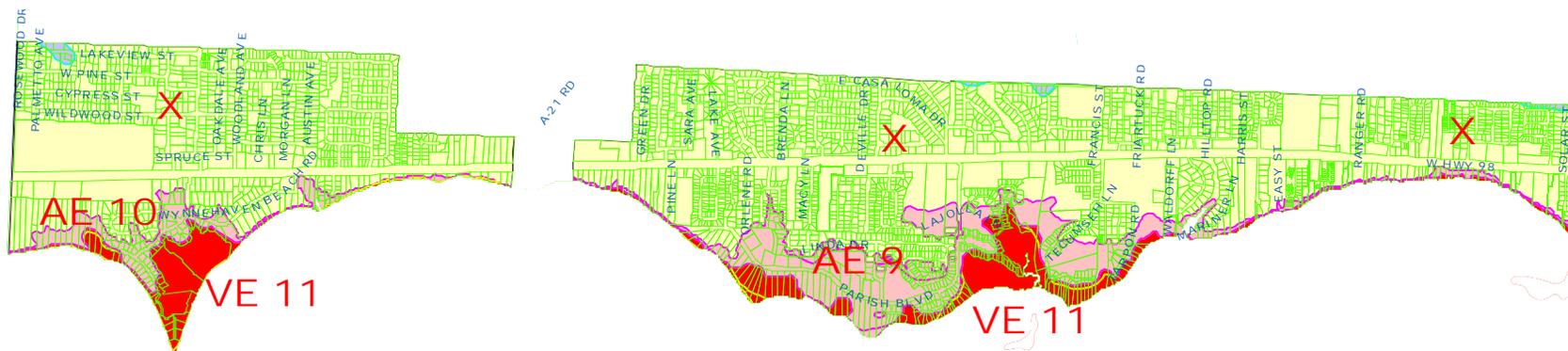


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# Florosa Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Unincorporated

Source: FEMA Map Service Center,  
Dec 6 2002



MAP PROJECTION:  
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State plane - Florida North (99.3)  
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# Florosa Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5
-  Unincorporated

Source: West Florida  
Regional Planning  
Council, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (8303)  
NAD 1983 (83), NAVD 1988

PUBLIC RECORD:  
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# Florosa Wildfire Level of Concern

Parcel Lines

Level of Concern



Unincorporated

Source: Florida Division  
of Forestry, 2010



MIP PROJECTION  
Lambert Conformal Conic Projection  
Spheroid: Florida North (823)  
NAD 1983 83, NAD 1983

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Department of  
Growth Management  
08/18/2010

# Okaloosa Island Critical Facilities

-  Parcel Lines
-  Critical Facilities
-  Unincorporated

Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION:**  
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State plane - Florida North (9903)  
NAD 1983 (93), NAVD 1988

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# Okaloosa Island Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E
-  Unincorporated

ZONE A = HURRICANE CAT 1

ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (9903)  
NAD 1983 (99), NAVD 1988

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# Okaloosa Island Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Unincorporated

Source: FEMA Map Service Center, Dec 6 2002



VE 14

VE 13

VE 15

**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (8303)  
NAD 1983 (83), NAVD 1988

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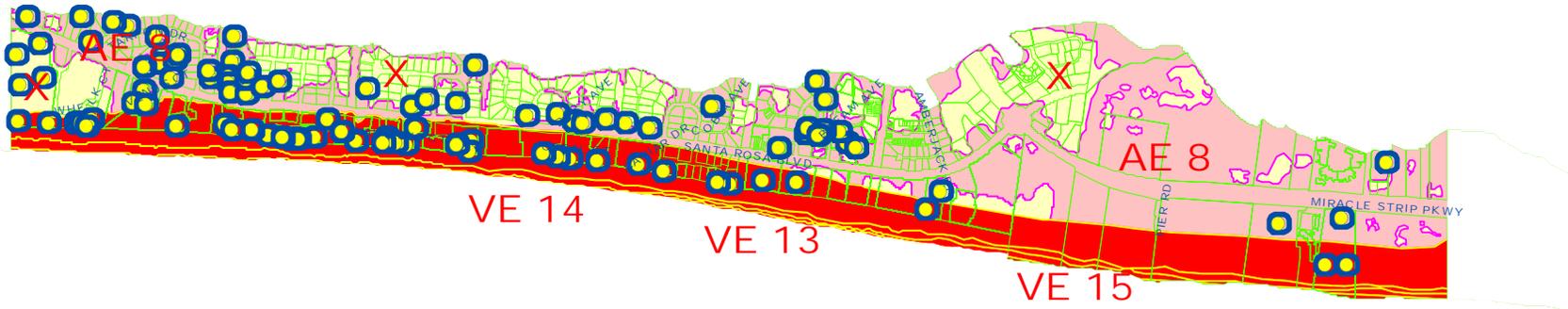


Department of  
Growth Management  
08/18/2010

# Okaloosa Island Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation
-  in a Floodway
-  Unincorporated Repetitive Loss
-  Properties

Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (8303)  
NAD 1983 (83), NAVD 1988

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# Okaloosa Island Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5
-  Unincorporated

Source: West Florida Regional Planning Council, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (9903)  
NAD 1983 (99), NAVD 1988

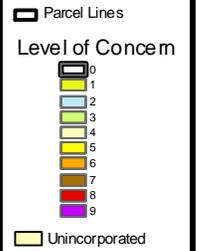
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08/18/2010

**Okaloosa Island  
Wildfire Level  
of Concern**



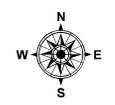
Source: Florida Division of Forestry, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (9903)  
NAD 1983 (99), NAVD 1988

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08/18/2010



# Blue Water Bay Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E
-  Unincorporated

ZONE A = HURRICANE CAT 1

ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010

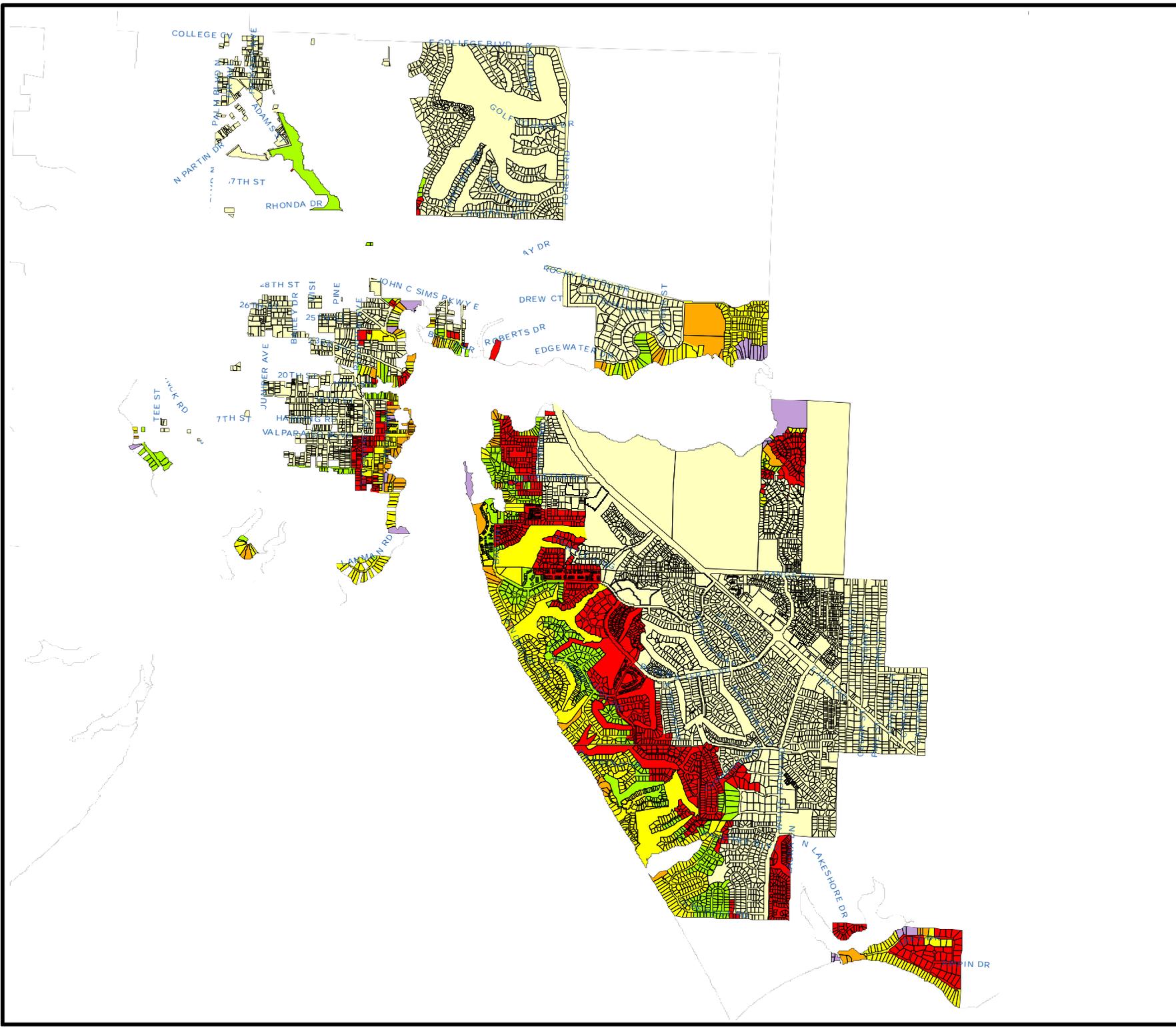
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State Plane - Florida North (83 03)  
NAD 1983 (2011) NAVD 1983

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# Bluewater Bay Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Unincorporated

Source: FEMA Map Service Center,  
Dec 6 2002

**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (8303)  
NAD 1983 (83), NAVD 1988

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# Bluewater Bay Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation
-  in a Floodway
-  Unincorporated
-  Repetitive Loss Properties

Source: FEMA Map Service Center, Dec 6 2002

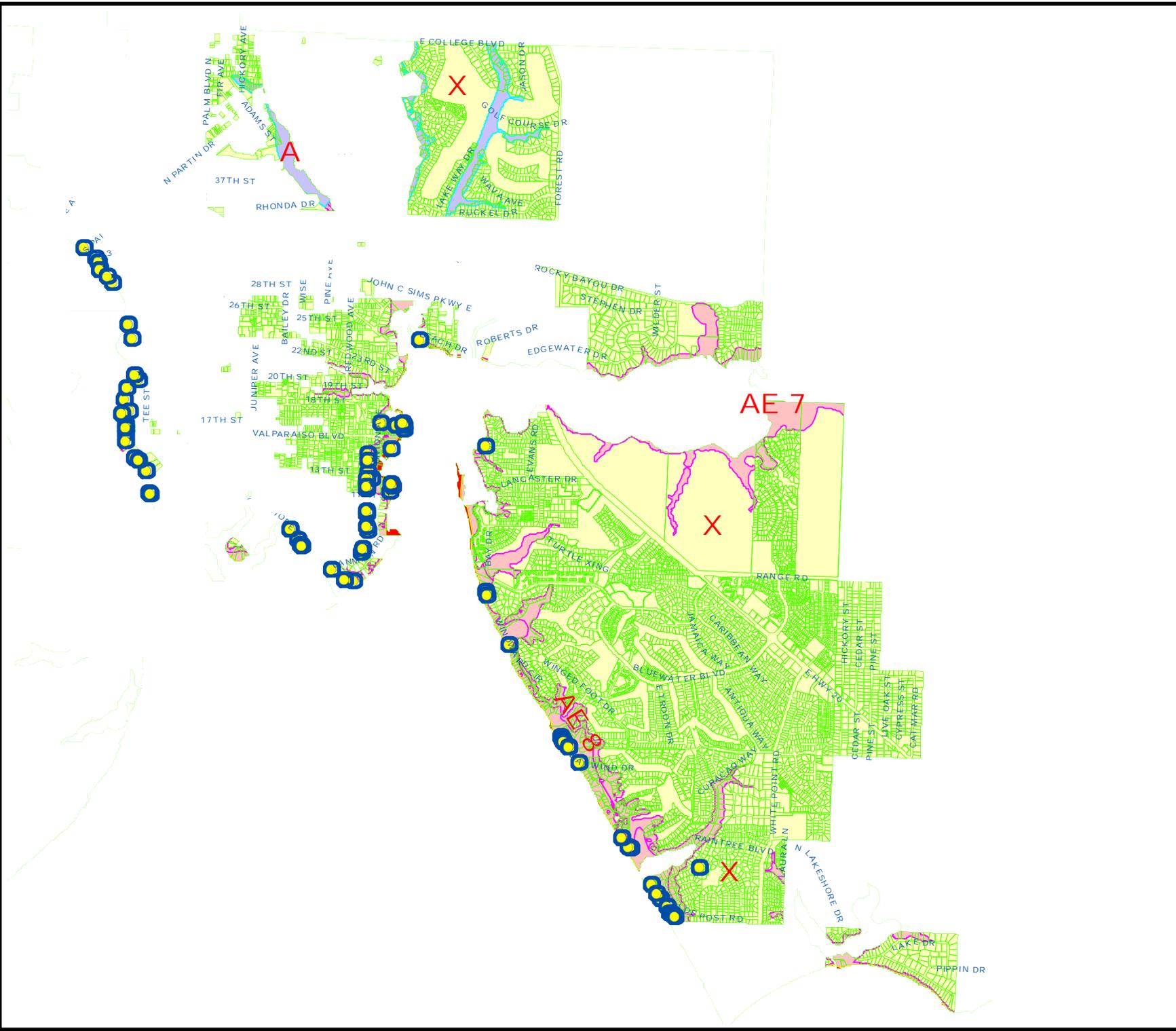
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State plane - Florida North (5003)  
NAD 1983 (93), NAVD 1988

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# Bluewater Bay Flood Zones & Dam Sites

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation in a Floodway
-  Dams
-  Unincorporated

Source: North West  
Florida Water  
Management District  
FEMA Map  
Service Center,  
Dec 6 2002

MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (9903)  
NAD 1983 (93), NAVD 1988

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# Blue Water Bay Surge Zones

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5
-  Unincorporated

Source: West Florida  
Regional Planning  
Council, 2010

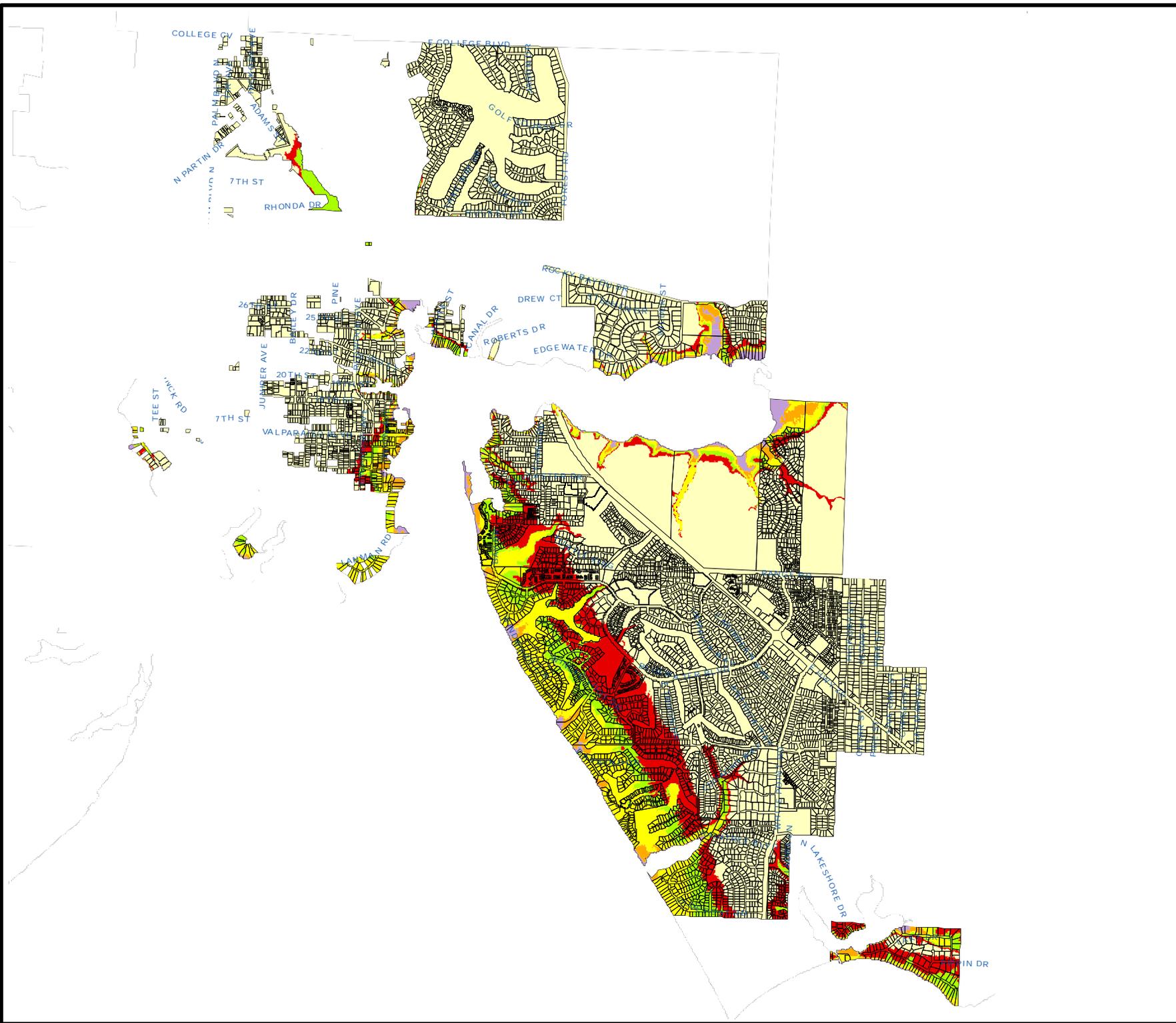
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State Plane: Florida North (89 03)  
NAD 1983 (83) NAVD 1988

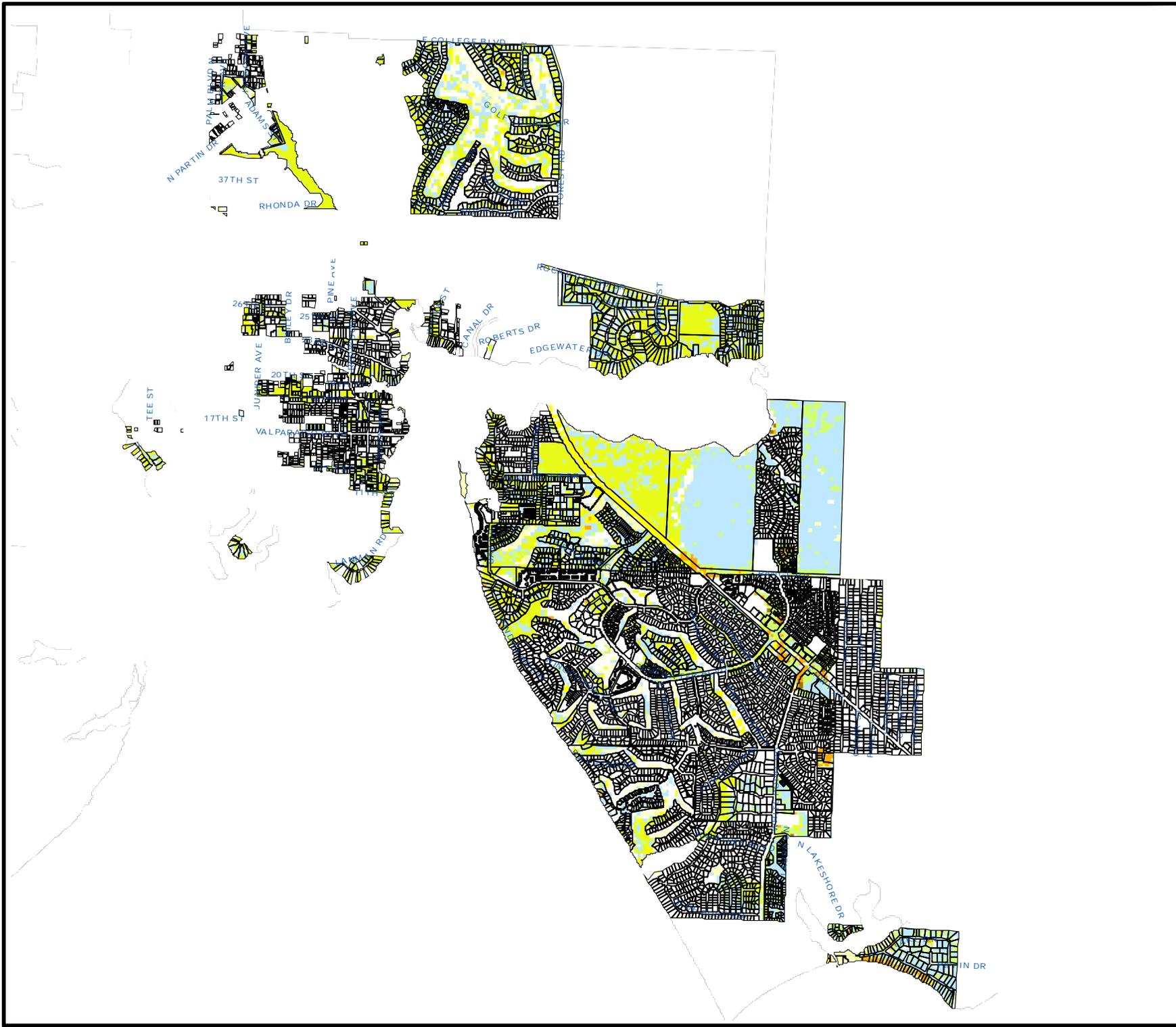
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Growth Management  
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**Bluewater Bay  
Wildfire Level  
of Concern**

Parcel Lines

Level of Concern

0
1
2
3
4
5
6
7
8
9

Unincorporated

Source: Florida Division of Forestry, 2010

**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (9903)  
NAD 1983 (99), NAVD 1988

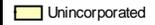
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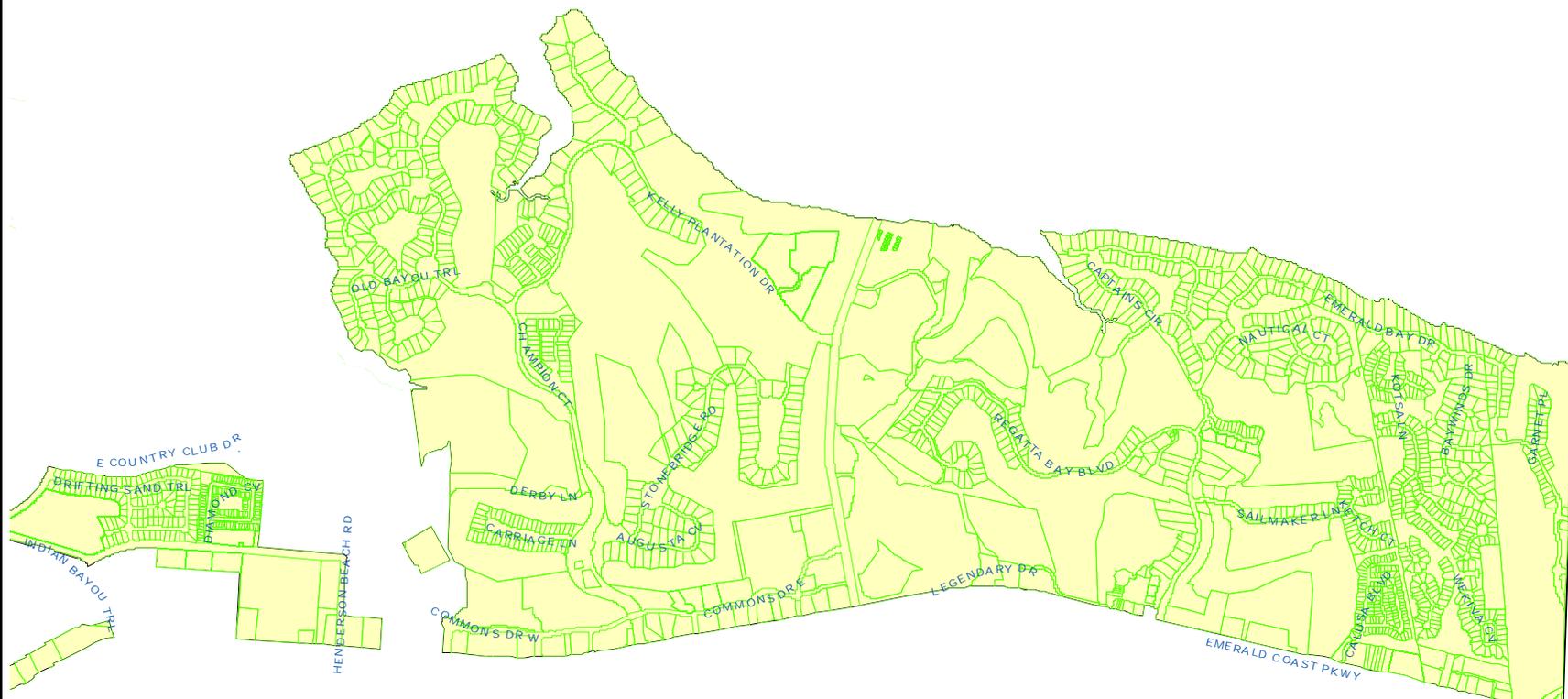
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Growth Management  
08/18/2010

**Unincorporated Destin Critical Facilities**

-  Parcel Lines
-  Critical Facilities
-  Unincorporated

**Unincorporated Destin does not have any Critical Facilities**

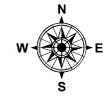
Source: Okaloosa County Public Safety, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (8903)  
NAD 1983 (83), NAVD 1988

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**Unincorporated  
Destin  
Evacuation Zones**

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E
-  Unincorporated

ZONE A = HURRICANE CAT 1

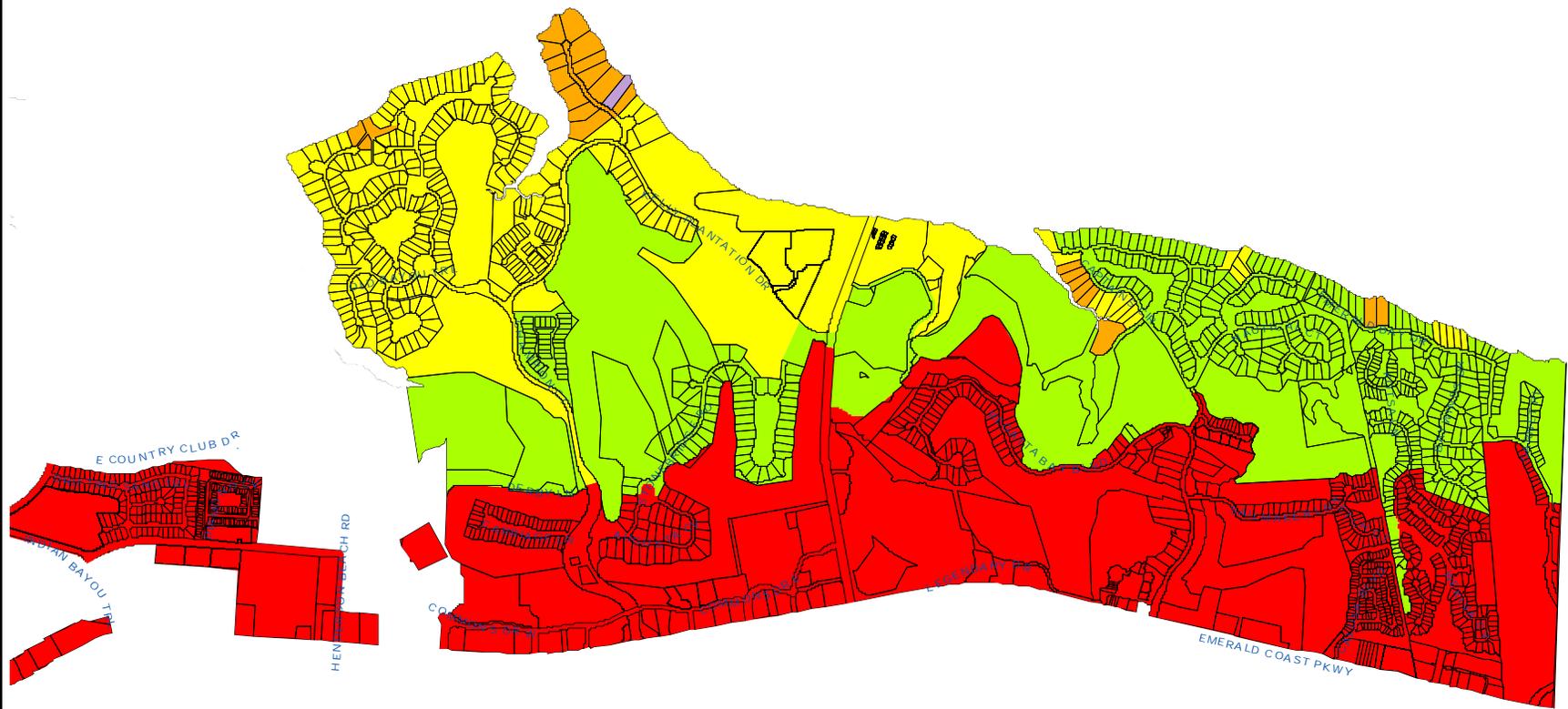
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida, North (30.3)  
NAD 1983 (93), NAVD 1988

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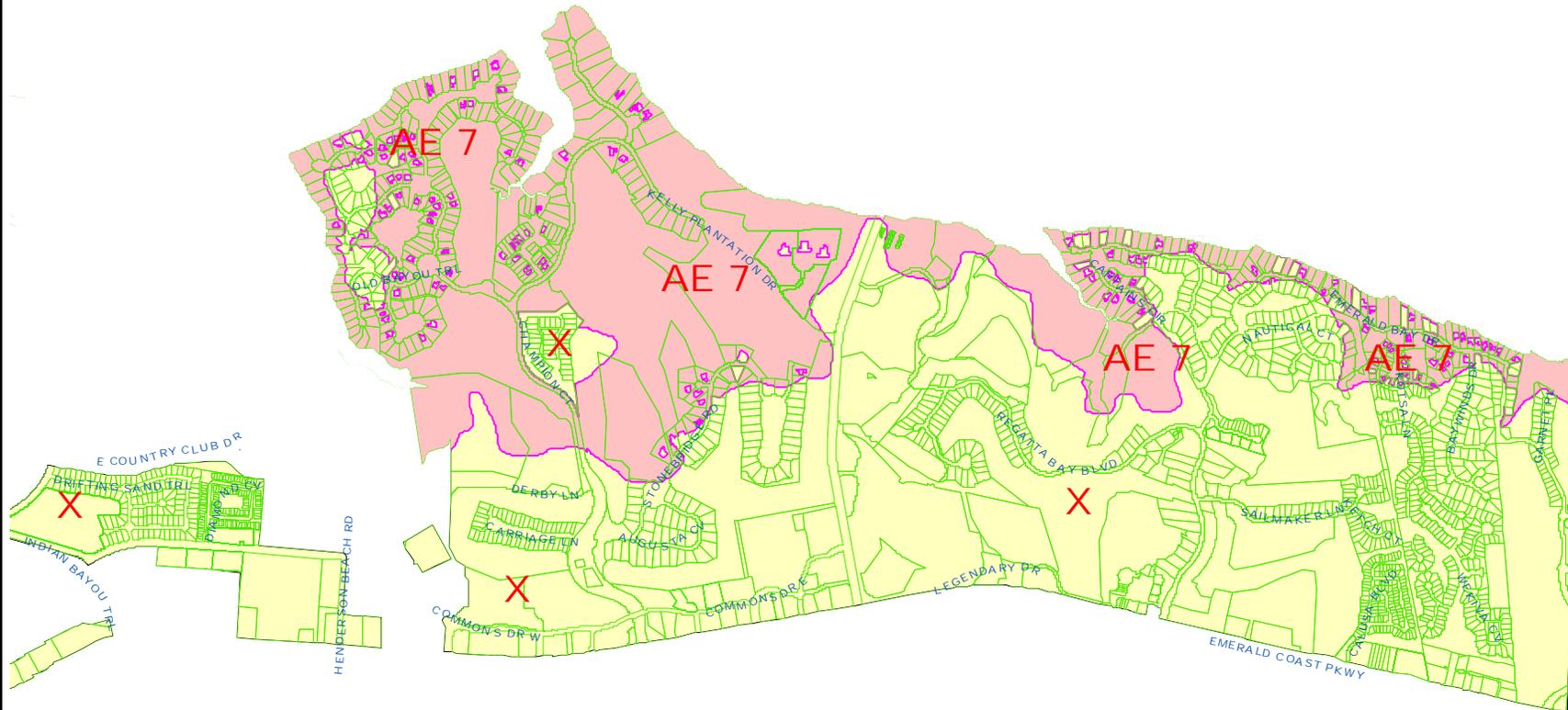


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08/18/2010

**Unincorporated  
Destin  
Flood Zones**

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Unincorporated

Source: FEMA Map  
Service Center,  
Dec 6 2002



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (9903)  
NAD 1983 (93), NAVD 1988

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**Unincorporated Destin Repetitive Loss Properties**

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation
-  in a Floodway
-  Unincorporated Repetitive Loss
-  Properties

**Unincorporated Destin does not have any Repetitive Loss Properties**

Source: FEMA Map Service Center, Dec 6 2002

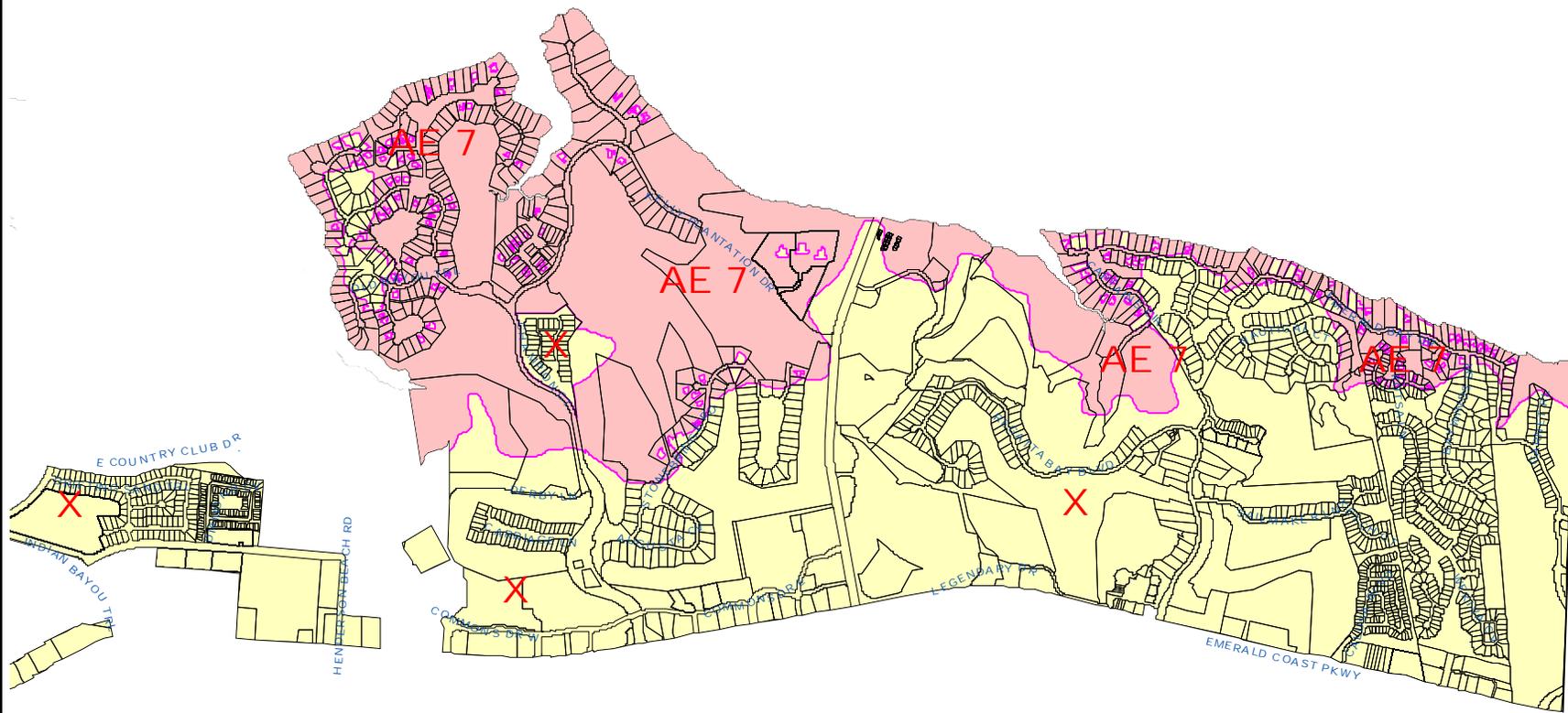
MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (8303)  
NAD 1983 (83), NAVD 1988

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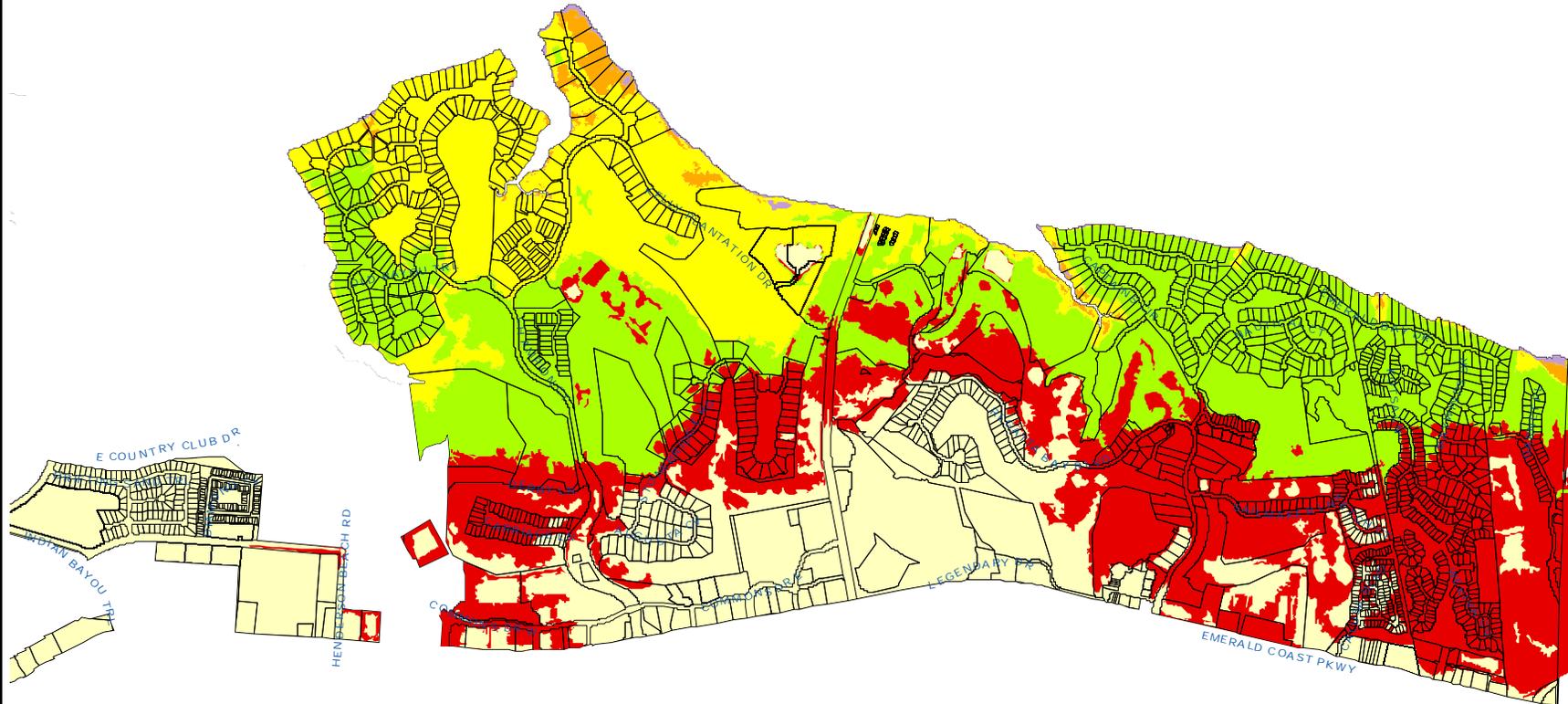
Department of Growth Management  
08/18/2010



**Unincorporated  
Destin  
Surge Zones**

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5
-  Unincorporated

Source: West Florida  
Regional Planning  
Council, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (9903)  
NAD 1983 (99), NAVD 1988

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**Unincorporated Destin  
Wildfire Level of Concern**

Parcel Lines

Level of Concern



Unincorporated

Source: Florida Division of Forestry, 2010



MAP PROJECTION:  
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State plane - Florida North (99.3)  
NAD 1983 (99), NAVD 1988

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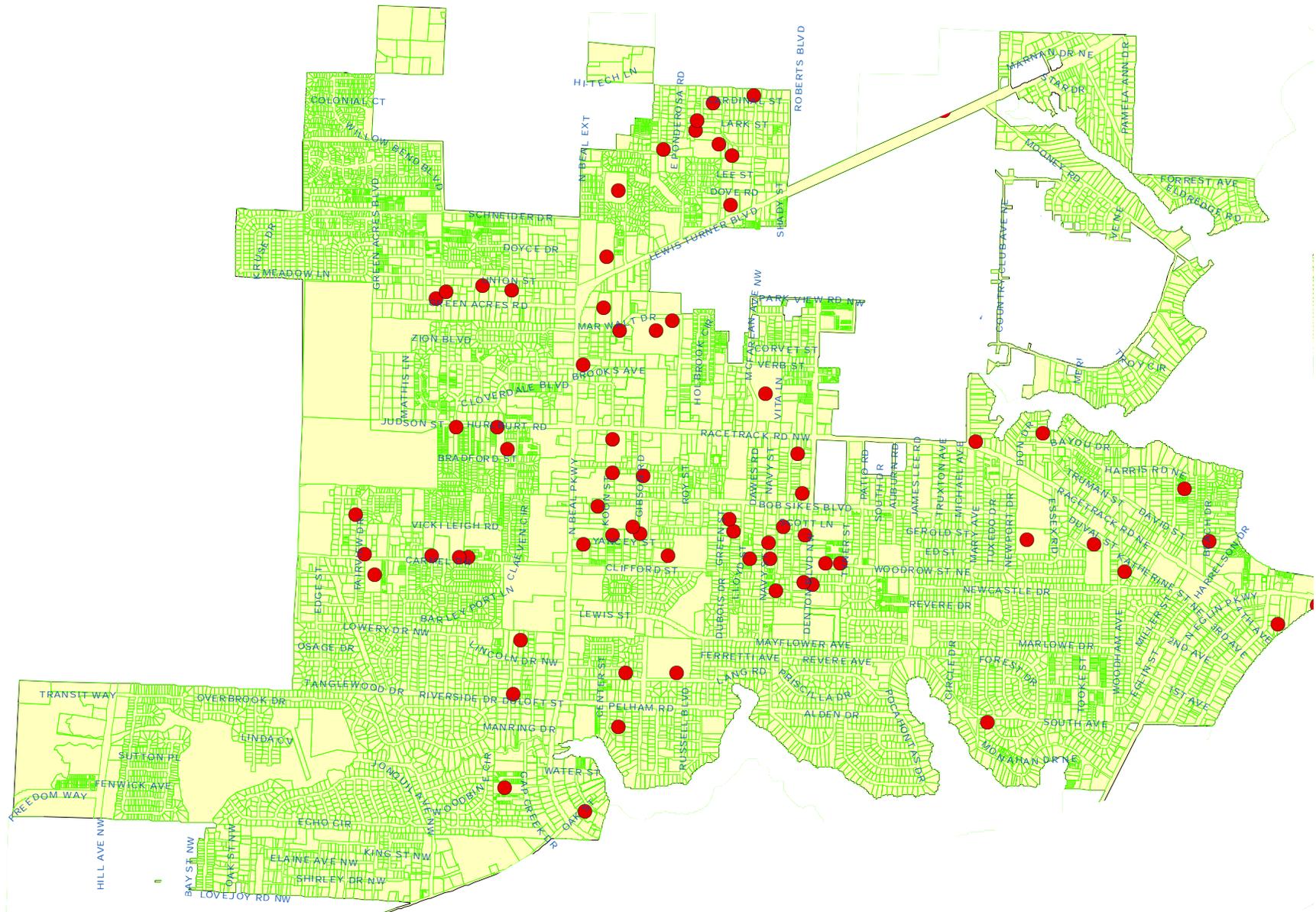


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# Ocean City Wright Critical Facilities

-  Parcel Lines
-  Critical Facilities
-  Unincorporated

Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (8303)  
NAD 1983 (83), NAVD 1988

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# Ocean City Wright Evacuation Zones

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E
-  Unincorporated

ZONE A = HURRICANE CAT 1

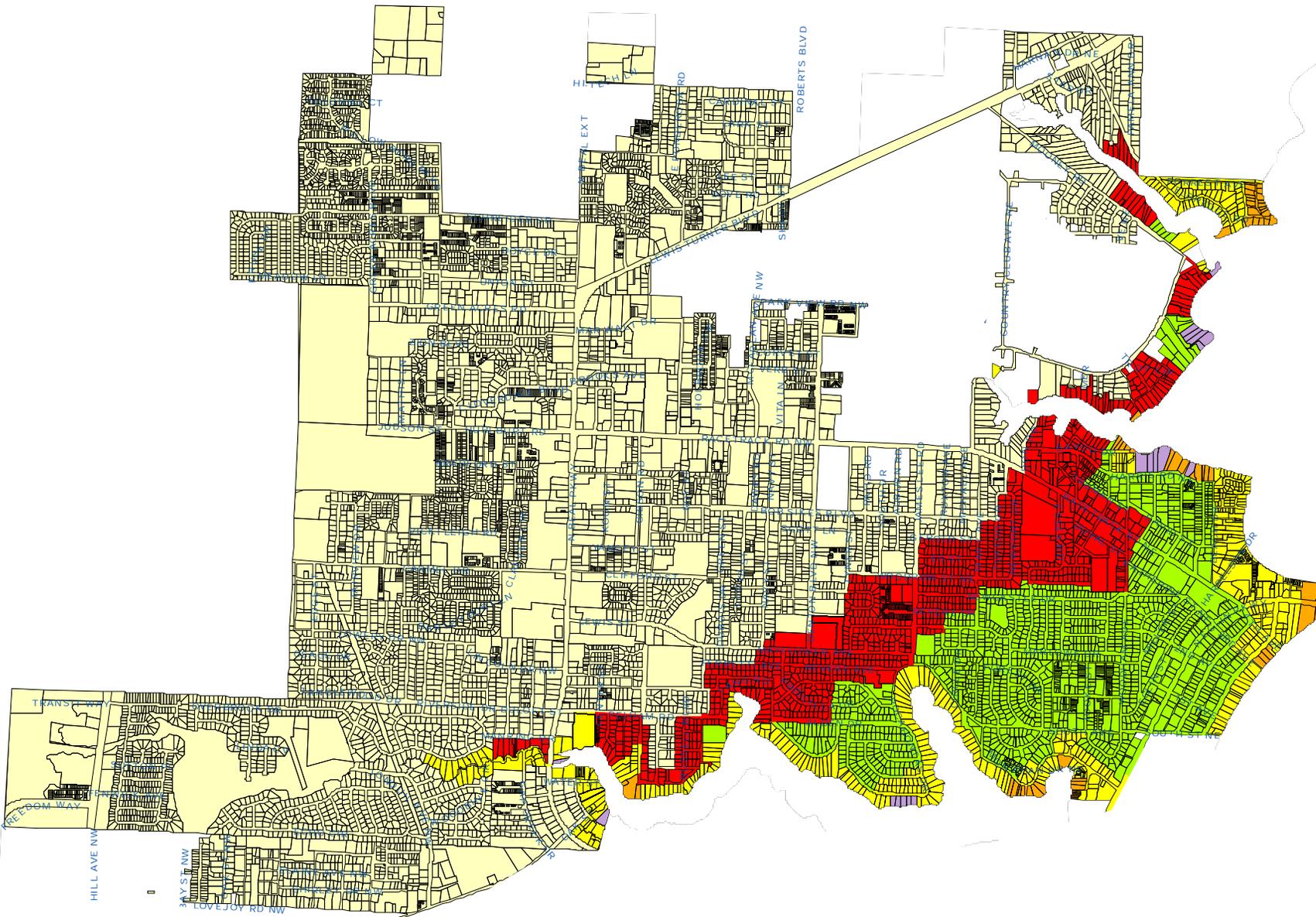
ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (9903)  
NAD 1983 (99), NAVD 1988

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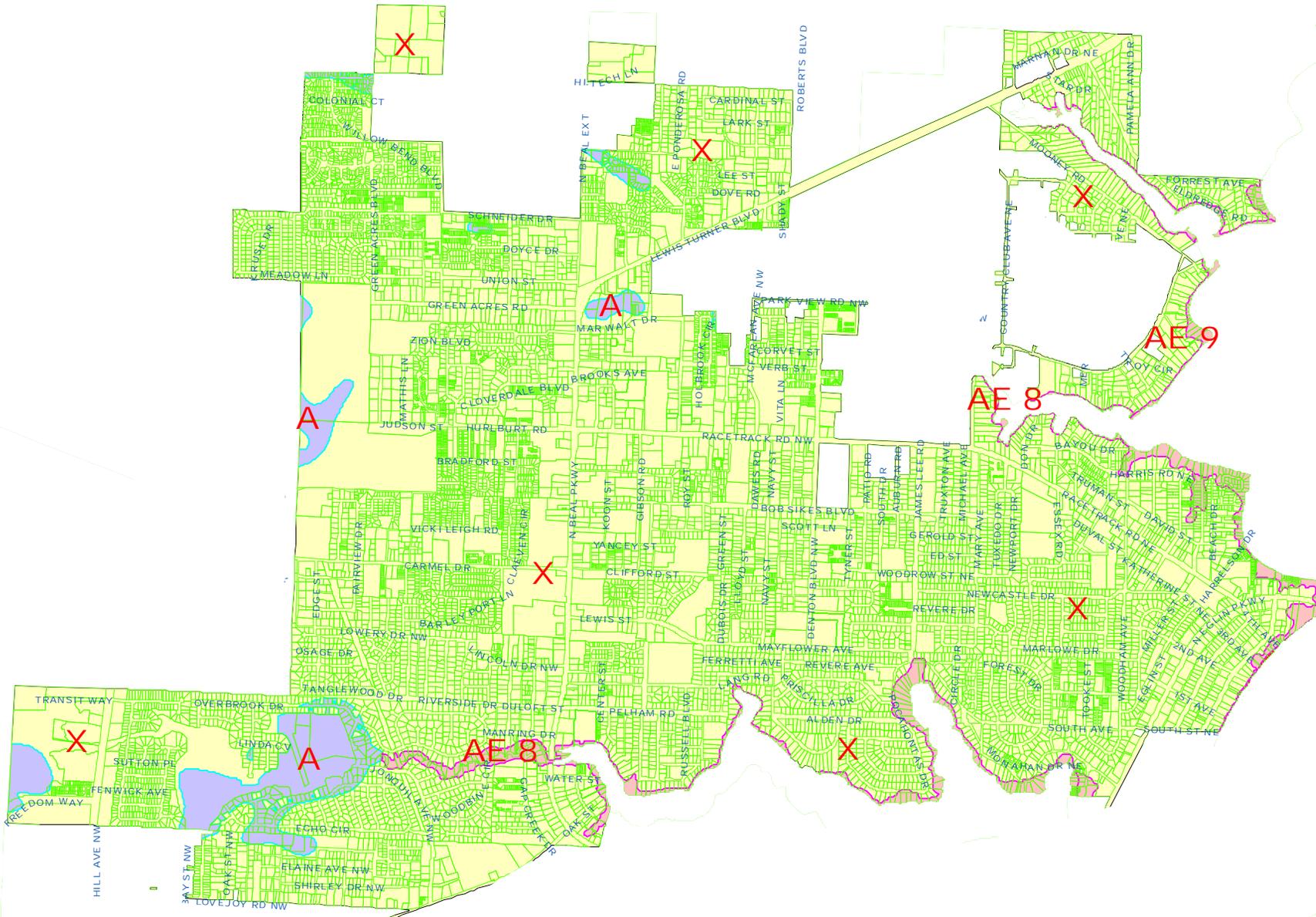


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08/18/2010

# Ocean City Wright Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Unincorporated

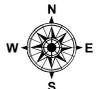
Source: FEMA Map Service Center,  
Dec 6 2002



**MAP PROJECT ON:**  
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State plane - Florida, North (9.93)  
NAD 1983 (93), NAVD 1988

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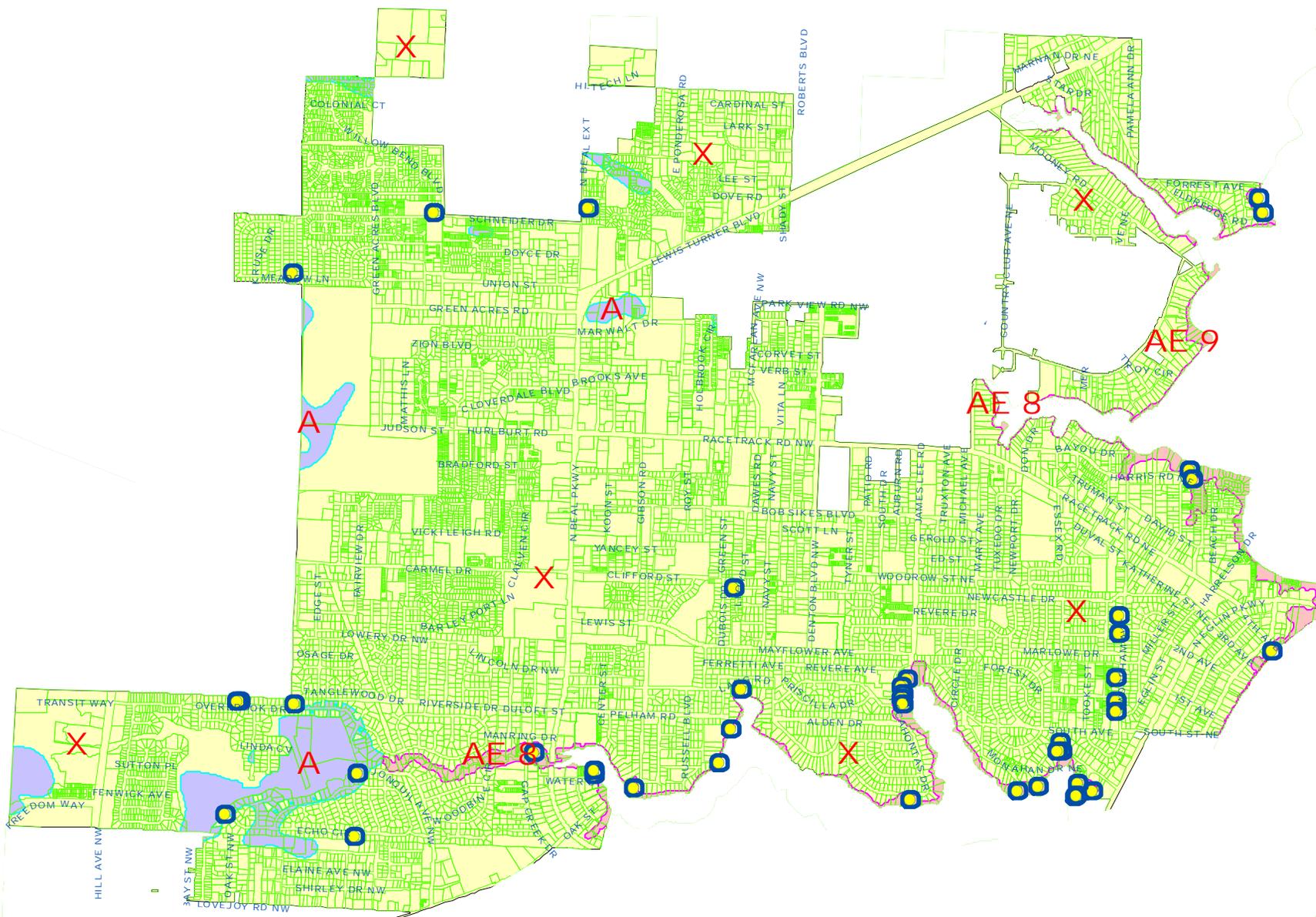


Department of  
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08/18/2010

# Ocean City Wright Repetitive Loss Properties

- Parcel Lines
- X 500 Year Flood Plain
- A 100 Year Flood Plain
- AE 100 Year Flood Plain
- VE 100 Year Flood Plain
- Base Flood Elevation in a Floodway
- Unincorporated
- Repetitive Loss
- Properties

Source: FEMA Map Service Center, Dec 6 2002



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (5003)  
NAD 1983 (9), NAVD 1988

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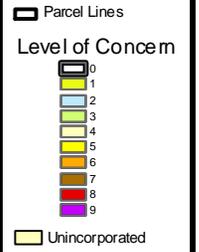
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**Ocean City  
Wright  
Wildfire Level  
of Concern**



Source: Florida Division of Forestry, 2010



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Lambert Conformal Conic Projection  
State plane - Florida North (993)  
NAD 1983 (93), NAVD 1988

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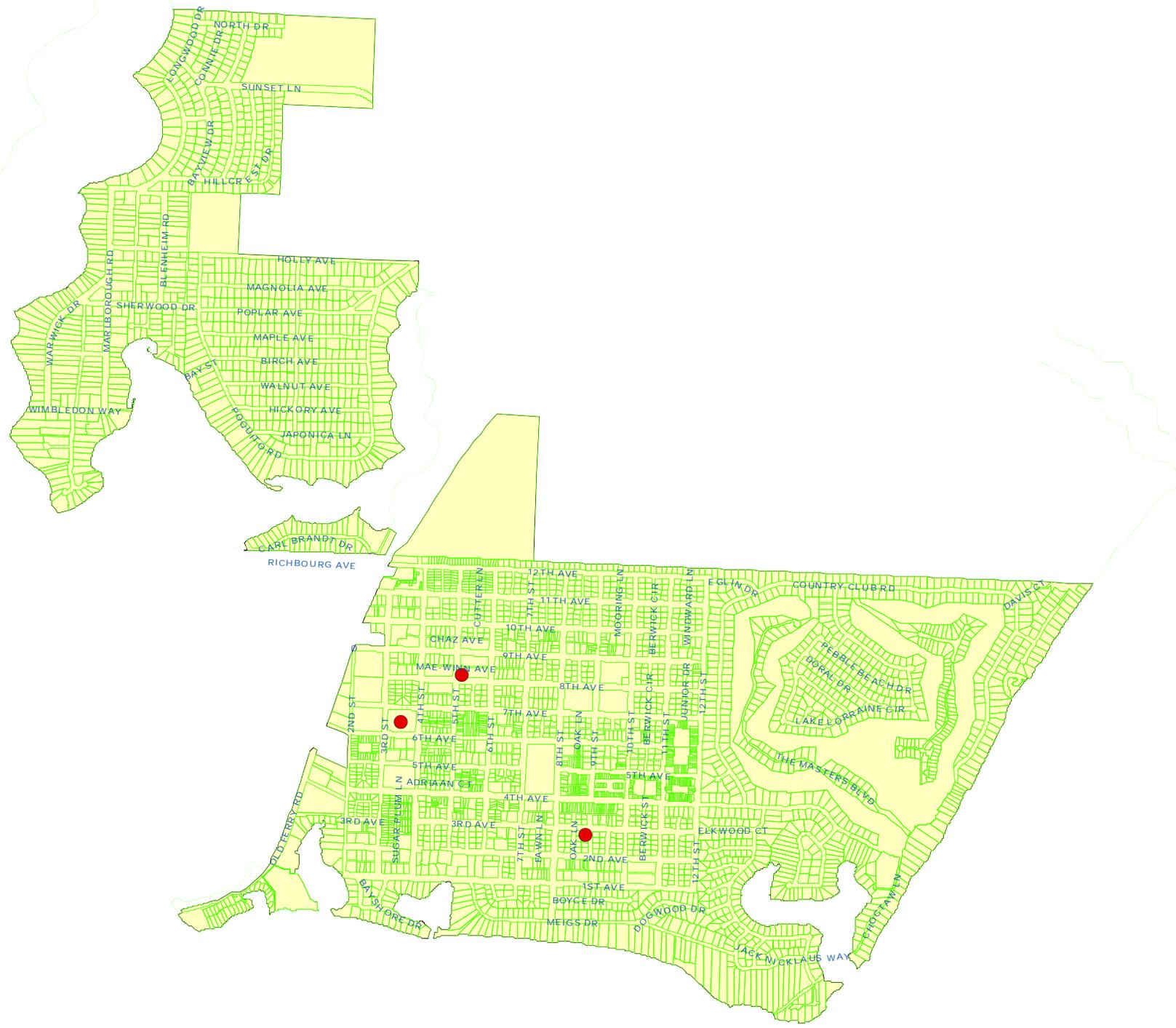


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08/18/2010

**Unincorporated  
Shalimar  
Critical  
Facilities**

-  Parcel Lines
-  Critical Facilities
-  Unincorporated

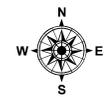
Source: Okaloosa County  
Public Safety, 2010



**MAP PROJECTION:**  
Lambert Conformal Conic Projection  
State plane - Florida North (8303)  
NAD 1983 (83), NAVD 1988

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**Unincorporated  
Shalimar  
Evacuation Zones**

-  Parcel Lines
-  Evac Zone A
-  Evac Zone B
-  Evac Zone C
-  Evac Zone D
-  Evac Zone E
-  Unincorporated

ZONE A = HURRICANE CAT 1

ZONE B = HURRICANE CAT 2

ZONE C = HURRICANE CAT 3

ZONE D = HURRICANE CAT 4

ZONE E = HURRICANE CAT 5

Source: Okaloosa County  
Public Safety, 2010

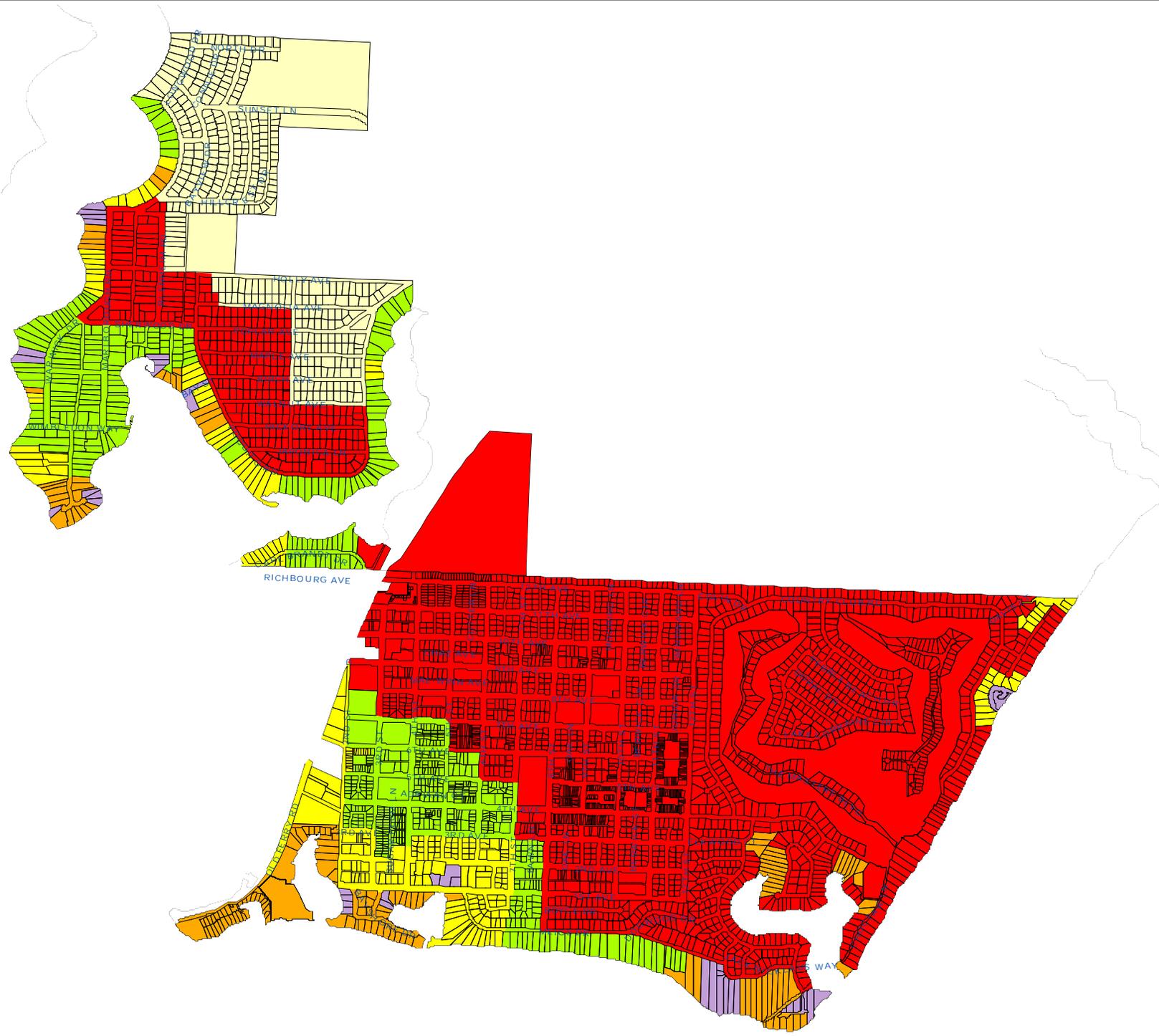
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State plane - Florida North (9903)  
NAD 1983 (93), NAVD 1988

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08/18/2010



# Unincorporated Shalimar Flood Zones

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Unincorporated

Source: FEMA Map Service Center, Dec 6 2002

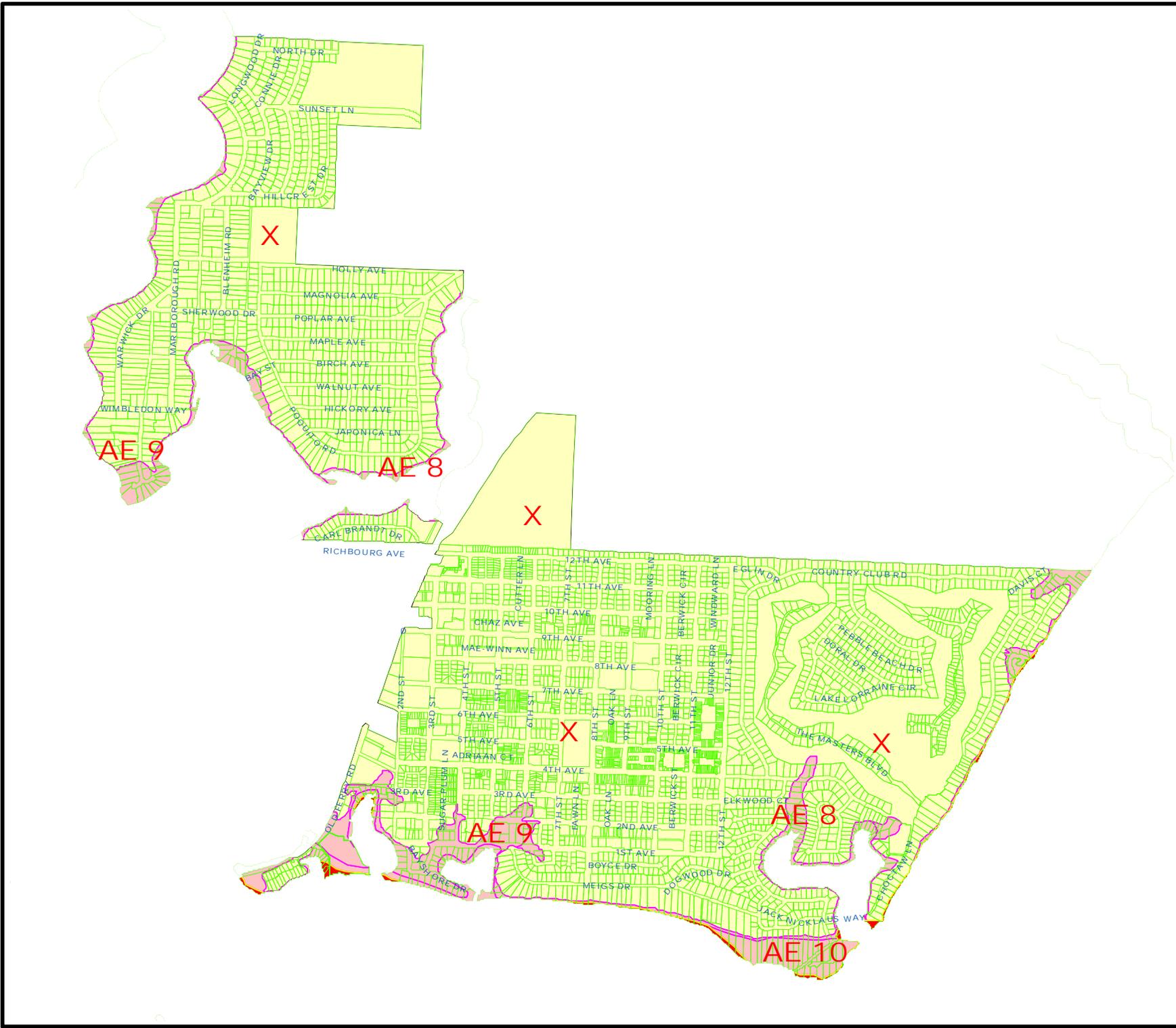
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 NAD 1983 (83), NAVD 1988

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# Unincorporated Shalimar Repetitive Loss Properties

-  Parcel Lines
-  X 500 Year Flood Plain
-  A 100 Year Flood Plain
-  AE 100 Year Flood Plain
-  VE 100 Year Flood Plain
-  Base Flood Elevation
-  in a Floodway
-  Unincorporated Repetitive Loss
-  Properties

Source: FEMA Map Service Center, Dec 6 2002

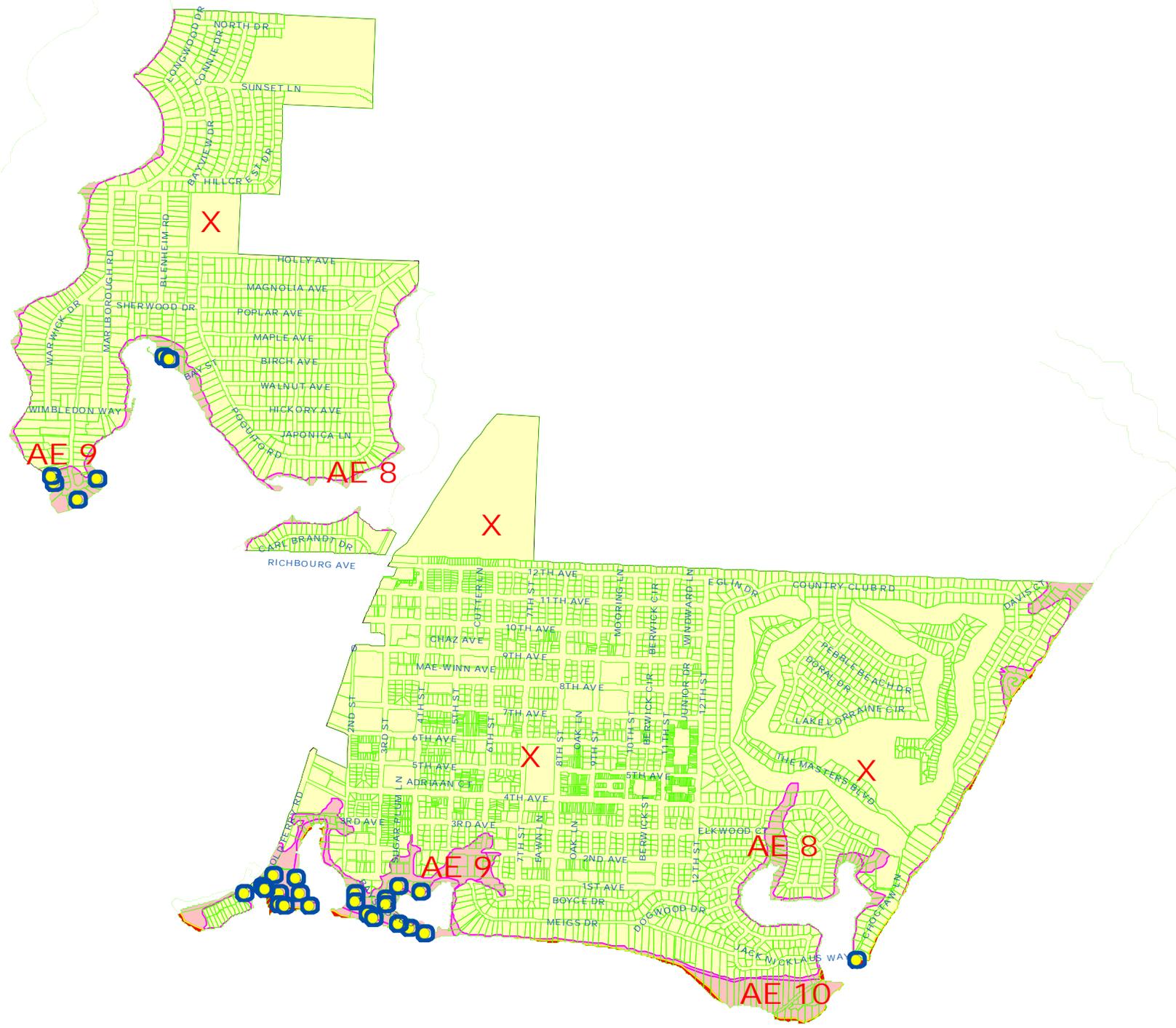
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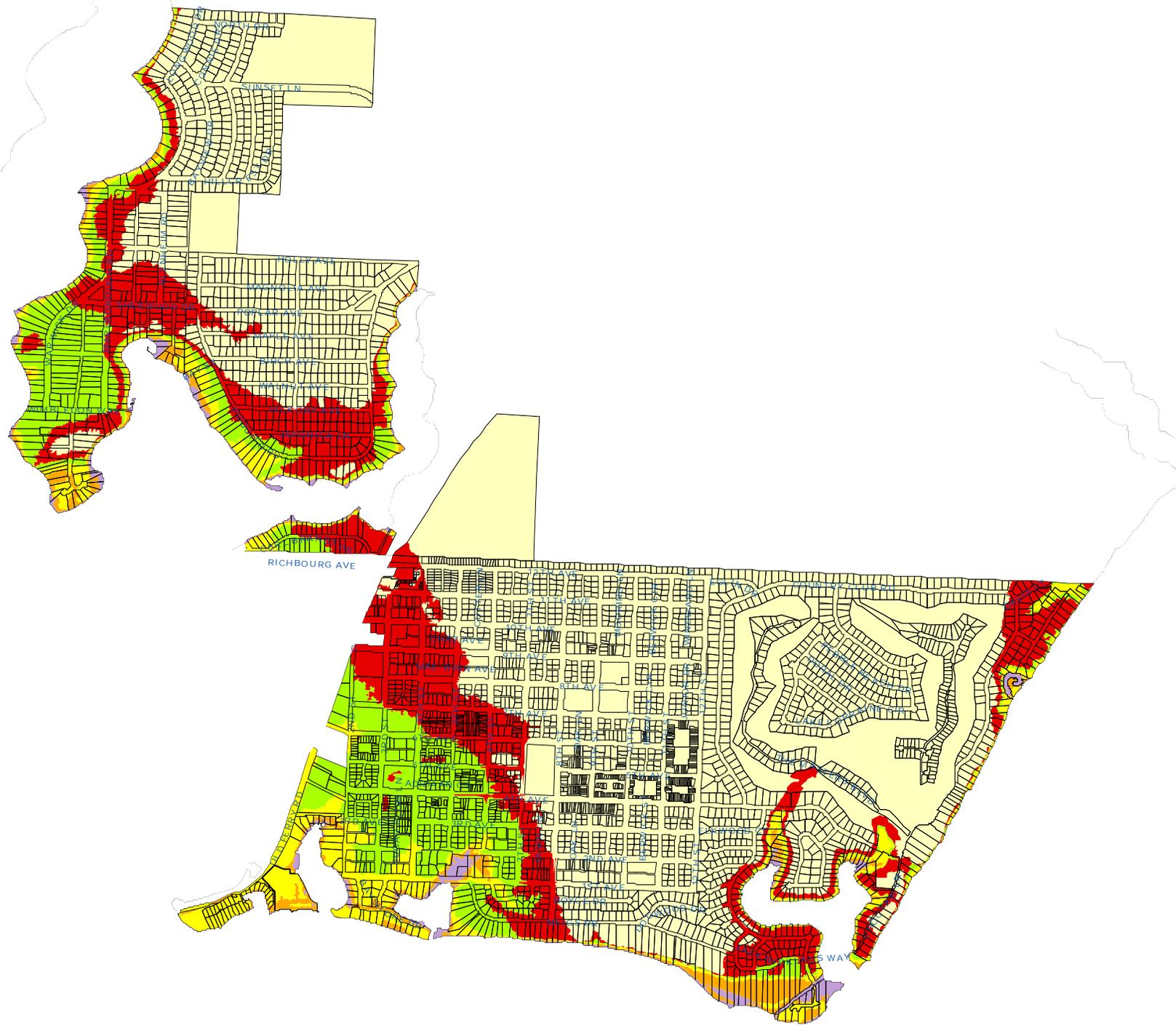
Department of  
Growth Management  
08/18/2010



**Unincorporated  
Shalimar  
Surge Zones**

-  Parcel Lines
-  Category 1
-  Category 2
-  Category 3
-  Category 4
-  Category 5
-  Unincorporated

Source: West Florida  
Regional Planning  
Council, 2010



MAP PROJECTION:  
Lambert Conformal Conic Projection  
State plane - Florida North (303)  
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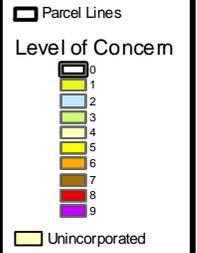
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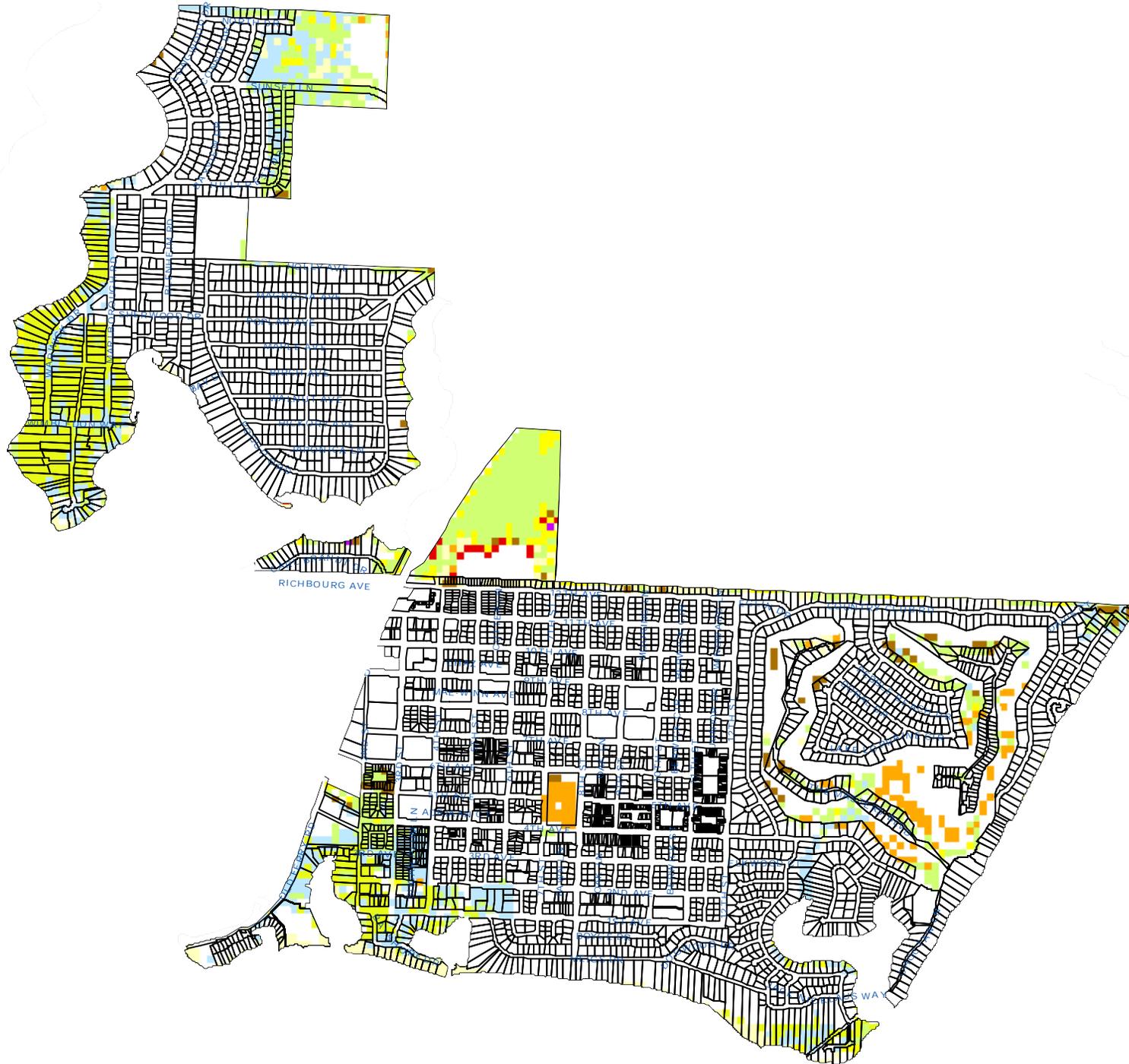


Department of  
Growth Management  
08/18/2010

**Unincorporated  
Shalimar  
Wildfire Level  
of Concern**



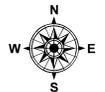
Source: Florida Division  
of Forestry, 2010



MIP PROJECTION  
Lambert Conformal Conic Projection  
Dateline: Florida North (82°)  
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08/18/2010



## Unincorporated Okaloosa County

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### **Section 5.10.06 Post Disaster Redevelopment Plan**

This section provides the post disaster redevelopment plan adopted by Okaloosa County. This plan is still in effect and, in addition to Okaloosa County, is enforced in all jurisdictions that do not have a post disaster redevelopment plan of their own.



## Unincorporated Okaloosa County

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### **Section 5.10.06 Post Disaster Redevelopment Plan**

To provide for the health, safety, and welfare of the public through sound pre-disaster and post-disaster redevelopment policies intended to reduce the potential for loss of life and property.

The Post-Disaster Redevelopment Plan for Okaloosa County, Florida, is adopted by the Board of County Commissioners in accordance with the Comprehensive Plan.

**Goal 1 Re-establish the economic vitality and social order of Okaloosa County in a timely and orderly manner consistent with the other goals of this plan.**

**Objective 1.1 Create and appoint a Disaster Recovery Advisory Committee, hereinafter referred to as the Committee, to guide implementation of this Plan after a disaster.**

**Policy 1.1.1** The Committee shall meet once a quarter or more often if deemed necessary by the County Administrator, regardless of a disaster occurrence, to discuss development rules that may be adopted or changed to mitigate the loss of life and property from potential disasters. The committee shall make a report annually to the Board of County Commissioners on its findings and recommendations. After a disaster, the Committee shall meet within 72 hours of the onset of damages, and as often as needed thereafter, to discuss and formulate recommendations for the execution of this Plan.

**Policy 1.1.2** The Committee shall include those personnel as the County Administrator deems necessary, but as a minimum shall include representatives from the following departments and agencies:

- Emergency Management Division
- Growth Management
- Clerk of Courts
- Finance
- Public Works
- Water and Sewer
- Public Health
- Property Appraisers Office

**Policy 1.1.3** The Committee shall, as necessary, seek input from, and coordinate with, municipalities, chambers of commerce, constitutional officers, and subject matter experts to develop policy recommendations for implementing disaster recovery plans and objectives. The County Administrator shall be the chair or spokesperson for the Committee, and shall task the members to perform such work as may be necessary to accomplish the Committee's purposes as outlined in this plan.

**Policy 1.1.4** The Committee shall prepare and maintain a list of critical facilities, both public and private, threatened by hurricane or other disasters, and shall make recommendations to reduce the vulnerability of those facilities. The Committee shall evaluate the undeveloped areas of the



## Unincorporated Okaloosa County

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County that are in the Hurricane Vulnerability Zone and the V, VE, A, and AE zones on the Federal Emergency Management Agency's Flood Insurance Rate Maps, and make recommendations on mitigation and development strategies to reduce the potential for loss of life and property from natural hazards.

**Policy 1.1.5** The Committee shall make recommendations on other pre-disaster zoning, building and related construction codes, or land use changes that are prudent and feasible, and which will reduce the loss of life or property resulting from hurricanes, floods, or other disasters. All recommendations for changes to existing zoning, building, and related construction codes shall be presented in writing for consideration by the Board of County Commissioners.

**Objective 1.2** *Conduct a post-disaster assessment of the impact on essential services, followed by a detailed assessment of damage to infrastructure, housing, and economic interests according to the State and County Comprehensive Emergency Management Plans in effect.*

**Policy 1.2.1** The Director of Public Safety, Chief of Emergency Management or designee shall ensure that a generalized impact assessment is conducted as soon as conditions allow following the disaster event. Each municipality shall also conduct an assessment of the disaster's impact to its residents and report the information to the County Emergency Operations Center (EOC) via whatever communications, including courier that is available. The County EOC shall correlate the data from municipalities and unincorporated areas and relay the information to the State EOC via whatever communications available. The impact assessments will concentrate on immediate human needs, such as food, water supply, electrical power needs, temporary housing needs, emergency, medical needs and security. The report will be in the format specified by the Florida Division of Emergency Management, and shall be provided within 12 hours of cessation of 40 mph winds (in the case of hurricanes), or daily in the case of floods or other disasters. The Department of Public Safety shall attempt to obtain such aid as is reasonably necessary to reduce suffering, restore public safety and order, restore communications, and clear transportation routes. All county departments and officers will render such aid as is available to meet these needs.

**Policy 1.2.2** The Director of Public Safety, Chief of Emergency Management, or designee shall ensure that a more detailed Preliminary Damage Assessment is conducted in the unincorporated area of the County. The reports will be in a format specified by the Florida Division of Emergency Management, and will be provided within 36 hours if conditions allow.

**Policy 1.2.3** Municipalities shall perform Preliminary Damage Assessments within their jurisdictions and report findings to the County EOC within 12 hours of cessation of 40 mph winds (for hurricanes), or 24 hrs for other types of disaster if conditions allow. The County EOC shall collect and collate damage information provided by the municipalities and report this information to the State EOC in the manner specified by the Florida Division of Emergency Management. The Okaloosa County Property Appraiser shall implement the procedures necessary to provide valuation information in support of this policy.



## Unincorporated Okaloosa County

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**Policy 1.2.4** Preliminary Damage Assessments will provide, insofar as possible, information on the numbers of homes, businesses, public facilities, public beaches, parks, and roads that are destroyed, suffered major damage, and sustained minor damage. Reports will include the estimated value of the destroyed structure or costs of repair for damages, the estimated number of employees or residents displaced and other information as may be required by state or federal agencies. The following definitions will be used for reporting purposes.

- a. Substantial Damage is when the cost of repair, replacement, or relocation of a structure exceeds 50-percent of its pre-disaster replacement value. A mobile home will be considered destroyed if flood waters reach floor level and the floor is soaked.
- b. Major damage is when the cost of repair, replacement, or relocation of a structure is between 25 to 50 percent of its pre-disaster replacement value, e.g., a building or house shall be considered to have major damage if flood waters reach the level of electrical outlets.
- c. Minor damage is when the cost of repair, replacement, or relocation of a structure is less than 25-percent of its pre-disaster replacement value.

**Policy 1.2.5** The Department of Public Safety shall coordinate with municipal, county, state, and federal agencies to accomplish additional damage assessments and verifications as may be necessary.

**Policy 1.2.6** Each county department head shall ensure that estimates for damage, repair or debris removal within their area of responsibility is conducted as soon as practical after the disaster event. They will prepare and maintain a detailed list of labor, materials, and contract expenditures for work performed to make formal preparations for the recovery from the disaster. Each department head shall designate a knowledgeable person from middle or upper management who will work with state and federal representatives to prepare damage survey reports for assistance or reimbursement claims within the department's area of responsibility.

**Policy 1.2.7** The County Administrator shall coordinate with the Clerk of Courts to evaluate immediate revenue sources needed for emergency repairs or relief of suffering. They will consider various options for funding the county's share of costs if state and federal aid will be available, or the entire amount if such aid is not made available.

**Policy 1.2.8** The County Administrator or designee shall apply for state and federal disaster relief grant and loan programs when necessary to relieve suffering or repair infrastructure.

**Policy 1.2.9** The Department of Public Safety shall cooperate with state and federal agencies to make available to them such facilities as may be needed to establish disaster Application Centers, staging areas, or other support facilities within Okaloosa County. All county employees and officers shall render to the Department of Public Safety such aid and support as may be necessary to accomplish this task.



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**Policy 1.2.10** The Clerk of Courts shall appoint personnel within his/her department who will be responsible for the necessary accounting and fiscal reporting procedures mandated by state and federal grant and loan agreements. The Clerk of Courts, or his/her designee, will coordinate payment schedules and procedures with the Disaster Field Office established by state and federal authorities.

**Policy 1.2.11** The Growth Management Department shall advise the Board of County Commissioners on the need or advisability of revising policies on building permits, zoning, construction and related codes, and business licensure to promote mitigation and economic redevelopment.

The County Administrator or his designee will be the liaison to the State and Federal Mitigation Officers, and shall participate in the implementation of the Local Mitigation Strategy Plan following a disaster. The Committee and the County Administrator will make such recommendations as necessary to the Board of County Commissioners.

**Policy 1.2.12** The Building Official shall, within the limits of access, time and staffing, condemn and visibly placard structures that were destroyed (per Policy 1.2.4) or which are unsafe for occupancy or use.

**Objective 1.3** *Establish the necessary staff structure and planning procedures to accommodate the emergency nature of redevelopment.*

**Policy 1.3.1** The Committee shall evaluate the projected workload for managing the recovery and reconstruction process and recommend the hiring of temporary workers or contracting portions of the workload to specialists. The Board of County Commissioners shall approve or disapprove such recommendations.

**Policy 1.3.2** The County shall evaluate the long-term needs for capital facilities planning and LMS project list immediately after meeting the human needs following a hurricane or other disaster.

**Policy 1.3.3** If necessary, the County shall prepare and forward to the State of Florida an amendment to the Capital Improvements Element of the Comprehensive Plan and revisions to the LMS project list to obtain a Statement of Consistency. This will be accomplished as soon as practical.

**Policy 1.3.4** County department heads and staff shall initiate coordination and cooperation with State and Federal agencies to obtain assistance in mitigation planning, relocation, or repair-in-place of public facilities.

**Policy 1.3.5** The Committee may identify and designate areas that can be used for relocation of residential housing and public facilities outside of the Hurricane Vulnerability Zone.



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**Objective 1.4** *Effective immediately upon the Declaration of a State of Local Emergency within Okaloosa County by the Board of County Commissioners or Governor of Florida, a meeting of the committee shall be called to discuss the need of moratoriums for approved development orders, building permits, and review procedures in progress for the affected areas of the county. This initial moratorium will be in effect during the State of Emergency (including any extension) and for 48 hours after the storm or disaster event. If moratoriums are enacted they will be lifted or extended according to the schedule below. Nothing in this policy should be construed to delay or prevent short-term, temporary measures of an emergency nature intended to improve safety or limit further damage or deterioration. For example, temporary repairs to cover roof openings, repair steps, or shore up structures may be conducted without permits.*

**Policy 1.4.1** The moratorium will be lifted immediately upon expiration of the initial moratorium, if the Governor of Florida did not declare the county a disaster area or did not request a Presidential Disaster Declaration which included Okaloosa County.

**Policy 1.4.2** If Okaloosa County is included in a disaster declaration, the moratorium will be lifted in phases, as specified below.

- a. As soon as practical, after the initial moratorium, private or public facilities and infrastructure that suffered major damage and which create or aggravate a threat to the public's health, safety, or welfare shall be able to apply for building permits and associated construction and development orders for repair or demolition. Destroyed public or private structures that pose an immediate threat to the public or occupants by risk of collapse, should be assessed for insurance purposes and demolished as soon as practical. The review of such permits is subject to the policies listed under Goals 2 and 3, below.
- b. Private or public facilities that suffered major damage but do not constitute a threat as specified above, may apply for necessary permits and development after the initial moratorium has been lifted.
- c. After the initial moratorium has been lifted, private or public facilities, which were destroyed, may apply for building permits and associated construction and development orders. The review process is subject to the policies listed under Goals 2 and 3, below.
- d. All building permits and development orders issued for the impacted area prior to the disaster will be reviewed and reevaluated by the building official and planning staff after the initial moratorium has been lifted. As soon as possible after the initial moratorium, previously approved building permits, development orders, and review procedures will revert to the pre-disaster status. It will not be necessary to repeat previous applications, but the applicants must notify Growth Management in writing that they intend to continue with or cancel the development plans.



## Unincorporated Okaloosa County

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**Policy 1.4.3** The Committee may, by consensus of the members, recommend extending or reducing the duration of the time frames listed in Policy 1.4.2 if necessary to meet local conditions.

**Goal 2** Reduce the loss of life and property in any future hurricane, flood, or other disaster.

**Objective 2.1** *Permitting and certification of structures will continue to be required to ensure compliance with applicable building, FEMA, CRS and related codes, zoning, and redevelopment policies to limit the potential for future loss of life and property.*

**Policy 2.1.1** Except for facilities requiring access to the waterfront, water wells and towers, recreation facilities, or those which provide essential services, safety and evacuation functions, all public structures in the Coastal High Hazard Area that were destroyed will be relocated out of such zone.

**Policy 2.1.2** When feasible, destroyed bulkheads and seawalls will be replaced with nonstructural forms of shoreline stabilization in accordance with all Federal, State, Regional and Local jurisdictional rules and regulation including emergency orders, except where such replacement would endanger essential transportation routes, critical facilities, or the public safety.

**Policy 2.1.3** The County and private developers will be required to coordinate with the necessary Federal, State, Regional and Local jurisdictional agencies as required by law or regulation for the permitting of reconstruction or redevelopment in order to ensure safety and protect the environment.

**Policy 2.1.4** Coordinate with public and private utilities to flood proof facilities and utility services through incentives or regulations consistent with the local mitigation strategy.

**Objective 2.2** *Establish a procedure to review proposals for redevelopment of public and private structures and develop policies to guide redevelopment decisions, consistent with the local mitigation strategy.*

**Policy 2.2.1** The timing of redevelopment reviews is set forth in Goal 1. The review of redevelopment permits for destroyed structures shall be guided by the following priorities:

- a. Reduce the pre-disaster density of residential development in the Coastal High Hazard Area (CHHA) or flood inundation areas through relocation assistance, zoning incentives, or acquisition of property for open space.
- b. Encourage the relocation of all non-residential structures destroyed in the CHHA or flood inundation areas to areas outside such zones by using relocation assistance or zoning incentives, or acquisition of property for open space.



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- c. Structures in the CHHA or V, VE, A, or AE flood zones that were destroyed, and where the owner decides to rebuild in the same zone, will be designed and constructed consistent with the adopted Comprehensive Plan, Future Land Use Maps, Land Development Code including zoning maps, Local Mitigation Strategy, FEMA flood insurance rate maps, Community Rating System and Florida building codes. They will be prohibited from purchasing flood insurance underwritten by the Federal and State Government unless they meet all additional requirements as may be imposed by the Federal, State, and Local Government for elevation, flood proofing, etc.
- d. Prior to issuance of a building permit, the applicant must submit a post disaster survey, (pre disaster if available) and/or site plan, as applicable, of the lot and structure and cost estimate for reconstruction. The construction plan must provide for direct, unimpeded, approved vehicle ingress and egress to the parcel.
- e. Destroyed structures outside the Coastal High Hazard Area (CHHA), but within the Hurricane Vulnerability Zone (HVZ) and rebuilt in the HVZ shall be designed and constructed consistent with the adopted Comprehensive Plan, Future Land Use Map, Land Development Code, National Flood Insurance Program, FEMA Flood Insurance Rate Maps, Florida Building Code and CRS.
- f. All destroyed structures, if rebuilt within the HVZ, will be required to be inspected prior to issuance of a Certificate of Occupancy to ensure conformance with Florida Building Codes and related codes or regulations.
- g. Coordinate the redevelopment of shoreline areas with the Florida Department of Environmental Protection, U.S. Army Corps of Engineers, and/or other Local, State and Federal agencies which may have regulatory jurisdiction over these areas.
- h. Certificates of Occupancy for private structures which were destroyed shall be contingent upon the immediate provision of services necessary for health and safety to the structure, e.g., sewer or septic service, electrical power, disaster debris removal and potable water.
- i. The Committee may make recommendations for increasing building standards or rezoning that would reduce the potential for damage or loss of life from future disasters. The Board of County Commissioners may adopt such recommendations as deemed prudent and necessary, and all redevelopment efforts after enactment will be required to comply with such stricter standards.

**Policy 2.2.2** The review of redevelopment permits for structures experiencing major damage, or which propose addition or changes exceeding 50-percent of the pre-disaster value of the structure, shall be guided by the following redevelopment policies.

- a. Where feasible, reduce the pre-disaster density of residential development which experienced major damage.



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- a. Encourage the relocation of structures experiencing major damage in the CHHA to outside the CHHA.
- b. Structures experiencing major damage in the CHHA and redeveloped in the CHHA shall be designed and reconstructed consistent with the adopted Comprehensive Plan, Future Land Use Map, Land Development Code, National Flood Insurance Program, FEMA FIRM, CRS and Florida Building and related codes.
- c. Prior to issuance of a development or building permit on the same parcel, the applicant must submit a post-disaster survey (pre-disaster survey if available) and estimate of construction, and site plan as applicable, of the parcel and structure if there is a proposed increase in the building footprint or if any portion of the parcel or parcels was eroded away by wave action, storm surge, or flood water. The construction plan must provide for direct, unimpeded, approved vehicle ingress and egress to the parcel.
- d. Structures experiencing major damage and redeveloped outside the CHHA, but within the INZ, shall be designed and constructed consistent with the adopted Comprehensive Plan, Future Land Use Map, Land Development Code, National Flood Insurance Program, FEMA FIRM, CRS and Florida Building and related codes.
- e. All structures experiencing major damage and redeveloped will be required to be inspected prior to issuance of a Certificate of Occupancy to ensure conformance with building codes and related regulations.
- f. Nonconforming uses (as defined in the adopted Comprehensive Plan, and Land Development Code) damaged outside the CHHA but within the HVZ, shall be designed and rebuilt consistent with the adopted Comprehensive Plan, Future Land Use Map, Land Development Code, FEMA FIRM, CRS, Florida Building and related codes.
- g. Certificates of Occupancy and permitting for redevelopment of private structures which suffered major damage shall be contingent upon the immediate provision of services necessary for health and safety to that structure, e.g., sewer or septic service, electrical power, and potable water, and comply with the FEMA 50% rule.
- h. The Committee may make recommendations for increasing building standards consistent with the Florida Building Codes or rezoning that would reduce the potential for damage or loss of life from future disasters. The Board of County Commissioners may adopt such recommendations as deemed prudent and necessary, and all redevelopment efforts after enactment would be required to comply with such stricter standards.

**Policy 2.2.3** The review of building permits for structures experiencing minor damage shall be guided by the following redevelopment priorities.

- a. Structures experiencing minor damage in the HVZ, including the CHHA, shall be allowed to rebuild to pre-disaster square footage consistent with the adopted Comprehensive



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Plan, Future Land Use Map, Land Development Code, National Flood Insurance Program, FEMA FIRM, CRS, Florida Building and related codes.

- b. Prior to issuance of a building permit on the same parcel, the applicant must submit a post-disaster survey (pre-disaster if available) and/or site plan as applicable, of the lot and structure if there is a proposed increase in building footprint or if any portion of the lot or lots was eroded away by wave action, storm surge, or flood waters. The site plan must provide for direct, unimpeded, approved vehicle egress and ingress to each lot.
- c. Certificates of Occupancy and permitting for redevelopment to pre-disaster square footage of private structures which suffered minor damage shall be contingent upon the immediate provisions of services necessary for health and safety to that structure, e.g., sewer or septic service, electrical power, waste disposal and potable water.
- d. Eligibility for flood insurance underwritten by the Federal Government will be contingent on program rules regarding the specific case.

**Policy 2.2.4** All private development which was destroyed or suffered major damage shall be guided by the following redevelopment priorities:

- a. Develop new street patterns in hardest hit areas to accommodate clustering of structures away from the CHHA and attempt to remove structural and physical patterns which increase the susceptibility of development to the hazards of hurricane, flood, or other natural disasters.
- b. Residential redevelopment densities shall not exceed pre-disaster development without providing enhanced evacuation methods and routes in order to reduce evacuation times.
- c. In order to reduce potential future property damage, redevelopment floor area ratios for commercial and office development in the HVZ shall not exceed those established in the adopted Comprehensive Plan and Future Land Use Map.
- d. Discourage the rebuilding and relocation of mobile homes and manufactured housing in the CHHA and HVZ unless they are proven to be able to withstand wind load requirements and structural safety rules established for other structures in the CHHA and HVZ by local, state, and federal building and related codes. This provision shall not be construed to limit the establishment of short-term housing areas to provide immediate and emergency relief to victims of the disaster.
- e. The Building Official shall, after consultation with the Growth Management Director, Planning Manager, Public Works Director/County Engineer and Chief of Emergency Management or in his/her absence Emergency Management Coordinator, condemn land parcels or lots that are destroyed and replaced by tidal waters.



### Unincorporated Okaloosa County

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- f. The replacement or repair of private beach or beach stabilization structures shall be the sole responsibility of the property owner, and shall conform to the rules and regulations of Local, State, Regional and Federal jurisdictional agencies.
- g. If a structure listed on the National Register of Historic Places, the State Inventory of Historic Places, or the State of Florida Master File suffers major or minor damage, it will not be required to redevelop in such a way as to cause it to lose its historic designation if the Building Official approves such exemption.

**Policy 2.2.5** Provision of water and sewer service at private expense to existing parcels of record in the CHHA will be permitted, provided that such service does not conflict with existing policies for determining when structures can be rebuilt, land development regulations, building and related codes, and state and federal policies regarding development and construction in the CHHA and environmental regulations. New sanitary sewer and potable water facilities in the CHHA will be flood proofed.

**Policy 2.2.6** It shall be the policy of Okaloosa County not to expend public funds for the repair of damaged private roads or easements, except in conjunction with the repair and maintenance of the county's water and sewer system or public easements. In cases where a declared disaster has resulted in a private road being rendered impassable to emergency vehicles, and therefore renders it impossible to conduct fire/rescue or law enforcement activities for a populated area, the county may make temporary, emergency repairs sufficient to allow passage of emergency vehicles. These repairs will be temporary in nature, such as filling holes or gaps in the roadway with dirt or sand, and will be done only once. Thereafter, it will be the responsibility of the owners to make any repairs and perform necessary maintenance. Real estate developers or sellers shall inform all future potential buyers in writing if the property is located on a private road that is not maintained by the county.

**Policy 2.2.7** The Committee will review mitigation alternatives and make recommendations for consideration by the Board of County Commissioners. The Committee will review the nature and extent of damages, the causal relationships between the damage and land use policies, and ways to reduce damage in future disasters. Among those policies and programs that will be considered are:

- a. Changes from residential to commercial zoning to reduce evacuation times;
- b. Reduction in residential density by increasing the minimum lot size or reducing the number of dwelling units allowed per acre;
- c. Awarding bonus or incentive points that would allow increased density if developers incorporate hazard-reduction features;
- d. Clustering development on the most protected portions of parcels;



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- e. Requests for Special Exemptions will be reviewed and considered based on the impact on population density (which effects evacuation clearance times and search/rescue needs) and potential for suffering or aggravating damage to other structures in the area;
- f. Reconstruction must comply with the Comprehensive Plan, Land Development Code, National Flood Insurance Program, FEMA FIRM, CRS, Florida Building and related codes.

**Policy 2.2.8** The County will seek opportunities through grants or other means to acquire land in the CHHA. The land acquisition will be designed to reduce development in the CHHA, increase open space ratings, and thereby mitigating potential loss of life or property in future disasters.

**Goal 3** Provide public facilities and services which guarantee to the extent possible the health, safety, and welfare of the citizens of Okaloosa County and which reduce future expenditure for public infrastructure in the CHHA.

**Objective 3.1** *Based upon the extent of damage, the review of permits for relocation or repair shall be guided by the following policies:*

**Policy 3.1.1** Those facilities that are essential to the immediate health, safety, and welfare of citizens will be assigned high priority. If this is not feasible, every effort will be made to provide the service through alternative means.

**Policy 3.1.2** Public buildings in the CHHA that were destroyed or suffered major damage shall be relocated out of the CHHA consistent with the adopted Comprehensive Plan, Future Land Use Map, Land Development Code, National Flood Insurance Program, FEMA FIRM, and CRS and will be rebuilt to current local, state, and federal standards. Facilities for access to the waterfront, recreational facilities, water and sewer, and facilities that are needed for evacuation may be allowed in the CHHA.

**Policy 3.1.3** Public buildings that must function during a hurricane or other disaster, such as hospitals, blood banks, police and fire stations, emergency operations centers, communication centers and facilities, electrical power-generating substations and plants, and water treatment plants shall be relocated to the extent feasible away from the CHHA if they were destroyed or suffered major damage. If an entire fire district is in the CHHA, then that fire district's fire station may be rebuilt in the CHHA.

**Policy 3.1.4** Public facilities which experienced minor damage in the CHHA shall be rebuilt in place to current local, state, and federal standards.

**Policy 3.1.5** Public facilities outside the CHHA, but within the HVZ, and are destroyed or suffer major damage will be rebuilt in place or relocated consistent with the adopted Comprehensive Plan, Future Land Use Map, and Land Development Code. Their construction will be consistent with Local, State, National Flood Insurance Program, FEMA, and CRS standards.



## Unincorporated Okaloosa County

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**Policy 3.1.6** Public facilities currently located in the CHHA that must function during a hurricane or other disaster, such as police and fire stations, emergency operations center, and communication centers shall be considered for relocation outside the CHHA in order to mitigate possible disruption of service due to their location in a surge zone or possible high velocity wave action from storms.

**Policy 3.1.7** Prior to repair or reconstruction of county roads and bridges, except when deemed a crucial transportation route or corridor or crucial to the public health, safety and welfare, which were destroyed or damaged by a disaster, the County shall consider alternative solutions, including, but not limited to, abandonment procedures, special assessment and condemnation, and construction practices to mitigate damage from future disasters. This shall not prevent the temporary repair of roads and bridges during or after the disaster event.

**Goal 4. Provide public facilities and services which guarantee to the extent possible the health, safety, and welfare of the citizens of Okaloosa County and which reduce future expenditure for public infrastructure in the 100-Year Floodplain.**

**Objective 4.1** *Based upon the extent of damage, the review of permits for relocation or repair shall be guided by the following policies:*

**Policy 4.1.1** Those facilities that are essential to the immediate health, safety, and welfare of citizens will be assigned high priority. If this is not feasible, every effort will be made to provide the service through alternative means.

**Policy 4.1.2** Public buildings in the 100-Year Floodplain that are destroyed or suffer major damage, and for which the County has an alternative location available, shall be relocated out of the 100-Year Floodplain consistent with the adopted Comprehensive Plan, Future Land Use Map, Land Development Code, National Flood Insurance Program, FEMA FIRM, and CRS and will be rebuilt to current local, state, and federal standards. However, facilities for access to the waterfront, recreational facilities, water and sewer, and facilities that are needed for evacuation and emergency response may be allowed in the 100-Year Floodplain, when built with flood proof or flood resistant materials.

**Policy 4.1.3** Repairs to public facilities which experience minor damage in the 100-Year Floodplain shall be in accordance with current local, state, and federal standards.

### **Glossary of Terms**

**Coastal High Hazard Area (CHHA)** –The area of the hurricane vulnerability zone defined as the land falling Category 1 evacuation zone as delineated by the West Florida Regional Planning Council.

**Community Rating System (CRS)** – A program encouraging flood plain management above the requirements of the National Flood Insurance Program (NFIP) requirements.



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**Hurricane Vulnerability Zone (HVZ)**- The area delineated by a regional hurricane evacuation study requiring evacuation in the event of a land falling Category 3 hurricane event conducted by the Army Corps of Engineers.

**Local Mitigation Strategy (LMS)** - a local document which identifies natural hazards and vulnerabilities to the jurisdiction.

**Un-numbered A Zone** – Where the base flood elevation has not been determined.

**AE Zone** – Where the base flood elevation has been determined by a hydrological analysis.

**V Zone** – A coastal zone with velocity hazards and wave action, and where the base flood elevation has not been determined.

**VE Zone** - A coastal zone with velocity hazards and wave action, and where the base flood elevation has been determined by a hydrological analysis.

**X Zone** – Areas of 500 year flooding; areas of 100 year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from the 100 year flood.

### **Section 5.10.06.1 Disaster Housing Plan**

#### **Section 1 INTRODUCTION**

##### **A. General**

Okaloosa County is vulnerable to a wide variety of disasters. This Disaster Housing Plan considers these events and outlines the county's procedures for reacting promptly to save lives and protect property when threatened or hit by a disaster or major emergency. Okaloosa County strives to provide its residents with a range of recovery options, maximizing their opportunity to attain the best available housing solutions and resources.

##### **B. Purpose**

This plan establishes the procedures and activities used by the county government and departments to return to pre-disaster conditions as quickly and efficiently as possible following an event. This plan serves as a guiding document during the recovery phase of an event. It is intended to provide guidance and data to decision makers concerning numerous strategies which may be applicable in implementing a housing needs program to provide its residents short or long-term housing, either permanently or temporarily in coordination with Federal and State programs.



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### **C. Scope**

The scope of this plan is post disaster housing and applies to all unincorporated areas of Okaloosa County, as well as all incorporated municipalities that have adopted this plan. The primary point of contact for maintaining and implementing the Disaster Housing plan is the Disaster Housing Coordinator who is the Growth Management Planning Coordinator. The office location is:

Growth Management – North Planning  
402 Brookmeade Dr.  
Crestview, FL 32539

This Plan covers the placement of disaster survivors when risk and host shelters are no longer available, and until they can obtain permanent housing. It also identifies funding and implementation of repairs to damaged residential structures.

Public Information is a critical component of the housing strategy. The timely dissemination of information to alert the public as to how to seek and utilize assistance programs available at all levels of government is critical. The Okaloosa County Public Information Officer also informs the public of volunteer agencies available to assist them in coordination with United Way/VOAD.

### **D. Planning Factors (Assumptions)**

Response urgency must be balanced with informed decisions.

- Level of damage may trigger a Presidential disaster declaration
- Level of damage may be extensive and many areas could experience casualties, property loss and disruption of normal life support systems
- May be a substantial number of disaster victims impacted
- Disaster may cause significant disruption to critical infrastructure
- Large number of people may be left temporarily homeless
- Demographic and socioeconomics may create unique characteristics
- Plan success relies on timely mission critical information and issues that can be collected, confirmed, and circulated in a format and with a frequency to make them readily accessible, consistent, and useful to all key stakeholders

### **E. Plan Maintenance and Activities**

Okaloosa County and its municipalities will conduct an annual cycle of actions necessary to maintain readiness to implement this plan with little or no advance notice. The list of municipal liaisons for this Plan (Appendix A) will be used for this purpose. The pre-event annual planning actions will be scheduled to be completed prior to June 1 of each year. The review will be included at one of the LMS meetings prior to this date. These pre-event planning actions will ensure that the Disaster Housing Plan has been updated for the upcoming year. They will include:



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- Review and update the contact information in the Plan
- Review and update the data supporting the interim housing options
- Review and update the information on potential post-disaster funding sources
- Refine and expand the proposals for expedited permitting/overcoming regulatory barriers to re-development
- Revise the assignment of personnel to staff the plan, as needed
- Complete the training of key personnel, including plan exercise, as needed in conjunction with the annual Okaloosa County hurricane exercise

### Countywide Review of the Plan

The plan will be reviewed and/or revised at least annually and as needed after each exercise or actual event. The LMS Committee, which includes representatives from all the municipal governments as well as the school board, will serve as the venue by which this Plan will be reviewed and modified as necessary.

### EOC Review of the Plan

The Plan will also be reviewed by the Emergency Management Division, Emergency Management Coordinator as a co-writer of the plan.

### **F. Authorities**

The Growth Management Department is the lead agency in maintaining and implementing the Disaster Housing Plan which is an appendix to the Post Disaster Redevelopment Plan. This Plan is consistent with the concepts that are identified in the National Disaster Housing Strategy.

Development of this Plan is also consistent with:

1. Federal Statutes 44 CFR and Section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5174, as amended and is cited as the 'Disaster Housing Flexibility Act of 2006' for additional information refer to (Appendix B)
2. Florida Statutes Chapter 252 Emergency Management, 252.36 Emergency Powers of the Governor. (Appendix C)
3. 2010 Florida Building Codes (Exhibit 2)
4. Chapter 9, Section 9-42 of the Code of Ordinances of Okaloosa County, Florida, in compliance with Chapter 252 of the Florida Statutes, authorizes the waiver of procedures and formalities otherwise required by law for political subdivision to take whatever prudent action is necessary to ensure the health, safety and welfare of the community in the event of a state of emergency. In addition it empowers the designated county official to declare a local state of emergency which shall automatically implement the remaining provisions of this article.



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### Section 2 SITUATION

#### A. Geographical

Okaloosa County is an urbanized county located in northwest Florida. It is bounded by Santa Rosa County to the west, Alabama to the north, Walton County to the east and the Gulf of Mexico to the south. Currently the county consists of nine (9) municipalities.

#### B. Climatology

Approximately 92,996 residents live within 5 miles of the Gulf Coast Line and 117,743 within 5 miles of the Choctawhatchee Bay based on the 2010 Census data.

#### C. Topographical Characteristics

Okaloosa is divided into two physiographic provinces. The northern portion is the Western Highlands subdivision of the Northern Highlands, and the southern portion is the Gulf Coastal Lowlands, a subdivision of the Coastal Lowlands.

The Western Highlands is characterized by gently sloping plateaus at the relatively higher elevations separated by lower, large stream valleys. Dendritic streams drain the margins of the Highlands. The northern two-thirds of Okaloosa County is in this subdivision. At the southern edge of the Western Highlands, and separating it from the Gulf Coastal Lowlands, is a south-facing scarp called the Cody Scarp. This scarp represents the most persistent topographic break in Florida.

The Gulf Coast Lowlands are that portion of the Coastal Lowlands physiographic province that is adjacent to the Gulf of Mexico. This area is much lower in average elevation than the Highlands to the north. Marine terraces, formed when the sea level was higher than at present, are characteristic, and most features are parallel to the coast. Landforms typical of this subdivision include barrier islands, such as Santa Rosa Island; lagoons, such as Santa Rosa Sound; estuaries, such as the Choctawhatchee Bay; coastal ridges; sand dune ridges; relict spits and bars; and valleys.

Okaloosa County represents a transitional zone between the shallow stratigraphy of the central panhandle and that of the western panhandle. A Mississippi rock unit, and two other units, the Pensacola clay and the Miocene coarse clastics, are in the western panhandle. The Pensacola clay does not extend very far into Okaloosa County.

All coastal areas of the county are considered hazard areas for hurricane storm surge. The county GIS map is located on the public county web site at [www.co.okaloosa.fl.us](http://www.co.okaloosa.fl.us)



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### D. Demographics

Okaloosa County at the 2010 Census has 180,822 residents in rural and urban areas combined. The estimate is for Okaloosa County to be at 190,200 by 2020 and 214,400 by 2040.

According to the Bureau of the Census, 25,134 (13.9%) people were 65 years of age or older; there are also 11,572 (6.4%) preschool children under the age of 5 years. Okaloosa County's ethnic and racial diversity continues to increase with the non-Hispanic, White population accounting for 77.1%, Black Persons 9.3%, Persons of Hispanic or Latino origin 6.8%, Asian 2.9% and American Indian/Alaska Native persons 0.6%.

By 2009, Okaloosa County's median household income was \$49,215, at the same time 12.5% of residents were considered below poverty level. According to the National Census Data Okaloosa County had 92,407 housing units, of which 7,859 are considered seasonal, recreational or other use. There are 48,741 (57.01%) owner occupied units and 25,273 (27.49%) renter occupied housing units. There are 3,325 occupied mobile homes with approximately 8,478 residents.

The elevation study conducted by the State of Florida and approved in 2010 has produced moderate changes in the mandatory hurricane evacuation zones in Okaloosa County. Also evacuation zones were changed from A (Tropical – Cat 1), B (Cat 2 and 3) and C (Cat 4 and 5) to Zone A (Tropical and Cat 1), B (Cat 2), C (Cat 3), D (Cat 4) and E (Cat 5) evacuation zones based on the 2010 Lidar data that may be found at <http://www.floridadisaster.org/gis/lidar/>

The Lidar study was based on the slosh basin map in figure 1.1 below.



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**Figure 1.1 Florida SLOSH Basins**

The chart below figure 1.2 indicates the number of residents and housing units in each evacuation zone. This is the total number of residents and does not account for if they will evacuate or not. Each evacuation zone calculation includes the lower evacuation zone, for instance Zone A is included in Zone B, and Zone A and B are included in Zone C and so on.



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<b>Okaloosa County</b>	<b>Evacuation Zone A</b>	<b>Evacuation Zone B</b>	<b>Evacuation Zone C</b>	<b>Evacuation Zone D</b>	<b>Evacuation Zone E</b>
Residents/Housing Units	19,072/566	43,582/5,202	65,627/7,881	64,110/9,790	66,995/9,790

**Figure 1.2 Residents /Housing Units Per Zone**

The chart below (figure 1.3) indicates the vulnerable population of residents expected to evacuate during a hurricane based on the Statewide Regional Evacuation Study of 2010. This does not include the numbers for shadow evacuations expected by those that are not in an evacuation zone but may decide to evacuate based on perceived threat.

<b>Okaloosa County</b>	<b>Evacuation Zone A</b>	<b>Evacuation Zone B</b>	<b>Evacuation Zone C</b>	<b>Evacuation Zone D</b>	<b>Evacuation Zone E</b>
To Friends or Family	697	5,077	11,020	11,777	18,917
To Hotel/Motel	288	2,103	4,562	4,832	7,835
To Public Shelter	24	172	374	979	1,575
To Other Destination	151	1,101	2,390	1,989	3,169
<b>Total</b>	<b>1,160</b>	<b>8,453</b>	<b>18,346</b>	<b>19,577</b>	<b>31,496</b>

**Figure 1.3 Residents in Evacuation Zones**

Shadow evacuations are evacuations of residents and non-residents that do not live in a specified evacuation zone but may decide to evacuate based on a perceived threat. These totals were derived from the 2010 regional evacuation study. It must be noted that the numbers shown in figure 1.4 are in addition to the numbers indicated above in figure 1.3.



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<b>Okaloosa County</b>	<b>Evacuation Zone A</b>	<b>Evacuation Zone B</b>	<b>Evacuation Zone C</b>	<b>Evacuation Zone D</b>	<b>Evacuation Zone E</b>
<b>Total</b>	25,271	31,735	44,833	62,865	59,008

**Figure 1.4 Shadow Evacuees**

Based on the totals in figures 1.3 and 1.4 it is estimated that 13.9% of each area may be 65 years of age or older. Figure 1.5 estimates the totals in each area that may be 65 years of age or older.

<b>Okaloosa County</b>	<b>Evacuation Zone A</b>	<b>Evacuation Zone B</b>	<b>Evacuation Zone C</b>	<b>Evacuation Zone D</b>	<b>Evacuation Zone E</b>
<b>Total</b>	3,674	5,586	8,782	11,459	12,580

**Figure 1.5 Total Evacuees 65 years of age or older**

**Section 3  
CONCEPT OF OPERATION**

**A. General**

The concept of operations outlined in this plan assumes that a major or catastrophic emergency has occurred, which involves extensive damage to numerous residential units, and the need exists for immediate activation of this plan. If the emergency is major or catastrophic in nature, it is assumed that the Governor will request activation of the National Response Framework, and that federal resources, coordinated through the Federal Emergency Management Agency (FEMA), will have been deployed to affected areas to provide assistance to local governments.

It is assumed that competition for scarce resources among Okaloosa County citizens and communities will be great. A major disaster may also impact contiguous counties. An unknown number of residents will self-evacuate independent of any local organized government effort.

**B. Purpose**

In the event of a disaster, the County Disaster housing coordinator in coordination with municipal housing coordinators will move aggressively to determine the need for temporary housing in their jurisdictions. After their initial assessment, the coordinators will submit their



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request to the Okaloosa County Disaster Housing Coordinator at the Emergency Operations Center and/or Housing Recovery Center if one has been established.

### **C. Emergency Operation Center (EOC) Activation**

Upon the activation of the EOC, the Red Cross and/or Salvation Army (Mass Care) and the Disaster Housing Coordinator will begin alerting support staff. The Disaster Housing Coordinator will coordinate with the Red Cross and/or Salvation Army (Mass Care) as long as the EOC is in operation.

#### Functions of Disaster Housing Coordinator:

**Phase I – Watch. (36 to 48 hours prior to anticipated disaster).** Remain informed as to activities of the EOC in order to prepare to be present at EOC for Phase II. Update information on existing housing resources in the event it should be needed.

**Phase II – Warning. (12 to 24 hours prior to anticipated disaster).** At this point in the operation, the Disaster Housing Coordinator will be in contact with the EOC.

**Phase III – Disaster.** Monitor possible impacted areas to begin to prepare for possible housing needs among evacuees.

In the event that neither Phase I – Watch, nor Phase II- Warning are able to be implemented due to the disaster, both phases will be implemented during Phase III.

**Phase IV – Recovery (All Clear).** In the event the emergency has lead to impacts to residences which may warrant a need for housing resources to be located and disseminated among impacted evacuees, the following will need to occur during this phase:

- Gather information on areas in which housing was impacted
- Locate and open sites where possible temporary housing (such as FEMA trailers or other housing) can be stationed.
- Update the motel/hotel resource list if appropriate. It will be assumed that some units/rooms will not be available in the event of a major storm.
- Coordinate and update the resource list with information available from Federal, State, County and Municipal housing programs. This includes programs from housing authorities and those programs in entitlement cities.
- Coordinate with cities on housing programs in existence and possible new programs.
- Coordinate with Federal, State and Local governments to create a list of housing resources that may be available.



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- Apply for post-disaster housing funds if made available to the County by Federal/State Government and other entities.

The Disaster Housing Coordinator will begin to assemble support staff in anticipation of activation of the Housing Recovery Center (HRC). The Red Cross lead will advise the County EOC Management Team of the need to activate the HRC. Once a decision has been made to implement a recovery phase, the HRC is authorized to begin its operations. Pre-assigned personnel from Growth Management will staff the HRC as needed. Prior to activation of an HRC the Disaster Housing Coordinator will meet with the Emergency Management Team and FEMA/State representatives' to determine if a separate HRC needs to be established or if the HRC can co-locate with the FEMA Disaster Recovery Center (DRC) if one is established.

The Disaster Housing Coordinator for the period that the EOC is activated will utilize Web EOC to submit daily reports on the Housing Recovery Center/Disaster Recovery Center actions.

### **D. Housing Recovery Center (HRC)**

The roles and responsibilities within the HRC are described in (Exhibit 1). The HRC primary location will be at the Housing Coordinators Office located at Growth Management North Planning, 402 Brookmeade Rd, Crestview, FL 32539 a secondary location will be activated after coordination with FEMA/State Housing personnel and the decision has been made to establish a Disaster Housing Center in the communities affected.

The Disaster Housing Coordinator will coordinate directly with the Mass Care Leader(s).

#### Post-Event Priorities

- Sheltering (up to 30 days) will be coordinated by Mass Care.
- Interim housing (up to 6 months).
- Long-term housing (up to 3+ Years).

#### Transition from Temporary to Permanent Housing

- Track progress of moving to permanent housing through Mass Care.
- Maintain and update a progress report on the current status of permanent housing availability.

The demand for information and or personnel and facilities provided to the Disaster Housing Coordinator from the following sources:

- Mass Shelter operations
- Individual Municipalities



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- The Okaloosa County Health Department will gather information regarding needs of sheltered residents that may require accessible accommodations
- Disaster Recovery Center
- Okaloosa County Citizens Information Line

### **E. Joint Housing Task Force (JHTF)**

After a Presidential Disaster Declaration, the Federal officials involved will convene a National Joint Housing Task Force (NJHTF) in the Joint Field Office (JFO) as soon as possible. This task force will be comprised of representatives from the affected state, tribal, and local governments, as well as federal agencies, American Red Cross, and National Voluntary Organization Active in Disasters (NVOAD).

The intent of the NJHTF is to facilitate coordination and contributions of housing ideas, strategies, solutions, and resources from all levels of government, voluntary organizations, the private sector, and affected population. As needed, the Disaster Housing Coordinator may represent local governments at the NJHTF. Therefore, it is essential that clear communication between the County and the municipalities be implemented. This can be done through the use of WebEOC the Okaloosa County Emergency Management database.

An important component in initiating the interim housing plans and the move out of organized emergency shelters is public notification. The NJHTF in coordination with the Okaloosa County Public Information Officer will ensure timely and accurate communications with disaster survivors.

The Florida Division of Emergency Management will assign a disaster housing liaison to each county to support the local-level disaster housing mission. The liaison will coordinate directly with the County's Disaster Housing Coordinator and Mass Care. The liaisons role is to:

- Coordinate and communicate local information – including need, status, available local resources and local policies – to the Area Field Office
- Forward information from the Area Field Office to the County Emergency Operations Center including current Federal and State disaster housing mission status information, policy changes and implementation, and inbound resources



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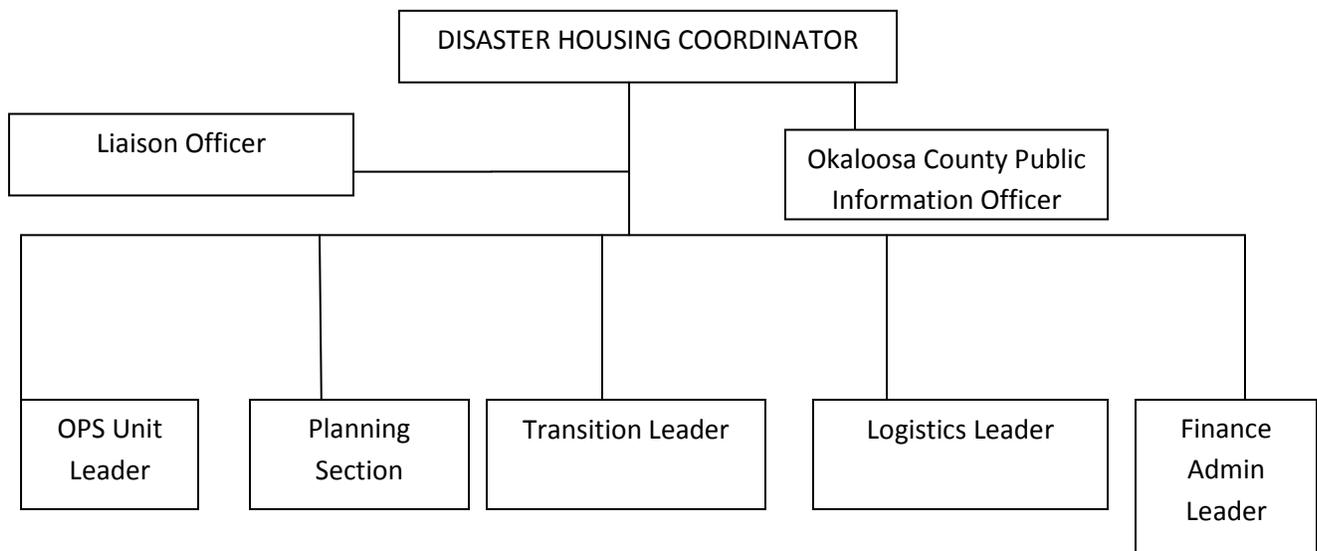
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**Section 4  
ORGANIZATIONAL CHART HOUSING RECOVERY CENTER**

**A. Staffing the Housing Recovery Center (HRC)**

Below is an organization chart likely to be needed in a Housing Recovery Center. Each area could be expanded or diminished, depending on the situation. Exhibit 1 describes the roles and responsibilities for the HRC.

**ORGANIZTIONAL CHART  
HOUSING RECOVERY CENTER (HRC)**





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### **Section 5 INTERIM HOUSING STRATEGIES**

If the event that has occurred is a major or catastrophic emergency, and a Presidential Disaster Proclamation has been issued, then the initiation and implementation of many of the following strategies will be determined by FEMA, after consultation through the NJHTF. The Disaster Housing Coordinator (with input from affected municipalities) will provide input and data to the NJHTF, and will provide liaison and/or coordination roles in the strategies selected by FEMA.

#### **Emergency Shelters**

In each emergency shelter, occupants will be reporting their need for temporary housing to the case managers assigned to that shelter location or transportation will be provided by Okaloosa County Coordinated Transportation to the HRC/DRC. The case managers will in turn notify ESF 6 (Mass Care) at the EOC.

#### **FEMA Applicant Registration Information**

Once survivors begin to access Federal individual assistance programs, an extensive array of information will become available on each of the survivors. This information will greatly enhance the development of disaster housing strategies.

Additional information identifying a listing of Disaster Assistance Programs that may be available to provide assistance during a disaster is located in Appendix G.

#### **A. Strategies for Financial Assistance**

##### Rental Assistant Paid to Survivors

This approach provides disaster survivors flexibility in choosing their own interim housing. The Emerald Coast Association of Realtors in an emergency would be able to provide a list of available rental units to FEMA and the Disaster Housing Coordinator.

##### Direct Rental Assistance Paid to Landlords

This approach allows rental payments to be made directly to participating landlords on behalf of disaster survivors. The Emerald Coast Association of Realtors in an emergency would be able to provide a list of available rental units to FEMA and the Disaster Housing Coordinator.

##### Small Business Administration (SBA)

In the event of a Presidential Declaration of Disaster authorizing the Federal Assistance to Individuals and Households Program, the SBA provides disaster relief in the form of loans, which are repaid to the U.S. Treasury. Home Disaster Loans are made to homeowners or renters to repair or replace disaster damages to real estate or personal property owned by the victim. To apply for SBA assistance, victims must call FEMA's National Process Service Center



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at 1-800-621-FEMA. The SBA should make a decision on a complete loan application in seven to twenty-one days after submission.

### **B. Sheltering**

#### Placement in Hotels and Motels

Vacant hotel/motel units will serve as temporary housing for displaced persons requiring shelter for short periods of time, or for those who cannot be accommodated by existing vacant rental units. The Emerald Coast Tourist Development Council maintains a list of hotels/motels in the area that may be contacted for a list of vacancies in their facilities.

#### Find Housing Online

Residents in need of housing in the aftermath of a natural disaster can locate available rental property in their area. Individuals can search the Florida Housing Search Web site at <http://www.floridahousingsearch.org>, to find properties by price, location and housing options such as number of bedrooms, bathrooms, if they accept pets, and are handicap accessible.

#### Vacant Commercial/Industrial Properties and Subdivisions

Various commercial or industrial structures may be suitable for conversion to temporary housing in a worst-case scenario in which all other temporary housing resources are exhausted. In addition, some partially developed or undeveloped commercial/industrial properties may be suitable for siting tent cities or mobile home/RV's. Information on potential vacant commercial/industrial properties for setting emergency housing will be made available to FEMA when needed.

#### Foreclosed Home for Storm Victims

Federal and/or State funds could be made available to rent foreclosed homes for storm victims. Banks and mortgage lenders would need to compile a list of available homes for use as temporary housing. This alternative will require direct federal and/or state assistance.

### **C. Strategies for repair of damaged structures**

Okaloosa County requires building permits to be issued prior to the start of any construction, renovation, repair, or demolition. However, in the wake of a declared emergency, Okaloosa County recognizes the need of property owners to make emergency repairs to their damaged structures and, further, that the governor may authorize a period of time in which repairs can be made prior to the receipt of a local building permit. In order to ensure that such emergency repairs that do not meet the applicable codes do not become permanent, the county will monitor the status of damaged structures and their repairs. After a reasonable period of time, as determined by the building official, has lapsed, the county will follow up with the owners of properties on which temporary repairs have been made to initiate the permanent permitted repair of the structure.



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### Emergency Repairs

The Florida Building Code, Section 105.2.1 Emergency Repairs; reads "Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official."

### Roof Tarp Program

After Hurricane Ivan, Operation Blue Roof, managed by the U.S. Army Corps of Engineers, provided temporary protection to homes by applying blue tarps over damaged roof areas. However, the program was slow to become operational and took almost two full weeks to begin after the event. The program was discontinued after October of 2008, and at this point should not be relied on for short term temporary fixes to roof systems. Residents of Okaloosa County should maintain a small stock of tarps for this purpose until the program, if needed, can be reinstated. The Disaster Housing Coordinator and the Public Safety Department will make the request through the State Department of Emergency Management Constellation program as required.

### Emergency Roof Repairs

The use of tarps to secure damaged roofs, and the rapid implementation of roof repairs, are important actions to prevent a dwelling from becoming uninhabitable.

The Growth Management Department maintains current information on licensed contractors.

The following measures can be used to encourage and expedite emergency roof repairs after a hurricane. These are documented in Exhibit 2.

- Emergency roof repairs are allowed to begin prior to permit approval.
- Teams, designated by the Okaloosa County Building Official, will have the authority to issue certain permits at the site.
- High priority is given to roof, electrical, shutter, and window permit applications.
- Plan review and inspection functions conducted on an overtime basis as required.
- Request to the statewide emergency aid inter-local agreement for additional personnel will be made as needed.

## **D. Potential Disaster Housing Sites**

### Manufactured Units in Existing Mobile Home Parks

This strategy involves placing a manufactured unit on a vacant pad in an existing mobile home park. The complete inventory, including park name, address, capacity and contact information is included in Appendix F of this document. A map depicting the locations of these mobile home/RV parks is located in Appendix F-1 of this document.



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### Manufactured Units in County Parks

Okaloosa County parks do not have sewer or electrical hook-ups for multiple manufactured units to be placed. However, there are a number of parks that, with the approval of the Board of County Commissioners, could be a possible site but would require some alterations. As mentioned previously all of these areas would require approval from county management and commissioners.

### Manufactured Homes in State Parks

State of Florida parks in Okaloosa County could be possible sites for a modular housing area on a temporary basis. Location of manufactured homes in these parks would require approval of the State Parks Dept, or the Governor of Florida before it could be used as a site. Note: A portion of the Blackwater State Park is in Santa Rosa County so the Housing Coordinator would need to coordinate with Santa Rosa County

### Manufactured Homes on Vacant Property

Emergency Group Sites (ESG) for manufactured units can be constructed on cleared, vacant property. A list of potential vacant properties including vacant subdivisions will be provided to FEMA by the Growth Management Department, when needed.

### Manufactured Units on Single Family Properties

Many homeowners, whose homes/units need repairs to return to occupancy, will prefer to place a manufactured unit on the same property while repairs are underway. Appendix H lists Florida Building Code provisions relative to this strategy.

### Existing Temporary Housing Source

There is one possible source of temporary housing that may be suitable for limited numbers of families. Camp Timpooshee a 4-H area operated by the University of West Florida has space for 140 personnel in climate controlled cabins with adjoining baths that can sleep 5 per cabin. The site has a main dining hall with a full kitchen, small conference rooms, and one large auditorium. However, it must be noted that the camp is water front property and may not survive a major storm and will have to be inspected prior to any use. Contact number for the camp is (850)897-2224

### **E. Sources of Funding for Interim Housing Strategies**

Appendix F provides a brief listing of programs and funding resources that may be useful for implementing interim housing strategies.



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### **Section 6 REGULATORY BARRIERS**

#### **A. Expedited Permitting Process**

A single expedited permitting process to support the rapid installation of disaster housing units at infill or new sites is highly desirable in the post-catastrophic environment. "One permit (with sub permits) only, one inspection only" for all local and state departments within 24 hours will ensure that disaster housing installation moves at a rapid pace. Primary inspection should focus on essential life safety concerns, including electrical power installation, water and sewer inspections, and structure tie-downs. The Okaloosa County Board of County Commissioners and the Growth Management Department will establish and execute a revised permitting process as dictated by the disaster event to ensure that revised disaster process can be accessed in the aftermath of a large-scale disaster in the community.

#### **B. Development Review Process**

The Okaloosa County Growth Management has developed a process to expedite the large site review process. The process is located in the Land Development Code Chapter 1-A. However, notwithstanding improvements to the County process, the state permitting process typically takes 120 days to review such projects for storm water issues among others. It would require the State of Florida to institute an expedited review process to cut the time from 120 days to a more acceptable time frame after a disaster. This process is outlined in the State of Florida Contingency Guidance for Catastrophic Events, page 34 which states "Florida Statute 252 gives the Governor the authority to abate the permitting requirements of local governments in order to save lives and protect property in the post-disaster environment."

#### **C. Florida Building Code Provisions Related to Hurricane Periods.**

Exhibit 2 contains provisions from the Florida Building Code relative to hurricane periods, which all building officials are required to follow.

#### **D. Florida Building Code Provisions for Placement of Mobile Homes on Single Family Lots.**

Many residents with substantially damaged single family homes will want to reside in a mobile home, on their single family property, while the repairs are ensuing. Exhibit 3 lists provisions from the Florida Building Code covering this situation.

#### **E. Model Resolution Permitting Temporary Trailers as Temporary Housing after a Declared Natural Disaster Ordinance. (Appendix G).**

#### **F. Model Policy and Procedures for Locating Temporary Trailers after a Declared Natural Disaster. (Appendix H).**



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**EXHIBITS**

**Exhibit 1:**

**Roles and Responsibilities for Staffing the Housing Recovery Center**

**Note: Not all of these positions may be needed the Housing Coordinator has the authority to assign or combine positions depending on the need**

Position	General Functions
Disaster Housing Coordinator	<p>Responsible for management, planning, coordination and administration of the HRC.</p> <ul style="list-style-type: none"> <li>• Determines initial and ongoing staffing and responsibilities for the HRC</li> <li>• Determines and documents the scope and location of interim housing needs</li> <li>• Establishes means and frequency of communications with Red Cross</li> <li>• Establishes and maintains contact with federal, state and municipal and private-sector agencies</li> <li>• Ensures the efficient and effective functioning of the HRC</li> </ul>
Liaison Officer	<p>Interfaces with external jurisdictions and agencies, including cities, state, federal, community groups, and not-for-profit organizations.</p> <ul style="list-style-type: none"> <li>• Serves as the point of contact for designated municipal liaisons; establishes means and timing of regular communications between the HRC and these liaisons, and facilitates communication as needed outside of these pre-arranged joint sessions</li> <li>• Serves as the initial point of contact for designated representatives of regional, state and federal agencies which are planning and/or implementing housing recovery programs in Okaloosa County and its municipalities, make referrals to the appropriate member of the HRC staff regarding each program.</li> <li>• Responds to inquiries from elected and senior appointed officials at the municipal, county, state and/or national level regarding the recovery programs being implemented and/or coordinated through the HRC</li> <li>• Maintains coordination, as appropriate, with other county agencies regarding recovery programs, their role in supporting or assisting housing recovery programs,</li> </ul>



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	<p>and the HRC role in supporting or assisting other recovery programs.</p> <ul style="list-style-type: none"> <li>• Support the HRC Public Information Officer in efforts to facilitate the distribution of public information regarding housing recovery efforts and available assistance programs.</li> <li>• Ensure that all liaisons from affected public and private agencies are kept informed as to the status of the HRC, including its deactivation.</li> </ul>
Public Information Officer	<p>Develops and releases, using County and/or Federal mechanisms, public information and instructions on housing recovery efforts and housing assistance programs. Coordinates with counterparts at municipalities and state.</p>
Operations Section Unit Leader	<p>Oversees and coordinates the housing strategies implemented by the HRC.</p> <ul style="list-style-type: none"> <li>• Processes information on the status of each program in which the HRC is participating, and transmits this information to the Planning Section Unit Leader</li> <li>• Monitors the effectiveness of HRC programs, tracking remaining capacity and continuing compliance with regulations, and transmits this information to the Planning Section.</li> <li>• When indicated, develops and monitors the termination of operations of HRC programs</li> <li>• Provides coordination and support for housing recovery activities within the County by all jurisdictions</li> </ul>
Planning Section Unit Leader	<p>Obtains and processes data on housing needs and program status, and develops Action Plans for each subsequent operational period.</p> <ul style="list-style-type: none"> <li>• Obtains and processes information and data on the demand for interim housing</li> <li>• Obtains and processes information on the status and effectiveness of each programs initiated by and/or participated in by the HRC, including the allocation of resources to each program</li> <li>• Develops an Action Plan for the subsequent operations period for approval by the HRC Commander</li> <li>• Implements each approved Action Plan</li> <li>• Ensures that All HRC activities are in compliance with local, state, and federal regulations</li> <li>• Ensures that all documentation regarding the HRC</li> </ul>



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	<p>activities are complete, accurate, and timely</p> <ul style="list-style-type: none"> <li>Responsible for planning the process for transition (initiation and demobilization) of individual HRC programs, and of the entire HRC</li> </ul>
Documentation Liaison	<p>Ensures the completeness, accuracy and timeliness of all documentation regarding interim Housing Strategies being implemented by the County.</p> <ul style="list-style-type: none"> <li>Monitors documentation submitted to and/or developed and processed by the HRC</li> <li>Implements corrective actions as necessary</li> <li>Provides technical support to other entities involved in interim housing activities within Okaloosa County</li> </ul>
Situation Liaison	<p>Continually tracks the current status of each interim housing effort, the allocation of resources, and other key progress measures. Uses this information to provide regular "situation reports" through the Planning Section Chief to the HRC Commander.</p> <ul style="list-style-type: none"> <li>Continually tracks the current status of each HRC program, including the allocation of resources, the operational status, the support to or from other agencies, and similar key progress measures</li> <li>Provides situation reports (SITREPs) for each HRC program, which are used by the Planning Section Chief to create the HRC Action Plan</li> </ul>
Transition Section Leader	<p>Responsible for planning the process of transitioning into each housing strategy (when appropriate), and transitioning out of each as it winds down.</p> <ul style="list-style-type: none"> <li>Working closely with the Operations Section and Logistics Section, plans the initiation of each HRC operation, providing input into the HRC Action Plan</li> <li>Utilizing the information provided by the Situation Branch, estimates the point when HRC operations will be complete for each HRC program, and provides input into the HRC Action Plans to implement these transitions</li> <li>Program deactivation encompasses the demobilization and debriefing of all involved personnel, and the proper identification and disposition of all resources and equipment</li> <li>For HRC led programs, a written demobilization plan shall be prepared, identifying the tasks necessary for deactivation, the responsibility for each task, and the handling of clients subsequent to the end of the</li> </ul>



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	<p>program</p> <ul style="list-style-type: none"> <li>• For programs being supported by the HRC, the Transition Branch monitors the deactivation process, and provides technical support and assistant to the lead agency upon request</li> <li>• When all HRC programs are deactivated, or when a determination is made that the HRC no longer needs to exist independently, the Transition Section will plan and implement the closure of the HRC itself. Including debriefing of personnel and disposition of resources and equipment</li> </ul>
<p>Logistics Section Leader</p>	<p>Ensures the adequacy of resources (personnel and equipment) available for the HRC. Manages and tracks the resources being used.</p> <ul style="list-style-type: none"> <li>• Ensures that adequate resources are mobilized and deployed for HRC programs and activities. This includes both physical resources and supplies, and also services such as communications, food, and fuel</li> <li>• Assists the interim housing efforts of other jurisdictions (municipal, state, federal) in securing additional or specialized resources for their operations</li> </ul>
<p>Finance and Administration Unit Leader</p>	<p>Completes the financial and administrative actions necessary to support the HRC process.</p> <ul style="list-style-type: none"> <li>• Completes the financial and administrative actions necessary to support the HRC process</li> <li>• Oversees the purchase and delivery of resources and services needed to support HRC activities</li> <li>• Oversees the necessary documentation to State and Federal agencies to receive reimbursement for HRC activities conducted by the County.</li> <li>• Oversees documentation of the time of County employees working on HRC activities and programs</li> </ul>
<p>Procurement</p>	<p>Responsible for the purchase and delivery of resources and services needed to support the HRC process, in a manner consistent with County, State, and Federal requirements.</p> <ul style="list-style-type: none"> <li>• Responsible for the purchase and delivery of resources and services needed to support the HRC process</li> <li>• Serves as liaison to State and Federal officials with regard to obtaining reimbursement for eligible expenses</li> <li>• Responsible for ensuring prompt payments to vendors and suppliers involved with HRC programs</li> <li>• When indicated and requested, provides technical support in the reimbursement function to municipalities</li> </ul>



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	and other HRC partner agencies
Time Branch	<p>Ensures documentation of the time of County employees expended in the post-disaster housing function. Ensures that policies and procedures used to document employee time are consistent with State/Federal reimbursement requirements.</p> <ul style="list-style-type: none"> <li>• Ensures documentation of the time of County employees expended in HRC programs and activities</li> <li>• Ensures that policies and procedures used to document employee time are consistent with State/Federal reimbursement requirements.</li> <li>• When indicated and requested, provides technical support regarding documentation of time to municipalities and other HRC partner agencies</li> </ul>

**Exhibit 2:**

**Florida Building Code Provisions Related to Hurricane Periods**

The Florida Building Code does not make special provisions for after a hurricane to expedite permitting and inspections after a major hurricane affects an area. However, Chapter 252 of the Florida Statutes 252 gives the Governor the authority to abate the permitting requirements of local governments in order to save lives and protect property in the post-disaster environment.

**Exhibit 3:**

**Florida Building Code Provisions for Placement of Mobile Homes on Single Family Lots**

The FEMA trailers (mobile homes) have to be installed by a State of Florida Department of Highway Safety and Motor Vehicles approved mobile home installer (contractor). The mobile home will require an electrical connection, plumbing connections and a mobile home tie down. Mobile Homes shall meet or exceed all Florida Building Codes as required for mobile/manufactured homes. Further, Okaloosa County Post Disaster Redevelopment Plan Policy 1.4.2 States “As soon as practical, after the initial moratorium, private or public facilities and infrastructure that suffered major damage and which create or aggravate a threat to the public’s health, safety, or welfare shall be able to apply for building permits and associated construction and development orders for repair or demolition.”



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**APPENDICES**

**Appendix A**

**Municipal Disaster Housing Liaisons**

<b>Municipality</b>	<b>Liaison</b>	<b>Telephone</b>	<b>E-Mail</b>
<b>Okaloosa County</b>	<b>Sherry Reed</b>	<b>850-689-5080</b>	<a href="mailto:sreed@co.okaloosa.fl.us"><u>sreed@co.okaloosa.fl.us</u></a>
<b>Cinco Bayou</b>	<b>Nell Dykes</b>	<b>850-833-3405</b>	<a href="mailto:nellydikes@cincobayou.com"><u>nellydikes@cincobayou.com</u></a>
<b>Crestview</b>	<b>Eric Davis</b>	<b>850-689-1618</b>	<a href="mailto:ericdavis@cityofcrestview.org"><u>ericdavis@cityofcrestview.org</u></a>
<b>Destin</b>	<b>Ken Gallander</b>	<b>850-837-4242</b>	<a href="mailto:kgallander@cityofdestin.com"><u>kgallander@cityofdestin.com</u></a>
<b>Fort Walton Beach</b>	<b>Stella Jones</b>	<b>850-833-9604</b>	<a href="mailto:ejones@fwb.org"><u>ejones@fwb.org</u></a>
<b>Laurel Hill</b>		<b>850-652-4441</b>	<a href="mailto:clhclerk@fairpoint.net"><u>clhclerk@fairpoint.net</u></a>
<b>Mary Esther</b>	<b>Lynn Oler</b>	<b>850-243-3566</b>	<a href="mailto:cmgr@cityofmaryesther.com"><u>cmgr@cityofmaryesther.com</u></a>
<b>Niceville</b>	<b>Wanda Cruttenden</b>	<b>850-729-4008</b>	<a href="mailto:wcruttenden@niceville.org"><u>wcruttenden@niceville.org</u></a>
<b>Shalimar</b>	<b>Tom Burns</b>	<b>850-651-7523</b>	<a href="mailto:shalimartom@yahoo.com"><u>shalimartom@yahoo.com</u></a>
<b>Valparaiso</b>	<b>Carl Scott</b>	<b>850-729-5402</b>	<a href="mailto:cityadministrator@valp.org"><u>cityadministrator@valp.org</u></a>



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### Appendix B

#### Federal Assistance to Individuals and Households

§ 206.110 Federal assistance to individuals and households.

(a) *Purpose.* This section implements the policy and procedures set forth in section 408 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5174, as amended by the Disaster Mitigation Act of 2000. This program provides financial assistance and, if necessary, direct assistance to eligible individuals and households who, as a direct result of a major disaster or emergency, have uninsured or under-insured, necessary expenses and serious needs and are unable to meet such expenses or needs through other means.

(b) *Maximum amount of assistance.* No individual or household will receive financial assistance greater than \$25,000 under this subpart with respect to a single major disaster or emergency. FEMA will adjust the \$25,000 limit annually to reflect changes in the Consumer Price Index (CPI) for All Urban Consumers that the Department of Labor publishes.

(c) *Multiple types of assistance.* One or more types of housing assistance may be made available under this section to meet the needs of individuals and households in the particular disaster situation. FEMA shall determine the appropriate types of housing assistance to be provided under this section based on considerations of cost effectiveness, convenience to the individuals and households and the suitability and availability of the types of assistance. An applicant is expected to accept the first offer of housing assistance; unwarranted refusal of assistance may result in the forfeiture of future housing assistance. Temporary housing and repair assistance shall be utilized to the fullest extent practicable before other types of housing assistance.

(d) *Date of eligibility.* Eligibility for Federal assistance under this subpart will begin on the date of the incident that results in a presidential declaration that a major disaster or emergency exists, except that reasonable lodging expenses that are incurred in anticipation of and immediately preceding such event may be eligible for Federal assistance under this chapter.

(e) *Period of assistance.* FEMA may provide assistance under this subpart for a period not to exceed 18 months from the date of declaration. The Associate Director (AD) may extend this period if he/she determines that due to extraordinary circumstances an extension would be in the public interest.

(f) *Assistance not counted as income.* Assistance under this subpart is not to be counted as income or a resource in the determination of eligibility for welfare, income assistance or income-tested benefit programs that the Federal Government funds.



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(g) *Exemption from garnishment.* All assistance provided under this subpart is exempt from garnishment, seizure, encumbrance, levy, execution, pledge, attachment, release or waiver. Recipients of rights under this provision may not reassign or transfer the rights. These exemptions do not apply to FEMA recovering assistance fraudulently obtained or misapplied.

(h) *Duplication of benefits.* In accordance with the requirements of section 312 of the Stafford Act, 42 U.S.C. 5155, FEMA will not provide assistance under this subpart when any other source has already provided such assistance or when such assistance is available from any other source. In the instance of insured applicants, we will provide assistance under this subpart only when:

- (1) Payment of the applicable benefits are significantly delayed;
- (2) Applicable benefits are exhausted;
- (3) Applicable benefits are insufficient to cover the housing or other needs; or
- (4) Housing is not available on the private market.

(i) *Cost sharing.* (1) Except as provided in paragraph (i)(2) of this section, the Federal share of eligible costs paid under this subpart shall be 100 percent.

(2) Federal and State cost shares for "Other Needs" assistance under subsections 408 (e) and (f) of the Stafford Act will be as follows;

(i) The Federal share shall be 75 percent; and

(ii) The non-federal share shall be paid from funds made available by the State. If the State does not provide the non-Federal share to FEMA before FEMA begins to provide assistance to individuals and households under subsection 408(e) of the Stafford Act, FEMA will still process applications. The State will then be obliged to reimburse FEMA for the non-Federal cost share of such assistance on a monthly basis. If the State does not provide such reimbursement on a monthly basis, then FEMA will issue a Bill for Collection to the State on a monthly basis for the duration of the program. FEMA will charge interest, penalties, and administrative fees on delinquent Bills for Collection in accordance with the Debt Collection Improvement Act. Cost shared funds, interest, penalties and fees owed to FEMA through delinquent Bills for Collections may be offset from other FEMA disaster assistance programs (*i.e.* Public Assistance) from which the State is receiving, or future grant awards from FEMA or other Federal Agencies. Debt Collection procedures will be followed as outlined in 44 CFR part 11.

(j) *Application of the Privacy Act.* (1) All provisions of the Privacy Act of 1974, 5 U.S.C. 552a, apply to this subpart. FEMA may not disclose an applicant's record except:



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(i) In response to a release signed by the applicant that specifies the purpose for the release, to whom the release is to be made, and that the applicant authorizes the release;

(ii) In accordance with one of the published routine uses in our system of records; or

(iii) As provided in paragraph (j)(2) of this section.

(2) Under section 408(f)(2) of the Stafford Act, 42 U.S.C. 5174(f)(2), FEMA must share applicant information with States in order for the States to make available any additional State and local disaster assistance to individuals and households.

(i) States receiving applicant information under this paragraph must protect such information in the same manner that the Privacy Act requires FEMA to protect it.

(ii) States receiving such applicant information shall not further disclose the information to other entities, and shall not use it for purposes other than providing additional State or local disaster assistance to individuals and households.

(k) *Flood Disaster Protection Act requirement.* (1) The Flood Disaster Protection Act of 1973, Public Law 93–234, as amended (42 U.S.C. 4106), imposes certain restrictions on federal financial assistance for acquisition and construction purposes. For the purpose of this paragraph, *financial assistance for acquisition or construction purposes* means assistance to an individual or household to buy, receive, build, repair or improve insurable portions of a home and/or to purchase or repair insurable contents. For a discussion of what elements of a home and contents are insurable, See 44 CFR part 61, Insurance Coverage and Rates.

(2) Individuals or households that are located in a special flood hazard area may not receive Federal Assistance for National Flood Insurance Program (NFIP)—insurable real and/or personal property, damaged by a flood, unless the community in which the property is located is participating in the NFIP (See 44 CFR part 59.1), or the exception in 42 U.S.C. 4105(d) applies. However, if the community in which the damaged property is located qualifies for and enters the NFIP during the six-month period following the declaration, the Governor's Authorized Representative may request a time extension for FEMA (See §206.112) to accept registrations and to process assistance applications in that community.

(3) *Flood insurance purchase requirement:* (i) As a condition of the assistance and in order to receive any Federal assistance for future flood damage to any insurable property, individuals and households named by FEMA as eligible recipients under section 408 of the Stafford Act who receive assistance, due to flood damages, for acquisition or construction purposes under this subpart must buy and maintain flood insurance, as required in 42 U.S.C. 4012a, for at least the assistance amount. This applies only to real and personal property that is in or will be in a designated Special Flood Hazard Area and that can be insured under the National Flood Insurance Program.



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(A) If the applicant is a homeowner, flood insurance coverage must be maintained at the address of the flood-damaged property for as long as the address exists. The flood insurance requirement is reassigned to any subsequent owner of the flood-damaged address.

(B) If the applicant is a renter, flood insurance coverage must be maintained on the contents for as long as the renter resides at the flood-damaged rental unit. The restriction is lifted once the renter moves from the rental unit.

(C) When financial assistance is used to purchase a dwelling, flood insurance coverage must be maintained on the dwelling for as long as the dwelling exists and is located in a designated Special Flood Hazard Area. The flood insurance requirement is reassigned to any subsequent owner of the dwelling.

(ii) FEMA may not provide financial assistance for acquisition or construction purposes to individuals or households who fail to buy and maintain flood insurance required under paragraph (k)(3)(i) of this section or required by the Small Business Administration.

(l) *Environmental requirements.* Assistance provided under this subpart must comply with the National Environmental Policy Act (NEPA) and other environmental laws and Executive Orders, consistent with 44 CFR part 10.

(m) *Historic preservation.* Assistance provided under this subpart generally does not have the potential to affect historic properties and thus is exempted from review in accordance with section 106 of the National Historic Preservation Act, with the exception of ground disturbing activities and construction related to §§206.117(b)(1)(ii) (Temporary housing), 206.117(b)(3) (Replacement housing), and 206.117(b)(4) (Permanent housing construction).

[67 FR 61452, Sept. 30, 2002; 67 FR 62896, Oct. 9, 2002]



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### Appendix C

#### Emergency Management Powers of the Governor

252.36 Emergency management powers of the Governor.—

(1)(a) The Governor is responsible for meeting the dangers presented to this state and its people by emergencies. In the event of an emergency beyond local control, the Governor, or, in the Governor's absence, her or his successor as provided by law, may assume direct operational control over all or any part of the emergency management functions within this state, and she or he shall have the power through proper process of law to carry out the provisions of this section. The Governor is authorized to delegate such powers as she or he may deem prudent.

(b) Pursuant to the authority vested in her or him under paragraph (a), the Governor may issue executive orders, proclamations, and rules and may amend or rescind them. Such executive orders, proclamations, and rules shall have the force and effect of law.

(2) A state of emergency shall be declared by executive order or proclamation of the Governor if she or he finds an emergency has occurred or that the occurrence or the threat thereof is imminent. The state of emergency shall continue until the Governor finds that the threat or danger has been dealt with to the extent that the emergency conditions no longer exist and she or he terminates the state of emergency by executive order or proclamation, but no state of emergency may continue for longer than 60 days unless renewed by the Governor. The Legislature by concurrent resolution may terminate a state of emergency at any time. Thereupon, the Governor shall issue an executive order or proclamation ending the state of emergency. All executive orders or proclamations issued under this section shall indicate the nature of the emergency, the area or areas threatened, and the conditions which have brought the emergency about or which make possible its termination. An executive order or proclamation shall be promptly disseminated by means calculated to bring its contents to the attention of the general public; and, unless the circumstances attendant upon the emergency prevent or impede such filing, the order or proclamation shall be filed promptly with the Department of State and in the offices of the county commissioners in the counties to which the order or proclamation applies.



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- (3) An executive order or proclamation of a state of emergency shall:
- (a) Activate the emergency mitigation, response, and recovery aspects of the state, local, and interjurisdictional emergency management plans applicable to the political subdivision or area in question; and
  - (b) Be authority for the deployment and use of any forces to which the plan or plans apply and for the use or distribution of any supplies, equipment, and materials and facilities assembled, stockpiled, or arranged to be made available pursuant to ss. [252.31-252.90](#) or any other provision of law relating to emergencies.
  - (c) Identify whether the state of emergency is due to a minor, major, or catastrophic disaster.
    - 1. For a major or catastrophic disaster, the proclamation is authority for a health care practitioner licensed in another state to assist in providing health care in the disaster area according to the provisions specified in the proclamation.
    - 2. For a catastrophic disaster, the proclamation constitutes a formal request for mobilization of the military, which shall be communicated to the President of the United States.
- (4) During the continuance of a state of emergency, the Governor is commander in chief of the Florida National Guard and of all other forces available for emergency duty. To the greatest extent practicable, the Governor shall delegate or assign command authority by prior arrangement embodied in appropriate executive orders or rules, but nothing herein restricts the Governor's authority to do so by orders issued at the time of the emergency.
- (5) In addition to any other powers conferred upon the Governor by law, she or he may:
- (a) Suspend the provisions of any regulatory statute prescribing the procedures for conduct of state business or the orders or rules of any state agency, if strict compliance with the provisions of any such statute, order, or rule would in any way prevent, hinder, or delay necessary action in coping with the emergency.
  - (b) Utilize all available resources of the state government and of each political subdivision of the state, as reasonably necessary to cope with the emergency.



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- (c) Transfer the direction, personnel, or functions of state departments and agencies or units thereof for the purpose of performing or facilitating emergency services.
- (d) Subject to any applicable requirements for compensation under s. [252.43](#), commandeer or utilize any private property if she or he finds this necessary to cope with the emergency.
- (e) Direct and compel the evacuation of all or part of the population from any stricken or threatened area within the state if she or he deems this action necessary for the preservation of life or other emergency mitigation, response, or recovery.
- (f) Prescribe routes, modes of transportation, and destinations in connection with evacuation.
- (g) Control ingress and egress to and from an emergency area, the movement of persons within the area, and the occupancy of premises therein.
- (h) Suspend or limit the sale, dispensing, or transportation of alcoholic beverages, firearms, explosives, and combustibles. However, nothing contained in ss. [252.31-252.90](#) shall be construed to authorize the seizure, taking, or confiscation of firearms that are lawfully possessed, unless a person is engaged in the commission of a criminal act.
- (i) Make provision for the availability and use of temporary emergency housing.
- (j) Take effective measures for limiting or suspending lighting devices and appliances, gas and water mains, electric power distribution, and all other utility services in the general public interest.
- (k) Take measures concerning the conduct of civilians, the movement and cessation of movement of pedestrian and vehicular traffic prior to, during, and subsequent to drills and actual or threatened emergencies, the calling of public meetings and gatherings, and the evacuation and reception of civilian population, as provided in the emergency management plan of the state and political subdivisions thereof.
- (l) Authorize the use of forces already mobilized as the result of an executive order, rule, or proclamation to assist the private citizens of the state in cleanup and recovery operations during emergencies when proper permission to enter onto or into private property has been obtained from the property owner. The provisions of s. [768.28](#)(9) apply to this paragraph.



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- (m) Authorize businesses and their employees who sell commodities as defined in s. [501.160](#)(1)(a) to exceed the times of curfews for the purpose of ensuring that the supplies of commodities are made available to the public and direct local law enforcement to assist and accommodate those businesses and their employees in ensuring that commodities are available in coping with the emergency.
- (n) By executive order, authorize the operator of solid waste disposal facilities to extend operating hours to ensure the health, safety, and welfare of the general public.
- (6) The Governor shall take such action and give such direction to state and local law enforcement officers and agencies as may be reasonable and necessary for the purpose of securing compliance with the provisions of ss. [252.31-252.90](#) and with the orders and rules made pursuant thereto.
- (7) The Governor shall employ such measures and give such directions to the Department of Health and the Agency for Health Care Administration as may be reasonably necessary for the purpose of securing compliance with the provisions of ss. [252.31-252.90](#) or with the findings or recommendations of such agency of health by reason of conditions arising from emergencies or threats of emergency.
- (8) The Governor shall delegate emergency responsibilities to the officers and agencies of the state and of the political subdivisions thereof prior to an emergency or threat of an emergency and shall utilize the services and facilities of existing officers and agencies of the state and of the political subdivisions thereof, including their personnel and other resources, as the primary emergency management forces of the state, and all such officers and agencies shall cooperate with and extend their services and facilities to the division, as it may require.
- (9) The Governor and the division shall establish agencies and offices and appoint executive, professional, technical, clerical, and other personnel as may be necessary to carry out the provisions of ss. [252.31-252.90](#).
- (10) The Governor shall formulate and execute plans and rules for the control of traffic in order to provide for the rapid and safe movement or evacuation over public highways and streets of people, troops, or vehicles and materials for national defense or for use in any defense industry



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and may coordinate the activities of the departments or agencies of the state and the political subdivisions thereof concerned directly or indirectly with public highways and streets in a manner which will best effectuate such plans.

History.—s. 1, ch. 74-285; s. 1, ch. 77-47; s. 4, ch. 79-12; s. 21, ch. 81-169; s. 2, ch. 83-44; s. 19, ch. 83-334; s. 11, ch. 93-211; s. 129, ch. 95-148; s. 47, ch. 99-8; s. 33, ch. 2001-61; s. 2, ch. 2005-283; s. 1, ch. 2006-100.

### Appendix D

#### Source of Hotel / Motels in Area 1

**Okaloosa County TDC – 850-651-7131**

**Escambia County TDC – 850-595-3477**

**Santa Rosa County TDC - 850-939-2691 or 9369-8666**

**Walton County TDC – 850-267-1216**

**Holmes County TDC – 850-547-4682**

**Washington County TDC – 850-638-6013**

**Bay County TDC – 850-747-5212**

**Jackson County TDC – 850-482-8060**

**Gulf County TDC – 850-229-7800**

**Franklin County TDC – 866-914-2068**

**Florida Restaurant and Lodging Association**

<http://www.frla.org/membership/membership-directory/map> **850-224-9213**: This website has an extensive list of members and address for hotels and motels throughout the State of Florida.

### Appendix E

#### Cruise Lines Northwest Florida

There are currently no large cruise lines in the Northwest Florida Region. However, in the event of wide spread devastation this would not prevent FEMA from ordering a cruise liner to the area to one of the deep channel docks in adjacent counties for use as temporary shelters.



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**Appendix F**

**Existing Mobile Home / RV Parks**

Site Name	Address	X-COORD	Y-COORD
LOG LAKE ROAD RV PARK	4504 LOG LAKE RD HOLT FL 32564	1261045.056	627255.168
RIVERS EDGE RV CAMPGROUND	4001 LOG LAKE RD HOLT FL 32564	1261236.97	615905.29
ACTION ON BLACKWATER RIVER	6293 W HWY 4 BAKER FL 32531	1268107.822	673594.228
ADAM'S MOBILE HOME PARK	800 CARDINAL ST LOT 4 FORT WALTON BEACH FL 32547	1297385.939	539750.435
ANCHOR TRAILER PARK	509 23RD ST LOT 8 NICEVILLE FL 32578	1348969.65	554439.618
ASTOR MOBILE RENTALS	21 8TH AVE SHALIMAR FL 32579	1314808.944	531042.465
AZALEA TRAILER PARK	326 CARMEL DR LOT 41 FORT WALTON BEACH FL 32547	1290819	530615.187
BAY COVE TRAILER PARK	60 BAYOU DR LOT 20 FORT WALTON BEACH FL 32547	1303778.372	533364.614
BEACH DRIVE MOBILE HOME PARK	117 BEACH DR FORT WALTON BEACH FL 32547	1306996.807	531262.091
BETHEA MOBILE HOME PARK	505E SCOTT LN FORT WALTON BEACH FL 32547	1298750.511	531570.762
BETTY'S TRAILER PARK	662 DENTON BLVD FORT WALTON BEACH FL 32547	1299123.249	530495.187
BOEHNERS VILLAGE	105 HARDING RD NICEVILLE FL 32578	1349616.25	551703.062
BRAD MAR TRAILER PARK	843 GIBSON RD LOT 2 FORT WALTON BEACH FL 32547	1296013.002	532547.175
BRAD MAR TRAILER PARK #1	155 AIR FORCE ST FORT WALTON BEACH FL 32547	1299014.171	532959.808
CAMERON'S TRAILER PARK	208 CASPER DR LOT 4 FORT WALTON BEACH FL 32547	1295529	527669.187
CANNONS TRAILER PARK	2210 JAMES LEE BLVD W LOT 11 CRESTVIEW FL 32536	1306162.6	645133.199



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Site Name	Address	X-COORD	Y-COORD
CAPRI COMMONS	928 CARLOS DR FORT WALTON BEACH FL 32547	1298396.749	534143.874
CARDINAL COVE	821 CARDINAL ST LOT G FORT WALTON BEACH FL 32547	1298178.251	539908.124
CEDAR CREEK MOBILE HOME PARK	5301 HARE ST LOT 23 CRESTVIEW FL 32539	1332247.125	645093.624
COACHLIGHT PARK	705 LLOYD ST LOT 4 FORT WALTON BEACH FL 32547	1298102.124	530931.937
COUNTRY BREEZE	510 UNION ST LOT 9 FORT WALTON BEACH FL 32547	1292901.524	536213.389
CROSSWINDS	208 SPRUCE ST LOT 1 MARY ESTHER FL 32569	1246995.068	520460.498
D&D MOBILE HOME PARK	8B BRADFORD ST FORT WALTON BEACH FL 32547	1293396.897	533069.468
DENTON MOBILE HOME PARK	675 DENTON BLVD LOT 19 FORT WALTON BEACH FL 32547	1299552	530859.874
DURHAM MOBILE HOME PARK	49 BRENDA LN MARY ESTHER FL 32569	1256893.99	520645.921
EAST BLUEBERRY COUNTRY ESTATES	5975 COBBLER LN CRESTVIEW FL 32539	1326622.156	662975.993
EMILY'S MOBILE HOME PARK	156 RICKEY AVE NE LOT 4 FORT WALTON BEACH FL 32547	1306507.875	532284.124
EVAN'S TRAILER PARK	729 GREEN ST LOT 7 FORT WALTON BEACH FL 32547	1297682.875	531700.5
FAIRVIEW HEIGHTS MOBILE HOME PARK	818 FAIRVIEW DR LOT 1 FORT WALTON BEACH FL 32547	1290446.948	531795.357
FOREST GROVE MH PARK	1318 LEWIS TURNER BLVD LOT 20 FORT WALTON BEACH FL 32547	1295322.875	536802.437
FORSTROMS MOBILE HOME PARK	1504 18TH ST NICEVILLE FL 32578	1349551.57	552160.358
FRED GANNON STATE PARK(ROCKY BAYOU)	4281 HWY 20 E NICEVILLE FL 32578	1360387.817	549678.818
FUNLAND TRAILER COURT	825 N EGLIN PKWY LOT 9 FORT WALTON BEACH FL 32547	1308336.25	529651.999



**Unincorporated Okaloosa County**

Site Name	Address	X-COORD	Y-COORD
GRANTS TRAILER PARK	411 LAKEVIEW ST MARY ESTHER FL 32569	1246913.663	522186.477
GRAY'S TRAILER PARK	678 KEHLHEM RD FORT WALTON BEACH FL 32547	1298600.319	530324.373
GREENWOOD MOBILE HOME COMMUNITY	103 JACKSON ST LOT 13 FORT WALTON BEACH FL 32547	1304773.625	531210.375
HILLTOP TRAILER PARK	931 JAMES LEE BLVD W LOT 7 CRESTVIEW FL 32536	1310753.154	647590.173
HOUSTON PARK	239 CARMEL DR LOT 5 FORT WALTON BEACH FL 32547	1291910.75	531004.686
HUDSONS MOBILE HOME PARK	826 MAYO TRL LOT 16 CRESTVIEW FL 32536	1311434.6	647198.4
KILLINGSWORTH MOBILE HOME PARK	106 LINCOLN DR NW LOT 4 FORT WALTON BEACH FL 32547	1293650.625	529340.936
LAURENT MOBILE HOME PARK	2496 HWY 98 W LOT 1 MARY ESTHER FL 32569	1255576.04	520342.663
LAZY OAKS TRAILER PARK	4600 WILKERSON BLUFF RD LOT A HOLT FL 32564	1284673.01	627442.33
LLOYD STREET MOBILE HOME PARK	724 LLOYD ST LOT 3 FORT WALTON BEACH FL 32547	1297773.375	531467.75
MAJOR MANOR	801 FAIRVIEW DR LOT 1 FORT WALTON BEACH FL 32547	1290613.344	531029.716
MINNIE MANOR	114 SKIPPER AVE LOT C FORT WALTON BEACH FL 32547	1305371.375	530678.937
MOORE'S TRAILER PARK	15 9TH ST SHALIMAR FL 32579	1316642.458	528696.693
NORTH STAR TRAILER PARK	310 FORREST AVE MARY ESTHER FL 32569	1244899.574	521586.265
OAKDALE VILLAGE MOBILE HOME PARK	820 GIBSON RD LOT 1 FORT WALTON BEACH FL 32547	1295828.912	531546.594
PALM TRAILER PARK	1015 PARTIN DR N LOT 8 NICEVILLE FL 32578	1347301.499	560278.25
PARKER'S TRAILER PARK	814 TANAGER RD LOT 1 FORT WALTON BEACH FL 32547	1297038.083	539235.647



**Unincorporated Okaloosa County**

Site Name	Address	X-COORD	Y-COORD
PATTY'S TRAILER PARK	781 NAVY ST FORT WALTON BEACH FL 32547	1298450.5	531252.999
PAULETTES TRAILER COURT	1778 HURLBURT RD LOT 1 FORT WALTON BEACH FL 32547	1292395.999	533495.784
PEGGY MARLER MOBILE HOME PARK	1303A BEVERLY ST FORT WALTON BEACH FL 32547	1293482.999	536149.318
PINECREST TRAILER PARK	441 RACETRACK RD NW LOT 20 FORT WALTON BEACH FL 32547	1295435.75	533254.937
PINEOAKS TRAILER PARK	622 GAP CREEK DR LOT 9 FORT WALTON BEACH FL 32548	1293348.124	526495.562
PLANTATION COVE	816 TANAGER RD LOT 1 FORT WALTON BEACH FL 32547	1297496.392	538984.478
PLAYGROUND MOBILE HOME PARK	777 N BEAL PKWY LOT 34 FORT WALTON BEACH FL 32547	1295424.626	531396.937
PLAYGROUND MOBILE HOME PARK II	807 GIBSON RD FORT WALTON BEACH FL 32547	1295967.047	531403.417
QUALITY TRAILER PARK	1814 HURLBURT RD LOT 1 FORT WALTON BEACH FL 32547	1293193.637	533471.246
ROBERTS TRAILER PARK	1649 JAMES LEE BLVD E LOT 15 CRESTVIEW FL 32539	1325251.8	645351.2
ROSES TRAILER PARK	3389 W HIGHWAY 98 LOT 16 MARY ESTHER FL 32569	1244368.824	519659.353
RUZOWSKI TRAILER PARK	134 FETTING AVE NW LOT 4 FORT WALTON BEACH FL 32547	1295419.125	532619.187
RYALS' TRAILER PARK	800 LARK ST LOT 1 FORT WALTON BEACH FL 32547	1297071.425	539432.063
SANDERS TRAILER PARK	703 SHADY LANE DR FORT WALTON BEACH FL 32547	1293500.418	528294.491
SCROGGINS TRAILER PARK	711C NAVY ST FORT WALTON BEACH FL 32547	1298472.25	530927.875
SHADY LANE TRAILER PARK	118 KOON ST LOT 4 FORT WALTON BEACH FL 32547	1295144.125	531940.999
SHALIMAR PARK	46 3RD ST LOT 23 SHALIMAR FL 32579	1313921	530345.312



**Unincorporated Okaloosa County**

Site Name	Address	X-COORD	Y-COORD
SHANYN'S MOBILE HOME PARK	820 TANAGER RD LOT 5 FORT WALTON BEACH FL 32547	1297753.33	538751.863
SIMPLERS TRAILER PARK	1303 GREEN ACRES AVE FORT WALTON BEACH FL 32547	1292205.5	536105.561
SIR ROBERTS TRAILER PARK	1302 GREEN ACRES AVE LOT 18A FORT WALTON BEACH FL 32547	1291990.839	535980.128
T H MOBILE HOME PARK	5294 CAVALIER DR CRESTVIEW FL 32539	1333275	644833.399
THOMAS TRAILER PARK	701 LEONARD RD LOT 4 FORT WALTON BEACH FL 32547	1294867.125	531212.375
TJP ENTERPRISE	1041 48TH ST LOT B NICEVILLE FL 32578	1348076.661	562919.72
TYNER COURT	700 TYNER ST LOT 3 FORT WALTON BEACH FL 32547	1299836	530850.437
VACHE ROYALE	800 DENTON BLVD LOT 8 FORT WALTON BEACH FL 32547	1299105.75	532216.624
VILLA WINDS TRAILER PARK	678 DENTON BLVD LOT 7 FORT WALTON BEACH FL 32547	1299175.25	531386.5
WADE TRAILER PARK	101 SASSER ST NICEVILLE FL 32578	1349514.875	554600.437
WARD'S MOBILE HOME PARK	1502 W PONDEROSA RD FORT WALTON BEACH FL 32547	1296407.875	538867.187
WHISPERING PINES TRAILER PARK	1 NEWCASTLE DR LOT A FORT WALTON BEACH FL 32547	1299303.181	530418.759
WILLIAMS COURT VENTURES	916 WILLIAMS CT FORT WALTON BEACH FL 32547	1296505.494	530987.587
ZUPCO MOBILE HOME COURT	226A OAKHILL AVE FORT WALTON BEACH FL 32547	1295686.801	528725.816



**Unincorporated Okaloosa County**

**Appendix G**

**Program/Funds Post Disaster**

**Department of Homeland Security, Office of Inspector General, Compendium of Disaster Assistance Programs**

DEPT	PROGRAM TITLE	PURPOSE	CFDA NUMBER
DHS	Disaster Unemployment Assistance	To provide special federally funded weekly benefits to workers and self-employed individuals who are unemployed as a direct result of a Presidentially-declared major disaster, and who are not eligible for regular unemployment insurance benefits paid by States. Administered by DOL through funding from FEMA)	97.034
DHS	Disaster Housing Assistance to Individuals and Households in Presidential Declared Disaster Areas	To provide financial assistance and, if necessary, direct assistance to individuals and households affected as a direct result of a presidentially declared major disaster or emergency, who have uninsured or under-insured, necessary expenses and serious needs and are unable to meet such expenses or needs through other means.	97.048
DHS	Presidential Declared Disaster Assistance- Disaster Housing Operations for Individuals and Households	To address disaster-related housing needs of individuals and households suffering hardship within an area which, by Presidential declaration, has been designated as a disaster area.	97.049



**Unincorporated Okaloosa County**

DEPT	PROGRAM TITLE	PURPOSE	CFDA NUMBER
DHS	Presidential Declared Disaster Assistance to Individuals and Households- Other Needs	To provide assistance to individuals and households affected by a disaster or emergency declared by President, and enable them to address necessary expenses and serious needs, which cannot be met through other forms of disaster assistance or through other means as insurance.	97.50
DOD	Roofing	Install temporary roofs on homes to allow occupation by owners/residents and relieve the need to provide temporary housing	*
HUD	Community Development Block Grants/State's Program and Non-Entitlement Grants in Hawaii	The primary objective of this program is the development of viable urban communities by providing decent housing, a suitable living environment, and expanding economic opportunities, principally for persons of low and moderate income. Each activity funded must meet one of the programs National Objectives by: Benefiting low and moderate income families; aiding in the prevention or elimination of slums or blight; or meeting other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community where other financial resources are not available.	14.22



**Unincorporated Okaloosa County**

DEPT	PROGRAM TITLE	PURPOSE	CFDA NUMBER
HUD	Home Investment Partnerships Program	(1) To expand the supply of affordable housing, particularly rental housing, for low and very low income Americans; (2) to strengthen the abilities of State and local governments to design and implement strategies for achieving adequate supplies of decent, affordable housing; (3) to provide both financial and technical assistance to participating jurisdictions, including development of model programs for developing affordable low income housing; and (4) to extend and strengthen partnerships among all levels of government and private sector, including for-profit and nonprofit organizations, in the production and operation of affordable housing.	14.239
HUD	Community Development Block Grants- Section 108 Loan Guarantees	To provide communities with a source of financing for economic development, housing rehabilitation, public facilities, and large scale physical development projects	14.248
HUD	Section 8 Housing Choice Vouchers	To aid very low income families in obtaining decent safe, and sanitary rental housing. Etc.	14.871
SBA	Disaster Assistance Loans	To provide loans to the victims of declared disasters for uninsured or otherwise uncompensated physical damage	5



**Unincorporated Okaloosa County**

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DEPT	PROGRAM TITLE	PURPOSE	CFDA NUMBER
USDA	Direct Housing Natural Disaster Loans and Grants	To assist qualified recipients to meet emergency assistance needs resulting from natural disaster. Funds are only available to the extent that funds are not provided by FEMA. For the purpose of administering these funds, a natural disaster will only include those counties identified by a Presidential declaration.	10.444

**\*No CFDA number identified**



**Unincorporated Okaloosa County**

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**Appendix H**

**DRAFT MODEL RESOLUTION PERMITTING TEMPORARY TRAILERS AS TEMPORARY HOUSING  
AFTER A DECLARED NATURAL DISASTER ON SINGLE FAMILY LOTS**

**1. Okaloosa County Proposed Emergency Resolution**

Before the Board of County Commissioners  
Okaloosa County, Florida

Resolution # \_\_\_\_\_

(disaster event) \_\_\_\_\_ Recovery Efforts

Whereas, (disaster event) \_\_\_\_\_, (define event), impacted Okaloosa County  
on day \_\_\_\_\_, date \_\_\_\_\_; and,

Whereas, (disaster event) \_\_\_\_\_, cause major damage to public utilities,  
public communication system, public streets and roads, marinas, beaches, and commercial and  
residential buildings and area; and,

Whereas the Okaloosa County Board of County Commissioners have declared a State of Local  
Emergency in unincorporated Okaloosa County for the (disaster event) and opened the  
Emergency Operations Center; and,

Whereas, Governor \_\_\_\_\_ declared a state of emergency as a result of  
(disaster event) \_\_\_\_\_; and

Whereas, President \_\_\_\_\_ declared Florida a major disaster area  
as a result of (disaster event) \_\_\_\_\_; and

Whereas, the Florida Department of Environmental Protection issued the document OGC No.  
XX-XXXX dated \_\_\_\_\_ entitled "Emergency authorization for repairs, replacement,  
restoration, and certain other measures made necessary by (disaster event) \_\_\_\_\_;  
and

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA  
COUNTY, FLORIDA THAT:



### Unincorporated Okaloosa County

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1. The above Recitals are hereby incorporated by reference.
2. For 6 months from the date of this resolution, a business owner with in the unincorporated area of Okaloosa County is authorized to conduct business operations in a camping trailer, trailer, motor home, or R/V on a commercially zoned site while the business structure is being reconstructed, if the commercial building located on that site has been determined to be "unsafe" or "restricted use" by Okaloosa County because of damage caused by (disaster event) \_\_\_\_\_. Such shall comply with all requirements of Okaloosa County. If the business operator leases the site of an affected business, then the business operator must obtain written permission from the commercial site owner to place a temporary unit on the site.
3. For 6 months from the date of this resolution, a resident of unincorporated Okaloosa County may reside in a camping trailer, trailer, motor home, or R/V on his/her residentially zoned lot while a residence is being reconstructed, if the residence is located on that lot has been determined to be "unsafe" or "restricted use" by Okaloosa County because of damage caused by (disaster event) \_\_\_\_\_. Such use shall comply with all requirements of the Okaloosa County Health Department.
4. This resolution does not supersede any private restriction or covenants, or other regulations, regarding the use of property.

DULY PASSED AND ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA COUNTY, this \_\_\_\_\_ the day of month \_\_\_\_\_, year \_\_\_\_\_.

ATTEST:

BOARD OF COUNTY COMMISSIONERS  
OKALOOSA COUNTY, FLORIDA

BY

\_\_\_\_\_  
APPROVED AS TO FORM AND CORRECTNESS:

\_\_\_\_\_  
OKALOOSA COUNTY ATTORNEY



## Unincorporated Okaloosa County

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### Appendix I

#### Draft Model Permitting of Temporary Trailers as Housing after a Declared Natural Disaster, in Unincorporated Okaloosa County

**Purpose:** Determine who qualifies and establish procedures to facilitate requests for trailers as temporary housing while replacing or reconstructing a residential unit.

**Policy:** Building Permit for use of temporary trailer while residential units are being replaced or reconstructed.

**Procedures: Qualifications**

1. Provide FEMA registration for trailer if needed; or
2. Provide proof homeowners insurance is addressing “loss of use” or residence.

**General Requirements**

- Prove unit is uninhabitable through appropriate documentation (pictures of damage, assessment reports by insurance company or FEMA, etc
- Comply with all Health, Building, Permitting, and Floodplain Management procedures.
- The Building Permit shall be valid for 6 months from date of issuance from the Permit Department. A possible one-year extension may be granted provided the applicant submits a request to the Okaloosa County Growth Management Department within 30 days of the permit expiration, as indicated on the permit.
- Granting of the permit does not relieve the applicant from complying with Deed Restrictions imposed by the development.
- The Growth Management Director may amend this policy to enforce additional requirements to ensure, health, safety, and welfare of the residents of Okaloosa County.



## Unincorporated Okaloosa County

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### Temporary Trailer Specific Requirements

- Generators are prohibited as a source of power for trailers while the main residential unit is being repaired.
- Electrical hook-up to commercial power is required.
- Water shall be supplied to the Temporary trailer through an existing hose bib.
- Sewage shall be self-contained or connected to a sewer system that may require inspection from Okaloosa County Growth Management and/or Health Department. Owner is required to provide the Health Department a copy of a signed "Service Agreement: stating the frequency of removal of the contents from self-contained tanks
- Applicant shall provide a survey, site plan or aerial of the property with proposed location of the temporary trailer.
- Temporary trailers shall be located on a lot such that the unit is entirely on the parcel/lot of the home residence being repaired as approved by Okaloosa County Growth Management.

### Mobile Home (MH) in Mobile Home Parks

In addition to meeting all above requirements, unless specified as being exempt, MH placed in Mobile Home Parks shall comply with the following additional requirements:

- Destroyed mobile homes and any associated debris shall be removed from the lot by the park owner or applicant, whichever is applicable, and disposed of in an appropriate manner.
- MH placed in mobile home parks shall submit to the Okaloosa County Growth Management Department for all appropriate permits, which include but are not limited to, demo of destroyed MH, electrical, mechanical, plumbing, and the tie down.
- The MH must be approved for the wind zone where it will be installed as approved under the Department of Highway Safety and Motor Vehicles.
- Temporary Installation does not vest the mobile home for existing use credit.



**Unincorporated Okaloosa County**

**CONTACT LIST**

<b>Agency</b>	<b>Contact</b>	<b>Phone</b>	<b>E-Mail</b>
Okaloosa County Administrator	James Curry	651-7515	<a href="mailto:jcurry@co.okaloosa.fl.us">jcurry@co.okaloosa.fl.us</a>
Okaloosa County Public Safety	Dino Villani Director	651-7150	<a href="mailto:dvillani@co.okaloosa.fl.us">dvillani@co.okaloosa.fl.us</a>
Okaloosa County Chief of Emergency Management	Randy McDaniel	651-7150	<a href="mailto:rmcdaniel@co.okaloosa.fl.us">rmcdaniel@co.okaloosa.fl.us</a>
Okaloosa County Growth Management	Elliot Kampert Director	651-7180	<a href="mailto:ekampert@co.okaloosa.fl.us">ekampert@co.okaloosa.fl.us</a>
Okaloosa County Building Official	Purl G. Adams III	585-0954	<a href="mailto:padams@co.okaloosa.fl.us">padams@co.okaloosa.fl.us</a>
Okaloosa County Fire & Life Safety Inspector	Chuck Bonta	423-4852	<a href="mailto:cbonta@co.okaloosa.fl.us">cbonta@co.okaloosa.fl.us</a>
Okaloosa County Disaster Housing Coordinator	Sherry Reed	689-7917	<a href="mailto:sreed@co.okaloosa.fl.us">sreed@co.okaloosa.fl.us</a>
Okaloosa County Public Works	John Hofstad Director	423-4828	<a href="mailto:jhofstad@co.okaloosa.fl.us">jhofstad@co.okaloosa.fl.us</a>
Okaloosa County Water and Sewer	Jeff Littrell Director	651-7172 978-0017	<a href="mailto:jlittrell@co.okaloosa.fl.us">jlittrell@co.okaloosa.fl.us</a>
Gulf Power Distribution Operations Center		833-4822	
Gulf Power Emergency Operations Center		833-4822 399-4335	
Gulf Power Representative	Carl Jackson	444-6654 206-1956	<a href="mailto:gjackson@southernco.com">gjackson@southernco.com</a>
Chelco Power Representative	Mike Richards	585-9193	<a href="mailto:mrichards@chelco.com">mrichards@chelco.com</a>



**Unincorporated Okaloosa County**

<b>Agency</b>	<b>Contact</b>	<b>Phone</b>	<b>E-Mail</b>
Okaloosa County Health Department Emerg Ops	Elaine Bieber	833-9240 ext 2304 699-4228	<a href="mailto:Elaine_Bieber@doh.state.fl.us">Elaine Bieber@doh.state.fl.us</a>
Okaloosa County School District	Kaye McKinley	833-5888 259-6091	<a href="mailto:mckinleyk@mail.okaloosa.k12.fl.us">mckinleyk@mail.okaloosa.k12.fl.us</a>
Northwest Florida Water Management District	Crestview District Office Daniel Arner	683-5048 683-5044	<a href="mailto:Daniel.arner@nfwmd.state.fl.us">Daniel.arner@nfwmd.state.fl.us</a>
Economic Development Council of Okaloosa County	Larry Sassano, President	362-6467	<a href="mailto:info@florida-edc.org">info@florida-edc.org</a> <a href="mailto:larrys@florida-edc.org">larrys@florida-edc.org</a>

**County and Municipal Building Officials**

<b>Agency</b>	<b>Building Official</b>
Okaloosa County 1804 Lewis Turner Blvd Suite 200 Fort Walton Beach, FL 32547	Building Official, Purl Adams <a href="mailto:padams@co.okaloosa.fl.us">padams@co.okaloosa.fl.us</a> 689-5080
City of Fort Walton Beach 105 Miracle Strip Parkway SW Fort Walton Beach, FL 32548	Development Services Manager Tim Bolduc <a href="mailto:tbolduc@fwb.org">tbolduc@fwb.org</a> 833-9599
City of Destin 4200 Indian Bayou Trail Destin, FL 32541	Chief Building Official, Larry Ballard <a href="mailto:lballard@cityofdestin.com">lballard@cityofdestin.com</a> 654-1119 Combination Inspector, Noell Bell <a href="mailto:nbell@cityofdestin.com">nbell@cityofdestin.com</a> 654-1119



**Unincorporated Okaloosa County**

Agency	Building Official
City of Niceville 208 N Partin Dr Niceville, FL 32578	Building Inspector, Darcy Chaney <a href="mailto:dchaney@niceville.org">dchaney@niceville.org</a> 279-6436
City of Crestview 198 Wilson St Crestview, FL 32536	Dept Director, Mike Wing <a href="mailto:mikewing@cityofcrestview.org">mikewing@cityofcrestview.org</a> 689-1618/1619
City of Mary Esther 195 Chrisobal Rd N Mary Esther, FL 32569	Building Official and Permitting is provided by Okaloosa County Growth Management Department
City of Valparaiso 465 Valparaiso Pkwy Valparaiso, FL 32580	Building Official, Barry Henderson <a href="mailto:cityadministrator@valp.org">cityadministrator@valp.org</a> 729-5402
City of Laurel Hill 8209 Hwy 85 N Laurel Hill, FL 32567	Building Official and Permitting is provided by Okaloosa County Growth Management Department
Town of Cinco Bayou 10 Yacht Club Dr NE Fort Walton Beach, FL 32548	Building Official and Permitting is provided by Okaloosa County Growth Management Department
Town of Shalimar 2 Cherokee Rd Shalimar, FL 32579	Building Official and Permitting is provided by Okaloosa County Growth Management Department

**REFERENCES**

Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended and Related Authorities. <http://www.fema.gov/about/stafact.shtm>

Chapter 252.36, F.S. Emergency Management Power of the Governor.  
[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0200-0299/0252/Sections/0252.36.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0200-0299/0252/Sections/0252.36.html)

Department of Homeland Security, Office of Inspector General Compendium of Disaster Assistance Programs [http://www.oig.dhs.gov/assets/Mgmt/OIG\\_09-49\\_Apr09.pdf](http://www.oig.dhs.gov/assets/Mgmt/OIG_09-49_Apr09.pdf)

Section 5.11

Eglin Air Force Base



**U.S. AIR FORCE**



## Eglin Air Force Base

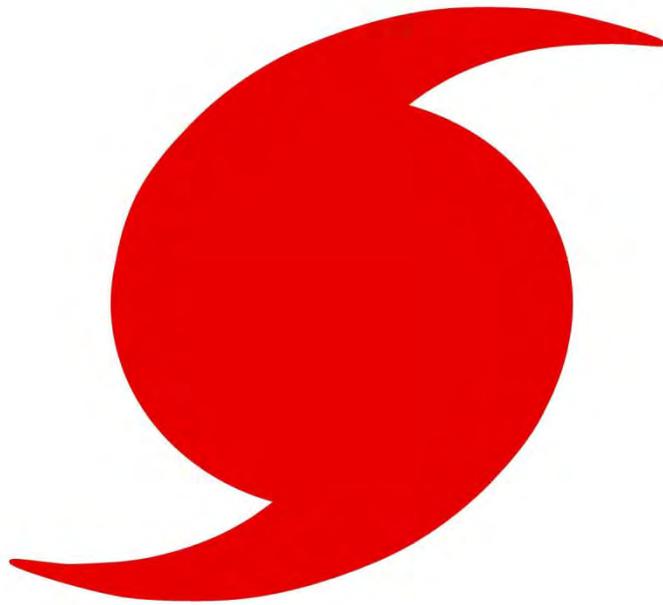
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### **Section 5.11.01 Risk Assessment and Vulnerabilities**

Okaloosa County also has a significant portion of unincorporated land that is federally owned and a part of Eglin Air Force Base and Hurlburt Field. The land mass of Eglin Air Force Base comprises about 45% of Okaloosa County and extends from the south end of the County, bordering the City of Valparaiso, City of Niceville, City of Fort Walton Beach, City of Mary Esther, and Town of Shalimar, to the unincorporated area in the north end of the county just south of the City of Crestview. All utilities and public infrastructure, housing, research facilities, aircraft operations, and other components that are located on the base are federally controlled. Eglin Air Force Base and its military population are susceptible to damage from tornadoes and waterspouts, land erosion, severe thunderstorms, lightning, hail, damaging winds, floods, winter storms, heat wave, droughts, wildfire, and beach erosion. Although Eglin Air Force Base is just as equally vulnerable to the impacts of these natural disasters as other parts of Okaloosa County, the County does not control mitigation activities in military areas and Eglin Air Force Base is therefore not included in this hazard mitigation plan. Eglin Air Force Base controls its own hazard mitigation strategies aside from this plan. The Okaloosa County Staff has been in contact with Ms. Marion Cook who is the Community Planner from Eglin Air Force Base and Mr. Glenn Lattanze, Community Planner for Hurlburt Field. Eglin Air Force Base and Hurlburt Field has stated their interest in offering data and sharing mitigation strategies with Okaloosa County Planning Staff but with the understanding that Eglin Air Force Base and its military population, operations, and personnel would not be analyzed under this hazard mitigation plan nor included as its own jurisdiction.

# **Appendix A**

## **List of Changes**





## List of Changes within the 2011 LMS

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The process used to review and analyze each section of the 2005 LMS plan involved the work of the LMS Committee Chair, the Planning Coordinator for Okaloosa County, all members of the LMS Committee, each of the nine municipalities, and the work of two interns from Florida State University. The culmination of their efforts is presented in each page of 2011 LMS. The update process of the 2005 LMS initially began by the LMS Committee Chair and Planning Coordinator, who organized the old plan and began analyzing the contents. This worked prefaced the arrival of the two interns who were placed at the Okaloosa County Growth Management Office in May to work strictly on the 2011 LMS update for 12 weeks. During this time, they worked in collaboration with the Planning Coordinator to complete the bulk of the plan. This involved researching, rewriting most of the document, gathering appropriate information from state and local agencies, and jurisdictions within the county, and attending LMS Committee meetings. Provided below is a list of all the changes within the 2011 LMS, with an explanation as to why.

### Chapter 1 Executive Summary and History

- *Executive summary rewritten*
- *Procedural history rewritten*

The executive summary and history were rewritten to accurately explain the specific contents of the document and more succinctly state the history behind the plan.

### Chapter 2 LMS Committee Organization

- *By-Laws rewritten*
- *LMS Committee Member form revised*

The by-laws were rewritten because the previous by-laws were unclear. The committee member form was revised to confirm the process for becoming a LMS Committee Member.

### Chapter 3 Goals, Objectives and Policies

- *Mitigation goals rewritten*
- *Project ranking criteria rewritten*
- *Project ranking criteria explanation created*
- *Project list updated*

The new goals and objectives that are listed within the plan were collectively defined by the LMS Committee and Okaloosa County Staff. Each of the nine municipalities were required to submit to Okaloosa County Staff a list of mitigation actions that their city or town actively enforces to reduce damage from each of the hazards identified in their risk assessment. The list of mitigation actions should work towards achieving the overall goals and objectives defined by the county.

The project list is a revised list of specific projects that, in conjunction with the mitigation actions, help achieve the overall mitigation goals and objectives identified by the Okaloosa County Staff. Although the list is revised and updated, it is not an entirely new list with all new projects, as some of them date back to 1999. This is because some of



## List of Changes within the 2011 LMS

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the projects were never completed, or because projects were unfunded. The 2005 project list was sent out to all of the municipalities in Okaloosa County and they were instructed to overlook each project and make note of any changes in the project's status. Their revisions were incorporated into the project list.

Okaloosa County Staff developed a new project ranking criteria in which to evaluate projects based on how well they meet requirements of the Community Rating System, and if they consider environmental impacts, possible funding sources, community benefits, and loss of life prevention. An explanation of the ranking criteria accompanies the ranking criteria Excel spread sheet to help explain how the point system awards numerical values to each project.

### Chapter 4 Risk Assessment

- *Okaloosa County overall risk assessment rewritten*
- *Okaloosa County overall vulnerability assessment rewritten*

Each section within Chapter 4 of the 2011 LMS was revised to more closely align with each of the Crosswalk elements. The best available hazard data was collected for hurricanes, tropical storms, storm surge, flooding, dam safety, land erosion, severe storms (tornado and waterspout, thunderstorms and lightning, winter storms), heat wave and drought, wildfire, and beach erosion. The hazard data was critically analyzed, reformatted and inserted into the document. Each hazard section begins with a formal definition of the hazard, which is a new addition to the 2011 LMS. Following the definition, each section lists the historical record of the hazard and what effects those storm events had on Okaloosa County. The extent of damage, in terms of the worst case scenario, was listed for each hazard and this was also a new addition to the 2011 LMS. New probabilities were created for each hazard.

Hazards that were determined not to be a threat in Okaloosa County such as sinkholes, expansive soils, earthquakes, avalanche, land subsidence, landslides, volcanoes and tsunamis were only briefly mentioned and were assigned an extremely low probability of occurrence. Some of the text and figures within the "other hazards" section are remnants of the 2005 plan as Okaloosa County has not become susceptible to these hazards since that time.

The vulnerability assessment involved the use of the most current NFIP data, GIS data, property appraisal data and information from each municipality regarding roads, infrastructure, and critical facilities within their individual jurisdictions. The vulnerability assessment for the overall county is a completely revised document compared to the 2005 LMS vulnerability assessment.

### Chapter 5 Communities

- *Risk assessment for each of the 9 municipalities rewritten*
- *Vulnerability assessment for the each of the 9 municipalities rewritten*
- *Critical facilities list for each municipality updated*
- *Mitigation actions for each municipality developed*



### List of Changes within the 2011 LMS

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- *Maps for each municipality created by Okaloosa County Staff using the most recent GIS data*
- *Post-disaster plans for each municipality evaluated and incorporated into the plan.*

Each of the 9 municipalities within Okaloosa County have their own risk assessment, vulnerability assessment, list of critical facilities, mitigation actions, maps and post-disaster plan. With the exception of the post-disaster plan, they are all completely new documents. The risk assessment for each of the municipalities involved evaluating the hazard data that was gathered for the overall County risk assessment and determining what data applies to the municipalities. Because all of Okaloosa County and its municipalities are vulnerable to hurricanes, tropical storms, thunderstorms, lightning, heat wave, drought, and winter storms, the description of these hazards and the future probability stated in the overall County risk assessment were applied to each of the municipalities. What was different among each of them, however, was historical occurrences and extent of damage, as they were catered specifically to each municipality. For example, although the City of Destin and the City of Laurel Hill are equally susceptible to hurricane damage, the extent of damage would be far worse in a coastal city bordering the Gulf of Mexico, compared to a small city in the north end of the county. These differences are reflected within the risk assessment for each of the municipalities.

The vulnerability assessments for each of the 9 municipalities involved gathering completely new data and are specific to each jurisdiction as each municipality is vulnerable to hazards in varying degrees. The vulnerability assessments involved the use of NFIP data, GIS data, property appraisal data and information from each municipality regarding roads, infrastructure, and critical facilities within their individual jurisdictions. The vulnerability assessments for each municipality are new and completely revised documents compared to the 2005 LMS vulnerability assessments.

The data incorporated into the mitigation strategy section was mostly given to Okaloosa County Staff by each of the jurisdictions; as they were responsible for submitting a list of mitigation actions that their community actively enforces in an effort of achieve Okaloosa County's mitigation goals and objectives. Like the previous sections within the plan, these sections have been completely revised and updated.

In summary, the 2011 LMS plan is a complete revision to the 2005 LMS plan. Okaloosa County Staff initially thought a critical revision of the 2005 LMS plan would suffice for the 2011 plan update, read through the old document, add data, make corrections where necessary, update hazard information. But upon further examination of the 2005 LMS plan, Okaloosa County Staff decided to completely revise the document and create a new 2011 LMS plan. The decision to rewrite the document was decided by Okaloosa County Staff, as the majority of the document did not meet the requirements listed in the 2008 Crosswalk. Throughout the entire 2011 LMS update, the Crosswalk served as a guide for the content and structure of the document. The best available data was collected from a variety of state and local agencies and national weather data bases,



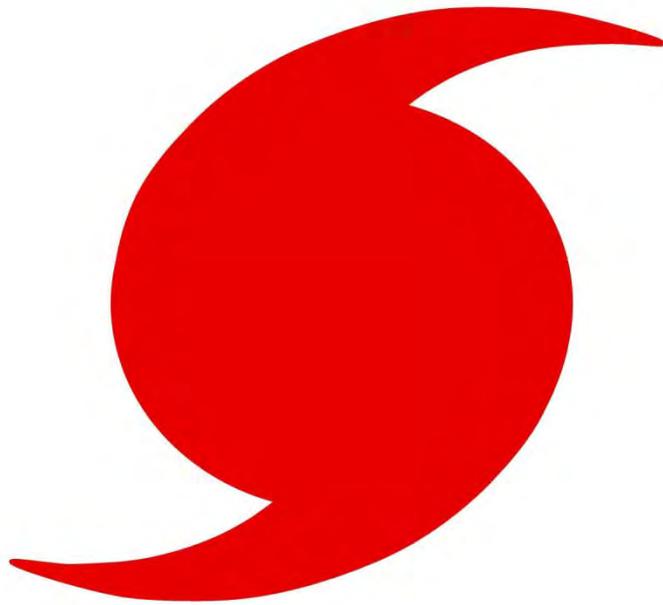
### List of Changes within the 2011 LMS

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formatted and then inserted into the document. At its core, the structural format of the 2011 LMS is different, it contains new and updated hazard data, and the text is different.

# **Appendix B**

## **2010 LMS Outreach Letter**





LMS Out Reach Letter

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**DEPARTMENT OF GROWTH MANAGEMENT  
PLANNING & ZONING**

402 Brookmeade Dr.  
Office Phone: (850) 689-5080

Crestview, Florida 32539  
Office Fax: (850) 689-1241

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January 26, 2010

Dear Community Stakeholder:

The Local Mitigation Strategy (LMS) Group would like to extend an invitation to you and your organization to attend and participate in the activities of our group. The LMS committee is a steering committee that is made up of local representatives from private businesses, neighborhood, civic and other private organizations, non-profit organizations, community individuals, and government agencies. The goals and efforts of this group are to implement mitigation activities to better protect our community against natural and man-made disasters in the future. The activities range from public education and communications outreach, to research and studies, to "brick and mortar" construction all in an effort to make our community better prepared and safer against disaster.

The organization has been in place since 1998, and we are moving forward with a renewed vigor to help guide our community in mitigating ourselves against disaster, to enhance our quality of life, meet common needs, and promote a safe and healthy community. Your opinion and input is critical in our ongoing efforts.

Typically, we meet on the third Thursday of each month at noon in the Niceville City Hall facilities. We want to extend an invitation to you to join us in this process. We need your input and opinion in making our LMS Group effort a valuable and productive one for our community's benefit. Everyone counts in this process.

If there are any other organization representatives or people you think would like to be a part of this process, please feel free to extend an invitation to them as well. To find out more about the LMS, please visit our website at [www.wfrpc.dst.fl.us](http://www.wfrpc.dst.fl.us). Should you wish to be added to our LMS email list, please do not hesitate to call Sherry Reed at 850-689-7917 or send an email to [sreed@co.okaloosa.fl.us](mailto:sreed@co.okaloosa.fl.us).

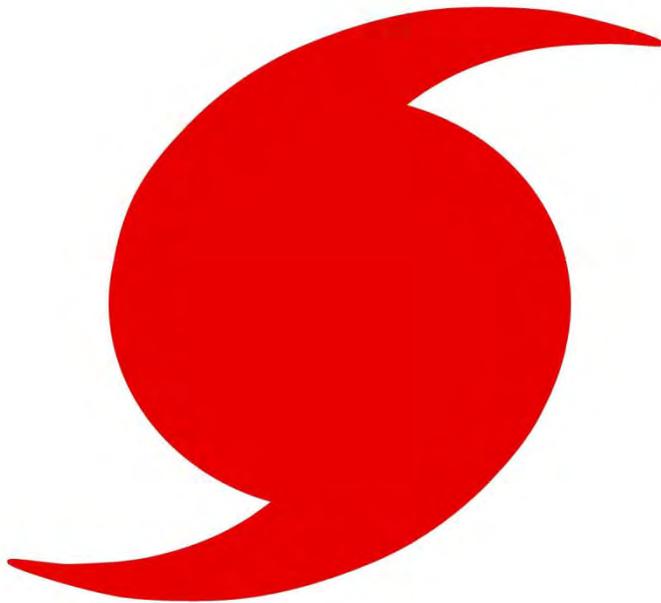
We look forward to seeing you at the next meeting!

Sincerely,

Elliot Kampert, Chair  
Local Mitigation Strategy Committee

# **Appendix C**

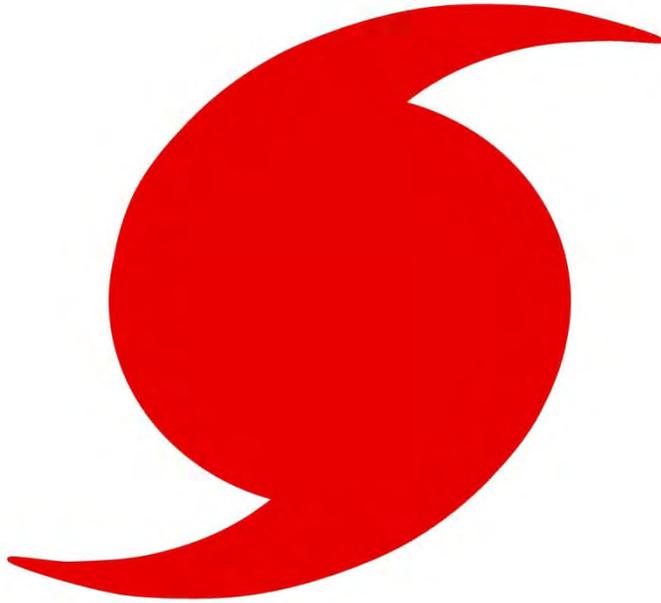
## **LMS Committee Membership List**



JURISDICTION	DEPARTMENT	MEMBER	STREET ADDRESS	CITY	STATE	ZIP CODE	E-MAIL ADDRESS	PHONE NUMBER
Okaloosa County	Growth Management - Director ( <b>CHAIRMAN</b> )	Elliot Kampert	402 Brookmeade Drive	Crestview	FL	32539	<a href="mailto:ekampert@co.okaloosa.fl.us">ekampert@co.okaloosa.fl.us</a>	850-689-5080
Okaloosa County	Growth Management - Planning Coordinator ( <b>VICE-CHAIRMAN</b> )	Sherry Reed	402 Brookmeade Drive	Crestview	FL	32539	<a href="mailto:sreed@co.okaloosa.fl.us">sreed@co.okaloosa.fl.us</a>	850-689-7917
Okaloosa County	Growth Management - Grants Specialist	Abra McGill	600 Transit Way	Fort Walton Beach	FL	32547	<a href="mailto:amcgill@co.okaloosa.fl.us">amcgill@co.okaloosa.fl.us</a>	850-833-9173
Okaloosa County	Public Works - Director	Jason Autrey	1759 S Ferdon Blvd	Crestview	FL	32536	<a href="mailto:jautrey@co.okaloosa.fl.us">jautrey@co.okaloosa.fl.us</a>	850-689-5772
Okaloosa County	Public Safety - Emergency Management	Randy McDaniel	6 11th Ave Suite G-1	Shalimar	FL	32579	<a href="mailto:rmcdaniel@co.okaloosa.fl.us">rmcdaniel@co.okaloosa.fl.us</a>	850-651-7150
Okaloosa County	Public Safety - Emergency Management	Ken Wolfe	6 11th Ave Suite G-1	Shalimar	FL	32579	<a href="mailto:kwolfe@co.okaloosa.fl.us">kwolfe@co.okaloosa.fl.us</a>	850-651-7150
Okaloosa County	Water & Sewer - Engineering Manager	Mark Wise	1804 Lewis Turner Blvd.	Fort Walton Beach	FL	32547	<a href="mailto:mwise@co.okaloosa.fl.us">mwise@co.okaloosa.fl.us</a>	850-651-7171
Okaloosa County School Board	School Board -Facilities Planning Director	Dr. Bill Smith	461 West School Ave	Crestview	FL	32536	<a href="mailto:smithb@mail.okaloosa.k12.fl.us">smithb@mail.okaloosa.k12.fl.us</a>	850-301-3024
	City of Crestview -Building Official	Jonathan Bilby	P.O. Drawer 1209	Crestview	FL	32536	<a href="mailto:jbilby@cityofcrestview.org">jbilby@cityofcrestview.org</a>	850-689-1618
City of Crestview	City of Crestview -Planning	Jason O'Daniels	P.O. Drawer 1209	Crestview	FL	32536	<a href="mailto:tgaillard@cityofcrestview.org">tgaillard@cityofcrestview.org</a>	850-689-1618
City of Destin	City of Destin- Community development	Ken Gallander	4200 Indian Bayou Trail	Destin	FL	32541	<a href="mailto:kgallander@cityofdestin.com">kgallander@cityofdestin.com</a>	850-837-4242
City of Destin	City of Destin- Public Services Director	David Campbell	4200 Indian Bayou Trail	Destin	FL	32541	<a href="mailto:dcampbell@cityofdestin.com">dcampbell@cityofdestin.com</a>	850-837-4242
City of Fort Walton Beach	City of Fort Walton Beach- Building Official	Barry Henderson	107 Miracle Strip Pkwy SW	Fort Walton Beach	FL	32548	<a href="mailto:bhenderson@fwb.org">bhenderson@fwb.org</a>	
	City of Fort Walton Beach-	Sam Wilson	107 Miracle Strip Pkwy SW	Fort Walton Beach	FL	32548	<a href="mailto:swilson@fwb.org">swilson@fwb.org</a>	
City of Fort Walton Beach	City of Fort Walton Beach- Planner II	Chris Frasetti	107 Miracle Strip Pkwy SW	Fort Walton Beach	FL	32548	<a href="mailto:cfrasetti@fwb.org">cfrasetti@fwb.org</a>	850-833-9604
City of Laurel Hill	Town of Laurel Hill- City Clerk	Anita Miller	P.O. Box 158	Laurel Hill	FL	32567	<a href="mailto:clhclerk@fairpoint.net">clhclerk@fairpoint.net</a>	850-652-4441
City of Mary Esther	City of Mary Esther- Code Enforcement	Bobby H	195 Christobal Rd. N	Mary Esther	FL	32569	<a href="mailto:code@cityofmaryesther.com">code@cityofmaryesther.com</a>	
City of Mary Esther	City of Mary Esther- City Manager	Lynn Oler	195 Christobal Rd. N	Mary Esther	FL	32569	<a href="mailto:cmgr@cityofmaryesther.com">cmgr@cityofmaryesther.com</a>	850-243-3566
	City of Niceville- City Planner	Ammy Hanson	208 N. Partin Drive	Niceville	FL	32578	<a href="mailto:ahanson@niceville.org">ahanson@niceville.org</a>	850-279-6436 x2004
City of Niceville	City of Niceville- City Planner	Bruce Price	208 N. Partin Drive	Niceville	FL	32578	<a href="mailto:bprice@niceville.org">bprice@niceville.org</a>	850-729-4008
City of Valparaiso	City of Valparaiso- City Administrator	Carl Scott	465 Valparaiso Pkwy.	Valparaiso	FL	32580	<a href="mailto:cityadministrator@valp.org">cityadministrator@valp.org</a>	850-729-5402
								850-833-3405
Town of Cinco Bayou	Town of Cinco Bayou- Town Manager/Clerk	Keith Williams	10 Yacht Club Dr.	Cinco Bayou	FL	32548	<a href="mailto:keith@cincobayou.com">keith@cincobayou.com</a>	850-259-7072
Town of Shalimar	Town of Shalimar- Town Manager	Tom Burns	2 Cherokee Rd.	Shalimar	FL	32579	<a href="mailto:shalimartom@yahoo.com">shalimartom@yahoo.com</a>	850-651-5723
Hurlburt Field	Hurlburt AFB Representative	Glen Lattanze			FL		<a href="mailto:glenn.lattanze@hurlburt.af.mil">glenn.lattanze@hurlburt.af.mil</a>	
Eglin Air Force Base	Eglin AFB Representative	Jeff Fanto			FL		<a href="mailto:jeffrey.fanto@eglin.af.mil">jeffrey.fanto@eglin.af.mil</a>	850-822-8054
Northwest Florida State College	NWFLSC		100 College Blvd. E	Niceville	FL	32578		
Florida Division of Forestry	Senior Forester	Maria Wilson	7050 Hwy 189 N	Baker	FL	32531	<a href="mailto:wilsonm@doacs.state.fl.us">wilsonm@doacs.state.fl.us</a>	850-689-7838
Citizen	Citizen	Morton Peterson					<a href="mailto:petersonmhjr@cox.net">petersonmhjr@cox.net</a>	
City of Laurel Hill	Town of Laurel Hill- Mayor		P.O. Box 158	Laurel Hill	FL	32567	<a href="mailto:clhmayor@fairpoint.net">clhmayor@fairpoint.net</a>	850-652-4441
Okaloosa Gas	Oakloosa Gas	David Underwood					<a href="mailto:DavidUnderwood@okaloosagas.com">DavidUnderwood@okaloosagas.com</a>	
Red Cross	Red Cross	Amy Eden					<a href="mailto:amy.eden@redcross.org">amy.eden@redcross.org</a>	850-432-7601
	WFLRPC-	Traci Goodhart	4081 E. Olive Rd., Suite A	Pensacola	FL	32514	<a href="mailto:traci.goodhart@wfrpc.org">traci.goodhart@wfrpc.org</a>	850-332-7976 x222
	NWFLWMD							
	Gulf Power Company	B H Johnson					<a href="mailto:bhjohnso@southernco.com">bhjohnso@southernco.com</a>	
	Choctawhatchee Electric Co-op	Donnie Fugate					<a href="mailto:dfugate@chelco.com">dfugate@chelco.com</a>	800-342-0990
	Choctawhatchee Electric Co-op	Chris Eddy					<a href="mailto:ceddy@chelco.com">ceddy@chelco.com</a>	800-342-0990

# **Appendix D**

## **Committee Meeting Agendas and Minutes**





Committee Meeting Agendas and Minutes

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**OKALOOSA COUNTY COMPREHENSIVE PLAN COMMITTEE/  
LOCAL MITIGATION STRATEGY  
TECHNICAL COMMITTEE**

**MEETING AGENDA  
10:00 am, Wednesday, April 14, 2010**

**\*\*\* Water and Sewer Building \*\*\***  
(3<sup>rd</sup> FLOOR, LARGE CONFERENCE ROOM)  
1804 Lewis Turner Blvd  
Fort Walton Beach

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**I. APPROVAL OF MINUTES**

A. Regular Meeting March 25, 2010

**II. NEW BUSINESS**

**III. UNFINISHED BUSINESS**

A. Update from FEMA Mitigation Planning Workshop

B. Hazards

C. Project Summary Sheet

**IV. ADJOURN**

**Next Scheduled Meeting: May 12, 2010**



**Committee Meeting Agendas and Minutes**

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MINUTES ARE NOT VERBATIM

OKALOOSA COUNTY  
COMPREHENSIVE PLAN COMMITTEE  
LOCAL MITIGATION STRATEGY COMMITTEE

MINUTES

April 14, 2010

The regular meeting of the Okaloosa County Comprehensive Plan Committee/Local Mitigation Strategy Technical Committee was held Wednesday, April 14, 2010 at 10:00 A.M., 1804 Lewis Turner Boulevard, 3<sup>rd</sup> floor Commissioner's Chambers, Fort Walton Beach, Florida. Members in attendance were Stella Jones, City of Fort Walton Beach; Pinky Bradley, City of Mary Esther; Glenn Lattanze, Hurlburt Field; Elliott Kampert, Okaloosa County Growth Management; Sherry Reed, Okaloosa County Growth Management; Lani Birchett, Okaloosa County Growth Management; Jason Autrey, Okaloosa County Public Works. Agencies that were not present: City of Valparaiso; City of Niceville; City of Crestview; City of Destin; City of Laurel Hill; Town of Shalimar; Town of Cinco Bayou; Okaloosa County School Board; and Eglin Air Force Base.

Chairman Kampert called the meeting to order at 10:10 A.M.

**I. APPROVAL OF MINUTES: March 25, 2010**

**Motion by Mr. Bradley to approve; seconded by Ms. Jones – 7 ayes.**

**II. NEW BUSINESS**

None.

**III. UNFINISHED BUSINESS**

**A. Update from FEMA Mitigation Workshop.**

Mrs. Reed attended the FEMA Mitigation Planning Workshop for Local Government (G-318) on April 6, 2010, along with Mr. Randy McDaniel, Division Chief, Okaloosa County Public Safety – Emergency Management Department. Mrs. Reed briefed the committee on what the State of Florida and FEMA were looking for in the updates to the Local Mitigation Strategy Plans. FEMA wants a short cut and dried data and account of the hazards. For all hazards that are listed for each community at least 1 mitigation action must be in the plan.

Mr. Kampert explained that the updated plan will be straight forward data for the hazards instead of the current methodology with the circle graphs.

**B. Hazard Mitigation**

Mr. Kampert brought the committee up to date on the status of the Hazus program for the committee's hazard data sets.

Mrs. Reed stated that the FEMA wants to know from each community "How bad was it?", "How bad is it?", and "How bad could it be?"



## Committee Meeting Agendas and Minutes

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Mrs. Reed gave out the population data through 2008 from the Census site.

Mrs. Reed asked the committee if they would consider combining the hazard topics of "Flooding" and "General Flooding".

Discussion ensued.

The committee agreed.

Mrs. Reed also presented to the committee a proposal for combining earthquakes, avalanches, land subsidence, and landslides into 1 small paragraph stating that these hazards are or no risk to the county.

Discussion ensued.

The committee agreed.

Mrs. Reed also presented to the committee a proposal for a paragraph addressing sinkholes and tsunamis as natural hazards that have not been studied in Okaloosa County.

Discussion ensued.

The committee agreed.

Mrs. Reed acknowledged Ms. Jones' great job on accessing the City of Fort Walton Beach's hazards.

Discussion ensued about various hazards and how they are to be addressed in the LMS.

Discussion ensued as to having 2 public workshops for the proposed LMS for public participation in the drafting portion and prior to adoption. Discussion ensued as to having a draft LMS at the drafting public workshop.

Discussion ensued as to having documentation of including adjacent counties.

Discussion ensued also to include a short narrative from Eglin Air Force Base and Hurlburt Field as a listing under the communities. Mrs. Reed stated the LMS committee did not want the bases mitigation strategies as a whole, but a short narrative.

Rip currents were discussed as a hazard.

Discussion ensued.

The committee concluded that rip currents were not to be addressed.

### C. Project Summary Sheet

Mr. Kampert asked the committee if they had reviewed and/or completed the Project Summary Sheets for each of their existing projects currently on the Project List.

Discussion ensued.

The committee agreed to use the project summary sheet for projects.



## Committee Meeting Agendas and Minutes

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Discussion ensued to revising the current Project List.

Members of the committee will update their projects on the Project List.

### IV. ADJOURN

**Motion by Ms. Jones to adjourn, seconded by Mr. Bradley; 7 ayes.**



**Committee Meeting Agendas and Minutes**

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**AGENDA  
Okaloosa County  
Local Mitigation Strategy Committee  
June 9, 2010**

**I. APPROVAL OF MINUTES**

- A. Regular Meeting 4-14-2010

**II. NEW BUSINESS**

- A. Introductions of interns – Katie Howell- Burke & Elyse Barksdale
- B. Schools Inter-local Agreement

**III. UNFINISHED BUSINESS**

- A. Hazards (Risk Assessments) – need final approval/comments
- B. Project List – updated with removals
- C. Project Forms – need completed for all valid projects
- D. Project Ranking Criteria & Instructions- need final approval/ comments
- E. Re-ranking of projects – need approval to perform under new criteria
- F. By-laws – need final approval/comments
- G. Repetitive loss – need list (Parcel ID # & Street Address) from each municipality & maps showing locations

**IV. ADJOURN**



**Committee Meeting Agendas and Minutes**

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MINUTES ARE NOT VERBATIM

OKALOOSA COUNTY  
COMPREHENSIVE PLAN COMMITTEE  
LOCAL MITIGATION STRATEGY COMMITTEE

MINUTES

June 9, 2010

The regular meeting of the Okaloosa County Comprehensive Plan Committee/Local Mitigation Strategy Technical Committee was held Wednesday, June 9, 2010 at 10:00 A.M., 1804 Lewis Turner Boulevard, 3<sup>rd</sup> floor Commissioner's Chambers, Fort Walton Beach, Florida. Members in attendance were Stella Jones, City of Fort Walton Beach; Glenn Lattanze, Hurlburt Field; Elliott Kampert, Okaloosa County Growth Management; Sherry Reed, Okaloosa County Growth Management; Lani Birchett, Okaloosa County Growth Management; Abra McGill, Okaloosa County; Jason Autrey, Okaloosa County Public Works; Mark Wise, Okaloosa County Water & Sewer; Eric Davis, City of Crestview; Carl Scott, City of Valparaiso; Nell Dykes, Town of Cinco Bayou; Marion Cook, Eglin Air Force Base; Maria Wilson, Florida Division of Forestry. Agencies that were not present: City of Niceville; City of Mary Esther; City of Destin; City of Laurel Hill; Town of Shalimar; Okaloosa County School Board; and Okaloosa County Public Safety.

Chairman Kampert called the meeting to order at 10:10 A.M.

Chairman Kampert recognized Ms. Katie Howell-Burke and Elyse Barksdale, interns to Okaloosa County from Florida State University for a 12 week timeframe. The interns are here to specifically help with the required update of the LMS.

Chairman Kampert also recognized Maris Wilson, Gary Holley, and Joe Zwierzchowski from the State of Florida, Department of Agriculture, Division of Forestry. The Division of Forestry presented data for the wildfire hazard section of the LMS.

**I. APPROVAL OF MINUTES: April 14, 2010**

**Motion by Ms. Jones to approve; seconded by Mr. Scott – 13 ayes.**

**II. NEW BUSINESS**

**A. Schools Inter-local Agreement**

Mr. Kampert stated that he had spoken with Dr. Smith and stated that the school inter-local agreement states that the comprehensive plan committee will also serve as the committee to review the potential school closings. The school district is considering closing some schools and Dr. Smith wanted the committee to be aware.

Discussion ensued as to if this committee would become a sounding board for angry parents and if the meeting would be open to the public.

**III. UNFINISHED BUSINESS**

**H. Hazards (Risk Assessments)**



## Committee Meeting Agendas and Minutes

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Mr. Kampert presented the risk assessment for the overall county to the committee for comment.

Discussion ensued.

The committee agreed for staff to continue on with the finite edits of the overall risk assessment.

### **I. Project List**

Combined with the project forms.

### **J. Project Forms**

Mrs. Reed stated that staff needs completed project forms for all valid projects as soon as possible for the annual update for CRS and LMS.

Members stated they would get the forms completed.

### **K. Project Ranking Criteria & Instructions**

Mr. Kampert stated that currently the ranking criteria is from two different sets of criteria. The proposed criteria would be used for any new projects and staff would re-rank the existing projects from the project forms that are submitted.

Discussion ensued.

Ms. Stella Jones stated that some projects may not point to a specific goals or objectives. But the project would better for the community.

Mrs. Reed suggested that the project may have to be referenced to the other government documents for compliance to codes, building code, life safety code, etc.

Discussion ensued.

The committee approved the project ranking criteria and instructions with revisions to the environmental criteria.

### **L. Re-ranking of projects**

The committee agreed for Mr. Kampert and Mrs. Reed to re-rank the projects submitted under new criteria.

### **M. By-laws**

Mr. Kampert explained that the current by-laws did not reflect what the committee does and how it functions. The proposed by-laws were re-written to reflect what the committee actually does.

Discussion ensued as to citizen's participation and sub committees/working groups.

The committee directed Mr. Kampert to include the possible forming of citizen's working groups as a sub group of the committee within the proposed by-laws and the committee would vote on the new by-laws at the next meeting in July.



## Committee Meeting Agendas and Minutes

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### **N. Repetitive loss**

Mrs. Reed stated she needs the list (Parcel ID # & Street Address) from each municipality & maps showing locations. The information should be on the 2008 disc sent to each community.

Mrs. Reed asked the committee as to how many public hearings the committee would like to have. The consensus of the committee was to have one meeting in the north county and one meeting in the south county after 5:00 both meetings to be in August.

Discussion ensued as to where the meetings would be held in Crestview and the Water & Sewer Administrative building in Fort Walton Beach.

Ms. Cook from Eglin Air Force Base came forward the ask what the committee needed from them the help with the rewrite.

### **IV. ADJOURN**

**Motion by Ms. Jones to adjourn, seconded by Mr. Scott; 13 ayes.**



**Committee Meeting Agendas and Minutes**

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**AGENDA  
Okaloosa County  
Local Mitigation Strategy Committee  
August 18, 2010**

**IV. APPROVAL OF MINUTES**

**B.** Regular Meeting 6-9-2010

**V. NEW BUSINESS**

*None.*

**VI. UNFINISHED BUSINESS**

**O.** Project List & Project Forms – updated with removals/additions need completed for all valid projects

**P.** Draft LMS - review

**IV. ADJOURN**



**Committee Meeting Agendas and Minutes**

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**MINUTES ARE NOT VERBATIM**

**OKALOOSA COUNTY**  
**LOCAL MITIGATION STRATEGY COMMITTEE**  
**MINUTES**  
**August 18, 2010**



## Committee Meeting Agendas and Minutes

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A meeting of the Local Mitigation Strategy Committee was held Wednesday, August 18, 2010, 10:00 AM, at the Okaloosa County Water & Sewer Administration Building, third Floor Large Conference Room, 1804 Lewis Turner Blvd., Fort Walton Beach, Florida.

Committee members in attendance were Elliot Kampert, Okaloosa County Growth Management Director; Sherry Reed, Planning Coordinator; Abra McGill, Grants Specialist; Jason Autrey, Public Works Engineering Manager; Steve Schmitt, City of Destin; Stella Jones, Planner, City of Fort Walton Beach; Lynn Oler, City of Mary Esther; Wanda Cruttenden, City of Niceville; Carl Scott, City of Valparaiso; and Tom Burns, City of Shalimar.

### **I. CALL TO ORDER**

Elliot Kampert called the meeting to order.

### **II. APPROVAL OF MINUTES:**

Motion to approve the minutes from the June 9, 2010 meeting made by Wanda Cruttenden; second by Stella Jones; all ayes.

### **IV. NEW BUSINESS**

None

### **V. UNFINISHED BUSINESS**

**A. Project List & Project Forms** – updated with removals/additions – need completed for all valid projects.



## Committee Meeting Agendas and Minutes

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Sherry Reed addressed the committee and informed them that they have been provided their section in Chapter 5 so that it can be edited as needed. She also noted that there are funds that can be used for printing the document.

Mrs. Reed stated that Niceville and Valparaiso have not submitted anything yet, but only because she told them to wait until such time as staff knew what was needed. She further stated that she needs wildfire, heat wave, land erosion and dam safety. She noted that beach erosion would be covered by the beach re-nourishment program and the Norriego Point project in Destin. She briefly discussed dam safety with Mr. Autrey and asked him to research for her. Mrs. Reed said she wasn't sure how to handle the wildfire requirement, but suggested that maybe the regular maintaining, bush-hogging, etc. might work.

A brief, inaudible, discussion ensued.

Mrs. Reed asked Mr. Autrey to research land erosion other than how it's covered in Land Development Codes, etc. She asked for other suggests for land erosion.

A brief, partially inaudible, discussion ensued.

Mr. Kampert referred to a potential issue with a Bayou off of Mooney Road which is actually being filled in due to a failed stormwater plan and suggested that it was something that maybe the county, the City of Fort Walton Beach and the Department of Transportation could refer to as a joint unfunded project perhaps. Fairchild Road in the county was also suggested due to frequent washouts.

A brief, mostly inaudible, discussion ensued.

Mrs. Reed stated that perhaps she would have to get in touch with County Information Services staff to research sending out notifications regarding dangerous heat waves.

Mrs. Reed sought confirmation from Steve Schmidt that she had all the projects that he had submitted. Mr. Schmidt's response was inaudible.

Mr. Kampert notified the committee that Growth Management is working on the annual LMS update to the Board of County Commissioners, however; it would include the old list of projects as the new list has not yet been ratified.

### **B. Draft LMS – review**

Mrs. Reed stated that she is still working on Chapter 1 - Executive Summary and History. She further stated that she is working with Sherry Harper, CRS liaison, who will proof the document for compliance with CRS. Mrs. Reed stated that Okaloosa County



## Committee Meeting Agendas and Minutes

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now has a Class 5 CRS rating and further that the county is less than 42 points away from achieving a Class 4 rating. She stated that the county is one of only 4 counties in the State of Florida looking for a Class 4 rating. Okaloosa is closest to achieving the Class 4 rating in terms of points. Mrs. Reed stated that Chapter 2 is the LMS committee organization.

Mr. Kampert gave a brief description of the required public notification process.

Mrs. Reed stated that Chapter 3 is the Goals, Objectives and Policies, which the committee has already approved. She informed the committee that Chapter 4 is the Risk Assessments and Vulnerabilities for the county overall. She stated that in consultation with Mike in mapping, he informed her that some of the maps that are in the text could be placed in each individual section, i.e. flood zones, surge zones, etc. or they could be left in the Mapping section. Mrs. Reed believes that whatever the committee decides, it should be the same for all.

Mr. Kampert noted that for the reviewers, it would be more effective to have the maps with the text that references them.

Mrs. Reed stated that the interns who helped with the LMS documents have moved on, but they were a great asset. Mrs. Reed also noted that she was working to clean up the document and has found some clip art to spruce it up.

Mrs. Reed asked for committee approval of the graphic that she intended to use on the cover of and within the document. Response from the committee, if any, was inaudible.

Ms. Reed updated the committee regarding hazus data.

Mr. Kampert asked if the information presented has been accurate for everyone's specific section. Mrs. Reed noted that each section's information can be individually updated at any time necessary.

Mr. Kampert announced an update by Abra McGill regarding the Neighborhood Stabilization Program. Ms. McGill's update was inaudible.

Mrs. Reed asked the committee members to take the document to their city managers so they're aware of it prior to the public workshops.

Mr. Kampert noted that there is no regulation requiring that this document be approved by the municipalities or the county prior to being sent to the state for review, however; he believes, as a matter of respect that the city managers/city councils and the County Administrator and Board of County Commissioners should be informed and allowed the opportunity to approve.



**Committee Meeting Agendas and Minutes**

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A brief, mostly inaudible, discussion ensued regarding number of copies that would need to be printed.

**VI. ADJOURN**

There being no further business, Mr. Kampert adjourned the meeting by declaration.

Prepared by:   
Teresa A. Mullins, Recording Secretary



**Committee Meeting Agendas and Minutes**

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**AGENDA  
Okaloosa County  
Local Mitigation Strategy Committee  
September 8, 2010**

**VII. APPROVAL OF MINUTES**

C. Regular Meeting 8-18-2010

**VIII. NEW BUSINESS**

*None.*

**IX. UNFINISHED BUSINESS**

Q. Approval for Draft 2011 LMS to be presented to the public.

R. Approval for public workshops on:

9-22-2010 at 5:01 pm, George Whitehurst Municipal Building, Warrior Hall, 201 Stillwell Blvd., Crestview, FL

AND

9-29-2010 at 5:01 pm, Water & Sewer Administrative Building, third floor conference room, 1804 Lewis Turner Blvd, Fort Walton Beach, FL

**IV. ADJOURN**



**Committee Meeting Agendas and Minutes**

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MINUTES ARE NOT VERBATIM

OKALOOSA COUNTY  
COMPREHENSIVE PLAN COMMITTEE  
LOCAL MITIGATION STRATEGY COMMITTEE

MINUTES

September 8, 2010

The regular meeting of the Okaloosa County Comprehensive Plan Committee/Local Mitigation Strategy Technical Committee was held Wednesday, September 8, 2010 at 10:00 A.M by e-mail. Members in attendance were Stella Jones, City of Fort Walton Beach; Elliott Kampert, Okaloosa County Growth Management; Sherry Reed, Okaloosa County Growth Management; Wanda Cruttenden, City of Niceville; Carl Scott, City of Valparaiso. Agencies that were not present: City of Niceville; Hurlburt Field; Eglin Air Force Base; Okaloosa County Public Works; City of Mary Esther; City of Crestview; City of Destin; City of Laurel Hill; Town of Shalimar; Florida Division of Forestry; Okaloosa County Water & Sewer; Okaloosa County School Board; Town of Cinco Bayou; and Okaloosa County Public Safety.

Chairman Kampert called the meeting to order at 10:10 A.M.

**I. APPROVAL OF MINUTES: August 18, 2010**

**Motion by Ms. Jones to approve; seconded by Mr. Scott – 5 ayes.**

**II. NEW BUSINESS**

None.

**III. UNFINISHED BUSINESS**

**A.** Approval for Draft 2011 LMS to be presented to the public.

**Motion by Ms. Cruttenden; seconded by Ms. Jones – 5 ayes.**

**B.** Approval for public workshops on:

9-22-2010 at 5:01 pm, George Whitehurst Municipal Building, Warrior Hall, 201 Stillwell Blvd., Crestview, FL

AND

9-29-2010 at 5:01 pm, Water & Sewer Administrative Building, third floor conference room, 1804 Lewis Turner Blvd, Fort Walton Beach, FL

**Motion by Ms. Cruttenden; seconded by Ms. Jones – 5 ayes.**

**IV. ADJOURN**

**Motion by Ms. Jones to adjourn, seconded by Mr. Scott - 5 ayes.**



**Committee Meeting Agendas and Minutes**

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**AGENDA  
Okaloosa County  
Local Mitigation Strategy Committee  
October 13, 2010**

**X. APPROVAL OF MINUTES**

**D.** Regular Meeting 9-8-2010

**XI. NEW BUSINESS**

*None.*

**XII. UNFINISHED BUSINESS**

**S.** Approval of 2011 LMS Draft 1 for transmittal to the State of Florida after approval for transmittal from Jurisdictions.

**T.** Interlocal Agreement with Okaloosa County School District.

**IV. ADJOURN**



**Committee Meeting Agendas and Minutes**

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MINUTES ARE NOT VERBATIM

Okaloosa County  
Local Mitigation Strategy Committee

Minutes

October 13, 2010

The regular meeting of the Okaloosa County Comprehensive Plan Committee/Local Mitigation Strategy Technical Committee was held Wednesday, October 13, 2010 at 10:00 A.M., 1804 Lewis Turner Boulevard, 3<sup>rd</sup> floor Commissioner's Chambers, Fort Walton Beach, Florida. Members in attendance were Stella Jones, City of Fort Walton Beach; Elliott Kampert, Okaloosa County Growth Management; Sherry Reed, Okaloosa County Growth Management; Bill Smith, Okaloosa County School Board; Ken Gallander, City of Destin; Lani Birchett, Okaloosa County Growth Management; Jason Autrey, Okaloosa County Public Works; Eric Davis, City of Crestview; Wanda Cruttenden, City of Niceville. 9 ayes. Agencies that were not present: Hurlburt Field; City of Mary Esther; Okaloosa County Water & Sewer; Eglin Air Force Base; City of Valparaiso; Florida Division of Forestry; City of Laurel Hill; Town of Cinco Bayou; Town of Shalimar; and Okaloosa County Public Safety.

Chairman Kampert called the meeting to order at 10:10 A.M.

**XIII. APPROVAL OF MINUTES**

E. Regular Meeting 9-8-2010

**Motion by Bill Smith to approve; seconded by Wanda Cruttenden; approved 9 ayes.**

**XIV. NEW BUSINESS**

*None.*

**XV. UNFINISHED BUSINESS**

U. Approval of 2011 LMS Draft 1 for transmittal to the State of Florida after approval for transmittal from Jurisdictions.

Mr. Kampert explained the approval process. The document must be approved for transmittal to the State of Florida, Division of Emergency Management, Mitigation Planning Unit and Department of Homeland Security, Federal Emergency Management Agency Region IV, Hazard Mitigation Community Planner by the LMS Committee first;



## Committee Meeting Agendas and Minutes

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then each jurisdiction needs to approve for transmittal either later this month or during the month of November. Upon receiving all jurisdictions request for transmittal, the Okaloosa County Board of County commissioners will also hear the request for transmittal. The document will then be sent to State of Florida, Division of Emergency Management, Mitigation Planning Unit for review and comment. Upon completion of the review, the state mitigation planner will inform the LMS chairman that the plan is ready to be sent to Department of Homeland Security, Federal Emergency Management Agency Region IV, and Hazard Mitigation Community Planner. After FEMA's review and the plan reaching FEMA's "approval pending adoption" phase, all jurisdictions must adopt the plan within 1 year. At least 1 jurisdiction must adopt the plan for FEMA to approve the plan. A copy of all resolutions to adopt must be submitted to the State of Florida, Division of Emergency Management, Mitigation Planning Unit for transmittal to FEMA.

Mr. Kampert stated that the draft document was sent to ISO for a courtesy review for CRS.

Mrs. Reed read ISO's findings and notified the committee of the minor changes to the document for additional credit points for everyone participating in the CRS program.

Discussion ensued regarding the ISO/CRS comments.

Mrs. Reed stated that there were 3 outstanding items to be added to the 2011 LMS plan. Those were: 1) the City of Valparaiso needed to address the status of their mitigation actions and which department would implement them; 2) the City of Destin needed to address the critical facilities located in the flood zone; and 3) the City of Fort Walton needed to address the critical facility located in the flood zone.

Mrs. Reed stated that a CD of the 2011 LMS Draft would be provided to each municipality for their use.

**Motion to approve for transmittal to the State of Florida, Division of Emergency Management, Mitigation Planning Unit and Department of Homeland Security, Federal Emergency Management Agency Region IV, Hazard Mitigation Community Planner with minor revisions by Wanda Cruttenden; seconded by Bill Smith; 9 ayes.**

### V. Interlocal Agreement with Okaloosa County School District.

Mr. Bill Smith explained the process how the interlocal agreement was created. The implementation of the agreement has become an issue. The agreement states that the School Board and Board of County Commissioners must convene a joint meeting annually. This requirement has not been met. There is also a requirement for



## Committee Meeting Agendas and Minutes

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convening of a new committee for the opening, closing or renovating schools which would have to be convened a minimum of January and December each year.

Mr. Smith explained the School Board's process of opening, closing or renovation schools each year in October.

Discussion ensued as to only having the meeting with the School Board and the jurisdictions that the opening, closing or renovation would affect.

Mr. Smith stated that the interlocal agreement needs to be addressed and various sections rewritten.

Discussion ensued.

Mr. Kampert stated there were sections in Okaloosa County's comp plan for School concurrency that needs re-addressing.

Mr. Smith stated that he is in the process of creating a committee of representatives from all jurisdictions to meet the requirements of the inter-local agreement.

Mr. Kampert agreed to meet with Mr. Smith and review the interlocal agreement for revisions.

### IV. ADJOURN

**Motion by Bill Smith to adjourn; seconded by Sherry Reed; 9 ayes.**

**AGENDA**  
**Okaloosa County**  
**Local Mitigation Strategy Committee**  
**July 13, 2011**

**LOCATION: 1804 Lewis Turner Blvd.**

**TIME: 10:00 AM**

**I. APPROVAL OF MINUTES**

A. Regular Meeting 6-15-2011

**II. NEW BUSINESS**

A. Re-Build Northwest Florida –guest speaker Garret Walton

B. School concurrency under 7207

C. Proposed resolution/ordinance

**III. UNFINISHED BUSINESS**

A. None

**IV. ADJOURN**

## Summary Minutes

July 13, 2011

### Okaloosa County Comprehensive Plan/ Local Mitigation Strategy Committee

The meeting was held in the Board of County Commissioners chambers located on the third floor of the Okaloosa County Water and Sewer Administration Building located at 1804 Lewis Turner Parkway in Ft Walton Beach.

Members present:

Elliot Kampert	Okaloosa County Growth Management
Sherry Reed	Okaloosa County Growth Management
Eric Davis	City of Crestview
Carl Scott	City of Valparaiso
Tom Burns	Town of Shalimar
Abra McGill	Okaloosa County Growth Management
Estella Jones	City of Fort Walton Beach

Chairman Kampert called the meeting to order at 10:05 AM.

Mr. Kampert recognized the following guests and welcomed them to the LMS Committee meeting.

Mr. Pete Peterson  
Mr. Garret Walton  
Ms. Sandy Woodbery

#### I. APPROVAL OF MINUTES

Mr. Kampert asked the committee if they had had an opportunity to review the minutes of the June 15, 2011 meeting. Mr. Kampert called for a motion to approve.

**Motion to approve made by Mr. Tom Burns and seconded by Carl Scott; all ayes.**

#### II. NEW BUSINESS

A. Rebuild Northwest Florida – Guest speaker Garret Walton

Mr. Kampert introduced Mr. Garret Walton with Rebuild Northwest Florida.

Mr. Walton greeted the committee and also introduced Sandy Woodbery, chief operating officer of Rebuild Northwest Florida.

Mr. Walton explained that Rebuild Northwest Florida is a not for profit organization that started in Escambia and Santa Rosa Counties after hurricane Ivan. The organization actively seeks both state and federal grants to accomplish their goal of hardening structures from wind and storms. The goal is to harden the whole envelop of the structure, roof, walls, and openings.

The target home is a single family detached dwelling, homesteaded, and built before the 2002 building codes came into effect. No mobile homes are covered under this process.

The funding is generally a 75%-25% match, with the homeowner paying the 25%.

The process starts with an application from the home owner. Rebuild Northwest Florida will do a thorough inspection of the home with their engineers of record. The engineer of record will compile a list of all the required improvements to be made, along with a cost. The full cost is given to the homeowner for approval. Finally, improvements are made by local contractors.

Discussions ensued with Mr. Walton and Ms. Woodbery as to how the grants are currently working for Escambia and Santa Rosa counties; and as to any additional grants that are available for wind retrofit projects.

Discussion ensued among committee members as to setting up this program, its sustainability, and placing it on the LMS Project List.

**Motion by Ms. Jones to place the project on the Project List as Wind Mitigation for all jurisdictions; go forward with the Pre-Disaster application for the project; seconded by Mr. Scott; all ayes.**

Mr. Peterson came forward to thank the committee for addressing the need for wind mitigation.

Mr. Kampert extended an invitation to Mr. Peterson to join the committee as a citizen representative. Mr. Peterson accepted.

B. School Concurrency under 7207

Mr. Kampert brought to the Committee's the Florida Legislature's recent passage of House Bill 7207 which, among other amendments to the Growth Management Act, made transportation, open space, and school concurrency optional. Mr. Kampert stated that the reason for bringing the matter up before the LMS Committee is that they also serve as the Comprehensive Plan and School Concurrency Committee, and he wanted to get a feel for how the jurisdictions feel, as a group, about school concurrency. He reminded the Committee that, if the consensus is to discontinue school concurrency, then it would be necessary to amend the School Interlocal Agreement, and that all the communities comprehensive plans would have to be amended accordingly.

A short discussion ensued, during which Estella Jones representing the City of Ft Walton Beach said the city had had some internal discussion of the matter, and felt that, even if concurrency itself was discontinued, it would still be important for all the communities to communicate with each other and the School District. Carl Scott with the City of Valparaiso agreed with Ms. Jones, which met with general agreement among the committee. Ms. Jones also reminded the group that the School District's representative, Dr. Bill Smith, had in the recent past expressed an interest in amending the Interlocal Agreement, and so this was perhaps an opportunity to re-address that issue.

At the close of the discussion Mr. Kampert volunteered to send an email to Dr Smith summarizing the LMS Committee discussion and seeking the School District's input on the matter.

#### C. Proposed resolution/ordinance

Mr. Kampert reminded the committee that everyone have the 2011 LMS adopted as soon as possible.

There being no further business, the Committee adjourned at 11:00 AM.

**AGENDA**  
**Okaloosa County**  
**Local Mitigation Strategy Committee**  
**June 13, 2012**

**LOCATION: 1840 Lewis Turner Blvd., Fort Walton Beach  
Large Meeting Room**

**TIME: 10:00 AM**

**I. APPROVAL OF MINUTES**

A. Regular Meeting 5-1-2012

**II. NEW BUSINESS**

A. New Disaster Housing Ordinance, and incorporation into 2011 LMS. (need vote)

B. Revisions to the Okaloosa County Post Disaster Redevelopment Plan. (need vote). This is a simple change from "County Manager" to County Administrator" and the addition of the Disaster Housing above.

**III. UNFINISHED BUSINESS**

A. None

**IV. ADJOURN**

## Summary Minutes

June 13, 2012

### Okaloosa County Comprehensive Plan/ Local Mitigation Strategy Committee

The meeting was held in the Board of County Commissioners chambers located on the third floor of the Okaloosa County Water and Sewer Administration Building located at 1804 Lewis Turner Parkway in Ft Walton Beach, Florida.

Members present:

Sherry Reed	Okaloosa County Growth Management
Ken Wolfe	Okaloosa County Public Safety
Brenda Bailey	Okaloosa County Clerk of Courts
Lynn Oler	City of Mary Esther
Joan Smith	City of Laurel Hill
Hank Woollard	City of Destin
Frank Brooks	Realtor

Vice-chairman Reed called the meeting to order at 10:00 AM.

#### I. APPROVAL OF MINUTES

Mrs. Reed asked the committee if they had had an opportunity to review the minutes of the May 1, 2012 meeting. Mrs. Reed called for a motion to approve.

**Motion to approve the May 1, 2012 minutes made by Mr. Hank Woollard and seconded by Frank Brooks; all ayes.**

#### II. NEW BUSINESS

A. New Disaster Housing Ordinance and incorporation into 2011 LMS.

Mrs. Reed stated that item B needed to be addressed first; discussion ensued concerning item B.

B. Revisions to the Okaloosa County Post Disaster Redevelopment Plan.

Mrs. Reed stated that the proposed revisions were to replace "County Manager" with "County Administrator".

**Motion to approve the revisions to the Okaloosa County Post Disaster Redevelopment Plan made by Mrs. Joan Smith and seconded by Mr. Hank Woollard; all ayes.**

Mrs. Reed returned to item A.

Mrs. Reed asked if the committee had read over the proposed new Disaster Housing Ordinance which will be an appendix to the Okaloosa County Post Disaster Redevelopment Plan.

Mrs. Reed gave a background of the Post Disaster Redevelopment Plan and how it affects those municipalities which do not currently have a Post Disaster Redevelopment Plan. The proposed Disaster Housing ordinance is an appendix to the existing Post Disaster Redevelopment Plan and by the adoption of the appendix each municipality without a Post Disaster Redevelopment Plan would follow the Okaloosa County plan.

The proposed Disaster Housing appendix addresses the process in which short and long term housing of citizens affected by a disaster can be housed quickly and the citizens can return to normalcy as soon as possible.

Mrs. Joan Smith, mayor of the City of Laurel Hill asked questions about the City of Laurel Hills's industrial park site.

Discussion ensued.

Mrs. Reed introduced Mr. Ken Wolfe, Okaloosa County Emergency Management Coordinator.

Mr. Wolfe stated that he had attended the Hurricane Conference, May 13th thru 18th, 2012, in Fort Lauderdale, FL, which included Disaster Housing seminars. Mr. Wolfe had previously sent the proposed Disaster Housing plan to the State of Florida Department of Emergency Management for review, which is not required at this time. The State of Florida approved the plan and liked it. Mr. Wolfe advised the committee, the State is now using the Okaloosa County Disaster Housing plan as a model for all 67 counties in the State of Florida.

Mr. Wolfe gave a brief description on how the plan was devised.

Mrs. Reed pointed out that the plan includes provisions to keep the citizens within the county or municipalities.

Mrs. Reed stated once the county has adopted the revisions to the 2011 LMS she would send each municipality a clean copy for their adoption process. Mrs. Reed also requested that once the municipality had adopted the revisions; please send her a copy of the adopted ordinance for her files.

**Motion to approve the proposed Disaster Housing Plan and including it in the 2011 LMS made by Mrs. Joan Smith, seconded by Mr. Hank Woollard; all ayes.**

Mrs. Reed stated that the next scheduled meeting of the committee is July 11, 2012.

There being no further business, the Committee adjourned at 10:15 AM.

**AGENDA**  
**Okaloosa County**  
**Local Mitigation Strategy Committee**  
**October 8, 2014**

**LOCATION: 1840 Lewis Turner Blvd., Fort Walton Beach**  
**Large Meeting Room, 3rd Floor**

**TIME: 10:00 AM**

**I. APPROVAL OF MINUTES**

A. Regular Meeting 8-13-2014

**II. NEW BUSINESS**

A. Intergovernmental MOU

B. Pending HMGP cycle

**III. UNFINISHED BUSINESS**

A. None

**IV. ADJOURN**

## Summary Minutes

October 8, 2014

### Okaloosa County Comprehensive Plan/ Local Mitigation Strategy Committee

The meeting was held in the Board of County Commissioners chambers located on the third floor of the Okaloosa County Water and Sewer Administration Building located at 1804 Lewis Turner Parkway in Ft Walton Beach, Florida.

Members present:

Sherry Reed	Okaloosa County Growth Management
Ken Wolfe	Okaloosa County Public Safety
Tom Burns	Town of Shalimar
Bruce Price	City of Niceville
Lynn Oler	City of Mary Esther

Vice-Chairman Reed called the meeting to order at 10:05 AM.

#### I. APPROVAL OF MINUTES

Ms. Reed asked the committee if they had an opportunity to review the minutes of the August 13, 2014 meeting. Ms. Reed called for a motion to approve.

**Motion to approve the August 13, 2014 minutes made by Mr. Ken Wolfe and seconded by Ms. Lynn Oler; all ayes.**

#### II. NEW BUSINESS

##### A. Intergovernmental MOU

Ms. Reed asked the committee if there were any corrections or deletions to the Intergovernmental MOU that was sent via e-mail to them with the agenda for this meeting.

Discussion among member about when the intergovernmental MOU would be approved by the various city councils and how to submit back to the county.

##### B. Pending HMGP Cycle- reminder

Ms. Reed stated that HMGP grant applications were due to FEMA by January 7, 2015.

Okaloosa County has been allocated \$989,820.17.

Discussion ensued about how to submit projects for consideration.

#### III. UNFINISHED BUSINESS

None.

There being no further business, the Committee adjourned at 10:30 AM.

Prepared by: Sherry Reed  
Sherry Reed, Recording Secretary  
Date: October 23, 2014

**AGENDA**  
**Okaloosa County**  
**Local Mitigation Strategy Committee**  
**June 12, 2013**

**LOCATION: 1840 Lewis Turner Blvd., Fort Walton Beach**  
**Large Meeting Room, 3rd Floor**

**TIME: 10:00 AM**

**I. APPROVAL OF MINUTES**

A. Regular Meeting 1-9-2013

**II. NEW BUSINESS**

A. Review of project list- removals

B. New project from city of Mary Esther – addition

C. Approval of letter for Rebuild NWFL to submit for **Hazard Mitigation Grant Program (HMGP) applications for FEMA 4084-DR-FL "Isaac"**

**III. UNFINISHED BUSINESS**

A. None

**IV. ADJOURN**

## Summary Minutes

June 12, 2013

### Okaloosa County Comprehensive Plan/ Local Mitigation Strategy Committee

The meeting was held in the Board of County Commissioners chambers located on the third floor of the Okaloosa County Water and Sewer Administration Building located at 1804 Lewis Turner Parkway in Ft Walton Beach, Florida.

Members present:

Sherry Reed	Okaloosa County Growth Management
Elliot Kampert	Okaloosa County Growth Management
Lynn Oler	City of Mary Esther
Eric Davis	City of Crestview
Stella Jones	City of Fort Walton Beach
Glenn Lattanze	Hurlburt Field AFB
Morton Peterson	Citizen
David Underwood	Okaloosa Gas District

Chairman Kampert called the meeting to order at 10:05 AM.

#### I. APPROVAL OF MINUTES

Mr. Kampert asked the committee if they had an opportunity to review the minutes of the June 13, 2012 meeting. Mr. Kampert called for a motion to approve.

**Motion to approve the January 9, 2013 minutes made by Ms. Lynn Oler and seconded by Mr. Eric Davis; all ayes.**

#### II. NEW BUSINESS

- A. Review of project list- removals
- B. New project from city of Mary Esther – addition

Mr. Kampert combined items A & B.

Mr. Kampert stated that the list must be maintained in order to apply for various grants. One additional project has been submitted by the City of Mary Esther. One removal has been submitted by Okaloosa county Water & Sewer.

**Motion to accept the 2013 Project list made by Ms. Stella Jones nad seconded Ms. Lynn Oler; all ayes.**

- C. Approval of letter for Rebuild NWFL to submit for **Hazard Mitigation Grant Program (HMGP) applications for FEMA 4084-DR-FL "Isaac"**

Mr. Kampert stated that in the e-mail package received by members was a letter that would come from the LMS Committee supporting the wind mitigation proposal submitted by Re-Build Northwest Florida.

Mr. Kampert stated that Re-Build Northwest Florida had come before the committee in 2010 and stated they would like to move into Okaloosa County. Since then no money has been available. Now money is available from Issac. They are putting together an application for submittal. The committee's role is to support it or not.

Re-Build Northwest Florida is a private non-profit organization. They are taking on the burden of administrating. Neither the county nor any of the cities would be responsible for any cost etc. Re-Build Northwest Florida works directly with the homeowners. They do everything.

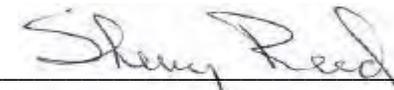
Mr. Kampert called for a motion.

**Motion by Mr. Eric Davis to approve the letter, seconded by Ms. Stella Jones; all ayes.**

Ms. Reed updated the committee about the proposed new Flood Insurance Rating Maps and the new possibility of a Coastal A Zone addition to the maps.

There being no further business, the Committee adjourned at 10:15 AM.

Prepared by: \_\_\_\_\_



Sherry Reed, Recording Secretary

Date: June 16, 2013

**AGENDA**  
**Okaloosa County**  
**Local Mitigation Strategy Committee**  
**August 12, 2015**

**LOCATION: 1840 Lewis Turner Blvd., Fort Walton Beach**  
**Large Meeting Room, 3rd Floor**

**TIME: 10:00 AM**

**I. APPROVAL OF MINUTES**

A. Regular Meeting 3-11-15

**II. NEW BUSINESS**

A. the timeline of the LMS update & resubmittal

B. status of cities' updates to their individual sections

C. revised ranking criteria

**III. UNFINISHED BUSINESS**

A. None

**IV. ADJOURN**

## Summary Minutes

August 12, 2015

### Okaloosa County Comprehensive Plan/ Local Mitigation Strategy Committee

The meeting was held in the Board of County Commissioners chambers located on the third floor of the Okaloosa County Water and Sewer Administration Building located at 1804 Lewis Turner Parkway in Ft Walton Beach, Florida.

Members present:

Sherry Reed	Okaloosa County Growth Management
Tom Burns	Town of Shalimar
Sam Wilson	City of Fort Walton Beach
Ken Gallander	City of Destin
Jonathan Bilby	City of Crestview
Steve Bolton	Okaloosa County School Board
Bruce Price	City of Niceville
Amy Hanson	City of Niceville
David Underwood	Okaloosa Gas
Ken Wolfe	Okaloosa County Public Safety

Chairman Kampert called the meeting to order at 10:05 AM.

#### I. APPROVAL OF MINUTES

Ms. Reed called for a motion for the approval of the March 11, 2015, minutes.

**Motion by Sam Wilson to approve both the 3-11-2015 minutes as written seconded by Tom Burns; all ayes.**

#### II. NEW BUSINESS

##### A. Timeline of the LMS update & resubmittal

Ms. Reed stated the LMS will expire in July 2016; the State of Florida has requested the revised LMS to be submitted to the state by February 2016. She recommended the LMS committee having everything submitted to the state by late December of 2015 just in case there were any issues that had to be corrected.

##### B. Status of cities updates to their individual sections

Ms. Reed stated there were a few changes to the crosswalk. She further asked each municipality to please review and update each of their sections. A e-mail of the crosswalk has been sent to each member for their review.

She stated that the crosswalk is asking for a more specific list of jurisdictional personnel or at least their position and department who participated in the plan modification.

The crosswalk has also asked for a location within the jurisdiction of the natural hazard.

Ms. Reed stated the crosswalk was also asking for the type and number of repetitive loss properties within each jurisdiction. She further stated that she had to do some checking since the Repetitive Loss List is privacy protected list.

Discussion ensued.

Ms. Reed stated that she had supplied to the jurisdictions a list of the declared events within the past 5 years. The only addition to the list would be the ice event of January 2014, which was not an officially declared event. Unless there was a natural event that occurred within the jurisdiction that is not on the list, this list would need to be included in each jurisdiction.

Discussion ensued.

### C. Revised ranking criteria

Ms. Reed stated that both she and chairman Kampert had reviewed the ranking criteria and had discovered that a lot of projects were coming out with the same scores. They then went back to the population served to break the ties. Thus the following recommendation is the following proposed revision to the Cost section.

#### **3.03.06 Cost**

The category considers many of the aspects of cost associated with projects, such as the acquisition of repetitive loss properties and structures, initial cost of the project, current available funds, funding assistance (such as loans), grant availability, and unmet need. Points are award based on funding availability and grant programs. Priority should be given to projects that have a source of funding.

Ranking Criteria for Funding Availability:

1. 0= Does not qualify for a grant or grant program; does not have funding assistance; does not have locally allocated funds for the project
2. 2= Does qualify for a grant or grant program; does not have funding assistance; does not have locally allocated funds for the project
3. 3= Does qualify for a grant or grant program; does have funding assistance; does have locally allocated funds for the project

Supporting documentation and information is required regarding the specific available funds.

Within this category the ranking criteria considers the cost of acquiring repetitive loss properties and severe repetitive loss structures. This is one specific example of cost-savings through property damage reduction. There are two Hazard Assistance Mitigation Programs that provide grant funding for repetitive loss claims or severe repetitive loss

structures. The Repetitive Flood Claims program awards funds to states and communities to reduce flood damages to insured properties that have one or more claims to NFIP. The Severe Repetitive Loss Program provides funding to reduce the long-term risk of flooding damage to severe repetitive loss structures, as defined by FEMA, and insured under NFIP.

Ranking Criteria for Acquisition of Repetitive Loss Structure(s):

1. 0= Does not acquire Repetitive Loss Structure(s)
2. 2=Does acquire Repetitive Loss Structure(s), but not Severe Repetitive Loss
- 2.3. 4= Does acquire Severe Repetitive Loss Structure(s)

The points also consider the cost-savings associated with property damage reduction and awards points for preventive measures.

Ranking Criteria for Property Damage Reduction:

1. 0= Does not prevent property damage
2. 4= Does prevent property damage

Supporting documentation and information required regarding the qualifications of a structure(s) as a Repetitive Loss Structure(s).

#### Projects with Equal Points

In the event of a tie, projects will be assigned an alpha-numeric ranking. For example, two projects with 35 points apiece that rank 7<sup>th</sup> on the overall list will be assigned rankings of 7a and 7b. The letter applied will be based on the number of people benefitting from a proposed project. Using the same example, one of the 35 point projects benefitting 100 people, the other project benefits 50 people. The project benefitting 100 people would be assigned 7a. The project benefitting 50 people would be assigned 7b. Thus the 100 person project 7a would be considered a higher priority than 7b.

Discussion ensued.

#### **D. Stake holder letter**

Ms. Reed explained that during update to the LMS it is required that the committee send out letters to community stakeholders to invite them to become part of the LMS committee. The only other two groups chairman Kampert & she had discussed were the Emerald Coast Association of Realtors and the Okaloosa Walton Building Industry Association.

Ms. Reed asked the committee for any further recommendations to send the stake holder letter to.

Discussion ensued.

The suggestion was made to include the 2 associated power companies and the rural/small water companies.

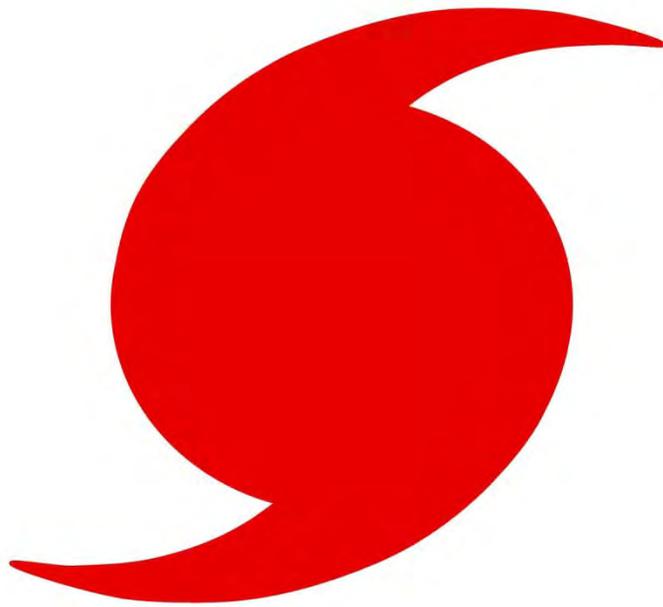
### **III. UNFINISHED BUSINESS**

None.

There being no further business, the Committee adjourned at 10:30 AM.

Prepared by: Sherry Reed  
Sherry Reed, Recording Secretary  
Date: March 12, 2015

**Appendix E**  
**2010 Project List**



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PRIORITY	NAME OF PROJECT	YEAR SUBMITTED	PROJECT DESCRIPTION	HAZARDS MITIGATED	MITIGATION GOALS ACHIEVED	FUNDING SOURCE	MATCH (if Applicable)	JURISDICTION	AGENCY RESPONSIBLE FOR IMPLEMENTATION	ESTIMATED COST	PROJECT STATUS				IF DEFERRED, WHY	TIMEFRAME FOR COMPLETION	MITIGATE NEW OR EXISTING?	BENEFICIARY	HMGP ELIGIBLE
											NEW	COMPLETED	DELETED	DEFERRED					
1	Relocate SS and LS on Alconese	2010	The shoreline has retreated leaving the sewer line 5-10 feet into the water. The line needs to be relocated to prevent sewage contamination into the bay and sound. Also, the sewer lift station needs to be relocated out of the roadway and onto an easement nearby.	Storm Surge	yes	City of Fort Walton Beach		City of Fort Walton Beach	City of Fort Walton Water & Sewer	\$108,000.00				X	No Funding	1 year	Existing	City of Fort Walton Beach	Y
2	Development of Master Drainage Plan	1999	Need master plan to mitigate stormwater runoff & flooding	Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther- Public Works	\$75,000.00				X	No Funding	240 days	Existing	City of Mary Esther	Y
3a	Beach Drive/Scranton Estates Area Drainage Improvements	2005	Retrofit drainage improvements to reduce flooding potential.	Flood. Severe Storms	yes	Okaloosa County		Okaloosa County	Okaloosa County- Public Works	\$25,000.00				X	No Funding	180 days	Existing	Okaloosa County	Y
3b	Local Alert Receivers	2010	Receivers for high population areas (Schools, nursing homes, etc.) to alert people to impending weater conditions	All hazards	yes	Okaloosa County		Okaloosa County	Okaloosa County - Public Safety	\$15,000.00				X	No Funding	60 days	New	All Jurisdictions and tourist	Y
3c	Relocate all utilities underground	2010	Relocate utilities underground. The town has already committed to a very small portion of Eglin Pkwy (SR 85) but will need new grant/funding source to continue to the Cinco Bayou bridge.	Hurricane/Tropical Storm	yes	Town of Cinco Bayou		Town of Cinco Bayou	Town of Cinco Bayou and private utilities	\$1,000,000.00				X	No Funding	1 year	Existing	Town of Cinco Bayou	Y
3d	Generators for lift stations, wells, booster stations and wastewater treatment plants	2010	During emergencies with power outages, such as hurricanes, generators are needed to keep lift stations, wells, booster stations, and wastewater treatment plants in working order.	Hurricane & Tropical Storm; and Severe Storms	yes	Okaloosa County		Okaloosa County	Okaloosa County - Water & Sewer Dept.	\$1,200,000.00				X	No Funding	1 year	Existing	Unincorporated Okaloosa County within the Okaloosa County Water & Sewer Service Area	Y
3e	Emergency Generators	1999	An automatic transfer emergency generator is needed at Lift Station #1 to prevent sewage overflow into Santa Rosa Sound in case of power failure. An additional portable generator is needed to accommodate other Lift Stations within the City.	Hurricane and Tropical Storm; and Severe Storm	yes	City of Fort Walton Beach		City of Fort Walton Beach	City of Fort Walton Beach - Water & Sewer Dept.	\$37,000.00				X	No Funding	3 months	Existing	City of Fort Walton Beach	Y
3f	Flood Proofing Lift Stations	2010	Storm proof lift stations 4,8,9,10,14,15, & 17. elevate tops of wet wells, valve boxes, relocation of emergency power supplies, and storm hardening controls. To include bulkheads and/or retaining walls	Hurricane & Tropical Storm; Flood; Land Erosion; Severe Storms; and Beach Erosion	yes	City of Valparaiso		City of Valparaiso	City of Valparaiso - Water & Sewer Dept.	\$600,000.00				X	No Funding	3 months	Existing	City of Valparaiso	Y
3g	Restoration of wetlands in Glenwood Park and upgrade the drainage system	2010	Restoration of wetlands in Glenwood Park and upgrade the park's drainage system	Hurricane & Tropical Storm: Flood; Storm Surge	yes	Town of Cinco Bayou		Town of Cinco Bayou	Town of Cinco Bayou - Public Works	\$15,000.00				X	No Funding	1 year	Existing	Town of Cinco Bayou	Y
4a	Undergrounding of Utilities	1999		Hurricane/Tropical Storms		Okaloosa County/Developer		Okaloosa County	Okaloosa County and Developers	\$158,000.00 per mile				X	On going	Required for new developments with a density of 4 dwelling units per acre and	Existing	Unincorporated Okaloosa	Y

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4b	Stormwater swales and retention for Sandalwood Drive	2014	Provide a stormwater management system for this multi-family neighborhood by constructing swales and exfiltration systems.	Flood; Hurricane & Tropical Storm;and Severe Storms	yes	City of Destin		City of Destin	City of Destin - Public Works	\$384,750.00				X	No funding	1 year	Existing	City of Destin	Y
4c	Stormwater swales and retention for Joe's Bayou area	2014	Provide a stormwater management system for this neighborhood by constructing swales and exfiltration systems.	Flood; Hurricane & Tropical Storm; and Severe Storms	yes	City of Destin		City of Destin	City of Destin - Public Works	\$649,266.00				X	No Funding	1 year	Existing	City of Destin	Y
4d	Stormwater swales and retention for Kelly Street area	2014	Provide a stormwater management system for this neighborhood by constructing swales and exfiltration systems.	Flood; Hurricane & Tropical Storm; and Severe Storms	yes	City of Destin		City of Destin	City of Destin - Public Works	\$925,805.00				X	No Funding	1 year	Existing	City of Destin	Y
5a	Stormwater swales and retention for Maltozos Street area	2014	Provide a stormwater management system for this neighborhood by constructing swales and exfiltration systems.	Flood; Hurricane & Tropical Storm; and Severe Storms	yes	City of Destin		City of Destin	City of Destin- Public Works	\$460,000.00				X	No Funding	1 year	Existing	City of Destin	Y
5b	85-A Culvert Crossing	1999	Culvert is to small to accommodate stormwater	Hurricane and Tropical Storm; Flood; and Severe Storms	yes	City of Laurel Hill		City of Laurel Hill	City of Laurel Hill - Public Works Dept.	\$30,000.00				X	No Funding	120 days	Existing	City of Laurel Hill	Y
6a	Replace culverts and swale system in Indian Bayou S/D	2014	replace deteriorated metal culvert pipes and re-establish the roadside swale system	Flood; Hurricane & Tropical Storm; and Severe Storms	yes	city of Destin		City of Destin	City of Destin - Public Works	\$750,000.00				X	No Funding	1 year	Existing	City of Destin	Y
6b	Repetitive Loss Relocation and/or Acquisition	1999	There are several properties, including concrete masonry unit houses built with slab on grade, which flood during storm events. Due to this type of construction, elevation is not an alternative. The structures should be relocated or acquired by the City to prevent future losses.	Flood; Hurricane & Tropical Storm; Severe Storms and Storm Surge	Existing Building Mitigation in Flood-prone locations	City of Fort Walton Beach		City of Fort Walton Beach	City of Fort Walton Beach	\$2,000,000.00 +				X	No Funding	18 months	Existing	City of Fort Walton Beach	Y
6c	Stormwater swales for Calhoun Avenue	2014	establish the roadside swale system for this area	Flood; Hurricane & Tropical Storm; and Severe Storms	yes	City of Destin		City of Destin	City of Destin - Public Works	\$300,000.00				X	No Funding	1 year	Existing	City of Destin	Y
7a	High efficiency .2 million gal/day lift at a tion	2011	Installation of new high efficiency .2 million gallon/day lift station. Current lift at a tion handles 50% of all sewage, is located in the flood zone, and is obsolete	Flood; Hurricane & Tropical Storm; Severe Storms and Storm Surge	yes	City of Valparaiso		City of Valparaiso	City of Valparaiso - Public Works Dept	\$700,000.00				X	No Funding	1 year	Existing	City of Valparaiso	Y
7b	Warning Siren	2010	For all emergency warnings	Hurricane & Tropical Storm; Flood; Severe Storms; Storm Surge; Heat Wave and Drought; and Wildfire	yes	Town of Shalimar		Town of Shalimar	Town of Shalimar	\$30,000.00				X	No Funding	120 days	Existing	Town of Shalimar	Y
8a	Arena Road Drainage Improvements	2010	A portion of Arena Road, an unimproved roadway, holds water during wet periods and floods during high rainfall events. This project would pipe water from the road and direct it to a retention pond.	Hurricane & Tropical Storm; Flood; and Severe Storms	yes	City of Crestview		City of Crestview	City of Crestview - Public Works Dept.	\$51,000.00				X	No Funding	90 days	Existing	City of Crestview	Y
8b	Beal Street Lift Station Relocation	2010	Lift Station is old and in the floodplain. New lift station needs to be in the same vicinity, at a higher elevation.	Hurricane & Tropical Storm; Flood; severe storms; and Storm Surge	yes	Okaloosa County		Okaloosa County	Okaloosa County - Water & Sewer Dept.	\$600,000.00				X	No Funding	18 months	Existing	Unincorporated Okaloosa County within the Okaloosa County Water & Sewer Service Area	Y

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9	Retaining Walls for Lift Stations #11, #20, and #21	2010	Lift stations 11, 20, and 21 are subject to occasional flooding but can be protected by the installation of retaining walls.	Hurricane and Tropical Storm; Flood; and Severe Storms	yes	City of Crestview		City of Crestview	City of Crestview - Water & Sewer Dept.	\$18,000.00				X	No Funding	60 days	Existing	City of Crestview	Y
10a	Resurfacing of secondary/residential streets	2010	Resurface the streets maintained by the Town of Cinco Bayou	Hurricane/Tropical Storm and Flooding	yes	Town of Cinco Bayou		Town of Cinco Bayou	Town of Cinco Bayou - Public Works Dept.	\$500,000.00				X	No Funding	1 year	Existing	Town of Cinco Bayou	Y
10b	South Avenue/Thornhill Road Area Drainage Improvements	2010	Regional stormwater management and drainage improvements.	Hurricane & Tropical Storm; Flood; and Severe Storms	yes	Okaloosa County		Okaloosa County	Okaloosa County - Public Works Dept.	\$5,000,000.00				X	No Funding	770 days	Existing	Unincorporated Okaloosa County within the Thornhill Road Area	Y
10c	Shady Lane/Woodlawn Drainage Problems	2010	Persistent drainage problems causing flooding and road closures	Hurricane & Tropical Storm; Flood; and Severe Storms	yes	City of Crestview		City of Crestview	City of Crestview - Public Works Dept.	\$412,000.00				X	No Funding	150 days	Existing	City of Crestview	Y
10d	Racetrack Road Sanitary Sewer Rehab	2010	Rehab on 18" gravity sewer line made of vitrified clay. It is crumbling and allowing infiltration into the sewer system.	Hurricane/Tropical Storm and Flood	yes	Okaloosa County		Okaloosa County	Okaloosa County - Water & Sewer Dept.	\$1,800,000.00				X	No Funding	6 months	Existing	Unincorporated Okaloosa County within the Racetrack Road area	Y
10e	Force main upgrade, Lift Station #10	2010	Increased flows during heavy rains and hurricane conditions overwhelm the force main at Lift Station #10 that serves the county jail and surrounding area.	Hurricane & Tropical Storms; Flood; and Severe Storms	yes	City of Crestview		City of Crestview	City of Crestview - Water & Sewer Dept.	\$300,000.00				X	No Funding	90 days	Existing	City of Crestview	Y
10f	Elevation of Repetitive Loss Structures	1999	Several wood frame houses with a crawl space underneath are in need of elevation or acquisition due to frequent flooding during storm events.	Flood, Hurricane/Tropical Storm, Storm Surge	Existing Building Mitigation in Flood-prone locations	City of Fort Walton Beach		City of Fort Walton Beach	City of Fort Walton Beach - Building Dept.	\$540,000.00				X	No Funding	1 year	Existing	City of Fort Walton Beach	Y
11a	Intersection Mast Arms	2010	All traffic signals that are not currently on mast arms rated at 140 mph need to be updated. There are six intersections for a total of 18 mast arms needed.	All hazards	Building Construction and Wind; Communications	City of Fort Walton Beach		City of Fort Walton Beach	City of Fort Walton Beach - Public Works Dept.	\$896,000.00				X	No Funding	1 year	Existing	All Jurisdictions - mast arms are located on Hurricane evacuation routes	Y
11b	Elevated Potable Water Storage Tank-Kennedy Lakes Area	2010	The Kennedy Lakes area in NW Crestview is plagued by low water pressures. While the pressure is adequate to provide water to residences, it is dangerously low for fire protection. The storage tank is necessary to provide additional storage and head pressure to fight wildfires or multiple structure fires in this area.	Wildfire	yes	City of Crestview		City of Crestview	City of Crestview - Water & Sewer Dept.	\$1,000,000.00				X	No Funding	270 days	Existing	City of Crestview	Y
11c	Port Dixie Stormwater System Repair	2010	Stormwater drainage analysis and infrastructure repair/replacement for the Port Dixie drainage area to resolve regional flooding and stormwater problems.	Hurricane & Tropical Storm; Flood; and Severe Storms	yes	Okaloosa County		Okaloosa County	Okaloosa County - Public Works Dept.	\$5,000,000.00				X	No Funding	770 days	Existing	Unincorporated Okaloosa County within the Port Dixie Area	Y
11d	standby generators at 8 power supply locations	2011	Installation of standby generators at each of 8 existing un-interruptable power supply locations. Ensures continued operation of cable communication system for emergency broadcast capabilities	All hazards	yes	City of Valparaiso		City of Valparaiso	City of Valparaiso - Public Works Dept	\$77,000.00				X	No Funding	6 months	Existing	City of Valparaiso	Y

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11e	Bluewater Bay MSBU 350 acres stormwater basin repair	2014	stormwater darinage system repairs	Hurricane & Tropical Storm; Flood; and severe storms	yes	Okaloosa County/Bluewater Bay MSBU		Okaloosa County	Okaloosa County/Bluewater Bay MSBU	\$400,000.00				X		2 Years	Existing	Unincorporated Okaloosa county within the Bluewater Bay area	Y
11f	Northern Pines - Forest Heights Drainage Improvements	2010	Regional stormwater management and drainage improvements.	Hurricane & Tropical Storm; Flood; and Severe Storms	yes	Okaloosa County		Okaloosa County	Okaloosa County - Public Works Dept.	\$5,000,000.00				X	No Funding	770 days	Existing	Unincorporated Okaloosa County within the Forest Heights Area	Y
11g	Bryn Mawr Subdivision Drainage	2010		Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther	\$700,000.00				X	No Funding	120 days	Existing	City of Mary Esther	Y
12a	Acquisition of Emergency Generators and Traffic Signal Quick Disconnects		Acquisition of dedicated portable generators and quick disconnects for traffic signals, so that vehicles can safely operate during a loss of electrical power associated with a hurricane or other disaster	All Hazards	yes	City of Crestview		City of Crestview	City of Crestview - Public Works Dept.	\$3,300.00				X	No Funding	60 days	Existing	All jurisdictions- Hwy 85 is a hurricane evacuation route	Y
12b	Generator for City Hall	2014	install 250 KW generator for City Hall	All hazards	yes	City of Niceville		City of Niceville	City of Niceville - Public Works Dept.	\$250,000.00				X	No Funding	30 days	Existing	City of Niceville	Y
12c	Island #2 and #3 Lift Station Retrofit		Replace electrical and control systems at 3 coastal lift stations that have damaged by wind and salt.	Hurricane & Tropical Storm; Flood; and Storm Surge	yes	Okaloosa County		Okaloosa County	Okaloosa County - Water & Sewer Dept.	\$225,000.00				X	No Funding	1 year	Existing	Unincorporated Okaloosa County within the Okaloosa Island area and tourist	Y
12d	Stormwater drainage system at Edwin's Elementary School	2014	Install new stormwater drainage system at Edwin's Elementary School	Hurricane & Tropical Storm; and Flood	yes	Okaloosa County School Board		Okaloosa County School Board	Okaloosa County School Board - Facilities Dept.	\$700,000.00				X	No Funding	1 year	Existing		Y
12e	Stormwater drainage system at Florosa Elementary School	2014	Install new stormwater drainage system at Florosa Elementary School	Hurricane & Tropical Storm; and Flood	yes	Okaloosa County School Board		Okaloosa County School Board	Okaloosa County School Board - Facilities Dept.	\$450,000.00				X	No Funding	1 year	Existing		Y
13a	8 Traffic Signals-Quick Disconnect for Highway 98		Provide hardward to interface post-storm power sources to aid in efficient traffic control and to free up emergency personnel for other efforts	All hazards	yes	City of Destin		City of Destin	City of Destin - Public Works Dept.	\$40,000.00				X	No Funding	6 months	Existing	All jurisdictions - Hwy 98 is an evacuation route	Y
13b	Stormwater drainage system at City of Mary Esther City Hall	2014	Repair and replace the underground stormwater system	Hurricane & Tropical Storm; and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther- Public Works	\$45,150.00				X	No Funding	6 months	Existing	City of Mary Esther	Y
13c	Repair and replace bridge on Christobal Rd.	2014	Repair and replace underground stormwater infrastructure	Hurricane & Tropical Storm; and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$482,150.00				X	No Funding	1 year	Existing	City of Mary Esther	Y
13d	Sylvania Heights Drainage Improvements Phase 2		Retrofit drainage improvements to reduce flooding potential.	Hurricane & Tropical Storm; and Flood	yes	Okaloosa County		Okaloosa County	Okaloosa County - Public Works Dept.	\$5,000,000.00				X	No Funding	770 days	Existing	Unincorporated Okaloosa County within the Sylvania Heights area	Y
13e	Stormwater drainage repair on Byn Mawr Blvd.	2014	Repair and replace underground stormwater infrastructure	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$159,710.00				X	No Funding	1 year	Existing	City of Mary Esther	Y
13f	Shoal River Dr. dam	2010	replace old piping in existing on golf course lake (Shoal River Drive is located on top of this dam)	Dam Safety	yes	Okaloosa County		Okaloosa County/NWFLWMD	Okaloosa County/NWFLWMD	\$300,000.00				X	No Funding	90 days	Existing	Unincorporated Okaloosa County within the Shoal River area	Y

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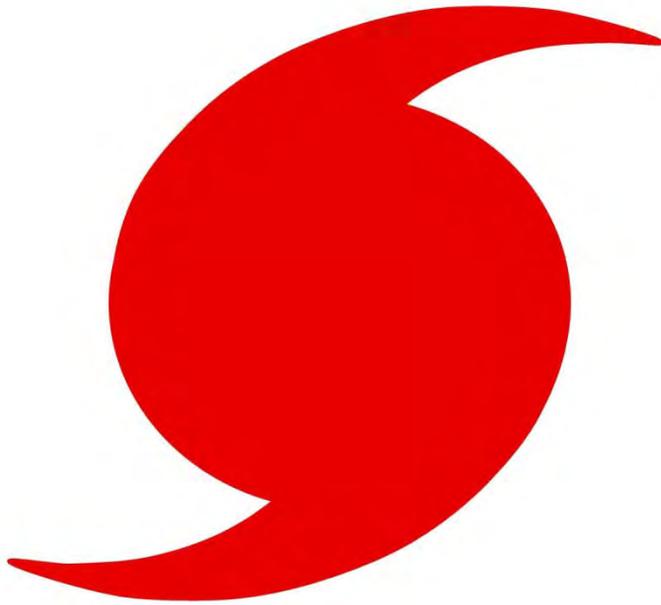
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13g	Stormwater drainage repair on Shrewsbury Blvd.	2014	Repair & replace underground stormwater infrastructure and right-of-way erosion	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$12,850.00				X	No Funding	60 days	Existing	City of Mary Esther	Y
13h	Stormwater drainage repairs on North Street	2014	Repair and replace stormwater inlets and fence encompassing the stormwater detention pond on North Street	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$33,680.00				X	No Funding	90 days	Existing	City of Mary Esther	Y
13i	Stormwater drainage repairs on Caswell Circle	2014	Repair & replace underground stormwater infrastructure and right-of-way erosion	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$31,050.00				X	No Funding	1 year	Existing	City of Mary Esther	Y
13j	Right-of-way erosion repair on N. Lorraine Drive	2014	Repair right-of-way due to erosion	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$8,725.00				X	No Funding	6 months	Existing	City of Mary Esther	Y
13k	Stormwater drainage repairs on S. Lorraine Drive	2014	Repair & replace underground stormwater pipes & inlets at intersections along S. Lorraine Drive	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$387,300.00				X	No Funding	1 year	Existing	City of Mary Esther	Y
13l	Stormwater drainage repairs on Sussex Road	2014	Repair & replace underground stormwater infrastructure and grade ditch on Sussex Road	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$50,250.00				X	No Funding	6 months	Existing	City of Mary Esther	Y
13m	Stormwater drainage repairs at Page Bacon & Joann Lane	2014	Repair & replace underground stormwater infrastructure	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$81,200.00				X	No Funding	6 months	Existing	City of Mary Esther	Y
13n	Stormwater drainage repairs at Dawn Lane & Emory Drive	2014	Repair & replace underground stormwater pipes & inlets at intersection of Dawn Lane and Emory Drive	Hurricane & Tropical Storm; Severe Storms and Flood	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$236,653.00				X	No Funding	1 year	Existing	City of Mary Esther	Y
14a	Portable Generators for Traffic Signals	2010	Provide a post-storm power source for traffic signals to move traffic and free up emergency personnel for other efforts	All hazards	yes	City of Destin		City of Destin	City of Destin - Public Works Dept.	\$35,000.00				X	No Funding	6 months	Existing	All Jurisdictions - Hwy 98 is an evacuation route	Y
14b	Traffic Signal Upgrade to Mast Arm	2010	Only a few traffic signals in Crestview have been upgraded to mast arms. Because the major highways in Crestview are hurricane evacuation routes the mast arms are needed to resist damage by high winds	All hazards	yes	City of Crestview		City of Crestview	City of Crestview - Public Works Dept.	\$3,000,000.00				X	No Funding	6 months	Existing	City of Crestview and All Okaloosa County- Hwy 85 is a hurricane evacuation route	Y
14c	Armoring Critical Facilities	1999	Fred Hedrick and Chester Pruitt Recreation Centers are utilized as storm shelters and should be retrofitted for 140 mph wind resistance.	Hurricane & Tropical Storm; and Severe Storms	Structural Soundness of Existing Local Government Centers; Availability of Public Sheltering	City of Fort Walton Beach		City of Fort Walton Beach	City of Fort Walton Beach - Public Works Dept.	\$138,000.00				X	No Funding	6 months	Existing	City of Fort Walton Beach	Y
15a	Permanent Stabilization of Norriego Point	1999	Norriego Point is the tip of Holiday Isle and provides protection to Destin harbor. Project anticipates stabilizing or hardening the point for improved storm protection, minimizing harbor channel shoaling and to preserve habitat and recreational areas provided by the point	Beach Erosion; and Storm Surge	yes	City of Destin		City of Destin	City of Destin - Public Works Dept.	\$10,200,000.00				X	No Funding	2 years	Existing	City of Destin and tourist	Y

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PRIORITY	NAME OF PROJECT	YEAR SUBMITTED	PROJECT DESCRIPTION	HAZARDS MITIGATED	MITIGATION GOALS ACHIEVED	FUNDING SOURCE	MATCH (if Applicable)	JURISDICTION	AGENCY RESPONSIBLE FOR IMPLEMENTATION	ESTIMATED COST	PROJECT STATUS				IF DEFERRED, WHY	TIMEFRAME FOR COMPLETION	MITIGATE NEW OR EXISTING?	BENEFICIARY	HMGP ELIGIBLE
											NEW	COMPLETED	DELETED	DEFERRED					
15b	Upland retaining wall - Lions Park	2014	Install 120 linear feet of upland retaining wall along the remaining unprotected shore line at Lions park	Beach Erosion; and Storm Surge	yes	City of Niceville		City of Niceville	City of Niceville - Public Works Dept.	\$12,000.00				X	No Funding	6 months	Existing	City of Niceville	Y
16a	Water distribution isolation valves	2011	Installation of water distribution isolation valves to preserve water quality and losses in the event of system depressurization for any reason	Hurricane & Tropical Storms; Flood; Severe Storms: Erosion and storm Surge	yes	City of Valparaiso		City of Valparaiso	City of Valparaiso - Public Works Dept	\$150,000.00				X	No Funding	1 year	Existing	City of Valparaiso	Y
16b	Relocation, elevation, or acquisition	2014	various locations throughout unincorporated Okaloosa county which frequently flood.	Hurricane & Tropical Storms; Flood; Severe Storms: Erosion and Storm Surge	yes	Okaloosa County		Okaloosa County	Okaloosa County	\$ 2,000,000.00 +				X	No Funding	1 year	Existing	Okaloosa County	Y
17a	New Public Works Maintenance Yard	2010	Construct new public works maintenance garage in accordance with Florida Building Codes	Hurricane & Tropical Storms; Flood; and Severe Storms	yes	City of Valparaiso		City of Valparaiso	City of Valparaiso - Public Works Dept	\$750,000.00				X	No Funding	18 months	New	City of Valparaiso	Y
17b	Wind Retrofit of Golf Course Clubhouse & Develop Backup Emergency Operation Center	1999	The Golf Course Clubhouse does not currently meet the 140 mph wind code for building construction.	Hurricane & Tropical Storm; Flood; and Severe Storms	Structural Soundness of Existing Local Government Centers	City of Fort Walton Beach		City of Fort Walton Beach	City of Fort Walton Beach - Public Works Dept.	\$100,000.00				X	No Funding	6 months	Existing	City of Fort Walton Beach	Y
18a	Redesign of stormwater culvert on Brewer Circle	2014	Redesign and replace stormwater culvert behind 142 - 162 Brewer Circle	Hurricane & Tropical Storm; Flood; and Severe Storms	yes	City of Mary Esther		City of Mary Esther	City of Mary Esther - Public Works	\$300,000.00				X	No Funding	6 months	Existing	City of Mary Esther	Y
18b	Brewer Circle Concrete Culvert	2013	Redesign and replace stormwater culvert	Flood, Hurricane/Tropical Storm	no	City of Mary Esther		City of Mary Esther	City of Mary Esther	\$350,000.00				X	No Funding	120 days	Existing	City of Mary Esther	Y
19a	Stormwater improvements on Brande Court & Mande Court	2014	redesign and replace the existing stormwater darinage system for both streets	Hurricane & Tropical Storm; Flood; and Severe Storms	yes	Town of Shalimar		Town of Shalimar	Town of Shalimar	\$30,000.00				X	No Funding	6 months	Existing	Town of Shalimar	Y
19b	County Wide Wind Retrofit	2011	Hardening of conventional single famile detached homesteaded dwellings to meet current FBC wind requirements	All Hazards	yes	ALL Jurisdictions	25% Private	All Jurisdictions	All Jurisdictions	\$3,000,000.00				X	No Funding	1 year	Existing	All Jurisdictions	Y
20	Roof replacement Carvier Hill Administration	2014	replacing the roof over the meeting room and freexer at Carver Hill Administration Complex	All hazards	yes	Okaloosa County School Board		Okaloosa County School Board	Okaloosa County School Board - Facilities Dept.	\$500,000.00				X	No Funding	6 months	Existing	All Jurisdictions	Y
<b>REMOVED PROJECTS</b>																			

# **Appendix F**

## **Project Ranking Sheets in Ranking Order**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Beach Renourishment**

**Jurisdiction: Okaloosa County Contact Person/Information: Jim Trifilio**

**1. General Description and Rationale:**  
 2. Restore 4.5 miles of critically eroded beaches on Okaloosa Island and Western Destin  
  
**Timeframe for completion:** 4 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**  
 2.a. LMS Goals and Strategies:  
  
 2.b. Comprehensive Plan: Goal 3.5 of Section 2.11, The County shall continue to preserve and protect the beaches and shores of Okaloosa County. This shall be done in part through regulations contained within the Land Development Code.  
  
 2.c. Is this project level of service or concurrency related: LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_  No

**3.a. Estimated Project Cost:** \$ 20,000,000.00

**Is this project fully funded?**  
 Yes \_\_\_ No

**3.b. Funding Plan (\$ in 000's)**

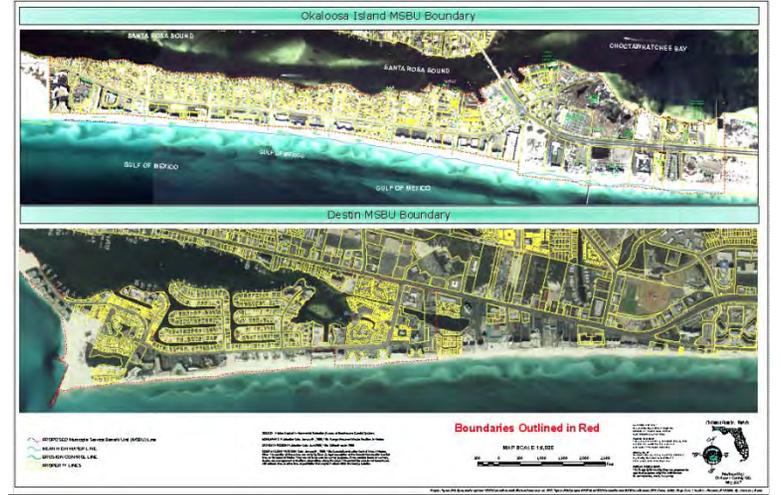
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
Tourist Dev. Tax MSBU							

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:** N/A Funding from 1<sup>st</sup> Cent of Tourist Development Tax and Municipal Service Benefit Unit

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Relocate SS and LS on Alconese**

**Jurisdiction: City of Fort Walton Beach Contact Person/Information: Michael Beedie, P.E., City Engineer**

**1. General Description and Rationale**

The shoreline has retreated leaving the sewer line 5-10 feet into the water. The line needs to be relocated to prevent sewage contamination into the bay and sound. Also, the sewer lift station needs to be relocated out of the roadway and onto an easement nearby.

**Timeframe for completion:** 1 year

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

None

**2.b. Comprehensive Plan:**

Goal E, Objective E.14

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 108,000.00

**Is this project fully funded?**

Yes  No

**3.b. Funding Plan (\$ in 000's)**

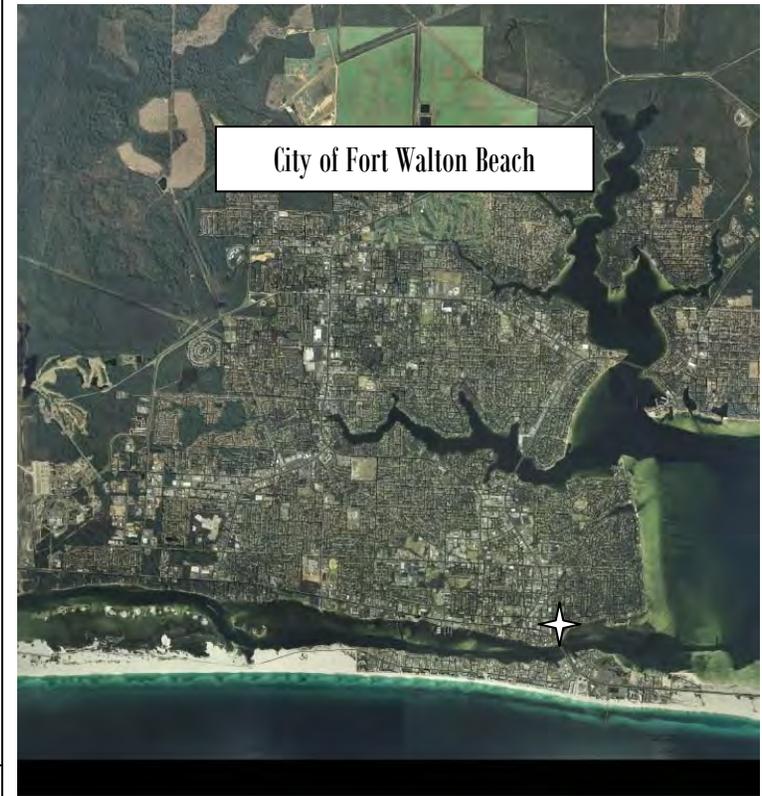
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
City of Fort Walton Beach		\$8	\$100				\$108
							<b>\$108</b>

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Design and Permitting		\$8					\$8
Construction			\$100				\$100
							<b>\$108</b>

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Master Stormwater Drainage Plan**

**Jurisdiction: Town of Shalimar Contact Person/Information: Tom Burns, Town Manager**

**1. General Description and Rationale:**

Need master plan to mitigate storm water runoff and flooding. It is thought that much of the flooding/runoff is from outside Shalimar.

**Timeframe for completion:** 120 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:** Goal 10.C  
Objective 10.C.1

**2.c. Is this project level of service or concurrency related:** LOS  Yes \_\_\_No Concurrency Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes  No

**3.a. Estimated Project Cost:** \$50,000.00

**Is this project fully funded?**  
\_\_\_ Yes  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
General Fund	0	0	0	50 K	0	0	50 K

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Stormwater Plan	0	0	0	50 K	0	0	50 K

**4. Statement of Operating Budget Impact:** No impact to operating budget.

**5. Location Map**

Town boundary and surrounding commercial and residential areas.

**TOWN OF SHALIMAR**



**Legend**  
 — Roads  
 SHALIMAR  
 UNINCORPORATED

**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Development of Master Drainage Plan**

**Jurisdiction: City of Mary Esther Contact Person/Information: Lynn Oler**

**1. General Description and Rationale**  
 Need master plan to mitigate stormwater runoff & flooding  
  
**Timeframe for Completion:** 240 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**  
**2.a. LMS Goals and Strategies:**  
  
**2.b. Comprehensive Plan:**  
  
**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$ \_75,000.00 \_\_\_

<b>Is this project fully funded?</b>	
___ Yes ___ No	

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**

**CITY OF MARY ESTHER**



**Legend**

- CITY OF MARY ESTHER
- CITY OF FORT WALTON BEACH
- UNINCORPORATED
- HURLBURT FIELD
- Roads



**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Main Island Lift Station Replacement**

**Jurisdiction: Okaloosa County Contact Person/Information: Mark Wise, P.E. – Engineering Manager**

**1. General Description and Rationale**

New lift station to replace existing one. In previous hurricanes, this lift station has been submerged, causing a public safety problem. It is one of our largest (1 MGD ADF), oldest, and most critical lift stations. It also has structural & elevation problems.

**Timeframe for Completion:** 2 years

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies: Goal 5** – Reduce or eliminate hazards identified to at risk locations in the County and its municipalities by implementing the mitigation actions.

**2.b. Comprehensive Plan:** Goal 1 of Section 2.4: Provide environmentally safe and efficient wastewater treatment and disposal systems. This project is also in OCWS' 5-year C.I.P.

**2.c.** Is this project level of service or concurrency related: LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$3,400,000.00

<b>Is this project fully funded?</b>		
_____ Yes	<input checked="" type="checkbox"/> No	_____ No

**3.b. Funding Plan (\$ in 000's)**

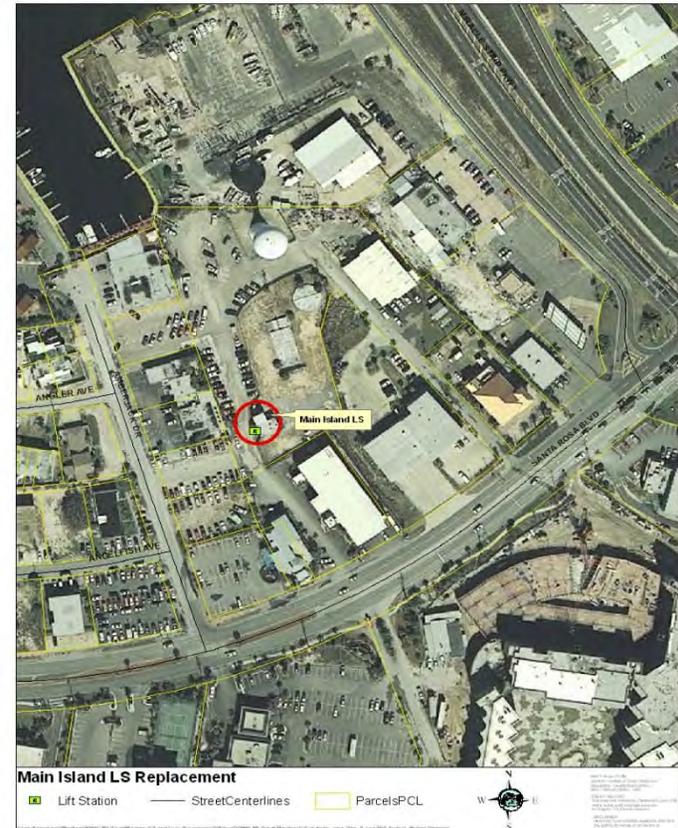
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
OCWS Enterprise Fund (unfunded).	0	0	0	0	0	0	0
							<b>0</b>

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Main Island Lift Station – OCWS 5-year C.I.P	0	400	3000	0	0	0	3400
							<b>\$3,400,000</b>

**4. Statement of Operating Budget Impact** This project is in the C.I.P., but unfunded. To accomplish this, O.C.W.S. would need to borrow money, in which the debt service would be ultimately passed on to our customers, and possibly a rate increase would be needed.

**5. Location Map:** On Okaloosa Island, west of the intersection of Santa Rosa Blvd. & Miracle Strip Parkway.



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Beach Drive / Scranton Estates Drainage Improvements**

**Jurisdiction: Okaloosa County Public Works Contact Person/Information: Jason Autrey**

**1. General Description and Rationale**  
 Retrofit drainage improvements to reduce flooding potential.  
  
**Timeframe for completion:** 180 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**  
**2.a. LMS Goals and Strategies:**  
**2.b. Comprehensive Plan:**  
 Section 2.6; objective 1; policy 1.1 & 2  
  
**2.c. Is this project level of service or concurrency related:** LOS  Yes \_\_\_ No Concurrency \_\_\_ Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes  No

**3.a. Estimated Project Cost:** \$ 25,000.00

<b>Is this project fully funded?</b>
___ Yes <input checked="" type="checkbox"/> No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

This project is not funded, only identified as a need.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

Project Name: Local Alert Receivers

Jurisdiction: Okaloosa County Contact Person/Information: Randy McDaniel, Public safety

**1. General Description and Rationale**

Purchase Additional 150 Local Alert Receivers for high population areas (schools, nursing homes.etc.) to alert people to impending weather conditions (Heat wave, tornado, hurricane, etc.)

Timeframe for Completion: 60 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

2.a. LMS Goals and Strategies:

2.b. Comprehensive Plan: No specific Comprehensive Plan reference.

2.c. Is this project level of service or concurrency related: LOS \_\_\_Yes \_\_\_No Concurrency \_\_\_Yes \_\_\_No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes \_\_\_ No

3.a. **Estimated Project Cost:** \$ 15,000.00

**Is this project fully funded?**  
 \_\_\_ Yes \_\_\_X\_\_\_ No

3.b. Funding Plan (\$ in 000's)

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
EMPA Grant							

3.c. Expenditure Plan (\$ in 000's)

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

Project Name: Underground Utilities

Jurisdiction: Town of Cinco Bayou Contact Person/Information: Nell Dykes, Town Manger

**1. General Description and Rationale** The intent of this project is to relocate utilities underground. The town has already committed to a very small portion of Eglin Parkway (SR 85) but will need new grant/funding source to continue to the bridge.

**Timeframe for Completion:** 1 year

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:**

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$ \_1,000,000.00 \_

<b>Is this project fully funded?</b>
___ Yes ___ <input checked="" type="checkbox"/> No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Generator Improvements Project**

**Jurisdiction:** Okaloosa County **Contact Person/Information:** Mark Wise, P.E. – Engineering Manager

**1. General Description and Rationale**

During emergencies with power outages, such as hurricanes, generators are needed to keep lift stations, wells, booster stations, and wastewater plants in working order.

**Timeframe for completion:** 1 year

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** **Goal 5** – Reduce or eliminate hazards identified to at risk locations in the County and its municipalities by implementing the mitigation actions.

**2.b. Comprehensive Plan:** Goal 1 of Section 2.4: Provide environmentally safe and efficient wastewater treatment and disposal systems.

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 1,200,000.00

**Is this project fully funded?**  
 Yes  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
OCWS Enterprise Fund (unfunded).	0	0	0	0	0	0	0
							<b>0</b>

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
To be determined		TBD	TBD	TBD	TBD	TBD	TBD

**4. Statement of Operating Budget Impact:** Not in rate model/budget. To accomplish this, O.C.W.S. would need to borrow money, in which the debt service would be ultimately passed on to our Customers, and possibly a rate increase would be needed.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Emergency Generators**

**Jurisdiction: City of Fort Walton Beach Contact Person/Information: Michael Beedie, P.E., City Engineer**

**1. General Description and Rationale**

An automatic transfer emergency generator is needed at Lift Station #1 to prevent sewage overflow into Santa Rosa Sound in case of power failure. An additional portable generator is needed to accommodate other Lift Stations within the City.

**Timeframe for Completion:** 3 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

None

**2.b. Comprehensive Plan:**

Goal E, Objective E.14 Protect quality of water sources flowing into Santa Rosa Sound

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 37,000.00

**Is this project fully funded?**

Yes  No

**3.b. Funding Plan (\$ in 000's)**

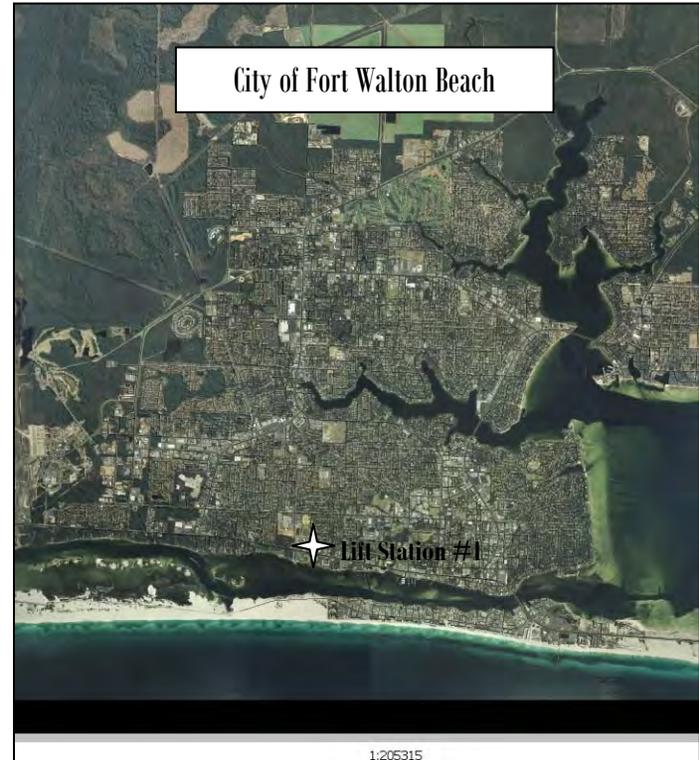
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
City of Fort Walton Beach		\$37					\$37

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
10KW Emergency Generator with Transfer Switch for Lift Station 1		\$37					\$37

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Armoring Critical Facilities**

**Jurisdiction: City of Valparaiso Contact Person/Information: Carl Scott**

**1. General Description and Rationale**

Storm proof Lift Stations 4, 8, 9, 10, 14, 15, & 17- elevate tops of wet wells, valve boxes, relocation of emergency power supplies, and storm hardening controls. To include bulkheads and/or retaining walls

**Timeframe for completion:** 3 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:**

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$ 600,000.00

**Is this project fully funded?**  
 \_\_\_ Yes \_\_\_  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**Legend**

- Roads
- VALPARAISO
- UNINCORPORATED
- EGLIN AFB

**Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Wetland Restoration**

**Jurisdiction: Town of Cinco Bayou Contact Person/Information: Nell Dykes, Town Manager**

**1. General Description and Rationale**

The intent of this project is to restore wetlands in Glenwood Park and upgrade the park's drainage system.

**Timeframe for completion: 1 year**

**2. LMS and Jurisdictional Comprehensive Plan**

**Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:**

**2.c. Is this project level of service or concurrency related: LOS**  
 \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$ \_15,000.00 \_

**Is this project fully funded?**

\_\_\_ Yes \_\_\_ X No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Sewer Pump Station # 13 Protective Measures**

**Jurisdiction: City of Niceville Contact Person/Information: Bruce Price**

**1. General Description and Rationale**

Location is unstable and susceptible to erosion and washing station is located north of Hwy 20 and east of Swift Creek

**Timeframe for Completion:** 90 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

2.a. LMS Goals and Strategies:

2.b. Comprehensive Plan:

2.c. Is this project level of service or concurrency related: LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes X No

3.a. **Estimated Project Cost:** \$ 10,000.00

**Is this project fully funded?**

\_\_\_ Yes X No

3.b. Funding Plan (\$ in 000's)

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

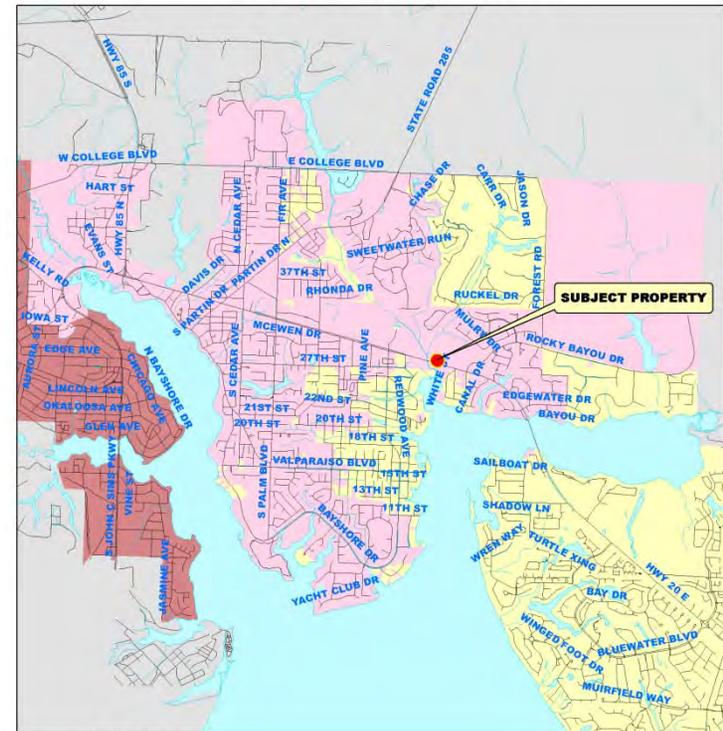
3.c. Expenditure Plan (\$ in 000's)

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**

**CITY OF NICEVILLE**



**Legend**

- CITY OF NICEVILLE
- CITY OF VALPARAISO
- UNINCORPORATED
- Roads



**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Coleman Lake Outfall**

**Jurisdiction: City of Destin Contact Person/Information: Steven R. Schmidt, Public Services Director**

**1. General Description and Rationale:**

The Coleman Lake outfall runs under Main Street in Destin through a structurally deficient earthen dam. Based on increasing frequency and depths of potholes at the outfall location, it is evident that the structure is leaking and could lead to a significant, if not catastrophic failure, risking significant property damage and even potential loss of life.

**Timeframe for completion:** 3 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Obj. 2.02.01

Obj. 8.01 & 8.02.01

**2.b. Comprehensive Plan:** Policy 4-5.1.1

Policy 4-5.1.3

**2.c. Is this project level of service or concurrency related:** LOS  Yes \_\_\_ No Concurrency \_\_\_ Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes  No

**3.a. Estimated Project Cost:** \$600,000.00

**Is this project fully funded?**

\_\_\_ Yes  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
General Fund			300	300			

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Update geotechnical Engineering/permitting			10				
Construction			100	300			
			190				

**4. Statement of Operating Budget Impact:** A reconstructed dam would reduce the City's maintenance budget by reducing the number of repairs to the Main Street roadway.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: 85-A Culvert Crossing**

**Jurisdiction: City of Laurel Hill Contact Person/Information: Stephanie Davis**

**1. General Description and Rationale**

Old culvert; too small to handle stormwater

**Timeframe for completion:** 120 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

2.a. LMS Goals and Strategies:

2.b. Comprehensive Plan:

2.c. Is this project level of service or concurrency related: LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

3.a. **Estimated Project Cost:** \$ \_30,000.00\_

**Is this project fully funded?**

\_\_\_ Yes \_\_\_ No

3.b. Funding Plan (\$ in 000's)

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

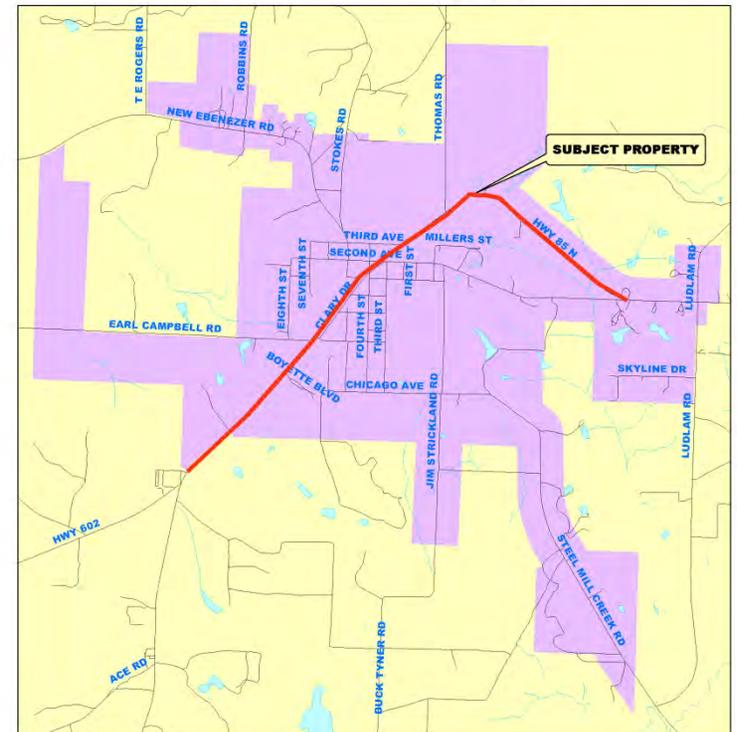
3.c. Expenditure Plan (\$ in 000's)

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**

**CITY OF LAUREL HILL**



**Legend**

- CITY OF LAUREL HILL
- UNINCORPORATED
- Roads



**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Repetitive Loss Relocation and/or Acquisition**

**Jurisdiction: City of Fort Walton Beach Contact Person/Information: Michael Beedie, P.E., City Engineer**

**1. General Description and Rationale**

There are several properties, including concrete masonry unit houses built with slab on grade, which frequently flood during storm events. Due to the type of construction, elevation is not a feasible alternative. The structures should be relocated or acquired by the City to prevent future flooding losses.

**Timeframe for completion:** 18 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

6.3.A- Existing Building Mitigation in Flood-prone Locations

6.3.B- Existing Building Mitigation in Flood-prone Locations

**2.b. Comprehensive Plan:**

Goal E, Objective E.5, Policy E.5.2

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_X\_\_\_ No Concurrency \_\_\_ Yes \_\_\_X\_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_X\_\_\_ No

**3.a. Estimated Project Cost:** \$ 2,000,000 +

**Is this project fully funded?**

\_\_\_ Yes \_\_\_x\_\_\_ No

**3.b. Funding Plan (\$ in 000's)**

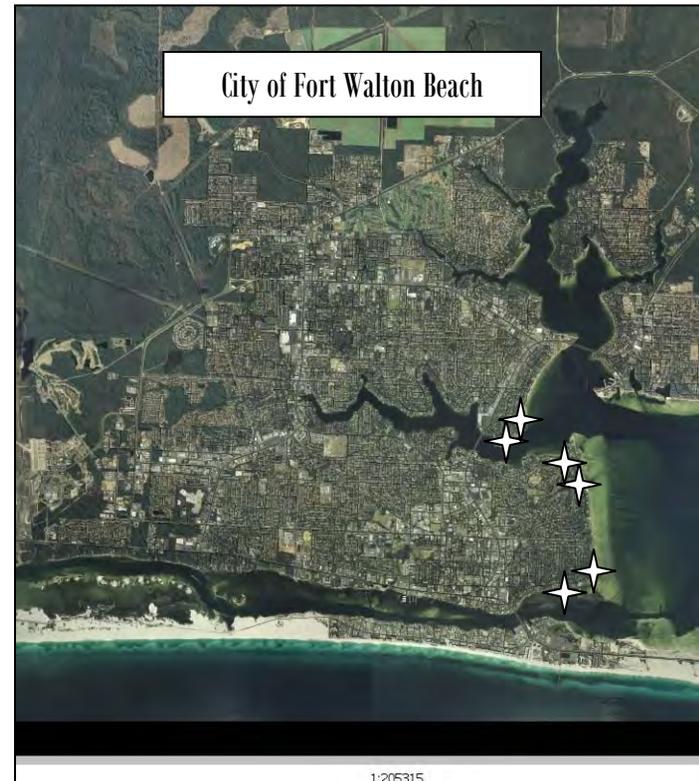
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Town of Shalimar Warming System**

**Jurisdiction: Town of Shalimar Contact Person/Information: Tom Burns, Town Manager**

**1. General Description and Rationale:**

Need siren for emergency warning

**Timeframe for completion:** 120 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:** 11.A.7.1 "Peace Time Emergency Plan"

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital

Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$30,000.00

**Is this project fully funded?**

Yes  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
General Fund	0	0	0	0	30 K	0	30 K

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Siren System	0	0	0		30 K	0	30 K

**4. Statement of Operating Budget Impact:**

**5. Location Map**

Ocean City Wright Fire District- Shalimar Annex

**TOWN OF SHALIMAR**



**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Undergrounding of Utilities**

**Jurisdiction: Okaloosa County Contact Person/Information: \_\_\_\_\_**

<p><b>1. General Description and Rationale</b> Require all utilities to be placed underground</p> <p>Timeframe for completion: unlimited</p>	<p><b>2. LMS and Jurisdictional Comprehensive Plan Compliance/References:</b></p> <p><b>2.a. LMS Goals and Strategies:</b></p> <p><b>2.b. Comprehensive Plan:</b> Land Development Code Chapter 6 Section 6.01.052.C</p> <p><b>2.c. Is this project level of service or concurrency related:</b> LOS ___Yes ___No Concurrency ___Yes ___No</p>
--	--

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_Yes X No

**3.a. Estimated Project Cost:** \$ \_158,400.00 per mile

**Is this project fully funded?**  
\_\_\_\_\_ Yes \_\_\_X\_\_\_ No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**5. Location Map**

**4. Statement of Operating Budget Impact:**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Arena Road Drainage Improvements**

**Jurisdiction: City of Crestview Contact Person/Information: Eric Davis**

**1. General Description and Rationale**

A portion of Arena Road, an unimproved roadway, holds water during wet periods and floods during high rainfall events. This project would pipe water from the road and direct it to a retention pond.

**Timeframe for completion:** 90 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Goal #6 – Reduce or eliminate hazards. Strategies 6.3.A and 6.3.B – Bridge and Highway construction.

**2.b. Comprehensive Plan:** Goal 8.A Provide safe, cost effective and functional transportation system.

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_X No Concurrency \_\_\_ Yes \_\_\_X No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_X Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$51,000.00

**3.b. Funding Plan (\$ in 000's)**

**Is this project fully funded?**

\_\_\_ Yes \_\_\_X No

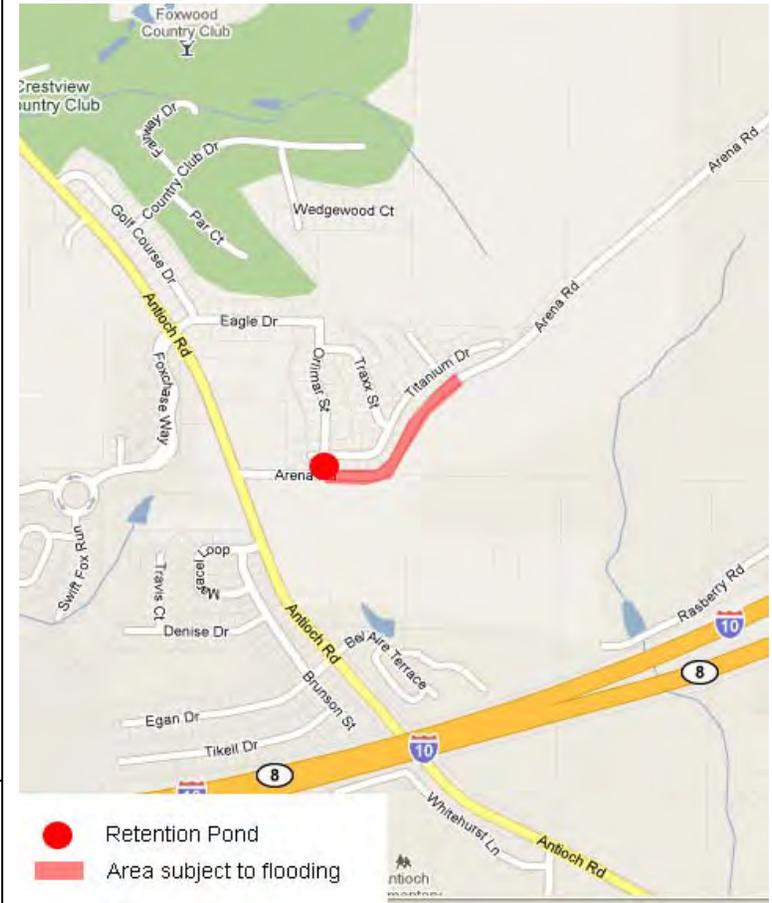
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
Local, state and federal. Impact fees, proportionate fair share mitigation					2,784	1,916	4,700

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Arena Rd. Phase I					2,784		2,784
Arena Rd. Phase II						1,916	1,916
							4,700

**4. Statement of Operating Budget Impact:** Impact and Prop. Share fees are not yet capable of funding the Arena Rd. improvements that are currently scheduled for three phases in FY 14, 15 and 16 in the City's Long Term CIP. This project would be a portion of the overall road improvement.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Beal Street Lift Station Replacement**

**Jurisdiction: Okaloosa County Contact Person/Information: Mark Wise, P.E. – Engineering Manager**

**1. General Description and Rationale**  
Lift station is old, outdated, and in a floodplain. New lift station needed in the same vicinity, at a higher elevation. Land acquisition costs could also be needed.

**Timeframe for completion:** 18 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**  
**2.a. LMS Goals and Strategies:** Goal 5 – Reduce or eliminate hazards identified to at risk locations in the County and its municipalities by implementing the mitigation actions.  
**2.b. Comprehensive Plan:** Goal 1 of Section 2.4: Provide environmentally safe and efficient wastewater treatment and disposal systems.  
**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 600,000.00

**Is this project fully funded?**  
 Yes  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
OCWS Enterprise Fund (unfunded).	0	0	0	0	0	0	0
							<b>0</b>

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
To be determined	0	TBD	TBD	TBD	TBD	TBD	TBD

**4. Statement of Operating Budget Impact:** Not in rate model/budget. To accomplish this, O.C.W.S. would need to borrow money, in which the debt service would be ultimately passed on to our Customers, and possibly a rate increase would be needed.

**5. Location Map:** On the east side of Beal Street, just north of Gap Creek.



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Retaining walls for Lift Stations #11, #20, and #21**

**Jurisdiction: City of Crestview Contact Person/Information: Eric Davis**

**1. General Description and Rationale**

Lift stations 11, 20 and 21 are subject to occasional flooding but can be protected by the installation of retaining walls.

**Timeframe for completion:** 60 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Goal #5 – Reduce or eliminate hazards. Strategies 6.3.A and 6.3.B – Existing building mitigation in flood-prone locations

**2.b. Comprehensive Plan:** Goal 10.A – Provide an environmentally safe and efficient wastewater treatment system.

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_ X No Concurrency \_\_\_ Yes \_\_\_ X No

**3. Budgetary Information:**

Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ X No

**3.a. Estimated Project Cost:** \$18,000.00

**Is this project fully funded?**

\_\_\_ Yes \_\_\_ X No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
N/A							

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
N/A							

**4. Statement of Operating Budget Impact:**

No funds have been identified for this project.

**5. Location Map**



● Locations of Lift Stations #11, #20 and #21

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Street Resurfacing**

**Jurisdiction: Town of Cinco Bayou Contact Person/Information: Nell Dykes, Town Manager**

**1. General Description and Rationale**

The intent of this project is to resurface streets maintained by the Town of Cinco Bayou. The focus of the project is primarily on secondary/residential streets.

**Timeframe for Completion: 1 year**

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:**

**2.c. Is this project level of service or concurrency related: LOS** \_\_\_ Yes \_\_\_ No **Concurrency** \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:**

\$ 500,000.00

**3.b. Funding Plan (\$ in 000's)**

**Is this project fully funded?**

\_\_\_ Yes \_\_\_ **X** \_\_\_ No

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
N/A							

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: South Avenue/ Thornhill Road Area Drainage Improvements**

**Jurisdiction: Okaloosa County Contact Person/Information: \_\_\_\_\_**

**1. General Description and Rationale**  
 Regional stormwater management and drainage improvements  
  
 Timeframe for completion: 770 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**  
**2.a. LMS Goals and Strategies:**  
  
**2.b. Comprehensive Plan:** Goal 1 of Section 2.6, Correct existing storm water management deficiencies by implementing improvements adopted in the 5-year Schedule of Capital Improvements, developing and implementing a Storm water Master Plan, and paving roads according to adopted level of service standards.  
  
**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 5,000,000.00

<b>Is this project fully funded?</b>
_____ Yes <input checked="" type="checkbox"/> No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

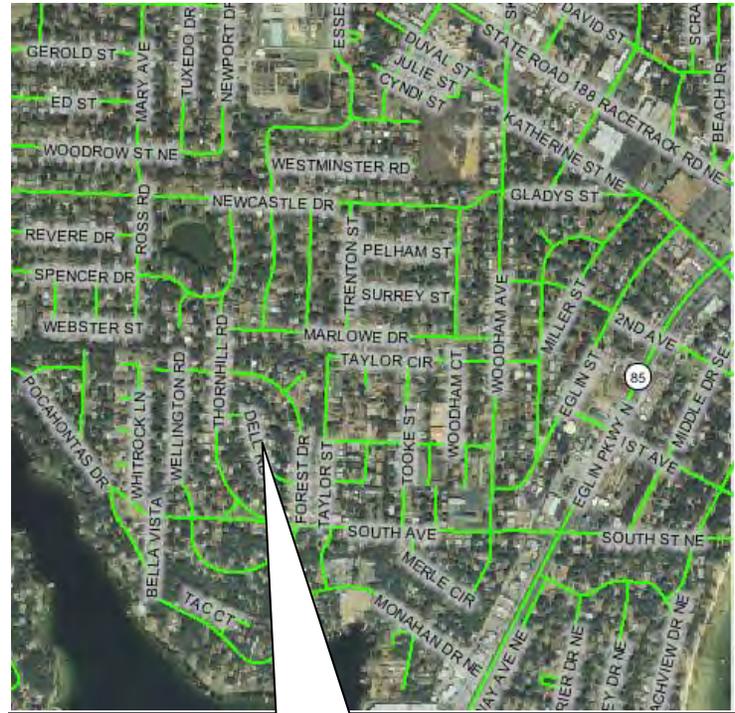
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

This project is not funded, only defined as a need.

**5. Location Map**



South Ave Drainage Area

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Shady Lane/Woodlawn Drainage Problems**

**Jurisdiction: City of Crestview Contact Person/Information: Eric Davis**

**1. General Description and Rationale**

Persistent drainage problems in the Shady Lane and Woodlawn Ave area create severe problems during heavy storm events, including flooding and road closures

**Timeframe for Completion:** 150 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Goal #5 – Reduce or eliminate hazards

Strategy 6.3.B Flooding – Bridge and Highway construction – Elevate roadways and improve storm water drainage system

**2.b. Comprehensive Plan:** Goal 10.C – Stormwater goals, objectives and policies. Section 15.02 Levels of service

**2.c. Is this project level of service or concurrency related:** LOS X Yes \_\_\_ No Concurrency X Yes \_\_\_ No

**3. Budgetary Information:**

Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes X No

**3.a. Estimated Project Cost:** \$412,000.00

**Is this project fully funded?**

\_\_\_ Yes X No

**3.b. Funding Plan (\$ in 000's)**

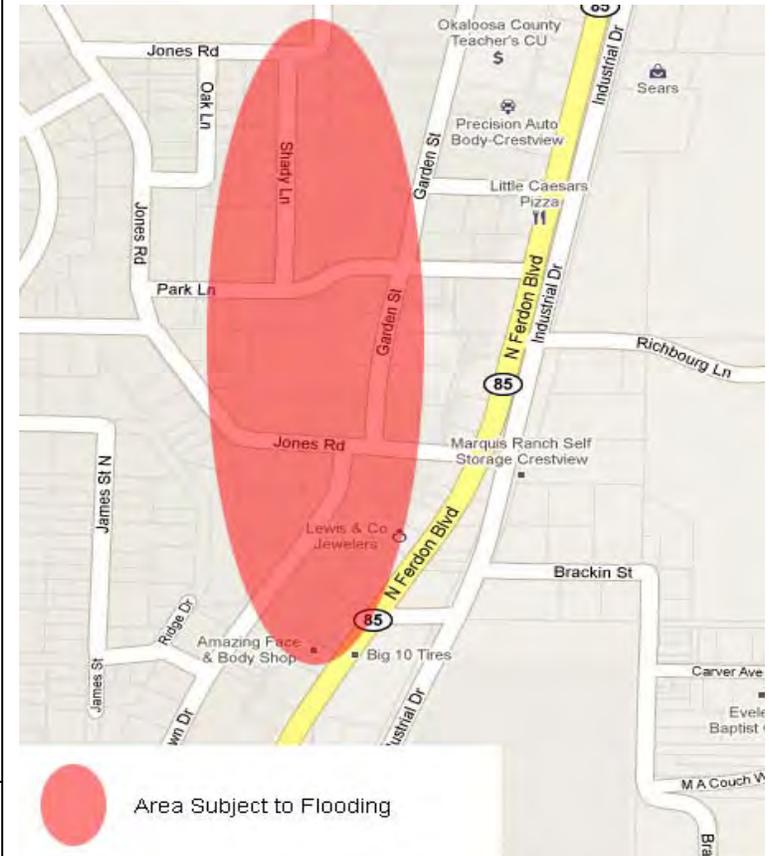
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
N/A							

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
N/A							

**4. Statement of Operating Budget Impact:** No funds have been identified for this project.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Chicago Avenue and Steel Mill Creek**

**Jurisdiction: City of Laurel Hill Contact Person/Information: Stephanie Davis**

**1. General Description and Rationale**  
Culvert is too small to accommodate stormwater runoff

**Timeframe for completion:** 120 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:**

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$ \_30,000.00 \_

<b>Is this project fully funded?</b>
___ Yes ___ No

**3.b. Funding Plan (\$ in 000's)**

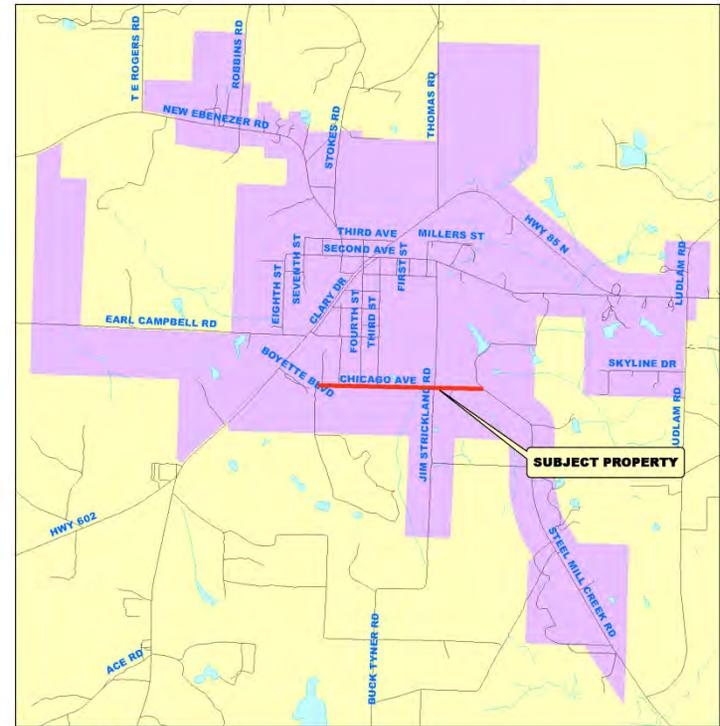
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map** **CITY OF LAUREL HILL**



**Legend**  
 CITY OF LAUREL HILL  
 UNINCORPORATED  
 Roads

**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Chicago Avenue Pipe Crossing**

**Jurisdiction: City of Laurel Hill Contact Person/Information: Stephanie Davis**

**1. General Description and Rationale**  
Culvert is too small to accommodate stormwater runoff

**Timeframe for Completion:** 120 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:**

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$ \_30,000.00 \_

<b>Is this project fully funded?</b>
___ Yes ___ No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

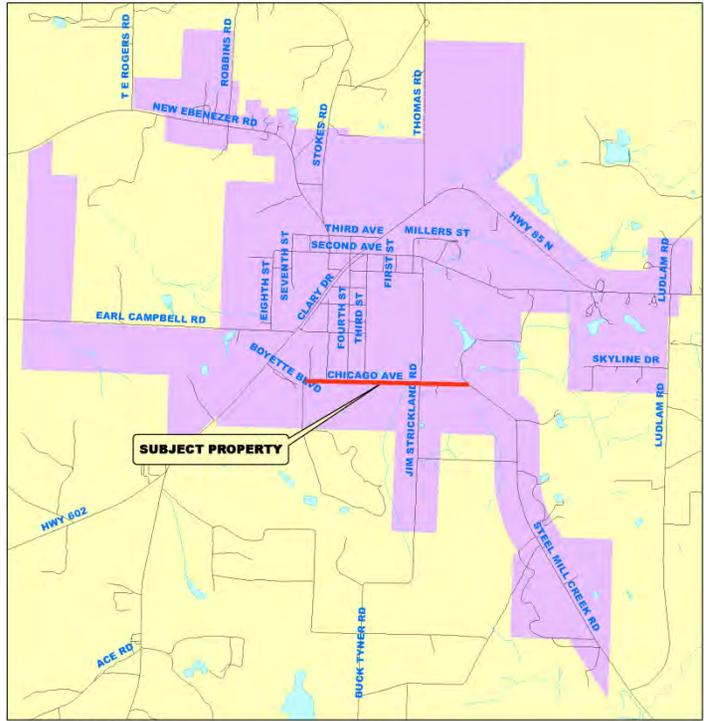
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**

**CITY OF LAUREL HILL**



**Legend**  
 CITY OF LAUREL HILL  
 UNINCORPORATED  
 — Roads



**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Racetrack Road Sanitary Sewer Rehab**

**Jurisdiction: Okaloosa County Contact Person/Information: Mark Wise, P.E. – Engineering Manager**

**1. General Description and Rationale**

Rehab on 18" gravity sewer line made of vitrified clay. It is crumbling and allowing sand, roots, inflow, and infiltration (I&I) into the sewer system. Difficult for sewer system during large rain events and flooding. Could potentially cause a large sinkhole in the middle of Racetrack Road.

**Timeframe for completion:** 6 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** **Goal 5** – Reduce or eliminate hazards identified to at risk locations in the County and its municipalities by implementing the mitigation actions.

**2.b. Comprehensive Plan:** Goal 1 of Section 2.4: Provide environmentally safe and efficient wastewater treatment and disposal systems. OCWS' 5-year C.I.P. has some money in it each year for line rehab projects, but it is unfunded, especially for a project this large.

**2.c.** Is this project level of service or concurrency related: LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 1,800,000.00

**Is this project fully funded?**

Yes  No

**3.b. Funding Plan (\$ in 000's)**

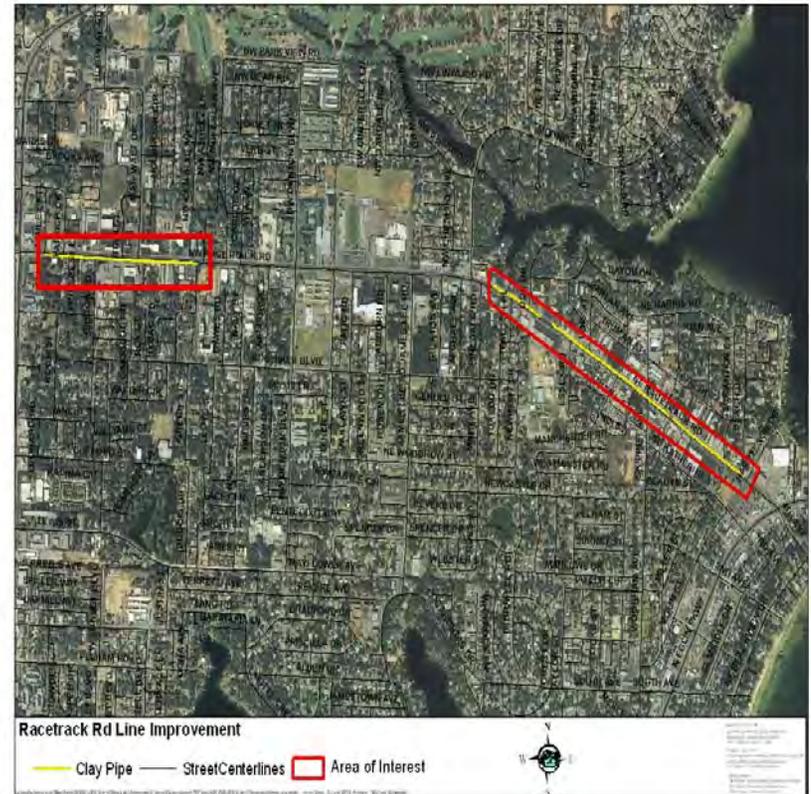
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
OCWS Enterprise Fund (unfunded).	0	0	0	0	0	0	0
							<b>0</b>

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
To be determined	0	TBD	TBD	TBD	TBD	TBD	TBD

**4. Statement of Operating Budget Impact:** Rehab is in the C.I.P., but unfunded. To accomplish this, O.C.W.S. would need to borrow money, in which the debt service would be ultimately passed on to our customers, and possibly a rate increase would be needed.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Force main upgrade, Lift Station #10**

**Jurisdiction: City of Crestview Contact Person/Information: Eric Davis**

**1. General Description and Rationale**

Increased flows during heavy rains and hurricane conditions overwhelm the force main at Lift Station #10 that serves the county jail and surrounding area.

**Timeframe for completion:** 90 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Goal #5 – Reduce or eliminate hazards.

**2.b. Comprehensive Plan:** Goal 10.A – Provide an environmentally safe and efficient wastewater treatment system.

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes X No Concurrency \_\_\_ Yes X No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes X No

**3.a. Estimated Project Cost:** \$300,000.00

**3.b. Funding Plan (\$ in 000's)**

<b>Is this project fully funded?</b>		
___ Yes	<u>X</u> No	

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
N/A							

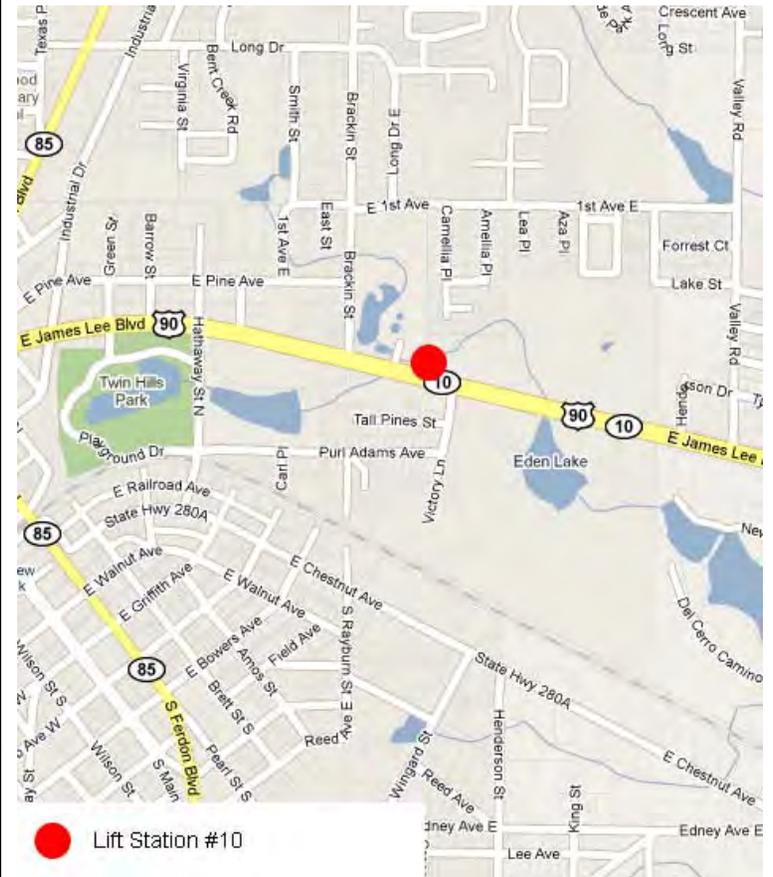
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
N/A							

**4. Statement of Operating Budget Impact:**

**No funds identified at this time for project.**

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Elevation of Repetitive Loss Structures**

**Jurisdiction: City of Fort Walton Beach Contact Person/Information: Michael Beedie, P.E., City Engineer**

**1. General Description and Rationale**

Several wood frame houses with a crawl space underneath are in need of elevation or acquisition due to frequent flooding during storm events.

**Timeframe for completion:** 1 year

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

6.3.A- Existing Building Mitigation in Flood-prone Locations

**2.b. Comprehensive Plan:**

Goal E, Objective E.5, Policy E.5.2

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes x No Concurrency \_\_\_ Yes x No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes x No

**3.a. Estimated Project Cost:** \$ 540,000.00

**Is this project fully funded?**

\_\_\_ Yes x No

**3.b. Funding Plan (\$ in 000's)**

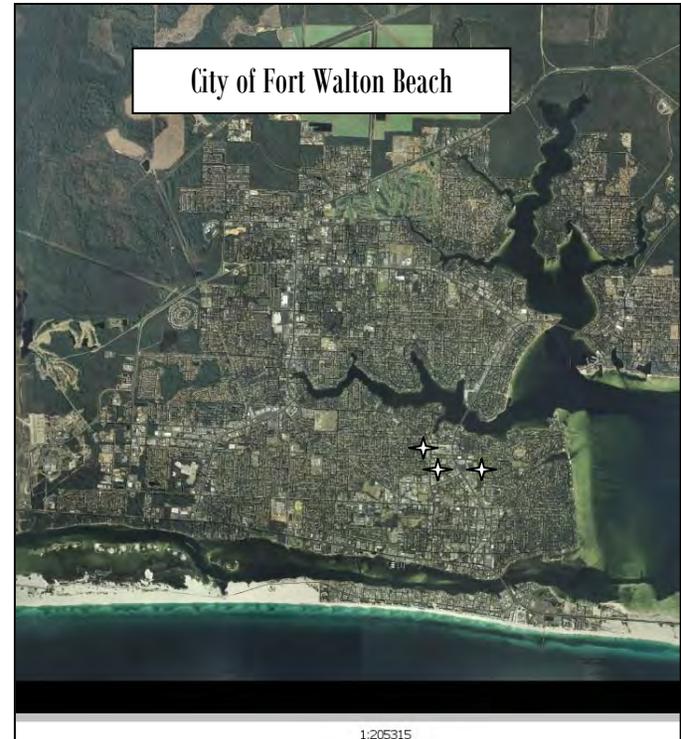
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

Project Name: Intersection Mast Arms

Jurisdiction: City of Fort Walton Beach Contact Person/Information: Michael Beedie, P.E., City Engineer

**1. General Description and Rationale**

All traffic signals that are not currently on mast arms rated at 140mph need to be updated. There are six intersections for a total of 18 mast arms needed at the following locations:

- Hollywood Blvd/Eglin Pkwy- 4 corners
- Hollywood Blvd/Robinwood- 4 corners
- Hollywood Blvd/Memorial Pkwy- 4 corners
- Hollywood Blvd/Wright Pkwy- 4 corners
- Mid-block crossing on South Wright Pkwy -1
- Fire Exit Signal at Lewis Turner Blvd- 1

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

Building Construction and Wind Communications

**2.b. Comprehensive Plan:**

Goal E, Objective E.6

**2.c.** Is this project level of service or concurrency related: LOS \_\_\_ Yes \_\_\_x\_\_\_ No Concurrency \_\_\_ Yes \_\_\_x\_\_\_ No

**Timeframe for completion: 1 year**

**3. Budgetary Information:**

Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$896,000.00

**Is this project fully funded?**

\_\_\_ Yes \_\_\_x\_\_\_ No

**3.b. Funding Plan (\$ in 000's)**

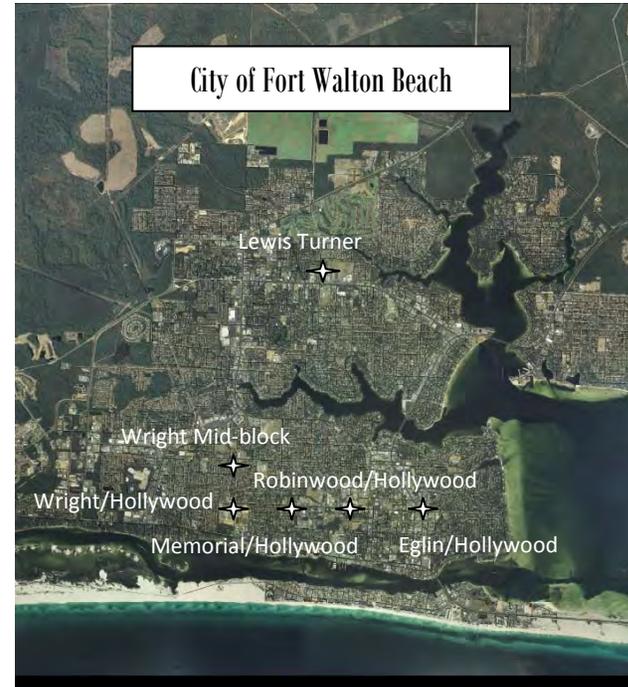
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
City of Fort Walton Beach		\$224					\$224

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Hollywood/Eglin		\$224					\$224

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Elevated Potable Water Storage Tank – Kennedy Lakes area**

**Jurisdiction: City of Crestview Contact Person/Information: Eric Davis**

**1. General Description and Rationale**

The Kennedy Lakes area in NW Crestview is plagued by low water pressures. While the pressure is adequate to provide water to residences, it is dangerously low for fire protection. The storage tank is necessary to provide additional storage and head pressure to fight wildfires or multiple structure fires in this area.

**Timeframe for completion:** 270 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Goal #5 – Reduce or eliminate hazards. Strategy 6.3.J – Water Supplies.

**2.b. Comprehensive Plan:** Goal 10.D – Provide an environmentally safe and efficient system for potable water.

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_X No Concurrency \_\_\_ Yes \_\_\_X No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$1,000,000.00

<b>Is this project fully funded?</b>		
___ Yes	___X___ No	

**3.b. Funding Plan (\$ in 000's)**

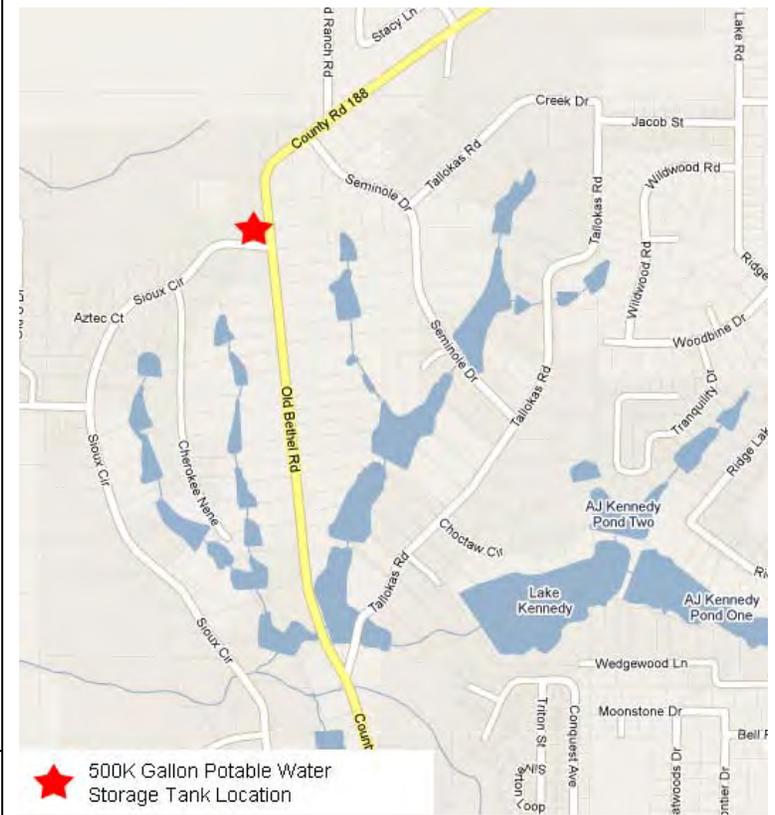
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
User Fees	0	0	1000	0	0	0	1000

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
500,000 gallon Storage Tank			1000				1000

**4. Statement of Operating Budget Impact:** Planned for construction after the construction of a new 1mgd well in FY2011.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Port Dixie Stormwater System Repair**

**Jurisdiction: Okaloosa County Contact Person/Information: Jason Autrey**

**1. General Description and Rationale**  
 Stormwater drainage analysis and infrastructure repair/replacement for the Port Dixie drainage area to resolve regional flooding and stormwater problems.

**Timeframe for Completion: 770 Days**

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:** Goal 1 of Section 2.6, Correct existing storm water management deficiencies by implementing improvements adopted in the 5-year Schedule of Capital Improvements, developing and implementing a Storm water Master Plan, and paving roads according to adopted level of service standards.

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 5,000,000.00

<b>Is this project fully funded?</b>
_____ Yes <input checked="" type="checkbox"/> No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

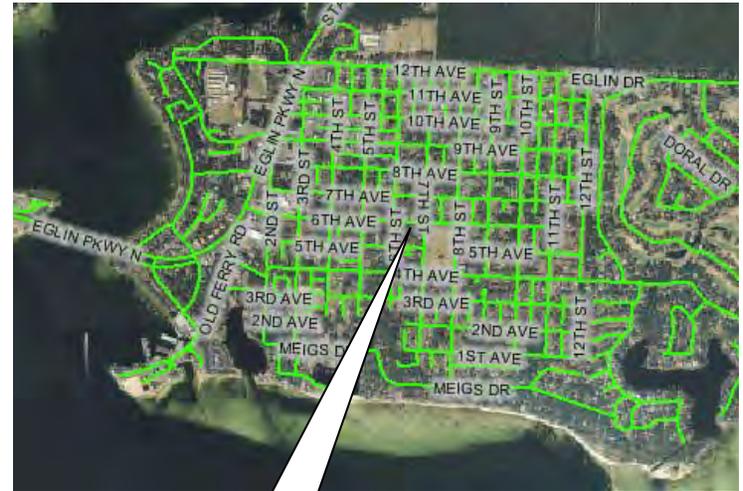
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

This project is identified as a need, but has no identified funding.

**5. Location Map**



Port Dixie  
Drainage Area

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Northern Pines – Forest Heights Area Drainage Improvements**

**Jurisdiction: Okaloosa County Contact Person/Information: Jason Autrey**

**1. General Description and Rationale**  
 Regional stormwater management and drainage improvements  
  
**Timeframe for completion: 770 days**

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**  
**2.a. LMS Goals and Strategies:**  
  
**2.b. Comprehensive Plan:** Goal 1 of Section 2.6, Correct existing storm water management deficiencies by implementing improvements adopted in the 5-year Schedule of Capital Improvements, developing and implementing a Storm water Master Plan, and paving roads according to adopted level of service standards.  
  
**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 5,000,000.00

<b>Is this project fully funded?</b>
_____ Yes <input checked="" type="checkbox"/> No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

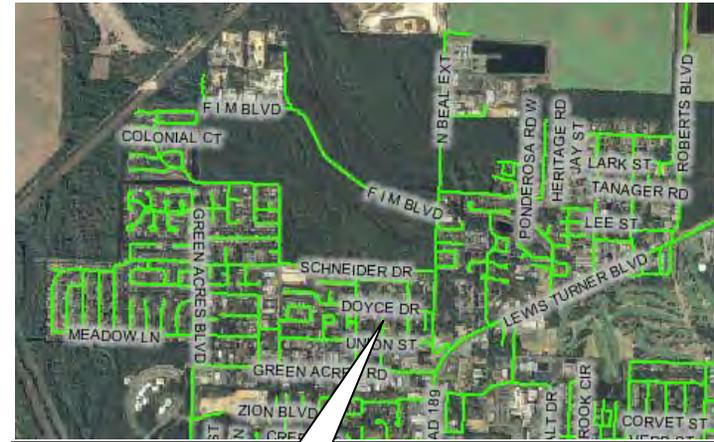
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

This project is not funded, only identified as a need.

**5. Location Map**



Northern Pines  
Drainage Area

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Bryn Mawr Subdivision Drainage**

**Jurisdiction: City of Mary Esther Contact Person/Information: Lynn Oler**

**1. General Description and Rationale**  
Stormwater drainage

**Timeframe for completion: 120 days**

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:**

**2.c. Is this project level of service or concurrency related: LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No**

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$ \_700,000.00 \_

<b>Is this project fully funded?</b>	
___ Yes ___ No	

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**

**CITY OF MARY ESTHER**



**Legend**

- CITY OF MARY ESTHER
- CITY OF FORT WALTON BEACH
- UNINCORPORATED
- HURLBURT FIELD
- Roads

**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Hollywood Blvd. Stormwater System Repair**

**Jurisdiction: Okaloosa County Contact Person/Information: Jason Autrey, Engineering Manager**

**1. General Description and Rationale**

Existing corrugated metal piping stormwater system requires replacement due to failures that cause sinkholes in the roadway.

**Timeframe for completion:** May 15, 2010

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:** Goal 1 of Section 2.6, Correct existing storm water management deficiencies by implementing improvements adopted in the 5-year Schedule of Capital Improvements, developing and implementing a Storm water Master Plan, and paving roads according to adopted level of service standards.

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:**

Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 1,500,000.00

**Is this project fully funded?**

Yes  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
American Reinvestment and Recovery Act (ARRA)	\$1,500,000						\$1,500,000

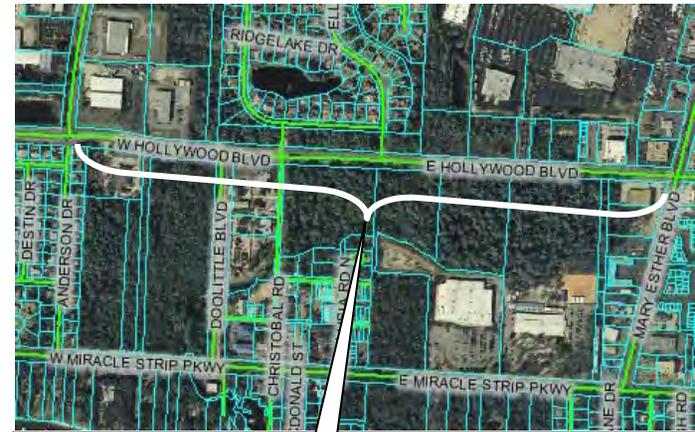
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Construction	\$1,500,000						\$1,500,000

**4. Statement of Operating Budget Impact:**

Funded solely because of ARRA Federal Program award

**5. Location Map**



Site

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Acquisition of Emergency Generators and Traffic Signal Quick Disconnects**

**Jurisdiction: City of Crestview Contact Person/Information: Eric Davis**

**1. General Description and Rationale**

Acquisition of dedicated portable generators and quick disconnects for traffic signals so that vehicles can safely operate during a loss of electrical power associated with a hurricane or other disaster

**Timeframe for completion:** 60 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Goal #5 – Reduce or eliminate hazards. Strategies – 6.3.A, 6.3.B – Bridge and Highway construction.

**2.b. Comprehensive Plan:** Goal 8.A – Provide a safe, cost effective and functional transportation system. Policy 8.A.2.1 – LOS standards. Section 15.02 – Levels of Service.

**2.c. Is this project level of service or concurrency related:** LOS X Yes \_\_\_ No Concurrency X Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes X No

**3.a. Estimated Project Cost:** \$3,300.00

**Is this project fully funded?**  
 \_\_\_ Yes X No

**3.b. Funding Plan (\$ in 000's)**

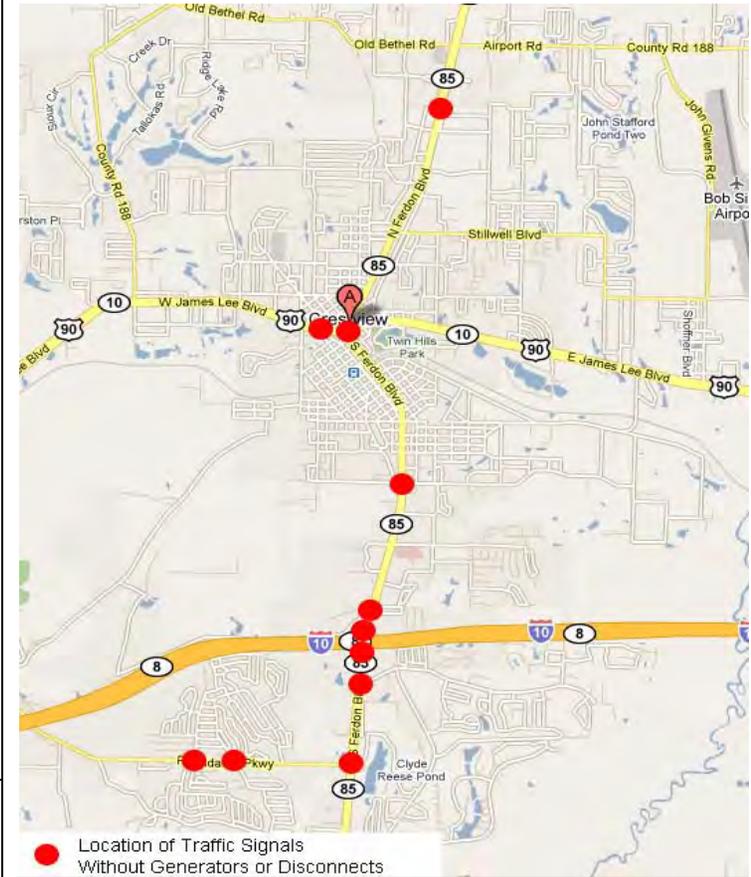
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
N/A							

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
N/A							

**4. Statement of Operating Budget Impact:** No funds have been identified for this project. Estimated project cost based #300 per intersection for eleven intersections.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: New Controls for Okaloosa Island Lift Stations**

**Jurisdiction: Okaloosa County Contact Person/Information: Mark Wise, P.E. – Engineering Manager**

**1. General Description and Rationale**

Replace electrical and control systems at 3 coastal lift stations that have been damaged by wind and salt.

**Timeframe for completion: 1 year**

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies: Goal 5** – Reduce or eliminate hazards identified to at risk locations in the County and its municipalities by implementing the mitigation actions.

**2.b. Comprehensive Plan:** Goal 1 of Section 2.4: Provide environmentally safe and efficient wastewater treatment and disposal systems.

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 225,000.00

<b>Is this project fully funded?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**3.b. Funding Plan (\$ in 000's)**

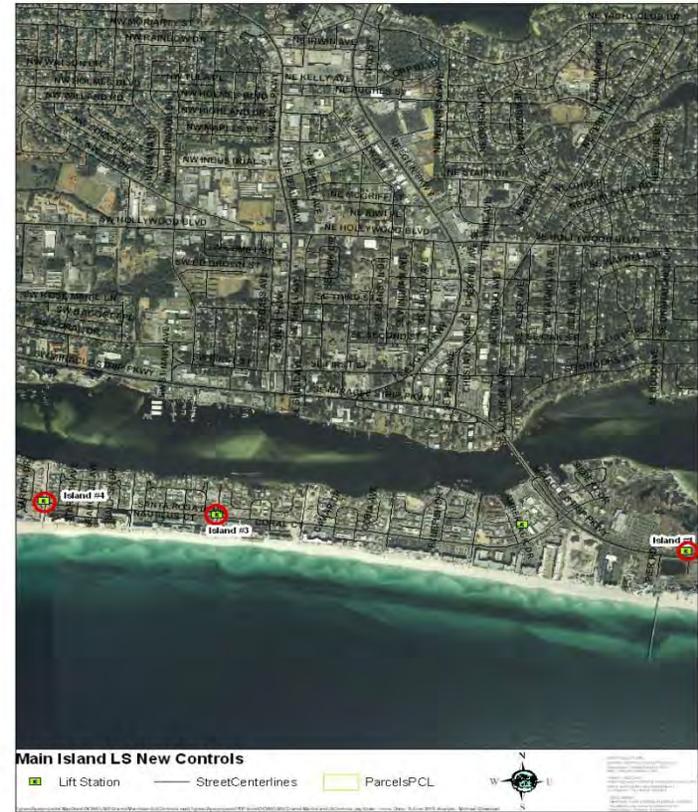
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
OCWS Enterprise Fund (unfunded).	0	0	0	0	0	0	0
							<b>0</b>

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
To be determined		TBD	TBD	TBD	TBD	TBD	TBD

**4. Statement of Operating Budget Impact:** Not in rate model/budget. To accomplish this, O.C.W.S. would need to borrow money, in which the debt service would be ultimately passed on to our Customers, and possibly a rate increase would be needed.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: 8 Traffic Signals – Quick Disconnect for Highway 98**

**Jurisdiction: City of Destin Contact Person/Information: Steven R. Schmidt**

**1. General Description and Rationale**

To provide hardware to interface post-storm power sources to aid in efficient traffic control and to free up emergency personnel for other security and/or clean up efforts.

**Timeframe for completion:** 6 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Objective 2.20; Objective 8.01  
Policy 2.02.01; Policy 8.01.01

**2.b. Comprehensive Plan:**

Policy 6-1.9.3: Future Coordination with the County in Emergency Preparedness.  
Policy 6-1.10.1: Recovery Operations and Post-Disaster Redevelopment.  
Policy 6-1.10.3: Repair and Cleanup.

**2.c.** Is this project level of service or concurrency related: LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$40,000.00

**Is this project fully funded?**  
 Yes  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
No funding available							

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
No funding available							

**4. Statement of Operating Budget Impact:** None anticipated

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Sylvania Heights Drainage Improvements Phase 2**

**Jurisdiction: Okaloosa County Contact Person/Information: \_\_\_\_\_**

**1. General Description and Rationale**  
 Retrofit drainage improvements to reduce flooding potential.

**Timeframe for completion: 770 days**

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:** Goal 1 of Section 2.6, Correct existing storm water management deficiencies by implementing improvements adopted in the 5-year Schedule of Capital Improvements, developing and implementing a Storm water Master Plan, and paving roads according to adopted level of service standards.

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 5,000,000.00

<b>Is this project fully funded?</b>
_____ Yes <input checked="" type="checkbox"/> No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

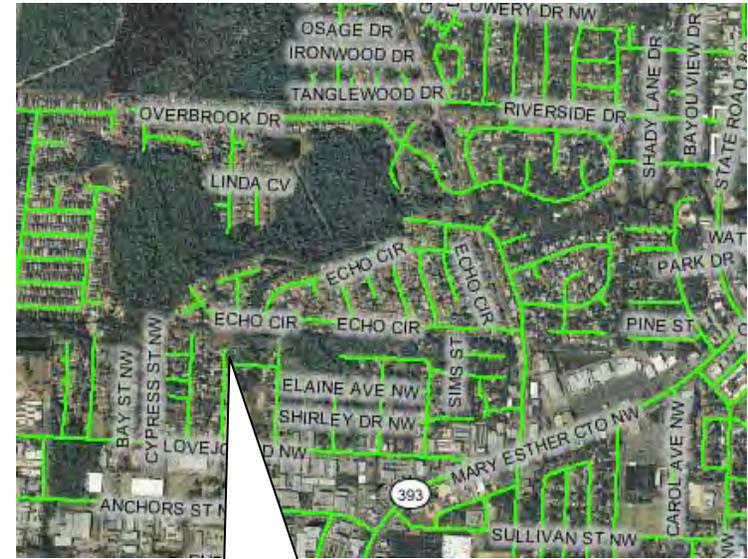
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

This project is not funded, only identified as a need.

**5. Location Map**



Sylvania Heights Drainage Area

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

Project Name: Shoal River Drive

Jurisdiction: Okaloosa County Contact Person/Information: Jason Autrey, Okaloosa County PW & Lance Laird, NWFLWMD

**1. General Description and Rationale**  
 Replace old piping in existing dam on golf course lake. NOTE: Shoal River Drive is located on top of this dam.  
  
**Timeframe for completion:** 90 days  
 (30 days & \$150,000.00 for dam repair & 60 days & \$150,000.00 for road repair)

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**  
 2.a. LMS Goals and Strategies:  
  
 2.b. Comprehensive Plan:  
  
 2.c. Is this project level of service or concurrency related: LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

**3.a. Estimated Project Cost:** \$\_300,000.00\_\_

<b>Is this project fully funded?</b>
___ Yes ___ X ___ No

**3.b. Funding Plan (\$ in 000's)**

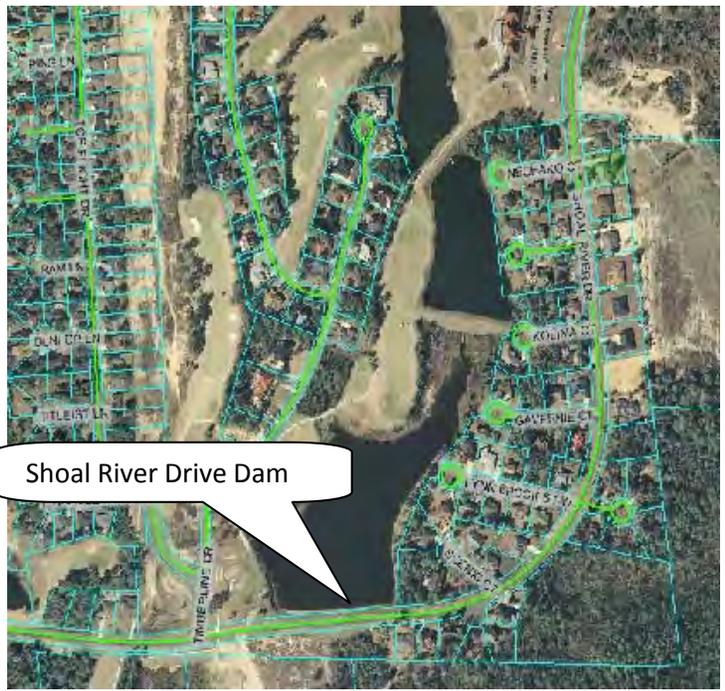
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**



Shoal River Drive Dam

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Lions Park Upland Retaining Wall**

**Jurisdiction: City of Niceville Contact Person/Information: \_\_\_\_\_**

**1. General Description and Rationale**

Severe erosion along the upland area of Lions Park along the northern boundary

**Timeframe for completion:** 30 days

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

**2.b. Comprehensive Plan:**

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes X No

**3.a. Estimated Project Cost:** \$ 12,000.00

**Is this project fully funded?**

\_\_\_ Yes X No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

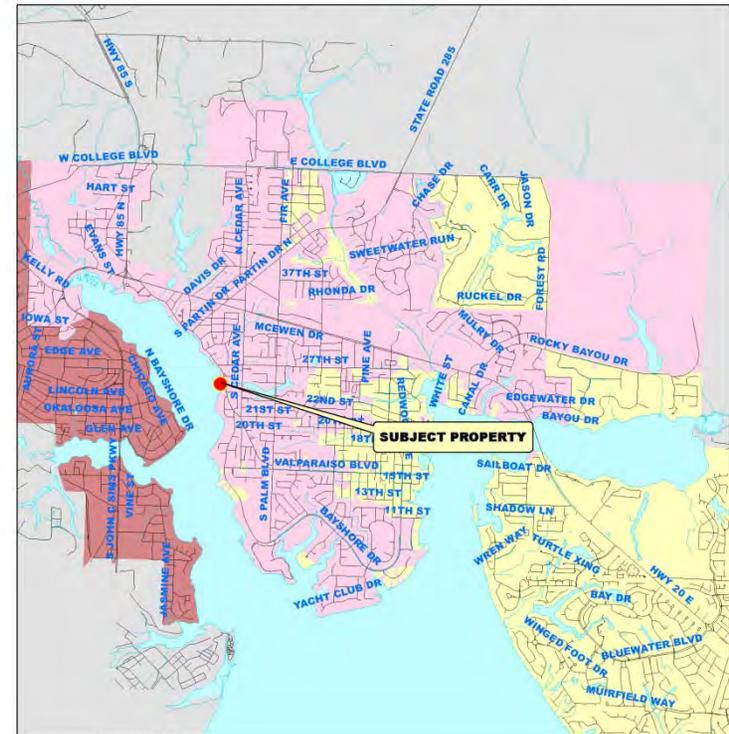
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**

**CITY OF NICEVILLE**



**Legend**

- CITY OF NICEVILLE
- CITY OF VALPARAISO
- UNINCORPORATED
- Roads



**Location Map**

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Portable Generators for Traffic Signals**

**Jurisdiction: City of Destin Contact Person/Information: Steven R. Schmidt**

**1. General Description and Rationale**

To provide a post-storm power source for traffic signals to move traffic and free up emergency personnel for other security and/or clean up efforts.

**Timeframe for completion:** 6 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Objective 2.20; Objective 8.01  
Policy 2.02.01; Policy 8.01.01

**2.b. Comprehensive Plan:**

Policy 6-1.9.3: Future Coordination with the County in Emergency Preparedness.  
Policy 6-1.10.1: Recovery Operations and Post-Disaster Redevelopment.  
Policy 6-1.10.3: Repair and Cleanup.

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$35,000.00

**Is this project fully funded?**  
 Yes  No

**3.b. Funding Plan (\$ in 000's)**

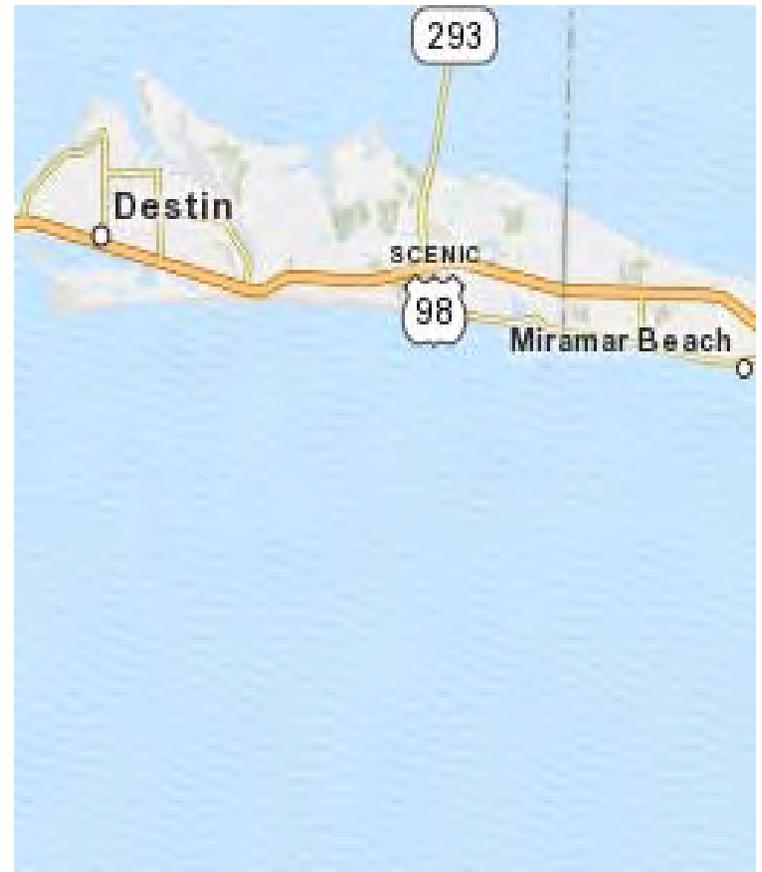
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
No funding available							

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
No funding available							

**4. Statement of Operating Budget Impact:** None anticipated

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Traffic Signal Upgrade to Mast Arm**

**Jurisdiction: City of Crestview Contact Person/Information: Eric Davis**

**1. General Description and Rationale**

Only a few of the traffic signals in Crestview have been upgraded to mast arms. Because the major highways in Crestview are hurricane evacuation routes the mast arms are needed to resist damage by high winds.

**Timeframe for completion:** 6 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Goal #5 – Reduce or eliminate hazards. Strategy 6.3.A – Bridge and highway construction

**2.b. Comprehensive Plan:** Goal 8.A Provide safe, cost effective and functional transportation system.

**2.c. Is this project level of service or concurrency related:** LOS  Yes \_\_\_ No Concurrency \_\_\_ Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes  No

**3.a. Estimated Project Cost:** \$3,000,000.00

**Is this project fully funded?**

\_\_\_ Yes  No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
N/A							

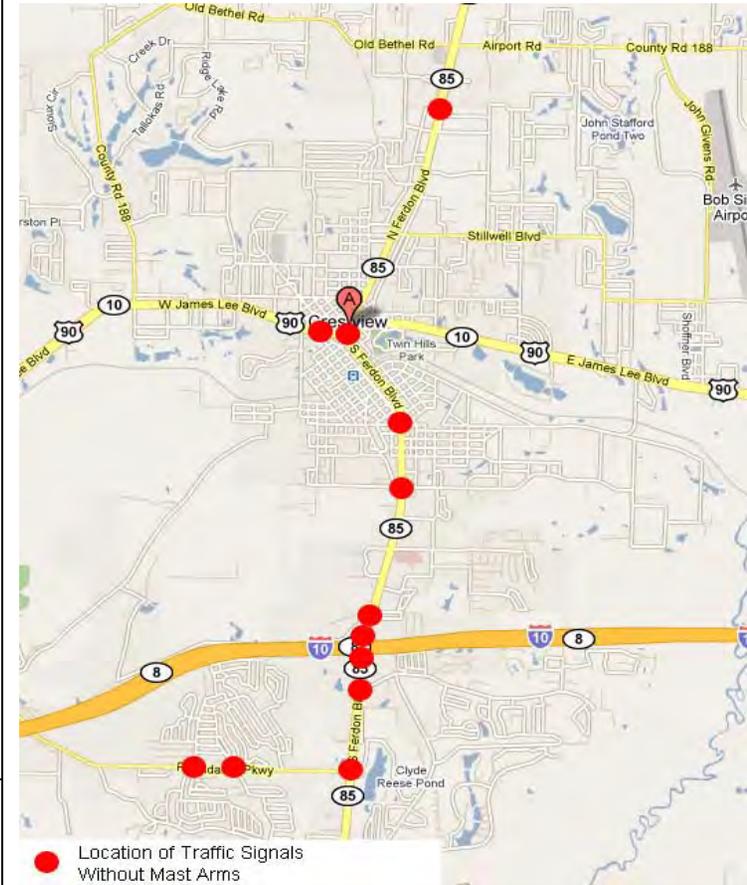
**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
N/A							

**4. Statement of Operating Budget Impact:**

No funds have been identified for this project. Estimated cost based on \$250,000 per intersection.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Armoring Critical Facilities**

**Jurisdiction: City of Fort Walton Beach Contact Person/Information: Michael Beedie, P.E., City Engineer**

**1. General Description and Rationale**

Fred Hedrick and Chester Pruitt Recreation Centers are utilized as storm shelters and should be retrofitted for 140mph wind resistance.

**Timeframe for completion:** 6 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

6.3.A Structural Soundness of Existing Local Government Centers

6.3.A Availability of Public Sheltering

**2.b. Comprehensive Plan:**

Goal H, Policy H.1.4

**2.c. Is this project level of service or concurrency related:** LOS  Yes  No Concurrency  Yes  No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

**3.a. Estimated Project Cost:** \$ 138,000.00

**Is this project fully funded?**

Yes  No

**3.b. Funding Plan (\$ in 000's)**

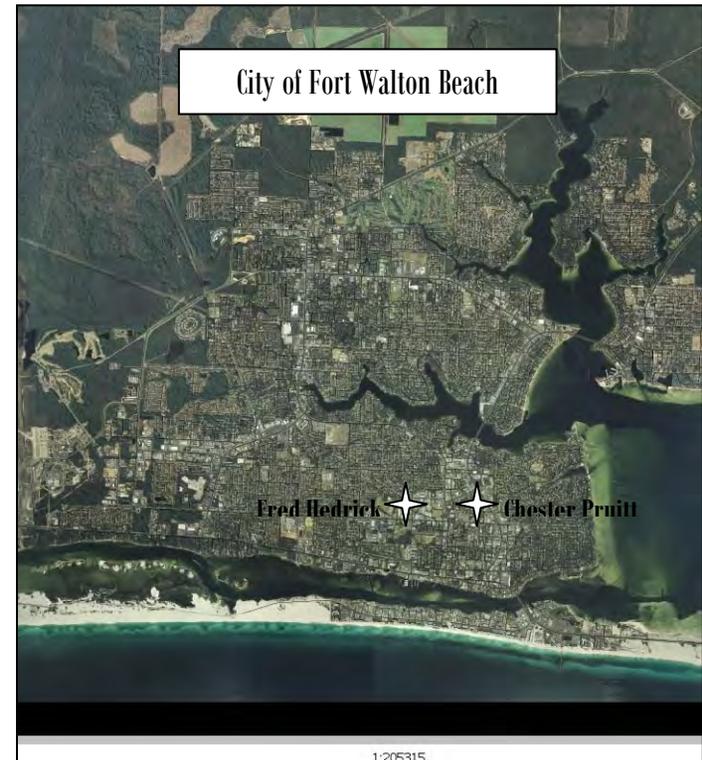
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
City of Fort Walton Beach							

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Permanent Stabilization of Norriego Point**

**Jurisdiction: City of Destin Contact Person/Information: \_\_\_\_\_**

**1. General Description and Rationale**

Norriego Point is the tip of Holiday Isle that provides protection for the Destin harbor from storms. This project anticipates stabilizing or "hardening" the point for improved storm protection, minimizing harbor channel shoaling and to preserve habitat and recreational areas provided by the point.

**Timeframe for Completion:** 2 years

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:** Objective 2.02; Goal 8.00; Objective 8.03

Policy 2.02.01; Policy 8.01.01; Policy 8.03.02

**2.b. Comprehensive Plan:** Policy 5-1.4.10, Policy 5-1.7.4; Policy 6-1.1.10, Policy 6-1.3.9; Policy 7-1.2.8

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes X No Concurrency \_\_\_ Yes X No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes X No

**3.a. Estimated Project Cost:** \$7,000,000.00

**Is this project fully funded?**

\_\_\_ Yes X No

**3.b. Funding Plan (\$ in 000's)**

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total
City of Destin	\$144						

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total
Design & eng.	\$144						

**4. Statement of Operating Budget Impact:** The proposed stabilization of Norriego Point would improve the City's operating budget inasmuch as it should help to minimize the need for periodic emergency dredging operations to keep the harbor channel navigable.

**5. Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

Project Name: New Public Works Maintenance Facility

Jurisdiction: City of Valparaiso Contact Person/Information: Carl Scott

**1. General Description and Rationale**  
 Construct new public works maintenance garage in accordance with Florida Building Code  
  
**Timeframe for completion:** 18 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**  
 2.a. LMS Goals and Strategies:  
 2.b. Comprehensive Plan:  
 2.c. Is this project level of service or concurrency related: LOS \_\_\_ Yes \_\_\_ No Concurrency \_\_\_ Yes \_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_ No

3.a. **Estimated Project Cost:** \$ 750,000.00

<b>Is this project fully funded?</b>
___ Yes ___ <input checked="" type="checkbox"/> No

3.b. Funding Plan (\$ in 000's)

Source	Allocated in Prior FYs	FY11	FY12	FY13	FY14	FY15	Total

3.c. Expenditure Plan (\$ in 000's)

Item	Prior FY Expend.	FY11	FY12	FY13	FY14	FY15	Total

**4. Statement of Operating Budget Impact:**

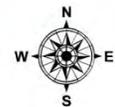
**5. Location Map**



**Legend**

- Roads
- VALPARAISO
- UNINCORPORATED
- EGLIN AFB

**Location Map**



**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

**Project Name: Wind Retrofit of Golf Course Clubhouse & Develop Backup**

**Jurisdiction: City of Fort Walton Beach Contact Person/Information: Michael Beedie, P.E., City Engineer**

**1. General Description and Rationale**

The Golf Course Clubhouse does not currently meet the 140 mph wind code for building construction.

**Timeframe for completion:** 6 months

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

**2.a. LMS Goals and Strategies:**

6.3.A- Structural Soundness of Existing Local Govt Centers

**2.b. Comprehensive Plan:**

Goal H

**2.c. Is this project level of service or concurrency related:** LOS \_\_\_ Yes \_\_\_x\_\_\_ No Concurrency \_\_\_ Yes \_\_\_x\_\_\_ No

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program? \_\_\_ Yes \_\_\_X\_\_\_ No

**3.a. Estimated Project Cost:** \$\_100,000.00

**Is this project fully funded?**

\_\_\_ Yes \_\_\_x\_\_\_ No

**3.b. Funding Plan (\$ in 000's)**

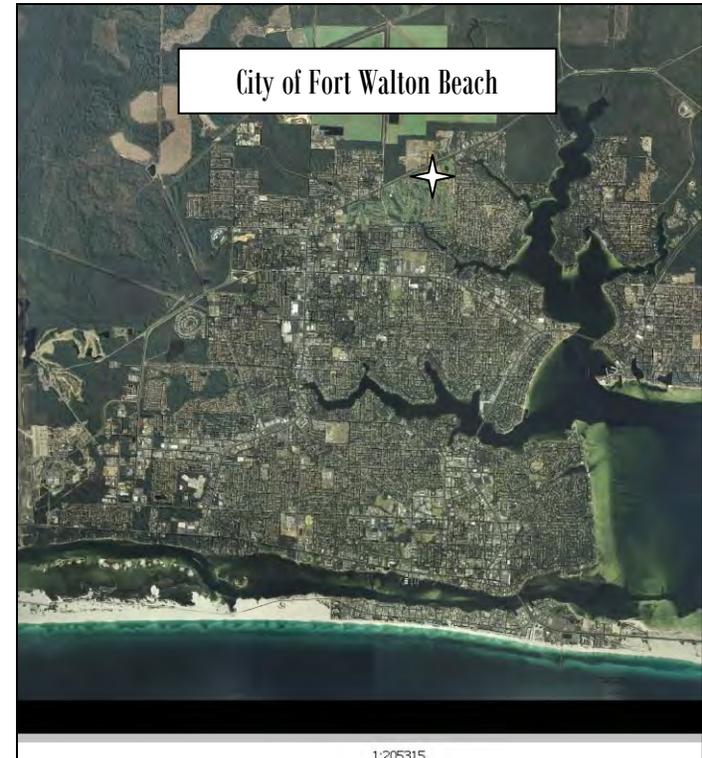
Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

**3.c. Expenditure Plan (\$ in 000's)**

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total

**4. Statement of Operating Budget Impact:**

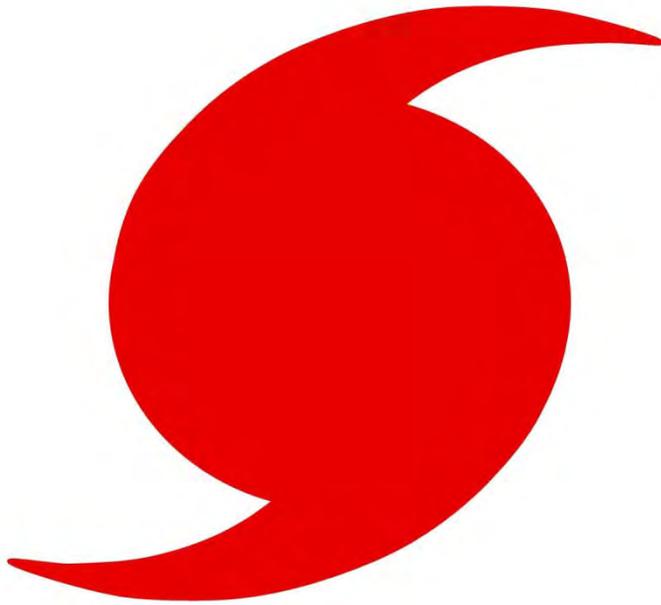
**5. Location Map**





# **Appendix G**

## **Legal Ad for LMS Public Workshops**





Legal Ad for LMS Public Workshops

Northwest Florida Daily News 200 Racetrack Rd NW Fort Walton Beach, FL 32549 Office 850-863-1111 Fax 850-314-7108	BILLING PERIOD		ADVERTISER/CLIENT NAME
	September-10		Department of Growth Management
	\$169.92		
			30/60/OVER 90 DAYS

Advertising Invoice & Statement

PAGE #	BILLING DATE	BILLED ACCOUNT NAME AND ADDRESS	REMITTANCE ADDRESS
1	9/13/2010	Department of Growth Management	
BILLED ACCOUNT NUMBER		812 E. James Lee Blvd.	P.O. BOX 2949
2013951		Crestview, FL 32539	FORT WALTON BEACH, FL 32549
		Attn: Sherry Reed	

DATE	NEWSPAPER REFERENCE	DESCRIPTION-COMMENTS/CHARGES	BILLED UNITS	TIMES RUN RATE	NET AMOUNT
09/13/10	2072108	Public Workshops (September)	2 x 4	1	\$169.92
		COURTESY INVOICE - NOT A BILL this may or may not reflect final charges			\$169.92
<b>TOTAL AMOUNT DUE</b>					<b>\$169.92</b>

SAR  
9-14-10



Legal Ad for LMS Public Workshops

NORTHWEST FLORIDA  
**Daily  
News**

Published Daily  
Fort Walton Beach, Florida  
Distributed in Okaloosa, Santa Rosa & Walton Counties

State of Florida, County of Okaloosa

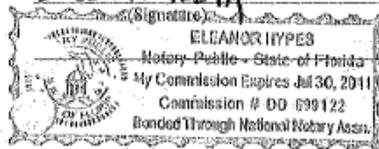
Before the undersigned authorized personally appeared \_\_\_\_\_  
Maurin Wiltsie, who on oath says that (s)he  
is Classified Advisor of the Northwest Florida Daily News, a daily  
newspaper published at Fort Walton Beach, in Okaloosa County, Florida;  
that the attached copy of advertisement, being a Legal 2072108  
in the matter of Notice  
Public Workshops - September  
in the Okaloosa County Court, was published in said newspaper in the issues of  
September 13, 2010

Affiant further says that the said Northwest Florida Daily News is a newspaper  
published at Fort Walton Beach, in said Okaloosa County, Florida, and that the said  
newspaper has heretofore been continuously published in said Okaloosa County, Florida,  
each day, and has been entered as second class mail matter at the post office in Fort Walton  
Beach, in said Okaloosa County, Florida, for a period of one year next preceding the first  
publication of the attached copy of advertisement; and affiant further says that (s)he has  
neither paid nor promised any person, firm or corporation any discount, rebate, commission  
or refund for the purpose of securing this advertisement for publication in the said newspaper.

STATE OF FLORIDA  
COUNTY OF OKALOOSA

Subscribed and sworn to (or affirmed) before me this 13 September 2010  
(Date)  
by Maurin Wiltsie, who is/are personally known to me or  
has/have produced Personally Known as identification.  
(Type of identification)

Eleanor Hypes Notary Public, Commission No. \_\_\_\_\_



(Name of Notary typed, printed or stamped)



Legal Ad for LMS Public Workshops

## NOTICE OF PUBLIC WORKSHOP

The Okaloosa County Local Mitigation Strategy Committee will hold two (2) public workshops to review the joint County/Cities Local Mitigation Strategy, including proposed projects and redevelopment plans, at the following times and locations:

**Wednesday, September 29, 2010 at 5:01 PM** in the 3rd floor conference room of the Okaloosa County Water and Sewer Administration Building, located at 1804 Lewis Turner Boulevard in Fort Walton Beach; and

**Wednesday, September 22, 2010 at 5:01** at the George Whitehurst Municipal Building, Warrior Hall, 201 Stillwell Blvd., Crestview, FL.

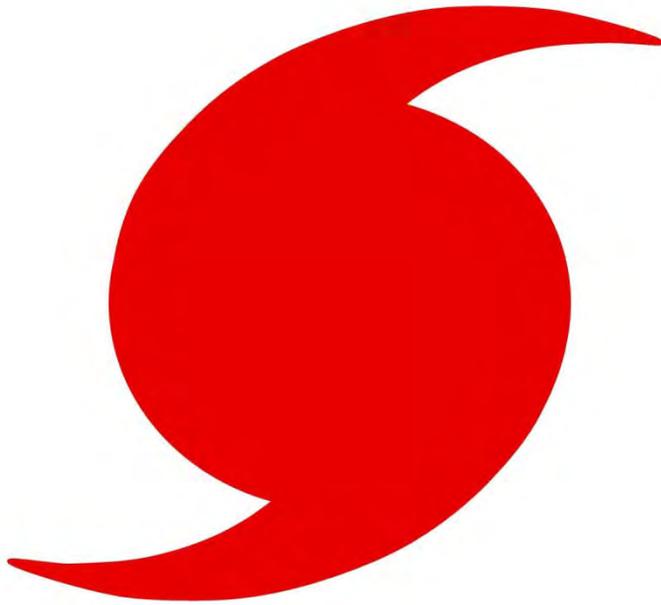
The draft Local Mitigation Strategy is available for inspection and may be reviewed at the Growth Management Office located on the second floor of the Okaloosa County Water and Sewer Administration Building located at 1804 Lewis Turner Boulevard in Fort Walton Beach or at the Growth Management office located at 402 Brookmeade Drive in Crestview.

The public is encouraged to attend these workshops to provide comment on the Local Mitigation Strategy being prepared by the County and its incorporated municipalities pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Any handicapped person requiring special accommodation at this workshop should contact Sherry Reed at 850-689-5080 at least four (4) calendar days prior to the date of the hearing. To access a Telecommunication Device for Deaf Persons (TDD) please call (800) 955-8771. Any non-English speaking person wishing to obtain information about the hearing or to request an interpreter for the hearing should also call Sherry Reed at 850-689-5080 at least four (4) calendar days prior to the hearing.

# **Appendix H**

## **LMS Public Workshop Fort Walton Beach**





# OKALOOSA COUNTY LOCAL MITIGATION STRATEGY 2011



PREPARED BY OKALOOSA LOCAL MITIGATION STRATEGY COMMITTEE SEPTEMBER 2010

# Okaloosa County Local Mitigation Strategy 2011

What is Local Mitigation Strategy?

- As defined by the Federal Emergency Management Agency (FEMA), a hazard mitigation plan is a long-term strategy for reducing losses.
- The LMS is a local government plan that is designed to reduce or eliminate risks to people and property from natural hazards.

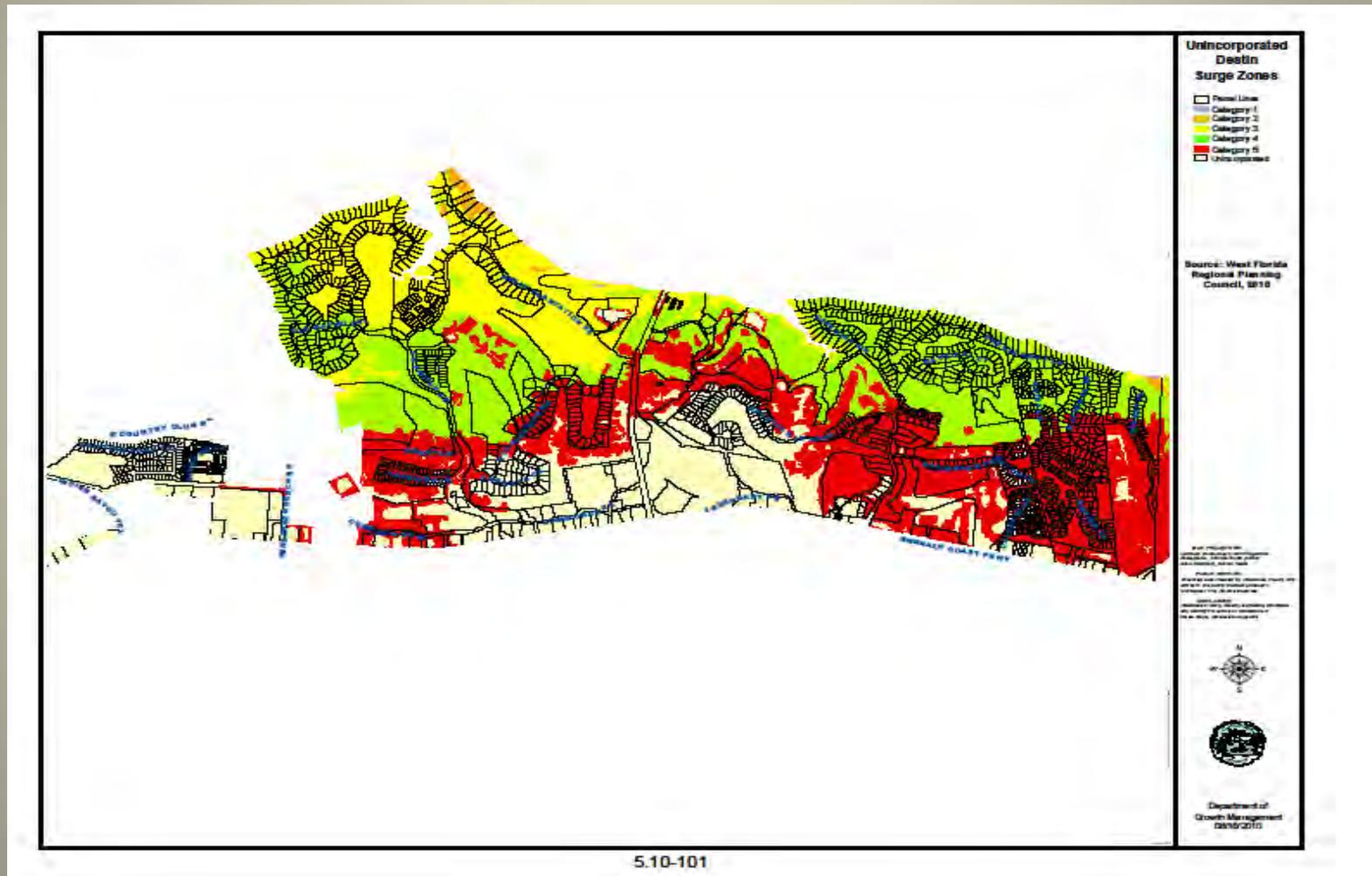
# Okaloosa County Local Mitigation Strategy 2011

- In order to maintain eligibility for certain types of state and federal funds, local governments must review and update their Local Mitigation Strategies every 5 years to reflect changes in development trends, monitor progress in mitigation efforts and make note of priority changes.
- Okaloosa County and the nine incorporated jurisdictions adopted the first Local Mitigation Strategy in 1998

# Okaloosa County Local Mitigation Strategy 2011

- Okaloosa County is exposed to the following natural hazards:
  - Hurricanes and Tropical Storms
  - Storm Surge
  - Flooding
  - Dam Safety
  - Land Erosion
  - Severe Storms ( Tornado & Water Spout, Thunderstorm & Lightning, and Winter Storms)
  - Heat Wave and Drought
  - Wildfire
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# Okaloosa County Local Mitigation Strategy 2011



# Okaloosa County Local Mitigation Strategy 2011



# Okaloosa County Local Mitigation Strategy 2011

2011 LMS assesses the problems associated with each hazard in a comprehensive three-step process for each jurisdiction

- **Risk Assessment** – defines the hazard and discusses historical occurrences, extent of damage and the probability of future occurrences
- **Vulnerability Assessment** - provides an estimate of the potential damage and economic loss for each building type that is susceptible to damage from the hazard
- **Mitigation Actions** - actions that are in effect in each jurisdiction in response to each hazard

# Okaloosa County Local Mitigation Strategy 2011

- ***Unincorporated Okaloosa County Hurricane Risk Assessment***

*EXTENT:*

- High winds from hurricanes are a substantial threat to all homes, especially manufactured housing. Category 3 or higher force winds would likely cause substantial damage throughout the unincorporated areas of the County. Winds in excess of 155 MPH could be experienced in a major Category 5 hurricane in some locations. Traditional stud and brick veneer or siding homes and businesses are vulnerable, as well, especially when hurricane shutters are not used. Relatively few businesses and homes have hurricane shutters in the County, although shelters and some critical facilities are shuttered.
- In the worst case scenario of a Category 5 hurricane, there will be catastrophic damage to homes and buildings, trees, power poles, and signage. Category 5 winds of in excess of 155 MPH will cause significant damage to all buildings, with loss of roof sheathing, broken windows, and in some cases wall failure resulting in a structural collapse. It is likely that any mobile home experiencing a Category 5 Hurricane winds would be completely destroyed. The majority of trees will be snapped in two and power poles downed. In some cases, this will result in power outages that could last for weeks or months. People and animals would be at an extremely high risk of injury or death as a result of the strong, forceful winds causing flying or falling debris.
- Evacuation zones have been established for each category of hurricane as depicted in Figures 5.10.01.02.1 through 5.10.01.02.7 which follow. In addition to winds, the expected storm surge, up to 21 feet associated with a Category 5 hurricane, will substantially impact the unincorporated coastal and bay areas in Okaloosa County, causing beach erosion to the coastal areas. Also, severe flooding will occur and likely cause polluted water, storm sewer overflow, and damage to roadways (NOAA, 2010). Storm surge will be examined in greater depth in the following section (5.10.01.3). Figure 5.10.01.02.1 displays the evacuation zones for all the southern unincorporated areas in Okaloosa County. The figures following depict the evacuation zones of the specific areas within unincorporated Okaloosa County, which corresponds to the various hurricane categories.
- Hurricane Ivan, a category 3 hurricane, made landfall in Gulf Shores, Alabama and had a storm surge of 10 to 15 feet along the gulf shoreline. Ivan also caused an estimated \$14.2 billion in damage to structures and infrastructure in the United States alone. (NOAA: Hurricane History)

# Okaloosa County Local Mitigation Strategy 2011

## *Unincorporated Okaloosa County Vulnerability*

### *Section 5.10.02.06 Hurricane and Tropical Storm*

- While all of the unincorporated areas of Okaloosa County are vulnerable to hurricanes and tropical storms, only Okaloosa Island (an unincorporated coastal resort community located on Santa Rosa Island, a barrier island located between Destin and the Okaloosa/Santa Rosa County line) is located *directly* on the Gulf of Mexico. These areas, as well as those located on Choctawhatchee Bay and associated bayous and inlets, are vulnerable to the most damaging effects of storm surge, heavy rains, and winds during a hurricane or tropical storm. The unincorporated areas in north Okaloosa County are vulnerable to hurricane damage in the form of heavy rains and substantial winds. In the area north of Eglin Air Force Base, outside of the incorporated boundaries of Crestview and Laurel Hill, are thousands of homes and hundreds of businesses. Okaloosa County has a varied topographical terrain, ranging from sea level in the south to elevations over 200 feet in the north. The whole county may experience heavy rains and wind damage during a hurricane or tropical storm. High winds damage structures by removing roofs, siding, and create flying debris out of sources that are not anchored.

# Okaloosa County Local Mitigation Strategy 2011

- ***Unincorporated Okaloosa County Mitigation Actions***
- ***Section 5.10.04.02 Hurricane and Tropical Storm***
  - Support efforts to shutter critical facilities. *Status: Completed; subject to new structural codes and buildings*
  - Ensure the public is informed of pending conditions. *Status: on going; Public Safety*
  - **Enforce Florida Building Codes for new structures. *Status: on going; Growth Management***
  - Ensure adequate equipment exists to remove debris, clear roads, perform search and rescue functions, and otherwise respond and recover from hurricane impacts. *Status: on going; Public Works*
  - Ensure communications are wind and electrical-failure resistant to allow for 24/7 communications during the first 72 hours following a disaster. *Status: on going; Public Safety, Information Systems, State of Florida, FEMA, and Private entities*
  - Ensure adequate and safe public risk shelters are available in all locations in the County to prevent homelessness, including adequate dining facilities and to maintain sanitary conditions. *Status: on going; Public Safety, Okaloosa County School District, Northwest Florida State College and the American Red Cross*
  - Promote and support funding that allows for buildings to remain functional before, during and after a hurricane or tropical storm event in order to support the function of Okaloosa County Emergency Management’s mandates. *Status: on going; Board of County Commissioners*
  - Support protection of county infrastructure named in the Okaloosa County Comprehensive Emergency Management Plan and its Emergency Support Functions. *Status: on going; Public Works*
  - **Promote public awareness of hurricane and tropical storm hazards. *Status: on going; Public Safety***
  - Promote ways that private structure owners and landowners can mitigate using governmental or private sector investment. *Status: on going; Public Safety and Growth Management*
  - Ensure roads are designed and engineered for the amount of wind, surge, flooding and debris that can be expected from a hurricane or tropical storm event. *Status: on going; Public Works*
  - Ensure communications systems are capable to communicate during and following hurricanes/tropical storms. Also to include the ability to erect temporary repeaters to restore communications. *Status: on going; Public Safety, Information Systems, State of Florida, FEMA, and Private entities*
  - Ensure internet systems are redundant to ensure continued availability of disaster management software throughout the county. *Status: on going; Public Safety, Information Systems, State of Florida, FEMA, and Private entities*
  - Support activities that educate the public about the dangers of hurricanes/tropical storms. Such activities should be coordinated with the County Public Safety Department, Emergency Management Office. *Status: on going; Public Safety and Growth Management*

# Okaloosa County Local Mitigation Strategy 2011

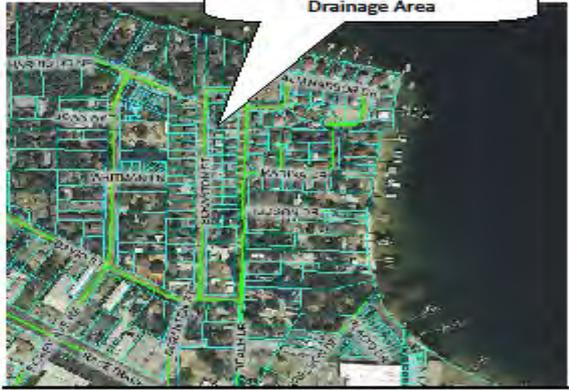
## Project Lists

- Projects are submitted by each jurisdiction
- Each project is an effort to protect people and property from one or more natural hazards. Projects must meet the mitigation goals of the 2011 LMS and are ranked according to the ranking requirements in Chapter 3.
- The projects listed are to be some of the first projects to be funded by grants when they become available.

# Okaloosa County Local Mitigation Strategy 2011

2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet																							
Project Name: Beach Drive / Scranton Estates Drainage Improvements																							
Jurisdiction: <u>Okaloosa County Public Works</u> Contact Person/Information: <u>Jason Autrey</u>																							
<b>1. General Description and Rationale</b> Retrofit drainage improvements to reduce flooding potential.				<b>2. LMS and Jurisdictional Comprehensive Plan Compliance/References:</b> 2.a. <u>LMS Goals and Strategies:</u>  2.b. <u>Comprehensive Plan:</u> Section 2.6; objective 1; policy 1.1 & 2  2.c. Is this project level of service or concurrency related: LOS <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Concurrency <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																			
<b>3. Budgetary Information:</b> Is this project listed in the adopted 5-Year Capital Improvements Program? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 3.a. <u>Estimated Project Cost: \$ 25,000</u> 3.b. Funding Plan (\$ in 000's) <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 20%;">Source</th> <th style="width: 5%;">Allocated in Prior FYs</th> <th style="width: 5%;">FY11</th> <th style="width: 5%;">FY 12</th> <th style="width: 5%;">FY 13</th> <th style="width: 5%;">FY 14</th> <th style="width: 5%;">FY 15</th> <th style="width: 10%;">Total</th> </tr> </thead> <tbody> <tr> <td> </td> </tr> </tbody> </table>				Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total									<b>5. Location Map</b> <div style="text-align: center; margin-bottom: 5px;"> <span style="border: 1px solid black; padding: 2px;">Beach Drive / Scranton Estates Drainage Area</span> </div> 			
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# **Okaloosa County Local Mitigation Strategy 2011**

## **Summary:**

**Developing and implementing a Local Mitigation Strategy helps ensure that public officials are aware of - and plan for - the types of natural disasters that could threaten the lives and properties of Okaloosa County's residents and businesses.**

**As provided by Federal Law (Robert T Stafford Disaster Preparedness Act), a community must have an adopted Local Mitigation Strategy in place in order to receive certain types of Federal recovery funds following a declared disaster.**

**The Local Mitigation Strategy complements the County's floodplain management program which enables the issuance of policies through the National Flood Insurance Program, and, through the Community Rating System, helps the County achieve reduced federal flood insurance rates.**

# Okaloosa County Local Mitigation Strategy 2011

Questions and Comments?

Thank you very much for participating.

Elliot Kampert, AICP

Director

Okaloosa County Growth Management

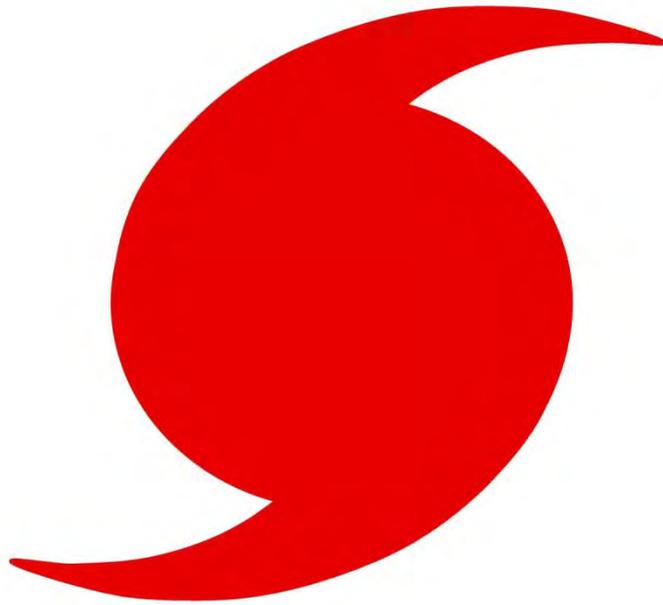
Sherry Reed, CFM

Planning Coordinator

Okaloosa County Growth Management

# **Appendix I**

## **LMS Public Workshop Cretview**





# Okaloosa County Local Mitigation Strategy 2011

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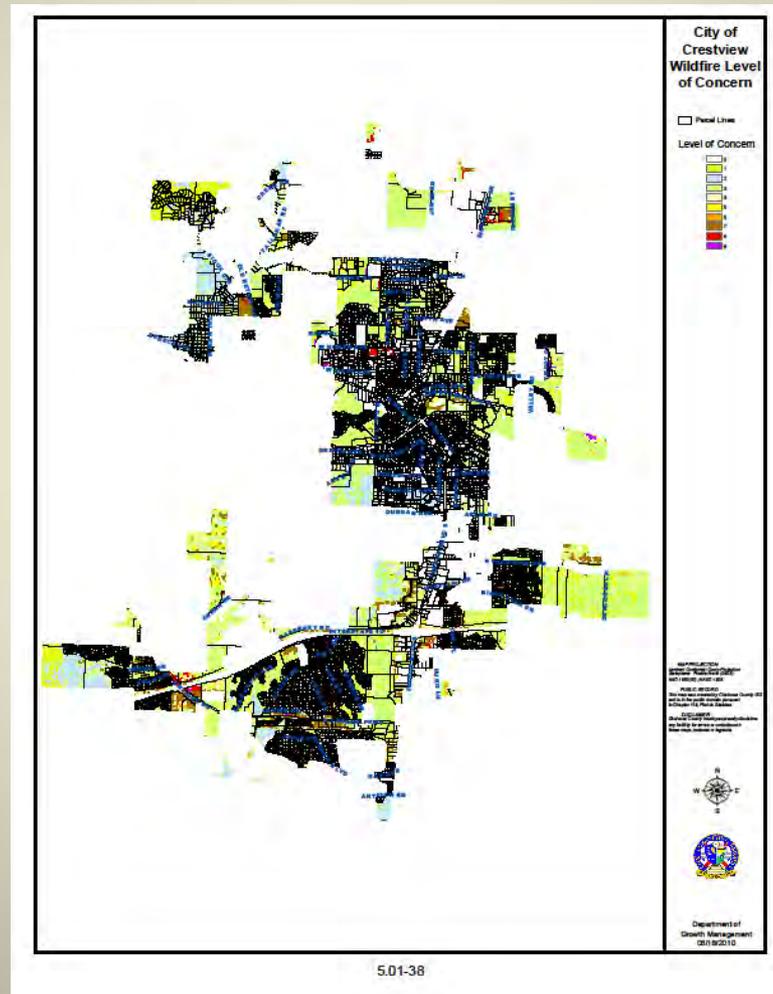
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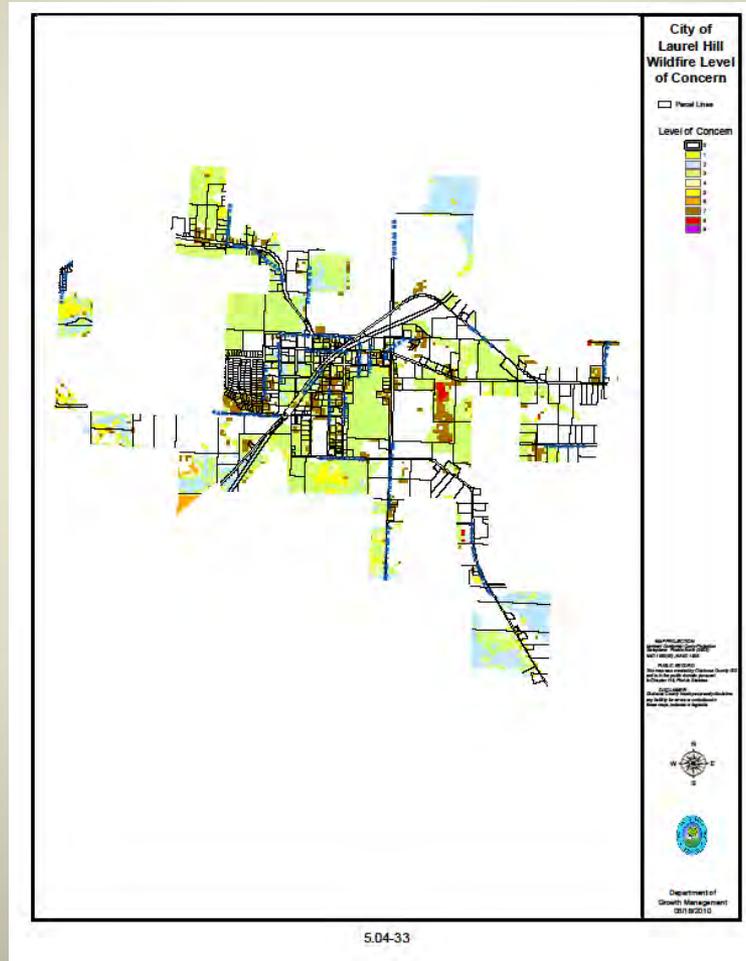
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# Okaloosa County Local Mitigation Strategy 2011



# Okaloosa County Local Mitigation Strategy 2011



# Okaloosa County Local Mitigation Strategy 2011

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# Okaloosa County Local Mitigation Strategy 2011

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# Okaloosa County Local Mitigation Strategy 2011

- ***Unincorporated Okaloosa County Mitigation Actions***
- ***Section 5.10.04.02 Hurricane and Tropical Storm***
  - Support efforts to shutter critical facilities. *Status: Completed; subject to new structural codes and buildings*
  - Ensure the public is informed of pending conditions. *Status: on going; Public Safety*
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# Okaloosa County Local Mitigation Strategy 2011

## Project Lists

- Projects are submitted by each jurisdiction
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- The projects listed are to be some of the first projects to be funded by grants when they become available.

# Okaloosa County Local Mitigation Strategy 2011

2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet																																													
Project Name: Elevated Potable Water Storage Tank – Kennedy Lakes area																																													
Jurisdiction: <u>City of Crestview</u> Contact Person/Information: <u>Eric Davis</u>																																													
<p><b>1. General Description and Rationale:</b> The Kennedy Lakes area in NW Crestview is plagued by low water pressures. While the pressure is adequate to provide water to residences, it is dangerously low for fire protection. The storage tank is necessary to provide additional storage and head pressure to fight wildfires or multiple structure fires in this area.</p>	<p><b>2. LMS and Jurisdictional Comprehensive Plan Compliance/References:</b></p> <p>2.a. <u>LMS Goals and Strategies:</u> Goal #5 – Reduce or eliminate hazards. Strategy 6.3.J – Water Supplies.</p> <p>2.b. <u>Comprehensive Plan:</u> Goal 10.D – Provide an environmentally safe and efficient system for potable water.</p> <p>2.c. Is this project level of service or concurrency related: LOS ___ Yes ___ X No Concurrency ___ Yes ___ X No</p>																																												
<p><b>3. Budgetary Information:</b> Is this project listed in the adopted 5-Year Capital Improvements Program? ___ X ___ Yes ___ No</p> <p>3.a. <u>Estimated Project Cost:</u> \$1,000,000.00</p> <p>3.b. Funding Plan (\$ in 000's)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Source</th> <th rowspan="2">Allocated in Prior FYs</th> <th rowspan="2">FY11</th> <th rowspan="2">FY 12</th> <th rowspan="2">FY 13</th> <th rowspan="2">FY 14</th> <th rowspan="2">FY 15</th> <th rowspan="2">Total</th> </tr> <tr> <th colspan="6">Is this project fully funded? ___ Yes ___ X ___ No</th> </tr> </thead> <tbody> <tr> <td>User Fees</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">1000</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">1000</td> </tr> </tbody> </table>				Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total	Is this project fully funded? ___ Yes ___ X ___ No						User Fees	0	0	1000	0	0	0	1000	<p>3.c. Expenditure Plan (\$ in 000's)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Item</th> <th>Prior FY Expend.</th> <th>FY 11</th> <th>FY 12</th> <th>FY 13</th> <th>FY14</th> <th>FY 15</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>500,000 gallon Storage Tank</td> <td></td> <td></td> <td style="text-align: center;">1000</td> <td></td> <td></td> <td></td> <td style="text-align: center;">1000</td> </tr> </tbody> </table>				Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total	500,000 gallon Storage Tank			1000				1000
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Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY14	FY 15	Total																																						
500,000 gallon Storage Tank			1000				1000																																						
<p><b>4. Statement of Operating Budget Impact:</b> Planned for construction after the construction of a new 1mgd well in FY2011.</p>																																													
<p><b>5. Location Map</b></p> <p style="text-align: center;">★ SITE LOCATION IDENTIFIED SURVEY SUBJECT AREA</p>																																													

# Okaloosa County Local Mitigation Strategy 2011

**2010 Okaloosa County Local Mitigation Strategy Project Summary Sheet**

Project Name: **Chicago Avenue and Steel Mill Creek**

Jurisdiction: **City of Laurel Hill** Contact Person/Information: \_\_\_\_\_

---

**1. General Description and Rationale:**

**2. LMS and Jurisdictional Comprehensive Plan Compliance/References:**

2.a. LMS Goals and Strategies:

2.b. Comprehensive Plan:

2.c. Is this project level of service or concurrency related: LOS  Yes  No Concurrency  Yes  No

---

**3. Budgetary Information:** Is this project listed in the adopted 5-Year Capital Improvements Program?  Yes  No

3.a. Estimated Project Cost: \$ \_\_\_\_\_

3.b. Funding Plan (\$ in 000's)

Source	Allocated in Prior FYs	FY11	FY 12	FY 13	FY 14	FY 15	Total

Is this project fully funded?  
 Yes  No

3.c. Expenditure Plan (\$ in 000's)

Item	Prior FY Expend.	FY 11	FY 12	FY 13	FY 14	FY 15	Total

**5. Location Map**

**CITY OF LAUREL HILL**

**Location Map**

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**4. Statement of Operating Budget Impact:**

# **Okaloosa County Local Mitigation Strategy 2011**

## **Summary:**

**Developing and implementing a Local Mitigation Strategy helps ensure that public officials are aware of - and plan for - the types of natural disasters that could threaten the lives and properties of Okaloosa County's residents and businesses.**

**As provided by Federal Law (Robert T Stafford Disaster Preparedness Act), a community must have an adopted Local Mitigation Strategy in place in order to receive certain types of Federal recovery funds following a declared disaster.**

**The Local Mitigation Strategy complements the County's floodplain management program which enables the issuance of policies through the National Flood Insurance Program, and, through the Community Rating System, helps the County achieve reduced federal flood insurance rates.**

# Okaloosa County Local Mitigation Strategy 2011

Questions and Comments?

Thank you very much for participating.

Elliot Kampert, AICP

Director

Okaloosa County Growth Management

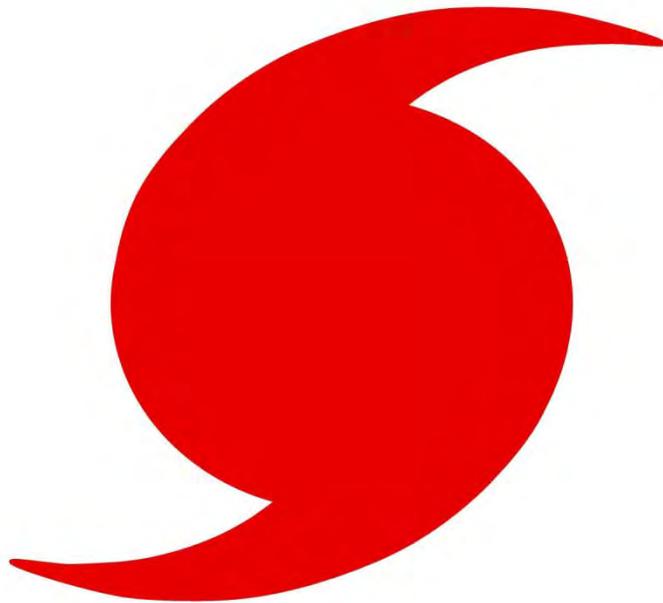
Sherry Reed, CFM

Planning Coordinator

Okaloosa County Growth Management

# **Appendix J**

## **Contact with adjacent Counties**





## Contact with adjacent Counties

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**From:** Karen Thornhill [mailto:KarenT@santarosa.fl.gov]  
**Sent:** Thursday, May 06, 2010 10:17 AM  
**To:** Sherry Reed  
**Subject:** RE: LMS Question

We had 13 items that needed revision. Basically, They wanted more information or rewording of items. I am not sure what all had to be done. Paul Miller is in charge of the LMS plan. We have an LMS Meeting today to try and finalize the revisions.

**Karen Thornhill, CFM**  
Santa Rosa County  
Floodplain Manager  
Residential Plan Review  
850-981-7029 Office  
850-983-5367 or 850-623-1208 Fax

**Tell us how we are doing. Please fill out our on line Customer Service Survey at: <http://www.santarosa.fl.gov/customerservice/index.html>**

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**From:** Sherry Reed [mailto:sreed@co.okaloosa.fl.us]  
**Sent:** Thursday, May 06, 2010 10:05 AM  
**To:** Karen Thornhill  
**Subject:** LMS Question



Karen,

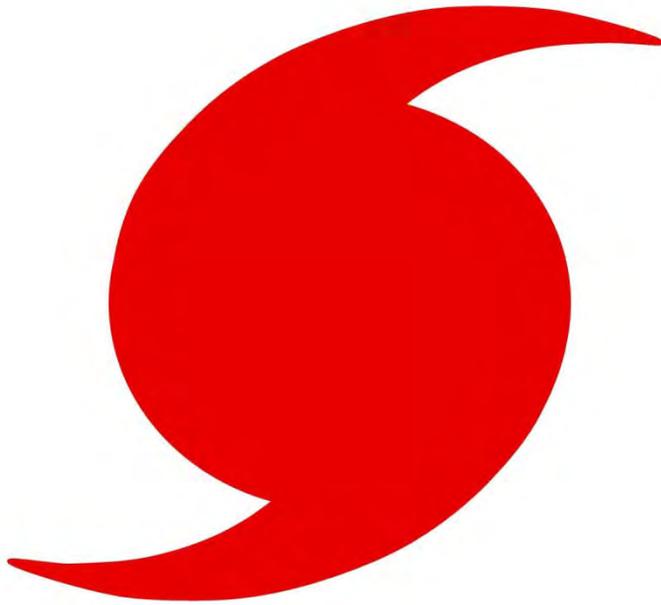
What did the state have comments on about your updated Local Mitigation Strategy?

*Sherry Reed, CFM*

Please note: Due to Florida's very broad public records laws, most written communications to or from County employees regarding County business are public records, available to the public and media upon request. Therefore, this written e-mail communication, including your e-mail address, may be subject to public disclosure

# **Appendix K**

## **LMS Draft on Okaloosa County Website**





LMS Draft on Okaloosa County Website

**Okaloosa County ONLINE**

[Employment](#) | [FAQ](#) | [Site Map](#)

Home ▾ County Government ▾ Departments ▾ Services ▾ Living ▾ Visiting ▾ Transit & Travel ▾

## Growth Management

### Welcome

Our Mission is to successfully and consistently implement the Okaloosa County Comprehensive Plan, Okaloosa County Land Development Code, the Building Codes, and other Board of County Commissioners goals. This includes:

- Implementing the Board's policies and objectives through review of applications for development and building permits.
- Ensuring orderly growth and development.
- Providing inspections and oversight to the building industry and providing code enforcement.
- Administering the Community Development Block Grant Program, and other State and Federal grant programs.

**Web Permitting** can be used for all types of permits or inspections (i.e., building and planning permits, fire inspections, code enforcement, health and safety inspections).

As of now, users can search on existing permits, gather parcel information, as well as estimate fees of new permits.

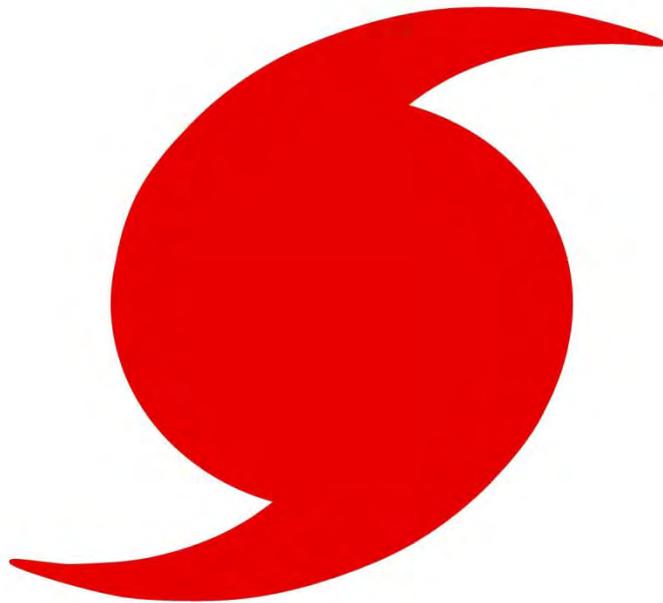
- [News, Events, Public Notices](#)
- [Department Policies](#)
- [What do I need to get a permit?](#)
- [Check for Zoning and Future Land Use](#)
- [View Okaloosa Development Maps](#)
- [Eglin Installation Growth \(EIG\) & Joint Land Use Study \(JLUS\) Information Page](#)
- [Okaloosa County Water Supply Plan - 2008 Update](#)
- [Okaloosa County Building Code Enforcement Agency - 08/14/07 Evaluation](#)
- DCA Notice of Intent to find the Comprehensive Plan Amendment(s) in compliance Docket No. [10-1-NOI-4601-\(A\)-\(I\)](#)
- [2006 Evaluation & Appraisal Report](#)
- [Progress Report - CRS \(Community Ratings System\) 2009](#)
- [LMS 2005 \(Local Mitigation Strategy\)](#)
- [LMS \(Local Mitigation Strategy\) as adopted by ORD 06-61](#)
- [LMS \(Local Mitigation Strategy\) Project Rankings](#)
- [LMS 2011 DRAFT \(Local Mitigation Strategy\)](#)

- [Welcome](#)
- [News, Events, Notices](#)
- [Department Policies](#)
- [Administration](#)
- [Planning Division Information and FAQ](#)
- [Board Schedules](#)
- [Board Members](#)
- [Comprehensive Plan Land Development Code](#)
- [Building Division](#)
- [Inspections](#)
- [Permitting](#)
- [Licensing](#)
- [Inspection/Permit Fees](#)
- [Daily Inspections Report](#)
- [Contractor Search](#)
- [Code Enforcement](#)
- [Choosing a Contractor](#)
- [Signs](#)
- [FAQ](#)
- [File/Current Complaints](#)
- [Online Forms](#)

Elliot Kampert, Director  
1804 Lewis Turner Blvd, Suite 200  
Fort Walton Beach, FL 32547  
Phone: (850) 651-7180  
Fax: (850) 651-7058  
[E-Mail](#)

# **Appendix L**

## **Jurisdictions Approval for Transmittal to State**





**Jurisdictions Approval for Transmittal to State**

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TOWN OF CINCO BAYOU  
REGULAR COUNCIL MEETING MINUTES  
NOVEMBER 9, 2010 – 6:00 PM

Mayor Farley called the Regular Council meeting to order at 6:00 P.M. on Tuesday, November 9, 2010. Following the Pledge of Allegiance and a silent prayer, roll call was taken:

Roll Call:	Mayor Farley	Mayor Pro Tem Koch
	Councilman Artabasy	Councilman Chubb
	Councilman Bratton	Councilman Driver

Also present at the meeting were: Town Manager Nell Dykes, Asst. Town Manager Monika Gillette, Attorney Jeff McInnis, Deputy Jim Welch and Guest Kay Rasmussen..

**Regular Business:**

- Council Approval of Agenda:** Mayor Farley asked for acceptance of the agenda. She stated a revision was made to include a motion to approve Okaloosa County's transmittal of the 2011 Local Mitigation Strategy to the State for approval. Councilman Koch made a motion to approve the revised agenda. Councilman Artabasy seconded the motion. The motion passed unanimously.
- Council Approval of Consent Agenda:** Mayor Farley asked for acceptance of the consent agenda: Regular Council Meeting Minutes of October 14, 2010 and Budget Status as of October 31, 2010. Councilman Koch made a motion to approve the consent agenda. Councilman Driver seconded the motion. The motion passed unanimously.

**EDC PRESENTATION:**

Kay Rasmussen of the Economic Development Council gave an overview of the EDC's work for the Town and the surrounding communities.

**REPORTS:**

**Attorney:** Attorney McInnis stated that his firm, along with others, would be representing clients in response to the BP oil spill. The goal would not be a class action suit but rather facilitate claims on a contingency basis. He requested that the matter be put on the December's agenda for consideration of representing the Town's possible claim.

**ACTION ITEMS:**

- Councilman Artabasy motioned to remove the tabled item, Amendment of Alcohol Ordinance 183. Councilman Bratton seconded the motion. The motion passed unanimously.



## Jurisdictions Approval for Transmittal to State

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2. Councilman Bratton stated he spoke with the owners of the two businesses in town selling alcohol who said they were losing business due to later alcohol sales. Councilman Bratton motioned to amend Ordinance 183 changing the houses of alcoholic beverage sales. The motion died due to the lack of a second.
3. Ms. Dykes gave a summary of the request from the County for transmittal of the 2011 Local Mitigation Strategy. Councilman Artabasy motioned to approve the County transmitting the document to the State for review. Councilman Bratton seconded the motion. The motion passed unanimously.

### DISCUSSION ITEMS:

1. **CRA/CDBG – Easement Update:** Ms. Dykes stated that the contractor was on target. She also stated that a construction meeting was being held on Mondays at Town Hall.
2. **Glenwood Park Drainage Culvert:** Ms. Dykes stated that the property owner retracted permission to use her property to access the ditch area. Ms. Dykes said that new bids would need to be acquired because of the need for a different entry point. During the discussion, it was the consensus of the Council to terminate the Engineering Contract. Councilman Bratton motioned to terminate and rebid the contract for engineering services. Councilman Chubb seconded the motion. The motion passed unanimously..
3. **City of Fort Walton Beach Services –** Councilman Chubb stated he was approached by Mayor Anderson of the City of Fort Walton Beach to have the town consider using services provided by the City of Fort Walton Beach. It was the consensus of the Council to be open to having Fort Walton Beach make recommendations on services they could offer.
4. **OCLOC Quarterly Dinner –** Councilman Koch stated that the Okaloosa County League of Cities quarterly dinner for January 2011 would be hosted by the town and recommended using Fort Walton Yacht club as the site. She also suggested a Christmas social following the next council meeting of December 9. The council members agreed on both recommendations.

### REPORTS:

**Town Manager's Report:** Ms. Dykes submitted a written report.

**Engineer's Report:** nothing additional

**Attorney's Report:** nothing additional

**Community Officer's Report:** Deputy Welch submitted a written report. He noted the increase in retail thefts at K-Mart. In addition, he extended greetings from the newly elected Sheriff, Larry Ashley.



**Jurisdictions Approval for Transmittal to State**

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**Public Comments/Requests:** None given.

**Council Member's Comments/Reports:**

- Councilman Bratton stated that the bare poles in the bayou had still not been fixed.
- Mayor Farley announced upcoming closures and meeting dates.

**Adjourn** – There being no further business, the meeting adjourned at 7:28 pm.

ATTEST:

---

Theresa Farley, Mayor

---

Nell Dykes  
Town Manager/Clerk



**Jurisdictions Approval for Transmittal to State**

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**CITY OF CRESTVIEW M I N U T E S**

**Regular Meeting**

**November 22 2010**

**6:00 P.M.**

The Regular Meeting of the Crestview City Council was called to order at 6:00 P.M. Members present were: President Charles Baugh, Vice-President Robert J. Allen, Tim Grandberry, Ben Iannucci and Linda Parker. Also present were, Mayor David Cadle, City Clerk Janice Young, City Attorney Ben Holley, department heads and members of the press.

The data reflected within these proceedings constitutes an extrapolation of information elicited from notes, observations, recording tapes, photograph(s) and VCR tapes. Comments reflected herein are sometime paraphrased, condensed and have been edited to reflect essential subject matter covered during the meeting. Background data of individual cases heard before the council are on file with the Clerk's office. Parties interested in receiving a verbatim account of the proceedings are responsible for coordinating with the City Clerk Department pursuant to Crestview Policy 91-1, Duplication of Public records, Chapter 119 and 283, Florida Statutes and Attorney General Opinions in force at time of enactment of Policy 91-1. This meeting was advertised through all sources pursuant to F.S. 286.011, et. Seq.

**1. Approval of Consent Agenda.**

- 1. Approval of the minutes for the workshop on November 8, 2010, the Crestview and the regular Council meeting on November 8, 2010.**
- 2. Acceptance of Partial Release of Mortgage, Warranty Deed, and Ingress/Egress & Utility Easement for Pinnacle Apartments located in Section 21, Township 3 North, Range 23 West, Okaloosa County, Florida – Requested by Administrative Services.**
- 3. Authorization to transmit the 2011 Local Mitigation Strategy to the Mitigation Planning Unit of the State of Florida Division of Emergency Management for Review. – Requested by Administrative Services.**

Motion by Ms. Parker to approve the Consent Agenda. Seconded by Mr. Iannucci. Vote – 5 yeas and 0 nays.



**Jurisdictions Approval for Transmittal to State**

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**ACTION AGENDA  
REGULAR MEETING  
DESTIN CITY COUNCIL  
NOVEMBER 15, 2010  
ANNEX COUNCIL CHAMBERS  
6:00 PM**

**PUBLIC HEARINGS**

1. Reading of Ordinance 11-02-PC, which amends Comprehensive Plan: 2010 Chapter 9, Capital Improvements Element, updating its five-year schedule of capital improvements and incorporating by reference the Okaloosa County School Board five year district work plan providing for an amendment to Table 9-1: Five-year Schedule of Capital Improvements of the Comprehensive Plan; providing for an amendment to Policy 9-4.1.3: School Board Work Plan

**Motion to adopt Ordinance 11-02-PC as amended by adding “(Pending Warrant Study)” following “CIP #CD85 – U.S. 98 at Two Trees Road” on Table 9-1; and authorize the Community Development Department to prepare and transmit the comprehensive plan amendment to the required state, regional, and local reviewing agencies passed 7-0. OPR:  
CD**

2. Second reading of Ordinance 10-15-CN, which is an Ordinance that would vacate a 66 foot wide by 39.5 foot long portion of Moreno Point Road. Mr. Lucky Stepp, on behalf of the Dolphin Point Condominium Association, is requesting to vacate said northernmost portion of Moreno Point Road right-of-way.

**Motion to adopt Ordinance 10-15-CN on second reading passed 7-0.**

3. Second reading of Ordinance 10-19-LC, which is an Ordinance that amends Land Development Code *Table 7-2: Table of Allowable Uses* to define which zoning districts would allow the new land use “Indoor Shooting Ranges”. The ordinance would also amend *Table 8-6: Number of Vehicle and Bicycle Spaces* to define the parking requirements for said use.

**Motion to adopt Ordinance 10-19-LC on second reading passed 5-2, with Council members Bagby and Hines dissenting.**

**CONSENT AGENDA\***

4. Request approval of the minutes of the November 1, 2010 regular city council meeting

**Motion to approve Consent Agenda item #4, as printed above, passed 7-0.**



**Jurisdictions Approval for Transmittal to State**

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**RESOLUTIONS**

5. Resolution 10-13 – Final Budget Amendment for FY 2010

**Motion to approve Resolution 10-13 passed 7-0.**

**COMMENTS FROM MAYOR AND COUNCIL**

6. Councilmember Williges  
a. Establish a regulation that prohibits left turn movements from Calhoun Avenue to Hwy 98

**Motion to refer this item to the Public Works/Safety Committee and ask them to submit a recommendation to the City Council no later than the 2nd meeting in January passed 6-1, with Councilmember Williges dissenting. OPR: PS**

7. Councilmember Hines  
8. Councilmember Wood  
9. Councilmember Bagby

**Suggests they recognize in some fashion the services the newly promoted Major Greg Gaddis provided to the City of Destin as the City's chief deputy for several years.**

10. Councilmember Destin  
11. Councilmember Weidenhamer

- a. Rescind the following motion previously adopted by the city Council:  
*“Staff to review all contracts, to include legal services, that are in excess of \$50,000, and bring back some recommendations to council by April 1<sup>st</sup>; and for staff to review and re-bid all contracts by July 1<sup>st</sup>, in preparation for the 2012 budget process.”*

**Motion to reconsider the above motion previously adopted by the city council passed 7-0.**

**Motion for staff to review all contracts, to include legal services, that are in excess of \$50,000, and bring back recommendation to the council by April 1<sup>st</sup> passed 7-0.**

12. Councilmember Trammell

**With city staffs' assistance, the Chairs and Vice Chairs of all the volunteer committees have all been trained; and they now have a better understanding of how they fit within Team Destin, and are beginning to work on creating measurable goals and objectives.**

**There is an Okaloosa County Public Library Coop meeting scheduled on Wednesday, Nov 17<sup>th</sup> to review the inter-local agreement among all the libraries in Okaloosa County.**

**Motion to send the Marler parking lot issue to the Harbor CRA Advisory Committee and ask that they conduct research and come up with some possible names for the parking lot that are related to the historical pieces of that part of the harbor, and bring their recommendations to the CRA Board 7-0. OPR: CD**



**Jurisdictions Approval for Transmittal to State**

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**Motion to send the issue relating to the Indian Bayou Trail and Hwy 98 intersection to the Public Works/Safety Committee for their recommendations on intersection improvements passed 7-0. OPR: PS**

13. Mayor SeEVERS

**STAFF REPORTS AND RECOMMENDATIONS**

14. City Attorney comments

**15. Transmittal of proposed Local Mitigation Strategy (LMS) for State review**

**Motion to transmit the proposed 2011 Local Mitigation Strategy to the Mitigation Planning Unit of the State of Florida's Division of Emergency Management within the Department of Community Affairs for them to initiate the review and, ultimately, final adoption passed 7-0. OPR: CD**

16. Recommended changes to City of Destin Code of Ordinances Chapter 13, Article III *Home Solicitation Sales* to align with Florida Statutes sections 501.021 – 501.55.

**Motion to forward proposed Ordinance 10-16-CC to the Local Planning Agency for their review and recommendation passed 7-0. OPR: CD**

17. City Manager comments

a. Organizational Work Objective for FY 2011

**Motion to approve the Organizational Work Objective for FY 2011 passed 7-0.**

**City Manager Announcements:**

- Saturday, Dec 11<sup>th</sup> – City of Destin Christmas Party at Tuscany Italian Bistro
  - Saturday, Dec 11<sup>th</sup> – Destin Christmas Parade
  - Sunday, Dec 12<sup>th</sup> – Destin Boat Parade
- Thursday, Dec 2<sup>nd</sup>, 6:00 PM – Christmas Tree Lighting

-

**ADJOURNED: 8:25 PM**



**Jurisdictions Approval for Transmittal to State**

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**MINUTES OF THE REGULAR COUNCIL MEETING OF THE CITY OF FORT  
WALTON BEACH, FLORIDA NOVEMBER 9, 2010**

**INTRODUCTION**

A regular meeting of the City Council of Fort Walton Beach, Florida, was held on Tuesday, November 9, 2010, at 6:00 p.m. in the Council Chambers at City Hall, with the following members present:

Mayor Mike Anderson

Councilmen: Mike Holmes, joyce gossom, Dennis Reeves, Bobby Nabors, Bull Rigdon, and Dick Rynearson

Absent: Mike Minich

Also Present: Robert Mearns, City Manager; Helen Spencer, City Clerk; Lamar Conerly, City Attorney's Office; Department Directors and Media

**CALL TO ORDER**

The Mayor called the meeting to order and welcomed everyone. He requested anyone who wished to address Council to approach the podium after being recognized, then state his or her name and address for the record.

**INVOCATION**

Pastor John Hester, Grace Tabernacle Church, gave the Invocation.

**PLEDGE OF ALLEGIANCE**

Mr. Rynearson led in the Pledge of Allegiance.

**PROCLAMATION--COVENANT HOSPICE**

The Mayor noted he presented a proclamation earlier in the day at Liza Jackson Park to Jeanne Easterling of Covenant Hospice proclaiming the month of November 2010 as National Hospice Month.

**PROCLAMATION--ACHIEVEMENT WEEK**

The Mayor presented a proclamation to John Feagin proclaiming November 14 to 21 as Omega Psi Phi Fraternity Achievement Week.

**APPROVAL OF AGENDA Mr. Holmes moved to approve the agenda as the business of the day. Mr. Nabors seconded motion and it carried unanimously with Holmes, gossom, Reeves, Nabors, Rigdon, and Rynearson in favor (Minich absent).**



## Jurisdictions Approval for Transmittal to State

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**CONSENT AGENDA** Mr. Reeves moved to approve the following Consent Agenda items. Mr. Nabors seconded motion and it carried unanimously with Holmes, Gossom, Reeves, Nabors, Rigdon, and Rynearson in favor (Minich absent).

### **MINUTES OF MEETING**

Approval of the minutes of the October 26, 2010 regular City Council meeting.

Award Bid 10-023 to the lowest, responsive responsible bidder, Fisher Scientific LLC, in the amount of \$92,864.74 for SCBA equipment upgrades utilizing Assistance to Firefighters Grant, with \$83,578.27 provided by federal resources and \$9,286.47 provided by the City.

### **BID AWARD FOR TENNIS COURT RESURFACING**

Award Bid 11-002 to the lowest, responsive responsible bidder, McLean Tennis, Inc., in a not to exceed amount of \$35,000 for resurfacing of the Ferry Park Tennis Courts, Jet Park Tennis Courts, and Mooney Tennis Courts.

### **LOCAL MITIGATION STRATEGY (LMS) TRANSMISSION**

To authorize transmittal of the 2011 Local Mitigation Strategy to the State Division of Emergency Management to initiate the review process.

### **FWB HOUSING AUTHORITY REQUEST FOR PAYMENT IN LIEU OF TAXES REFUND**

Consideration of request for Payment in Lieu of Taxes (PILOT) refund to the Fort Walton Beach Housing Authority.

Brandy Wunker, Finance Director, advised that the City receives Pilot in Lieu of Taxes (PILOT) from the Fort Walton Beach Housing Authority on an annual basis, and the amount received this year was \$16,106.46. Ms. Wunker informed the Housing Authority has requested the City refund the entire amount to help offset expenses incurred with the new development of Germany Terrace.

Ms. Wunker explained the recent history of the City has been to waive or refund all or a portion of the proceeds of the PILOT payments received from the Housing Authority. However, last year Council expressed the desire to place a cap on the refunded amount, and Council has sole discretion to grant a refund.

Council requested a status report on the Sound Side project. Gail Sansbury, Executive Director of the Housing Authority, advised that HUD has received the application and is reviewing it. Ms. Sansbury further advised that the last resident of Germany Terrace has signed a lease and is moving into another facility.

The Mayor asked for public input. There was none.



## Jurisdictions Approval for Transmittal to State

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**Mr. Nabors moved to refund the entire PILOT payment in the amount of \$16, 106.46 to the Fort Walton Beach Housing Authority. Mr. Rynearson seconded motion and it carried unanimously with Holmes, gossom, Reeves, Nabors, Rigdon, and Rynearson in favor (Minich absent).**

### **BMX SKATEBOARD TRACK AND CONCESSIONS FACILITY.**

Consideration of Bid for BMX Skateboard Track and Concessions facility.

#### **BMX SKATEBOARD FACILITY (CONT)**

Jeff Peters, Recreation and Cultural Services Director, informed the City issued an RFP for the management of the BMX facility in Sept 2010 and that one bid was received from the current contractor. Mr. Peters informed the bid included responsibilities to provide insurance, utilities, a monthly lease and maintenance of the park.

Mr. Peters explained Staff is recommending City Council reject all bids for lease of BMX Skateboard Track and Concessions Facility and allow time to research all recreational opportunities for the property. Mr. Peters advised the facility will remain open on a month to month basis by the current contractor, Emerald Coast Dirt and Vert.

Ms. gossom disclosed she was contacted by the proposal respondent via voice mail, but that she did not return the call.

Discussion ensued regarding contact and disclosure between members of Council and bidders during the RFP process. Lamar Conerly from the City Attorney's Office advised he would return to Council with parameters for Council to follow.

The Mayor asked for public input.

Bill Madden of Emerald Coast Dirt and Vert, the current contractor at the BMX facility, stated he was available to answer any questions that Council might have.

Ken Belcher, City resident, spoke in favor of the BMX facility.

Johnny Lee Riddle, 1936 Bishop Road, also spoke in favor of the facility.

Katherine Weitzell, 145 Jet Drive, discussed the safe environment the facility has for the youth of the area.

John Cleveland, Navarre, stated he brings his children to the facility and feels they are in good hands when they are there.

Erin Terrin, 239 Beachview, stated she and her young son visit the facility and it helps to bring them together.

David Beal, 111 Memorial Parkway, spoke in favor of the facility.



## Jurisdictions Approval for Transmittal to State

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Greg Hoover, Niceville resident, stated his daughter enjoys the BMX facility.

Mike Hatfield, 3063 Auburn Road, Crestview, stated his two young sons use the park, and they are interested in this kind of sport.

Brian Prescott, 602 Camborne Avenue NE, stated the management of the facility has core values they share with the youth that use park.

As there was no one further who wished to speak, public input was closed.

**BMX SKATEBOARD FACILITY (CONT) Mr. Holmes moved to reject all bids for the Lease for the BMX Skateboard Track and Concessions Facility and allow Staff time to research all recreational opportunities for the property; that Staff will bring back a recommendation to the City Council in March 2011 that will benefits the most citizens; and that the Skatepark will continue to be open to the public, as the contractor is operating on a month to month contract. Mr. Rynearson seconded motion and it carried unanimously with Holmes, gossom, Reeves, Nabors, Rigdon, and Rynearson in favor (Minich absent).**

### **CRA REQUEST FOR EXPENDITURE**

Consideration of a request for \$20,000 to replace holiday lights in the CRA District.

Tim Bolduc, Building Official, informed Council has before them a request to purchase holiday decorations for the CRA District in an amount up to \$20,000 from the CRA's promotional budget account. Mr. Bolduc stated the CRA reviewed options and made the recommendation to replace the snowflakes and install holiday lighting in the downtown area up to \$20,000.00. Mr. Bolduc explained using CRA funds for the decorations will help promote the downtown area, and that the themes and concepts provided in the proposal are consistent with those of the Downtown Merchants Group.

Discussion ensued decorating the Uptown area along Eglin Parkway as well as the downtown area, and that has been discussed and will be looked at in the future.

Valerie Wenzel, 29 County Club, Shalimar, discussed the importance of having holiday decorations in the downtown/CRA district.

**Mr. Nabors moved to approve funding up to the amount of \$25,800, the higher option provided by Staff, to replace the holiday lights in the CRA District. Mr. Rigdon seconded motion.**

Mr. Holmes suggested since there is \$40,000 in the CRA promotional account, now might be the time to continue moving up Eglin Parkway to the Uptown District with the holiday decorations, and that the CRA Board be given the latitude to invest the funds.

**Mr. Holmes amended the motion to increase the funding to not to exceed \$40,000.00 to**



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**be used at the discretion of the CRA Board of Commissioners. Ms. gossom seconded motion.**

**The Mayor called for the vote on the amendment and it carried by a vote of 4 to 2 with Holmes, gossom, Nabors, and Rynearson in favor and Reeves and Rigdon opposed (Minich absent).**

**The Mayor called for the vote on the motion, as amended, and it carried by a vote of 4 to 2 with Holmes, gossom, Nabors, and Rynearson in favor and Reeves and Rigdon opposed (Minich absent).**

**CITY MANAGER REPORTS--COUNTRY CLUB AVENUE RESIDENTS' MEETING**

The City Manager advised he will be conducting an informational meeting with the residents of Country Club Avenue on Monday, November 15 at 6 pm at the Golf Course meeting room to discuss findings of the traffic study.

**MAYOR/COUNCIL COMMENTS**

Mr. Holmes stated the importance of promoting the City and that the holiday decorations are a way to do that.

The Mayor discussed the Military Sustainability Partnership that the City is involved in; the presence of the Police Department at several activities this past weekend; the ceremony for the swearing-in of the new sheriff; the possibility of adding a fee of \$1.00 on water bills for those who would like to contribute to the Fourth of July fireworks and asked Staff to come back with information; that he will be attending the Veterans' Day Ceremony at Beal Cemetery; and also mentioned the flag raising ceremony at Uptown Station on Veteran's Day.

**ADJOURNMENT**

There being no further business, the meeting adjourned at 7:28 pm.

APPROVED:

\_\_\_\_\_

MAYOR:

\_\_\_\_\_

ATTEST:

CITY CLERK



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### MINUTES OF THE NOVEMBER 29, 2010 SPECIAL/ PUBLIC MEETING OF THE LAUREL HILL, FLORIDA, CITY COUNCIL.

The Laurel Hill City Council met in regular session November 29, 2010 at 6:00 PM, at the City Hall.

	Council Members:	
	Larry Hendren	Present
	Willie Mae Toles	Present
	Robby Adams	Present
	Johnny James	Present
	Betty Williamson	Present
Mayor:	Joan Smith	Present
City Clerk:	Harold Jones	Present
Fire Chief:	N/A	Absent
Attorney:	Toni Craig	Present

Visitors: See Sign-In Sheet

I. **Chair person** called the meeting to order at 6:00 PM.

II. **Mike McVay** led in the prayer and pledge of allegiance to the flag.

III. **Discussion of Fire Dept:**

Mike McVay began sharing with the council issues with the fire department. Mike McVay said the firemen would like to keep the fire department at Laurel Hill. There are vehicle problems that need to be solved and radio issues. Harold Jones, City Administrator shared he has asked for the fire department inventory, but yet to receive one. Once inventory is turned in at that point we can determine what needs to be fixed and replaced. There have been issues in the past with the fire vehicles being parked at the houses of the firemen. Joan Smith, Mayor said the reason the vehicles were parked was due to the vehicles being used for personal uses. If the council and the fire department can come to an agreement the fire department will remain at Laurel Hill. Johnny James asked how many fire fighters we have. It was stated we have 9. Council James also asked who is Deputy Chief, Mike McVay said it is David Griggs. Mr. McVay also said if David Griggs will stay on as Deputy Chief he has someone that would like to become the Fire Chief. The Mayor ask who would like to become Fire Chief and Mr. McVay shared Mike Hanula. Betty Williamson asked if we had enough firemen to leave the fire department here. Once again it was said we have 9 firemen and that is enough. Chairman Hendren asked Harold to look into repair cost to the spare fire truck. Harold said he had already begun looking into repair cost. Chairman Hendren said according to the charter the fire department is to hold a meeting and submit names for the fire chief position to the Mayor. Once the name is submitted then the Mayor will appoint a fire chief. City Administrator, Mayor and Chairman stated they will start attending the fire department meetings. Harold Jones also added for the record Almarante and Laurel Hill are both doing a good job. Larry asked if we are in agreement to leave as is. All Agreed.

IV. **Selection of Attorney:**

**Betty Williamson** made a motion to hire Daniel Campbell. **Willie Mae Toles** seconded motion. All Ayes, Motion Carried. The hiring of Daniel Campbell as the City Attorney for Laurel Hill will be effective as of December 1, 2010.



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**V. Local Mitigation Strategy:**

**Robby Adams** motioned to approve Local Mitigation Strategy with typo corrections. **Willie Mae Toles** seconded. All Ayes Motion Carried as Corrected.

**VI. Water Meter Purchase:**

Toni Craig said we need to get the ITB correct before we advertise again. She also said we need to be clear on what we want before we go back out for bids. A motion was made by **Johnny James** to go with the Sensus Radio Read meter with no moving parts the motion was seconded by **Willie Mae Toles**. All Ayes Motion Carried. Mayor asked could we also purchase a new stand alone water department computer for the water clerk with the grant money. **Johnny James** motioned **Robby Adams** seconded. All Ayes Motion carried.

**VII. Adoption of Budget Resolution 2010-04:**

Chairman, Larry Hendren opened the Public hearing. No Public present. Close Public Hearing.

Budget resolution effective date 11/29/2010.

Meeting went into recess for 10 minutes. Meeting back in session. **Robby Adams** motioned to adopt Budget Resolution 2010-04 effective date 11/29/2010 **Johnny James** seconded. All Ayes, Motion Carried.

**VIII. Discussion of up-coming election:**

It was discussed who was up for re-election this coming year. Willie Mae Toles, Johnny James and Betty Williamson will be up for re-election in March, 2011.

Chairman Larry Hendren thanked Toni Craig for staying with us after she had turned in her resignation to no longer be city attorney for Laurel Hill.

No meeting for December 2, 2010 with Almarante. December 9, 2010 at 5:30 PM LPA meeting is planned with regular meeting to follow at 6:00 PM.

**Meeting adjourned at 7:46 PM**

SUBMITTED BY:

APPROVED \_\_\_\_\_

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Council Chairman



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**REGULAR LEGISLATIVE MEETING  
of the City Council**

December 6, 2010  
7:00 p.m.

CITY OF MARY ESTHER  
195 Christobal Road – North, Mary Esther, FL 32569

1. INVOCATION
2. CALL TO ORDER
3. PLEDGE OF ALLEGIANCE
4. ROLL CALL
5. MINUTES APPROVAL: 10-04-10 Legislative, 10-25-10 Workshop, and 11-01-10 Legislative Meetings  
Cmbr. Stearns made a **motion to approve the 10-04-10 Legislative, 10-25-10 Workshop, and 11-01-10 Legislative Meeting Minutes**, seconded by Cmbr. Sykes.  
There was no discussion. Mayor McLemore called for the vote.

MOTION PASSED UNANIMOUSLY (5-0)

Yes: Cmbr. Stearns, Cmbr. Griffin, Cmbr. Sykes, Cmbr. Crews, Cmbr. Crowder

6. **LOCAL MITIGATION STRATEGY**  
Cmbr. Crews made a **motion to approve transmittal of the City of Mary Esther 2011 Local Mitigation Strategy**, seconded by Cmbr. Stearns.  
Mayor McLemore called for discussion. The City Manager noted that Mr. Herbstreith had spoken with the County and Cmbr. Crews' request to change 'bay' to 'Santa Rosa Sound' would be corrected since the City bordered the Santa Rosa Sound and not Choctaw Bay. Cmbr. Sykes said the LMS reflected bay in several places and expressed concern that all would be changed. The City Manager said they would all be corrected. There was no further discussion; Mayor McLemore called for the vote.

MOTION PASSED UNANIMOUSLY (5-0)

Yes: Cmbr. Stearns, Cmbr. Griffin, Cmbr. Sykes, Cmbr. Crews, Cmbr. Crowder

7. CHRISTOBAL-HOLLYWOOD SIDEWALK PROJECT BID OPENING  
A **motion is needed approve the lowest bid submitted by Coastal Materials of Alabama, Inc., in the amount of \$218,960.00 for the Christobal Road – Hollywood Boulevard sidewalk project on the contingency the City Engineer confirms the submitted bid package meets all specifications.**
8. ADJOURNMENT  
A **motion is needed to adjourn.**

Check out our website at: [www.cityofmaryesther.com](http://www.cityofmaryesther.com)

*Note: The City does not keep verbatim minutes as a matter of record. If a person decides to appeal any decision made by the Mary Esther City Council with respect to any matter considered at this meeting, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. See Florida Statute 286.0105*



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### MINUTES REGULAR COUNCIL MEETING CITY OF NICEVILLE, FLORIDA NOVEMBER 9,2010

The Niceville City Council met in regular session at 7:00 PM, November 9, 2010 in the Council Chambers, 208 N Partin Drive. All Council members, and the Mayor were present. Also present were City Manager Lannie Corbin; City Clerk, Dan Doucet; City Planner, Wanda Cruttenden; Police Department, Lt Sallee; Public Works Director Bruce Price; Fire Department, Chief Mayville; Library Director, Sheila Bishop; a member of the press, and 26 visitors in the audience. Councilman Thomas offered the prayer and Councilman Thomas led the pledge of allegiance. Mayor Wise called the meeting to order at 7:00 PM.

#### APPROVAL OF MINUTES

Regular Council Meeting, October 12, 2010  
Planning Commission Meeting -November  
1,2010 Local Planning Agency Meeting -No  
Meeting Held

Councilman Henkel moved approval providing the minutes are amended to include zoning comments regarding the C-PUD Concept Plan. Councilman Thomas seconded. Discussion followed. Council Vote: Boudreaux-yes; Thomas-yes; Henkel-yes; Swihartyes; Smith-yes.

#### PUBLIC HEARING

##### 2011 Local Mitigation Strategy -Approval

The revised 2011 Local Mitigation Strategy document was forwarded to the City Council on October 29, 2010 for review. It is recommended the City Council authorize its transmittal to the Mitigation Planning Unit of the State of Florida's Division of Emergency Management within the Department of Community Affairs to initiate the review and, ultimately, adoption process. Councilman Thomas moved approval. Councilman Swihart seconded. Council Vote: Boudreaux-yes; Thomas-yes; Henkelyes; Swihart-yes; Smith-yes.

Ordinance 10-12-01 -An ordinance ratifying through readoption of the Community Planned Unit Development (CPUD) zoning for lands described as set forth herein; providing for proper advertisement pursuant to Florida Statutes 125.66; providing for the severability of this ordinance; providing an effective date and providing for filing with the Clerk of Court and Department of State. (Second Reading) Mr Doucet read ordinance 10-12-01 by title. Councilman Smith moved approval on second reading. Councilman Thomas seconded. No one spoke for or against. Council Vote: Boudreaux-yes; Thomas-yes; Henkel-yes; Swihart-yes; Smith-yes.



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Ordinance 10-12-02 -An ordinance for the partial rezoning of certain properties in the City of Niceville, Florida. A portion of Pinecrest 6, R-IA zoning: Blocks 132, 134, 147, 148, 169 and the following blocks south of Bayshore Dr: 133, 135 and 146; providing zoning for same and an effective date. (Second Reading)

Mr Doucet read ordinance 10-12-02 by title. Councilman Smith moved approval on second reading. Councilman Thomas seconded. Noone spoke for or against. Council Vote: Boudreaux-yes; Thomas-yes; Henkel-yes; Swihart-yes; Smith-yes.

Ordinance 11-01-01 -An ordinance annexing to the City of Niceville, Florida, contiguous lands described as set forth herein; providing for proper advertisement pursuant to Florida Statutes 171.044; providing that the property will be zoned R-IB; providing for the severability of this ordinance; providing an effective date and providing for filing with the Clerk of Court and Department of State. Robert Adams, Sycamore Avenue. (First Reading)

Mr Doucet read ordinance 11-01-01 by title. Councilman Smith moved approval on first reading. Councilman Henkel seconded. Mayor Wise asked if anyone exparted the property. All responded yes Council Vote: Boudreaux-yes; Thomas-yes; Henkel-yes; Swihart-yes; Smith-yes.

### CITY MANAGER REPORTS/REQUESTS/RECOMMENDATIONS

#### Water/Sewer/Drainage Projects -Update:

Mr Price briefed the status of current projects.

Rocky Bayou Force Main Diversion: All of the force main diversion work for this project has been completed with the exception of the upgrade to the pump station that serves a portion of the Rockywood area. Once this pump station upgrade is complete all flow from the city service area will be directed into our collection system.

Fire Hydrant Maintenance: We are awaiting the arrival of the hydrant risers and replacement hydrants to begin the hydrant maintenance.

13<sup>th</sup> Street Drainage Improvements: We have obtained bids to complete the final phase of this project. The remaining work includes the excavation of the treatment pond for the run off from Oak Avenue and the installation of sod and fencing. There have been no flooding or standing water issues in the 13<sup>th</sup> Street and Bayshore Place areas since this system became operational. The majority of the work for this project is being done by city personnel and the final projected cost of this project is anticipated to be @ 50,000.00 below the engineer's estimate and well below the original budgeted amount.



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Bayshore Drive Pipe Replacement Project: Our engineers are preparing the bid documentation for this project and will be advertising and plan to bid and award this work after the holidays.

Valparaiso Boulevard Drainage Improvements: The final plans for this project have been submitted for permitting after which this project will be scheduled for bidding.

Equipment Wash down Facility@ Cedar Avenue: City crews are constructing the new wash down facility at the Public Works yard on Cedar Avenue. This will be used to clean vehicles and equipment.

Turkey Creek Parking Lot: City crews are making improvements to the parking lot at Turkey Creek. This work included removing the rock base, regarding the parking areas and installing milled asphalt to alleviate some of the dust and drainage problems.

Triangle Fence: We have completed the removal of the perimeter fencing around the Triangle Holding Pond.

Christmas Decorations: City crews have started the Christmas Decorations.

Veterans Monument: City crews installed the Fallen Soldier Monument in front of the chambers.

New Sanitation Truck Chassis: We also accepted delivery of our new sanitation truck which has been sent to Ramer Alabama to have the loader installed on it. Instead of purchasing a new loader for this truck we have opted to have one of our older loaders reworked and mounted on the new chassis. This will save @ 15to 18K.

VRC 31 Development: The developer has started the roadway clearing for the 31 lot subdivision on SR 85 North above Edge Elementary School.

Wal Mart Project: The Infrastructure work for the Wal Mart Site between the new bridge and the Oak Creek Center is completed. The developer is now installing underground utilities between the Revell Drive entrance and Swift Creek crossing.



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Wise Avenue Service Road Connection: The permitting with the DOT for the intersection connection is near completion. The storm water permit for the connector road is completed and the construction plans are being prepared for review and approval.

### Regional Sewer System -Update:

No report.

### LIBRARY -UPDATE

Sheila Bishop briefed the status of current projects and provided statistical data to the City Council. Ms Bishop answered several questions from the Council regarding library operating hours; wireless access for people who use the internet in close proximity to the library during non-operating hours.

### FIRE DEPARTMENT -UPDATE

Chief Mayville briefed the status of current projects in the department. He advised that during the month of October the Fire Department responded to a total of 114 calls. There were 106 calls within the City limits and 8 mutual aid calls. Chief Mayville stated fire prevention activities began October 4<sup>th</sup> and ran thru October 20<sup>th</sup>. He advised department personnel spoke to the children in all the elementary schools and childcare centers about fire safety. He advised they worked the Mullet Festival and had no medical or fire related calls.

### POLICE DEPARTMENT -UPDATE:

Lt Sallee briefed the status of current projects. He advised that during the month of October the Police Department responded to 2220 calls for police assistance. A total of 109 vehicles were involved in reported accidents. The estimated amount of damage to these vehicles and related property was \$197,911. A total of 205 Traffic Citations were issued, 34 were Misdemeanor, 7 Felony and 3 DUI arrests were made. Lt Sallee stated that there was some concern during last month's council meeting regarding speeders on Bayshore Drive. He stated that the police department has been monitoring this area and reported the following: 2,031 vehicles were counted with an average speed of 31 miles per hour; 85 traffic details were done from October 13<sup>th</sup> to November the 8<sup>th</sup>. The highest speed observed was 48 miles per hour. The total number of 8 citations were issued. In consideration of 2,031 vehicles and 8 citations were issued equals out to one citation to every 254 vehicles. Discussion followed.



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Other Business:

### **LITIGATION -UPDATE**

Ms Wanda Cruttenden, City Planner briefed the status of a zoning issue involving .45 acres at 316 Niceville Avenue. She advised the property owners are Mr James Finlayson and Mr Warren Cook.

Background Information:

November 2007:

Requested rezoning from R-2 to C-2  
Housing Authority objected to the rezoning.  
Planning Commission and the City Council denied the request.

April 2008:

Requested rezoning from R-2 to R-NC Housing Authority objected to the rezoning. Offered to put restriction on deed: If zoning changed, allow only an office structure not to exceed 2 stories to be built. No other type structure could ever be built without approval of Planning Commission and City Council. Planning Commission and City Council denied the request.

September 2010:

Attorney Bert Moore filed suit against the City contending all criteria for rezoning had been met and property should have been rezoned to R-NC. Requested court enter judgment declaring that the property qualified for rezoning.

Dixie Powell, City of Niceville Attorney filed motion to dismiss. Among other things, fails to make sufficient factual allegations that the decision by the City Council was not within its discretion. Waiting to schedule a hearing.

Mr Corbin stated another litigation issue received by the City regarding a wrongful death situation is being staffed by attorney Dixie Powell. Discussion followed.

Mr Corbin praised the efforts of Lynn Waltz, Connie Naftel, Ken Filson and his employees for the outstanding work they do in setting up the Christmas Display at the City Hall Complex. We receive positive feedback from our residents every year confirming the great work these people do for us.



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Mr Corbin introduced Mr Dorsey Chaney the new City Building Inspector who recently replaced Don Baccadutre who retired from the City in September. Mr Chaney brings a wealth of knowledge since he has worked for the County and the City of Destin in related roles.

### **Fallen Soldier Memorial:**

Mr Corbin introduced Mr Ron Hall; who is responsible for maintaining our vehicle fleet. He lauded Mr Hall's fund raising efforts since the total expense to construct the memorial was funded by his personal efforts. The beautiful memorial is located near the Council Chambers near the putting green.

### **Niceville History:**

Mr Corbin commended Ms Mincher who actually resided in another state for her historical research on our City that goes back to the early days when Niceville became a City one hundred years ago on the November 7, 2010. Mr Corbin stated that an appropriate celebration will be put together during our 4th of July fireworks event next year. Mr Corbin recommended the Mayor send a letter to her in recognition of her efforts. Discussion followed.

### **BILLS PAYABLE**

Councilman Smith moved approval. Councilman Swihart seconded. Council Vote: Boudreaux-yes; Thomas-yes; Henkel-yes; Swihart-yes; Smith-yes.

The meeting adjourned at 8:05 PM.

MAYOR

ATTEST:

CITY CLERK



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**Town of Shalimar  
Town Commission Meeting Minutes  
November 9, 2010**

**CALL TO ORDER** – Mayor Gary Combs called the meeting to order at 6:00 p.m. in Town Hall chambers. He led the "Pledge of Allegiance" to the Flag.

**ROLL CALL FOR THE RECORD**

Mayor Gary Combs - present  
Mayor Pro-Tem Ricardo Garcia - absent  
Commissioner Jerry McCallister - present  
Commissioner Ursel Behnken - present  
Commissioner Glenn Wagner - absent

**Others in attendance:** Town Manager Tom Burns, Deputy Clerk Sheila Hansen, Police Chief John Cash, Maintenance Supervisor Kent Beck, Johann Behnken, Frances and Gene Brown, Joy Bates, Sharon and Tim Smith, Steven Peterson, Roy Petrey, Rebecca and Jim Monte, Jean and Ron Brooks and Desiree and Paul Kalin

**TOWN RESIDENTS TIME:** Sharon Smith asked about the cones on Richbourg Avenue. It was decided that the cones would be removed and the police department would monitor the area to see if people start parking there again.

Gene Brown brought up the danger of the intersection of Cherokee Park and Eglin Parkway. Tom Burns will talk to DOT about making sure the intersection meets their specifications and maybe changing the light so that there is a left turn on green only.

**OLD BUSINESS:**

- I. **APPROVE MINUTES FROM THE OCTOBER 5, 2010 SPECIAL TOWN COMMISSION MEETING - Mayor Combs entertained a motion to approve the October 5, 2010 minutes. Commissioner McCallister moved to approve the minutes of the October 5, 2010 Special Town Commission Meeting as written. The motion was seconded by Commissioner Behnken and passed unanimously.**
- II. **STORAGE LOT – POSTPONED FOR SPECIAL MEETING**
- III. **PUTTING REFERENDUM ON BALLOT TO LIMIT MILLAGE TO 2.0 – Mayor Combs entertained a motion to place a referendum on the March ballot to make a change to the town charter to limit the millage rate to 2.0. Commissioner McCallister moved to place the referendum on the ballot and Commissioner Behnken seconded the motion. The motion was passed unanimously.**
- IV. **CODE ENFORCEMENT ISSUES** – House at 20 Shalimar Drive has the roof falling in and needs to be demolished. Tom Burns stated that he had contacted the owner early this summer and they indicated plans to demolish the structure. If the owner has no intentions of rectifying the problem in the near future, he will be notified that



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we will have to handle the demolition and a lien will be placed against his property.

An inspection will be done of the property at 22 Shalimar Drive to see if there are any violations with the unregistered cars in the back yard and if this problem can be solved.

- V. BEAUTIFICATION** – A beautification Committee was formed with Frances Brown and Sharon Smith appointed as co-chairmen. They will report to Commissioner Behnken and Kent Beck will advise them with his Master Gardner expertise. This committee will report to the commission at the monthly meetings.

**VI. DRAINAGE ISSUES:**

**EASEMENT AT THE JAMES MONTE RESIDENCE** – Roy Petrey of Poly-Engineering spoke explaining that there were anomalies that were found when he inspected the property. The system was designed with swales that would allow the excess water from Barron Court to drain into the retention pond behind the Monte residence. These swales are nearly non-existent now due to homeowners landscaping which has filled in the swales.

Mr. Petrey recommended that a survey be done for the price of \$3500.00 to see what can be done to correct or improve the drainage problem. **Commissioner Behnken made a motion to have the engineering survey done. Commissioner McCallister seconded the motion and it was unanimously passed.**

**GRATING ON OLD FERRY ROAD** – The grates on Old Ferry Road which are a part of the stormwater system have deteriorated to the point that they need replacing. This can be done for \$6500.00 which will replace the drains with new grates which will be made of a stronger and less corrosive material. **Commissioner Behnken made a motion to replace the grates and Commissioner McCallister seconded the motion. The motion was unanimously passed.**

**NEW BUSINESS:**

- I. LMS DRAFT APPROVAL** – A draft was presented for the Okaloosa County Local Mitigation Strategy Plan. This plan is to help create a disaster resistant community. A discussion was held to explain what Shalimar has requested in the plan and that the Commission must make an approval to allow the county to send the plan to the State of Florida Department of Community Affairs. **Commission McCallister made a motion to approve the LMS and allow the county to send the plan to the DCA. Commissioner Behnken seconded the motion and it was passed with unanimous approval.**

**II. APPOINTMENT OF REPLACEMENT OF COMMISSIONER RICARDO GARCIA AND SET DATE TO MAKE A DECISION ON THE STORAGE LOT ISSUE** –

**III.** Commissioner Garcia has resigned due to fact that he is working in another state and is unable to attend the Town Commission meetings. A new commissioner was to be appointed, however, due to lack of time to advertise the open position to the



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residents **Commissioner McCallister moved to table the appointment and have a special meeting in which a new commissioner will be selected and to also make a decision on the Storage Lot issue. This motion also included deciding that a full Commission not be required to make the decision on the storage lots. Commissioner Behnken Seconded the motion and it was unanimously passed and a date of December 2, 2010 at 6:00 pm was set for the meeting.**

A letter will be sent to all residents within the next week explaining that we want volunteers for the open seat on the Commission and the date and time of the special meeting to appoint a new Commissioner and make a decision on the storage lots.

**MAYOR COMB'S REPORT:** The Mayor had nothing to report.

**COMMISSIONER GARCIA'S:** Absent

**COMMISSIONER BEHNKEN'S REPORT:** Commissioner Behnken had nothing to report.

**COMMISSIONER McCALLISTER'S REPORT:** Commissioner McCallister reported that the audit is in the process of being done and the auditors will address the Commission during the January meeting. This month's budget report is in the backup items for the minutes.

**COMMISSION WAGNER'S REPORT:** Absent

**POLICE REPORT:** Chief Cash informed the Commission that Officer Miley will soon be resigning due to having gotten married and planning to move out of state. He also informed the Commission that the Police Department would need a new car in the near future. Also, the local police chief's group is trying to form an inter-local plan so that the local municipalities do not have to depend upon the County Sheriff's Office for as much support as they do at present.

**TOWN MANAGER UPDATE:** Tom Burns announced that the Christmas Parade and Town Christmas Party will be held on December 14<sup>th</sup>.

### **ANNOUNCEMENTS:**

**NOVEMBER 24, 2010 – 6:00 – PLANNING AND ZONING MEETING**

**DECEMBER 2, 2010 – 6:00 – SPECIAL TOWN COMMISSION MEETING**

**DECEMBER 14, 2010 – 6:00 – TOWN COMMISSION MEETING AND CHRISTMAS PARADE AND PARTY**

**ADJOURNMENT: Commissioner Behnken moved to adjourn the meeting at 8:45 p.m. The motion was seconded by Commissioner McCallister and passed unanimously.**

\_\_\_\_\_  
Sheila Hansen, Secretary

\_\_\_\_\_  
December 2, 2010

\_\_\_\_\_  
Date approved



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FRESH AND SALTWATER SPORTS  
ON CHOCTAWHATCHEE BAY



**CITY OF VALPARAISO**  
465 VALPARAISO PARKWAY • (850) 729-5402  
VALPARAISO, FLORIDA 32580



HOME OF  
EGLIN AIR FORCE BASE

December 15, 2010

Okaloosa County Planning Office  
Attn: Ms. Sherry Reed, Planning Analyst  
402 Brookmeade Road  
Crestview, Florida 32539

Dear Ms. Reed:

The City of Valparaiso is aware the resolution adopted for the Local Mitigation Strategy is for the acceptance of a draft document for transmittal to the State for review. At such time as a final document is presented, the Commissioners will review changes, if any, and adopt a subsequent resolution.

If I can be of further assistance please contact me at your convenience at 850-729-5402.

Sincerely,

Carl L. Scott  
City Administrator

*"Home of the World's Largest Air Force Installation; Eglin Air Force Base, Florida"*



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RESOLUTION NO. 23-12-13-10

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF VALPARAISO, **ADOPTING THE DRAFT OKALOOSA COUNTY LOCAL MITIGATION STRATEGY 2011** IN ORDER TO MITIGATE THE VULNERABILITIES OF VALPARAISO TO THE IMPACTS OF FUTURE DISASTERS AND PROVIDING AN EFFECTIVE DATE.

**WHEREAS**, The City of Valparaiso is vulnerable to the human and economic costs of natural, technological and societal disasters, and

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

**WHEREAS**, the City of Valparaiso has been an active participant in the Okaloosa County Local Mitigation Strategy Committee, which has established a comprehensive/ coordinated planning process to eliminate or decrease these vulnerabilities, and

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

**WHEREAS**, these proposed projects and programs have been incorporated into the initial edition of the Okaloosa County Local Mitigation Strategy 2011 that has been prepared and issued for consideration and implementation by the communities of Okaloosa County,

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF VALPARAISO, FLORIDA THAT:

**Section 1.** The City of Valparaiso hereby adopts the draft Okaloosa County Local Mitigation Strategy 2011 to reflect the current need and citizen desire to identify and implement hazard mitigation.

**Section 2.** This resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED THIS 13<sup>TH</sup> DAY OF DECEMBER 2010.



## Jurisdictions Approval for Transmittal to State

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- I. Public Information Update
- II. County Administrator's Update
- III. Public Hearings

- 1. **Request public comment and consideration of a proposed Ordinance which would amend Ordinance No. 98-03 to adjust water and sewer rates and ancillary charges. District: All.**

<b>RESULT:</b>	<b>DEFEATED [UNANIMOUS]</b>
<b>MOVER:</b>	Bill Roberts, Commissioner District 3
<b>SECONDER:</b>	David Parisot, Commissioner
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

Motion to table for further exploration: Feb. 1 meeting 9 AM public hearing.

### IV. Visitors

- 1. **Robin Wright, 1st Judicial Circuit Trial Court Administrator, to address the Board concerning support for the implementation of a Unified Family Court in Okaloosa County.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Bill Roberts, Commissioner District 3
<b>SECONDER:</b>	James Campbell, Commissioner District 5
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

- 2. **John J. O'Connor, President, OC's Towing & Recovery, to address the Board concerning amending the County's Towing Ordinance.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	David Parisot, Commissioner
<b>SECONDER:</b>	Bill Roberts, Commissioner District 3
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

move to public hearing.

### V. Consent Agenda

- 1. **November 16, 2010 Regular Meeting minutes.**



**Jurisdictions Approval for Transmittal to State**

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<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	James Campbell, Commissioner District 5
<b>SECONDER:</b>	Don Amunds, Commissioner District 4
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

1-41

2. **Request approval of a Resolution in support of advanced degrees and higher education in Okaloosa County.**
3. **Request approval of a Public Event Permit for a 5K run along Stillwell Blvd, Farmer Street and Industrial Blvd in Crestview to be held on April 16, 2011 between the hours of 7:00 a.m. and 12:00 p.m., sponsored by Mosaic Church of Crestview.**
4. **Request approval of final payment in the amount of \$427.58 to PBS&J for completion of construction engineering & inspection services on the Hollywood Blvd drainage & resurfacing project.**
5. **Resolution amending the Fiscal Year 2011 Budget, General Fund, to reflect appropriations from Office of Economic Adjustment for carryforward grant in the amount of \$84,431.**
6. **Resolution amending the Fiscal Year 2011 Budget, General Fund, to reflect appropriations from Federal Transit Administration for carryforward grants in the amount of \$5,617,849.**
7. **Resolution amending the Fiscal Year 2011 Budget, General Fund, to reflect appropriations from Florida Department of Transportation for carryforward grants in the amount of \$1,081,568.**
8. **Resolution amending the Fiscal Year 2011 Budget, County Transportation Trust Fund, to reflect appropriations for cash carryforward in the amount of \$175,339.**
9. **Resolution amending the Fiscal Year 2011 Budget, County Transportation Trust Fund, to reflect appropriations from Florida Department of Transportation for carryforward grants in the amount of \$581,791.**
10. **Resolution amending the Fiscal Year 2011 Budget, County Transportation Trust Fund, to reflect appropriations from United States Department of Agriculture for carryforward grant in the amount of \$3,500.**
11. **Resolution amending the Fiscal Year 2011 Budget, Fine & Forfeiture Fund, to reflect appropriations from United States Department of Justice for carryforward grants in the amount of \$238,631.**



### Jurisdictions Approval for Transmittal to State

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12. **Resolution amending the Fiscal Year 2011 Budget, Fine & Forfeiture Fund, to reflect appropriations from Florida Department of Children and Families for carryforward grant in the amount of \$62,047.**
13. **Resolution amending the Fiscal Year 2011 Budget, Fine & Forfeiture Fund, to reflect appropriations from Florida Department of Law Enforcement for carryforward grant in the amount of \$560,043.**
14. **Resolution amending the Fiscal Year 2011 Budget, Library Cooperative Fund, to reflect appropriations for cash carryforward in the amount of \$24,838.**
15. **Resolution amending the Fiscal Year 2011 Budget, Tourist Development Fund, to reflect appropriations for cash carryforward in the amount of \$478,655.**
16. **Resolution amending the Fiscal Year 2011 Budget, Tourist Development Fund, to reflect appropriations from Florida Department of Transportation for carryforward grant in the amount of \$291,183.**
17. **Resolution amending the Fiscal Year 2011 Budget, Natural Disaster Fund, to reflect appropriations from Federal and State for 2009 grant carryforward and local match in the amount of \$495,105.**
18. **Resolution amending the Fiscal Year 2011 Budget, County Health Department Fund, to reflect appropriations for cash carryforward in the amount of \$187,738.**
19. **Resolution amending the Fiscal Year 2011 Budget, Street Lighting Fund, to reflect appropriations for cash carryforward in the amount of \$4,822.**
20. **Resolution amending the Fiscal Year 2011 Budget, Unincorporated County Parks MSTU, to reflect appropriations for cash carryforward in the amount of \$46,491.**
21. **Resolution amending the Fiscal Year 2011 Budget, Debt Service Fund, to reflect appropriations for cash carryforward in the amount of \$95,795.**
22. **Resolution amending the Fiscal Year 2011 Budget, Capital Outlay Construction Fund, to reflect appropriations for cash carryforward in the amount of \$715,685.**
23. **Resolution amending the Fiscal Year 2011 Budget, Road/Bridge Construction Fund, to reflect appropriations for cash carryforward in the amount of \$1,278,510.**



### Jurisdictions Approval for Transmittal to State

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24. **Resolution amending the Fiscal Year 2011 Budget, Road/Bridge Construction Fund, to reflect appropriations from Enterprise Florida, Inc. for carryforward grants in the amount of \$741,191.**
25. **Resolution amending the Fiscal Year 2011 Budget, Road/Bridge Construction Fund, to reflect appropriations from United States Department of Agriculture for carryforward grants in the amount of \$538, 123.**
26. **Resolution amending the Fiscal Year 2011 Budget, Water & Sewer Enterprise Fund, to reflect appropriations from Enterprise Florida, Inc. for Shoal River water treatment plant/reservoir and buffering initiative grant in the amount of \$500,000.**
27. **Resolution amending the Fiscal Year 2011 Budget, Water & Sewer Enterprise Fund, to reflect appropriations from Florida Department of Transportation for carryforward grant in the amount of \$11,506.**
28. **Resolution amending the Fiscal Year 2011 Budget, Airport Enterprise Fund, to reflect appropriations from Federal Aviation Administration for carryforward grants in the amount of \$7,266,910.**
29. **Resolution amending the Fiscal Year 2011 Budget, Airport Enterprise Fund, to reflect appropriations from Florida Department of Transportation for carryforward grants in the amount of \$2,961,940.**
30. **Resolution amending the Fiscal Year 2011 Budget, Airport Enterprise Fund, to reflect appropriations from the Office of the Governor for carryforward grant in the amount of \$92,000.**
31. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Liberty County cooperative grant in the amount of \$17,500.**
32. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Calhoun County cooperative grant in the amount of \$17,500.**
33. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Gulf County cooperative grant in the amount of \$16,500.**
34. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of**



**Jurisdictions Approval for Transmittal to State**

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**Environmental Protection for Holmes County cooperative grant in the amount of \$13,880.**

35. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Jackson County cooperative grant in the amount of \$14,117.**
36. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Santa Rosa County cooperative grant in the amount of \$34,000.**
37. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Walton County cooperative grant in the amount of \$19,112.**
38. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Washington County cooperative grant in the amount of \$17,494.**
39. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Franklin County cooperative grant in the amount of \$9,452.**
40. **Resolution amending the Fiscal Year 2011 Budget, Solid Waste Fund, to reflect appropriations from Florida Department of Environmental Protection for Gadsden County cooperative grant in the amount of \$6,160.**
41. **Request approval for Facility Maintenance staff to assist Ruckel Middle School with augering holes on their softball field for installation of a backstop.**

**VI. Department Business**

**A. Donna Miller/Administrative Services**

1. **Request approval of and authorize the Chairman to execute a Joint Use Agreement with the City of Fort Walton Beach for joint usage/maintenance of Courthouse Annex Extension and Fairgrounds properties. District: All.**



**Jurisdictions Approval for Transmittal to State**

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**RESULT: ADOPTED [UNANIMOUS]**  
**MOVER:** Bill Roberts, Commissioner District 3  
**SECONDER:** James Campbell, Commissioner District 5  
**AYES:** Harris, Roberts, Amunds, Campbell, Parisot

**B. Jeff Littrell/Water & Sewer**

- 1. Request approval of and authorize the Chairman to execute a Memorandum of Agreement with Hurlburt Field to provide wastewater service to Hurlburt Field's Transportable Plasma Waste to Energy System facility. District: All.**

**RESULT: ADOPTED [UNANIMOUS]**  
**MOVER:** Don Amunds, Commissioner District 4  
**SECONDER:** David Parisot, Commissioner  
**AYES:** Harris, Roberts, Amunds, Campbell, Parisot

- 2. Request approval of and authorize the Chairman to execute a Joint Agreement for Legal Representation for legal services related to litigation in opposition of the implementation of proposed Numeric Nutrient Criteria rules. District: All.**

**RESULT: ADOPTED [UNANIMOUS]**  
**MOVER:** Don Amunds, Commissioner District 4  
**SECONDER:** James Campbell, Commissioner District 5  
**AYES:** Harris, Roberts, Amunds, Campbell, Parisot

**C. Greg Donovan/Airports**

- 1. Request approval of and authorize the Chairman to execute Supplemental Joint Participation Agreement No. 1, and an approving Resolution for backup generators at Northwest Florida Regional Airport. District: All.**

**RESULT: ADOPTED [UNANIMOUS]**  
**MOVER:** Bill Roberts, Commissioner District 3  
**SECONDER:** David Parisot, Commissioner  
**AYES:** Harris, Roberts, Amunds, Campbell, Parisot

- 2. Request approval of and authorize the Chairman to execute Amendment No. 1 with Qwest Air Parts, Inc. which increases square footage and establishes a lease that recovers airport invested funds at Bob Sikes Airport in Crestview. District:**



**Jurisdictions Approval for Transmittal to State**

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**RESULT:**           **ADOPTED [UNANIMOUS]**  
**MOVER:**           James Campbell, Commissioner District 5  
**SECONDER:**       Don Amunds, Commissioner District 4  
**AYES:**             Harris, Roberts, Amunds, Campbell, Parisot

D.     John Hofstad/Public Works

1.   **Request approval of a request to schedule a public hearing for the vacation of a portion of Hudson Drive in Fort Walton Beach. District: 3.**

**RESULT:**           **ADOPTED [UNANIMOUS]**  
**MOVER:**           Don Amunds, Commissioner District 4  
**SECONDER:**       James Campbell, Commissioner District 5  
**AYES:**             Harris, Roberts, Amunds, Campbell, Parisot

2.   **Request approval to declare an office vacant on the Parks Advisory Committee and to appoint a new member for this vacancy. District: All.**

**RESULT:**           **ADOPTED [UNANIMOUS]**  
**MOVER:**           James Campbell, Commissioner District 5  
**SECONDER:**       Bill Roberts, Commissioner District 3  
**AYES:**             Harris, Roberts, Amunds, Campbell, Parisot

3.   **Request approval to use county labor, equipment and rental equipment for clearing a right-of-way easement and construction of a driveway to access county park property known as Turkey Bluff Park located near Walthall Road along the Shoal River near Crestview. District: 1.**

**RESULT:**           **ADOPTED [UNANIMOUS]**  
**MOVER:**           Bill Roberts, Commissioner District 3  
**SECONDER:**       Don Amunds, Commissioner District 4  
**AYES:**             Harris, Roberts, Amunds, Campbell, Parisot

TPO meeting discussion of transportation capacity projects; Resolution for TPO meeting from BCC of non-support authorization pursuit of legislation prioritizing projects; concerns expressed. Motion resolution of opposition made by Bill Roberts, second James Campbell; approved.



**Jurisdictions Approval for Transmittal to State**

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**E. Elliot Kampert/Growth Management**

- 1. Request review of and approval to submit the 2011 Local Mitigation Strategy to the Mitigation Planning Unit of the Florida Department of Community Affairs for review and adoption. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Bill Roberts, Commissioner District 3
<b>SECONDER:</b>	James Campbell, Commissioner District 5
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

- 2. Request approval of and authorize the Chairman to execute Task Order No. 8, Amendment 7 with OCT for reimbursement of operating costs and the related authorizing Resolution; as well as the Joint Participation Agreement Notification of Funding No. 4-A for FY 2011 Transit Block Grant funding. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Bill Roberts, Commissioner District 3
<b>SECONDER:</b>	David Parisot, Commissioner
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

- 3. Request approval to participate in the development of a Regional Post-Disaster Redevelopment Plan in conjunction with Walton County. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Bill Roberts, Commissioner District 3
<b>SECONDER:</b>	Don Amunds, Commissioner District 4
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

- 4. Request approval of and authorize the Chairman to execute Amendment No. 1 to the Neighborhood Stabilization Program Agreement with Okaloosa Community Development Corporation pertaining to implementation of the Neighborhood Stabilization Program. District: All.**



**Jurisdictions Approval for Transmittal to State**

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**RESULT:**           **ADOPTED [UNANIMOUS]**  
**MOVER:**           Don Amunds, Commissioner District 4  
**SECONDER:**       James Campbell, Commissioner District 5  
**AYES:**             Harris, Roberts, Amunds, Campbell, Parisot

5. **Request approval of a budget amendment to the Neighborhood Stabilization Program Agreement with the Department of Community Affairs. District: All.**

**RESULT:**           **ADOPTED [UNANIMOUS]**  
**MOVER:**           Bill Roberts, Commissioner District 3  
**SECONDER:**       David Parisot, Commissioner  
**AYES:**             Harris, Roberts, Amunds, Campbell, Parisot

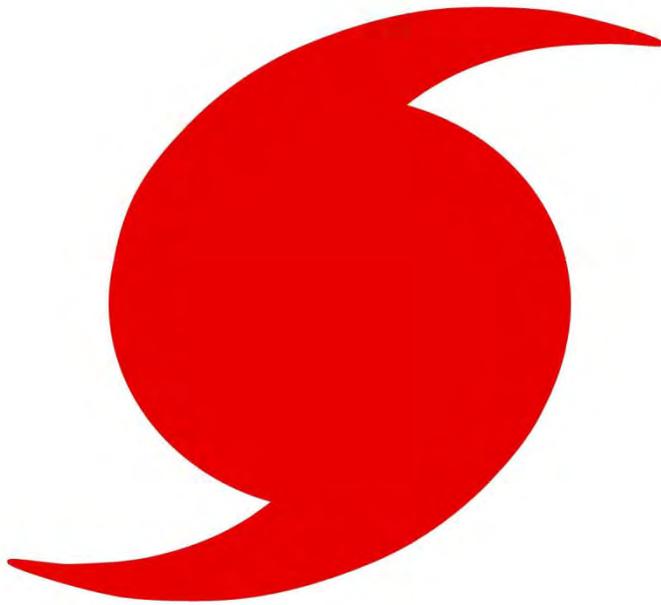
6. **Request review and approval of plans for Coastal Breeze II Condominium, a proposed 66-unit project as submitted by Emerald Coast Design Build on behalf of property owner Coastal Breeze II, LLC. Property is located at 1715 Highway 98 West, Mary Esther and contains 6.1 acres, more or less. District: 4.**

**RESULT:**           **ADOPTED [UNANIMOUS]**  
**MOVER:**           David Parisot, Commissioner  
**SECONDER:**       Wayne Harris, Commissioner District 1  
**AYES:**             Harris, Roberts, Amunds, Campbell, Parisot

Okaloosa County adheres to the Americans with Disabilities Act and will make reasonable modifications for access to this meeting upon request. Please call the County Administrator's Office at (850) 651-7515 to make a request. For Hearing Impaired, Dial 1-800-955-8771 (TDD), and 1-800-955-8770 (Voice). Requests must be received at least 48 hours in advance of the meeting in order for Okaloosa County to provide the requested service.

**Appendix M**

**Jurisdictions Adoptions**



NORTHWEST FLORIDA  
**Daily  
News**

Published Daily  
Fort Walton Beach, Florida  
Distributed in Okaloosa, Santa Rosa & Walton Counties

State of Florida, County of Okaloosa

Before the undersigned authorized personally appeared Maurien Wiltse,  
who on oath says that (s)he is Legal Advertising Clerk  
of the Northwest Florida Daily News,

a daily newspaper published at Fort Walton Beach, in Okaloosa County, Florida;

that the attached copy of advertisement, being a Legal 2071965  
in the matter of Notice

BCC Meeting July 19, 2011  
in the Okaloosa County Court, was published in said newspaper in the issues of  
July 6, 2011

Affiant further says that the said Northwest Florida Daily News is a newspaper published at Fort Walton Beach, in said Okaloosa County, Florida, and that the said newspaper has heretofore been continuously published in said Okaloosa County, Florida, each day, and has been entered as second class mail matter at the post office in Fort Walton Beach, in said Okaloosa County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that (s)he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

STATE OF FLORIDA  
COUNTY OF OKALOOSA

Subscribed and sworn to (or affirmed) before me this 6 July 2011  
(Date)

by Maurien Wiltse, who is/are personally known to me or  
has/have produced Personally Known as identification.  
(Type of Identification)

Eleanor Hayes Notary Public, Commission No. \_\_\_\_\_  
(Signature)

(Name of Notary typed, printed or stamped)

Notary Public, State of Florida  
My Commission Expires July 2012  
Commission # DD 8801-2  
Bonded \$10,000.00

Libya," said Sen. Bob Corker, R-Tenn., a member of the Foreign Relations Committee.

Sen. Roger Wicker, R-Miss., said the Senate could have the Libya debate at another time.

Congress already was sending a muddled message on Libya to both U.S. allies

No. 2 Republican, and Senate Intelligence Committee Chairwoman Dianne Feinstein, D-Calif.

Since NATO took command of the Libya operation in early April, the U.S. role has largely been limited to support efforts such as intelligence, surveillance and

## NOTICE OF PUBLIC HEARING

Notice is hereby given of a public hearing to be held to consider the adoption of an ordinance entitled as follows:

**AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA COUNTY, FLORIDA REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY; PROVIDING FOR CONSULTATION FOR EVALUATION AND APPRAISAL REPORT PURPOSES; AND PROVIDING AN EFFECTIVE DATE**

A public hearing has been scheduled as follows:

**Board of County Commissioners: July 19, 9:00 AM, or as soon thereafter, in the Okaloosa County Water & Sewer Administration Building, third floor Commission Meeting Room, 1804 Lewis Turner Blvd., Fort Walton Beach, FL.**

**ALL INTERESTED PERSONS ARE INVITED TO ATTEND AND BE HEARD REGARDING THE ORDINANCE:**

The proposed ordinance may be inspected by the public at the Department of Growth Management offices in Fort Walton Beach, 1804 Lewis Turner Blvd., 2nd floor, (850) 651-7180 or in Growth Management offices located at 402 Brookmeade Dr., Crestview, (850) 689-5080.

If any person decides to appeal any decision made with respect to any matter considered at these hearings, such person will need a record of the proceeding and may need to ensure that a verbatim record of the proceeding is made which record includes the testimony and evidence upon which the appeal is to be based.

Okaloosa County adheres to the Americans with Disabilities Act and will make reasonable modifications for access to these hearings upon request. Requests may be made to the Growth Management offices described above and must be made at least 48 hours in advance of the hearings in order to provide the requested service.

\*Offers exclude Electrolux, John Deere, Fisher & Paykel, conditioners, air cleaners, humidifiers, dehumidifiers, with other Sears card discounts. Excludes Sears Card only. Offers good thru 7/0/11.

**sa**  
all Craftsman  
and c  
Excludes E

**1599<sup>99</sup>** FINAL  
Craftsman® 46-in. yard tractor with 24-hp V-twin Briggs & Stratton engine and hydrostatic automatic transmission. **SAVE \$450**  
07128857 Reg. 2049.99

\*\*See craftsman.com for warranty details.

As rated by engine manufacturers.

**\$100**  
price drop

Your neighbor

FOR AN EVEN GREATER SELECTION

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**NICEVILLE**  
**Phone: (**  
**Owned &**

**IMPORTANT DEFERRED INTEREST DETAILS (WHEN** promotional period or if you make a late payment. With Account? void on installed sales only. Offer is only valid offer. **SEARS CARDS:** As of 6/2/11, APR for purchases of up to \$50 may apply. See card agreement for details. **GUARANTEE OR YOUR MONEY BACK:** Exclusions apply. **APPLIANCE DEFER:** No interest offer applies to appliances. **Outlet Stores:** Offer good thru 7/8/11. \*\*Free standard within the local delivery area Monday through Friday only. Local areas and non-standard delivery charges vary. E Payment Plan. See store for details. Not valid in Outlet.

Northwest Florida Daily News 200 Racetrack Rd NW Fort Walton Beach, FL 32549 Office 850-883-1111 Fax 850-314-7108	ADVERTISER/CLIENT NAME	
	July-11	Department of Growth Management
	\$223.05	
		30/60/OVER 90 DAYS

### Advertising Invoice & Statement

PAGE #	BILLING DATE	BILLED ACCOUNT NAME AND ADDRESS	REMITTANCE ADDRESS
1	7/6/2011	Department of Growth Management	
BILLED ACCOUNT NUMBER		402 Brookmeade Dr. Crestview, FL 32539 Attn: Sherry Reed	P.O. BOX 2949 FORT WALTON BEACH, FL 32549
2013951			

DATE	NEWSPAPER REFERENCE	DESCRIPTION-COMMENTS/CHARGES	BILLED UNITS	TIMES RUN RATE	NET AMOUNT
07/06/11	2071965	BCC Meeting July 19, 2011	2 x 5	1	\$223.05
TOTAL AMOUNT DUE					\$223.05

COURTESY INVOICE - NOT A BILL  
this may or may not reflect final charges

7-7-11  
SAR

## NOTICE OF PUBLIC HEARING

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AGENDA (Amended)  
Okaloosa County Board of Commissioners  
July 19, 2011 – 8:30 a.m.  
Water & Sewer Administration Building  
Fort Walton Beach

- I. Employee Awards
- II. Public Information Update
- III. County Administrator's Update
- IV. Public Hearings
  - 1. Request public comment and consideration concerning adoption of the 2011 Local Mitigation Strategy. District: All.
- V. Visitors
  - 1. David & Rebecca Sherry, to address the Board concerning the Okaloosa Island Beach Restoration Project.
  - 2. Kathy Houchins, Chairperson, Tourist Development Council, to address the Board concerning beach restoration.
- VI. Consent Agenda
  - 1. June 7, 2011 Regular Meeting Minutes.
  - 2. June 7, 2011 Executive Session Minutes.
  - 3. June 21, 2011 Regular Meeting Minutes.
  - 4. Resolution amending the Fiscal Year 2011 Budget, Supervisor of Elections General Fund, to reflect appropriations from Florida Department of State for federal election activities grant in the amount of \$23,004.
  - 5. BT-11-13 to provide local match for federal election activities grant in the amount of \$6,902.
  - 6. Resolution amending the Fiscal Year 2011 Budget, Capital Outlay Construction Fund, to reflect appropriations from budget transfer from County Health Department in the amount of \$756,240.
  - 7. Request approval to award the bid for restaurant food and beverage services at Northwest Florida Regional Airport to First Class Perks, LLC, they being the sole bidder meeting specifications. Bid Amount - \$12% of annual gross sales.
  - 8. Request approval to award the bid for the Fiber Optic Network Range Road project to World Fiber Technologies, they being the lowest bidder meeting specifications. Bid amount - \$69,798.55
  - 9. Request approval to award the bid for furniture for the judicial center to multiple bidders who met specifications for various items of furniture required. Total bid amount - \$212,709.44
  - 10. Request approval to award the bid for a BDA Signal Booster to Cell Antenna Corp., they being the lowest bidder meeting specifications. Bid amount - \$117,937.94
  - 11. Request approval of a Public Event Permit for an Intersection Charitable Collection, to be held on August 6, 2011 with a rain date of August 27, 2011, at the following

locations: Beal Pkwy & Mary Esther Cut-Off, Eglin Pkwy & Racetrack Rd, Beal Pkwy & Racetrack Rd and Green Acres Rd & Lewis Turner Blvd, sponsored by Gulf Coast City Church.

12. Request approval of Pensacola Photography, LLC's request for a Qualified Beach Vendor permit for 2011.
13. Request approval of Sunshine Weddings, LLC's request for renewal of their Qualified Beach Vendor permit for 2011.

## VII. Department Business

1. Catherine White/Drug Court
  - a. Request approval of and authorize the Chairman to execute grant applications and a distribution approval letter for submittal to the Edward Byrne Memorial Justice Assistance Grant Program for the following: Emerald Coast Children's Advocacy Center, Judge Ben Gordon Jr. Family Visitation Center, State Attorney's Office and the Sheriff's Department. District: All.
2. Richard Brannon/Purchasing
  - a. Request consideration and staff direction concerning the updated list of surplus County-owned property prepared by staff in conjunction with the Okaloosa Citizens Alliance. District: All.
3. Greg Donovan/Airports
  - a. Request approval to award the construction contract for east side additions - fuel farm canopies and security improvements at Northwest Florida Regional Airport to Cathey Construction & Development, LLC. District: All.
4. Mark Bellinger/Tourist Development Council
  - a. Request approval of and authorize the Chairman to execute a lease agreement with Harbor Walk, LLC for a Visitor's Welcome Center in Destin. District: All.
5. Dino Villani/Public Safety
  - a. Request approval of and authorize the Chairman to execute a Resolution adopting the updated Comprehensive Emergency Management Plan as the official disaster preparedness and response plan for the county. District: All.
6. Don Vanderhoek/Information Systems
  - a. Request approval of and authorize the Chairman to execute Change Order No. 1 with Anderson Columbia for the extension of the fiber optic network across the Mid Bay Bridge to connect with existing fiber in Destin. District: All.
7. John Hofstad/Public Works
  - a. Request approval of and authorize the Chairman to execute a renewal of the Sovereignty Submerged Lands Lease with the Florida Department of Environmental Protection for the Okaloosa Island Pier. District: 5.

8. Jeff Littrell/Water & Sewer
  - a. Request approval of Revision 1 to Task Order 30 for professional engineering design and construction services for the Garnier's Plant demolition project. District: All.
  - b. Request approval to schedule a public hearing on August 16, 2011 for public comment concerning proposed adjustments in Water & Sewer rates and ancillary charges. District: All.
9. Elliot Kampert/Growth Management
  - a. Informational presentation related to the Transit Development Plan from data collected through the recent Okaloosa County Transit survey. District: All.
  - b. Request adoption by Resolution of the Local Housing Assistance Program for FY 2010-2013. District: All.

#### VIII. Old Business

1. Request approval to schedule an Executive Session concerning Okaloosa County vs. Shalimar Village on August 2, 2011, immediately following the Commission Meeting scheduled that morning. District: All.

***Okaloosa County adheres to the Americans with Disabilities Act and will make reasonable modifications for access to this meeting upon request. Please call the County Administrator's Office at (850) 651-7515 to make a request.*** For Hearing Impaired, Dial 1-800-955-8771 (TDD), and 1-800-955-8770 (Voice). Requests must be received at least 48 hours in advance of the meeting in order for Okaloosa County to provide the requested service.

**OKALOOSA BOARD OF COUNTY COMMISSIONERS  
AGENDA REQUEST**

**TO:** The Honorable Chairman and Members of the Board of  
County Commissioners

**FROM:** Elliot L. Kampert, AICP; Growth Management Director

**DATE:** July 19, 2011

**SUBJECT:** Adoption of 2011 Local Mitigation Strategy

**DEPARTMENT:** Growth Management Department

**DISTRICT:** All

**STATEMENT OF ISSUE:** The County must adopt its new, 2011 Local Mitigation Strategy by ordinance following a public hearing.

**BACKGROUND:** The federal Robert T. Stafford Disaster Relief and Emergency Assistance Act requires that every community develop a plan and strategy (known as a Local Mitigation Strategy or LMS) that addresses each type of natural disaster that threatens the community. Failure to develop and adopt the required LMS jeopardizes a community's ability to receive certain types of both pre-disaster and post-disaster funds. Okaloosa County first adopted its LMS in 1999, which it re-adopted with some revisions in 2006. The LMS was written by the Okaloosa County LMS Committee which is comprised of representatives from various County departments, the municipal governments of Okaloosa County, the Air Force. The Committee is chaired by Okaloosa County.

In accordance with the Stafford Act, the accompanying LMS includes:

- a general description of all the natural hazards to which the county as a whole is vulnerable;
- a municipality-specific analysis of the natural hazards to which *each municipality* is vulnerable;
- an analysis of the natural hazards to which the *unincorporated County* is vulnerable;
- a list of the LMS' goals, objectives, and policies;
- a list of projects intended to reduce the communities' (cities and County) vulnerability to the various natural disasters; and
- a discussion of the actions and programs (for example, participation in the National Flood Insurance Program) each community has undertaken to reduce its vulnerability to natural disasters.

The 2011 LMS was completed in November 2010 and transmitted to the Florida Division of Emergency Management (FDEM) in December, 2010 for review and comments. The FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review. In April 2011, the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (FEMA) for further review. Finally, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

In addition to fulfilling the requirements of the Stafford Act, the Local Mitigation Strategy (LMS) facilitates the County's participation in the National Flood Insurance Program Community Rating System.

It should be noted that the opening of the Executive Summary will be amended for all future publications to reflect the Board's adoption date. An additional appendix "Appendix M" will be added to contain a copy of all the municipalities resolutions and/or ordinances adopting the 2011 LMS.

**RECOMMENDATION:** The Department of Growth Management requests that the Board conduct the public hearing, receive input, and then approve the ordinance adopting the 2011 Local Mitigation Strategy.

**RECOMMENDED BY:** \_\_\_\_\_  
Department Head

**APPROVED BY:** \_\_\_\_\_  
County Administrator

Attachment: 2010 LMS Report  
2011 LMS Ordinance

Meeting Summary  
Okaloosa County Board of Commissioners  
Tuesday, July 19, 2011– 8:30 AM  
Water and Sewer

**I. Employee Awards**

**II. Public Information Update**

**III. County Administrator's Update**

8 county coalition BP Oil Spill Recovery (1 billion for advanced NRDA Projects-FL 1 Million) organized by DEP; 4 projects Okaloosa Co.; additional projects added.  
ECWR project overview next meeting.

1. **Motion for Public Works staff and partners to prioritize BP Funding of NRDA projects**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Bill Roberts, Commissioner District 3
<b>SECONDER:</b>	David Parisot, Commissioner District 2
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

Finalized list will come back to the board for approval in the future.

**IV. Public Hearings**

1. **Request public comment and consideration concerning adoption of the 2011 Local Mitigation Strategy. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Bill Roberts, Commissioner District 3
<b>SECONDER:</b>	David Parisot, Commissioner District 2
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

**V. Visitors**

1. **David & Rebecca Sherry, to address the Board concerning the Okaloosa Island Beach Restoration Project.**
2. **Kathy Houchins, Chairperson, Tourist Development Council, to address the Board concerning beach restoration.**

**VI. Consent Agenda**

1. **June 7, 2011 Regular Meeting Minutes.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Wayne Harris, Commissioner District 1
<b>SECONDER:</b>	Don Amunds, Commissioner District 4
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

1-13

2. **June 7, 2011 Executive Session Minutes.**
3. **June 21, 2011 Regular Meeting Minutes.**
4. **Resolution amending the Fiscal Year 2011 Budget, Supervisor of Elections General Fund, to reflect appropriations from Florida Department of State for federal election activities grant in the amount of \$23,004.**
5. **BT-11-13 to provide local match for federal election activities grant in the amount of \$6,902.**
6. **Resolution amending the Fiscal Year 2011 Budget, Capital Outlay Construction Fund, to reflect appropriations from budget transfer from County Health Department in the amount of \$756,240.**
7. **Request approval to award the bid for restaurant food and beverage services at Northwest Florida Regional Airport to First Class Perks, LLC, they being the sole bidder meeting specifications. Bid Amount - \$12% of annual gross sales.**
8. **Request approval to award the bid for the Fiber Optic Network Range Road project to World Fiber Technologies, they being the lowest bidder meeting specifications. Bid amount - \$69,798.55**
9. **Request approval to award the bid for furniture for the judicial center to multiple bidders who met specifications for various items of furniture required. Total bid amount - \$212,709.44**
10. **Request approval to award the bid for a BDA Signal Booster to Cell Antenna Corp., they being the lowest bidder meeting specifications. Bid amount - \$117,937.94**
11. **Request approval of a Public Event Permit for an Intersection Charitable Collection, to be held on August 6, 2011 with a rain date of August 27, 2011, at the following locations: Beal Pkwy & Mary Esther Cut-Off, Eglin Pkwy & Racetrack Rd, Beal Pkwy & Racetrack Rd and Green Acres Rd & Lewis Turner Blvd, sponsored by Gulf Coast City Church.**
12. **Request approval of Pensacola Photography, LLC's request for a Qualified Beach Vendor permit for 2011.**
13. **Request approval of Sunshine Weddings, LLC's request for renewal of their Qualified Beach Vendor permit for 2011.**

**VII. Department Business****1. Catherine White/Drug Court**

- a. **Request approval of and authorize the Chairman to execute grant applications and a distribution approval letter for submittal to the Edward Byrne Memorial Justice Assistance Grant Program for the following: Emerald Coast Children's Advocacy Center, Judge Ben Gordon Jr. Family Visitation Center, State Attorney's Office and the Sheriff's Department. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Bill Roberts, Commissioner District 3
<b>SECONDER:</b>	David Parisot, Commissioner District 2
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

**2. Richard Brannon/Purchasing**

- a. **Request consideration and staff direction concerning the updated list of surplus County-owned property prepared by staff in conjunction with the Okaloosa Citizens Alliance. District: All.**

<b>RESULT:</b>	<b>ADOPTED [4 TO 1]</b>
<b>MOVER:</b>	Wayne Harris, Commissioner District 1
<b>SECONDER:</b>	Bill Roberts, Commissioner District 3
<b>AYES:</b>	Wayne Harris, Bill Roberts, Don Amunds, David Parisot
<b>NAYS:</b>	James Campbell

Okaloosa Citizens Alliance Presentation

Suggest property manager; more than pays for itself in other counties.

**3. Greg Donovan/Airports**

- a. **Request approval to award the construction contract for east side additions - fuel farm canopies and security improvements at Northwest Florida Regional Airport to Cathey Construction & Development, LLC. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Wayne Harris, Commissioner District 1
<b>SECONDER:</b>	David Parisot, Commissioner District 2
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

4. *Mark Bellinger/Tourist Development Council*

- a. **Request approval of and authorize the Chairman to execute a lease agreement with Harbor Walk, LLC for a Visitor’s Welcome Center in Destin. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	David Parisot, Commissioner District 2
<b>SECONDER:</b>	Wayne Harris, Commissioner District 1
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

5. *Dino Villani/Public Safety*

- a. **Request approval of and authorize the Chairman to execute a Resolution adopting the updated Comprehensive Emergency Management Plan as the official disaster preparedness and response plan for the county. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	David Parisot, Commissioner District 2
<b>SECONDER:</b>	Don Amunds, Commissioner District 4
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

6. *Don Vanderhoek/Information Systems*

- a. **Request approval of and authorize the Chairman to execute Change Order No. 1 with Anderson Columbia for the extension of the fiber optic network across the Mid Bay Bridge to connect with existing fiber in Destin. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Don Amunds, Commissioner District 4
<b>SECONDER:</b>	Wayne Harris, Commissioner District 1
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

7. *John Hofstad/Public Works*

- a. **Request approval of and authorize the Chairman to execute a renewal of the Sovereignty Submerged Lands Lease with the Florida Department of Environmental Protection for the Okaloosa Island Pier. District: 5.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Don Amunds, Commissioner District 4
<b>SECONDER:</b>	David Parisot, Commissioner District 2
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

8. *Jeff Littrell/Water & Sewer*

- a. **Request approval of Revision 1 to Task Order 30 for professional engineering design and construction services for the Garnier's Plant demolition project. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Don Amunds, Commissioner District 4
<b>SECONDER:</b>	Wayne Harris, Commissioner District 1
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

Mike Wells-1&2

- b. **Request approval to schedule a public hearing on August 16, 2011 for public comment concerning proposed adjustments in Water & Sewer rates and ancillary charges. District: All.**

9. *Elliot Kampert/Growth Management*

- a. **Informational presentation related to the Transit Development Plan from data collected through the recent Okaloosa County Transit survey. District: All.**
- b. **Request adoption by Resolution of the Local Housing Assistance Program for FY 2010-2013. District: All.**

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Wayne Harris, Commissioner District 1
<b>SECONDER:</b>	Don Amunds, Commissioner District 4
<b>AYES:</b>	Harris, Roberts, Amunds, Campbell, Parisot

VIII. **Old Business**

1. **Request approval to schedule an Executive Session concerning Okaloosa County vs. Shalimar Village on August 2, 2011, immediately following the Commission Meeting scheduled that morning. District: All.**

**RESULT:**       **ADOPTED [UNANIMOUS]**  
**MOVER:**        Don Amunds, Commissioner District 4  
**SECONDER:**   David Parisot, Commissioner District 2  
**AYES:**         Harris, Roberts, Amunds, Campbell, Parisot

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ORDINANCE 11-09

**AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA COUNTY, FLORIDA REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY; PROVIDING FOR CONSULTATION FOR EVALUATION AND APPRAISAL REPORT PURPOSES; AND PROVIDING AN EFFECTIVE DATE**

WHEREAS, Section 322 of the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all natural hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement those actions;

WHEREAS, Okaloosa County coordinates the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County, the municipal governments of Okaloosa County, and chaired by Okaloosa County;

WHEREAS, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended in 2006;

WHEREAS, the 1999 and 2006 Local Mitigation Strategies were duly adopted by Okaloosa County in accordance with applicable State and Federal laws;

WHEREAS, beginning in 2009, the LMS Committee began the process of substantially updating and revising the 2006 LMS for adoption in 2011 as required by the Stafford Act;

WHEREAS, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

WHEREAS, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

WHEREAS, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

WHEREAS, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA COUNTY, FLORIDA, THAT:

Section 1. Repeal of 2006 LMS. The 2006 Local Mitigation Strategy adopted pursuant to Ordinance 06-61 by is hereby repealed in its entirety.

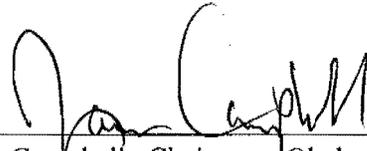
Section 2. 2011 Local Mitigation Strategy Adopted. The 2011 Local Mitigation Strategy attached hereto as Exhibit A, which includes the Okaloosa County Post-Disaster Redevelopment Plan, is hereby adopted and shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

Section 3. Use and Consideration of LMS for Development of Comprehensive Plan Evaluation and Appraisal Report. The 2011 Local Mitigation Strategy attached hereto as Exhibit A shall be consulted and given due consideration during the development of the Okaloosa County Comprehensive Plan Evaluation and Appraisal Report.

Section 4. Effective Date. This ordinance shall take effect upon signing.

PASSED AND DULY ADOPTED THIS 19th DAY OF July, 2011.

By:



James Campbell, Chairman, Okaloosa County  
Board of County Commissioners



ATTEST:



Don Howard  
Clerk of Circuit Court



**ORDINANCE NO. 1467**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CRESTVIEW, FLORIDA, REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY; CLARIFYING SECTIONS OF CITY RESPONSIBILITY; AND PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, Section 322 of the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement those actions;

**WHEREAS**, the City of Crestview is part of the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County and the other municipal governments of Okaloosa County and chaired by Okaloosa County;

**WHEREAS**, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended in 2006;

**WHEREAS**, the 1999 and 2006 Local Mitigation Strategies were duly adopted by the City of Crestview in accordance with applicable State and Federal laws;

**WHEREAS**, beginning in 2009, the LMS Committee began the process of substantially updating and revising the 2006 LMS for adoption in 2011 as required by the Stafford Act;

**WHEREAS**, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

**WHEREAS**, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

**WHEREAS**, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

**WHEREAS**, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CRESTVIEW, FLORIDA, THAT:**

**SECTION 1. AUTHORITY.** The authority for enactment of this ordinance is Chapter 166.021, Florida Statutes and Section 2, City Charter.

**SECTION 2. ADOPTION.** The 2011 Local Mitigation Strategy attached hereto as Exhibit A is hereby adopted and shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

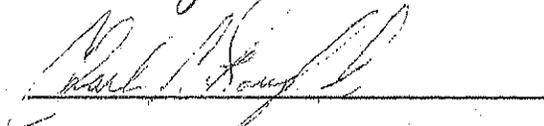
**SECTION 3. USE AND CONSIDERATION OF LMS FOR DEVELOPMENT OF COMPREHENSIVE PLAN EVALUATION AND APPRAISAL REPORT.** The 2011 Local Mitigation Strategy attached hereto as Exhibit A shall be consulted and given due consideration during the development of the City of Crestview Comprehensive Plan Evaluation and Appraisal Report.

**SECTION 4. REPEALER.** All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

**SECTION 5. SEVERABILITY.** If any section, subsection, sentence clause, phrase or portion of this ordinance or the particular application thereof shall be held invalid by any court, administrative agency, or other body with appropriate jurisdiction, the remaining section, subsection, sentences, clauses, or phrases under application shall not be affected thereby.

**SECTION 6. EFFECTIVE DATE.** This ordinance shall become effective upon its adoption.

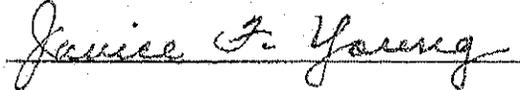
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF CRESTVIEW, FLORIDA ON THE 25<sup>TH</sup> DAY OF July, 2011.



CHARLES E. BAUGH, JR.

Council President

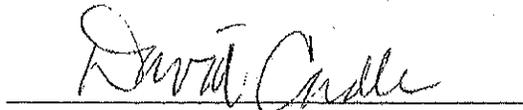
ATTEST:



JANICE F. YOUNG

City Clerk

APPROVED BY ME THIS 25<sup>TH</sup> DAY OF July, 2011.



DAVID CADLE

Mayor

## RESOLUTION 11-06

### **A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DESTIN, FLORIDA, REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY; CLARIFYING SECTIONS OF CITY RESPONSIBILITY; AND PROVIDING FOR AN EFFECTIVE DATE**

*WHEREAS*, Section 322 of the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement those actions; and

*WHEREAS*, the City of Destin is part of the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County and the other municipal governments of Okaloosa County and chaired by Okaloosa County;

*WHEREAS*, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended in 2006;

*WHEREAS*, the 1999 and 2006 Local Mitigation Strategies were duly adopted by the City of Destin in accordance with applicable State and Federal laws;

*WHEREAS*, beginning in 2009, the LMS Committee began the process of substantially updating and revising the 2006 LMS for adoption in 2011 as required by the Stafford Act;

*WHEREAS*, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

*WHEREAS*, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

*WHEREAS*, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

*WHEREAS*, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DESTIN, FLORIDA, THAT:

Section 1. Repeal of 2006 LMS. The 2006 Local Mitigation Strategy is hereby repealed in its entirety.

Section 2. 2011 Local Mitigation Strategy Adopted. The 2011 Local Mitigation Strategy attached hereto as Exhibit A is hereby adopted and shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

Section 3. Use and Consideration of LMS for Development of Comprehensive Plan Evaluation and Appraisal Report. The 2011 Local Mitigation Strategy attached hereto as Exhibit A shall be consulted and given due consideration during the development of the City of Destin Comprehensive Plan Evaluation and Appraisal Report.

Section 4. Effective Date. This resolution shall take effect upon signing.

ADOPTED THIS 1<sup>ST</sup> DAY OF AUGUST 2011

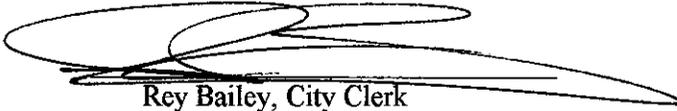
By:



Sarah "Sam" Seevers

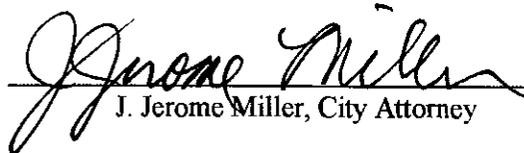
for: Sarah "Sam" Seevers

ATTEST:



Rey Bailey, City Clerk

The form and content of the above Resolution is hereby approved for legal sufficiency.



J. Jerome Miller, City Attorney

**RESOLUTION 2011-15**

A RESOLUTION OF THE CITY OF FORT WALTON BEACH, FLORIDA, REPEALING THE 2006 LOCAL MITIGATION STRATEGY, ADOPTING THE 2011 OKALOOSA COUNTY LOCAL MITIGATION STRATEGY, AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FORT WALTON BEACH, FLORIDA AS FOLLOWS:

**Section 1. Authority & Intent**

The Robert T. Stafford Disaster Relief Act (42 USC 5121-5207) as modified by the Disaster Mitigation Act of 2000 (44 CFR 201), requires that all local governments develop a Local Mitigation Strategy (LMS) that proactively identifies the types of natural disasters to which each community is vulnerable, and which includes a plan to reduce each community's vulnerability, including clearly defined hazard mitigation activities and projects.

The Okaloosa County Comprehensive Plan/LMS Committee, represented by several municipalities including the City of Fort Walton Beach, prepared the attached 2011 update to the Local Mitigation Strategy. The Plan has been developed consistent with the Insurance Service Office's Community Rating System (CRS).

**Section 2. Repeal**

The City Council hereby repeals the 2006 Local Mitigation Strategy in its entirety.

**Section 3. Adoption**

The City Council hereby adopts the 2011 Okaloosa County Local Mitigation Strategy (LMS), which shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and all related rules and regulations. The LMS Plan shall serve as the City's long-term strategy for reducing disaster losses by addressing public participation, risk assessment, and identifying potential mitigation actions.

**Section 3. Effective Date**

This Resolution shall take effect immediately upon approval by City Council and signature of the Mayor.

Adopted June 14, \_\_\_\_\_, 2011

Mike Anderson  
Mike Anderson, Mayor

Attest:

Helen A. Spencer  
Helen Spencer, City Clerk

Approved for form and legal sufficiency:

Hayward Dykes  
Hayward Dykes, City Attorney

DISPOSITION
Eng.
M. Beedie
E. Jones



REGULAR MEETING OF THE LAUREL HILL, CITY COUNCIL.

The Laurel Hill City Council met in session July 5, 2011 at 6:00 PM, at the City Hall.

Council Members:	Larry Hendren	Present
	Willie Mae Toles	Present
	Robby Adams	Present
	Betty Williamson	Present
Mayor:	Joan Smith	Present
City Clerk:	Nita Miller	Present
Fire Chief:	Kevin Kendrick	Present
Attorney:	Dan Campbell	Present
Visitors:	Paula Kelley, Paul Lux, Julie Chumbley, Johnny James, Jeff Senterfitt, Greg Martin, Chris Jowers, Bessie Green, Ora Lee Clary, Kenny Skanes	

- I. **Chairman** called the meeting to order at 6:00 PM.
- II. **Council woman Toles** led in the prayer and pledge of allegiance to the flag.
- III. **April 5, 2011 Minutes:**  
Approved as distributed.
- IV. **May 9, 2011 Minutes:**  
Approved as distributed.
- V. **June 7, 2011 Minutes:**  
Approved as distributed.
- VI. **June 21, 2011 Minutes:**  
All three meeting minutes approved as distributed.
- VII. **Ordinance #311:**  
First reading of Ordinance #311 establishing a Fire Public Safety Facilities Fee.
- VIII. **Ordinance #314:**  
First reading of Ordinance #314 providing Public Participation in the Comprehensive Planning Process.

- IX. **Resolution 2011-10:**  
Repealing Resolution 2005-05 and adopting the 2011 Local Mitigation Strategy.  
Motion by **Councilman Adams** to approve the 2011 Local Mitigation Strategy seconded  
by **councilwoman Williamson**. **All Ayes, Motion Carried.**
- X. **Council Seat Vacancy:**  
Three names submitted for vacant council seat.  
1. Mike Blizzard 2. Johnny James 3. Charles Lennard  
Motion by **Councilman Adams** to appoint Johnny James to vacant council seat seconded  
by **Councilwoman Toles**. Chairman Hendren and Councilwoman Williamson opposed.  
**Motion failed due to lack of majority vote.**  
Motion by **Councilwoman Williamson** to appoint Charles Lennard to vacant council  
seat seconded by **Chairman Hendren**. Councilman Adams and Councilwoman Toles  
opposed. **Motion failed due to lack of majority vote.**
- XI. **Water Improvement Loan:**  
Expires November 30, 2011. Discussed meter installation.
- XII. **Fire Dept Radio:**  
Motion by **Councilman Adams** to approve the purchase of Fire Dept radios pending  
50/50 Forestry Grant seconded by **Councilwoman Williamson**. **All Ayes, Motion  
Carried.**
- XIII. **Fire Truck Repair:**  
Engine 61's alternator and 3 batteries have been replaced.  
Engine 63 does not have a gas leak, but the air breaks are leaking and will be repaired.
- XIV. **Ordinance 172 Gulf Power:**  
Expires Feb 4, 2011. If no action is taken it rolls over for another 5 years.
- XV. **Ordinance 312:**  
Second reading of Ordinance #312 repealing Ordinance #249 and Ordinance #295.  
Motion by **Councilman Adams** to approve Ordinance #312 seconded by **Councilwoman  
Williamson**. **All Ayes, Motion Carried.**
- XVI. **Fire Chief Report:**  
Total calls for June was 6. Currently have 12 members. Applied for the Forestry 50/50  
grant for the 10 VHF radios.
- XVII. **Clerk Report:**  
CDBG grant is on track and looks good. Page numbering on minutes have been updated.
- XVIII. **Attorney Report:**  
None
- XIX. **Mayor Report:**  
None

Next Council meeting and Budget Workshop scheduled for Aug 2, 2011 @ 6:00 PM.

Adjourned: 6:53 p.m.

Submitted by:

Approved:

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Nita Miller / City Clerk

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Larry Hendren, Council Chairman

**Resolution No. 2011-10**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAUREL HILL,  
FLORIDA, REPEALING RESOLUTION 2005-05; ADOPTING THE 2011 LOCAL  
MITIGATION STRATEGY; CLARIFYING SECTIONS OF CITY  
RESPONSIBILITY; AND PROVIDING FOR AN EFFECTIVE DATE**

WHEREAS, Section 322 of the Federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement those actions;

WHEREAS, the City of Laurel Hill is part of the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County and the other municipal governments of Okaloosa County and chaired by Okaloosa County;

WHEREAS, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended;

WHEREAS, the 1999 and amended Local Mitigation Strategies were duly adopted by the City of Laurel Hill in accordance with applicable State and Federal laws;

WHEREAS, beginning in 2009, the LMS Committee began the process of substantially updating and revising the LMS for adoption in 2011 as required by the Stafford Act;

WHEREAS, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

WHEREAS, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

WHEREAS, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

WHEREAS, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LAUREL HILL, FLORIDA, THAT:

Section 1. Repeal of previous LMS. The previous Local Mitigation Strategy is hereby repealed in its entirety.

Section 2. 2011 Local Mitigation Strategy Adopted. The 2011 Local Mitigation Strategy attached hereto as Exhibit A is hereby adopted and shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

Section 3. Use and Consideration of LMS for Development of Comprehensive Plan Evaluation and Appraisal Report. The 2011 Local Mitigation Strategy attached hereto as Exhibit A shall be consulted and given due consideration during the development of the City of Laurel Hill Comprehensive Plan Evaluation and Appraisal Report.

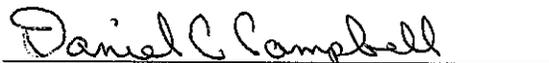
Section 4. Effective Date. This resolution shall take effect upon signing.

PASSED AND DULY ADOPTED THIS 5<sup>TH</sup> DAY OF JULY, 2011.

By:

  
Larry Hendren, Council Chairman

APPROVED AS TO FORM  
AND LEGAL SUFFICIENCY:

  
City Attorney

ATTEST:

  
City Clerk

**Resolution 2011-03**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARY ESTHER, FLORIDA, REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY; PROVIDING FOR CONSULTATION DURING DEVELOPMENT OF THE COMPREHENSIVE PLAN EVALUATION AND APPRAISAL REPORT; AND PROVIDING FOR AN EFFECTIVE DATE**

WHEREAS, Section 322 of the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement those actions;

WHEREAS, the City of Mary Esther is part of the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County and the other municipal governments of Okaloosa County and chaired by Okaloosa County;

WHEREAS, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended in 2006;

WHEREAS, the 1999 and 2006 Local Mitigation Strategies were duly adopted by the City of Mary Esther in accordance with applicable State and Federal laws;

WHEREAS, beginning in 2009, the LMS Committee began the process of substantially updating and revising the 2006 LMS for adoption in 2011 as required by the Stafford Act;

WHEREAS, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

WHEREAS, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

WHEREAS, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

WHEREAS, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARY ESTHER, FLORIDA, THAT:

Section 1. Repeal of 2006 LMS. The 2006 Local Mitigation Strategy is hereby repealed in its entirety.

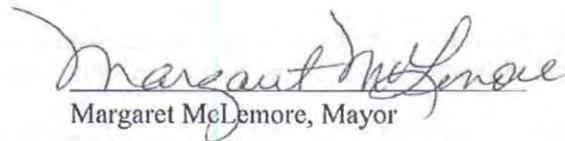
Section 2. 2011 Local Mitigation Strategy Adopted. The 2011 Local Mitigation Strategy attached hereto as Exhibit A is hereby adopted and shall be considered the Local Mitigation Strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

Section 3. Use and Consideration of LMS for Development of Comprehensive Plan Evaluation and Appraisal Report. The 2011 Local Mitigation Strategy attached hereto as Exhibit A shall be consulted and given due consideration during the development of the City of Mary Esther Comprehensive Plan Evaluation and Appraisal Report.

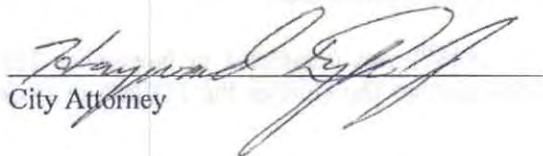
Section 4. Effective Date. This resolution shall take effect upon signing.

PASSED AND DULY ADOPTED THIS 5<sup>TH</sup> DAY OF JULY, 2011.

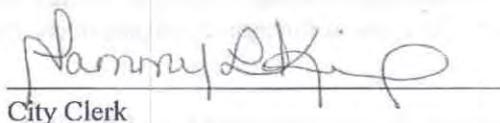
By:

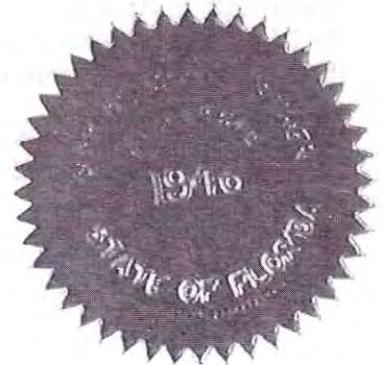
  
Margaret McLemore, Mayor

APPROVED AS TO FORM  
AND LEGAL SUFFICIENCY:

  
City Attorney

ATTEST:

  
City Clerk



Daniel J. Doucet  
City Clerk



Telephone (850) 729-4000  
208 N. Partin Drive  
Niceville, Florida 32578

*"Home of the Boggy Bayou Mullet Festival"*

June 10, 2011

Mayor: Wise

Councilperson: Boudreaux  
Thomas  
Smith  
Swihart  
Henkel

Attorney: Powell

There will be a **Regular** Council meeting at 7:00 PM, June 14, 2011 in the council chambers 208 N Partin Drive.

Please plan to attend.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Doucet".

D. J. Doucet  
City Clerk

cc: News Media

AGENDA  
REGULAR COUNCIL MEETING  
CITY OF NICEVILLE, FLORIDA  
JUNE 14, 2011

APPROVAL OF MINUTES

Regular Council Meeting, May 10, 2011  
Planning Commission Meeting – June 6, 2011  
Local Planning Agency Meeting - No Meeting Held

PUBLIC HEARING

Final Review:

Mr Michael Floyd request his property known as Endicott Village II, be submitted for final review.

Legal: Endicott Village, Phase II

Ordinance 11-05-03 - An ordinance for the rezoning of certain properties in the City of Niceville, Florida; at the corner of Palmetto and Early from R-2, one or multiple family to C-2, General Commercial; the south ½ of Lot 14, Nathey Estates, according to the plat thereof recorded in Plat Book 1, Page 45, Public Records of Okaloosa County, Florida. Tonya L'Orange. (Third Reading)

Resolution 11-06-01 – A resolution of the City of Niceville, Florida, repealing the 2006 Local Mitigation Strategy; adopting the 2011 Local Mitigation Strategy, attached hereto; clarifying sections of City responsibility; and providing for an effective date.

CITY MANAGER REPORTS/REQUESTS/RECOMMENDATIONS

Water/Sewer/Drainage Projects - Update:

Regional Sewer System - Update:

Other Business:

BILLS PAYABLE

Note: other items may be added.

RESOLUTION NO. 11-06-01

A RESOLUTION OF THE CITY OF NICEVILLE, FLORIDA, REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY, ATTACHED HERETO; CLARIFYING SECTIONS OF CITY RESPONSIBILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Section 322 of the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement those actions;

WHEREAS, the City of Niceville is part of the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County and the other municipal governments of Okaloosa County and chaired by Okaloosa County;

WHEREAS, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended in 2006;

WHEREAS, the 1999 and 2006 Local Mitigation Strategies were duly adopted by the City of Niceville in accordance with applicable State and Federal laws;

WHEREAS, beginning in 2009, the LMS Committee began the process of substantially updating and revising the 2006 LMS for adoption in 2011 as required by the Stafford Act;

WHEREAS, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

WHEREAS, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

WHEREAS, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

WHEREAS, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NICEVILLE, FLORIDA, THAT:

SECTION I:            Repeal of 2006 LMS. The 2006 Local Mitigation Strategy is hereby repealed in its entirety.

SECTION II:            2011 Local Mitigation Strategy Adopted. The 2011 Local Mitigation Strategy, attached hereto, is hereby adopted and shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

SECTION III:            Use and Consideration of LMS During the Development of Comprehensive Plan and Evaluation and Appraisal Report. The 2011 Local Mitigation Strategy, attached hereto, shall be consulted and given due consideration during the development of the City of Niceville Comprehensive Plan and Evaluation and Appraisal Report.

SECTION IV:            Effective Date. This resolution shall take effect immediately.

ADOPTED in session this 14th day of June, 2011.

  
MAYOR

ATTEST:

  
CITY CLERK

STATE OF FLORIDA

CITY OF NICEVILLE

I, Daniel J. Doucet, City Clerk for the City of Niceville, Florida, do hereby certify the foregoing is a true and correct copy of the City of Niceville, Florida, Resolution 11-06-01, June 14, 2011 and appears on file in the office of the City Clerk.

IN WITNESS WHEREOF, I hereunto set my hand and official seal this 15th day of June, 2011.

  
Daniel J. Doucet, MMC  
City Clerk

MINUTES  
REGULAR COUNCIL MEETING  
CITY OF NICEVILLE, FLORIDA  
JUN 14, 2011

The Niceville City Council met in regular session at 7:00 PM, June 14, 2011 in the Council Chambers, 208 N Partin Drive. All Council members, except for Councilman Henkel and the Mayor were present. Also present were City Manager Lannie Corbin; City Clerk, Dan Doucet; City Planner, Wanda Cruttenden; Police Department, Capt Popwell; Public Works Director Bruce Price; Fire Department, Chief Mayville; a member of the press, and 54 visitors in the audience. Councilman Thomas offered the prayer and led the pledge of allegiance. Mayor Wise called the meeting to order at 7:00 PM.

APPROVAL OF MINUTES

Regular Council Meeting - May 10, 2011

Councilman Thomas moved approval. Councilman Smith seconded. Council Vote: Boudreaux-yes; Thomas-yes; Swihart-yes; Smith-yes.

Planning Commission Meeting - June 6, 2011

Councilman Smith moved approval. Councilman Thomas seconded. Council Vote: Boudreaux-yes; Thomas-yes; Swihart-yes; Smith-yes.

Local Planning Agency Meeting - No Meeting Held

PUBLIC HEARING

Final Review:

Mr Michael Floyd request his property known as Endicott Village II, be submitted for final review.

Legal: Endicott Village, Phase II

Councilman Smith moved approval. Councilman Thomas seconded. No one spoke for or against. Council Vote: Boudreaux-yes; Thomas-yes; Swihart-yes; Smith-yes.

Ordinance 11-05-03 - An Ordinance for the rezoning of certain properties in the City of Niceville, Florida; at the corner of Palmetto and Early from R-2, one or multiple family to C-2, General Commercial; the south ½ of Lot 14, Nathey Estates, according to the plat

thereof recorded in Plat Book 1, Page 45, Public Records of Okaloosa County, Florida. Tonya L'Orange. (Third Reading)

Mr Doucet read ordinance 11-05-03 by title. Councilwoman moved approval on third reading. Councilman Swihart seconded. Mr Heath Rominger, 3 Coolwater Lane provided an overview of past council meetings on the issue and reiterated the position of residents in the neighborhood in that they are against the rezoning for reasons stated during previous meetings. He explained that he doesn't understand how this issue has gone as this far and requested the council who vote yes tonight to provide an explanation as to why they voted to support the rezoning. Attorney Nick Peterson on behalf of Attorney Mike Chesser provided background information regarding the request for C-2 zoning. He felt to rezone the property would be a plus for the area and a plus for the City. Mr Brett Bernstein 14 Coolwater Lane stated he agreed with Mr Rominger if you vote yes to the rezoning please provide an explanation as to why you voted for it. Mr John Evans, 218 Cook Street expressed his concern for the rezoning; Mr Mike Clements 232 Palmetto stated the Planning Commission advised the planned business doesn't fit in our neighborhood and wants an explanation if you vote "yes"; Ms Debbie Creech, 215 Cook Street stated various reasons why she does not oppose the rezoning; Mr John Sullivan 2005 Earley Street supported the rezoning stating that he is a small businessman and gave examples of other businesses in the neighborhood and felt that Mr L' Orange's business will be welcomed to the neighborhood. Mr Casey Isenbarger 21 Cook Street stated he works for the Sheriff's Office and safety concerns are his business. He advised he doesn't see the reason for re-zoning the property. There is no room for it since it's a small community. People who have spoken before have valid reasons. The additional traffic created by the U-Haul business is no good. To add a new business would be a displeasure. He stated that safety is the biggest concern and he too would like an explanation if the vote is yes to the rezoning. Several other residents expressed their opposition to the rezoing Discussion followed. Council Vote: Boudreaux-yes; Thomas-no; Swihart-yes; Smith-no. Motion failed.

Resolution 11-06-01 – A resolution of the City of Niceville, Florida, repealing the 2006 Local Mitigation Strategy; adopting the 2011 Local Mitigation Strategy, attached hereto; clarifying sections of City Responsibility; and providing for an effective date.

Mr Doucet read Resolution 11-06-01 by title. Councilman Thomas moved approval. Councilman Smith seconded. The LMS updated plan was open for public input/discussion and then approved by the council. No one spoke for or against. Council Vote: Boudreaux-yes; Thomas-yes; Swihart-yes; Smith-yes.

## CITY MANAGER REPORTS/REQUESTS/RECOMMENDATIONS

## Water/Sewer/Drainage Projects - Update:

Mr Price briefed the status of current projects.

**City Hall Pump Station Project:**

The sewer line installation from the swift creek and Palm Blvd service areas are completed to the new pump station site. The wet well, pumps and some of the control components are installed. The remaining work includes the completion of the pump station, the directional bore under Mill Creek on College Boulevard along with the tie in of the remaining force main in that location. We have encountered problems with the boring under Mill Creek which has resulted in a work stoppage and Mr. Corbin along with Glenn Stevens will brief you on that situation.

Mr Corbin provided background information regarding the directional bore project under Mill Creek and the possible environmental issues associated with the project. Basically Construction Services Company's Subcontractor, Cinch Underground, made several attempts to complete the bore process without success. Construction Services advised the City that they want to use another subcontractor, Boan Construction, but they will charge \$47,000 more than the initial bid to complete the project. Construction Services Co advised to divide the expense between the City and contractor. Mr Corbin asked for council consideration to expend the funds and complete the project since there is a potential for sewer backup concerns if this is delayed for any period of time. Councilman Smith moved to accept the proposal made by the City Manager to expend the funds (\$23,500) for project completion. Councilwoman Boudreaux seconded. Council Vote: Smith-yes; Thomas-yes; Boudreaux-yes; Swihart-yes.

Mr Price stated the reuse main from College Boulevard down to the City Hall area is installed and operational and effluent is now irrigating the complex ball fields. This is a milestone in our efforts to reduce the amount of potable water being used to irrigate city sites.

**Sewer Extensions:**

City crews have completed the installation of new sewer service connections on Sycamore Avenue, 13<sup>th</sup> Street and Valparaiso Boulevard.

**Scott Street Drainage Improvements Project:**

We have completed the removal and replacement of the drainage system on Scott Street and Hudson Circle. This work included the removal and reinstallation of @ 600 feet of pipe, 515 feet of new sidewalk, replacement of 5 driveways and re-sodding of the right of way. We were also able completed a water main extension project that provided a loop in the water main serving this area.

**Bayshore Pipe Replacement Project:**

We have postponed the pipe replacement work for this project until after the 4<sup>th</sup> of July to avoid any problems with traffic.

**Nutmeg and 23<sup>rd</sup> Street Pipe repair:**

We are preparing to replace a damaged drainage pipe under Nutmeg Avenue near the intersection at 23<sup>rd</sup> Street.

**MS-4 Permit Renewal:**

We received notification from FDEP that our permit modifications have been approved. The major changes to our permit application were modifications some of the City's inspection procedures and staff training.

**Wise Pine Connector Road:**

The contractor has remobilized and is working on the service road where it ties into SR 20 but that connection cannot be completed until the new signal poles are installed and operational.

**VRC 31 (Arrowhead) Developments:**

We have signed off on the water and sewer for this project.

**New Lions Park Bathrooms:**

Construction is underway for the new bathrooms at Lions Park. The slab work is underway at this time.

**Proposed Crosswalk @ Chick Fil-A:**

We have been in contact with the developer regarding the request for a crosswalk on the new boulevard behind Chick Fil-A across from Wal Mart. The developer is checking with their traffic engineering consultant to evaluate and propose the best location for the pedestrian crossing.

**Cornwell Right of Way Adjustments:**

We are making adjustment to the right of way on Bayshore drive in front of the Cornwell property. We are removing the excess fill, exposing the paved shoulder of the roadway and stabilizing the city right of way.

**4<sup>th</sup> July Preparations:**

We are taking steps to prepare for the 4<sup>th</sup> of July festivities. These preparations include safety inspections and the shorelines in our park areas and clearing vegetation to improve the view.

**Mast Arms @ Cedar & SR 20:**

We have completed the restoration of the signal poles and mast arms at Cedar and SR 20. I have had informal conversations with Okaloosa County regarding the mast arms at Rocky Bayou Road and at SR 285 and College.

Material Cost:	\$1,000.00
Labor Cost:	\$6,000.00
Equipment Cost	\$4,100.00

**Actual Cost:                      \$11,100.00**

**Rocky Bayou Christian School Zone:**

I attended a DOT Preconstruction meeting last week in Milton regarding the installation of a school zone sign on SR 285 in front of the school. The plan is to have the school zone sign operational prior to the beginning of school.

**Regional Sewer System - Update:**

No Report.

**FIRE DEPARTMENT - UPDATE**

Chief Mayville briefed the status of current projects in the department. He advised that during the month of May the Fire Department responded to a total of 97 calls. There were 95 calls within the City limits and 2 mutual aid calls. Chief Mayville advised they received a large piece of metal from the World Trade Center ruins. He advised a glass enclosure box will be used to display this piece of history at the station. Chief Mayville advised they tested 147 fire hydrants.

**POLICE DEPARTMENT - UPDATE:**

Capt Popwell briefed the status of current projects. He advised that during the month of May the Police Department responded to 1518 calls for police assistance. A total of 70 vehicles were involved in reported accidents. The estimated amount of damage to these vehicles and related property was \$ 147,925. A total of 149 Traffic Citations were

issued, 29 Misdemeanor, 24 Felony and 1 DUI arrests were made. Discussion followed.

Other Business:

Bills Payable

Councilman Smith moved approval. Councilman Thomas seconded. Council Vote: Smith-yes; Thomas-yes; Boudreaux-yes; Swihart-yes.

The meeting adjourned at 8:20 PM.

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK

**AGENDA**  
**CITY OF VALPARAISO & VALPARAISO CABLE AUTHORITY JOINT MEETING**  
**465 Valparaiso Parkway**  
**Valparaiso, Florida**  
**850-729-5402**  
**July 11, 2011**  
**6:00 pm**

Invocation (Commissioner Shermer)  
Pledge of Allegiance (Mayor Arnold)

**CITIZENS' CONCERNS (non-agenda items)**

1. Resident
2. Non-resident

**NEW BUSINESS**

1. Resolution No. 10-07-11-11 Adopt LMS -----Attach 1
2. City Audit
3. Etc.

**OLD BUSINESS**

1. Waste Water Treatment Pilot Update
2. Gulf Power Franchise Update
3. Gulf Power Pole License Agreement
4. Sidewalk Program Update -----Attach 2
5. School Charter Study Status
6. Etc.

**REPORTS / CORRESPONDENCE / ANNOUNCEMENTS**

1. TPO/DOT
2. Stormwater
3. Legal Activities
4. Budget Workshop July 18<sup>th</sup> 6:00pm -----Attach 3
5. Proposed Rezoning Hearing August 16<sup>th</sup> 5:30pm
6. Etc.

**ADMINISTRATIVE ITEMS**

1. Minutes
2. Bills Payable
3. Etc.

## RESOLUTION NO. 10-07-11-11

### A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF VALPARAISO, FLORIDA, REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY; CLARIFYING SECTIONS OF CITY RESPONSIBILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

**WHEREAS**, Section 322 of the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement these actions;

**WHEREAS**, the City of Valparaiso is part of the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County and the other municipal governments of Okaloosa County and chaired by Okaloosa County;

**WHEREAS**, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended in 2006;

**WHEREAS**, the 1999 and 2006 Local Mitigation Strategies were duly adopted by the City of Valparaiso in accordance with applicable State and Federal laws;

**WHEREAS**, beginning in 2009, the LMS Committee began the process of substantially updating and revising the 2006 LMS for adoption in 2011 as required by the Stafford Act;

**WHEREAS**, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

**WHEREAS**, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

**WHEREAS**, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

**WHEREAS**, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF VALPARAISO, FLORIDA, THAT:**

**Section 1. Repeal of 2006 LMS.** The 2006 Local Mitigation Strategy is hereby repealed in its entirety.

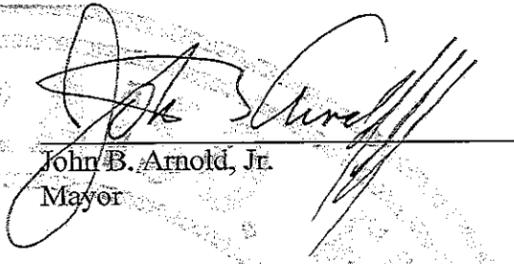
**Section 2. 2011 Local Mitigation Strategy Adopted.** The 2011 Local Mitigation Strategy attached hereto as Exhibit A is hereby adopted and shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

**Section 3. Use and Consideration of LMS for Development of Comprehensive Plan Evaluation and Appraisal Report.** The 2011 Local Mitigation Strategy attached hereto as Exhibit A shall be consulted and given due consideration during the development of the City of Valparaiso Comprehensive Plan Evaluation and Appraisal Report.

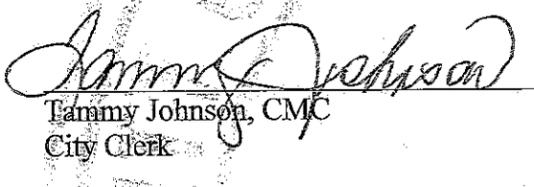
**Section 4. Effective Date.** This resolution shall take effect upon signing.

**PASSED AND DULY ADOPTED THIS 11<sup>TH</sup> DAY OF JULY, 2011.**



  
John B. Arnold, Jr.  
Mayor

ATTEST:

  
Tammy Johnson, CMC  
City Clerk

**RESOLUTION NO. 2011-03**

**A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF CINCO BAYOU, FLORIDA, REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY; PROVIDING FOR CONSULTATION DURING DEVELOPMENT OF THE COMPEREHENSIVE PLAN EVALUATION AND APPRAISAL REPORT; AND PROVIDING FOR AN EFFECTIVE DATE**

WHEREAS, Section 322 of the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement those actions;

WHEREAS, the Town of Cinco Bayou is part of the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County and the other municipal governments of Okaloosa County and chaired by Okaloosa County;

WHEREAS, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended in 2006;

WHEREAS, the 1999 and 2006 Local Mitigation Strategies were duly adopted by the Town of Cinco Bayou in accordance with applicable State and Federal laws;

WHEREAS, beginning in 2009, the LMS Committee began the process of substantially updating and revising the 2006 LMS for adoption in 2011 as required by the Stafford Act;

WHEREAS, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

WHEREAS, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

WHEREAS, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

WHEREAS, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

NOW , THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF CINCO BAYOU, FLORIDA, THAT:

Section 1. Repeal of 2006 LMS. The 2006 Local Mitigation Strategy is hereby repealed in its entirety.

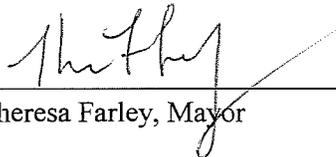
Section 2. 2011 Local Mitigation Strategy Adopted. The 2011 Local Mitigation Strategy attached hereto as Exhibit A is hereby adopted and shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

Section 3. Use and Consideration of LMS for Development of Comprehensive Plan Evaluation and Appraisal Report. The 2011 Local Mitigation Strategy attached hereto as Exhibit A shall be consulted and given due consideration during the development of the Town of Cinco Bayou Comprehensive Plan Evaluation and Appraisal Report.

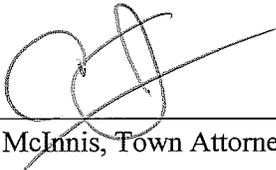
Section 4. Effective Date. This resolution shall take effect upon signing.

PASSED AND DULY ADOPTED THIS 14TH DAY OF JULY, 2011.

By:

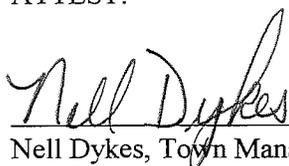
  
\_\_\_\_\_  
Theresa Farley, Mayor

APPROVED AS TO FORM  
AND LEGAL SUFFICIENCY:

  
\_\_\_\_\_  
C. Jeffery McInnis, Town Attorney



ATTEST:

  
\_\_\_\_\_  
Nell Dykes, Town Manager/Clerk

## **RESOLUTION NO. 2011-07**

### **A RESOLUTION OF THE TOWN COMMISSION OF THE TOWN OF SHALIMAR, FLORIDA, REPEALING THE 2006 LOCAL MITIGATION STRATEGY; ADOPTING THE 2011 LOCAL MITIGATION STRATEGY; PROVIDING FOR CONSULTATION DURING DEVELOPMENT OF THE COMPERHENSIVE PLAN EVALUATION AND APPRAISAL REPORT; AND PROVIDING FOR AN EFFECTIVE DATE**

WHEREAS, Section 322 of the federal Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (hereinafter the "Stafford Act"), requires that each local government prepare a mitigation plan that identifies all hazards to which the area under the jurisdiction of the local government is vulnerable, describes actions to mitigate hazards, risks, and vulnerabilities identified under the plan, and establishes a strategy to implement those actions;

WHEREAS, the Town of Shalimar is part of the Okaloosa County Local Mitigation Strategy Committee (hereinafter the "LMS Committee") which is comprised, among others, of representatives from Okaloosa County and the other municipal governments of Okaloosa County and chaired by Okaloosa County;

WHEREAS, the LMS Committee first developed a Local Mitigation Plan and Strategy (hereinafter, the "Local Mitigation Strategy" or "LMS") in 1999 which was subsequently amended in 2006;

WHEREAS, the 1999 and 2006 Local Mitigation Strategies were duly adopted by the Town of Shalimar in accordance with applicable State and Federal laws;

WHEREAS, beginning in 2009, the LMS Committee began the process of substantially updating and revising the 2006 LMS for adoption in 2011 as required by the Stafford Act;

WHEREAS, the revised LMS (hereinafter the "2011 LMS") was completed in November 2010 and transmitted to the Florida Division of Emergency Management (hereinafter the FDEM) in December, 2010 for review and comments;

WHEREAS, the FDEM completed its initial review of the 2011 LMS and provided comments to the LMS Committee through Okaloosa County in January 2011 which resulted in revisions to the 2011 LMS which was returned to the FDEM in March 2011 for further review;

WHEREAS, in April 2011 the FDEM notified the LMS Committee through Okaloosa County that the 2011 LMS was sufficient and that it had been forwarded to the Federal Emergency Management Agency (hereinafter "FEMA") for further review; and

WHEREAS, on May 10, 2011, the FDEM notified Okaloosa County that FEMA had found the 2011 LMS ready for adoption, and encouraged Okaloosa County and its municipalities to adopt the 2011 LMS in an expeditious manner.

Now , THEREFORE, BE IT RESOLVED BY THE TOWN COMMISSION OF THE TOWN OF SHALIMAR, FLORIDA, THAT:

Section 1. Repeal of 2006 LMS. The 2006 Local Mitigation Strategy is hereby repealed in its entirety.

Section 2. 2011 Local Mitigation Strategy Adopted. The 2011 Local Mitigation Strategy (copy available at the Town Hall) is hereby adopted and shall be considered the local mitigation strategy for all purposes pursuant to the Stafford Act and related rules and regulations.

Section 3. Use and Consideration of LMS for Development of Comprehensive Plan Evaluation and Appraisal Report. The 2011 Local Mitigation Strategy attached hereto as Exhibit A shall be consulted and given due consideration during the development of the Town of Shalimar, Florida Comprehensive Plan Evaluation and Appraisal Report.

Section 4. Effective Date. This resolution shall take effect upon signing.

**Passed and Duly Adopted this 12th Day of July, 2011.**

By:

  
\_\_\_\_\_  
Gary Combs, Mayor

**ATTEST**

  
\_\_\_\_\_  
Thomas A. Burns, Town Clerk



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