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Gulf County Florida Local Mitigation Strategy

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The 2010 Gulf County Local Mitigation Strategy was prepared by the Gulf County LMS Task Force with support from the Disaster Resistant Communities Group.



EXECUTIVE SUMMARY

Gulf County is threatened by a number of different types of natural, technological, and societal or man-made hazards. These hazards endanger the health and safety of the population of the county, jeopardize its economic vitality, and imperil the quality of its environment. Because of the importance of averting or minimizing the vulnerabilities to these hazards, the public and private sector interests of Port St. Joe, Wewahitchka, and Gulf County have joined together to create a task force to undertake a comprehensive planning process that has culminated in the publication of this document: "Gulf County Local Mitigation Strategy (LMS)."

This task force, entitled the Gulf County LMS Task Force, has conducted detailed studies to identify the hazards threatening the jurisdictions of Port St. Joe, Wewahitchka, and unincorporated Gulf County and to estimate the relative risks posed to the community by those hazards. This information has been used by the Task Force to assess the vulnerabilities of the facilities and jurisdictions of the county to the impacts of future disasters involving those hazards. With these identified, the Task Force has worked to identify proposed projects and programs that will avoid or minimize these vulnerabilities to make the communities of the county much more resistant to the impacts of future disasters.

These proposed projects and programs aimed at reducing the impacts of future disasters are termed "mitigation initiatives" in this document. Mitigation initiatives have been developed and will continue to be proposed by the Task Force for implementation whenever the resources to do so become available. It is important to note that this mitigation list is not finalized. The list of mitigation initiatives will and should evolve as projects are undertaken and completed, as future disasters affect the county and new needs are identified, and as local priorities change. As the mitigation initiatives identified in this plan are implemented, step-by-step, the county will become a more "disaster resistant" community.

This document details the work of the Gulf County LMS Task Force to develop and maintain the planning organization, to undertake technical analyses and to coordinate the mitigation initiatives that have been proposed by the participating jurisdictions and organizations.

The Federal Emergency Management Agency (FEMA) and Florida Department of Community Affairs (DCA) require that this document be adopted by the governing bodies of Port St. Joe, Wewahitchka, and Gulf County. Adoption of the Gulf County LMS by the City and County Commissions will not have any legal effect on the Comprehensive Plan or any other legally binding documents. However, adoption of the LMS will give the county and its jurisdictions priority with respect to funding for disaster recovery and hazard mitigation from state and federal sources. Through publication of this local mitigation strategy, the Task Force continues to solicit the involvement of the



entire community to make the people, neighborhoods, businesses, and institutions of Gulf County safer from the impacts of future disasters.



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Hazard Mitigation Overview

Hazard mitigation is any action taken to permanently reduce or eliminate long-term risk to people and their property from the effects of hazards. Some examples of hazard mitigation include land use planning techniques that limit infrastructure in high hazard areas and programs for retrofitting existing structures to meet new building codes and standards. Ideally, a community can minimize the effects of future hazards through a mix of code enforcement, planning, and responsible development.

Every community is exposed to some level of risk from hazards. Hurricanes, tornadoes, floods, hazardous material spills, fires, and sinkholes are some of the hazards experienced by Florida communities. It is the goal of the local mitigation strategy to identify local hazards and establish a local framework to reduce the risk of those hazards.

Local Actions can Reduce Risk

Hazards cannot be eliminated, but it is possible to determine what the hazards are, where the hazards are most severe, and identify local actions that can be taken to reduce the severity of the hazard. For example, we know that hurricanes are frequent in Florida, that flooding and wind damage are most severe along the coast, that low intensity storms occur more frequently than high intensity storms, and that the level of coastal flooding is fairly predictable for a given magnitude of storm. Given this knowledge, local as well as state and federal laws exist to limit the type and amount of development along the coast in areas that have been identified as high risk to coastal storms (Coastal High Hazard Areas and Velocity Zones are examples). Furthermore, there are incentives to live in lower risk areas. Insurance rates and taxes are usually higher in coastal and riverine areas.

Disasters Cost the Community

Hazards have real costs to businesses and residents. Businesses in high hazard areas can suffer when damaged or isolated by storms. Residents who build in flood prone areas are subject to evacuation, damage to their homes, lower home values, and higher insurance premiums. Critical facilities such as hospitals, schools, airports, utilities and major government buildings should not be placed in high hazard areas because the functions these facilities provide are too valuable to be placed in jeopardy, especially during times of disaster. And of course, community health and safety are beyond price.

Disasters Cost Local Government



Community infrastructure such as roads, drainage structures, sewer lines, electric lines, telephone lines that are built in high hazard areas are subject to frequent damage and are extremely costly to repair. Also, if a local government belongs to the National Flood Insurance Program and allows development in the floodplain without proper elevation and construction techniques, the federal government can withdraw the community's access to federal flood insurance for both public and private structures. Furthermore, a local government is responsible for as much as 12.5% of their local public cost for a federally declared disaster and 100% of any damage from smaller events that are not declared disasters. These costs can put a significant strain on the local government budget.

The Gulf County Context

The Gulf County LMS Task Force has been established to make the population, neighborhoods, businesses and institutions of the community more resistant to the impacts of future disasters. The Task Force has undertaken a comprehensive, detailed evaluation of the vulnerabilities of the community to all types of future natural, technological and societal hazards in order to identify ways to make the county more resistant to their impacts. This document reports the results of that planning process for the current planning period.

The county's LMS is intended to serve many purposes. These include the following:

Provide a Methodical, Substantive Approach to Mitigation Planning

The approach utilized by the Task Force relies on a step-wise application of soundly-based planning concepts in a methodical process to identify vulnerabilities to future disasters and to propose the mitigation initiatives necessary to avoid or minimize those vulnerabilities. Each step in the planning process builds upon the previous, so that there is a high level of assurance that the mitigation initiatives proposed by the participants have a valid basis for both their justification and priority for implementation. One key purpose of the LMS is to document that process and to present its results to the community.

Enhance Public Awareness and Understanding

The Task Force is interested in finding ways to make the community as a whole more aware of the natural, technological, and societal hazard that threaten the public health and safety, the economic vitality of businesses, and the operational capability of important institutions. The LMS identifies the hazards threatening the county and provides an assessment of the relative level of risk they pose. It also details the specific vulnerabilities of the county's neighborhoods and many of the facilities that are important to the community's daily life. The LMS also includes a number of proposals of ways to avoid or minimize those vulnerabilities. This information will be very helpful to individuals that wish to understand how the community could become safer from the impacts of future disasters.



The Task Force organization also seeks to provide information and education to the public regarding ways to be more protected from the impacts of future disasters. It has been active in communicating with the public and engaging interested members of the community in the planning process. These documents, and the analyses contained herein, are the principal information resource for this activity.

Create a Decision Tool for Management

The LMS provides information needed by the managers and leaders of local government, business and industry, community associations, and other key institutions and organizations to take actions to address vulnerabilities to future disasters. It also provides proposals for specific projects and programs that are needed to eliminate or minimize those vulnerabilities.

These proposals, called "mitigation initiatives" in the LMS, have been justified on the basis of their economic benefits using a uniform technical analysis and prioritized for implementation using ten objective criteria. This approach is intended to provide a decision tool for the management of participating organizations and agencies regarding why the proposed mitigation initiatives should be implemented, which should be implemented first, and the economic and public welfare benefits of doing so.

Promote Compliance with State and Federal Program Requirements

There are a number of state and federal grant programs, policies, and regulations that encourage or even mandate local government to develop and maintain a comprehensive mitigation strategy. This LMS is specifically intended to assist the participating local governments in complying with these requirements, and to enable them to more fully and quickly respond to state and federal funding opportunities for mitigation-related projects. Because the LMS defines, justifies and prioritizes mitigation initiatives that have been formulated through a technically valid hazard analysis and vulnerability assessment process, the participating organizations are better prepared to more quickly and easily develop the necessary grant application materials for seeking state and federal funding.

Enhance Local Policies for Hazard Mitigation Capability

A component of the hazard mitigation planning process conducted by the Task Force is the analysis of the existing policies, programs and regulatory bases for control of growth and development. This process involves cataloging the current mitigation-related policies of local government so that they can be compared to the hazards that threaten the jurisdiction and the relative risks they pose to the community. When the risks posed to the community by a specific hazard are not adequately addressed in the community's policy or regulatory framework, the impacts of future disasters can be even more severe. The planning process utilized by the Task Force supports detailed comparison of the community's policy controls to the level of risk posed by specific hazards. This



comparison supports and justifies efforts to propose enhancements in the policy basis which should be promulgated by the involved local jurisdictions to create a more disaster-resistant future for the community.

Assure Inter-Jurisdictional Coordination of Mitigation-Related Programming

A key purpose of the planning process utilized by the Task Force is to ensure that proposals for mitigation initiatives are reviewed and coordinated among the participating jurisdictions within the county. In this way, there is a high level of confidence that mitigation initiatives proposed by one jurisdiction or participating organization, when implemented, will be compatible with the interests of adjacent jurisdictions and would be unlikely to duplicate or interfere with mitigation initiatives proposed by others.

Create Jurisdiction-Specific Mitigation Strategies for Implementation

A key purpose of the LMS is to provide each participating local jurisdiction with a specific plan of action that can be adopted and implemented pursuant to its own authorities and responsibilities. Therefore, the LMS addresses mitigation for each separate participating jurisdiction. Initiatives can be adopted and implemented for the jurisdiction's own purposes and on its own schedule. In this way, the format of the LMS and the operational concept of the planning process ensure that proposed mitigation initiatives are coordinated and prioritized effectively among jurisdictions, while allowing each jurisdiction to adopt only the proposed mitigation initiatives that it actually has the authority or responsibility to implement when resources are available.

Provide a Flexible Approach to the Planning Process

The planning process used by the Task Force is very flexible in meeting the analysis and documentation needs of the planning process. The planning program utilized provides for the creation of this document, as well as the preparation of numerous other reports regarding the technical analyses undertaken. In this way, the LMS assists the Task Force with utilizing a full range of information in the technical analysis and the formulation of proposed mitigation initiatives for incorporation into this LMS.

The following sections of the LMS present the detailed information to support these purposes. The remainder of the LMS describes the planning organization developed by the Task Force, as well as its approach to managing the planning process. It then summarizes the results of the hazard identification and vulnerability assessment process, and addresses the current policy basis for hazard management by the participating jurisdictions and organizations. The LMS also documents the structural and non-structural mitigation initiatives proposed by the participating jurisdictions to address the identified vulnerabilities. The LMS concludes by addressing the goals and objectives of the Task Force for the next planning period, during which the LMS will continue to be expanded and refined.



The Task Force is made up of a number of local government agencies, business interests, community organizations and institutions. This section describes the local jurisdictions and organizations participating in the Task Force and discusses the organizational structure used to complete the public planning process. It also explains the characteristics of the Task Force as an organization, as defined in its bylaws, and the basic procedures for conducting the planning process, which are described in the Task Force's operating procedures. Furthermore, there is a summary of the current status of planning activities by the participants.

The Task Force Organizational Structure

The Task Force encourages participation by all interested local jurisdictions, agencies, organizations and individuals. Broad community representation is promoted in the Task Force, through public meetings and the use of the internet to provide ample opportunity for public commentary and consideration of the local mitigation strategy. The organization is intended to represent a partnership between the public and private sectors of the community, working together to create a disaster resistant community. The proposed mitigation initiatives developed by the Task Force and listed in this plan, when implemented, are intended to make the entire community safer from the impacts of future disasters, for the benefit of every individual, neighborhood, business, and institution.

The responsibilities and duties of this organizational structure are provided in Appendix A: Task Force Bylaws. The Task Force has adopted bylaws to establish its purpose and responsibility, to create a structure for the organization, and to establish the other fundamental characteristics of the Task Force as a community service organization.

Although the Disaster Resistant Communities Group (DRCG) has been primarily responsible for updating the LMS, the Task Force assists DRCG in making official decisions regarding the planning process. Most importantly for this document however, was the Task Force's role to be responsible for approval of proposed mitigation initiatives for incorporation into the plan, for determining the priorities for implementation of those initiatives, and for removing or terminating initiatives that are no longer desirable for implementation. The Task Force also coordinates the actual technical analyses and planning activities that are fundamental to development of this plan. These activities include conducting the hazard identification and vulnerability assessment processes, as well as receiving and coordinating the mitigation initiatives for incorporation into this plan.

The Task Force represents all of the local jurisdictions and key organizations participating in the planning process. The Task Force includes representatives from the planning and zoning department, building department, emergency management



department, insurance agencies, real estate, and the general public. Members of the city and county commission, as well as, the local chamber of commerce and non-governmental organizations were also involved. Individual jurisdictions, and their agencies and local organizations, were essential to accomplishing the planning process.

Each public and private entity that has been contacted thus far in the planning process is listed in Table 2.1. Members of each organization were sent invitation letters and e-mails explaining the importance of the LMS and requesting cooperation. Sample invitation letters to the jurisdictions and several community organizations are provided in Appendix B: Documentation of the Planning Process. The Task Force benefited from the assistance and support of its many members.

Participation on the Task Force is not limited in any manner, and all members of the community, whether representing the public or private sector, are welcome to participate. The public is encouraged to become involved with the LMS to gauge plan effectiveness and help identify local hazards to be placed on the county project list. Participation from interested parties, including local / adjacent government representatives and citizens, is solicited via the LMS Web, public meeting advertisements in The Star newspaper (documented in Appendix B: Documentation of the Planning Process) and articles in the Gulf County Chamber of Commerce newsletter.

Copies of all the Task Force's documents are maintained on the LMS Web and at the county's Emergency Management Department. Comments regarding the LMS can be made via the LMS Web or by contacting the county's Emergency Management Department via phone, letter, or e-mail. Public notices were placed in The Star newspaper (documented in Appendix B: Documentation of the Planning Process) advising interested parties that the draft mitigation strategies are available for comment at the appropriate locations. Interested parties can provide comments at any time, which will be incorporated into drafts of the local mitigation strategy.

As other potential stakeholders are identified, they will be contacted and asked to join the Task Force. The county will continually update its Task Force membership by providing updates at Board of County Commission meetings.

Summary of the Planning Process

The Task Force scheduled to meet several times during the review and revision process Table 2.2.

The purpose of the LMS Public Hearing was to solicit formal public comments regarding the completed plan prior to its approval by the Florida Department of Community Affairs (DCA), the Federal Emergency Management Agency, and each participating jurisdiction.



It is important to emphasize that the procedure used by the Task Force was based on the following important concepts:

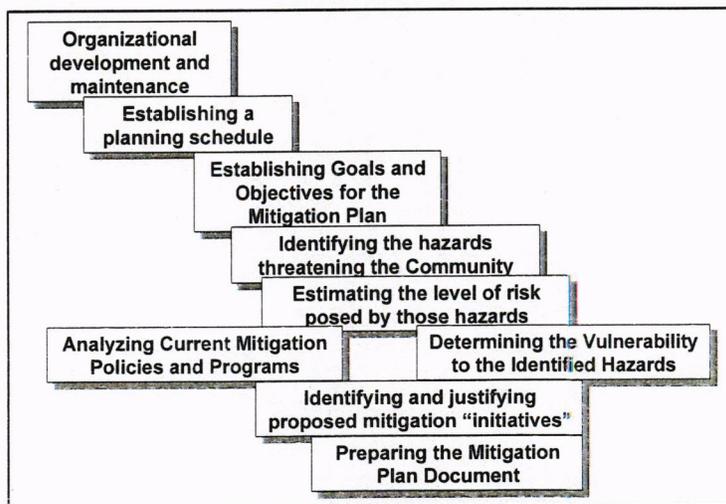
- A multi-organizational, multi-jurisdictional planning group establishes specific goals and objectives to address the community's vulnerabilities to all types of hazards.
- It utilizes a logical, stepwise process of hazard identification, risk evaluation and vulnerability assessment, as well as review of past disaster events, that is consistently applied by all participants.
- Mitigation initiatives are proposed for incorporation into the plan only by those jurisdictions or organizations with the authorities and responsibilities for their implementation.
- The process encourages participants to propose specific mitigation initiatives that are feasible to implement and are clearly directed at reducing specific vulnerabilities to future disasters.

Proposed mitigation initiatives are characterized in a substantive manner, suitable for this level of planning, to assure their cost effectiveness and technical merit, as well as coordinated among jurisdictions to assure that conflicts or duplications are avoided.

The Task Force's Operating Procedures

The planning process undertaken by the Task Force is generally described in the operating procedures of the group, which are enclosed in this section. The process described in the procedures mainly addresses how hazard mitigation initiatives are to be developed and processed. These procedures involve both a technical approach to the planning and an organizational methodology for incorporating mitigation initiatives into the LMS. The general technical analysis process is that identified below.

Figure # 2.1 Hazard Mitigation Planning Process



The planning process has been started with the development of the Task Force as an organization and obtaining participation from the local government jurisdictions and key organizations and institutions. The planning work conducted to develop this document relies heavily on the expertise and authorities of the participating agencies and organizations, rather than on detailed scientific or engineering studies. The Task Force is confident that the best judgment of the participating individuals, because of their role in the community, can achieve a level of detail in the analysis that is more than adequate for purposes of local mitigation planning. As the planning process described herein continues, more detailed and costly scientific studies of the mitigation needs of the community can be defined as initiatives for incorporation into the plan and implemented as resources become available to do so.

Establishing the Planning Schedule

As indicated in the exhibit, the Task Force initially establishes a planning schedule for the upcoming planning period that allows the participants to anticipate their involvement in the technical analyses and evaluations that they will be asked to do. At the outset of the planning period, the Task Force defined the goals that the planning process is attempting to achieve, as well as the specific objectives within each goal that will help to focus the planning efforts. The goals and objectives established by the Task Force for this planning period are described in Section 5: Mitigation Goals and Policies.

Conducting the needed analyses and then formulating proposed mitigation initiatives to avoid or minimize vulnerability of the community to future disasters is an enormous effort, and one that must take place over a long period of time. Therefore, for any one planning period, the goals and objectives set by the Task Force are intended to help focus the effort of the participants, for example, by directing attention to certain types of facilities or neighborhoods, or by emphasizing implementation of selected types of proposed mitigation initiatives.

Hazard Identification and Risk Estimation

The Task Force then identified the natural, technological, and societal hazards that threaten all or portions of the community. Specific geographic areas, subject to the impacts of the identified hazards are delineated where possible. The Task Force also used general information to estimate the relative risk of the various hazards as an additional method to focus their analysis and planning efforts. The Task Force compared the likelihood or probability that a hazard will impact an area, as well as the consequences of that impact to public health and safety, property, the economy, and the environment. This comparison of the consequences of an event with its probability of occurrence is a measure of the risk posed by that hazard to the community. The Task Force compared the estimated relative risks of the different hazards it identified to highlight which hazards should be of greatest concern during the ongoing mitigation planning process.



Depending on the participating jurisdiction, a variety of information resources regarding hazard identification and risk estimation are available. The planners representing the jurisdictions have attempted to incorporate consideration of hazard specific maps, including flood plain delineation maps, whenever applicable, and have attempted to avail themselves of GIS based analyses of hazard areas and the locations of critical facilities, infrastructure components and other properties located within the defined hazard areas.

Estimating the relative risk of different hazards was followed by the assessment of the vulnerabilities in the likely areas of impact to the types of physical or operational agents potentially resulting from a hazard event. Two methods are available to the Task Force to assess the communities' vulnerabilities to future disasters.

Vulnerability Assessment

The first avenue is a methodical, qualitative examination of the vulnerabilities of important facilities, systems and neighborhoods to the impacts of future disasters. For the participating jurisdictions and organizations, this is done by the individuals most familiar with the facility, system or neighborhood. The process ranks both the hazards to which the facility, system or neighborhood is most vulnerable, as well as the consequences to the community should it be disrupted or damaged by a disaster. This process typically results in identification of specific vulnerabilities that can be addressed by specific mitigation initiatives that can be proposed and incorporated into this plan. As an associated process, the Task Force also reviews past experiences with disasters to see if those events highlighted the need for specific mitigation initiatives based on the type or location of damage they caused. Again, these experiences can result in the formulation and characterization of specific mitigation initiatives for incorporation into the plan.

The second avenue for assessment of community vulnerabilities, as illustrated in the exhibit, involves comparison of the existing policy, program and regulatory framework promulgated by local jurisdictions to control growth, development and facility operations in a manner that minimizes vulnerability to future disasters. The Task Force members assessed the individual jurisdiction's existing codes, plans, and programs to compare their provisions and requirements against the hazards posing the greatest risk to that community. If indicated, the participating jurisdiction could then propose development of additional codes, plans or policies as mitigation initiatives for incorporation into the LMS for future implementation when it is appropriate to do so. The Task Force consulted the following documents:

- Gulf County Floodplain Ordinance
- Gulf County Comprehensive Emergency Management Plan
- Gulf County Comprehensive Plan
- Port St. Joe Comprehensive Plan
- City of Wewahitchka Comprehensive Plan
- Apalachee Regional Planning Council Strategic Regional Policy Plan



- Northwest Water Management District Plan
- State Comprehensive Plan
- State Hazard Mitigation Plan
- Community Ranking System Plan
- Flood Mitigation Assistance Plan

Developing Hazard Mitigation Initiatives

This process enables the Task Force participants to highlight the most significant vulnerabilities to assist in prioritizing subsequent efforts to formulate and characterize specific hazard mitigation initiatives to eliminate or minimize those vulnerabilities. Once the highest priorities are defined, the Task Force participants identified specific mitigation initiatives for the plan that would eliminate or minimize those vulnerabilities.

The Task Force established a methodical, objective procedure for characterizing and justifying the mitigation initiative proposed by each participating jurisdiction for incorporation into this plan. This procedure involves describing the initiative, relating it to one of the goals and objectives established by the Task Force, and justifying its implementation on the basis of its economic benefits and / or protection of public health and safety, as well as valuable or irreplaceable resources. A “benefit to cost” ratio is established for each initiative to demonstrate that it would indeed be worthwhile to implement when or if the resources to do so became available. Further, each proposed mitigation initiative is “prioritized” for implementation in a consistent manner by each participating organization using a set of ten objective criteria.

In characterizing a mitigation initiative for incorporation into the Task Force’s plan, it is important to recognize that the level of analysis conducted by each organization involved has been intentionally designed to be appropriate for this stage in the planning process. That is, it is the interest of the Task Force to have a satisfactory level of confidence that a proposed mitigation initiative, when implemented, will be cost effective, feasible, acceptable to the community, and technically effective in its purpose. To do this, the technical analyses conducted, including the development of a benefit to cost ratio for each proposal, have been based on a straightforward, streamlined approach, relying largely on the informed judgment of experienced local officials. The analyses have not been specifically designed to meet the known or anticipated requirements of any state or federal funding agency, due largely to the fact that such requirements can vary with the agency and type of proposal. Therefore, at the point when the organization proposing the initiative is applying for funding from any state or federal agency, or from any other public or private funding source, that organization will then address the specific informational or analytical requirements of the funding agency.

Each mitigation initiative proposed for incorporation into the plan is formulated and submitted to the Task Force for consideration by an agency, organization, business, or individual that has the authority or responsibility for its implementation. This avoids the artificiality of proposing mitigation initiatives when it is unclear who would implement them and if the authority to do so is actually available.



Developing the Local Mitigation LMS

Once the above procedure was completed by the agency or organization developing the proposed mitigation initiative, the information used to characterize the initiative was submitted to the Task Force for review and inter-jurisdictional coordination.

On receipt of a pending initiative, the Task Force first evaluated the merits of the proposal and the validity of the judgments and assumptions that went into its characterization, as well as considered its potential for conflict with other jurisdiction's programs or interests. The Task Force also assured that the proposal was consistent with the goals and objectives established for the planning period and confirms that it would not duplicate or harm a proposal submitted by another jurisdiction or agency. If there was such a difficulty with a proposed initiative, it was returned to the submitting organization for revision or reconsideration.

Once the Task Force has reviewed and coordinated the submitted initiative, and is satisfied regarding its merit, it is formally considered for incorporation into the LMS. The Task Force again can assure that the proposed initiative is consistent with the goals and objectives for the planning period and would be beneficial for the community as a whole if and when implemented. If so, the Task Force then informally votes to incorporate the proposed initiative into the strategy.

During routine updates of the LMS, each mitigation initiative included in the plan is evaluated to determine if it is still valid or should be removed from the plan, or whether its implementation should be a priority or deferred until a later time.

Approval of the Current Edition of the Plan

At the end of each planning period, a plan document such as this is prepared for release to the community and for action by the governing bodies of the jurisdictions and organizations that participated in the planning process.

Implementation of Approved Mitigation Initiatives

Once incorporated into the LMS, the agency or organization proposing the initiative becomes responsible for its implementation. This may mean developing a budget for the effort, or making application to state and federal agencies for financial support for implementation. This is the approach utilized by the Task Force because only the jurisdiction or organization itself has the authorities or responsibilities to implement its proposed mitigation initiatives.

Current Status of Participation in the Task Force

In order to support the participating jurisdictions in the completion of the community profiles and vulnerability assessments, the Task Force sets a schedule for each



technical analysis step, provides training in the evaluations needed, and distributes the necessary forms for completion. The jurisdictions then complete the assignments and return the forms to the Task Force. The information provided on these forms is then used to create this plan.

During the review and revision process of the LMS the Task Force facilitated two meetings and one Public Hearing Table 2.2. During these meetings and hearings as well as via the LMS Web up-dates were recommended and incorporated in the current version of the LMS.

The participating jurisdictions, organizations, and individuals in the Task Force have all worked diligently to complete this plan, and will continue to do so in the future to create a truly disaster resistant community for the benefit of all its citizens.

Table # 2.1 Task Force Membership

Organization	Membership Type
Port St. Joe	
City of Port St. Joe	Municipality
City of Port St. Joe Police Department	Law Enforcement
Costin Insurance Agency Inc	Business
Hannon Insurance Company Inc	Business
Wewahitchka	
City of Wewahitchka	Municipality
Gulf County (Unincorporated)	
American Red Cross	Volunteer Organization
Coastal Community Assoc	Non-Profit
Gulf Coast Community College	Institution
Gulf County Board of County Commissioners	County
Gulf County Building Department	County
Gulf County Chamber of Commerce	Business
Gulf County Clerk of Court	County
Gulf County Emergency Management Department	County
Gulf County Extension Service Office	County
Gulf County Grants Department	County
Gulf County GIS Department	County



Gulf County Health Department	County
Gulf County Mosquito Control and Solid Waste Department	County
Gulf County Planning and Building Department	County
Gulf County Property Appraiser's Office	County
Gulf County Public Works Department	County
Gulf County Road Department	County
Gulf County Tourist Development Council	Business
Gulf County Veterans' Service	County
Mexico Beach Community Development Council Inc	Non-Profit
Salvation Army	County

Table # 2.2

Task Force Work Plan

Date	Activity
2/25/09	Task Force Meeting – Public Notice
3/17/09	<p>Gulf County / LMS Web</p> <ul style="list-style-type: none"> • There were several reasons for placing the LMS on the internet. <ol style="list-style-type: none"> 1. Task Force members could follow the progress being made on during the review and revision process as working draft copies were constantly placed to the web site. 2. To ensure the widest possible public access to the LMS review and revision process. 3. Provide a web based platform for allowing Task Force members and the general public to make comments and submit mitigation initiative proposals.
3/17/09	<p>Task Force Meeting</p> <ul style="list-style-type: none"> • Review Task Force policies and procedures. • Review hazard identification and recent disaster events. • Analysis current mitigation initiatives.
4/23/09	<p>Task Force Meeting</p> <ul style="list-style-type: none"> • Assess previous mitigation activities. • Evaluate the mitigation measures.
5/20/09	Public Hearing



9/5/09

Submit Final Draft of the LMS to the various city and county commissions.



The Task Force is made up of a number of local government agencies, business interests, community organizations and institutions. This section describes the local jurisdictions and organizations participating in the Task Force and discusses the organizational structure used to complete the public planning process. It also explains the characteristics of the Task Force as an organization, as defined in its bylaws, and the basic procedures for conducting the planning process, which are described in the Task Force's operating procedures. Furthermore, there is a summary of the current status of planning activities by the participants.

The Task Force Organizational Structure

The Task Force encourages participation by all interested local jurisdictions, agencies, organizations and individuals. Broad community representation is promoted in the Task Force, through public meetings and the use of the internet to provide ample opportunity for public commentary and consideration of the local mitigation strategy. The organization is intended to represent a partnership between the public and private sectors of the community, working together to create a disaster resistant community. The proposed mitigation initiatives developed by the Task Force and listed in this plan, when implemented, are intended to make the entire community safer from the impacts of future disasters, for the benefit of every individual, neighborhood, business, and institution.

The responsibilities and duties of this organizational structure are provided in Appendix A: Task Force Bylaws. The Task Force has adopted bylaws to establish its purpose and responsibility, to create a structure for the organization, and to establish the other fundamental characteristics of the Task Force as a community service organization.

Although the Disaster Resistant Communities Group (DRCG) has been primarily responsible for updating the LMS, the Task Force assists DRCG in making official decisions regarding the planning process. Most importantly for this document however, was the Task Force's role to be responsible for approval of proposed mitigation initiatives for incorporation into the plan, for determining the priorities for implementation of those initiatives, and for removing or terminating initiatives that are no longer desirable for implementation. The Task Force also coordinates the actual technical analyses and planning activities that are fundamental to development of this plan. These activities include conducting the hazard identification and vulnerability assessment processes, as well as receiving and coordinating the mitigation initiatives for incorporation into this plan.

The Task Force represents all of the local jurisdictions and key organizations participating in the planning process. The Task Force includes representatives from the planning and zoning department, building department, emergency management



department, insurance agencies, real estate, and the general public. Members of the city and county commission, as well as, the local chamber of commerce and non-governmental organizations were also involved. Individual jurisdictions, and their agencies and local organizations, were essential to accomplishing the planning process.

Each public and private entity that has been contacted thus far in the planning process is listed in Table 2.1. Members of each organization were sent invitation letters and e-mails explaining the importance of the LMS and requesting cooperation. Sample invitation letters to the jurisdictions and several community organizations are provided in Appendix B: Documentation of the Planning Process. The Task Force benefited from the assistance and support of its many members.

Participation on the Task Force is not limited in any manner, and all members of the community, whether representing the public or private sector, are welcome to participate. The public is encouraged to become involved with the LMS to gauge plan effectiveness and help identify local hazards to be placed on the county project list. Participation from interested parties, including local / adjacent government representatives and citizens, is solicited via the LMS Web, public meeting advertisements in The Star newspaper (documented in Appendix B: Documentation of the Planning Process) and articles in the Gulf County Chamber of Commerce newsletter.

Copies of all the Task Force's documents are maintained on the LMS Web and at the county's Emergency Management Department. Comments regarding the LMS can be made via the LMS Web or by contacting the county's Emergency Management Department via phone, letter, or e-mail. Public notices were placed in The Star newspaper (documented in Appendix B: Documentation of the Planning Process) advising interested parties that the draft mitigation strategies are available for comment at the appropriate locations. Interested parties can provide comments at any time, which will be incorporated into drafts of the local mitigation strategy.

As other potential stakeholders are identified, they will be contacted and asked to join the Task Force. The county will continually update its Task Force membership by providing updates at Board of County Commission meetings.

Summary of the Planning Process

The Task Force scheduled to meet several times during the review and revision process Table 2.2.

The purpose of the LMS Public Hearing was to solicit formal public comments regarding the completed plan prior to its approval by the Florida Department of Community Affairs (DCA), the Federal Emergency Management Agency, and each participating jurisdiction.



It is important to emphasize that the procedure used by the Task Force was based on the following important concepts:

- A multi-organizational, multi-jurisdictional planning group establishes specific goals and objectives to address the community's vulnerabilities to all types of hazards.
- It utilizes a logical, stepwise process of hazard identification, risk evaluation and vulnerability assessment, as well as review of past disaster events, that is consistently applied by all participants.
- Mitigation initiatives are proposed for incorporation into the plan only by those jurisdictions or organizations with the authorities and responsibilities for their implementation.
- The process encourages participants to propose specific mitigation initiatives that are feasible to implement and are clearly directed at reducing specific vulnerabilities to future disasters.

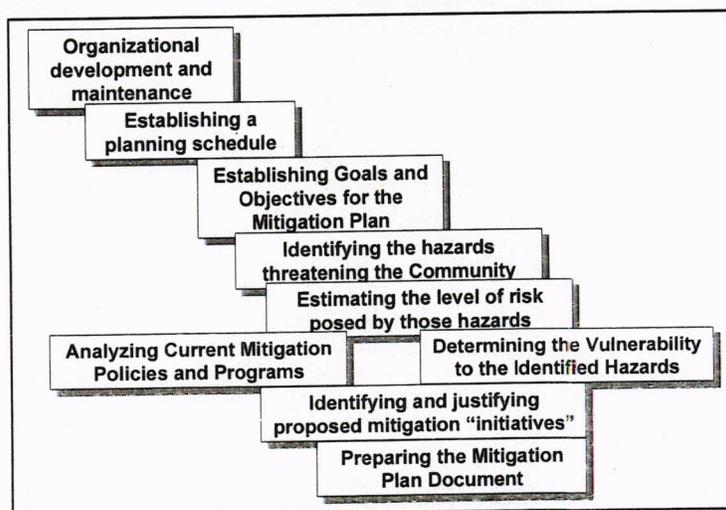
Proposed mitigation initiatives are characterized in a substantive manner, suitable for this level of planning, to assure their cost effectiveness and technical merit, as well as coordinated among jurisdictions to assure that conflicts or duplications are avoided.

The Task Force's Operating Procedures

The planning process undertaken by the Task Force is generally described in the operating procedures of the group, which are enclosed in this section. The process described in the procedures mainly addresses how hazard mitigation initiatives are to be developed and processed. These procedures involve both a technical approach to the planning and an organizational methodology for incorporating mitigation initiatives into the LMS. The general technical analysis process is that identified below.

Figure # 2.1

Hazard Mitigation Planning Process



The planning process has been started with the development of the Task Force as an organization and obtaining participation from the local government jurisdictions and key organizations and institutions. The planning work conducted to develop this document relies heavily on the expertise and authorities of the participating agencies and organizations, rather than on detailed scientific or engineering studies. The Task Force is confident that the best judgment of the participating individuals, because of their role in the community, can achieve a level of detail in the analysis that is more than adequate for purposes of local mitigation planning. As the planning process described herein continues, more detailed and costly scientific studies of the mitigation needs of the community can be defined as initiatives for incorporation into the plan and implemented as resources become available to do so.

Establishing the Planning Schedule

As indicated in the exhibit, the Task Force initially establishes a planning schedule for the upcoming planning period that allows the participants to anticipate their involvement in the technical analyses and evaluations that they will be asked to do. At the outset of the planning period, the Task Force defined the goals that the planning process is attempting to achieve, as well as the specific objectives within each goal that will help to focus the planning efforts. The goals and objectives established by the Task Force for this planning period are described in Section 5: Mitigation Goals and Policies.

Conducting the needed analyses and then formulating proposed mitigation initiatives to avoid or minimize vulnerability of the community to future disasters is an enormous effort, and one that must take place over a long period of time. Therefore, for any one planning period, the goals and objectives set by the Task Force are intended to help focus the effort of the participants, for example, by directing attention to certain types of facilities or neighborhoods, or by emphasizing implementation of selected types of proposed mitigation initiatives.

Hazard Identification and Risk Estimation

The Task Force then identified the natural, technological, and societal hazards that threaten all or portions of the community. Specific geographic areas, subject to the impacts of the identified hazards are delineated where possible. The Task Force also used general information to estimate the relative risk of the various hazards as an additional method to focus their analysis and planning efforts. The Task Force compared the likelihood or probability that a hazard will impact an area, as well as the consequences of that impact to public health and safety, property, the economy, and the environment. This comparison of the consequences of an event with its probability of occurrence is a measure of the risk posed by that hazard to the community. The Task Force compared the estimated relative risks of the different hazards it identified to highlight which hazards should be of greatest concern during the ongoing mitigation planning process.



Depending on the participating jurisdiction, a variety of information resources regarding hazard identification and risk estimation are available. The planners representing the jurisdictions have attempted to incorporate consideration of hazard specific maps, including flood plain delineation maps, whenever applicable, and have attempted to avail themselves of GIS based analyses of hazard areas and the locations of critical facilities, infrastructure components and other properties located within the defined hazard areas.

Estimating the relative risk of different hazards was followed by the assessment of the vulnerabilities in the likely areas of impact to the types of physical or operational agents potentially resulting from a hazard event. Two methods are available to the Task Force to assess the communities' vulnerabilities to future disasters.

Vulnerability Assessment

The first avenue is a methodical, qualitative examination of the vulnerabilities of important facilities, systems and neighborhoods to the impacts of future disasters. For the participating jurisdictions and organizations, this is done by the individuals most familiar with the facility, system or neighborhood. The process ranks both the hazards to which the facility, system or neighborhood is most vulnerable, as well as the consequences to the community should it be disrupted or damaged by a disaster. This process typically results in identification of specific vulnerabilities that can be addressed by specific mitigation initiatives that can be proposed and incorporated into this plan. As an associated process, the Task Force also reviews past experiences with disasters to see if those events highlighted the need for specific mitigation initiatives based on the type or location of damage they caused. Again, these experiences can result in the formulation and characterization of specific mitigation initiatives for incorporation into the plan.

The second avenue for assessment of community vulnerabilities, as illustrated in the exhibit, involves comparison of the existing policy, program and regulatory framework promulgated by local jurisdictions to control growth, development and facility operations in a manner that minimizes vulnerability to future disasters. The Task Force members assessed the individual jurisdiction's existing codes, plans, and programs to compare their provisions and requirements against the hazards posing the greatest risk to that community. If indicated, the participating jurisdiction could then propose development of additional codes, plans or policies as mitigation initiatives for incorporation into the LMS for future implementation when it is appropriate to do so. The Task Force consulted the following documents:

- Gulf County Floodplain Ordinance
- Gulf County Comprehensive Emergency Management Plan
- Gulf County Comprehensive Plan
- Port St. Joe Comprehensive Plan
- City of Wewahitchka Comprehensive Plan
- Apalachee Regional Planning Council Strategic Regional Policy Plan



- Northwest Water Management District Plan
- State Comprehensive Plan
- State Hazard Mitigation Plan
- Community Ranking System Plan
- Flood Mitigation Assistance Plan

Developing Hazard Mitigation Initiatives

This process enables the Task Force participants to highlight the most significant vulnerabilities to assist in prioritizing subsequent efforts to formulate and characterize specific hazard mitigation initiatives to eliminate or minimize those vulnerabilities. Once the highest priorities are defined, the Task Force participants identified specific mitigation initiatives for the plan that would eliminate or minimize those vulnerabilities.

The Task Force established a methodical, objective procedure for characterizing and justifying the mitigation initiative proposed by each participating jurisdiction for incorporation into this plan. This procedure involves describing the initiative, relating it to one of the goals and objectives established by the Task Force, and justifying its implementation on the basis of its economic benefits and / or protection of public health and safety, as well as valuable or irreplaceable resources. A “benefit to cost” ratio is established for each initiative to demonstrate that it would indeed be worthwhile to implement when or if the resources to do so became available. Further, each proposed mitigation initiative is “prioritized” for implementation in a consistent manner by each participating organization using a set of ten objective criteria.

In characterizing a mitigation initiative for incorporation into the Task Force’s plan, it is important to recognize that the level of analysis conducted by each organization involved has been intentionally designed to be appropriate for this stage in the planning process. That is, it is the interest of the Task Force to have a satisfactory level of confidence that a proposed mitigation initiative, when implemented, will be cost effective, feasible, acceptable to the community, and technically effective in its purpose. To do this, the technical analyses conducted, including the development of a benefit to cost ratio for each proposal, have been based on a straightforward, streamlined approach, relying largely on the informed judgment of experienced local officials. The analyses have not been specifically designed to meet the known or anticipated requirements of any state or federal funding agency, due largely to the fact that such requirements can vary with the agency and type of proposal. Therefore, at the point when the organization proposing the initiative is applying for funding from any state or federal agency, or from any other public or private funding source, that organization will then address the specific informational or analytical requirements of the funding agency.

Each mitigation initiative proposed for incorporation into the plan is formulated and submitted to the Task Force for consideration by an agency, organization, business, or individual that has the authority or responsibility for its implementation. This avoids the artificiality of proposing mitigation initiatives when it is unclear who would implement them and if the authority to do so is actually available.



Developing the Local Mitigation LMS

Once the above procedure was completed by the agency or organization developing the proposed mitigation initiative, the information used to characterize the initiative was submitted to the Task Force for review and inter-jurisdictional coordination.

On receipt of a pending initiative, the Task Force first evaluated the merits of the proposal and the validity of the judgments and assumptions that went into its characterization, as well as considered its potential for conflict with other jurisdiction's programs or interests. The Task Force also assured that the proposal was consistent with the goals and objectives established for the planning period and confirms that it would not duplicate or harm a proposal submitted by another jurisdiction or agency. If there was such a difficulty with a proposed initiative, it was returned to the submitting organization for revision or reconsideration.

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In order to support the participating jurisdictions in the completion of the community profiles and vulnerability assessments, the Task Force sets a schedule for each



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Gulf Coast Community College	Institution
Gulf County Board of County Commissioners	County
Gulf County Building Department	County
Gulf County Chamber of Commerce	Business
Gulf County Clerk of Court	County
Gulf County Emergency Management Department	County
Gulf County Extension Service Office	County
Gulf County Grants Department	County
Gulf County GIS Department	County



Gulf County Health Department	County
Gulf County Mosquito Control and Solid Waste Department	County
Gulf County Planning and Building Department	County
Gulf County Property Appraiser's Office	County
Gulf County Public Works Department	County
Gulf County Road Department	County
Gulf County Tourist Development Council	Business
Gulf County Veterans' Service	County
Mexico Beach Community Development Council Inc	Non-Profit
Salvation Army	County

Table # 2.2

Task Force Work Plan

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4/23/09	<p>Task Force Meeting</p> <ul style="list-style-type: none"> • Assess previous mitigation activities. • Evaluate the mitigation measures.
5/20/09	Public Hearing



9/5/09 | Submit Final Draft of the LMS to the various city and county commissions.



This section of the LMS contains information about Port St. Joe, Wewahitchka and the unincorporated areas of the county. Local agencies and organizations serving each jurisdiction developed the profiles of Port St. Joe, Wewahitchka and the county's unincorporated areas. The approach of the Task Force was to catalogue the results of the planning effort by jurisdiction, in order to provide information and analysis that will support the jurisdictions' efforts to implement their priority mitigation initiatives. In addition, the jurisdiction profiles created a "baseline" or starting point for the Task Force to identify potential vulnerabilities to future disasters and to initially indicate avenues for pursuing evaluations and assessments throughout the county as the planning process continues in the future.

This profile includes information regarding the demographic and infrastructure characteristics of each jurisdiction, a list of plans and codes governing the jurisdiction and a general description of land uses and development trends. All demographic data was obtained from the United States Census Bureau 2007 estimates.

There may be differences among the amounts of information or analysis provided for each jurisdiction. This may be a result of the differing characteristics of the jurisdictions, the information and data available to use in the analysis, and the time available for the jurisdiction's representatives to conduct the planning process.



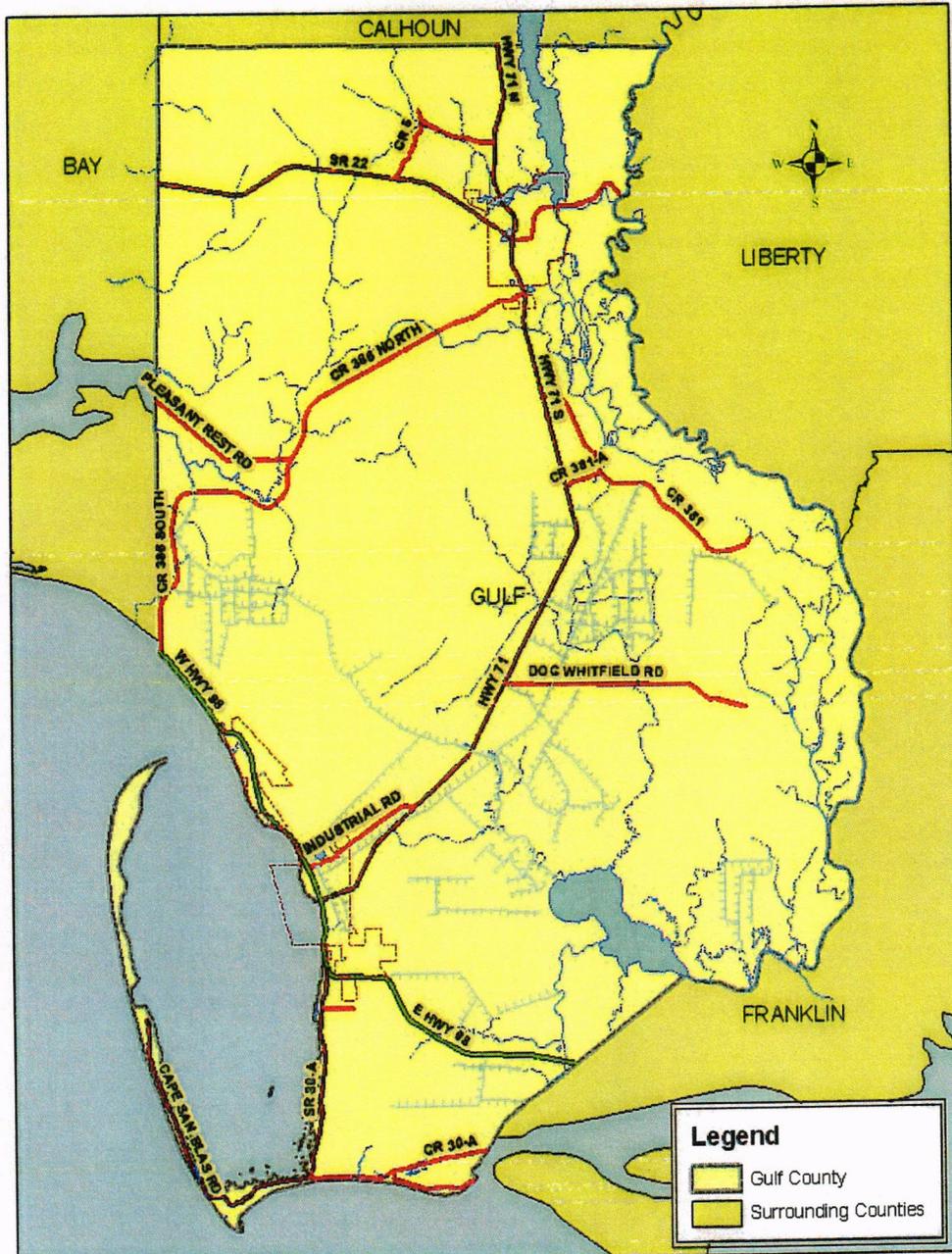
Gulf County

Figure # 3.1 Geographic Location of Gulf County



Figure # 3.2

Map of Gulf County



Disclaimer: Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
Path: Projects/EI/UMS/GulfCo
Date: 5/5/2009



Gulf County, Florida

1 inch = 4.07 miles



Table # 3.1

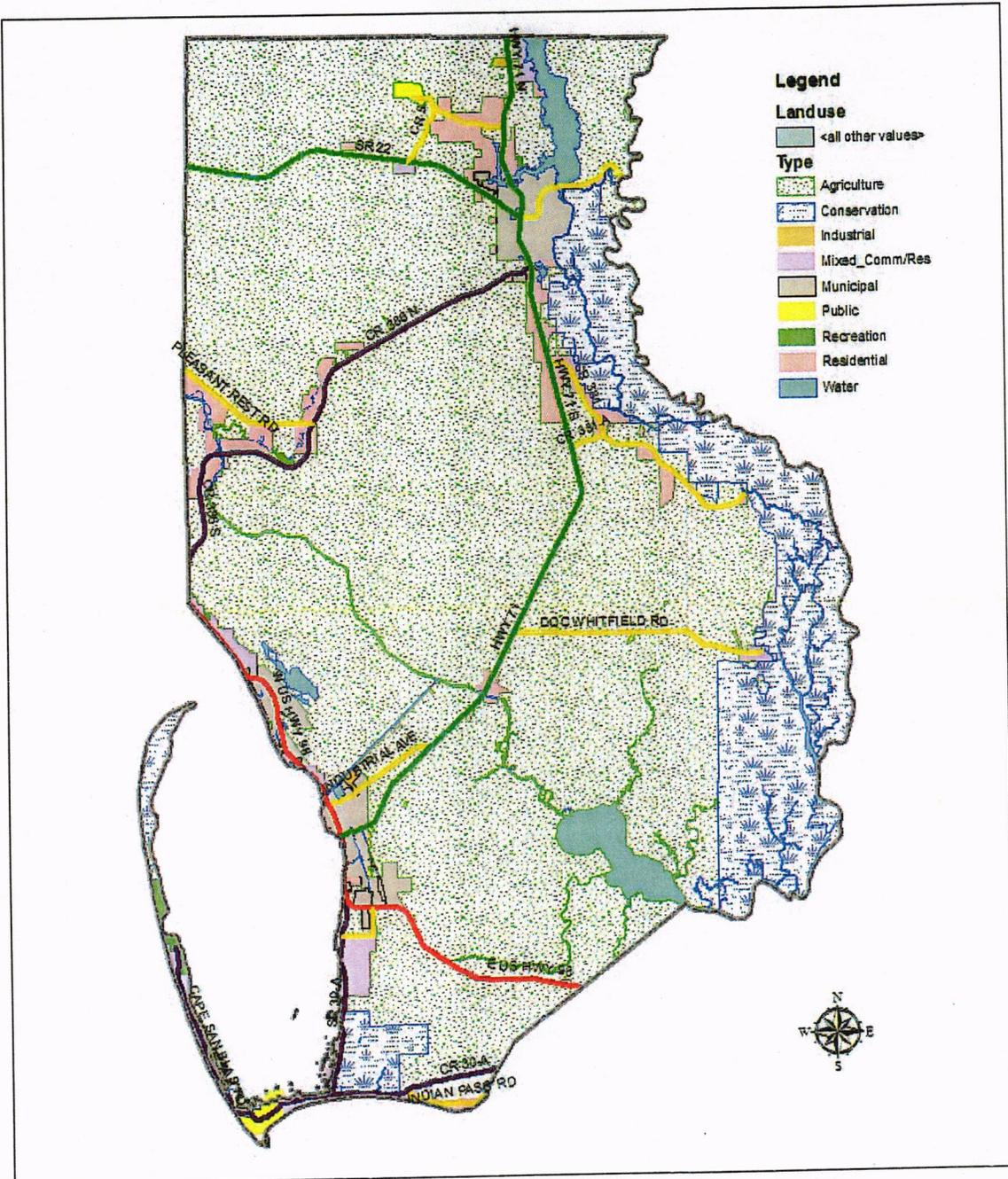
Gulf County Jurisdictional Profile

Gulf County	Data
Population	14,059
Geographic Size	554 Square Miles
Persons Per Square Mile	24
Current Growth Trend	3.4% Decrease Since 2000
Economy	Construction – 19% Public Administration – 15% Repair / Maintenance – 4% Agriculture / Forestry / Fishing / Hunting – 4%
Income	Median Household Income – \$30,276 Persons Living Below Poverty Level – 16.7%
Maintains	A Comprehensive Land Use Plan A Land Use Code and Zoning Ordinance A Building Code A Fire / Life Safety Code Current Insurance Service Office (ISO) rating of 10 Current Building Code Effectiveness Classification 8 Participant in the National Flood Insurance Program (NFIP) Current NFIP Community Ranking System (CRS) rating of 8
Development Trends	The county's unincorporated areas are not considered to be fully developed. Development of vacant and unused land is occurring very rapidly or much faster than planned. Expansion, redevelopment and reconstruction of existing properties are numerous in many locations. Potential development will face hazards identical to those Alford currently faces.



Figure # 3.3

Gulf County Land Use Map



GULF COUNTY LAND USE MAP

Disclaimer - Gulf County provides this GIS data as a public service. No Warranty for availability or accuracy is provided.

0 6,500 13,000 26,000 Feet

1 inch = 21,946 feet



Table # 3.2

Gulf County Current Land Use (2009)

Current Land Use Categories	Percent of Jurisdiction Included
Agricultural	74.76%
Conservation	13.57%
Industrial	.09%
Mixed Commercial / Residential	1.72%
Municipal	2.71%
Public	.35%
Recreation	.29%
Residential	3.35%
Water	3.17%

Table # 3.3

Gulf County Future Land Use

Current Land Use Categories	Percent of Jurisdiction Included
Agricultural	74.76%
Conservation	13.57%
Industrial	.09%
Mixed Commercial / Residential	1.72%
Municipal	2.71%
Public	.35%
Recreation	.29%
Residential	3.35%
Water	3.17%



Figure # 3.4

Map of Port St. Joe



Legend

- City of Port St. Joe
- _____ Gulf County

Disclaimer: Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
Path: Projects/EM/UMS
Date: 5/6/2009



Port St. Joe City Limits
Gulf County, Florida

1 inch = 1 miles



Table # 3.4 Port St. Joe Jurisdictional Profile

Port St Joe	Data
Population	3,579
Geographic Size	3.32 Square Miles
Persons Per Square Mile	1,078
Current Growth Trend	0.6% Decrease Since 2000
Economy	Construction – 15% Public Administration – 14% Chemicals – 11% Educational Services – 7%
Income	Median Household Income - \$40,814 Persons Living Below Poverty Level – 13%
Maintains	A Comprehensive Land Use Plan A Land Use Code and Zoning Ordinance A Building Code A Fire / Life Safety Code Current Insurance Service Office (ISO) rating of 6 Participant in the National Flood Insurance Program (NFIP) Current NFIP Community Ranking System (CRS) rating of 9
Development Trends	The community is not considered to be fully developed. Development of vacant and unused land is occurring very rapidly or much faster than planned. Expansion, redevelopment and reconstruction of existing properties are numerous in many locations. Potential development will face hazards identical to those the community currently faces.

Table # 3.5 Port St Joe Current Land Uses (2009)

Current Land Use Categories	Percent of Jurisdiction Included
Agricultural	0%



Commercial	10%
Developed Mixed Uses	0%
Industrial	30%
Institutional (education, health care, etc.)	5%
Parks / Restricted Wild Land / Wildlife Refuge	5%
Residential	48%
Transportation or Utility Right-of-Way	0%
Vacant / Unused – Government Ownership	0%
Vacant / Unused – Private Ownership	0%
Waterway / Lake / Wetland	2%

Table # 3.6

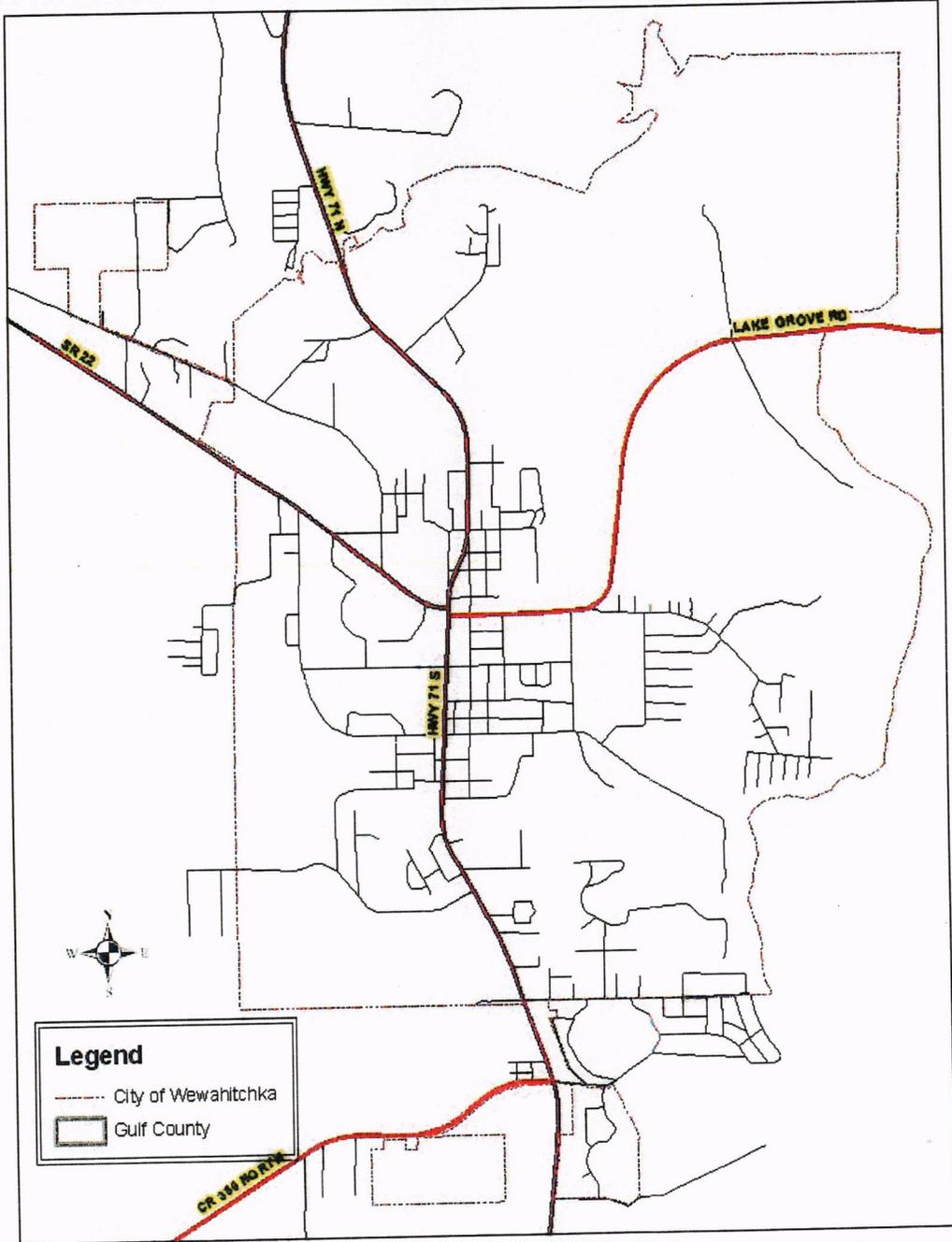
Port St. Joe Future Land Uses

Current Land Use Categories	Percent of Jurisdiction Included
Agricultural	0%
Commercial	10%
Developed Mixed Uses	0%
Industrial	30%
Institutional (education, health care, etc.)	5%
Parks / Restricted Wild Land / Wildlife Refuge	5%
Residential	48%
Transportation or Utility Right-of-Way	0%
Vacant / Unused – Government Ownership	0%
Vacant / Unused – Private Ownership	0%
Waterway / Lake / Wetland	2%



City of Wewahitchka

Figure # 3.5 Map of Wewahitchka



Legend

- City of Wewahitchka
- Gulf County

Disclaimer: Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
Path: Project: GIS/Limits/Map of Wewahitchka City Limits
Date: 5/6/2009



Wewahitchka City Limits
Gulf County, Florida

1 inch = 0.47 miles



Table # 3.7 Wewahitchka Jurisdictional Profile

Wewahitchka	Data
Population	1,665
Geographic Size	6.21 Square Miles
Persons Per Square Mile	268
Current Growth Trend	3.3% Decrease Since 2000
Economy	Public Administration – 20% Construction – 17% Educational Services – 7% Truck Transportation – 5%
Income	Median Household Income – \$35,917 Persons Living Below Poverty Level – 19.2%
Maintains	A Comprehensive Land Use Plan A Land Use Code and Zoning Ordinance A Building Code A Fire / Life Safety Code Current Insurance Service Office (ISO) rating of 7 Not a Participant in the National Flood Insurance Program (NFIP)
Development Trends	The community is not considered to be fully developed. Little or no development is occurring. Expansion, redevelopment and reconstruction of existing properties are numerous in many locations. Potential development will face hazards identical to those the community currently faces.

Table # 3.8 Wewahitchka Current Land Uses (2009)

Current Land Use Categories	Percent of Jurisdiction Included
Agricultural	55%
Commercial	7%
Developed mixed uses	6%



Industrial	0%
Institutional (education, health care, etc.)	0%
Parks / Restricted Wild Land / Wildlife Refuge	1%
Residential	41%
Transportation or Utility Right-of-Way	0%
Vacant / Unused – Government Ownership	0%
Vacant / Unused – Private Ownership	0%
Waterway / Lake / Wetland	0%

Table # 3.9 Wewahitchka Future Land Uses

Current Land Use Categories	Percent of Jurisdiction Included
Agricultural	52%
Commercial	1%
Developed mixed uses	3%
Industrial	0%
Institutional (education, health care, etc.)	0%
Parks / Restricted Wild Land / Wildlife Refuge	1%
Residential	43%
Transportation or Utility Right-of-Way	0%
Vacant / Unused – Government Ownership	0%
Vacant / Unused – Private Ownership	0%
Waterway / Lake / Wetland	0%



**SECTION
FOUR**

HAZARDS AND VULNERABILITIES

This section of the LMS details the results of the hazard identification and vulnerability assessment processes undertaken by the Task Force members. The intent of the section is to provide a compilation of the information gathered and the judgments made about the hazards threatening the county as a whole and the potential vulnerability to those hazards. Hazards specific to each jurisdiction are also discussed along with information relevant to the entire planning area. Following the discussion of hazards facing the county is a brief evaluation of the critical facilities in the county that are at greatest risk from some of these hazards and a listing of the properties in the county that have suffered repetitive losses from past disasters.

Community Assets

There is no Community Assets Section in this report.

Recent Disaster History

When a disaster strikes that overwhelms the ability of local communities to respond, the President of the United States can declare the affected communities a federal disaster area. This enables local communities to receive federal disaster assistance. Disaster assistance includes public assistance for disaster related losses to local governments, family and individual assistance, low interest loans to businesses to cope with lost revenues during the rebuilding process, and hazard mitigation grants to help fund projects to reduce local vulnerability to future disasters. The following table lists the major disasters that have occurred recently in the county. Previous occurrences (i.e. historical events) are documented for the following hazards: drought, flooding, tornadoes, hurricanes, landslide / erosion and wildfire.

Table # 4.1

Recent Disasters in Gulf County

Date	Type	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
2/17/92	Tornado	F-1	0	0	25K	0
2/17/92	Tornado	F-0	0	0	3K	0
8/10/92	Thunderstorm	N/A	0	0	0	0
9/12/92	Thunderstorm	N/A	0	0	0	0
11/2/92	Hail	0.75 Inch	0	0	0	0
11/4/92	Thunderstorm	N/A	0	0	0	0
12/9/92	Thunderstorm	N/A	0	0	0	0



12/9/92	Thunderstorm	N/A	0	0	0	0
1/24/93	Tornado	F-1	0	2	50K	0
3/12/93	Tornadoes	N/A	25	0	1.6B	2.5M
10/30/93	Waterspout	N/A	0	0	0	0
7/3/94	Tropical Storm Alberto	N/A	0	0	5.0M	0
7/5/94	Flood	N/A	0	0	500K	50.0M
8/15/94	Waterspout	N/A	0	0	0	0
8/15/94	Thunderstorm	N/A	0	0	5K	0
8/16/94	Tropical Storm	N/A	0	1	50.0M	0
10/2/94	Flood	N/A	0	0	5.0M	0
2/17/95	Tornado	F-0	0	0	0	0
6/5/95	Hurricane Allison	N/A	0	0	0.9M	25K
7/18/95	Thunderstorm	1 Knots	0	0	0	0
10/4/95	Hurricane Opal	N/A	0	0	1.0B	0
3/7/96	Tornado	F-0	0	0	2K	0K
10/7/96	Tropical Storm	N/A	0	0	0	0
11/13/97	Tornado	F-0	0	0	5K	0
2/22/98	Thunderstorm	52 Knots	0	0	0	0
2/22/98	Hail	0.75 Inch	0	0	0	0
3/7/98	Tornado	F-0	0	0	35K	0
3/7/98	Hail	1.75 Inch	0	0	0	0
3/8/98	Tornado	F-0	0	0	25K	0
3/10/98	Flood	N/A	0	0	367.0M	0
6/20/98	Wildfire	N/A	0	0	0	0
9/2/98	Hurricane Earl	N/A	2	2	6.0M	0
9/28/98	Hurricane Georges	N/A	0	1	62.0M	0
1/2/99	Tornado	F-0	0	0	30K	0
2/28/99	Thunderstorm	N/A	0	0	200K	0
4/26/99	Wildfire	N/A	0	0	0	0



5/7/99	Thunderstorm	N/A	0	0	2K	0
5/7/99	Thunderstorm	N/A	0	0	50K	0
8/14/99	Thunderstorm	N/A	0	0	1K	0
3/1/00	Wildfire	N/A	0	0	0	0
3/16/00	Waterspout	N/A	0	0	0	0
3/16/00	Tornado	F-0	0	0	150K	0
3/29/00	Thunderstorm	N/A	0	0	15K	0
7/8/00	Wildfire	N/A	0	0	0	0
7/17/00	Wildfire	N/A	0	0	0	0
7/20/00	Hail	0.75 Inch	0	0	0	0
7/20/00	Thunderstorm	N/A	0	0	300K	0
7/24/00	Thunderstorm	N/A	0	0	25K	0
8/9/00	Thunderstorm	N/A	0	0	2K	0
8/11/00	Waterspout	N/A	0	0	0	0
9/6/00	Thunderstorm	N/A	0	0	50K	0
9/21/00	Tropical Storm Helene	N/A	0	0	0	0
9/22/00	Flood	N/A	0	0	100K	0
3/20/01	Thunderstorm	65 Knots	0	0	0	0
8/4/01	Tropical Storm	N/A	0	0	5.0M	0
8/11/01	Waterspout	N/A	0	0	0	0
3/12/02	Thunderstorm	N/A	0	0	50K	0
9/14/02	Tropical Storm	N/A	0	0	400K	0
9/14/02	Storm Surge	N/A	0	0	15K	0
9/25/02	Tropical Storm	N/A	0	1	11.0M	0
9/25/02	Storm Surge	N/A	0	0	1.0M	0
2/16/03	Tornado	F-0	0	0	250K	0
4/25/03	Tornado	F-0	0	0	250K	0
5/31/03	Rip Current	N/A	1	0	0	0
8/12/04	Tropical Storm Bonnie	N/A	0	0	155K	0
9/5/04	Hurricane Ivan	N/A	0	0	1.7M	0



9/15/04	Tornado	F-0	0	0	25K	0
9/15/04	Hurricane Jeannie	N/A	6	16	99.4M	0
3/7/05	Thunderstorm	55 Knots	0	0	10K	0
3/7/05	Tornado	F-0	0	0	150K	0
3/7/05	Tornado	F-0	0	0	75K	0
4/1/05	Flood	N/A	0	0	5.0M	0
5/5/05	Hail	1.75 Inch	0	0	0	0
6/10/05	Tropical Storm Dennis	N/A	0	0	270K	0
7/5/05	Tropical Storm	N/A	0	0	150K	0
7/9/05	Hurricane	N/A	0	0	62.0M	0
7/10/05	Storm Surge	N/A	0	0	8.5M	0
8/28/05	Hurricane Katrina	N/A	0	0	1.7M	0
10/20/05	Heavy Surf	N/A	0	0	25K	0
5/9/06	Hail	0.88 Inch	0	0	0	0
5/10/06	Thunderstorm	55 Knots	0	0	1K	0
6/12/06	Tropical Storm	N/A	0	0	250K	0
6/12/06	Storm Surge	N/A	0	0	0	0
7/19/06	Thunderstorm	55 Knots	0	0	3K	0
7/29/06	Hail	0.75 Inch	0	0	0	0
8/13/08	High Surf	N/A	0	0	0K	0K
9/1/08	Storm Surge	N/A	0	0	0K	0K
9/11/08	Hurricane Gustav	N/A	0	0	0K	0K
12/10/08	Coastal Flood	N/A	0	0	0K	0K
Total			4	24	3.296B	52.525M

Source: NOAA – www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms

As evidenced by the information in the preceding table, over the last 20 years, the county has been affected by an incredible array of disasters. Although most of these disaster declarations have been the result of severe tropical weather, the county is vulnerable to a wide variety of hazards that are described on the following pages.



Hazard Identification and Vulnerability Assessment Overview

As noted in Section 2: The Planning Process, the technical planning process begins with hazard identification. In this process, the support staff and representatives of individual jurisdictions identify all of the natural, technological and societal or man-made hazards that could threaten the community.

Hazard identification and risk estimation can be a highly complex, time consuming and very costly effort if sophisticated technical and engineering studies are undertaken. Most communities will not have the resources to undertake hazard identification and risk assessment studies to this level of detail. However, in order to complete the LMS, it is necessary to have a general understanding of the hazards threatening the county and its jurisdictions, and to estimate the level of risk to the community posed by these hazards.

Representatives of the above noted disciplines gathered in a single workshop facilitated by the Task Force. The hazards threatening the entire county were identified and their risks estimated by the entire group, addressing each participating jurisdiction one-by-one until all had been assessed. The results of the judgments reached by this approach were recorded on the hazard identification and risk estimation matrix. Table 4.40 shows the completed form for the county. There were no deviations for Port St. Joe and Wewahitchka.

With the hazard types identified, the participants could make an estimate of the risk each poses to the jurisdiction being evaluated. The estimate of risk is based on the judgment of the planners regarding the likely frequency of occurrence of the hazard event compared to its consequences. The higher the frequency of occurrence and the greater the consequences, the higher the risk posed by that hazard. The Task Force derived a "relative risk score" using a qualitative process in which planners compile their estimates of the likely frequency of occurrence, the extent of the community that would be impacted, and the likely consequences in terms of public safety, property damage, economic impacts and harm to valuable environmental resources. The total of the qualitative assessments of each of these is considered in this plan to constitute the "relative risk score."

In deriving these estimates of risk, the participating jurisdictions have utilized all available information regarding the geographic areas that may be impacted by each identified hazard, as well as population, infrastructure and facilities within those impacted areas. This has included inventories of valuable environmental resources, as well as factors that are influential to the economic well being of the community. Examples of such existing information resources that have been accessed in this manner include existing hazard area maps, such as Flood Insurance Rate Maps, Hurricane / Tsunami surge zone maps, tornado and severe weather frequency distribution maps, geologic hazard and soil characteristics maps, wildfire risk maps, hazardous materials accident scenarios, and similar types of hazard zone delineation maps. For many of the participating jurisdictions, this information has been available in



a GIS database, or has been accessed from internet websites and state geographic and meteorological existing GIS databases.

Information regarding the existing population and property at risk within these hazard zones has been obtained, where possible, from US Census data, from the county's property appraisal records, aerial photographs, topographic maps and similar information sources. Evaluations of the potential risk to valuable environmental resources in the impacted areas have been derived from review of available environmental inventories, maps of parklands, wildlife refuges, wetlands, potable water supplies, and other similar natural features. Information on the potential risk to the economic well being of the community, particularly regarding indirect economic costs of potential hazard events, has been derived from evaluating the number of businesses that may be affected by the event, the number of jobs involved, and the revenue these businesses return to the community.

However, it must be emphasized that in many cases, detailed information regarding the areas potentially impacted by a specific hazard, as well as the potential health and safety, property, environmental and economic impacts of that hazard, have not been available. Further, it has not been the intent of the Task Force, nor have funding resources been available, to conduct extensive new studies to obtain such information solely for the purposes of the development of the LMS. Therefore, it has often been necessary to rely on the informed judgment of knowledgeable local officials in deriving these estimates. The Task Force believes that their experience with their own communities, as well as their capabilities to derive reasonable estimates of the geographic area at risk and the potential impacts of the hazard, is adequate for the purposes of this planning effort. Where the absence of hazard and risk-related data has been deemed by the jurisdiction to be a significant limitation on the effectiveness of this planning process, a proposed mitigation initiative to request funding to develop such data has been incorporated into the LMS by the involved jurisdiction.

For the county, the results of this process are described below and divided into two sections. The first part provides a narrative discussion of the relative risk posed by various hazard categories to the jurisdictions that were evaluated. The second section contains summaries of the relative risk for the county for each of the public safety, property damage, economic impact, and environmental damage criteria and organizes the hazards according to relative risk scores.

Vulnerability Assessments

The Task Force also conducted numerous vulnerability assessments during the planning period. These assessments build on the identification of hazards in the community and the risk that the hazards pose to the community. The vulnerability assessment process examines more specifically how the facilities, systems and neighborhoods of the county would be damaged or disrupted by the hazard events identified during the earlier work of the Task Force participants.



The vulnerability assessment process for the Task Force begins with profiling the communities of the county and examining specific characteristics that contribute to the vulnerability of the structures, people, and functioning of that specific component of the community. The assessment conducted by the Task Force includes determining the potential cost of property damage as a measure of vulnerability.

A report is enclosed in this section that assesses the jurisdictions for the presence of what is termed "critical facilities," which are structures whose function is very important to the safety and welfare of the community. The presence of critical facilities in a jurisdiction increases the importance of mitigating the potential for future disaster impacts in such areas. This report also includes identification of any repetitive loss properties located in the jurisdictions assessed.

MEMPHIS Hazard Model Analysis

The Department of Community Affairs (DCA) provided the Mapping for Emergency Management Parallel Hazard Information System (MEMPHIS) to model the hazards of every county in Florida. MEMPHIS uses Geographical Information System (GIS) technology to estimate the potential damage and dollar losses resulting from a variety of natural hazards. The MEMPHIS coastal hazard model combined with a geographical representation of the county's property appraiser data allows MEMPHIS to estimate damage to all structures on record and their contents, depending on the severity of the hazard event. There is virtually no end to the types of analyses that can be generated using MEMPHIS. It must be noted that the MEMPHIS model is based upon the tracks of 40,000 simulated storms and the data were gathered so as to produce a true worst-case scenario for use in planning. Therefore, the following information is reflective of a true worst-case scenario. It is also important to be aware that MEMPHIS is limited in its ability to account for inland riverine flooding. Finally, the tax assessor and property appraiser data used by the MEMPHIS model does not distinguish between woodframe structures and concrete block structures. Therefore, the model assumes that all structures are woodframe. This will have the effect of inflating damage estimations produced by the model.

The following subsections provide explanations of the hazards present in the county and its jurisdictions. A narrative summary of each hazard is provided which includes a definition of the hazard, a hazard map for the planning area, comments from the Task Force regarding how the hazard affects the county, the hazard score, and the potential dollar losses generated by MEMPHIS. No potential dollar losses were generated for technological and societal hazards.

Dam / Levee Failure	Hazard Score: 11
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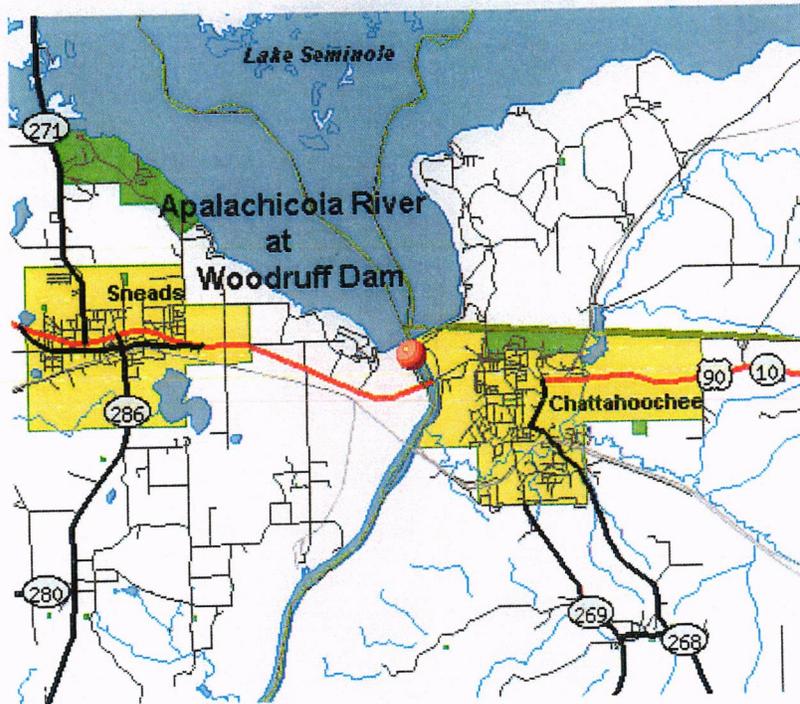
Definition: A dam or levee is a barrier that is constructed to contain the flow of water or keep out the sea. The benefits of dams are numerous: they provide water for drinking, navigation and agricultural irrigation. Dams also provide hydroelectric power and create lakes for fishing and recreation. Most important, dams save lives by preventing or



reducing floods. In the event of a dam failure, the energy of the water stored behind even a small dam is capable of causing loss of life and great property damage if there are people downstream of the dam.

Task Force Comments: According to the Task Force, there are no dams or levees in the county. The only dam posing a remote threat to the county is Jim Woodruff Dam shown on the following map. In the event of dam failure, the corresponding flooding would be similar to that of very heavy rainfall.

Figure # 4.1 **Jim Woodruff Dam**



Potential Dollar Losses: There was insufficient information to generate an estimate of potential dollar losses resulting from dam and levee failure. Potential losses will be estimated as more information and technology becomes available. This capability will be reassessed each planning cycle.

Drought / Heat **Hazard Score: 36**

Definition: Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a "dome" of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. Droughts



occur when a long period passes without substantial rainfall. A heat wave combined with a drought is a very dangerous situation.

Task Force Comments: Because the county is a coastal county, it is not particularly prone to severe droughts. However, droughts have occurred as recently as 2000. Port St. Joe and Wewahitchka residents use deep wells as a water sources and thus are only affected by long-term drought. Rural residents who use shallow wells may be more affected. In addition, severe droughts may have an adverse affect on the county's wetlands and exotic flora species. Figure 4.2 shows the seasonal drought index averages in North Florida using the Keetch-Bryam Drought Index (KBDI). For many months of the year, the county is extremely moist and not susceptible to drought. During late spring and mid-summer, drought presents the greatest risks.

The KBDI is a continuous reference scale for estimating the dryness of the soil and duff layers. The index increases for each day without rain (the amount of increase depends on the daily high temperature) and decreases when it rains. The scale ranges from 0 (no moisture deficit) to 800. The range of the index is determined by assuming that there is 8 inches of moisture in a saturated soil that is readily available to the vegetation.

For different soil types, the depth of soil required to hold 8 inches of moisture varies (loam = 30", clay = 25" and sand = 80"). A prolonged drought (high KBDI) influences fire intensity largely because more fuel is available for combustion (i.e. fuels have a lower moisture content). In addition, the drying of organic material in the soil can lead to increased difficulty in fire suppression.

High values of the KBDI are an indication that conditions are favorable for the occurrence and spread of wildfires, but drought is not by itself a prerequisite for wildfires. Other weather factors, such as wind, temperature, relative humidity and atmospheric stability, play a major role in determining the actual fire danger.

Table # 4.2 **Florida KBDI Averages**

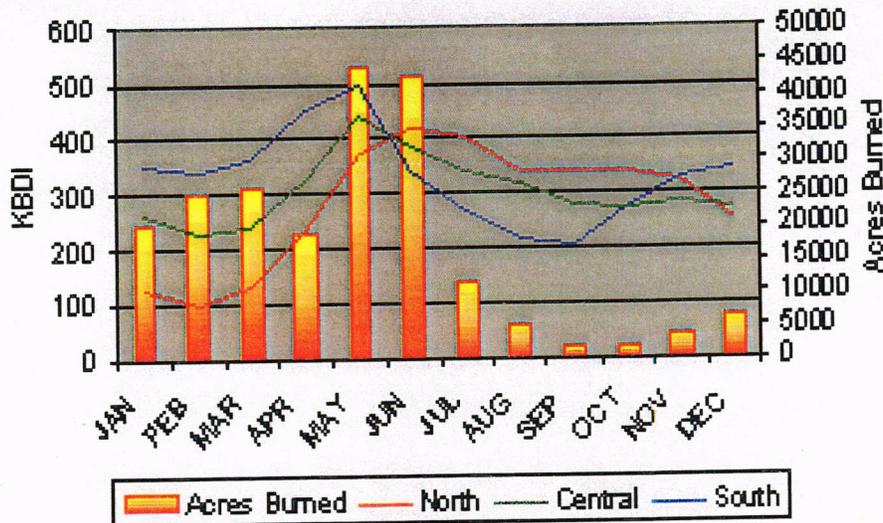
Threat	Winter	Spring	Summer	Fall
Very Low	0 – 160	0 – 190	0 – 220	0 – 180
Low	161 – 220	191 – 260	221 – 300	181 – 240
Normal	221 – 390	261 – 460	301 – 500	241 – 420
Moderate	391 – 500	461 – 600	501 – 640	421 – 540
Severe	501 – 800	601 – 800	641 – 800	541 - 800

Source: Division of Forestry – www.fl-dof.com/fire_weather/information/seasonal.html



Figure # 4.2

Mean Regional KDBI along with Mean Number Of Acres Burned Statewide



Source: Division of Forestry – www.fl-dof.com/fire_weather/information/activity.html

Potential Dollar Losses: Drought presents the greatest economic threat to the seafood industry. There was insufficient information to generate an estimate of potential dollar losses resulting from drought and extreme heat. Potential losses will be estimated as more information and technology becomes available. This capability will be reassessed each planning cycle.

Earthquake

Hazard Score: 0

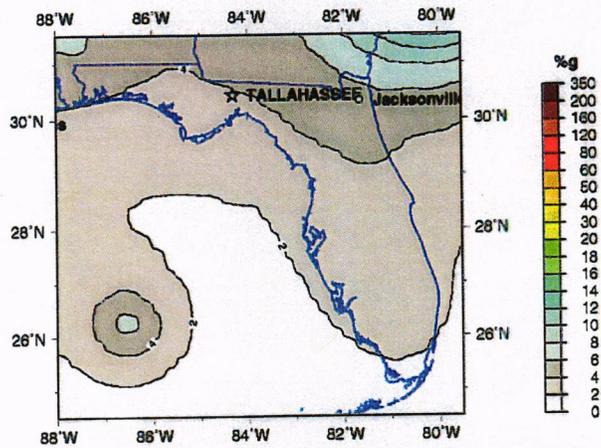
Definition: An earthquake is a sudden, rapid shaking of the Earth caused by the breaking and shifting of rock beneath the Earth's surface. This shaking can cause buildings and bridges to collapse; disrupt gas, electric, and phone service; and sometimes trigger landslides, avalanches, flash floods, fires, and huge, destructive ocean waves (tsunamis).

Task Force Comments: The following map shows the Peak Ground Acceleration (PGA) values for Florida with a 10% chance of being exceeded over 50 years. According to the map, all of the county is located in an area with 1%g peak acceleration and a relatively low seismic risk of an earthquake occurring. Earthquake is not considered to be a hazard applicable to the county and a risk assessment was not conducted for as part of the LMS.



Figure # 4.3

Earthquake Potential throughout Florida

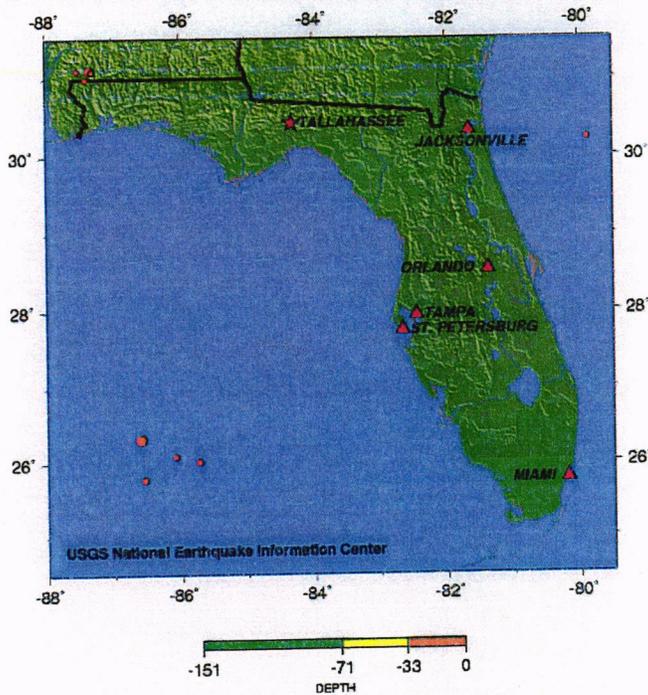


National Seismic Hazard Mapping Project (2008)

Source: US Geological Survey – earthquake.usgs.gov/regional/states/florida/hazards.php

Figure # 4.4

Seismicity of Florida



Source: USGS – earthquake.usgs.gov/regional/states/florida/seismicity.php

Potential Dollar Losses: \$ 0.00



Definition: A flood, as defined by the National Flood Insurance Program is: "A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is your property) from:

- Overflow of inland or tidal waters.
- Unusual and rapid accumulation or runoff of surface waters from any source.
- A mudflow.

While storm surge has been the number one cause of hurricane related deaths in the past, more people have died from inland flooding associated with tropical systems in the past 30 years. Flooding from hurricanes can occur hundreds of miles from the coast placing communities, which would not normally be affected by the strongest hurricane winds, in great danger. Some of the greatest rainfall amounts associated with tropical systems occur from weaker tropical storms that have a slow forward speed (1 to 10 mph) or stall over an area.

According to the Saffir / Simpson Scale, hurricanes are assigned a designation of category 1 through 5 depending on wind speeds in an effort to predict the potential damage that may be caused by the weather event. The following table lists the flood effects associated with hurricane of different categories according to the Saffir / Simpson scale.

Table # 4.3

Flood Effects Using the Saffir / Simpson Hurricane Scale

Category	Wind Speed	Storm Surge	Effects
1	74-95 MPH	4-5 feet above normal	Low-lying coastal roads inundated, minor pier damage, some small craft in exposed anchorage torn from moorings.
2	96-110 MPH	6-8 feet above normal	Coast roads and low-lying escape routes inland cut by rising water 2 to 4 hours before arrival of hurricane center. Considerable damage to piers. Marinas flooded. Small craft in unprotected anchorages torn from moorings. Evacuation of some shoreline residences and low-lying areas required.
3	111-130 MPH	9-12 feet above normal	Low-lying escape routes are cut by rising water 3-5 hours before arrival of the hurricane center. Flooding near the coast destroys smaller structures with larger structures damaged by battering of



			floating debris. Terrain continuously lower than 5 ft above mean sea level may be flooded inland 8 miles (13 km) or more. Evacuation of low-lying residences within several blocks of the shoreline may be required.
4	131-155 MPH	13-18 feet above normal	Low-lying escape routes may be cut by rising water 3-5 hours before arrival of the hurricane center. Major damage to lower floors of structures near the shore. Terrain lower than 10 ft above sea level may be flooded requiring massive evacuation of residential areas as far inland as 6 miles (10 km).
5	> 155 MPH	>18 feet above normal	Low-lying escape routes are cut by rising water 3-5 hours before arrival of the hurricane center. Major damage to lower floors of all structures located less than 15 ft above sea level and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5-10 miles (8-16 km) of the shoreline may be required.

Source: NOAA – www.srh.noaa.gov/tropical/s-s_scale.php

Task Force Comments: Coastal and riverine characteristics predominate in the county, Port St. Joe and Wewahitchka.

The Port St. Joe is subject to flooding from rainfall ponding during periods of high rainfall, and coastal storm surge flooding during hurricane or tropical storm activity. The community is primarily subject to coastal flooding from St. Joe Bay, although the amount of surge is reduced somewhat by St. Joe Peninsula.

A bulkhead protects a portion of the Port St Joe's waterfront. The city is also protected by a storm drainage system, which is adequate to protect the city from annual storm events but does not have sufficient capacity to handle the rainfall from a 100 year storm.

Minor storm surge flooding has occurred during Hurricane Agnes (1972). Hurricane Eloise (1975) created flooding from storm surge 6.5' above normal, causing a washout of St Rd 30 at Lighthouse Point and flooding around Patton Bayou and along the bayfront. Coastal surge from Hurricane Frederick (1979) was 3.5' - 3.8' above mean high tide.

The major sources of flooding in Wewahitchka are two-fold: Riverine backwater and shallow flooding resulting from intense rainfall. The backwater effects are felt from the



Apalachicola River system and Taylor Branch (sometimes known as Johnny Bell Creek locally). A majority of the backwater from Taylor Branch is a result of constrictive culverts under River Rd and St Rd 71. Runoff ponds behind both of these embankments.

The Chipola Cutoff just south of Dead Lake ties the Apalachicola and Chipola Rivers together. During times of high flows on the Apalachicola, a substantial portion of the flow is diverted to the Chipola River causing high stages along the eastern boundary of Wewahitchka. Significant flooding occurred in 1966, 1977, 1994, and 1998. The highest flooding of record occurred in September of 1929.

Table # 4.4 Wewahitchka High-Water Mark Elevations

Event	Location
1929 Elevation (NGVD)	
30.7 feet*	Point 33 feet west of East Fourth Street and 42 feet south of Lake Avenue
1977 Elevation (NGVD)	
25.6 feet*	State Road 22-A, on east side of Weir Bridge and north side of Road
26.9 feet*	50 feet west of north end of Jehu Road at west arm of Dead Lake
1998 El Niño (gauge reading)	
28.50 feet *	Gaskin Park Apalachicola River Gauge WAHF1 (44 mile marker)

* Source – Florida Engineering Associates

General flooding in the county results from periods of intense rainfall causing ponding and sheet-runoff into low, poorly drained areas. The Intracoastal Waterway – Gulf County Canal system does little to alleviate the county's drainage problem. The floodplains of the Apalachicola and Chipola Rivers and the Dead Lakes are subject to flooding during high river stages. Coastal areas are subject to flooding and wave action from hurricanes and tropical storms.

The terrain of the county is very low in elevation, sloping gently from the large, poorly-drained, swampy areas with elevations below 10' National Geodetic Vertical Datum (NGVD) that extend eastward from the Apalachicola River to higher areas in the northwest quadrant of the county that reach elevations of 60' NGVD. Elevations of 20' NGVD or more also exist along a coastal ridge of dunes.



The eastern portion of the county lies within the floodplain of the Apalachicola River and has been subject to river floods in 1929, 1960, 1966, 1977, 1994 and 1998. The 1929 flood was considered a 100 year flood and overtopped St Rd 71 about seven miles south of Wewahitchka. The floods in 1960 and 1966 were considered 10 year and 20 year interval events respectively. The floods in 1994 and 1998 have been considered 35 to 50 year floods.

The Apalachicola River has a watershed that extends well into northern portions of Georgia and Alabama. Heavy rains well outside of the region can result in flooding in the county. Rain throughout the Southeast United States from the El Niño weather pattern resulted in another disaster declaration for the county in 1998. The floodwaters reached high enough to isolate or damage 607 houses (268 single-family dwellings and 339 mobile or manufactured homes) in the county. In addition to overt damage, flooding can result in hidden damage such as septic tank failure, fuel tank failure, and contamination of water wells. There were also economic disruptions. The following pages summarize damage from the 1998 El Niño flood and provide an example of how extensive damage can be even from a non-tropical storm event.

Table # 4.5 March 1998 El Niño Flood – Structures Damaged

Damage Level	Commercial	Residential	Manufactured Home
Minor	1	145	223
Major	5	103	97
Destroyed	0	20	19
Total	6	358	339

Table # 4.6 March 1998 El Niño Flood – Areas Affected

Stonemill Creek	Midway Park Area
Idlewood Drive Area	Our Town Road Area
Brian Setterich Road Area	Gaskin Side Camp Area
Lake Height Subdivision	West Arm Creek Area
Willis Landing	White City Area
Jehu Road Area	Lake Grove Road Area
Red Bull Island Area	East River Road Area
Roberts Cemetery Area	Bryant's Landing Area
Douglas Landing Area	Howard Creek Area



Table # 4.7**March 1998 El Niño Flood – Areas Losing Electrical Service**

Lister's Landing	Howard's Creek Area
Douglas Landing	West Arm Creek
Willis Landing	Red Bull Island

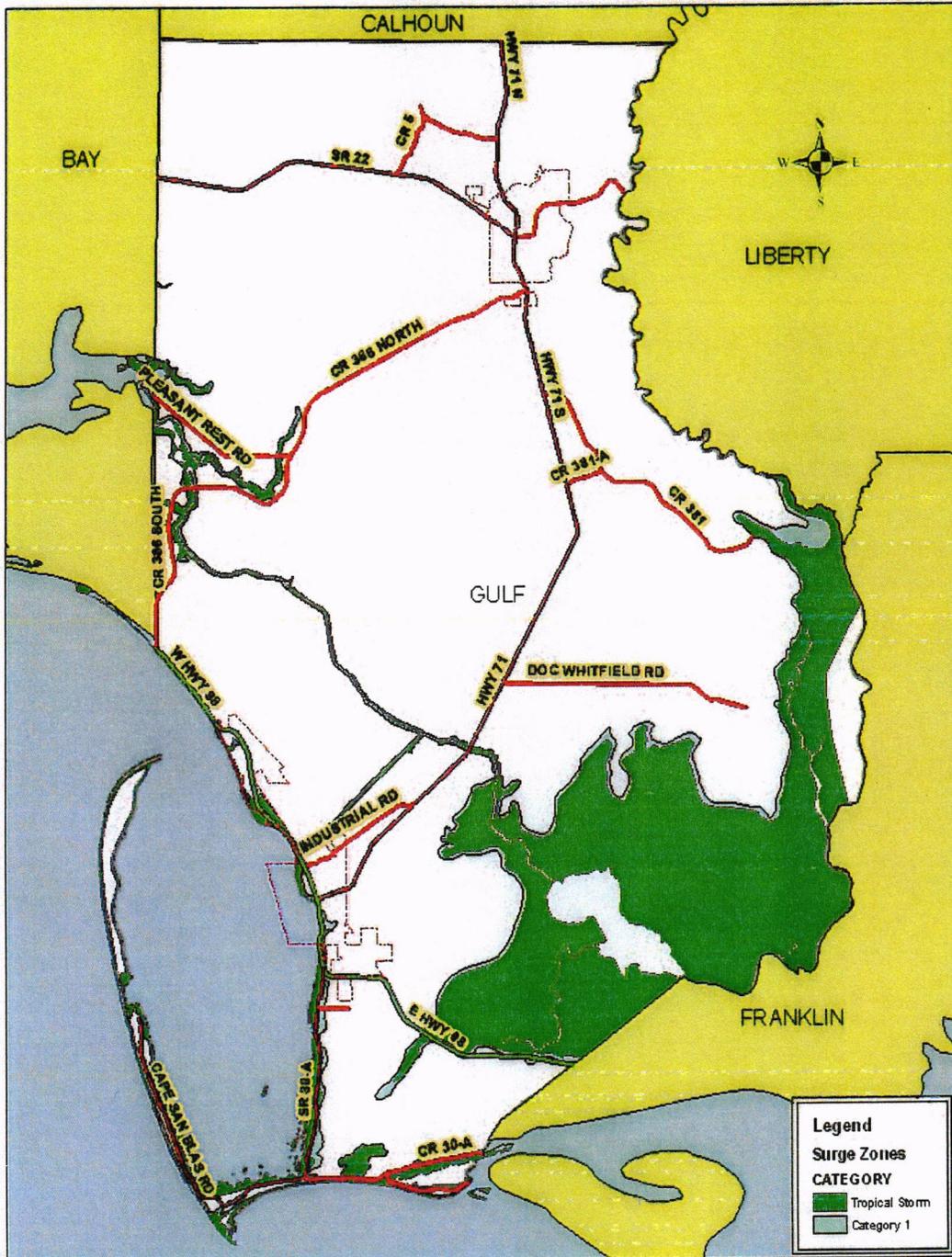
It is clear from the preceding information that the county is extremely prone to flooding. Approximately 28% of the residents and 34% of the residential dwellings in the county are located in the 100-year flood plain. In 2009 figures, over \$137 million in property is located in the flood plain.

Flood analysis is separated into the two main sources: coastal flooding caused by hurricanes and riverine flooding. This scale is discussed further in the High Winds portion of this section. The following maps indicate the peak storm surge expected at a site and the corresponding flood zones of category 1 to 5 hurricanes. Similarly the map in Figure 4.10 indicates the 10-year flood zones by rainfall, ponding, or riverine.



Figure # 4.5

Flood Zone for a Category 1 Hurricane



Disclaimer: Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
Path: Projects\B4\UMS\GulfCo CAT 1



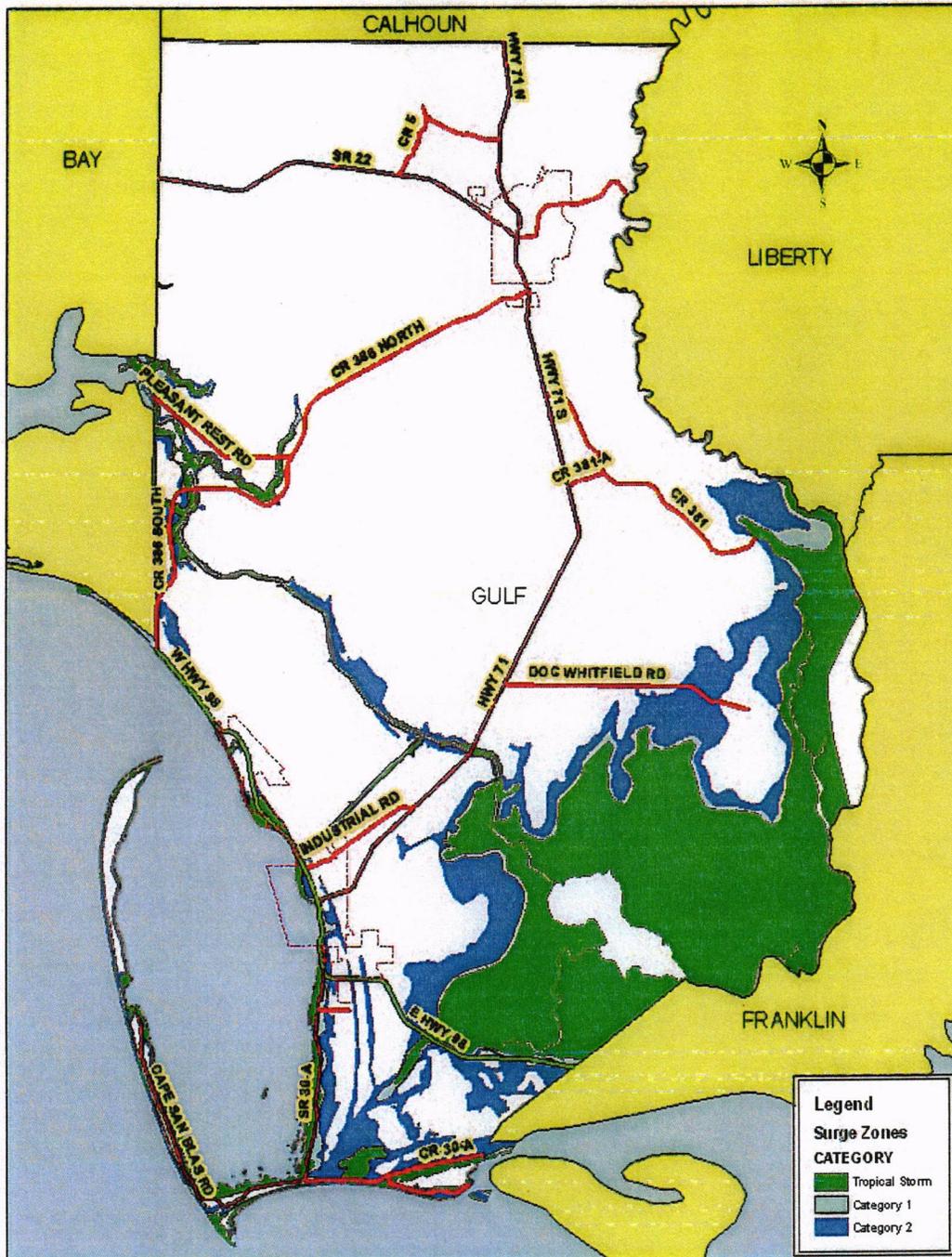
Category 1 Storm Surge
Gulf County, Florida

1 inch = 4.07 miles



Figure # 4.6

Flood Zone for a Category 2 Hurricane



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Path: Projects/EM/UMS/GulfCo CAT2



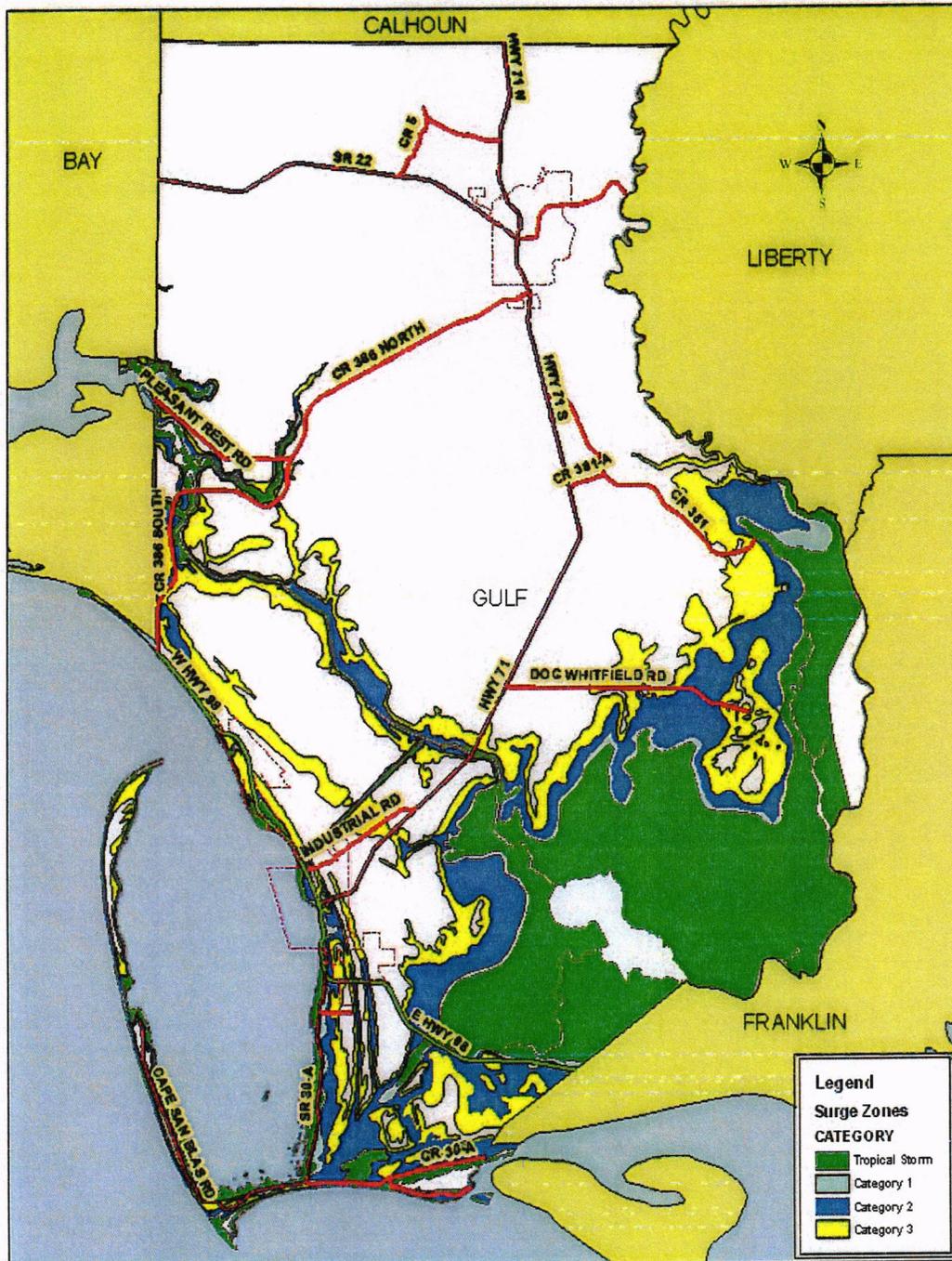
Category 2 Storm Surge
Gulf County, Florida

1 inch = 4.07 miles



Figure # 4.7

Flood Zone for a Category 3 Hurricane



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Path: Projects/Evl/LMIS/GulfCo CAT3



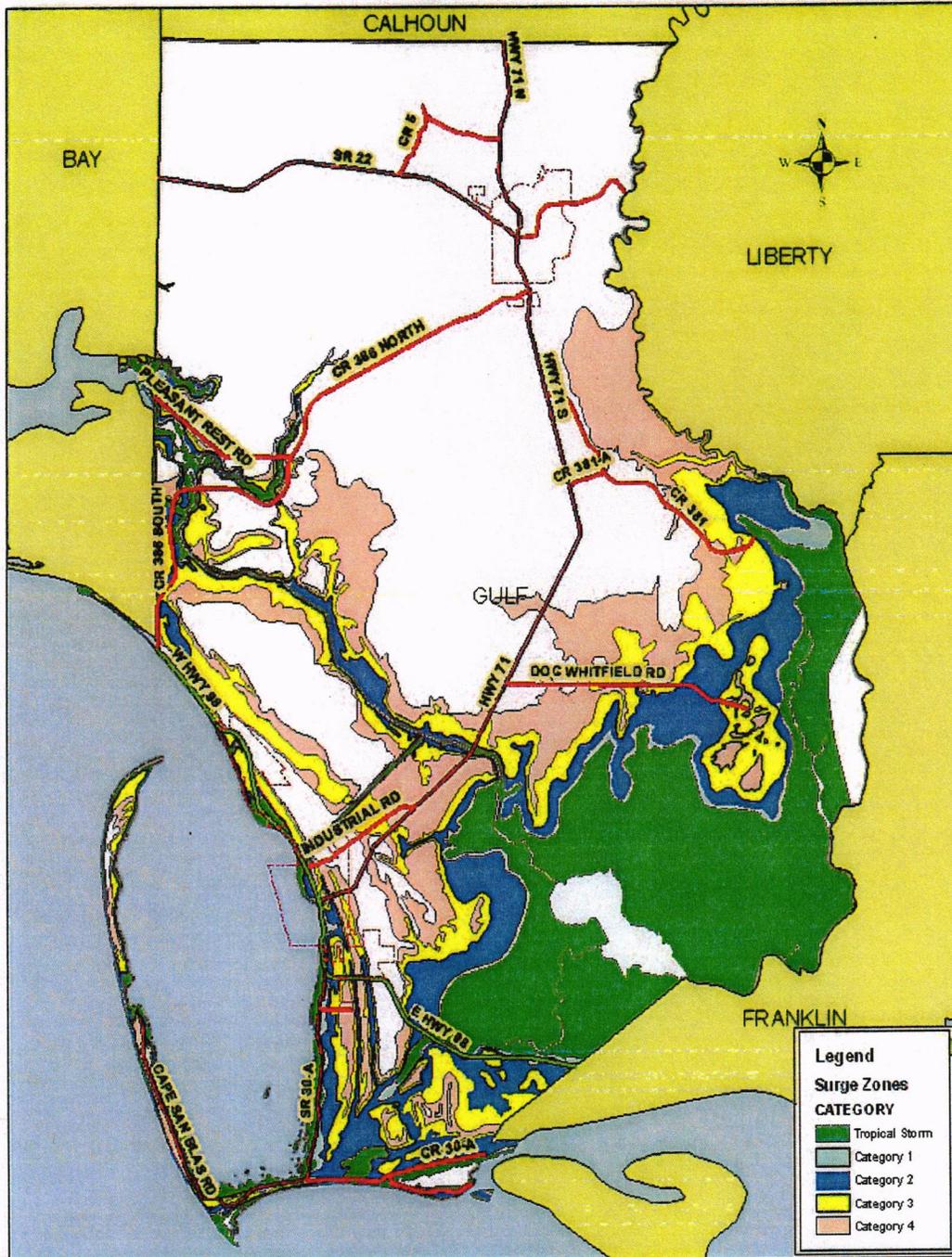
Category 3 Storm Surge
Gulf County, Florida

1 inch = 4.07 miles



Figure # 4.8

Flood Zone for a Category 4 Hurricane



Disclaimer: Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided. Path: Projects\BM\GIS\GulfCo CAT 4



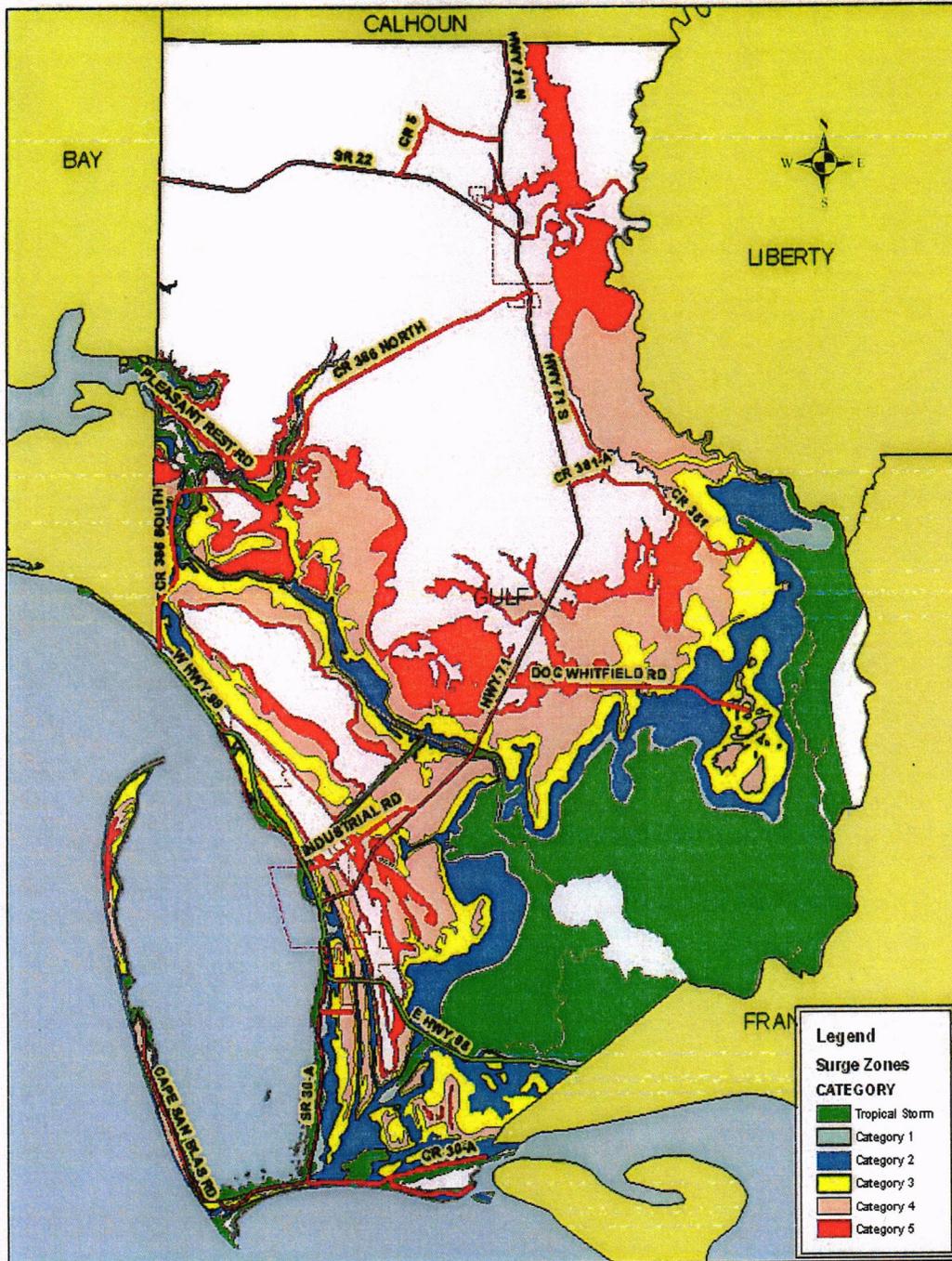
Category 4 Storm Surge
Gulf County, Florida

1 inch = 4.07 miles



Figure # 4.9

Flood Zone for a Category 5 Hurricane



Disclaimer- Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided. Path: Projects/EM/LMIS/GulfCo CAT5



Category 5 Storm Surge
Gulf County, Florida

1 inch = 4.07 miles



Potential Dollar Losses: The following tables show the potential dollar losses for the county resulting from hurricane and riverine flooding. There is an additional event based estimate for hurricanes which lists dollar losses produced from historic loss data models not using the maximum potential damage caused by the hazard. Actual annual economic loss estimates from flooding are \$11,842,080.

Table # 4.8

Potential Losses from Hurricane Flooding by Jurisdiction

Intensity	Population	Structures	Potential Dollar Value	Event Based Estimate
Gulf County (unincorporated)				
Category 1	1,102	1,112	\$94,529,408	\$17,911,378
Category 2	1,630	1,620	\$125,487,432	\$46,611,536
Category 3	1,879	2,094	\$146,516,064	\$101,408,776
Category 4	2,522	2,618	\$211,091,408	\$198,723,632
Category 5	2,405	2,754	\$227,797,968	\$255,289,264
Port St. Joe				
Category 1	0	546	\$51,491,628	(No Data Available)
Category 2	7,786	1,559	\$105,690,181	(No Data Available)
Category 3	8,312	1,211	\$69,089,416	(No Data Available)
Category 4	4,618	412	\$23,782,976	(No Data Available)
Category 5	4,618	998	\$50,915,716	(No Data Available)
Wewahitchka				
(No Data Available)				

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com



Table # 4.9 Potential Losses from Hurricane Flooding by Building Type

Building Type	Category 1	Category 2	Category 3	Category 4	Category 5
Gulf County (unincorporated)					
Single Family	\$64,028,920 (819)	\$77,212,072 (1,120)	\$90,070,232 (1,410)	\$90,455,416 (1,552)	\$100,577,264 (1,663)
Mobile Homes	\$2,199,896 (123)	\$5,169,347 (270)	\$8,291,463 (397)	\$9,943,602 (493)	\$10,668,294 (498)
Multi-family	\$0 (0)	\$0 (0)	\$0 (0)	\$2,534,353 (60)	\$2,534,353 (60)
Hotels	\$258,470 (3)	\$72,317 (2)	\$106,035 (4)	\$33,717 (2)	\$33,717 (2)
Commercial	\$2,929,902 (68)	\$1,637,266 (39)	\$1,951,620 (53)	\$20,170,073 (70)	\$1,617,965 (69)
Industrial	\$1,370,225 (7)	\$381,446 (4)	\$207,880 (4)	\$748,981 (16)	\$3,530,881 (16)
Government	\$1,636,939 (4)	\$5,410,197 (9)	\$4,111,810 (15)	\$2,783,798 (34)	\$3,087,327 (35)
Port St. Joe					
Single Family	\$27,615,852 (435)	\$62,858,140 (1,256)	\$45,000,036 (984)	\$15,817,456 (348)	\$17,730,836 (392)
Mobile Homes	\$193,370 (18)	\$672,206 (51)	\$750,497 (43)	\$275,141 (11)	\$304,567 (14)
Multi-family	\$0 (0)	\$0 (0)	\$0 (0)	\$0 (0)	\$0 (0)
Hotels	\$96,705 (1)	\$346,435 (3)	\$249,729 (2)	\$249,729 (2)	\$249,729 (2)
Commercial	\$4,402,734 (45)	\$9,779,121 (137)	\$6,755,297 (100)	\$2,306,195 (25)	\$2,583,548 (28)
Industrial	\$8,639,647 (4)	\$10,407,539 (35)	\$1,767,892 (31)	\$214,882 (5)	\$214,882 (5)
Government	\$2,842,186 (7)	\$8,065,586 (16)	\$5,187,999 (8)	\$706,705 (4)	\$706,705 (4)
Wewahitchka					
(No Data Available)					

Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.

Source: The Arbitrator of Storms (TAOS) – lmsmaps.kinanco.com



Table # 4.10

Potential Losses from Riverine Flooding by Jurisdiction

Frequency	Population	Structures	Potential Dollar Value
Gulf County (unincorporated)			
10-Year	1,102	453	\$37,274,112
25-Year	1,102	1,028	\$85,822,992
50-Year	605	1,512	\$122,344,360
100-Year	1,630	1,623	\$124,965,504
Port St. Joe			
10-Year	0	33	\$2,753,811
25-Year	0	546	\$51,491,628
50-Year	3,694	1,321	\$96,858,896
100-Year	8,312	1,557	\$104,334,016
Wewahitchka			
(No Data Available)			

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com



Table # 4.11 Potential Losses from Riverine Flooding by Building Type

Building Type	10-Year	25-Year	50-Year	100-Year
Gulf County (unincorporated)				
Single Family	\$27,963,180 (349)	\$57,340,516 (749)	\$76,290,024 (1,067)	\$75,078,664 (1,111)
Mobile Homes	\$910,969 (46)	\$2,071,860 (116)	\$4,009,358 (219)	\$5,529,615 (280)
Multi-Family	\$0 (0)	\$0 (0)	\$0 (0)	\$0 (0)
Hotels	\$258,470 (3)	\$258,470 (3)	\$72,317 (2)	\$72,317 (2)
Commercial	\$1,266,138 (23)	\$2,577,250 (65)	\$3,087,960 (71)	\$1,977,031 (56)
Industrial	\$1,326,752 (5)	\$1,370,225 (7)	\$1,472,638 (7)	\$155,268 (3)
Government	\$1,760,586 (3)	\$2,823,997 (5)	\$5,886,315 (9)	\$5,762,550 (11)
Port St. Joe				
Single Family	\$2,022,038 (23)	\$27,615,852 (435)	\$56,702,980 (1,051)	\$62,042,000 (1,258)
Mobile Homes	\$16,400 (1)	\$193,370 (18)	\$639,301 (47)	\$847,395 (56)
Multi-Family	\$0 (0)	\$0 (0)	\$0 (0)	\$0 (0)
Hotels	\$0 (0)	\$96,705 (1)	\$96,705 (1)	\$346,435 (3)
Commercial	\$27,658 (1)	\$4,666,098 (52)	\$8,610,535 (123)	\$9,751,462 (136)
Industrial	\$0 (0)	\$8,639,647 (4)	\$10,192,657 (30)	\$10,407,539 (35)
Government	\$369,164 (2)	\$5,508,409 (10)	\$7,601,468 (15)	\$7,696,422 (14)
Wewahitchka				
(No Data Available)				

Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.
 Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com



Hail**Hazard Score: 12**

Definition: Hail is precipitation in the form of lumps of ice produced by convective clouds. Hail typically accompanies thunderstorms. Because hail needs convective clouds and strong updrafts to increase in size, hail storms are more frequent in warmer months (spring and early summer) when these conditions are present.

Task Force Comments: Hail accompanies only a few thunderstorms that affect the county. Damage has previously occurred to cars in parking lots. The following table shows the recent hail damage locations.

Table # 4.12**Recent Hail Damage Locations**

Location	Date	Size
Gulf County	7/23/1976	1 Inch
Gulf County	3/6/1983	1 Inch
Gulf County	11/2/1992	0.75 Inch
Gulf County	3/12/1993	Unknown
Wewahitchka	7/18/1995	Unknown
Port St. Joe	2/22/1998	0.75 Inch
Port St. Joe	3/7/1998	1.75 Inch
Overstreet	7/20/2000	0.75 Inch
Port St. Joe	5/5/2005	1.75 Inch
Port St. Joe	5/9/2006	0.88 Inch
Port St. Joe	7/29/2006	0.75 Inch

Source: NOAA – www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms

Potential Dollar Losses: There was insufficient information to generate an estimate of potential dollar losses resulting from hail. Potential losses will be estimated as more information and technology becomes available. This capability will be reassessed each planning cycle.

High Wind**Hazard Score: 36**

Definition: A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is spawned by a thunderstorm (or sometimes as a result of a hurricane) and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. The damage from a tornado is a result of the high wind velocity and wind-blown debris. Tornado season is generally March through August, although tornadoes can



occur at any time of year. The following table lists the damages associated with tornadoes of different categories according to the Fujita-Pearson tornado scale.

Table # 4.13 Wind Effects using the Fujita-Pearson Tornado Scale

Category	Wind Speed	Effects
F-0	40-72 MPH	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages sign boards.
F-1	73-112 MPH	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
F-2	113-157 MPH	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
F-3	158-206 MPH	Roof and some walls torn off well constructed houses; trains overturned; most trees uprooted
F-4	207-260 MPH	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.
F-5	> 261 MPH	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-enforced concrete structures badly damaged.

Source: Tornado Project – www.tornadoproject.com/fscale/fscale.htm

A hurricane is a tropical storm with winds that have reached a constant speed of 74 miles per hour or more. Hurricane winds blow in a large spiral around a relative calm center known as the "eye." The "eye" is generally 20 to 30 miles wide, and the storm may extend outward 400 miles. As a hurricane approaches, the skies will begin to darken and winds will grow in strength. As a hurricane nears land, it can bring torrential rains, high winds, and storm surges. August and September are the peak months during the hurricane season that lasts from June 1 through November 30. The following table lists the damages associated with hurricanes of different categories according to the Saffir / Simpson scale.



Table # 4.14

Wind Effects using the Saffir / Simpson Hurricane Scale

Category	Wind Speed	Effects
1	74-95 MPH	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees.
2	96-110 MPH	Some roofing material, door, and window damage to buildings. Considerable damage to vegetation, mobile homes, and piers.
3	111-130 MPH	Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures. Mobile homes are destroyed.
4	131- 55 MPH	More extensive curtainwall failures with some complete roof structure failure on small residences.
5	> 155 MPH	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away.

Source: NOAA – www.nhc.noaa.gov/aboutshs.shtml

Task Force Comments: Historically, the county has not been impacted by the intense tornadoes for which the Midwestern States are known. The intensity of tornadoes is measured by the Fujita scale, which evaluates the damage and destruction caused by a storm passing over man-made structures. According to this scale, an F-0 – F-1 tornado is weak, F-2 – F-3 is rated as strong, and F-4 – F-5 is considered to be extremely violent. Nearly all of these tornadoes that have struck the county were relatively weak F-0 and F-1 events. It should be noted that Table 4.15 reflects only those tornadoes that have been reported; it is likely that others have occurred in rural areas or touched down only briefly and were not reported. One of the primary concerns associated with tornadoes is the lack of warning time prior to a tornado touching down. Increasingly, the National Weather Service has been able to provide the county's Emergency Management Department with advance warning of storm fronts that have the potential to spawn tornado activity.



Figure # 4.11

Tornado Risk Assessment

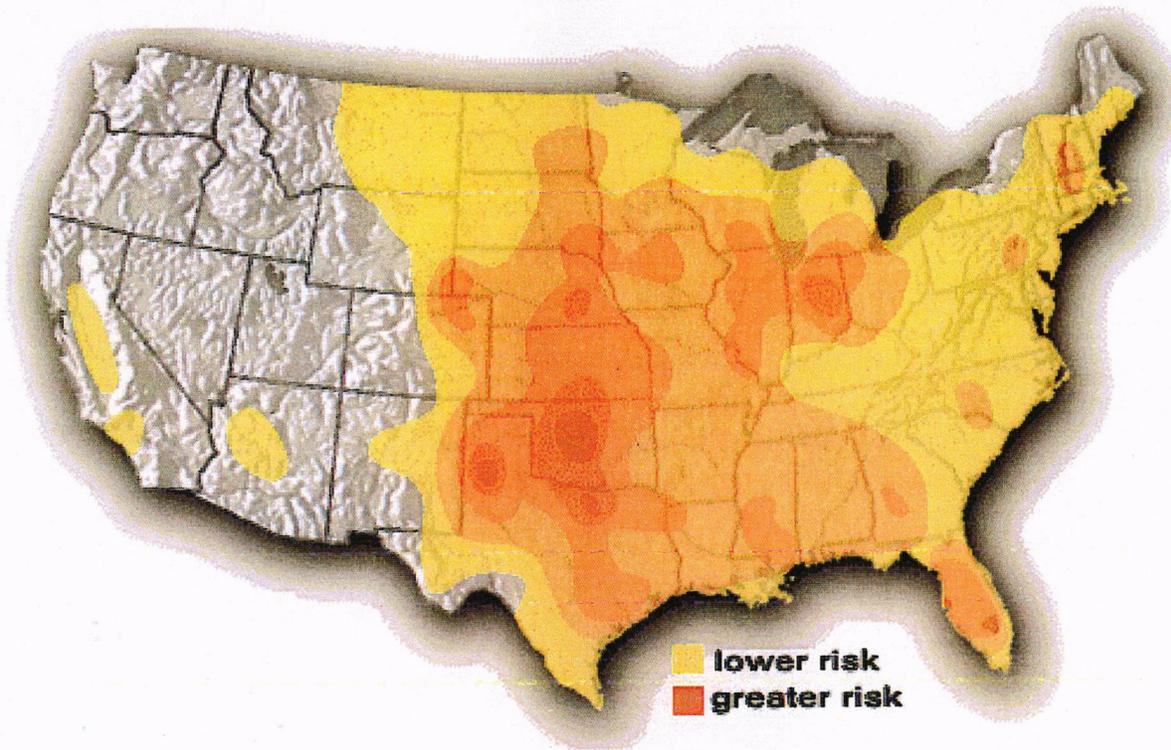


Table # 4.15

Gulf County Tornado History

Location	Date	Magnitude	Deaths	Injuries	Property Damage
Gulf County	7/10/1970	Unknown	0	0	0K
Gulf County	3/2/1972	F-1	0	0	3K
Gulf County	10/27/1972	F-2	0	1	250K
Gulf County	3/9/1976	F-0	0	0	25K
Gulf County	12/24/1978	F-1	0	0	250K
Gulf County	1/23/1980	F-0	0	0	3K
Gulf County	7/12/1989	F-1	0	0	25K
Gulf County	2/17/1992	F-1	0	0	25K
Gulf County	2/17/1992	F-0	0	0	3K
Port St. Joe	1/24/1993	F-1	0	2	50K
Gulf County	3/12/1993	Unknown	25	0	1.6B



Wewahitchka	2/17/1995	F-0	0	0	0
Wewahitchka	3/07/1996	F-0	0	0	2K
Highland View	11/13/1997	F-0	0	0	5K
Port St. Joe	3/7/1998	F-0	0	0	35K
Beacon Hill	3/8/1998	F-0	0	0	25K
Wewahitchka	1/2/1999	F-0	0	0	30K
Port St. Joe	3/16/2000	F-0	0	0	150K
Port St. Joe	2/16/2003	F-0	0	0	250K
Indian Pass	4/25/2003	F-0	0	0	250K
Beacon Hill	9/15/2004	F-0	0	0	25K
Port St. Joe	3/7/2005	F-0	0	0	150K
Wewahitchka	3/7/2005	F-0	0	0	75K
Total			25	3	1.602B

Source: NOAA – www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms

Tornadoes have occurred throughout the county and have developed from severe storm systems over land as well as from waterspouts coming ashore. The entire population of the county is vulnerable to the effects of tornadoes. Populations especially vulnerable are those residing in older manufactured homes and substandard site-built homes.

Hurricanes and tropical storms can be a source of catastrophic coastal flooding and wind damage. The damage from coastal flooding is primarily due to erosion and the battering effect of waves upon buildings, coastal structures and near-shore septic tanks. High winds from hurricanes damage buildings, infrastructure, and vegetation directly as well as through impact with airborne debris. According to a National Ocean and Atmospheric Administration (NOAA) technical memorandum, the county has a hurricane return period of 11 years. The return period is defined as the average number of years between landfalls. Table 4.16 and Figure 4.12 identify numerous tropical storms and hurricanes that have made landfall within 60 miles of Port St. Joe in the last 100 years. Several recent storms causing damage in the county (Hurricanes Earl, Georges and Opal) are not listed as they actually made landfall in excess of 60 miles from Port St. Joe. The frequency with which the county has been impacted by severe tropical weather dramatically underscores the importance of hazard mitigation along this vulnerable coast.



Table # 4.16

Gulf County Hurricane History

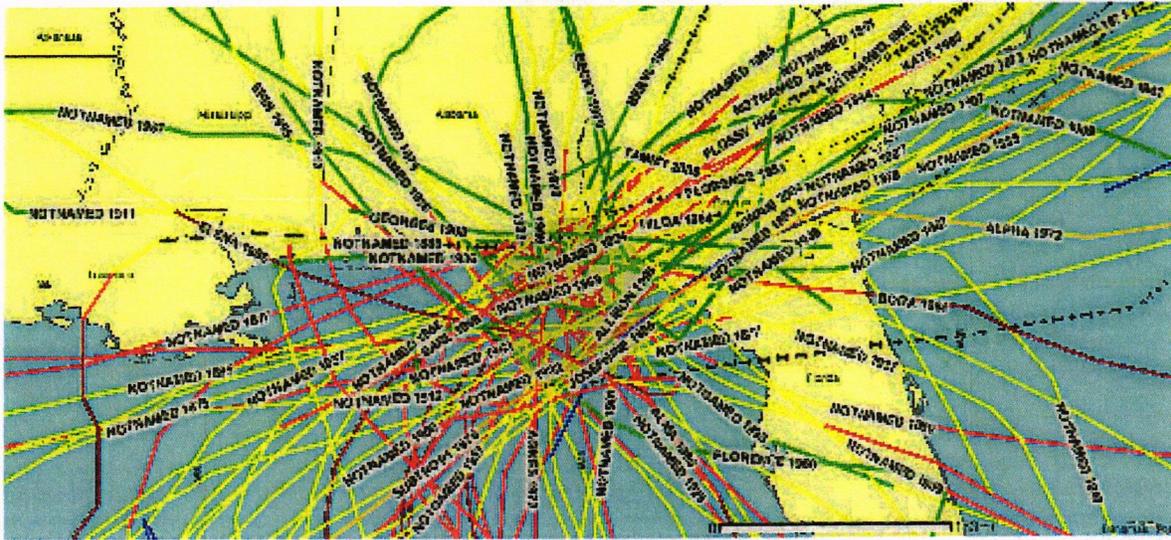
Date	Event	Category	Maximum Wind Speed
6/19/1972	Hurricane Agnes	1	95 MPH
5/23/1976	Not Named	TS	45 MPH
11/22/1985	Hurricane Kate	3	105 MPH
7/3/1994	Tropical Storm Alberto	TS	65 MPH
8/16/1994	Tropical Storm Beryl	TS	60 MPH
6/5/1995	Hurricane Allison	1	75 MPH
10/4/1995	Hurricane Opal	4	150 MPH
10/7/1996	Tropical Storm Josephine	TS	60 MPH
9/2/1998	Hurricane Earl	2	100 MPH
9/28/1998	Hurricane Georges	5	155 MPH
9/21/2000	Tropical Storm Helene	TS	70 MPH
8/4/2001	Tropical Storm Barry	TS	70 MPH
8/4/2001	Tropical Storm Barry	TS	70 MPH
9/25/2002	Tropical Storm Isidore	3	125 MPH
8/12/2004	Tropical Storm Bonnie	TS	65 MPH
9/5/2004	Hurricane Frances	4	145 MPH
9/15/2004	Hurricane Ivan	5	165 MPH
6/10/2005	Tropical Storm Arlene	TS	70 MPH
7/9/2005	Hurricane Dennis	4	150 MPH
8/28/2005	Hurricane Katrina	5	155 MPH
6/12/2006	Tropical Storm Alberto	TS	70 MPH

Source: NOAA – www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms



Figure # 4.12

Tropical Event Tracks within 65 miles of Gulf County



Source: NOAA - maps.csc.noaa.gov/hurricanes/index.jsp

The high winds accompanying hurricanes can result in significant damage to homes, businesses and critical infrastructure. It is important to understand however, that wind speeds generated by hurricanes can vary greatly throughout the county. For example, the coastal portion of the county may experience category 1 force winds while an interior, protected part of the county may only experience weak tropical storm force winds. Planners and emergency management personnel can use this information to make informed decisions regarding the location of future critical facilities such as emergency shelters. This information can also be used to identify critical facilities that may need to be retrofitted to improve their ability to withstand high winds. A map at the end of this section displays differences in wind speeds for category 1 through 5 hurricanes striking the county.

Damages from coastal flooding are primarily due to erosion and the battering effect of waves upon buildings, coastal structures, and near-shore septic tanks. Coastal portions of the county have been subjected to significant coastal flooding and storm surge from several hurricanes in recent years including Hurricane Eloise in 1975, Hurricanes Elena and Kate in 1985 and Hurricane Opal in 1995. Hurricane Kate destroyed or caused major damage to 31 structures apart from roads. In Highland View, approximately 100 feet of US Hwy 98 was damaged and 90' of a sloping concrete revetment were destroyed. Hurricane Kate's storm surge caused extensive erosion on Cape San Blas. Profile data obtained by DEP's Bureau of Coastal Data Acquisition indicated that a dune in this area with an elevation of 13.5' NGVD was reduced to an elevation of 3' after Kate. Approximately 1,500' of the southern tip of Cape San Blas disappeared after Hurricane Elena passed 30 miles offshore in September 1985. The exposed southwest shore of Cape San Blas sustained heavy beach and dune erosion. Tables 4.17 and 4.18 describe damage in the county from Hurricanes Kate and Opal.



Table # 4.17

Hurricane Kate Damage Summary – 1985

290	feet sloping concrete slab revetment destroyed or damaged
65	feet steel bulkhead damaged
500	feet paved road destroyed
4	single family homes destroyed
12	single family homes sustained major structural damage
3	mobile homes destroyed
1	mobile home sustained major structural damage
2	Commercial building destroyed
6	Industrial buildings sustained major structural damage
1	public building sustained major structural damage
1	Fishing pier destroyed
1	Swimming pool destroyed
31	major structures (excluding roads) destroyed or sustained major structural damage

Source: Department of Environmental Protection

Table # 4.18

Hurricane Opal Damage Summary – 1995

26	major structures destroyed or sustained major damage
475	feet of revetment destroyed
2,000	feet of Cape San Blas Road destroyed at Stump Hole
700	feet of paved road on Air Force property

Source: Department of Environmental Protection

Damages incurred by local governments from major disasters such as hurricanes are recorded in Damage Survey Reports (DSR) and submitted to the Federal Emergency Management Agency (FEMA). Local governments are reimbursed by FEMA for 75% of the eligible disaster recovery expenses detailed in the DSRs. Eligible expenses include debris removal, overtime for government and repairs to infrastructure such as government buildings, roads, drainage systems and recreation equipment, are reimbursed. Currently, the State of Florida picks up 12.5% of the total expenses and the local government is responsible for the remaining 12.5%. In some cases, the requirement for the county to pay the local portion of the eligible disaster expenses can be waived by the Governor's Office if the county is financially unable to pay its share. An important point for local officials to recognize is that local governments will not always be able to have their local cost-share waived following a disaster. This should



serve as a further incentive to support local mitigation activities. Table 4.19 highlights the county's expenses from some major disasters.

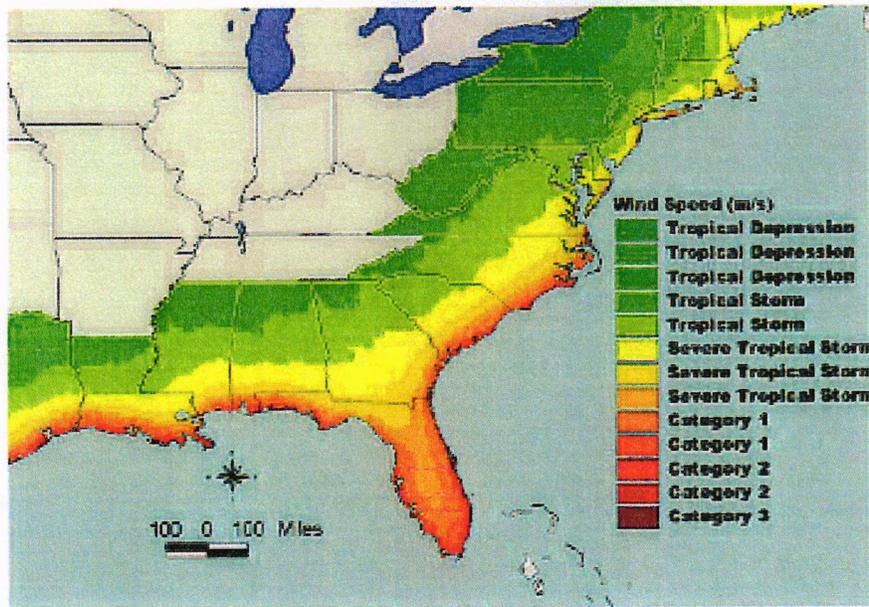
Table # 4.19 **Damage Survey Report Data for Gulf County**

Disaster	Total DSR Expenses	Eligible DSR Expenses	Federal Portion	Local / State Portion
Hurricane Kate		\$205,682	\$154,263	\$51,419
Tropical Storm Alberto		\$947,922	\$710,942	\$236,981*
Hurricane Opal	\$1,182,143	\$502,309	\$376,734	\$125,575*

* Local match paid for by the State of Florida

Given the size and intensity of Atlantic tropical storms and hurricanes, the entire population of the county and all seasonal visitors are vulnerable to this hazard from June through November. Residents in coastal and low-lying areas are especially vulnerable to the high winds, storm surge, and flooding accompanying hurricanes. The following map illustrates the wind speeds expected from category 1 to 5 hurricanes.

Figure # 4.13 **Wind Speeds for Various Tropical Events**



Potential Dollar Losses: Tables 4.20 and 4.21 depicts cumulative wind, wave, and flood damages to both structures and contents from storms of varying intensity. Using tax assessor data, the TAOS model allocated damage to structures and property in a variety of categories including single and multi-family, mobile homes, commercial and properties, and government buildings, among others. There are several items of interest to note from this table. First, because of the proximity of much of the development in the county to the coast, even a relatively weak hurricane has the potential to cause a tremendous amount of structural and property damage in a worst-case scenario. For example, the model predicts that a worst-case category 1 storm could potentially cause in excess of \$342 million in damage. Second, as the intensity of storm increases, the dollar amount of damage rises dramatically. A category 4 or 5 storm, though extremely rare, could result in between \$1.3 and \$1.4 billion in damage. It is important to note that future developments will add their values to these losses.

Table # 4.20 Potential Losses from High Winds by Jurisdictions – Tornado

Risk Level	Population	Structures	Potential Dollar Value
Tornado			
Gulf County (unincorporated)			
Very low risk	7,282	4,493	\$334,235,392
Low risk	7,394	2,088	\$166,587,456
Port St. Joe			
Very low risk	8,312	1,790	\$123,128,704
Wewahitchka			
Low risk	3,665	691	\$31,985,284

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Table # 4.21 Potential Losses from High Winds by Jurisdictions – Hurricane

Damage Level	Population	Structures	Potential Dollar Value
Category 1 Hurricane			
Gulf County (unincorporated)			
Light damage (<10%)	14,676	1,790	\$123,128,704
Port St. Joe			
Light damage (<10%)	8,312	691	\$31,985,284
Wewahitchka			



Light damage (<10%)	3,665	6,581	\$500,822,784
Event Based Loss Estimate: \$31,392,908			
Category 2 Hurricane			
Gulf County (unincorporated)			
Light damage (<10%)	8,891	3,560	\$284,509,888
Moderate damage (10-30%)	5,785	3,021	\$216,312,912
Port St. Joe			
Moderate damage (10-30%)	8,312	1,790	\$123,128,704
Wewahitchka			
Light damage (<10%)	3,665	691	\$31,985,284
Event Based Loss Estimate: \$86,465,424			
Category 3 Hurricane			
Gulf County (unincorporated)			
Light damage (<10%)	5,417	1,024	\$55,983,012
Moderate damage (10-30%)	9,259	5,139	\$414,100,320
Heavy damage (30-50%)	0	418	\$30,739,312
Port St. Joe			
Moderate damage (10-30%)	8,312	1,777	\$122,190,648
Heavy damage (30-50%)	0	13	\$938,054
Wewahitchka			
Light damage (<10%)	3,665	681	\$31,664,420
Moderate damage (10-30%)	0	10	\$320,862
Event Based Loss Estimate: \$201,876,208			
Category 4 Hurricane			
Gulf County (unincorporated)			
Moderate damage (10-30%)	6,907	1,571	\$121,709,920
Heavy damage (30-50%)	1,973	1,471	\$103,986,632
Severe damage (50-80%)	5,796	3,539	\$275,126,112
Port St. Joe			
Severe damage (50-80%)	8,312	1,790	\$123,128,704
Wewahitchka			



Moderate damage (10-30%)	3,665	691	\$31,985,284
Event Based Loss Estimate: \$402,578,592			
Category 5 Hurricane			
Gulf County (unincorporated)			
Heavy damage (30-50%)	6,907	1,399	\$104,510,296
Severe damage (50-80%)	1,973	1,254	\$85,787,568
Destroyed (>80%)	5,796	3,925	\$310,524,928
Port St. Joe			
Destroyed (>80%)	8,312	1,790	\$123,128,704
Wewahitchka			
Heavy damage (30-50%)	3,665	690	\$31,965,296
Severe damage (50-80%)	0	1	\$19,988
Event Based Loss Estimate: \$589,045,632			

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

The category 4 and 5 portions of the table above provide data showing the number of properties receiving 50% damage or greater from various categories of simulated storms striking the county, Port St. Joe and Wewahitchka (again, assuming worst case scenarios). This number is significant because structures receiving damage greater than 50% of their market value must meet current regulations regarding structure elevation, setbacks, and building codes when they are rebuilt

One of the key points to observe from the previous tables is the tremendous impact to the housing stock from even a relatively weak hurricane. This is especially noticeable in the damage to the large number of mobile homes throughout the county. According to the TAOS model, a category 2 hurricane could result in nearly 477 mobile homes receiving significant damage to market value. A category 3 storm wreaks even more havoc on housing in the county; more than 2,812 homes and 1,127 mobile homes would receive significant damage. It must be reiterated that the TAOS model represents a true worst-case scenario.

Table # 4.22 Potential Losses from High Winds by Structure Type – Tornado

Building Type	Very Low Risk	Low Risk
Gulf County (unincorporated)		
Single Family	\$171,515,424 (2,848)	\$28,900,716 (743)
Mobile Homes	\$17,885,972 (888)	\$12,913,895 (657)



Multi-Family	\$2,534,353 (60)	(No Data Available)
Hotels	\$649,329 (10)	(No Data Available)
Commercial	\$4,896,301 (132)	\$1,700,361 (64)
Industrial	\$1,997,654 (24)	\$265,952 (2)
Government	\$9,182,761 (51)	\$24,088,340 (8)
Port St. Joe		
Single Family	\$74,700,472 (1,450)	(No Data Available)
Mobile Homes	\$943,868 (61)	(No Data Available)
Multi-Family	(No Data Available)	(No Data Available)
Hotels	\$346,435 (3)	(No Data Available)
Commercial	\$11,421,404 (152)	(No Data Available)
Industrial	\$10,407,539 (35)	(No Data Available)
Government	\$8,308,174 (19)	(No Data Available)
Wewahitchka		
Single Family	(No Data Available)	\$16,763,856 (365)
Mobile Homes	(No Data Available)	\$3,511,729 (197)
Multi-Family	(No Data Available)	\$826,023 (26)
Hotels	(No Data Available)	(No Data Available)
Commercial	(No Data Available)	\$2,837,276 (45)
Industrial	(No Data Available)	\$82,964 (2)
Government	(No Data Available)	\$3,894,446 (11)
Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.		

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Table # 4.23

Potential Losses from High Winds by Structure Type – Category 1 Hurricane

Building Type	Light Damage (<10%)
Gulf County (unincorporated)	
Single Family	\$200,416,096 (3,591)
Mobile Homes	\$30,799,868 (1,545)
Multi-Family	\$2,534,353 (60)



Hotels	\$649,329 (10)
Commercial	\$6,852,900 (197)
Industrial	\$2,263,607 (26)
Government	\$33,271,105 (59)
Port St. Joe	
Single Family	\$74,700,472 (1,450)
Mobile Homes	\$943,868 (61)
Multi-Family	(No Data Available)
Hotels	\$346,435 (3)
Commercial	\$11,421,404 (150)
Industrial	\$10,407,539 (35)
Government	\$8,308,174 (19)
Wewahitchka	
Single Family	\$16,763,856 (365)
Mobile Homes	\$3,511,729 (197)
Multi-Family	\$826,023 (26)
Hotels	(No Data Available)
Commercial	\$2,837,276 (46)
Industrial	\$82,964 (2)
Government	\$3,894,446 (11)
Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.	

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Table # 4.24

Potential Losses from High Winds by Structure Type – Category 2 Hurricane

Building Type	Light Damage (<10%)	Moderate Damage (10-30%)
Gulf County (unincorporated)		
Single Family	\$51,552,088 (1,458)	\$148,864,032 (2,133)
Mobile Homes	\$20,239,870 (1,068)	\$10,559,992 (477)
Multi-Family	\$1,271,764 (9)	\$1,262,588 (51)
Hotels	\$33,717 (2)	\$615,611 (8)



Commercial	\$2,179,195 (81)	\$4,673,700 (116)
Industrial	\$320,582 (4)	\$1,943,025 (22)
Government	\$26,485,317 (39)	\$6,785,783 (20)
Port St. Joe		
Single Family	(No Data Available)	\$74,700,472 (1,450)
Mobile Homes	(No Data Available)	\$943,868 (61)
Multi-Family	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	\$346,435 (3)
Commercial	(No Data Available)	\$11,367,674 (152)
Industrial	(No Data Available)	\$10,407,539 (35)
Government	(No Data Available)	\$8,308,174 (19)
Wewahitchka		
Single Family	\$16,763,856 (365)	(No Data Available)
Mobile Homes	\$3,511,729 (197)	(No Data Available)
Multi-Family	\$826,023 (26)	(No Data Available)
Hotels	(No Data Available)	(No Data Available)
Commercial	\$2,839,276 (45)	(No Data Available)
Industrial	\$82,964 (2)	(No Data Available)
Government	\$3,894,446 (11)	(No Data Available)

Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Table # 4.25

**Potential Losses from High Winds by Structure Type –
Category 3 Hurricane**

Building Type	Light Damage (<10%)	Moderate Damage (10-30%)	Heavy Damage (30-50%)
Gulf County (unincorporated)			



Single Family	\$17,098,154 (437)	\$155,893,600 (2,812)	\$27,424,156 (342)
Mobile Homes	\$8,128,486 (378)	\$21,772,720 (1,127)	\$898,655 (40)
Multi-Family	(No Data Available)	\$2,534,353 (60)	\$1,168,282 (14)
Hotels	(No Data Available)	\$649,329 (10)	(No Data Available)
Commercial	\$1,100,244 (43)	\$5,208,294 (137)	\$544,357 (16)
Industrial	\$11,482 (1)	\$2,252,125 (25)	(No Data Available)
Government	\$156,116 (4)	\$33,079,693 (54)	\$35,294 (1)
Port St. Joe			
Single Family	(No Data Available)	\$74,349,352 (1,444)	\$351,112 (6)
Mobile Homes	(No Data Available)	\$943,868 (61)	(No Data Available)
Multi-Family	(No Data Available)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	\$346,435 (3)	(No Data Available)
Commercial	(No Data Available)	\$11,393,745 (151)	\$27,658 (1)
Industrial	(No Data Available)	\$10,407,539 (35)	(No Data Available)
Government	(No Data Available)	\$7,939,010 (17)	\$369,164 (2)
Wewahitchka			
Single Family	\$16,463,464 (356)	\$300,391 (9)	(No Data Available)
Mobile Homes	\$3,511,729 (197)	(No Data Available)	(No Data Available)
Multi-Family	\$826,023 (26)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	(No Data Available)	(No Data Available)
Commercial	\$2,783,276 (45)	(No Data Available)	(No Data Available)
Industrial	\$82,964 (2)	(No Data Available)	(No Data Available)
Government	\$3,894,446 (11)	(No Data Available)	(No Data Available)
Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.			

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Table # 4.26

Potential Losses from High Winds by Structure Type – Category 4 Hurricane

Building Type	Moderate Damage (10-30%)	Heavy Damage (30-50%)	Severe Damage (50-80%)
Gulf County (unincorporated)			



Single Family	\$22,086,284 (607)	\$20,492,914 (596)	\$157,836,832 (2,388)
Mobile Homes	\$10,280,948 (525)	\$8,644,532 (465)	\$11,874,379 (555)
Multi-Family	(No Data Available)	(No Data Available)	\$2,534,353 (60)
Hotels	(No Data Available)	\$33,717 (8)	\$615,611 (8)
Commercial	\$1,700,361(64)	\$279,623 (10)	\$4,672,113 (123)
Industrial	\$11,482 (1)	\$307,082 (2)	\$1,945,013 (23)
Government	\$24,088,340 (8)	\$971,940 (10)	\$8,210,819 (41)
Port St. Joe			
Single Family	(No Data Available)	(No Data Available)	\$74,700,472 (1,450)
Mobile Homes	(No Data Available)	(No Data Available)	\$943,868 (61)
Multi-Family	(No Data Available)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	(No Data Available)	\$346,435 (3)
Commercial	(No Data Available)	(No Data Available)	\$11,421,404 (152)
Industrial	(No Data Available)	(No Data Available)	\$10,407,539 (35)
Government	(No Data Available)	(No Data Available)	\$8,308,174 (19)
Wewahitchka			
Single Family	\$16,763,856 (365)	(No Data Available)	(No Data Available)
Mobile Homes	\$3,511,729 (197)	(No Data Available)	(No Data Available)
Multi-Family	\$826,023 (26)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	(No Data Available)	(No Data Available)
Commercial	\$2,837,276 (45)	(No Data Available)	(No Data Available)
Industrial	\$82,964 (2)	(No Data Available)	(No Data Available)
Government	\$3,894,446 (11)	(No Data Available)	(No Data Available)
Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.			

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Table # 4.27

**Potential Losses from High Winds by Structure Type –
Category 1 Hurricane**

Building Type	Heavy Damage (30-50%)	Severe Damage (50-80%)	Destroyed (over 80%)
Gulf County (unincorporated)			



Single Family	\$20,240,850 (546)	\$14,318,867 (464)	\$165,856,384 (2,578)
Mobile Homes	\$8,982,011 (457)	\$7,649,221 (431)	\$14,168,638 (657)
Multi-Family	(No Data Available)	(No Data Available)	\$2,534,353 (60)
Hotels	(No Data Available)	\$33,717 (2)	\$615,611 (8)
Commercial	\$1,700,361(64)	\$279,623 (10)	\$4,672,113 (123)
Industrial	\$11,482 (1)	\$307,082 (2)	\$1,945,013 (23)
Government	\$24,088,340 (8)	\$971,940 (10)	\$8,210,819 (41)
Port St. Joe			
Single Family	(No Data Available)	(No Data Available)	\$74,700,472 (1,450)
Mobile Homes	(No Data Available)	(No Data Available)	\$943,868 (61)
Multi-Family	(No Data Available)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	(No Data Available)	\$346,435 (3)
Commercial	(No Data Available)	(No Data Available)	\$11,421,404 (152)
Industrial	(No Data Available)	(No Data Available)	\$10,407,539 (35)
Government	(No Data Available)	(No Data Available)	\$8,308,174 (19)
Wewahitchka			
Single Family	\$16,743,868 (364)	\$19,988 (1)	(No Data Available)
Mobile Homes	\$3,511,729 (197)	(No Data Available)	(No Data Available)
Multi-Family	\$826,023 (26)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	(No Data Available)	(No Data Available)
Commercial	\$2,837,276 (45)	(No Data Available)	(No Data Available)
Industrial	\$82,964 (2)	(No Data Available)	(No Data Available)
Government	\$3,894,446 (11)	(No Data Available)	(No Data Available)
Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.			

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Infestation / Disease

Hazard Score: 35

Definition: Infestation is the state of being invaded or overrun by something. In hazard mitigation, infestation usually refers to parasites, insects, or rodents. Typically, disease is linked to infestation because “pests” that overrun an area carry disease with them, infecting plants, animals, and humans.



Task Force Comments: The primary sources of infestation and disease in the county are Southern Pine Beetle infestation, Red Tide, and mosquito related infections. Annually, the Southern Pine Beetle destroys portions of the pine forests in the county. According to the Florida Division of Forestry, it is unlikely that an area-wide breakout will occur in most of the county. However, Southern Pine Beetles present a moderate risk to the eastern portion of the county. The following map shows the Southern Pine Beetle hazard rating for various parts of the county.

Figure # 4.14

Southern Pine Beetle Hazard Rating – 2006



Source: US Department of Agriculture – www.fs.fed.us/foresthealth/technology/nidrm_spb.shtml

Red tide refers to a bloom of harmful microorganisms that color the water while releasing toxins. Because of the tremendous fish and marine life kills, red tide consistently poses a threat to the county’s seafood industry. The mosquito related infections tracked in the county have included West Nile Virus and Eastern equine encephalitis / meningitis. Cases of both of these viruses have occurred in recent years. One death occurred in 2003 from the West Nile that originated in the county.

Potential Dollar Losses: There was insufficient information to generate an estimate of potential dollar losses resulting from infestation and disease. Potential losses will be estimated as more information and technology becomes available. This capability will be reassessed each planning cycle.



Definition: Debris flows, sometimes referred to as mudslides, mudflows, lahars, or debris avalanches, are common types of fast-moving landslides. These flows generally occur during periods of intense rainfall or rapid snowmelt. These events usually occur when there is a significant elevation change across a bluff or embankment when the soils / rock strata become water saturated. Due to the low elevations in the county and the lack of near vertical embankments of any size, these events are extremely unlikely.

Coastal erosion is the landward displacement of the shoreline caused by the forces of waves and currents. A Critical erosion area is a segment of the shoreline where natural processes or human activity have caused or contributed to erosion and recession of the beach or dune system to such a degree that upland development, recreational interests, wildlife habitat, or important cultural resources are threatened or lost. Critical erosion areas may also include peripheral segments or gaps between identified critical erosion areas which, although they may be stable or slightly erosional now, their inclusion is necessary for continuity of management of the coastal system or for the design integrity of adjacent beach management projects.

Task Force Comments: Significant damages are also caused by coastal erosion that can result in severe changes to coastline contours and dune structure. Areas of problem erosion in the county are the St. Joseph Peninsula and Indian Pass, both of which are areas used for private residences as well as public recreation. Coastal erosion is especially critical in the Stump Hole area of Cape San Blas. If the County were to consider acquiring coastal property, these areas could serve multiple purposes of conservation, beach access, and mitigation (to prevent development in areas prone to erosion and loss). The map on the following page identifies areas of critical erosion. The Florida Department of Environmental Protection's Bureau of Beaches and Coastal Systems has described the county's beach erosion problems as follows:

There are two critically eroded areas (8.3 miles) and three non-critically eroded areas (8.6 miles) in the county.

Most of St. Joseph Peninsula is eroded between R41 and R106. A segment of St. Joseph Peninsula State Park (R41-R69) is non-critically eroded for 5.5 miles and a segment of the peninsula (R69-R106) is critically eroded for 7.2 miles due to threatened development and recreational interests. Two segments within the designated critically eroded area (R85.5-R90.1 and R91.3-R95.5) are included for continuity of management of the coastal system and for the design integrity of a beach management project. A beach restoration project throughout the critically eroded segment is under construction during the spring and summer of 2008.

The west shoreline of Cape San Blas is severely eroded and is considered to have the highest erosion rate along the coast of Florida. The segment between R106 and R111.5 (1.1 mile) is designated critically eroded from Stump Hole to the threatened and damaged U.S. Air Force facilities, because the erosion has destroyed nesting sea turtle



habitat along Cape San Blas. After Hurricane Opal (1995), a rock mound structure was constructed to protect the county road at Stump Hole. Likewise, the U.S. Air Force constructed a rock mound structure in front of their road to the rocket launch site after Hurricane Kate (1985), but both the road and the rock mound-structure were destroyed by Hurricane Opal (1995). The rock mound at Stump Hole was extended and subsequently damaged by Hurricanes Ivan (2004) and Dennis (2005). South of the US Air Force facilities, Cape San Blas (111.5-R114) has sustained severe but noncritical erosion for an additional 0.5 mile.

Indian Peninsula (R150-R162) at the east end of the county is also eroded for 2.6 miles with no threatened interests at this time.

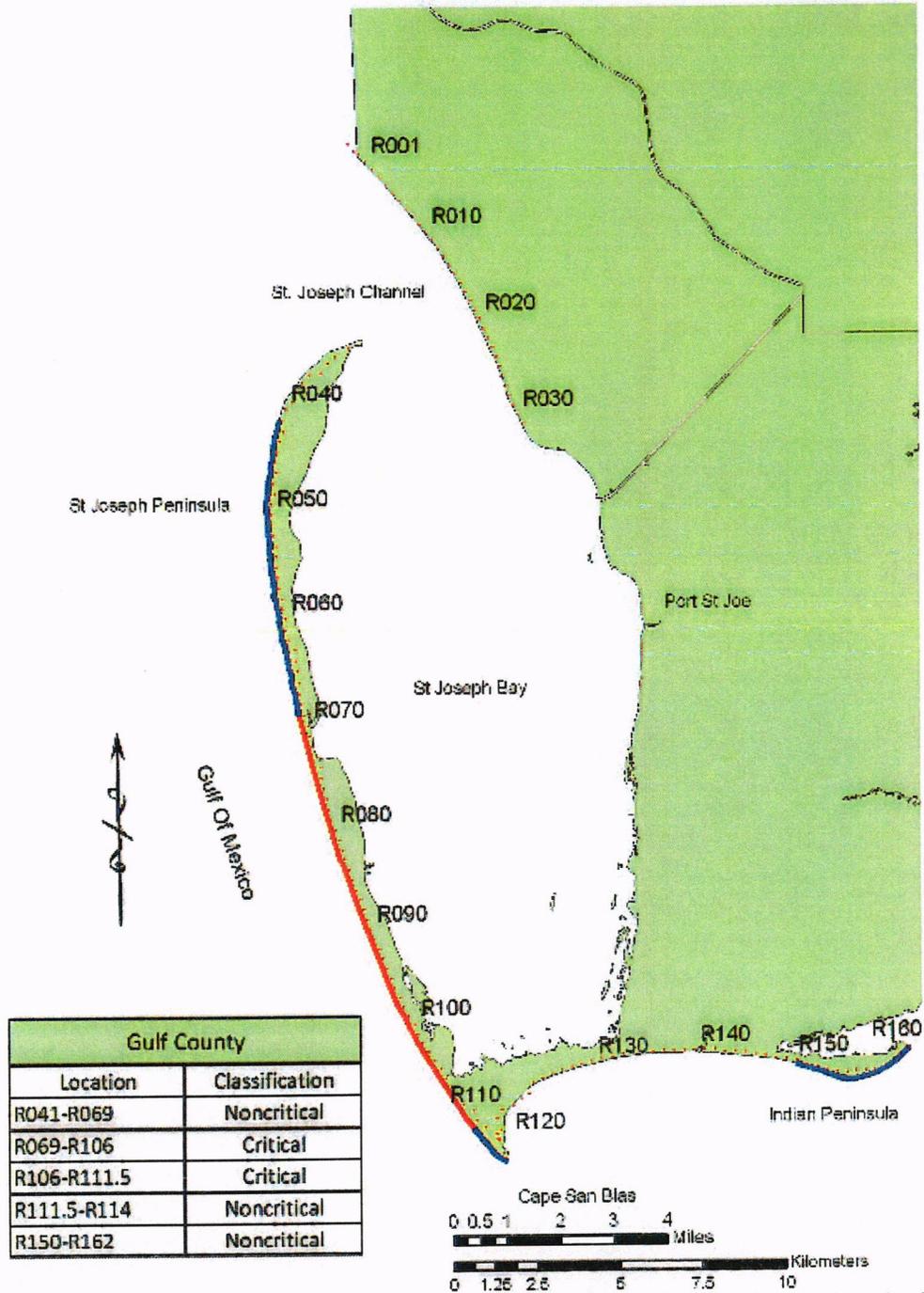
Potential Dollar Losses: There was insufficient information to generate an estimate of potential dollar losses resulting from landslide and erosion. Potential losses will be estimated as more information and technology becomes available. This capability will be reassessed each planning cycle.



Figure # 4.15

Critical Beach Erosion Areas

June, 2008



Source: Department of Environmental Protection – www.dep.state.fl.us/beaches/publications/tech-rpt.htm



Definition: Lightning is an electrical discharge that results from the buildup of positive and negative charges within a thunderstorm. When the buildup becomes strong enough, lightning appears as a "bolt." This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning reaches a temperature approaching 50,000 degrees Fahrenheit in a split second.

Task Force Comments: Lightning resulting from thunderstorms is common in the county. However, lightning rarely causes significant property damage. Figure 4.16 shows the lightning flash density while Figure 4.17 shows the lightning fatalities for the county.

Figure # 4.16

Lightning Flash Density

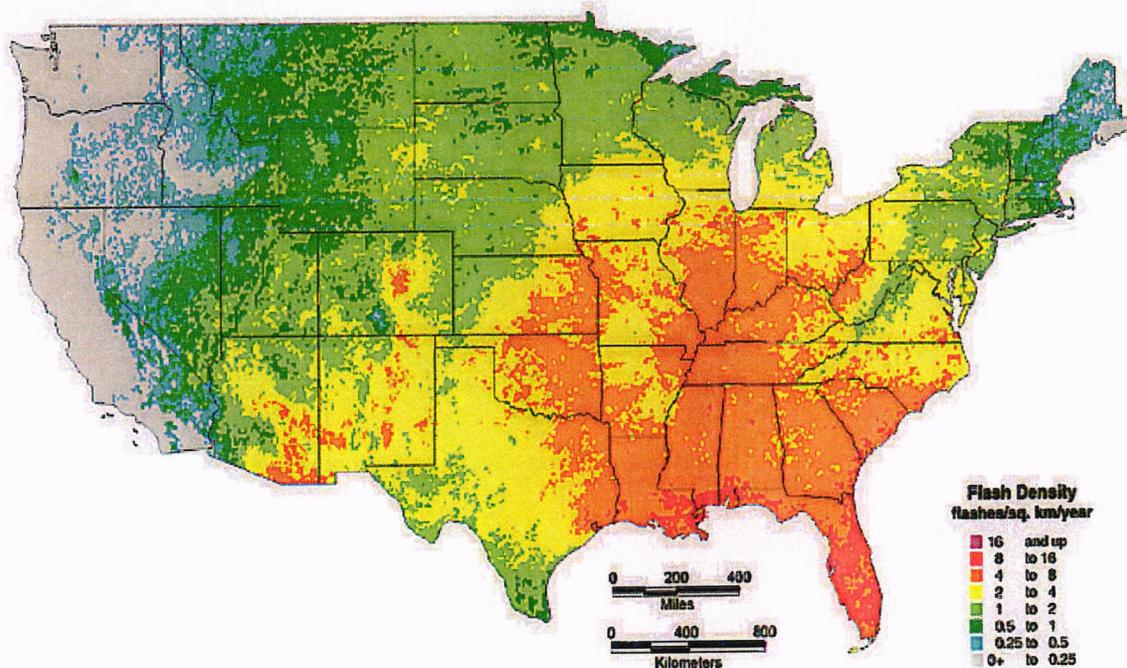
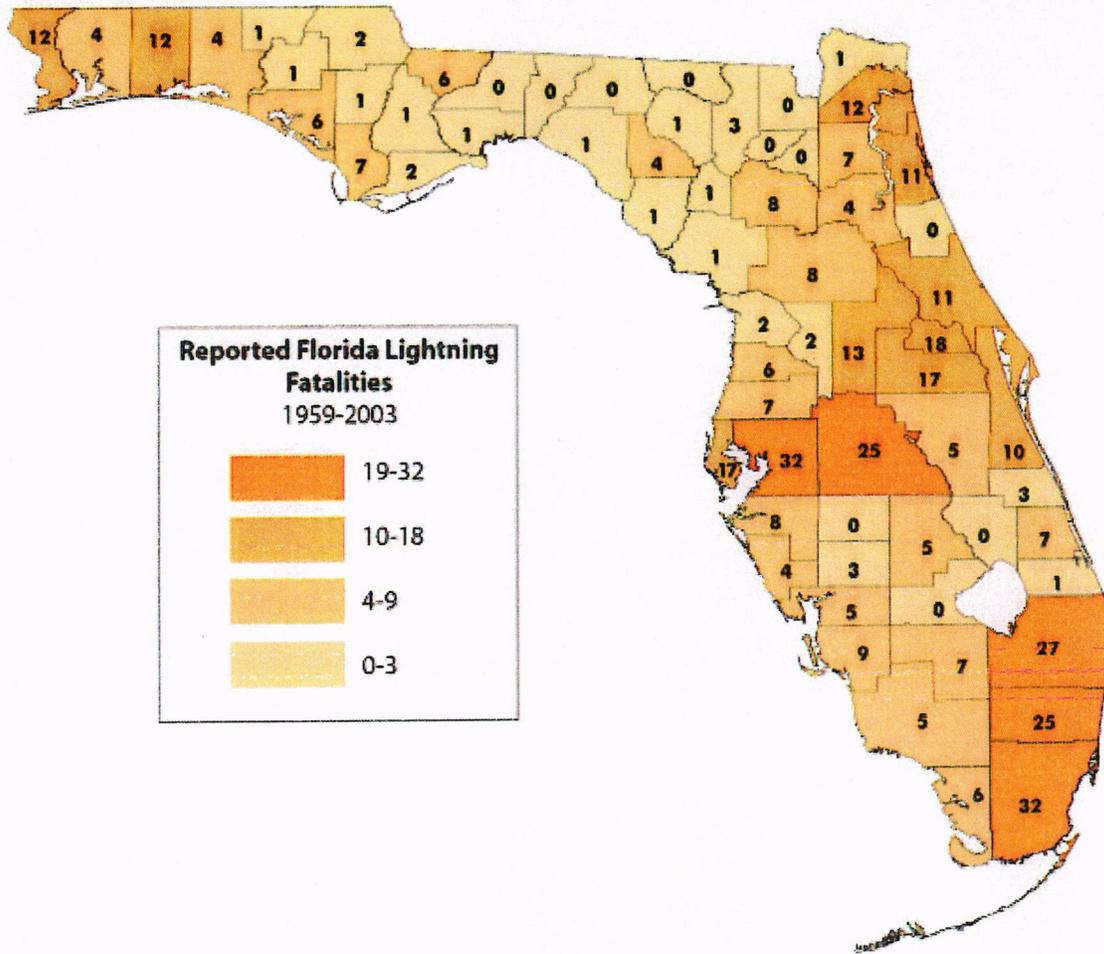


Figure # 4.17

Lightning Fatalities



Potential Dollar Losses: There was insufficient information to generate an estimate of potential dollar losses resulting from lightning. Potential losses will be estimated as more information and technology becomes available. This capability will be reassessed each planning cycle.

Storm Surge / Tsunami

Hazard Score: 40

Definitions: Storm Surge: An abnormal rise in sea level accompanying a hurricane or other intense storm, and whose height is the difference between the observed level of the sea surface and the level that would have occurred in the absence of the cyclone. Storm surge is usually estimated by subtracting the normal or astronomic high tide from the observed storm tide. Note: waves on top of the storm surge will create an even greater high-water mark.



Tsunami: A tsunami is a series of pressure waves caused by a sudden shift in the ocean floor. Such shifts are usually caused by earthquakes, but they can also be caused by undersea landslides or slumps, volcanoes or even meteor impacts. In deep ocean waters, the waves can travel hundreds of miles an hour with little surface indication. However, as the waves approach land, the shallow waters cause them to slow down and build up, sometimes to very significant heights. The recent tsunami from the earthquake in Sumatra had reports of tsunami wave heights as high as 60' and wave heights of 100' have been recorded in Japan in prior tsunami events. The waves can radiate out in all directions from the epicenter, and can travel great distances. The term tsunami is Japanese for "harbor wave," although they are also mistakenly called tidal waves.

Tropical cyclones are classified as follows:

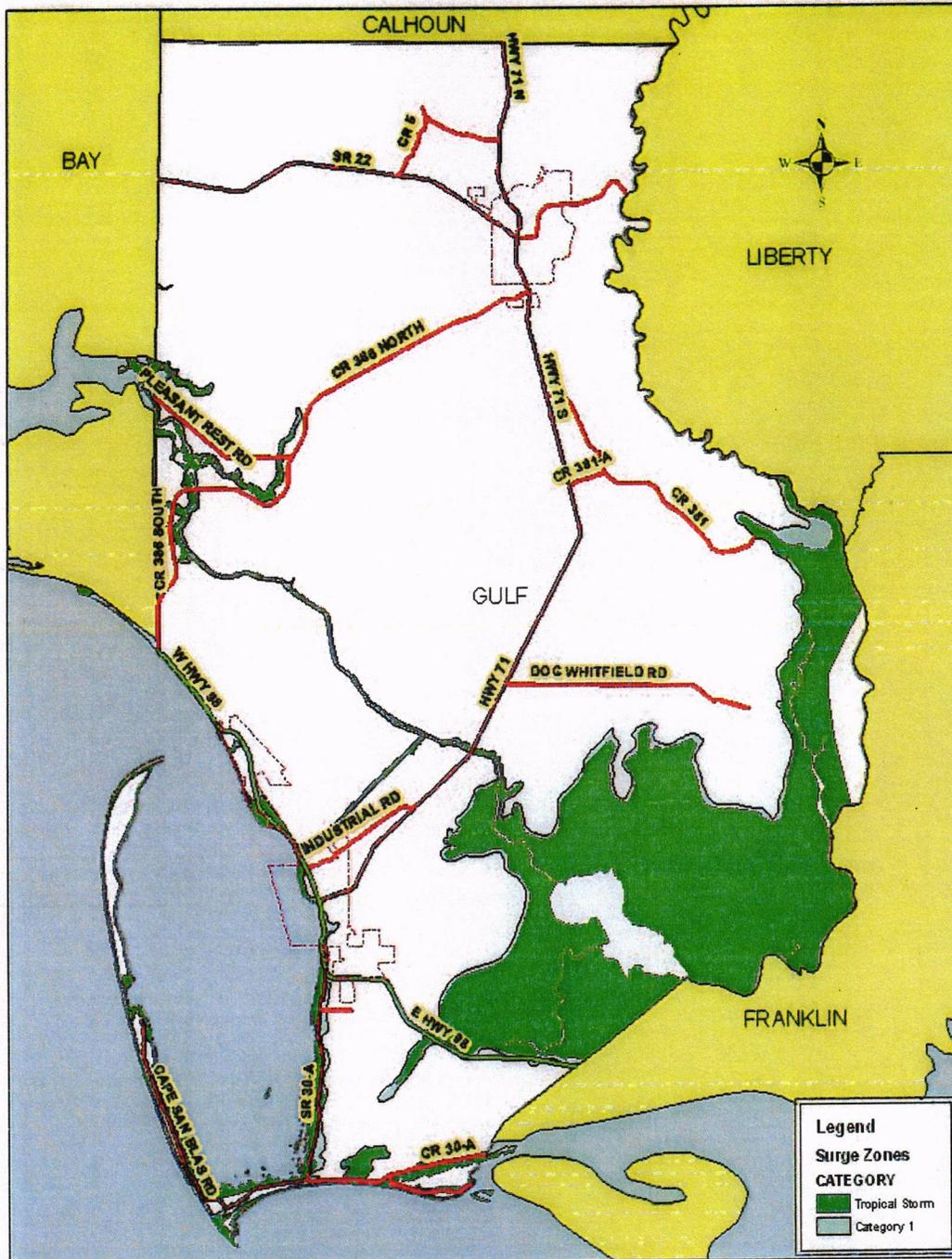
- **Tropical Depression** - An organized system of clouds and thunderstorms with a defined circulation and maximum sustained winds of 38 mph (33 knots) or less.
- **Tropical Storm** - An organized system of strong thunderstorms with a defined circulation and maximum sustained winds of 39 to 73 mph (34-63 knots).
- **Hurricane** - An intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 mph (64 knots) or higher. Hurricanes are called "typhoons" in the western Pacific, while similar storms in the Indian Ocean are called "cyclones."

Task Force Comments: The following maps show the storm surge area and wave heights for hurricanes of categories 1 through 5.



Figure # 4.18

Category 1 Hurricane Flood Zone



Disclaimer- Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
Path: Proj\ctz\Bw\ML\GIS\GulfCo CAT 1



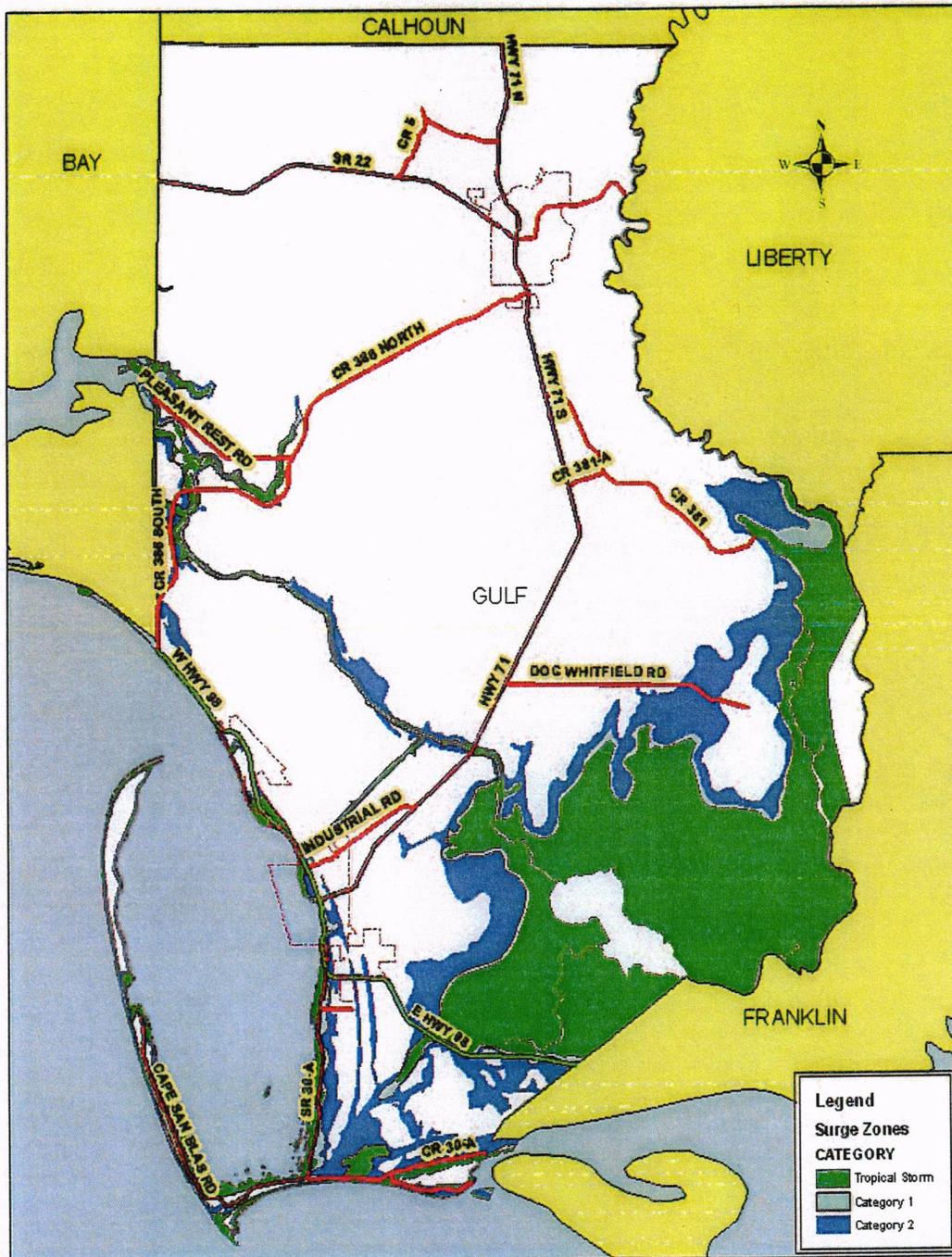
Category 1 Storm Surge
Gulf County, Florida

1 inch = 4.07 miles



Figure # 4.19

Category 2 Hurricane Flood Zone



Disclaimer: Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
 Path: Projectz\BML\GIS\GulfCo CAT2



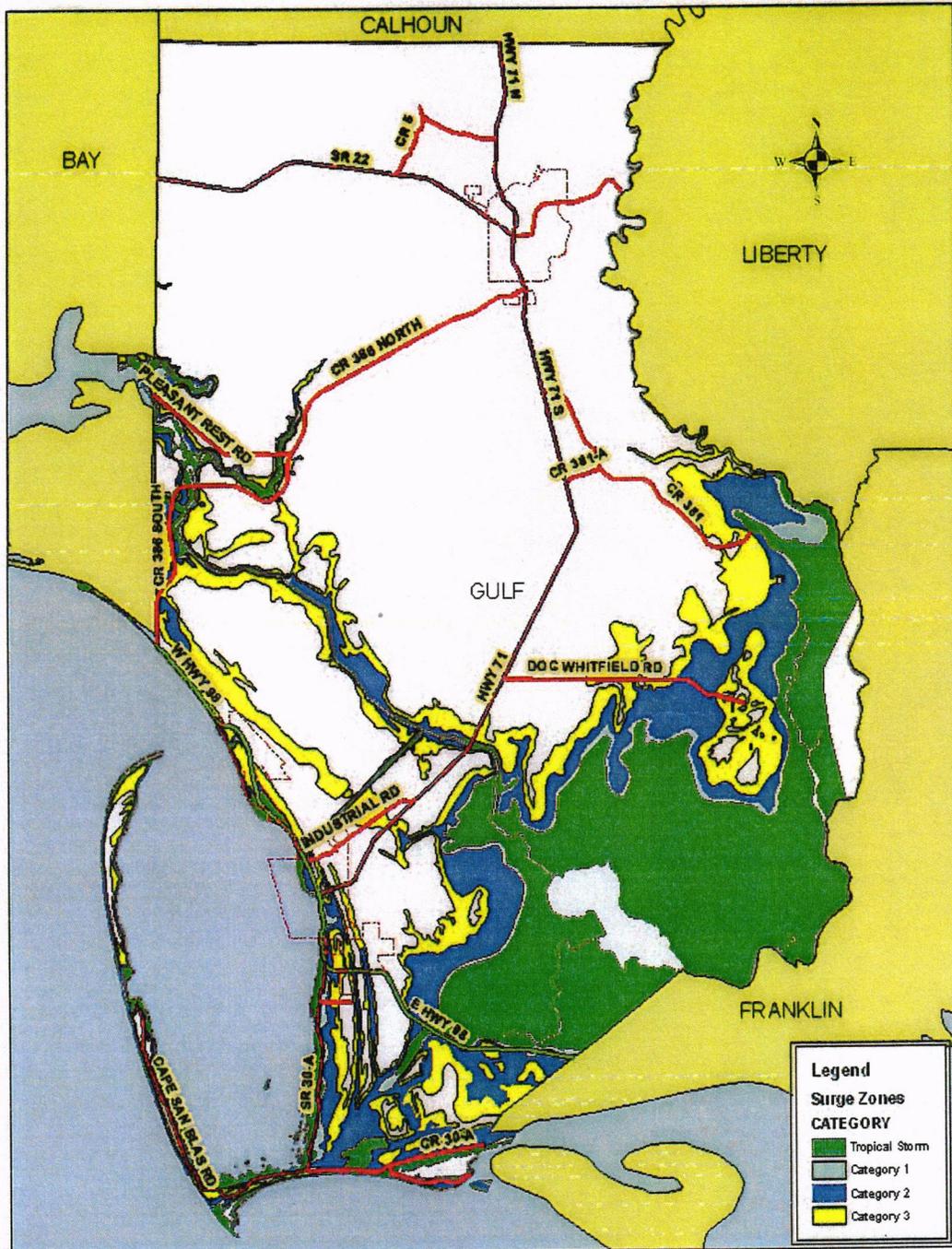
Category 2 Storm Surge
 Gulf County, Florida

1 inch = 4.07 miles



Figure # 4.20

Category 3 Hurricane Flood Zone



Disclaimer- Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
Path: Projects/EI/UMS/GulfCo CAT 3



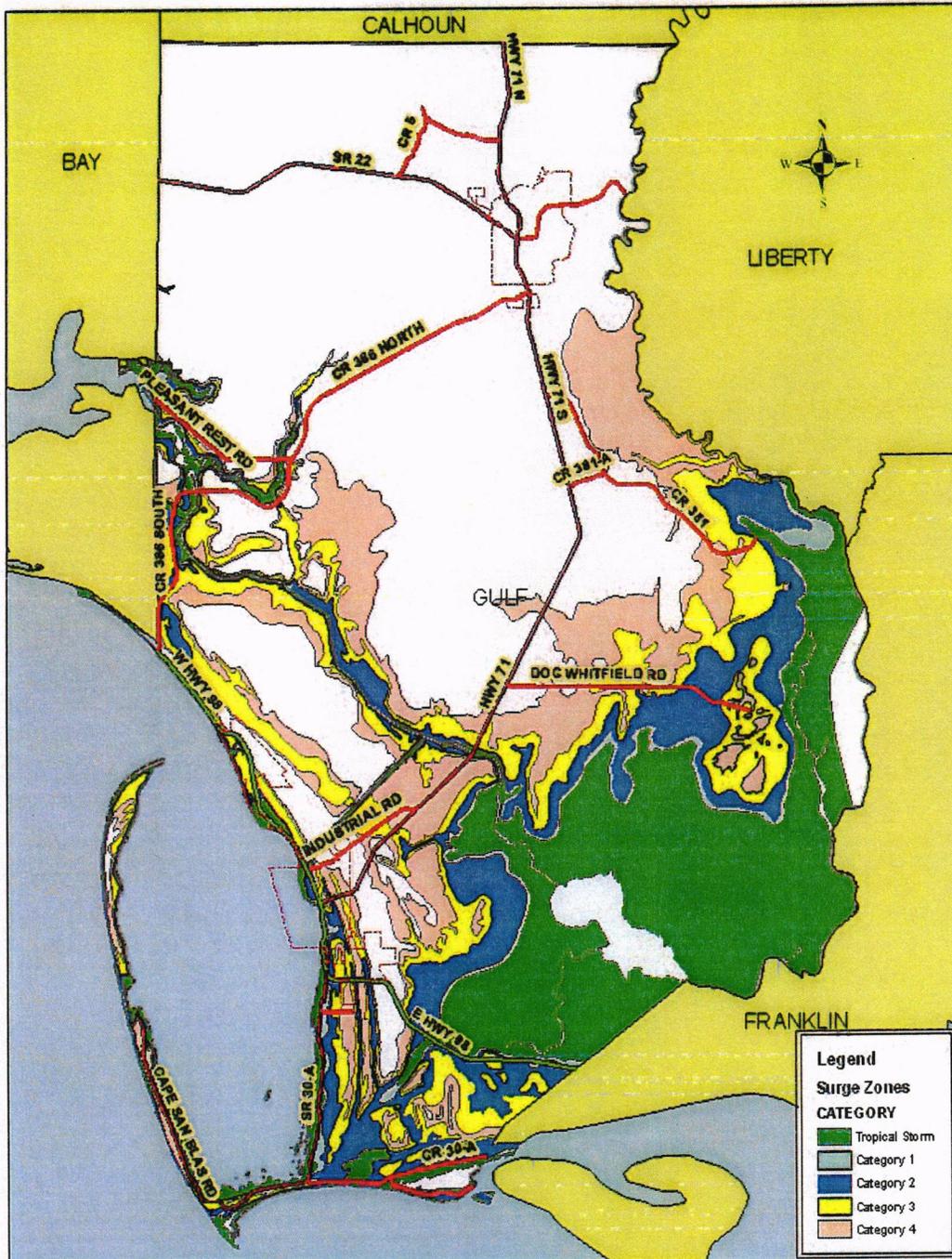
Category 3 Storm Surge
Gulf County, Florida

1 inch = 4.07 miles



Figure # 4.21

Category 4 Hurricane Flood Zone



Disclaimer- Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
 Path: Proj: cts:BM/LMI/S/GulfCo CAT-4



Category 4 Storm Surge
 Gulf County, Florida

1 inch = 4.07 miles



Potential Dollar Losses: Table 4.28 shows potential dollar losses from storm surge wave.

Table # 4.28		Potential Losses from Storm Surge by Jurisdictions	
Intensity	Population	Structures	Potential Dollar Value
Gulf County (unincorporated)			
Category 1	0	0	\$0
Category 2	1,102	153	\$11,212,061
Category 3	1,102	530	\$39,683,524
Category 4	1,707	1,203	\$80,485,584
Category 5	1,824	1,405	\$96,556,808
Port St. Joe			
Category 1	0	0	\$0
Category 2	0	138	\$11,198,173
Category 3	0	546	\$51,491,628
Category 4	3,694	1,378	\$99,345,696
Category 5	3,694	1,37	\$99,345,696
Wewahitchka			
(No Data Available)			

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com



Table # 4.29 Potential Losses from Storm Surge by Category

Building Type	Category 1	Category 2	Category 3	Category 4	Category 5
Gulf County (unincorporated)					
Single Family	(No Data Available)	\$6,967,975 (99)	\$27,199,534 (390)	\$50,714,384 (816)	\$56,087,752 (931)
Mobile Homes	(No Data Available)	\$474,202 (26)	\$1,235,034 (64)	\$4,513,606 (234)	\$5,129,133 (284)
Multi-Family	(No Data Available)	(No Data Available)	(No Data Available)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	\$258,470 (3)	\$258,470 (3)	\$330,788 (5)	\$330,788 (5)
Commercial	(No Data Available)	\$813,070 (11)	\$1,499,974 (36)	\$2,746,730 (57)	\$2,881,023 (59)
Industrial	(No Data Available)	\$1,121,696 (8)	\$1,370,225 (7)	\$1,503,143 (9)	\$1,163,143 (9)
Government	(No Data Available)	\$506,470 (1)	\$2,756,939 (4)	\$5,916,667 (10)	\$5,838,867 (10)
Port St. Joe					
Single Family	(No Data Available)	\$6,869,971 (113)	\$27,615,852 (435)	\$58,882,984 (1,102)	\$56,969,600 (1,058)
Mobile Homes	(No Data Available)	\$48,978 (3)	\$193,370 (18)	\$668,727 (50)	\$639,301 (47)
Multi-Family	(No Data Available)	(No Data Available)	(No Data Available)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	(No Data Available)	\$96,705 (1)	\$96,705 (1)	\$96,705 (1)
Commercial	(No Data Available)	\$1,617,257 (14)	\$4,666,098 (52)	\$7,915,205 (126)	\$8,837,852 (123)
Industrial	(No Data Available)	(No Data Available)	\$8,639,647 (4)	\$10,192,657 (30)	\$10,192,657 (30)
Government	(No Data Available)	\$3,529 (1)	\$3,108,409 (10)	\$7,601,468 (15)	\$7,601,468 (15)
Wewahitchka					
		(No Data Available)			

Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

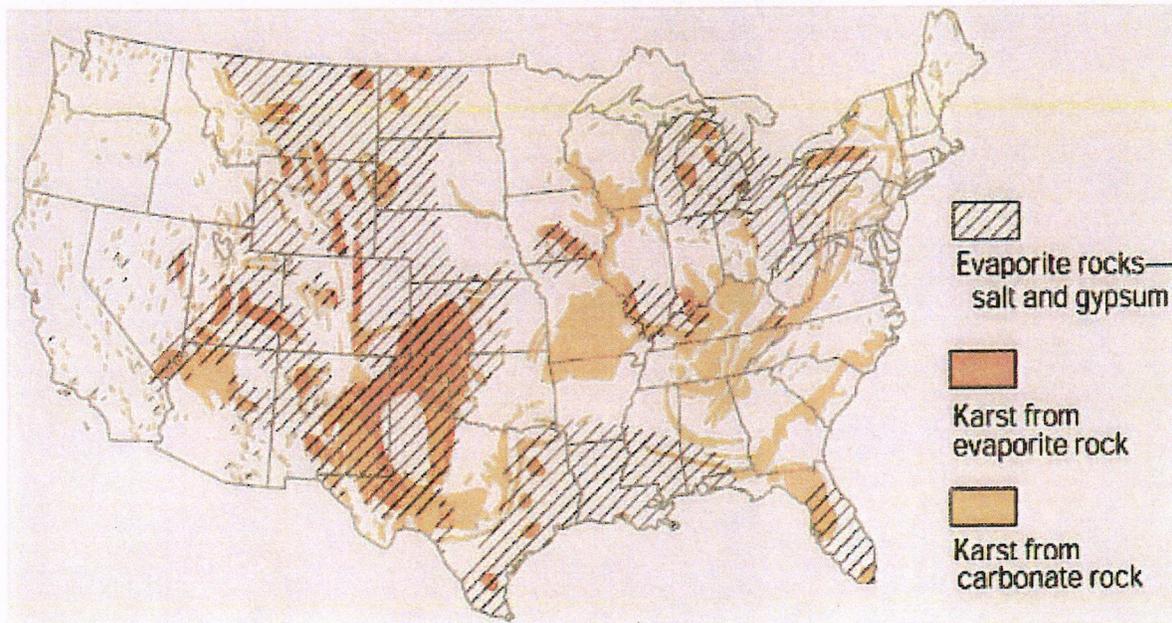


Definition: Land subsidence occurs when large amounts of ground water have been withdrawn from certain types of rocks, such as fine-grained sediments. Sinkholes are common where the rock below the land surface is limestone, carbonate rock, salt beds, or rocks that can naturally be dissolved by ground water circulating through them. As the rock dissolves, spaces and caverns develop underground.

Task Force Comments: Although sinkholes are commonplace in Florida, the county has a relatively low sinkhole potential. According to the Florida Department of Environmental Protection, the area has “very few sinkhole occurrence, although several large diameter, deep sinkholes are present in the area.” However, there is some potential of sinkhole occurrence and land subsidence in the eastern half of the county because of the karst topography and soils. The following map shows the Sinkhole Risk Assessment for the county.

Figure # 4.23

Sinkhole Risk Assessment



Potential Dollar Losses: Approximately 7,568 buildings are located in the very low or low sinkhole potential zones with a total value of \$645,826,726. Actual losses are about \$300 per year. Table 4.30 shows a breakdown of potential damage by jurisdiction and level of risk.



Table # 4.30

Potential Losses from Subsidence and Expansive Soils by Jurisdiction

Risk Level	Population	Structures	Potential Dollar Value
Gulf County (unincorporated)			
Very low risk	14,676	6,480	\$500,822,784
Port St. Joe			
Very low risk	8,312	1,790	\$123,128,704
Wewahitchka			
Very low risk	3,665	691	\$31,985,284

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Table # 4.31

Potential Losses from Subsidence and Expansive Soils by Structure Type

Building Type	Very Low Risk
Gulf County (unincorporated)	
Single Family	\$200,416,096 (3,588)
Mobile Homes	\$30,799,868 (1,545)
Multi-Family	\$2,534,353 (60)
Hotels	\$649,329 (10)
Commercial	\$6,852,900 (197)
Industrial	\$2,263,607 (26)
Government	\$33,271,105 (59)
Port St. Joe	
Single Family	\$74,700,472 (1,450)
Mobile Homes	\$943,868 (61)
Multi-Family	(No Data Available)
Hotels	\$346,435 (3)
Commercial	\$7,621,404 (170)
Industrial	\$10,407,539 (35)
Government	\$8,308,174 (19)
Wewahitchka	



Single Family	\$16,763,856 (365)
Mobile Homes	\$3,511,729 (197)
Multi-Family	\$826,023 (26)
Hotels	(No Data Available)
Commercial	\$2,821,536 (45)
Industrial	\$245,696 (3)
Government	\$3,894,446 (11)

Note: The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category.

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Urban Fire	Hazard Score: 35
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Definition: Urban fire refers to fires that take place in urban development, high-density residential areas, central business districts / downtowns, and commercial centers. Fires can also occur on the urban interface, the area where heavily vegetated areas meet urban development. Urban fire is particularly dangerous because fire can spread quickly because of the close proximity of structures in urban areas. In addition, fires are more likely to encounter energy sources that will intensify the fire such as propane tanks, gasoline stations, and natural gas lines.

Task Force Comments: Because the county’s urban area is relatively small, many fires occur along the urban interface and cause significant structural damage. Although the rural population is sparse, those who live in and near the forest may be directly threatened or isolated by fire. Often the location of rural residents is not well marked and sometimes the driveway access is not large enough to accommodate fire trucks or other emergency response vehicles. In the areas of the county with a rapidly growing population, there is a concern that the size and amount of new construction may exceed the existing capacities of the local fire departments. Since there were no hazard maps available for only urban fire, the city limits of the municipalities are shown on the following maps to indicate urban and interface areas.



Figure # 4.24

Port St. Joe City Limits



Legend

- City of Port St Joe
- ▭ Gulf County

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Path: Projects\GMLMS
Date: 5/8/2009



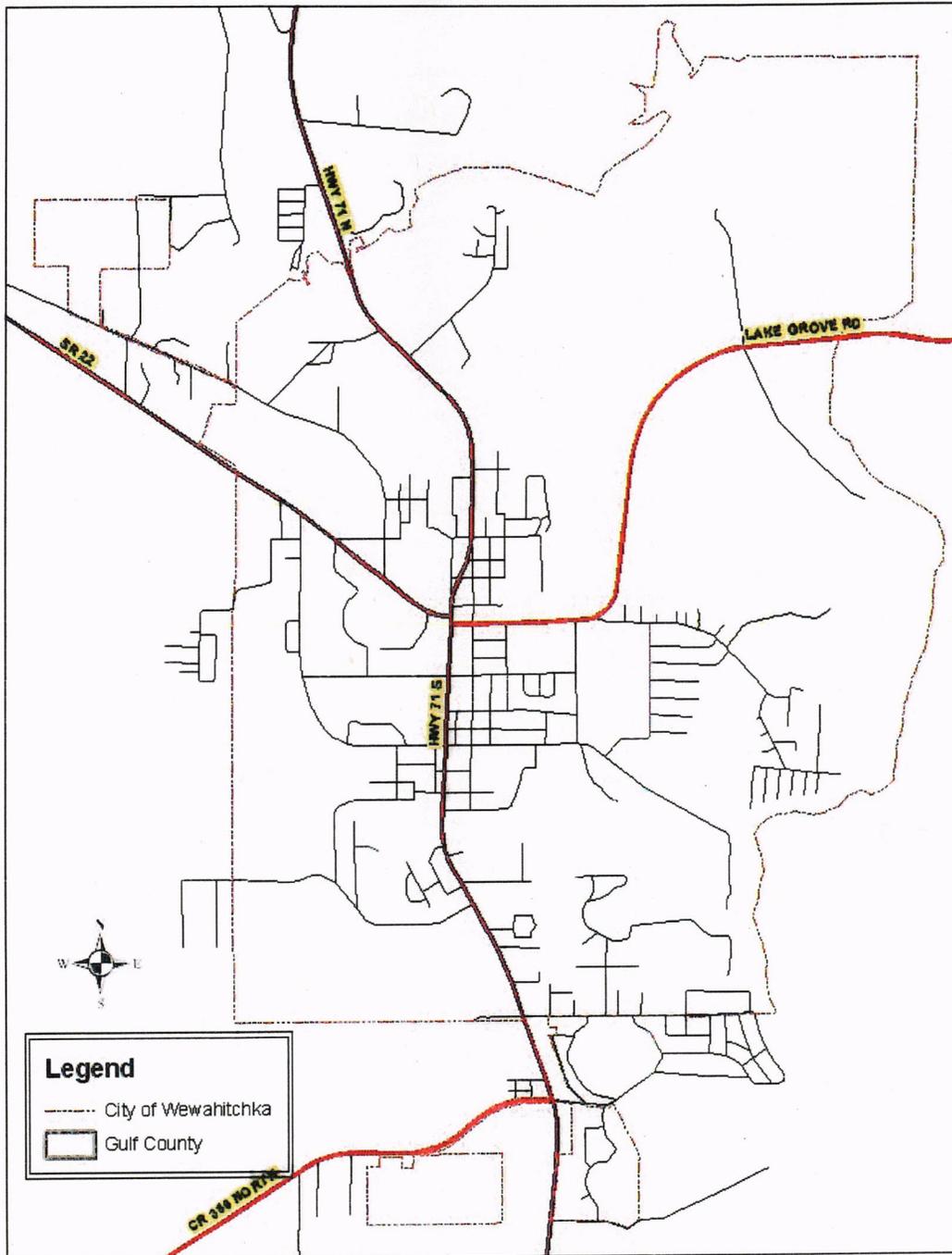
Port St. Joe City Limits
Gulf County, Florida

1 inch = 1 miles



Figure # 4.25

Wewahitchka City Limits



Disclaimer: Gulf County GIS provides this GIS data as a public service. NO WARRANTY for the availability or accuracy is provided.
Path: Projects/Env/UMS/WewaCityLimits
Date: 5/8/2009



Wewahitchka City Limits
Gulf County, Florida

1 inch = 0.47 miles



Potential Dollar Losses: Because the potential dollar losses associated with urban fire are included with those resulting from wildfire in the TAOS model, urban fire estimates were generated by excluding potential losses to timber, crop, and agricultural land from the total potential dollar losses. Table 4.32 shows these losses according to jurisdiction and risk level.

Table # 4.32 Potential Losses from Urban Fire by Jurisdiction

Risk Level	Population	Structures	Potential Dollar Value
Gulf County (unincorporated)			
Low	975	2,030	\$93,575,727
Medium	4,903	1,979	\$92,650,490
High	8,798	1,693	\$103,138,413
Port St. Joe			
Low	7,786	991	\$57,897,114
Medium	0	723	\$60,239,971
High	526	76	\$4,062,263
Wewahitchka			
Low	0	387	\$19,722,878
Medium	1,421	186	\$6,995,150
High	2,244	118	\$3,976,366

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Table # 4.33 Potential Losses from Urban Fire by Building Type

Building Type	Low	Medium	High
Gulf County (unincorporated)			
Single Family	\$69,362,256 (1,257)	\$72,238,072 (1,259)	\$58,815,544 (1,075)
Mobile Homes	\$11,184,219 (526)	\$11,151,843 (536)	\$8,463,810 (483)
Multi-Family	\$1,271,764 (9)	\$1,262,588 (51)	(No Data Available)
Hotels	\$284,823 (3)	\$364,505 (7)	(No Data Available)
Commercial	\$2,352,826 (73)	\$2,413,766 (59)	\$2,086,302 (65)
Industrial	\$1,235,423 (5)	\$378,449 (12)	\$649,735 (14)



Government	\$3,427,221 (10)	\$1,345,173 (15)	\$28,498,705 (34)
Port St. Joe			
Single Family	\$37,683,376 (801)	\$33,502,380 (586)	\$3,514,686 (63)
Mobile Homes	\$391,614 (29)	\$521,159 (31)	\$31,094 (1)
Multi-Family	(No Data Available)	(No Data Available)	(No Data Available)
Hotels	\$272,117 (2)	(No Data Available)	\$74,317 (1)
Commercial	\$7,338,386 (92)	\$3,788,989 (54)	\$247,329 (6)
Industrial	\$1,663,893 (28)	\$8,693,364 (6)	\$50,282 (1)
Government	\$5,254,940 (9)	\$2,895,274 (8)	\$83,528 (2)
Wewahitchka			
Single Family	\$9,881,578 (205)	\$4,149,152 (97)	\$2,733,124 (63)
Mobile Homes	\$1,865,763 (101)	\$962,467 (56)	\$683,498 (40)
Multi-Family	\$826,023 (26)	(No Data Available)	(No Data Available)
Hotels	(No Data Available)	(No Data Available)	(No Data Available)
Commercial	\$1,637,954 (25)	\$760,621 (14)	\$416,516 (6)
Industrial	(No Data Available)	\$82,964 (2)	\$0 (0)
Government	\$1,784,058 (6)	\$453,469 (4)	\$68,682 (1)
The numbers in parentheses indicate the number of structures vulnerable to the hazards in each category			

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com

Wildfire	Hazard Score: 40
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Definition: There are three different classes of wildland fires. A surface fire is the most common type and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire is usually started by lightning and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees.

Task Force Comments: The rural areas of the county are heavily forested and wildfires are common. Data provided by the State Division of Forestry shows that from April 2004 through April 2009, a significant number of acres burned in the county. Wildfires affecting commercial forest, non-commercial forest and non-forest (agricultural) lands are included in the information presented. Commercial forests are forestlands capable of producing crops of industrial wood, regardless of stocking, and not withdrawn from

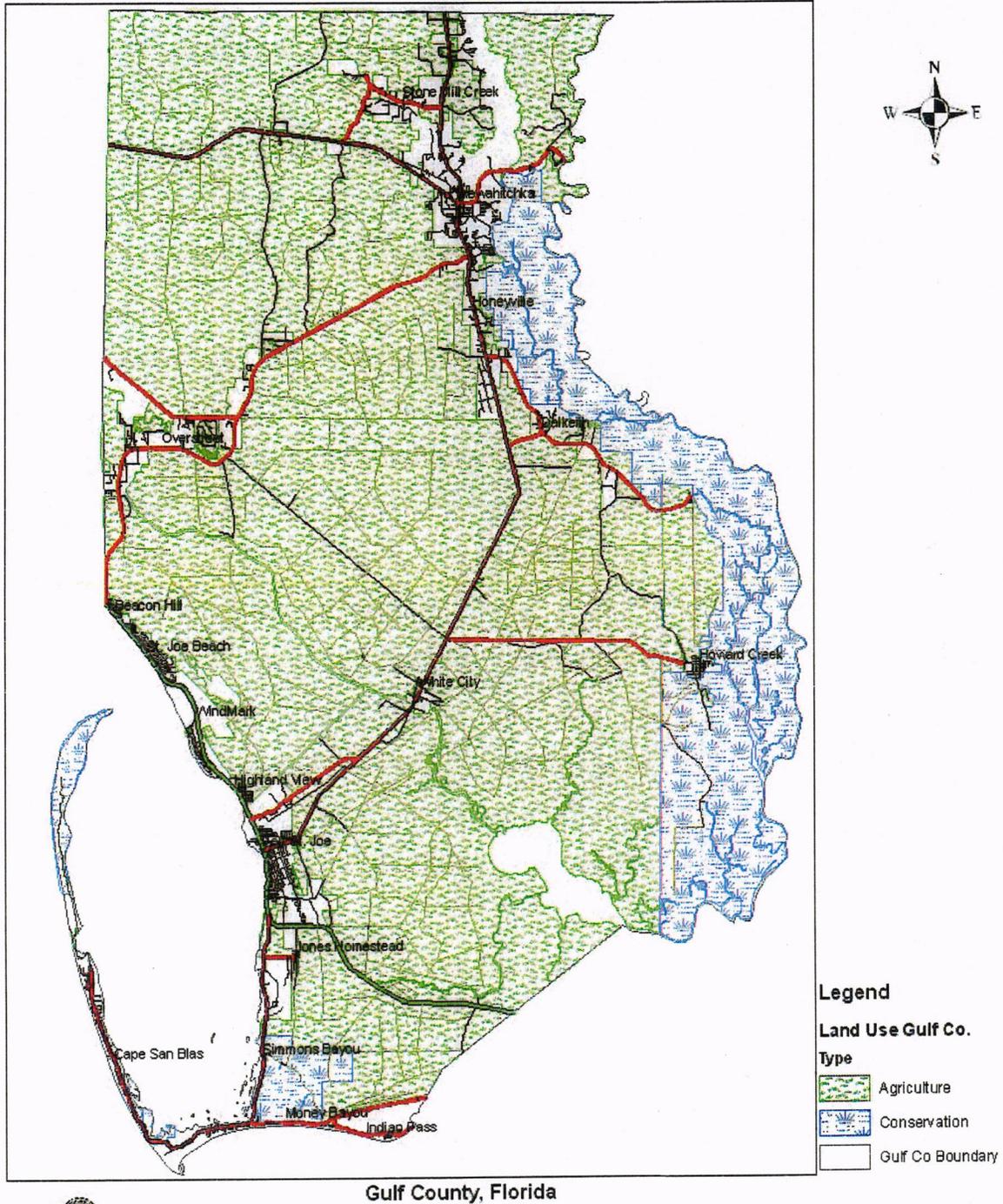


timber utilization. A noncommercial forest is land that is unproductive forestland, including productive forestland withdrawn from commercial timber use. Non-forest land is any area not growing timber and devoted to non-forest uses such as crops, pasture, etc.



Figure # 4.26

Wildfire Threat



Gulf County, Florida

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The above map identifies all of the land used in the county for agriculture and conservation purposes indicating where wildfires could occur.

Table # 4.34

Gulf County Wildfires by Causes – 4/21/04 through 4/20/09

Cause	Fires	Percent	Acres	Percent
Campfire	6	4.44	25.0	0.76
Children	10	7.41	71.3	2.17
Debris Burn	2	1.48	30.5	0.93
Debris Burn – Broadcast / Acreage (Authorized)	2	1.48	181.1	5.52
Debris Burn – Piles (Authorized)	3	2.22	6.0	0.18
Debris Burn – Yard Trash (Authorized)	2	1.48	45.5	1.39
Debris Burn – Broadcast /Acreage (Non-Authorized)	0	0	0.0	0
Debris Burn – Piles (Non-Authorized)	2	1.48	2.8	0.09
Debris Burn – Yard Trash (Non-Authorized)	4	2.96	265.6	8.09
Equipment Use	0	0	0.0	0
Equipment – Agriculture	1	0.74	369.0	11.24
Equipment – Logging	3	2.22	110.8	3.38
Equipment – Recreation	0	0	0.0	0
Equipment – Transportation	2	1.48	8.1	0.25
Incendiary	13	9.63	75.7	2.31
Lightning	62	45.93	1,917.3	58.43
Miscellaneous – Breakout	0	0	0.0	0
Miscellaneous – Electric Fence	0	0	0.0	0
Miscellaneous – Fireworks	1	0.74	0.6	0.02
Miscellaneous – Power Lines	3	2.22	4.3	0.13
Miscellaneous – Structure	1	0.74	0.2	0.01
Miscellaneous – Other	6	4.44	134.1	4.09
Railroad	0	0	0.0	0
Smoking	7	5.19	10.6	0.32
Unknown	5	3.70	23.1	0.70



Total	135		3,281.6	
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Source: Florida Division of Forestry – www.fl-dof.com/wildfire

The population most vulnerable to wildfires is residents living in close proximity to the county's heavily wooded rural areas. The wildfires that swept throughout the state in 1998 burned many residences in areas where the urban environment intersected with large tracts of heavily wooded land. Areas of the county have a similar urban / wildland interface and are vulnerable to this hazard.

The Keetch-Byram Drought Index (KBDI) is a continuous reference scale for estimating the dryness of the soil and duff layers. The index increases for each day without rain (the amount of increase depends on the daily high temperature) and decreases when it rains. The scale ranges from 0 (no moisture deficit) to 800. The range of the index is determined by assuming that there is 8 inches of moisture in a saturated soil that is readily available to the vegetation.

For different soil types, the depth of soil required to hold 8 inches of moisture varies (loam = 30", clay = 25" and sand = 80"). A prolonged drought (high KBDI) influences fire intensity largely because more fuel is available for combustion (i.e. fuels have a lower moisture content). In addition, the drying of organic material in the soil can lead to increased difficulty in fire suppression.

High values of the KBDI are an indication that conditions are favorable for the occurrence and spread of wildfires, but drought is not by itself a prerequisite for wildfires. Other weather factors, such as wind, temperature, relative humidity and atmospheric stability, play a major role in determining the actual fire danger.

Table # 4.35 **North Florida KBDI Averages**

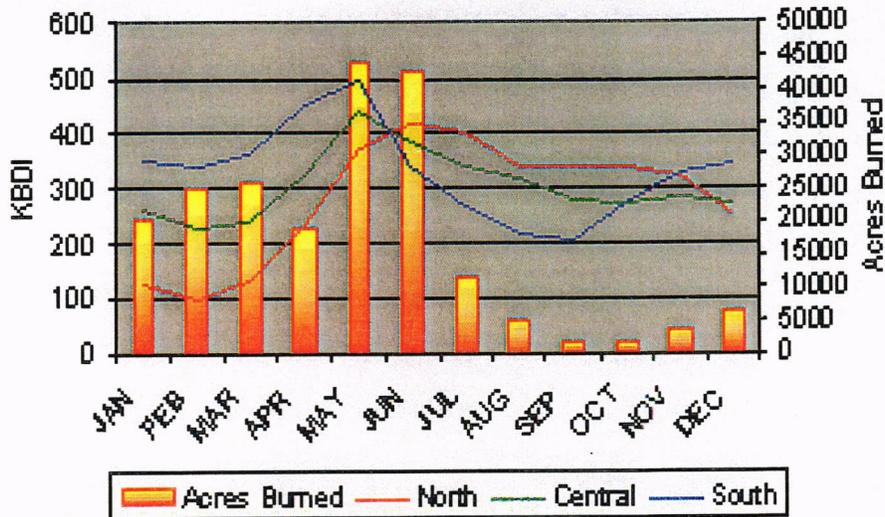
Threat	Winter	Spring	Summer	Fall
Very Low	0 – 160	0 – 190	0 – 220	0 – 180
Low	161 – 220	191 – 260	221 – 300	181 – 240
Normal	221 – 390	261 – 460	301 – 500	241 – 420
Moderate	391 – 500	461 – 600	501 – 640	421 – 540
Severe	501 – 800	601 – 800	641 – 800	541 - 800

Source: Division of Forestry – www.fl-dof.com/fire_weather/information/seasonal.html



Figure # 4.27

Mean Regional KDBI Along With Mean Number of Acres Burned Statewide



Source: Division of Forestry – www.fl-dof.com/fire_weather/information/activity.html

Potential Dollar Losses: The following table lists the potential dollar losses in the county from wildfire.

Table # 4.36

Potential Losses from Wildfire by Jurisdiction

Risk Level	Structures	Potential Dollar Value
Gulf County (unincorporated)		
Low	174	\$42,736,588
Medium	230	\$55,229,558
High	475	\$113,491,555
Port St. Joe		
Low	6	\$420,722
Medium	14	\$454,981
High	1	\$53,623
Wewahitchka		
Low	5	\$204,128
Medium	6	\$486,555
High	7	\$600,201

Source: The Arbiter of Storms (TAOS) – lmsmaps.kinanco.com



Winter Storm

Hazard Score: 16

Definition: Winter storms are extra-tropical storms that bring cold temperatures, precipitation, and possibly, high winds. The following conditions can occur during winter storms: snow, heavy snow, blizzard, freezing rain, sleet, freeze, frost and wind chill.

Task Force Comments: This region is generally unaccustomed to snow, ice and freezing temperatures. Once in a while, cold air penetrates south across Florida, into the Gulf of Mexico. Temperatures fall below freezing killing tender vegetation, such as flowering plants and the citrus fruit crop. Wet snow and ice rapidly accumulate on trees with leaves, causing the branches to snap under the load. Motorists are generally unaccustomed to driving on slick roads and traffic accidents increase. Some buildings are poorly insulated or lack heat altogether. Neither the county nor the cities have available snow removal equipment or treatments, such as sand or salt, for icy roads. For winter deaths related to ice and snow about 70% occur in automobiles, while about 25% are people caught out in the storm. For winter deaths related to exposure to cold 50% are people over 60 years old, over 75% are males, and about 20% occur in the home.

Potential Dollar Losses: There was insufficient information to generate an estimate of potential dollar losses resulting from winter storms. Potential losses will be estimated as more information and technology becomes available. This capability will be reassessed each planning cycle.

Volcanic Activity

Hazard Score: 0

Definition: A volcano is a mountain that opens downward to a reservoir of molten rock below the surface of the earth. Unlike most mountains, which are pushed up from below, volcanoes are built up by an accumulation of their own eruptive products lava, ashflows, and airborne ash and dust. When pressure from gases and the molten rock becomes strong enough to cause an explosion, eruptions occur. Gases and rock shoot up through the opening and spill over, or fill the air with lava fragments.

Task Force Comments: The only volcanoes in the United States are located in Alaska, Hawaii, and the western portion of the country. Volcanoes found in Mexico and on islands in the Caribbean Ocean are substantial distances away from the county. Therefore, the United States Geological Survey asserts that volcanic activity presents little to no risk to the county and its cities.

Potential Dollar Losses: \$ 0.00



Gas Service Loss

Hazard Score: 8

Definition: Gas service loss refers to the disruption of centralized natural gas service to a community's residents, including the holding facilities for natural gas, crude and refined petroleum, and petroleum-derived fuels, the refining and processing facilities for these fuels and the pipelines, ships, trucks and rail systems that transport these commodities from their source to systems that are dependent upon gas and oil in one of their useful forms.

Task Force Comments: St. Joe Natural Gas Company Inc is the service provide for areas with centralized service. Rural areas use propane tanks. Therefore, the Task Force considered gas service loss a very low risk hazard.

Power Loss

Hazard Score: 20

Definition: Power loss refers to the disruption of electrical service to the community's residents, including generation stations, transmission and distribution networks that create and supply electricity to end-users so that end-users achieve and maintain nominal functionality, and the transportation and storage of fuel essential to that system.

Task Force Comments: There are two electrical energy service providers in the county: Gulf Coast Electric Cooperative and Progress Energy. Each services about 60% and 40% of the county, respectively, and operates separate systems. Power outages are commonplace during severe weather, especially hurricanes, but do not persist for significant periods of time.

Radiological Incident

Hazard Score: 6

Definition: Radiological accidents can occur wherever radioactive materials are used, stored or transported. In addition to nuclear power plants, hospitals, universities, research laboratories, industries, major highways, railroads or shipping yards could be the site of a radiological accident. Radioactive materials are composed of atoms that are unstable. An unstable atom gives off its excess energy until it becomes stable. The energy emitted is radiation. Radioactive materials are dangerous because of the harmful effect of certain types of radiation on the cells of the body. The longer a person is exposed to radiation, the greater the risk.

Task Force Comments: There is a hospital in the county using radiological equipment in its laboratory. In addition, according to the Task Force, radiological materials are transported via major roads according to the Florida Department of Transportation.



Sewer Service Loss

Hazard Score: 24

Definition: Sewer service loss includes the disruption of service to the community's residents of the facilities consisting of a system of sewers for carrying off liquid and solid sewage or waste pipes and equipment that carries away sewage or surface water.

Task Force Comments: Most of the county's unincorporated areas use septic tanks instead of centralized sewer service. Wewahitchka is particularly prone to sewer service loss when the electrical power service is lost. Without the sewer lift stations, there is often sewage backup.

Telecommunications Failure

Hazard Score: 36

Definition: Telecommunications failure includes a disruption of service to the community's residents of the networks and systems that support the transmission and exchange of electronic communications among and between end-users. Telephone, cellular / mobile phone, cable / satellite television and internet service are considered telecommunication services.

Task Force Comments: The county's telecommunication systems are rather vulnerable to failure. If there is power loss and a generator is not functioning, the county's entire telecommunications network may be lost. In addition, the Task Force feels that the county is especially vulnerable to cyberterrorism and viruses. Computer network failure could potentially cause the county's entire computer system to crash.

Water Services Loss

Hazard Score: 28

Definition: Water service loss refers to the disruption of service to the community's residents, including the sources of water, reservoirs and holding facilities, aqueducts and other transport systems, the filtration and cleaning systems, the pipelines, the cooling systems and other delivery mechanisms that provide for domestic and industrial applications, and systems for dealing with waste water and fire fighting.

Task Force Comments: Most of the county's unincorporated areas and both municipalities are part of centralized water systems. Water service loss is common during severe weather.

Hazardous Materials Incident

Hazard Score: 24

Definition: Hazardous materials are chemical substances, which if released or misused can pose a threat to the environment and human health. These chemicals are used in industry, agriculture, medicine, research, and consumer goods. Hazardous materials come in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. These substances are most often released as a result of transportation accidents or because of chemical accidents in plants.



Lighthouse Utilities – Water Well	Chlorine	0.5 miles	50
Lighthouse Utilities – Water Plant	Chlorine	0.5 miles	200
Premier Services	Sulfuric Acid	0.1 miles	100
Raffield Fisheries	Anhydrous Ammonia	3.2 miles	6,540

Source: Apalachee Regional Planning Council

Despite the routine shipment of hazardous materials through the county and the presence of large quantities of chemicals at a number of local facilities, there have been relatively few incidents involving the release of hazardous substances. The following describes hazardous materials incidents that have occurred in the county between 1/1/2000 and 3/30/2009. Of the 22 incidents reported to the State Watch Office, the majority were transportation-related, originated from private sector firms, and involved the release of a petroleum-based chemicals.



Table # 4.38 Hazardous Materials Incidents

Date	Substance	Description	Injured	Killed	Sector	Petrol	FTO*
12/4/00	Diesel	Unknown	0	0	Private	Yes	T
8/15/01	Gasoline	Gas Station	0	0	Private	Yes	F
9/13/01	Diesel	Dredging Company	0	0	Private	Yes	T
2/14/02	Unknown	Paper Company	0	0	Private	No	F
8/4/03	Gasoline / Diesel	Traffic Accident	1	0	Private	Yes	T
9/17/03	Natural Gas	Construction	0	0	Private	No	F
1/31/04	Gasoline	Traffic Accident	1	0	Private	Yes	T
3/8/04	Diesel	Private Boat	0	0	Private	Yes	T
5/25/04	Diesel / Oil	Traffic Accident	0	0	Private	Yes	T
8/7/04	Oil	Shrimp Boat	0	0	Private	Yes	T
1/14/05	Sulfuric Acid	Private Residence	0	0	Private	No	F
5/26/05	Diesel	Transportation	0	0	Private	Yes	T
7/27/05	Lubricating Base Oil	Unknown	0	0	Unknown	Yes	Unknown
8/3/06	Magnesium Slurry	Minerals	0	0	Private	No	F
8/17/06	Hydraulic Oil	Transportation	0	0	Private	Yes	T
2/22/07	Oil	Traffic Accident	0	0	Private	Yes	T
3/5/07	Vegetable Oil	Gum and Wood Chemicals	0	0	Private	No	F
3/26/07	Diesel	Private Vessel	0	0	Private	Yes	T
6/29/07	Gasoline / Diesel	Private Vessel	0	0	Private	Yes	F



7/9/07	Diesel	Private Vessel	0	0	0	Private	Yes	T
1/9/09	Oil	Shrimp Boat	0	0	0	Private	Yes	T

* F = Fixed facility release, T = Transportation related release, O = Offloading release

Source: Apalachee Regional Planning Council



One of the primary concerns of the Task Force has been the placement of facilities for people with special needs (such as nursing homes or hospitals) in close proximity to major transportation routes or near fixed facilities storing large quantities of hazardous chemicals. Unfortunately, however, there are few locations in the county that are not within a short distance of major trucking routes or within areas that could potentially be affected by a worst-case release from a facility storing extremely hazardous substances. Analysis of census data shows that approximately 71% of county residents reside within a hazardous materials vulnerable zone. It is important to note however, that incidents at fixed facilities have rarely occurred and transportation-related incidents in this county have been small in scale and highly localized in impact.

Crime	Hazard Score: 20
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Definition: Crime is any act punishable by law such as murder, sexual offenses, robbery, aggravated assault, burglary, larceny, or motor vehicle theft.

Task Force Comments: The county has the same problems with crime as any other rural county. The following table shows the crime statistics as reported by the Florida Department of Law Enforcement.

Table # 4.39	Crime in County
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Year	Population	Violent Crime	Non-Violent Crime
2004	16,171	57	246
2005	16,479	109	233
2006	16,509	99	252
2007	16,815	108	307
2008	16,923	74	222

Source: Florida Department of Law Enforcement – www.fdle.state.fl.us/fsac/crime_trends/map/19.htm

Civil Disturbance	Hazard Score: 12
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Definition: Civil disturbance (or civil disorder) is a condition in society where people are engaged in several forms of disturbance such as parades, sit-ins, riots, sabotage, and other forms of crime. Although usually intended to be a demonstration to the public, the politics can easily evolve into chaos. Generally, the cause of civil disorder is discontent among people because of conditions such as economical stalemate, inflation, a huge amount of unemployment and political scandal.

Task Force Comments: The Task Force considers civil disturbance unlikely in the county.



Terrorism

Hazard Score: 18

Definition: Terrorism is defined in the Code of Federal Regulations as "the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives."

Task Force Comments: As with civil disturbance, the Task Force considers a terrorist event in the county highly unlikely. However, if an event were to occur, the water system would be the most susceptible.

Economic Crisis

Hazard Score: 18

Definition: Economic crisis includes localized economic recession, severe national or state recessions and depressions, and generally severe decreases in the productivity of the local economy that result in increased unemployment, poverty, and homelessness.

Task Force Comments: The county is generally susceptible to adverse national or state economic conditions. The economy is relatively diverse for a rural community with representation in public administration; educational, health and social services; retail trade and commercial; and agricultural industrial sectors. However, tourism from sports fishing drives the local economy.

Key Employer Crisis

Hazard Score: 18

Definition: A key employer is a firm or company that employs a significant number of the local residents and / or is a significant contributor to the local economy. Key employer crises often trigger local economic crises.

Task Force Comments: The key employer of the county is the Gulf County Correctional Institution. It is highly unlikely that this facility will be closed in the near future.



Table # 4.40 Hazard Identification and Risk Estimation

Natural Hazards

There are no deviations for Port St. Joe and Wewahitchka.

Risk Characteristic		Natural Hazards														
	Score	Drought	Earthquake	Flooding	Hail	High winds	Infestation/ Disease	Landslide, Erosion	Lightning	Storm surge, Tsunami	Subsidence, expansive soils	Urban Fire	Wildfire	Winter storm	Volcanic activity	Dam/Levee Failure
Area Impacted	No developed area impacted	0	0												0	
	Less than 25% of developed area impacted	1			1		1			1	1	1		1		
	Less than 50% of developed area impacted	2	2			2		2					2			2
	Less than 75% of developed area impacted	3		3					1							
Health and Safety Consequences	Over 75% of developed area impacted	4														
	No health and safety impact	0	0					0							0	
	Few injuries or illnesses	1	1	1	1	1			1	1	1		1	1		1
	Few fatalities but many injuries or illnesses	2					2					2				
Property Damage	Numerous fatalities	3														
	No property damage	0	0	0											0	
	Few properties destroyed or damaged	1					1				1			1		
	Few destroyed but many damaged	2		2	1	2		2	2	2		2	2	2		2
Environmental Damage	Few damaged and many destroyed	2														
	Many properties destroyed and damaged	3								3						
	Little or no environmental damage	0	0						0		0				0	
	Resources damaged with short term recovery	1		1	1	1				1				1		
Resources damaged with long term recovery	2	2					2	2				2	2			2
	Resources destroyed beyond recovery	3														



Technological Hazards

There are no deviations for Port St. Joe and Wewahitchka.

Risk Characteristics		Technological Hazards							
		Score	Gas service loss	Hazardous materials	Power loss	Radiological incident	Sewer service loss	Telecommunications system failure	Water service loss
Area Impacted	No developed area impacted	0							
	Less than 25% of developed area impacted	1		1	1	1			
	Less than 50% of developed area impacted	2	2				2		
	Less than 75% of developed area impacted	3							3
	Over 75% of developed area impacted	4						4	
Health and Safety Consequences	No health and safety impact	0							
	Few injuries or illnesses	1		1	1	1	1		1
	Few fatalities but many injuries or illnesses	2	2					2	
	Numerous fatalities	3							
Property Damage	No property damage	0				0		0	0
	Few properties destroyed or damaged	1	1	1	1		1		
	Few destroyed but many damaged	2							
	Few damaged but many destroyed	2							
	Many properties destroyed and damaged	3							
Environmental Damage	Little or no environmental damage	0	0		0			0	0
	Resources damaged with short term recovery	1					1		
	Resources damaged with long term recovery	2		2		2			
	Resources destroyed beyond recovery	3							
Economic Disruption	No economic impact	0							
	Low direct and/or indirect costs	1		1	1	1	1		
	High direct and low indirect costs	2							
	Low direct and high indirect costs	2							
	High direct and high indirect costs	3	3					3	3
TOTAL SCORE FOR NATURAL HAZARDS (Sum of value for Public Safety, Property Damage, Environmental Impact and Economic Disruption)			8	6	4	6	6	9	7

Probability or Frequency of Occurrence

Probability of Occurrence	Unknown but rare occurrence	1	1			1			
	Unknown but anticipate an occurrence	2							
	100 years or less occurrence	3							
	25 years or less occurrence	4		4			4	4	4
	Once a year or more occurrence	5			5				



TOTAL RISK RATING FOR EACH HAZARD

(Total Score for Tech Hazards) X (Score for Probability of Occurrence) =	8	24	20	6	24	36	28
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TOTAL RISK RATING FOR ALL TECHNOLOGICAL HAZARDS: 148
(Sum of Risk Ratings for Specific Hazards)



Societal Hazards

There are no deviations for Port St. Joe and Wewahitchka.

Risk Characteristics		Societal Hazards					
		Score	Crime	Civil Disturbance	Terrorism	Economic Crisis	Key Employer Crisis
Area Impacted	No developed area impacted	0					
	Less than 25% of developed area impacted	1	1	1			
	Less than 50% of developed area impacted	2					
	Less than 75% of developed area impacted	3			3	3	3
	Over 75% of developed area impacted	4					
Health and Safety Consequences	No health and safety impact	0				0	0
	Few injuries or illnesses	1		1			
	Few fatalities but many injuries or illnesses	2	2		2		
	Numerous fatalities	3					
Property Damage	No property damage	0				0	0
	Few properties destroyed or damaged	1	1	1	1		
	Few destroyed but many damaged	2					
	Few damaged but many destroyed	2					
	Many properties destroyed and damaged	3					
Environmental Damage	Little or no environmental damage	0	0	0	0	0	0
	Resources damaged with short term recovery	1					
	Resources damaged with long term recovery	2					
	Resources destroyed beyond recovery	3					
Economic Disruption	No economic impact	0	0				
	Low direct and/or indirect costs	1		1			
	High direct and low indirect costs	2					
	Low direct and high indirect costs	2					
	High direct and high indirect costs	3			3	3	3
TOTAL SCORE FOR NATURAL HAZARDS (Sum of value for Public Safety, Property Damage, Environmental Impact and Economic Disruption)			4	4	9	6	6

Probability or Frequency of Occurrence

Probability of Occurrence	Unknown but rare occurrence	1				
	Unknown but anticipate an occurrence	2			2	
	100 years or less occurrence	3		3		3
	25 years or less occurrence	4				
	Once a year or more occurrence	5	5			



TOTAL RISK RATING FOR EACH HAZARD

(Total Score for Societal Hazards) X (Score for Probability of Occurrence) =	20	12	18	18	18
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TOTAL RISK RATING FOR ALL SOCIETAL HAZARDS: 86
(Sum of Risk Ratings for Specific Hazards)

TOTAL RISK RATING FOR THE JURISDICTION FOR ALL HAZARD CATEGORIES: 611
(Sum of the total risk ratings for natural, technological and societal hazards)



Table # 4.41

Hazards by Risk Rating

Hazard	Risk Rating
Flooding	50
Storm Surge, Tsunami	40
Wildfire	40
Landslide, Erosion	40
High Winds	36
Drought	36
Telecommunications System Failure	36
Urban Fire	35
Infestation, Disease	35
Water Service Loss	28
Lightning	25
Hazardous Materials	24
Sewer Service Loss	24
Crime	20
Power Loss	20
Economic crisis	18
Key Employer Crisis	18
Terrorism	18
Winter Storm	16
Civil Disturbance	12
Hail	12
Gas Service Loss	8
Radiological Incident	6
Subsidence, Expansive Soils	3
Earthquake	0
Volcanic Activity	0



Repetitive Loss Properties

Another indication of the hazards threatening the county is the frequency with which properties are repeatedly damaged by disaster events. The properties, which may be buildings, roads, utilities, or similar construction, are termed "repetitive loss properties." Properties can fall into this classification based on repeated damages from a variety of hazards, and the repetitive loss properties identified in the county are listed in the report enclosed in this section, based on the cause of their prior repetitive losses.

A specific category of repetitive loss properties is those that are insured under the National Flood Insurance Program (NFIP), and have had repeated claims for flood loss damages. The county has had such properties designated and these are listed in a second repetitive loss property report included in this section.

Repetitive damage properties are properties insured with NFIP that have incurred two or more losses in excess of \$1,000. There are at numerous properties in the county that meet the NFIP designation of a repetitively damaged property. Twenty-three of the properties have suffered at least two losses while eight have suffered at least three losses. Cumulatively, these properties have recorded over \$1.2 million in damages over the last 20 years. A number of the repetitive damage properties have suffered structural losses in excess of 50% of their property value.

It is important for local officials to be aware that millions of dollars in funding have been made available by the State of Florida and the Federal government through the Hazard Mitigation Grant Program (HMGP), the Flood Mitigation Assistance Program (FMAP) and the Community Development Block Grant (CDBG) program to acquire or elevate repetitively damaged properties as they are responsible for a disproportionate share of flood damage nationwide. These programs provide the best opportunity for local officials to mitigate damage in flood prone areas, ensure an uninterrupted tax base, and diminish the burden placed upon local agencies in the pre-storm and post-storm environment.

Table # 4.42

Repetitive Damage Properties per NFIP as of 6/30/08

Property Number	Jurisdiction	Cumulative Damage		Total Losses	Total Paid
		Building	Contents		
1	Gulf County	\$121,336.49	\$19,737.15	6	\$141,073.64
2	Gulf County	\$78,824.54	\$0.00	2	\$78,824.54
3	Port St. Joe	\$23,248.88	\$8,120.20	3	\$31,369.08
4	Gulf County	\$38,623.24	\$4,832.86	3	\$43,456.10
5	Cape San Blas	\$114,301.00	\$500.00	2	\$114,801.00



6	Wewahitchka	\$24,105.70	\$1,703.58	2	\$25,809.28
7	Wewahitchka	\$9,172.14	\$0.00	2	\$9,172.14
8	Port St. Joe	\$19,351.46	\$9,566.22	2	\$28,917.68
9	Gulf County	\$18,623.95	\$0.00	3	\$18,623.95
10	Port St. Joe	\$10,133.22	\$3,879.52	2	\$14,012.74
11	Port St. Joe	\$16,019.65	\$7,278.09	2	\$23,297.74
12	Port St. Joe	\$110,355.58	\$20,123.44	4	\$130,479.02
13	Indian Pass	\$2,821.65	\$0.00	2	\$2,821.65
14	Gulf County	\$76,645.00	\$7,959.65	2	\$84,604.65
15	Highlandview	\$52,783.55	\$4,200.00	5	\$56,983.55
16	Wewahitchka	\$12,737.15	\$0.00	2	\$12,737.15
17	Wewahitchka	\$2,139.16	\$1,295.41	2	\$3,434.57
18	Wewahitchka	\$27,327.37	\$3,571.50	2	\$30,898.87
19	Gulf County	\$82,179.81	\$24,431.69	3	\$106,611.50
20	Highlandview	\$89,203.37	\$23,144.84	5	\$112,348.21
21	Port St. Joe	\$23,531.96	\$16,000.00	2	\$39,531.96
22	Port St. Joe	\$76,711.36	\$11,855.37	2	\$88,566.73
23	Gulf County	\$62,000.00	\$20,000.00	2	\$82,000.00
24	Wewahitchka	\$38,782.08	\$2,239.20	2	\$41,021.28
25	Bryant's Landing	\$50,481.44	\$6,311.50	2	\$56,792.94
26	Wewahitchka	\$14,300.00	\$0.00	2	\$14,300.00
27	Wewahitchka	\$28,862.76	\$0.00	2	\$28,862.76
28	Wewahitchka	\$22,455.27	\$0.00	2	\$22,455.27
29	Wewahitchka	\$14,417.49	\$10,000.00	3	\$24,417.49
30	Wewahitchka	\$54,819.85	\$13,317.10	2	\$68,136.95
31	Port St. Joe	\$27,465.34	\$14,561.60	2	\$42,026.94
32	Port St. Joe	\$28,975.30	\$0.00	3	\$28,975.30
33	Wewahitchka	\$12,642.65	\$0.00	2	\$12,642.65
34	Port St. Joe	\$9,274.47	\$1,723.49	2	\$10,997.96
35	Port St. Joe	\$313,304.57	\$60,000.00	3	\$373,304.57
36	Gulf County	\$37,164.40	\$6,797.10	2	\$43,961.50



37	Gulf County	\$70,000.00	\$5,000.00	2	\$75,000.00
38	Gulf County	\$37,710.33	\$8,458.47	2	\$46,168.80
39	Gulf County	\$94,293.42	\$0.00	3	\$94,293.42
40	Port St. Joe	\$7,881.04	\$0.00	2	\$7,881.04
41	Port St. Joe	\$51,511.61	\$47,374.58	2	\$98,886.19
42	Port St. Joe	\$37,695.62	\$6,666.26	2	\$44,361.88
43	Gulf County	\$56,992.85	\$5,300.00	2	\$62,292.85
44	Port St. Joe	\$18,092.58	\$2,605.83	2	\$20,698.41
45	Port St. Joe	\$25,163.06	\$4,106.35	2	\$29,269.41
46	Port St. Joe	\$12,601.23	\$8,481.62	2	\$21,082.85
47	Gulf County	\$18,100.66	\$0.00	3	\$18,100.66
48	Port St. Joe	\$13,061.72	\$0.00	2	\$13,061.72
49	Gulf County	\$167.71	\$2,880.36	2	\$3,048.07
50	Gulf County	\$47,462.54	\$14,445.76	2	\$61,908.30
51	Port St. Joe	\$8,753.68	\$0.00	2	\$8,753.68

Source: Federal Emergency Management Agency – National Flood Insurance Program

Critical Facilities

Critical facilities are facilities that are crucial to the maintenance of health, safety and welfare of the county and its residents and visitors. The facilities include essential services such as water wells and tanks; sewage plants; medical facilities; government buildings; fire departments; food stores; local law enforcement agencies and emergency service organizations necessary for responding to and recovering from a disaster. Given that nearly all development within the county is located within one mile of the coast, it is not surprising that many of the assets needed to help the community respond to and recover from a disaster are located in these areas as well. In fact, nearly two-thirds of the county's critical facilities are located in areas that are projected to be inundated by a category 3 hurricane. The vulnerable location of many of these assets places a great strain on the ability of the local governments to provide the services most needed in the aftermath of a major storm. From a planning perspective, it also makes sense to place critical facilities outside of the floodplain or other hazard zone, whenever possible.

The essential services these critical facilities provide make them excellent candidates for mitigation project funding. Indeed, the Hazard Mitigation Grant Program (HMGP), which funds hazard mitigation projects after a declared disaster, will consider the value of critical facilities provide to the community as a benefit when calculating the benefit-cost ratio for a proposed project.



For security purposes, the inventory of critical facilities has not been provided with the LMS. As a public document, this plan may be viewed by anyone. Thus, releasing a list of facilities that are vital to the county increases the vulnerability of these facilities to terrorism, crime and other acts of violence or sabotage. A database of the critical facilities is maintained by county's Emergency Management Department and is available by written request.

Future Vulnerability

In addition to profiling existing vulnerabilities and critical facilities, it is also important to describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in identified hazard areas in the LMS. Infrastructure and capital improvement projects are on going as funding becomes available and listed in Section 6: Compilation of Mitigation Initiatives. A number of large and small scale residential developments are being built within the county that are expected to increase the population, as well as the number of residents that may be faced with hazards. The county is currently taking administrative steps to ensure that substandard structures are not being built.



**SECTION
FIVE**

MITIGATION GOALS AND POLICIES

This section of the LMS describes the goals established by the Task Force and the current programs, policies and plans that support mitigation. In addition, a catalog of organizations with mitigation functions is provided.

Goals for the Mitigation Plan

The county has established a number of goals to guide its work in the development of this plan and focus the efforts of the group in the mitigation planning effort to achieve an end result that matches the unique needs, capabilities and desires of the participating jurisdictions. The goals selected by the Task Force for the planning process are those listed below in Table 5.1. They are related to the broad mitigation needs and capabilities of the communities involved, rather than addressing a specific hazard type or category. Therefore, the county's mitigation goals, by definition, are "multi-hazard" in scope and can be described as statements of the desired "mitigation-related capabilities" that will be present in each participating jurisdiction in the future as the goals are achieved." The following table, Table 5.2 demonstrates how these mitigation goals are reflected in other current policies.

In the planning approach used by the Task Force, the goals are established for the entire planning area and all of the participating jurisdictions in a process that can be described as follows: Each Task Force member was provided with a worksheet of potential county goals, extracted from other local planning documents and county's 1999 LMS. In an effort to solicit input from the general public regarding mitigation goals, attendees of the Task Force were asked to develop their own goals if they were not listed on the worksheet. Task Force members ranked each goal from most important to least important, omitting goals that should not be part of the LMS planning process or revising goal wording to suit the county's specific needs. Completed worksheets were returned to the Task Force support staff, which compiled the ranked goals. This approach clearly creates a framework for "goal-based" planning by the Task Force, focusing the group's efforts on proposing and implementing mitigation initiatives intended to achieve the mitigation goals established by the county and municipalities.

As the LMS is reviewed and updated by the Task Force the goals are also reviewed to ensure they are still applicable to meeting the unique needs, interests and desires of the county.

Table # 5.1

Ranked Mitigation Goals

Ranking	Goal
# 1	Protect the health, safety and welfare of the community's residents and visitors from disasters.



# 2	Support effective hazard mitigation programming throughout the community with local government policies and regulations.
# 3	Local government will have the non-delegable duty to develop, implement and maintain effective mitigation programs.
# 4	Minimize property damage to homes, institutions and places of employment in the community.
# 5	Maintain the condition of coastal and riverine environmental systems, especially those that provide natural protection and have economic value.
# 6	Maintain the availability and functioning of the community's infrastructure during a disaster.
# 7	Seek preventative measures that would reduce loss and the need for response and recovery measures.
# 8	Promote the economic vitality of the community.
# 9	Protect scenic, historical and recreational community resources.
#10	Promote community awareness of local hazards and the techniques to minimize vulnerability to those hazards.
# 11	Coordinate with other government agencies to enhance regional mitigation efforts.
# 12	Minimize government expenditures for public goods and services.
# 13	Maintain continuity of local government operations after disasters.
# 14	Maintain emergency response readiness.

Table # 5.2

Goals Identified in Existing Policy Objectives

Mitigation Goals as Policy Objective	Source
1. Protect the health, safety, and welfare of the community's residents and visitors from disasters.	
To protect human life and health;	Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}
The Primary objective of the Gulf County Comprehensive Emergency Management Plan is to minimize the loss of lives and property and to reduce human suffering resulting from any type of disaster, whether natural or man-made.	Gulf County Comprehensive Emergency Management Plan Objectives (Part I, Sect H, p. 22-23)



2. Support effective hazard mitigation programming throughout the community with local government policies and regulations.

...the unified development code...requires land development to be compatible with the topography, natural resources, soil conditions, and availability of facilities and services.	Comprehensive Plan, Land Use Element Objective 1.1
Gulf County will promote the redevelopment and renewal of blighted areas within the county by continuing to provide funding at or above existing levels for infrastructure improvements, housing rehabilitation, and related programs.	Comprehensive Plan, Land Use Element Objective 1.2
County shall endeavor to provide for safe, convenient, and efficient motorized and non-motorized traffic flow by implementing the policies of the Comprehensive Plan.	Comprehensive Plan, Traffic Circulation Element Objective 1.1
County will conserve its potable water resources...(by coordinating with NFWMD to develop conservation strategies, Policy 1.4.1, and by adopting procedures for emergency water conservation, Policy 1.4.2).	Comprehensive Plan, Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element. Objective 1.4

3. Local government will have the non-delegable duty to develop, implement, and maintain effective mitigation programs.

4. Minimize property damage to homes, institutions, and places of employment in the community.

to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas;	Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(6)
County will seek to eliminate substandard housing conditions and encourage the structural and aesthetic improvement of existing housing by adopting a minimum housing code.	Comprehensive Plan, Housing Element Objective 1.2
County will develop and implement a program for housing conservation, rehabilitation, or demolition as local conditions dictate.	Comprehensive Plan, Housing Element Objective 1.5

5. Maintain the condition of coastal and riverine environmental systems, especially those that provide natural protection and have economic value.



<p>County will protect the functions of natural groundwater recharge areas and natural drainage features...</p>	<p>Comprehensive Plan, Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element. Objective 1.5</p>
<p>Conventional septic tank systems shall be prohibited within 150 feet from coastal waters and wetlands (including salt marsh areas) within the Bayside area depicted on the revised Future Land Use Map, and shall be prohibited within 75 feet of coastal waters and wetlands (including salt marsh areas) within the Gulf side area depicted on the revised Future Land Use Map. Lots or parcels of record which existed prior to January 14, 1992, which cannot be developed without placement of the septic tank within the 150 foot setback, may be exempted from the 150 foot setback requirement, but the septic tank shall be placed as far landward as possible. The minimum setback distance for buffering other Gulf County wetlands or water bodies shall be 75 feet as required by Florida Statutes 381-.031</p>	<p>Septic Tank Setbacks{LDR 4.01.04(E), page IV-7}</p>
<p>The coastal resources of Gulf County, including wetlands, living marine resources, coastal barriers, and wildlife habitats shall be protected, conserved, or enhanced through the implementation of land development regulations...</p>	<p>Comprehensive Plan Coastal Management Element Objective 1.1</p>
<p>Gulf County shall maintain or improve estuarine environmental quality ...</p>	<p>Comprehensive Plan Coastal Management Element Objective 1.2</p>
<p>Gulf County shall develop and adopt criteria for prioritizing shoreline uses which give priority to water-dependent and water-related uses.</p>	<p>Comprehensive Plan Coastal Management Element Objective 1.3</p>
<p>Gulf County shall protect beach and dune systems by preparing, adopting and enforcing construction standards which minimize the impacts of development on these systems and establishes a shoreline restoration policy.</p>	<p>Comprehensive Plan Coastal Management Element Objective 1.4</p>
<p>6. Maintain the availability and functioning of the community's infrastructure during a disaster.</p>	



County will ensure the provision of adequate drainage facilities to minimize adverse impacts from stormwater and stormwater runoff...	Comprehensive Plan, Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element Objective 1.6
7. Seek preventative measures that would reduce loss and the need for response and recovery measures.	
8. Promote the economic vitality of the community.	
to minimize prolonged business interruptions;	Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(4)
9. Protect scenic, historical and recreational community resources.	
Gulf County shall protect and restore natural and historic resources by implementing Policies 1.4.1 through 1.4.10 and by continuing to enforce existing regulations. (named resources include wellfields, aquifer recharge areas, areas subject to flooding, environmentally sensitive areas such as wetlands and floodplains, open spaces, and identified historic and archaeological resources).	Comprehensive Plan Land Use Element Objective 1.4
Gulf County will adopt land development regulations ... which encourage the protection or sensitive reuse of historic resources.	Comprehensive Plan Coastal Management Element Objective 1.6
10. Promote community awareness of local hazards and the techniques to minimize vulnerability to those hazards.	
to insure that potential homebuyers are notified that property is in a flood area.	Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(7)
11. Coordinate with other government agencies to enhance regional mitigation efforts.	
12. Minimize government expenditures for public goods and services.	
to minimize expenditure of public money for costly flood control projects;	Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(2)
to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;	Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(3)



to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in the floodplains	Gulf County Floodplain Ordinance Objectives {LDR 4.04.01(C), page IV-9}(5)
13. Maintain continuity of local government operations after disasters.	
14. Maintain emergency response readiness.	

It can be seen from an examination of Table 5.2, that there are Mitigation Goals in the LMS that are not reflected in adopted county or municipal policy plans.

Organizations with Mitigation Functions

An essential part of getting things done is coordinating with others. This means knowing what agencies are available to help, what it is that those agencies do and how their operations are supposed to work with others. Tables 5.3, 5.4, 5.5 and 5.6 are lists of federal, state, regional and local organizations with descriptions of the mitigation functions they perform. Table 5.7 also catalogs utility companies in the area and indicates their infrastructure functions.

Table # 5.3

Federal Organizations and Mitigation Functions

Organization	Mitigation Functions
Federal Emergency Management Agency (FEMA)	Post-disaster relief and assistance, National Flood Insurance Program, Community Rating System, Hazard Mitigation Grant Program, Repair and Restoration of Disaster-Damaged Historic Properties program. Hazardous Materials Training Program for Implementation of the Superfund Amendment and Reauthorization Act makes funding available to provide training designed to improve emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals.
US Army Corps of Engineers	Intercoastal waterways, dam maintenance, dredge and fill permitting, wetland permitting, emergency protection from erosion caused by flooding.
US Department of Defense	Post-disaster relief and assistance.
US Department of Commerce	Small Business Administration loans for individual relocation and repair or floodproofing. Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements Program makes grants for enhancement of sustainable fishing industries.



US Department of Agriculture	Soil Conservation Service is a possible source for Wetland Reserve program, flood hazard studies, and levee infrastructure improvement funds. Rural Development program provides low cost loans to rural communities for public services and infrastructure.
US Environmental Protection Agency	Chemical Emergency Preparedness and Prevention Technical Assistance Grants Program provides funds for chemical accident prevention activities and emergency preparedness for chemical accidents. Pollution Prevention Grants Program provides grants to implement pollution prevention projects. Sustainable Development Challenge Grants encourage partnerships among community, business, and government entities to work cooperatively to develop flexible, locally-oriented approaches that link environmental management and quality of life activities with sustainable development and revitalization.
National Estuarine Research Reserve	Promotes preservation of the Port St. Joe River basin and estuary; Provides information on ecological health of estuary.
US Department of Housing and Urban Development	The Community Development Block Grant program (CDBG), although administered by the state, originates from the HUD. The CDBG program provides funds to local governments under a variety of programs (neighborhood revitalization, commercial revitalization, economic development, and housing rehabilitation). Congress may allocate additional funds for post-disaster recovery. All projects must benefit primarily (51%) low to moderate-income people.
General Services Administration	Disposal of Federal Surplus Real Property program provides equipment to local government at discounts up to 100%.

Table # 5.4

State Organizations and Mitigation Functions

Organization	Mitigation Functions
Governors Office of Planning and Budgeting	Review of federal assistance applications, intergovernmental coordination.
Florida Department of Community Affairs	Local planning assistance and review, comprehensive plan amendments and evaluation, disaster preparedness, response, recovery, and mitigation.
Florida Communities Trust Program	Provides financial and technical assistance to acquire lands that conserve natural resources, correct undesirable development patterns, restore degraded natural areas, enhance resource values, restore deteriorated urban



	waterfronts, reserve lands for later purchase, use innovative land acquisition methods, and provide public access to surface waters. Land acquisition grants, loans, and matching grants are available through the P-2000 program.
Florida Coastal Management Grants Program	Local governments within Florida's 35 coastal counties are eligible to apply for about \$1,200,000 for project subgrants for planning small-scale capital improvements, acquisition, and technical assistance.
Waterfronts Florida	Designated communities receive a combination of technical assistance and limited financial assistance for the purpose of developing a plan for revitalizing traditional working waterfronts.
Community Development Block Grant (CDBG)	Community project grants are awarded to applicants on a funds available basis according to a project score that depends on the degree the project benefits very low, low, and low to moderate-income populations within the community.
Emergency Management Preparedness and Assistance Trust Fund (EMPA)	Provides competitive grants to state or regional agencies, local governments, and private non-profit organizations to implement projects that will further state and local emergency management objectives.
State Housing Initiatives Partnership (SHIP)	Funding for improving local housing for low-income households.
Florida Department of Environmental Protection	Environmental studies, water facilities (stormwater, potable water, wastewater), wetland permitting, landfill permitting. Drinking or waste water system loans. Fisheries management.
Florida Department of Transportation	Local transportation planning assistance, long-term (five year) state transportation planning.
Florida Department of Health	Public health services, septic tank permitting.
Florida National Guard	Post-disaster relief and assistance
Florida Division of Forestry	Forest management, prescribed burning, fire-fighting, agricultural support, fire hazard awareness programs, burn permits, fire-fighting equipment, aerial surveillance equipment.
Flood Mitigation Assistance	Federally funded state program providing 75% of cost to elevate or relocate repetitively damaged properties in NFIP communities.



Table # 5.5

Regional Organizations and Mitigation Functions

Organization	Mitigation Functions
Apalachee Regional Planning Council (ARPC)	Local planning assistance, grant writing assistance, grant program administration.
Northwest Florida Water Management District (NFWMD)	Regional and local water studies/planning assistance, wetland permitting, dam/impoundment permitting. Payments in Lieu of Taxes Program provides compensation to counties
Local Emergency Planning Committee (LEPC)	Planning, regional coordination, education and awareness regarding hazardous materials public safety issues. LEPC is organized in conjunction with the Apalachee Regional Planning Council.
American Red Cross	Disaster planning, disaster awareness, disaster response training and post-disaster assistance.
Salvation Army	Post-disaster assistance

Table # 5.6

Local Organizations and Mitigation Functions

Organization	Mitigation Functions
City of Port St. Joe	Local land use planning, conduit for local hazard information, public works, drainage, sewer system, water system.
City of Wewahitchka	Local land use planning, conduit for local hazard information, water system, sewer system, local drainage maintenance.
County Planning and Community Development	Local land use planning, community development, conduit for local hazard information and community analysis.
County Planning and Building department	Enforcement of local building codes including anchoring of manufactured housing, registration of mobile homes, permit elevated of structures in flood zones, site review.
County Health Department	Medical laboratory, water testing, soil testing, immunizations, distributes health related information and emergency medical staff.
County EMS Department	Emergency medical technical services.
County Senior Citizens Association	Advocate for senior issues, conduit for information.
County School District	Placement of schools, use of schools as shelters.



County Sheriff's Office	Law enforcement, evacuation support, traffic control.
County Emergency Management Department	Coordination of local disaster preparation, response, recovery, and mitigation activities.
County Road and Public Works Department	Local road repair, bridge maintenance, culvert maintenance, debris removal, sewer maintenance, water system maintenance.
County Volunteer Fire Departments	Fire fighting and first responders to hazardous material spills.
County Extension Service	Information on how to prevent soil erosion.

Table # 5.7 Utility Companies and Infrastructure Functions

Utilities	Infrastructure Function
Gulf Coast Electric Coop	Electric
Progress Energy	Electric
West Florida Electric Inc	Electric and water
Gulf Aires Sewer System Inc	Wastewater system
Barrier Dunes Sewer System Inc	Wastewater system
Lighthouse Utilities Co	Drinking water system
Highland View Water System Inc	Drinking water system
St. Joe Beach Water System Inc	Drinking water system
Gulf Forestry Camp	Drinking water system

Plans, Programs and Policies Examination

Immediately following is a quick overview of the key policy issues with respect to mitigation that should be addressed in the LMS and eventually incorporated into the county's long-term planning process. Descriptions of Federal, State, regional, and local (county and city) policies that pertain to hazard mitigation can be found in Appendix D: Evaluation of Mitigation Policies. Although these policies exist in source plans and documents, they have been summarized as an accessible support to mitigation planning and funding. Many grant applications require that proposed projects conform to existing policies. Thus, these policy summaries can be used to find the policy support needed for a local project or initiative. These mitigation policies have also been evaluated in terms of how well they are being implemented within each jurisdiction. These evaluations can serve as a review of local mitigation policy implementation.



Evaluation of Local Policies Relating to Hazard Mitigation

Coastal High Hazard Area: The county's Comprehensive Plan, Coastal Element Policy 2.1.1 defines the Coastal High Hazard Area (CHHA) "as the area seaward of currently established CCCL and shall include FEMA designated V zones (V = velocity zone, the area where wave action is most destructive)." This definition of the CHHA is adequate for describing the most active area of the coast for the purposes of establishing where building codes must be most stringent to prevent the destruction of coastal structures from the wave action of coastal storms. However, it may be useful to consider other kinds of vulnerability. For example, the CHHA could be based on the evacuation zone of a category 1 hurricane. This would reflect the hazard posed by coastal flooding from a common low magnitude hurricane. Another possible enhancement could be a policy to review and update of CHHA after a hurricane to include areas where a high level of storm damage occurred. This review and revision process could also be part of the review and revision of the LMS.

Development in the Coastal High Hazard Area (CHHA): Land use within the CHHA has been consistent with Comprehensive Plan policies favoring location of water-dependent uses in the port area and low-density residential development (1 unit per acre) on Bay and Gulf front property. The problem areas for development are the high erosion areas of Cape San Blas (near Stump Hole or the area of the Cape where it takes a sharp turn westward towards the Cape San Blas State Park). The road in this area was washed out from Hurricane Opal and could be washed out again from any modest hurricane. The vulnerability of the road to erosion also affects all the property owners who live beyond this point. State building codes take into account the long-term erosion rates and should be adequate to establish building setbacks for new construction. However, some undeveloped lots in the Stump Hole area have already experienced erosion to the degree that the lots may not have sufficient setback space to legally build a useful structure. The county is looking into acquiring some of these lots to prevent land use that could accelerate erosion in this vulnerable area. There is a possibility that the peninsula could be breached eventually, which would require the construction of a bridge to continue road service to the far end of the Cape. In addition, some older existing housing on the Cape are vulnerable to long-term erosion. In terms of long-term planning, the county will face a choice between expensive beach re-nourishment projects to continually rebuild the beach that is lost to erosion, and facing additional loss of beachfront property.

Regarding vulnerable community assets, there is a need to mitigate (strengthen or relocate) two critical facilities existing in areas of the county subject to coastal flooding: The Highland View Elementary School and the telephone router in the FairPoint Communications Inc telephone building.

Local Development Codes: The county has implemented coastal development codes but has not imposed stricter standards than the state because it lacks the resources to



enforce regulations. Issues that need addressing and coordination with state agencies for remediation and mitigation are:

- Enclosure of the area underneath the elevated portion of coastal structures.
- Location and design of septic systems in erosion prone areas.
- Enforcement of stormwater permits.

From the county's point of view, these issues might be solved with more vigorous enforcement of state rules and permits by state agencies. Coordination between local governments and state agencies might improve the ability to understand the areas of jurisdiction and improve enforcement or implementation of existing policies.

Building Codes: Codes are implemented and enforced. A possible enhancement would be to extend the coastal building zone to encompass the entire coastal community. This zone currently extends 1,500' from the shore and buildings within this zone require a variety of specific building techniques (such as number of nails per foot and anchoring techniques) to make structures more weather resistant. Building in excess of 2000 square feet must also be engineered (certified by an engineer to meet minimum requirements for weather resistance). Extending the coastal building zone to the Gulf Canal would allow the zone to encompass the entire coastal community.

Post-Storm Redevelopment: There is not a specific post-storm redevelopment plan other than the usual provisions to favor particular land uses and avoid infrastructure and critical facilities in the CHHA. The LMS could identify specific mitigation measures and policies for post-storm redevelopment. In addition the LMS, or a portion thereof, could serve as the redevelopment portion of the county's Comprehensive Plan.

Flood hazards and Stormwater: Flood Insurance Rate Maps (FIRM) are not entirely accurate. Several designated C zones (areas of minimal flooding) are easily flooded.

Port St. Joe experiences stormwater or flash flooding during heavy rainfall along US Hwy 98, northern sections of the city, and in the Gulfview Pines area. Current stormwater regulations are minimal and the county relies on state enforcement of stormwater permits to address potential stormwater problems with respect to new development. However, state regulations only address larger developments (5 acres or more). A stormwater plan may be necessary as development accelerates to avoid or reduce additional localized flooding.

Evacuation: Policies exist for evacuation on St Rd 71. In practice, most evacuation coordination occurs through county's Board of County Commissioners and Emergency Management Department. The traffic capacity on St Rd 71 should be increased to facilitate the evacuation of residents from the county's coastal region. In addition, evacuation consideration needs to be given anticipation of future development in the county's coastal region.



Non-Flood Hazards: The county's Comprehensive Plan does not address non-flood hazards. Non-flood hazards are addressed in the County's Comprehensive Emergency Management Plan (CEMP) but no specific county-wide land use or development policies that consider mitigation of non-flood hazards exist. The LMS should identify policies to minimize non-flood hazards such as fire, hazardous materials, transportation accidents and severe wind.

Hazard Awareness: No policies substantially address hazard awareness, although the county's Emergency Management Department publishes hurricane and flooding awareness materials. Additional measures might include posting high water marks along river banks and shore lines, publishing insurance rates for improved building standards, and posting evacuation information in rental properties, resort properties and real estate sales contracts.



**SECTION
SIX**

COMPIATION OF MITIGATION INITIATIVES

This section of LMS contains the compilation of the mitigation initiatives that are the result of the earlier planning efforts by the Task Force. Typically, they will involve strengthening a structure against a hazard, elevating a structure above a flood hazard, relocating a structure away from a hazard, or removing the structure all together to avoid further damage. In addition, mitigation initiatives can be designed as local government actions or activities designed to reduce further exposure to hazards through policy, hazard information, or incentive. The Task Force chose to design mitigation initiatives that address hazards presenting a significant threat to the county's communities, NOT every hazard to which the county has vulnerability. The compilation is provided in two formats.

THE PLANNING PROCESS

Found in Table 6.1 is a complete listing of the current mitigation initiatives for the county sorted by their Priority Scores. Contained in the list are Project Description, Project Type, Jurisdiction, Lead Agency, Hazard Addressed, Priority Score, Date Proposed, and Current Implementation Status.

Table # 6.1

Proposed Mitigation Initiatives

Project # 1	Protect the shoreline where US Highway 98 washes out in the Highland View Community area and along the Constitution Drive area of Port St. Joe.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Storm Surge / Flooding
Priority Score	90
Date Proposed	9/99
Current Implementation Status	No action taken as of 9/1/09

Project # 2	Register and establish the Gulf County Citizen Corps.
Project Type	Education
Jurisdiction	Gulf County (unincorporated)



Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	90
Date Proposed	5/20/09
Current Implementation Status	No action taken as of 9/1/09

Project # 3	County wide beach re-nourishment and dune restoration with an emphasis on the Stump Hole and St. Joe Peninsula areas.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Administration
Hazard Addressed	Storm Surge / Flooding
Priority Score	88
Date Proposed	9/99
Current Implementation Status	No action taken as of 9/1/09

Project # 4	Mitigate the effects of severe winds and storm surge on local businesses that perform essential services.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Hurricane
Priority Score	80
Date Proposed	4/13/09
Current Implementation Status	No action taken as of 9/1/09



Project # 5	Ensure the county's Emergency Operations Center's (EOC) has the ability to support the needs of the county's residents, businesses and essential city and county services by maintaining state-of-the-art communications and operational support systems.
Project Type	Equipment
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	80
Date Proposed	2/04
Current Implementation Status	The County has applied for funding from the Hazard Mitigation Grant Program (HMGP).

Project # 6	Purchase and install back-up generators for local businesses that perform essential services.
Project Type	Equipment
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	80
Date Proposed	4/13/09
Current Implementation Status	No action taken as of 9/1/09

Project # 7	Acquire back-up generators for various mission essential critical facilities such and the future EMS building.
Project Type	Equipment
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management
Hazard Addressed	Multiple
Priority Score	80



Date Proposed	5/20/09
Current Implementation Status	No action taken as of 9/1/09

Project # 8	Conduct a shoreline erosion mitigation study to determine possible initiatives that can be undertaken to reduce future coastal erosion.
Project Type	Planning
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Planning Department
Hazard Addressed	Storm Surge
Priority Score	79
Date Proposed	4/10/09
Current Implementation Status	No action taken as of 9/1/09

Project # 9	Design and facilitate a Disaster Resistant Business initiative to educate local business owners on the need to be prepared for future disasters.
Project Type	Education
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	79
Date Proposed	4/13/09
Current Implementation Status	No action taken as of 9/1/09

Project # 10	Coordinate with Florida DOT and local land developers to move US Highway 98 away from the coast and to pave Parkwood Tram Road to be used as an alternate evacuation route for Highland View Area.
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Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Storm Surge
Priority Score	78
Date Proposed	9/99
Current Implementation Status	The County is currently working with the St. Joe Development Company regarding the evacuation of Highland View residents. Windmark residents will be able to use St Rd 386 as an alternative evacuation route by 2015.

Project # 11	Work with Florida DOT to build a storm-proof roadway through the Stump Hole area.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Storm Surge
Priority Score	78
Date Proposed	9/99
Current Implementation Status	No action taken as of 9/1/09

Project # 12	Mitigate flooding at the Gulf Pines Hospital sewage lift station.
Project Type	Construction
Jurisdiction	City of Port St. Joe
Lead Agency	Port St Joe Public Works
Hazard Addressed	Flooding
Priority Score	76
Date Proposed	10/99
Current Implementation Status	No action taken as of 9/1/09



Project # 13	Mitigate flooding at the Port St. Joe High School sewage lift station.
Project Type	Construction
Jurisdiction	City of Port St. Joe
Lead Agency	Port St Joe Public Works
Hazard Addressed	Flooding
Priority Score	76
Date Proposed	10/99
Current Implementation Status	No action taken as of 9/1/09

Project # 14	Increase capacity / replace 1,000 feet of stormwater drainage pipe along US Highway 98 near the bridge and Avenues A through F to prevent water backing up.
Project Type	Construction
Jurisdiction	City of Port St. Joe
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Flooding
Priority Score	76
Date Proposed	10/99
Current Implementation Status	No action taken as of 9/1/09

Project # 15	Acquire, relocate or elevate structures in highly flood prone and repetitively damaged areas.
Project Type	Buy Out / Relocate / Elevate
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Grants Department
Hazard Addressed	Flooding
Priority Score	76



Date Proposed	9/99
Current Implementation Status	No action taken as of 9/1/09

Project # 16	Mitigate the effects of severe winds and storm surge on low income owner occupied homes.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Community Development Council
Hazard Addressed	Hurricane
Priority Score	75
Date Proposed	4/13/09
Current Implementation Status	No action taken as of 9/1/09

Project # 17	Identify and plot all repetitively flood prone real estate parcels on the county's real property tax role.
Project Type	Planning
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Property Appraiser's Office
Hazard Addressed	Flooding
Priority Score	75
Date Proposed	5/20/09
Current Implementation Status	No action taken as of 9/1/09

Project # 18	Identify Gulf County District School facilities in need of hurricane shuttering and / or other structural mitigation initiatives.
Project Type	Planning
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County School District



Hazard Addressed	Multiple
Priority Score	75
Date Proposed	4/21/09
Current Implementation Status	No action taken as of 9/1/09

Project # 19	Require flood hazard disclosure in the deed for the sale or transfer of improved or unimproved property in the floodplain.
Project Type	Planning
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Administration
Hazard Addressed	Flooding
Priority Score	75
Date Proposed	4/21/09
Current Implementation Status	No action taken as of 9/1/09

Project # 20	Replace the back-up generator that serves City Hall, the Police Department and the Fire Station.
Project Type	Equipment
Jurisdiction	City of Port St. Joe
Lead Agency	Port St Joe Public Works Department
Hazard Addressed	Multiple
Priority Score	70
Date Proposed	
Current Implementation Status	Port St. Joe is currently seeking funding for this project.

Project # 21	Improve current efforts to remove dead, dying or diseased trees or branches next to roadways and power lines.
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Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Multiple
Priority Score	70
Date Proposed	4/21/09
Current Implementation Status	No action taken as of 9/1/09

Project # 22	Design and facilitate a household disaster resilience initiative to educate low income families to be prepared for future disasters.
Project Type	Education
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	70
Date Proposed	4/13/09
Current Implementation Status	No action taken as of 9/1/09

Project # 23	Develop a countywide stormwater management plan.
Project Type	Planning
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Planning Department
Hazard Addressed	Flooding
Priority Score	70
Date Proposed	2/04
Current Implementation Status	No action taken as of 9/1/09



Project # 24	Coordinate with the Florida DOT to add one or two additional lanes to St Rd 71.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Flooding
Priority Score	68
Date Proposed	9/99
Current Implementation Status	No action taken as of 9/1/09

Project # 25	Coordinate with Florida DOT to improve stormwater drainage in the Simmons Bayou area.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Flooding
Priority Score	68
Date Proposed	4/13/09
Current Implementation Status	No action taken as of 9/1/09

Project # 26	Elevate the back-up generator in Fair Point Communications Inc's telephone switching building.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Grants Department
Hazard Addressed	Flooding
Priority Score	68
Date Proposed	9/99



Current Implementation Status	No action taken as of 9/1/09
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Project # 27	Replace the existing 330 foot communications tower at the Courthouse Complex.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Flooding
Priority Score	68
Date Proposed	2/04
Current Implementation Status	No action taken as of 9/1/09

Project # 28	Replace the existing 330 foot communications tower at the Courthouse Annex in Wewahitchka.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Multiple
Priority Score	68
Date Proposed	5/20/09
Current Implementation Status	No action taken as of 9/1/09

Project # 29	Flood proof the city's sewerage system where cost effective.
Project Type	Construction
Jurisdiction	City of Wewahitchka
Lead Agency	Wewahitchka Public Works Department
Hazard Addressed	Flooding



Priority Score	68
Date Proposed	10/99
Current Implementation Status	No action taken as of 9/1/09

Project # 30	Retrofit the existing community center so that it can be used as a hurricane risk shelter.
Project Type	Construction
Jurisdiction	City of Wewahitchka
Lead Agency	Wewahitchka Public Works Department
Hazard Addressed	Hurricane
Priority Score	68
Date Proposed	10/99
Current Implementation Status	Current Implementation Status: This project is still pending. Wewahitchka is working with the St. Joe Company to prepare the center as a risk shelter.

Project # 31	Acquire and install back-up generators for the city's sewage lift stations.
Project Type	Equipment
Jurisdiction	City of Port St. Joe
Lead Agency	Port St Joe Public Works Department
Hazard Addressed	Multiple
Priority Score	68
Date Proposed	10/04
Current Implementation Status	No action taken as of 9/1/09.

Project # 32	Purchase and install a back-up generator for City Hall and the Fire Station.
Project Type	Equipment
Jurisdiction	City of Wewahitchka



Lead Agency	Wewahitchka Public Works Department
Hazard Addressed	Multiple
Priority Score	68
Date Proposed	10/04
Current Implementation Status	No action taken as of 9/1/09

Project # 33	Purchase and install back-up generators for the city's sewage lift stations.
Project Type	Equipment
Jurisdiction	City of Wewahitchka
Lead Agency	Wewahitchka Public Works Department
Hazard Addressed	Multiple
Priority Score	68
Date Proposed	10/04
Current Implementation Status	No action taken as of 9/1/09

Project # 34	Upgrade the city's water and sewage systems to meet or exceed the state and federal governmental requirements.
Project Type	Construction
Jurisdiction	City of Wewahitchka
Lead Agency	Wewahitchka Public Works Department
Hazard Addressed	Flooding
Priority Score	68
Date Proposed	10/04
Current Implementation Status	No action taken as of 9/1/09



Project # 35	Extend the city's sewage lines to Indian Pass in an effort to reduce or prevent repetitive damage to septic tanks and to improve water quality to local residents.
Project Type	Construction
Jurisdiction	City of Port St. Joe
Lead Agency	Port St. Joe Public Works Department
Hazard Addressed	Storm Surge
Priority Score	66
Date Proposed	10/99
Current Implementation Status	Intends to apply for a Community Development Block Grant (CDBG) with the aid of the County.

Project # 36	Extend city sewer lines to Beacon Hill to prevent repetitive damage to septic tanks.
Project Type	Construction
Jurisdiction	City of Port St. Joe
Lead Agency	Port St Joe Public Works Department
Hazard Addressed	Storm Surge
Priority Score	66
Date Proposed	10/99
Current Implementation Status	Intends to apply for a Community Development Block Grant (CDBG) with the aid of the County.

Project # 37	Improve the disaster resistance of existing site built housing stock.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Economic Development Council
Hazard Addressed	Multiple
Priority Score	65
Date Proposed	4/21/09



Current Implementation Status	No action taken as of 9/1/09
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Project # 38	Purchase and install Smoke Alarms in low-income homes.
Project Type	Equipment
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Fire Departments
Hazard Addressed	Fire
Priority Score	65
Date Proposed	4/17/09
Current Implementation Status	No action taken as of 9/1/09

Project # 39	Purchase and install a countywide telephone emergency notification system.
Project Type	Equipment
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	60
Date Proposed	2/04
Current Implementation Status	No action taken as of 9/1/09

Project # 40	Using the Gulf County Critical Facilities listing, identify facilities that need hurricane shuttering and / or other structural mitigation initiatives.
Project Type	Planning
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard	Multiple



Addressed	
Priority Score	60
Date Proposed	4/21/09
Current Implementation Status	No action taken as of 9/1/09

Project # 41	Stabilize the base of sandy clay roads throughout the county. This will lessen the possibility of damage due to flood events.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Flood
Priority Score	60
Date Proposed	8/12/09
Current Implementation Status	No action taken as of 9/1/09

Project # 42	In coordination with the Chamber of Commerce design and facilitate an ongoing offering of disaster education outreach activities targeting tourists, residents and business owners.
Project Type	Education
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	60
Date Proposed	2/04
Current Implementation Status	No action taken as of 9/1/09

Project # 43	Conduct Community Emergency Response Team (CERT) training for neighborhoods residents and high school students.
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Project Type	Education
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	4/17/09
Date Proposed	60
Current Implementation Status	No action taken as of 9/1/09

Project # 44	Funding to purchase two variable message boards.
Project Type	Equipment
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Grants Department
Hazard Addressed	Multiple
Priority Score	60
Date Proposed	4/28/09
Current Implementation Status	No action taken as of 9/1/09

Project # 45	Post signs indicating high-water marks in coastal and river flood hazard areas.
Project Type	Education
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Storm Surge / Flooding
Priority Score	58
Date Proposed	9/99

Current Implementation Status	The County has posted some of the high-water marks but this project has not been completed.
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Project # 46	Supply each real estate agency with a NOAA Weather Radio as part of an seasonal resident emergency notification system.
Project Type	Equipment / Education
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Emergency Management Department
Hazard Addressed	Multiple
Priority Score	58
Date Proposed	2/04
Current Implementation Status	No action taken as of 9/1/09

Project # 47	Extend the county's sewage and water service to the Overstreet area.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Wildfire
Priority Score	56
Date Proposed	2/04
Current Implementation Status	No action taken as of 9/1/09

Project # 48	Identify a location for a temporary landfill for storm debris storage.
Project Type	Research / Planning
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	High Winds
Priority Score	56
Date Proposed	7/01



Current Implementation Status	This project is still pending. Potential sites have been identified with the assistance of the St. Joe Company and Preble-Rish.
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Project # 49	Identify and purchase equipment needed for responding to a hazardous materials release.
Project Type	Planning
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Fire Departments
Hazard Addressed	Hazardous Materials
Priority Score	55
Date Proposed	4/21/09
Current Implementation Status	No action taken as of 9/1/09

Project # 50	Lengthen all bridges and replace pipe culverts with box culverts on Doc Whitfield Road to allow flood waters to flow under the road instead of over it. This will lessen the possibility of community isolation during flood events.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Flooding
Priority Score	55
Date Proposed	4/29/09
Current Implementation Status	No action taken as of 9/1/09

Project # 51	Replace pipe culverts with low water crossings and / or fords on Saul's Creek Road. This will lessen the possibility of road damage due to high volumes of water going through culverts
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	during flood events.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Flooding
Priority Score	55
Date Proposed	4/29/09
Current Implementation Status	No action taken as of 9/1/09

Project # 52	Replace pipe culverts with low water crossings and / or fords on Old Bay City Road. This will lessen the possibility of road damage due to high volumes of water going through culverts during flood events.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Flood
Priority Score	55
Date Proposed	8/12/09
Current Implementation Status	No action taken as of 9/1/09

Project # 53	Funding to upgrade guardrails to Florida DOT Standards.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Traffic
Priority Score	50
Date Proposed	4/28/09



Current Implementation Status	No action taken as of 9/1/09
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Project # 54	Funding to sandblast and paint all metal bridges.
Project Type	Construction
Jurisdiction	Gulf County (unincorporated)
Lead Agency	Gulf County Public Works Department
Hazard Addressed	Traffic
Priority Score	50
Date Proposed	4/28/09
Current Implementation Status	No action taken as of 9/1/09

Mitigation Initiatives Priority Score Process

Next, the initiatives are listed in Table 6.3 by the priority score assigned to each as a result of the common process to characterize and prioritize mitigation initiatives that is used by all participants in the planning process. This priority score is a long-term characterization value directly associated with each specific initiative based on its own merits at the time it was first proposed by the individual participant. The priority is intended to serve as a guideline for the Task Force regarding the relative desirability of implementation of a specific mitigation initiative in relation to the other proposed initiatives incorporated into the plan. Table 6.3 also provides the breakdown of the priority scores by criterion, including an estimated number of people who will benefit and cost to implement each initiative. These scores have been assigned according to the knowledge and discretion of the Task Force considering orders of magnitude not exact technical estimates.

Mitigation initiatives with higher point totals have higher priority. However, it would be a mistake to assume that only top priority initiatives should be considered for funding. High priority projects often require significant resources or money. In a post-disaster situation, for example after a hurricane, the amount of money available for hazard mitigation projects could be as little as \$30,000 or as much as \$1 million or more. Therefore, it is important to have initiatives with a range of costs that are rationally prioritized so that the jurisdictions can get the most value for the mitigation money they receive. Furthermore, simply because a mitigation initiative has high associated costs does not mean it is not cost effective. An initiative may yield significant benefits over the lifetime of the project that far outweighs the initial costs. In lieu of conducting formalized benefit-cost analyses, order of magnitude cost estimates were made by the



Task Force assuming that less expensive projects would be easier to obtain funding for and could be implemented more readily.

The mitigation initiatives were assigned priority scores based upon the following criteria according to the county's goals for local mitigation and the program funding requirements of FEMA:

- Number of people (from 1 to 10,000 or more) who will benefit.
- The risk rating, according to the community, for the addressed hazard.
- Immediate need or post-disaster priority.
- Enhancement of special needs population or promotion of hazard awareness.
- Reduction of risk to structures that have been repetitively damaged.
- Critical facility or infrastructure.
- Environmentally sound.
- Technically feasible.
- Cost effective.
- Encourage cooperation among government entities.

Table 6.2 shows the point awarding system for establishing a priority score for each mitigation initiative. The maximum priority score is 100.

Table # 6.2 **Priority Scoring for Mitigation Initiatives**

Criterion	Category	Scoring
Number of people who will benefit	10,000 or more	10
	1,000 or more	8
	100 or more	6
	10 or more	4
	1 or more	2
Risk rating of addressed hazard	40 or more	10
	30-39	8
	20-29	6
	10-19	4
	Less than 10	2
Immediate need or post-disaster priority	Yes	10
Enhancement of special needs population or promotion of hazard awareness.	Yes	10
Reduction of risk to structures that have been repetitively damaged.	Yes	10



Environmentally sound.	Yes	10
Critical facility or infrastructure.	Yes	10
Technically feasible.	Yes	10
Cost effective.	Yes	10
Encourage cooperation among government entities.	Yes	10

Note: Projects in the "No" category receive a score of 0 for that criterion.



Table # 6.3

Mitigation Initiatives by Priority Score

Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically Feasible	Cost Effective	Cooperation
Gulf County (unincorporated)											
Project # 1 Protect the shoreline where US Highway 98 washes out in the Highland View Community area and along the Constitution Drive area of Port St. Joe.	90	10	10	10	0	10	10	10	10	10	10
Project # 2 Register and establish the Gulf County Citizen Corps.	90	10	10	10	10	10	5	5	10	10	10
Project # 3 County wide beach re-nourishment and dune restoration with an emphasis on the Stump Hole and St. Joe Peninsula areas.	88	8	10	10	0	10	10	10	10	10	10
Project # 4 Mitigate the effects of severe winds and storm surge on local businesses that perform essential services.	80	10	10	5	5	10	5	10	5	10	10
Project # 5 Ensure the county's Emergency Operations Center's (EOC) has the ability to support the needs of the county's residents, businesses and essential city and county services by maintaining state-of-the-art communications and operational support systems.	80	10	10	10	10	0	10	10	10	10	0



Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically Feasible	Cost Effective	Cooperation
Project # 6 Purchase and install back-up generators for local businesses that perform essential services.	80	10	10	5	5	10	5	10	5	10	10
Project # 7 Acquire back-up generators for various mission essential critical facilities such and the future EMS building.	80	10	10	10	10	0	0	10	10	10	10
Project # 8 Conduct a shoreline erosion mitigation study to determine possible initiatives that can be undertaken to reduce future coastal erosion.	79	8	10	8	0	8	10	5	10	10	10
Project # 9 Design and facilitate a Disaster Resistant Business initiative to educate local business owners on the need to be prepared for future disasters.	79	8	10	8	0	10	5	8	10	10	10
Project # 10 Coordinate with Florida DOT and local land developers to move US Highway 98 away from the coast and to pave Parkwood Tram Road to be used as an alternate evacuation route for Highland View Area.	78	10	8	0	0	10	10	10	10	10	10
Project # 11 Work with Florida DOT to build a storm-proof roadway through the Stump Hole area.	76	8	8	0	0	10	10	10	10	10	10



Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically Feasible	Cost Effective	Cooperation
Project # 15 Acquire, relocate or elevate structures in highly flood prone and repetitively damaged areas.	76	6	10	10	10	10	10	0	10	10	0
Project # 16 Mitigate the effects of severe winds and storm surge on low income owner occupied homes.	75	5	10	10	10	10	0	0	10	10	10
Project # 17 Identify and plot all repetitively flood prone real estate parcels on the county's real property tax role.	75	5	10	10	5	5	5	5	10	10	10
Project # 18 Identify Gulf County District School facilities in need of hurricane shuttering and / or other structural mitigation initiatives.	75	5	10	10	10	0	0	10	10	10	10
Project # 19 Require flood hazard disclosure in the deed for the sale or transfer of improved or unimproved property in the floodplain.	75	10	10	5	10	10	0	0	10	10	10
Project # 21 Improve current efforts to remove dead, dying or diseased trees or branches next to roadways and power lines.	70	5	10	5	5	5	5	5	10	10	10
Project # 22 Design and facilitate a household disaster resilience initiative to educate low income families to be prepared for future disasters.	70	5	10	10	10	0	5	0	10	10	10



Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically feasible	Cost Effective	Cooperation
Project # 23 Develop a countywide stormwater management plan.	70	10	10	0	0	10	10	0	10	10	10
Project # 24 Coordinate with the Florida DOT to add one or two additional lanes to State Road Rd 71.	68	10	8	0	0	0	10	10	10	10	10
Project # 25 Coordinate with Florida DOT to improve stormwater drainage in the Simmons Bayou area.	68	4	10	5	0	7	8	4	10	10	10
Project # 26 Elevate the back-up generator in Fair Point Communications Inc's telephone switching building.	68	10	8	0	0	10	10	10	10	10	0
Project # 27 Replace the existing 330 foot communications tower at the Courthouse Complex.	68	10	8	10	0	0	10	10	10	10	0
Project 28 Replace the existing 330 foot communications tower at the Courthouse annex in Wewahitchka.	68	10	8	10	0	0	10	10	10	10	0
Project # 37 Improve the disaster resistance of existing site built housing stock.	65	10	10	5	5	5	0	0	10	10	10



Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically Feasible	Cost Effective	Cooperation
Project # 38 Purchase and install Smoke Alarms in low-income homes.	65	5	5	10	10	5	0	0	10	10	10
Project # 39 Purchase and install a countywide telephone emergency notification system.	60	10	10	0	10	0	10	0	10	10	0
Project # 40 Using the Gulf County Critical Facilities listing, identify facilities that need hurricane shuttering and / or other structural mitigation initiatives.	60	5	10	5	5	0	0	5	10	10	10
Project # 41 Stabilize the base of sandy clay roads throughout the county. This will lessen the possibility of damage due to flood events	60	10	5	10	0	5	0	0	10	10	10
Project # 42 In coordination with the Chamber of Commerce design and facilitate an ongoing offering of disaster education outreach activities targeting tourists, residents and business owners.	60	10	10	0	10	0	10	0	10	10	0
Project # 43 Conduct Community Emergency Response Team (CERT) training for neighborhoods residents and high school students.	60	5	10	5	5	0	5	0	10	10	10
Project # 44 Funding to purchase two variable message boards.	60	10	5	10	0	0	0	5	10	10	10



Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically Feasible	Cost Effective	Cooperation
Project # 45 Post signs indicating high-water marks in coastal and river flood hazard areas.	58	8	10	0	10	0	10	0	10	10	0
Project # 46 Supply each real estate agency with a NOAA Weather Radio as part of an seasonal resident emergency notification system.	58	10	8	0	10	0	10	0	10	10	0
Project # 47 Extend the county's sewage and water service to the Overstreet area.	56	8	8	0	0	0	10	10	10	10	0
Project # 48 Identify a location for a temporary landfill for storm debris storage.	56	8	8	0	0	0	10	10	10	10	0
Project # 49 Identify and purchase equipment needed for responding to a hazardous materials release.	55	5	5	5	5	0	0	5	10	10	10
Project # 50 Lengthen all bridges and replace pipe culverts with box culverts on Doc Whitfield Road to allow flood waters to flow under the road instead of over it. This will lessen the possibility of community isolation during flood events.	55	5	5	10	0	5	0	0	10	10	10



Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically Feasible	Cost Effective	Cooperation
Project # 51 Replace pipe culverts with low water crossings and / or fords on Saul's Creek Road. This will lessen the possibility of road damage due to high volumes of water going through culverts during flood events.	55	5	5	10	0	5	0	0	10	10	10
Project # 52 Replace pipe culverts with low water crossings and / or fords on Old Bay City Road. This will lessen the possibility of road damage due to high volumes of water going through culverts during flood events.	55	5	5	10	0	5	0	0	10	10	10
Project #53 Funding to upgrade guardrails to Florida Department of Transportation standards.	50	5	5	5	5	0	0	5	5	10	10
Project # 54 Funding to sandblast and paint all metal bridges.	50	5	5	5	5	0	0	5	5	10	10
Port St. Joe											
Project # 12 Mitigate flooding at the Gulf Pines Hospital sewage lift station.	76	6	10	10	0	10	10	10	10	10	0
Project # 13 Mitigate flooding at the Port St. Joe High School sewage lift station.	76	6	10	10	0	10	10	10	10	10	0



Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically feasible	Cost Effective	Cooperation
Project # 14 Increase capacity / replace 1,000 feet of stormwater drainage pipe along US Highway 98 near the bridge and Avenues A through F to prevent water backing up.	76	6	10	10	0	10	10	10	10	10	0
Project # 20 Replace the back-up generator that serves City Hall, the Police Department and the Fire Station.	70	10	10	10	0	0	10	10	10	10	0
Project # 31 Acquire and install back-up generators for the city's sewage lift stations	68	10	8	0	0	10	10	10	10	10	0
Project # 35 Extend the city's sewage lines to Indian Pass in an effort to reduce or prevent repetitive damage to septic tanks and to improve water quality to local residents.	66	8	8	0	0	10	10	10	10	10	0
Project # 36 Extend the city's sewer lines to Beacon Hill in an effort to reduce or prevent repetitive damage to septic tanks.	66	8	8	0	0	10	10	10	10	10	0
Wewahitchka											
Project # 29 Flood proof the city's sewerage system where cost effective.	68	8	10	0	0	10	10	10	10	10	0



Initiative Description	Scoring Criterion										
	Total Score	# People Benefiting	Risk Rating of Hazard	Need / Priority	Special Population	Repetitive damage	Environment	Critical Facility	Technically Feasible	Cost Effective	Cooperation
Project # 30 Retrofit the existing community center so that it can be used as a hurricane risk shelter.	68	8	10	10	0	0	10	10	10	10	0
Project # 32 Purchase and install a back-up generator for City Hall and the Fire Station.	68	8	10	10	0	0	10	10	10	10	0
Project # 33 Purchase and install back-up generators for the city's sewage lift stations.	68	8	10	10	0	0	10	10	10	10	0
Project # 34 Upgrade the city's water and sewage systems to meet or exceed the state and federal governmental requirements.	68	8	10	0	0	0	10	10	10	10	0



Completed Mitigation Initiatives

The implementation of the mitigation initiatives proposed as a result of the Task Force's planning process is an important measure of the progress in implementation of the county's LMS. As the participants in the planning are able to implement more and more of the proposed initiatives that have been incorporated into the LMS, the facilities, systems, and neighborhoods of the county can become more and more resistant to the impacts of future disasters. Table 6.4 lists the previous mitigation initiatives that have been completed at the time of the approval of this LMS.

Table # 6.4

Completed Mitigation Initiatives

Initiative Description	Date Proposed
Gulf County (unincorporated)	
Install shutters on critical facilities.	10/99
Move the coastal building zone wind load construction specifications inland from the coast.	10/99
Acquire undeveloped lots around Stump Hole for public beach access.	10/99
Build a new storm resistance Emergency Operations Center (EOC) for the county.	10/99
Retrofit the county's Health Department building.	10/99
Repave County Road 5.	7/01
Repave County Road 381.	Unsure
Improve Stormwater drainage at St. Joe Beach	Unsure
Extend sewage service to White City	Unsure
Retrofit the front entrance of the Sheriff's Office to withstand hurricane force winds.	Unsure
Collect topographic and elevation data using airborne Light Detection and Ranging (LIDAR) technology.	2/05
Port St. Joe	
Install shutters on critical facilities.	10/99
Improve stormwater drainage along US Highway 98 and Marina Drive.	10/99
Reinforce 8th Street bridge.	10/99
Reinforce Monument Avenue bridge.	10/99
Improve stormwater drainage along Battle Street between Avenue a and Avenue F.	10/99



Improve stormwater drainage from Fair Point Communications Inc's parking lot.	10/99
Improve stormwater drainage for Washington School Recreation Center.	10/99
Mitigate flooding at 10th Street sewage lift station	Unsure
Wewahitchka	
Install shutters on critical facilities.	10/99
Install back-up generator for the city's water system.	10/99
Install back-up generator for sewage treatment plant.	Unsure

Mitigation for New Buildings and Infrastructure

Many of the mitigation projects created by the Task Force attempt to remedy the vulnerability of existing buildings and infrastructure to current hazards. However, initiatives have been included to reduce the effects of hazards on new buildings and infrastructure. For example, the county would like to develop a stormwater management plan, potentially using funds from the Northwest Florida Water Management District. Hopefully, this initiative will be a positive step towards mitigating non-point pollution for the county's many water bodies, reduce runoff, and decrease damage to buildings. In addition, the entire county is undertaking initiatives to provide hazard awareness materials and workshops focusing on rip tide, weather conditions, and emergency situations through realtors and the Chamber of Commerce to tourists, new residents, business owners, builders and contractors. This effort may lead to greater preparedness by everyone involved with and affected by the county's development. Hazard and mitigation awareness may result in the implementation of better building practices by contractors and developers.

The Priority for Initiative Implementation

As a part of the planning process, the Task Force periodically reviews the proposed mitigation initiatives approved for incorporation into the plan. This assessment provides guidance to the individual jurisdictions and organizations proposing the initiatives. However, because each participating jurisdiction or organization has independent authority and responsibility for implementation of their proposed mitigation initiatives, they retain the prerogative to act in their own interests, using their own priorities for mitigation initiative implementation.

The Task Force has chosen not to establish an implementation priority for proposed mitigation initiatives beyond the aforementioned priority score. Implementation of an initiative depends heavily on a jurisdiction's current judgment of the situation and the likelihood of obtaining resources for mitigation initiative implementation. These resources may range from the normal budgeting process for the jurisdiction or



organization to seeking state or federal financial or technical support for implementation of the initiative. This priority for implementation may vary in time, depending on the conditions in the community, recent disaster experience, and similar factors. While generally it would be expected to consider the priority score assigned to each initiative, the priority for implementation will differ somewhat from strict application of the score, due to the importance of current conditions and circumstances in the community. Generally, implementation of an initiative begins as soon as financial resources are available.

Effectiveness of Mitigation Initiatives

Of course, the true measure of progress in the implementation of mitigation initiatives is their success in saving lives, avoiding property damage and protecting valuable or irreplaceable resources in the community. As the mitigation initiatives that have been incorporated into the county's LMS are implemented, there will be more opportunities to measure the "success" of the Task Force's mitigation efforts.

The best opportunity for measuring this success is to evaluate the community's experience with actual disasters and to attempt to estimate the number of lives that were saved by the implemented initiatives or the value of the property protected from disaster-related damage. Future updates of the LMS will provide such estimates of "mitigation success" based on recent disaster experience in the county. In addition, recent disaster events can be very helpful in highlighting the mitigation needs of the community based on the type, location, or magnitude of the impacts experienced. In turn, this can be a major factor in the future progress of implementation of the plan, as the Task Force considers and acts on actual disaster experience by the community. Future recommendations will be referred to a "lead" agency with the intention that the organization will use the information to propose additional mitigation initiatives for incorporation into the LMS.

The Task Force recognizes that it will take a long period of time and implementation of many if not all of the proposed initiatives approved for the LMS, to make the county a truly disaster-resistant community. However, the continuing dedication to the safety and welfare of the community shown by the participants in this planning process will make this ambitious goal possible.



This portion of Section 7 discusses the manner in which the LMS will continue to be implemented, maintained and updated over time. "Plan implementation" is considered as the implementation of the proposed mitigation initiatives now included in the LMS. "Plan maintenance" is considered to be the process by which the Task Force will continue to update, improve and expand the mitigation planning process. It also includes the technical analyses needed for the process to propose more mitigation initiatives for incorporation into the LMS. "Plan maintenance" further includes the group's activities to monitor implementation of the LMS, to evaluate the effectiveness of implemented mitigation initiatives, and to continually strive to engage the community in the disaster mitigation process. The basic elements of the Task Force's actions to implement and maintain the LMS are also described in the Task Force's operating procedures, given in Section 2: The Planning Process of the LMS.

Plan Implementation Responsibility and Schedules

As noted above, implementation of the LMS is basically through implementation of the approved mitigation initiatives incorporated into the LMS. As these initiatives are implemented over the years, the facilities, systems and neighborhoods of the participating jurisdictions will become less vulnerable to the impacts of future disasters, and the communities of the county will become increasingly more disaster resistant.

Pursuant to the developed planning process, the individual agencies and organizations that proposed the mitigation initiatives incorporated into the LMS are responsible for their implementation when the resources or opportunity to do so become available. As a practical matter, in most cases, this means that the proposing agencies identify the most feasible funding source (e.g., a State or Federal grant program, the agency's budgetary process, etc.), make application to the funding source or otherwise allocate funds and, upon receipt of funding, take the necessary steps to actually implement the project, whatever that may entail (e.g., design, permitting and construction, etc.). In other cases, this may mean that, should a unique opportunity for implementation of an initiative arise, e.g., upon receipt of unexpected funds, immediately after a disaster event, the agency can proceed with implementation of the initiative.

While the actual responsibility for implementation of a mitigation initiative remains the responsibility of the sponsoring agency, the Task Force as a multi-jurisdictional, cooperative organization has a substantial involvement in the implementation of the LMS and under the Task Force's approach, can assist with the coordinating and scheduling of the implementation of approved mitigation initiatives.

As a part of the planning process, approved mitigation initiatives included in the LMS are re-evaluated annually by the Task Force as to their continuing value and the need for their implementation. The purpose of this re-evaluation is to assure that a proposed



mitigation initiative remains a valuable component of the LMS, and whether any unique or unanticipated conditions warrant extra efforts to implement the initiative.

The Task Force has chosen not to assign priorities for implementation. Mitigation initiatives will be implemented as funding becomes available. Funding will be pursued for each project by the sponsoring agency, organization or jurisdiction as a part of their normal operations or activity scheduling.

The implementation of a mitigation initiative may be moved forward due to unique circumstances. For example, assume that the proposed mitigation initiatives included in the LMS with the highest priority score are for flood-related vulnerabilities, because this reflects the most normal concern for the planning area. However, also assume that long-range weather forecasts are for drought conditions, not flooding. This circumstance may warrant attempting to implement any drought-related mitigation initiatives included in the LMS as soon as feasible. Therefore, in this case, drought-related initiatives would be given higher priority until drought conditions have passed.

Conversely, implementation for some mitigation initiatives may be deferred. This means that the initiative is still a valid proposal, but that under present circumstances, its implement should be deferred until a future date, allowing the participating agencies to focus on higher priority initiatives. Also, some projects may be terminated, which means that, upon re-evaluation, the Task Force believes the initiate to not longer be needed or beneficial, and that it should be removed from the LMS.

Plan Maintenance and Monitoring of Plan Implementation

Mitigation planning is a dynamic process that must be continually adjusted to account for changes in the community and to further refine the information, judgments and proposals documented in the LMS. The process used by the Task Force to maintain the LMS consists primarily of four functions.

The first is to continue to expand and improve the LMS by accomplishing additional technical analyses, such as vulnerability assessments, evaluation of the policy framework of the participating jurisdictions, and post-event analysis of disasters, etc. The second is to continue to expand participation in the planning process by soliciting the involvement of additional agencies from the participating jurisdictions, by implementing public information programs, and by inviting expanded participation by the private sector. The third is to routinely monitor implementation of the initiatives in the LMS until each is completed and in-place, and to assess their actual effectiveness following the next relevant disaster event. The fourth is to issue an updated LMS for use by the participating jurisdictions, to inform the community, and when appropriate for submittal to State and Federal agencies for approval pursuant to the Disaster Mitigation Act of 2000. This portion of Section 7 describes these four activities by the Task Force to maintain the LMS.



The technical analyses conducted by the participating jurisdictions will be an ongoing effort to continually assess the hazards threatening the community, the vulnerabilities to those hazards, and the adequacy of the participating jurisdictions policy and program framework to control those vulnerabilities. When indicated, the technical analysis also includes formulating proposed mitigation initiatives to eliminate or minimize the identified vulnerabilities. In the next planning cycles, the Task Force will continue to assess the vulnerabilities of critical facilities, repetitive loss properties, and the jurisdictions to stated hazards. Vulnerability assessments are fundamental to identifying needed mitigation initiatives to propose for incorporation into the LMS, and as this process is continued, additional mitigation initiatives will be proposed for incorporation into the LMS.

Another technical analysis important to maintenance of the LMS is the expanded and refined evaluation of the policy and program framework of the participating jurisdictions and the adequacy of this framework to control the vulnerabilities of the community. To date, the current comprehensive land use plans, land development codes, general policies of the participating jurisdictions have been assessed in detail. As the plans are updated, the LMS will also be revised to reflect these changes. During the next planning cycle, the Task Force participants intend to expand the analysis of the policy and program framework. The emphasis of this LMS maintenance activity during the upcoming planning cycle will be to evaluate the effectiveness of mitigation affiliated policies, the adequacy of their enforcement, and recommend modifications.

The second type of activity to continue to maintain the LMS will be to continue to expand participation in the Task Force and the mitigation planning process. The current participants in the planning and the level of their participation are addressed in Section 2: The Planning Process of the LMS. Gaining additional participation in the planning is also part of the public information and community outreach component of the Task Force's approach to LMS development. The specific public information activities that are directly related to expanding participation in the mitigation planning are listed under the "Continued Public Involvement" heading of this section. The Task Force has planned these activities to expand participation in the planning through active involvement of additional local agencies, community groups, and private sector interests as partners in the planning.

The third category of LMS maintenance activities that will be undertaken by the Task Force will be to monitor the implementation of mitigation initiatives by the participating jurisdictions and their agencies. The Task Force will document the efforts to fund the initiative, to conduct required studies, and to obtain any needed permits, as well as to estimate the time remaining to complete design, needed studies and purchasing or construction. When an initiative is completed, this fact is noted in the program as well. The current status of initiative implementation has been discussed in Section 6: Compilation of Mitigation Initiatives and the Task Force will again update this section for the next publication of the LMS.



As a part of monitoring the implementation of mitigation initiatives, following a disaster and as a part of the post-event analysis that the Task Force will conduct, the effectiveness of completed mitigation initiatives, or any pre-existing mitigation initiatives, in reducing the human and economic impacts of the event can be estimated. As time passes and disaster events occur, this will enable the Task Force to accumulate a database of "mitigation success stories" with regard to the value of the property losses avoided and the number of fatalities, injuries or illnesses prevented. Recent disaster events have been so evaluated and documented in Section 4: Hazards and Vulnerabilities, while a report of the mitigation initiatives is included in Section 6: Compilation of Mitigation Initiatives, is documentation of this planning effort and the success of the mitigation actions of the participants.

Monitoring of the effectiveness of LMS implementation and maintenance also involves assessing the effectiveness of the mitigation goals established for the planning process. As noted in Section 5: Mitigation Goals and Policies, the Task Force established general goals to guide the participants in the mitigation planning process. The Task Force's attempts to achieve the associated mitigation goals for the community, is a key measure of the effectiveness of the continuing LMS maintenance and implementation. As these initiatives are implemented, and monitored for their effectiveness in future disasters, the Task Force will be able to determine the overall success of their mitigation planning effort. In future planning cycles, these goals will be reviewed and re-evaluated to ensure they are still relevant to the unique needs of the community and continue to address current and expected conditions.

The fourth category of LMS maintenance activities is to actually incorporate the results of all technical analyses, including the development of new mitigation initiatives, and to publish another, updated edition of the LMS.

Plan Updating, Review and Approval

The maintenance and revision process is in recognition of the likelihood of change and the need to refine the strategy over time. Furthermore, it is a requirement of the county's Comprehensive Emergency Management Plan (CEMP) to address hazard mitigation and to review the CEMP on an annual basis.

The LMS should be revised at least annually to ensure that it remains current and reflects changing conditions within the community. In order to ensure that the local mitigation strategy remains updated, the county's Emergency Management Department personnel have agreed to review and revise the strategy annually as part of the CEMP annual review. To assist in this process, the Task Force developed the following procedures.

Each Year Prior to June 30:

1. Update hazard maps and history, if needed.
2. Update list of mitigation programs and policies, if needed.



3. Revise list of mitigation initiatives, including the removal of completed or unnecessary projects, proposal of new initiatives, and prioritization of remaining projects.
4. Conduct preliminary cost-benefit analysis for projects that are technically feasible, potentially cost effective, and environmentally sound.
5. Obtain grant applications for mitigation funding programs.
6. Submit revised LMS for public review and adoption by governing bodies of the county and the cities of Port St Joe and Wewahitchka.

After a Declared Emergency:

1. Obtain information regarding the availability of and requirements for Hazard Mitigation Grant Program (HMGP), Community Development Block Grants (CDBG) and any other special post-disaster funding.
2. Identify suitable projects for HMGP, CDBG and any other special post-disaster funding from the existing list of initiatives and add any new projects identified.
3. Incorporate recommendations of the State Mitigation Task Force into the LMS.
4. Prioritize projects and apply for funding for those projects that have the highest priority and the greatest likelihood of being funded.
5. Keep list of any new projects identified to add to annually revised list of mitigation initiatives.
6. Keep narrative and financial records of community and repetitive damage for updating hazard history.

To correspond with many mitigation and government grant cycles, the new planning period is to begin June 30. The schedule for the upcoming planning cycle is included in Table 7.1 at the end of this section. In addition to the start date for the planning cycle, this planning timeline also documents the intended deadlines for completion of key activities. The planned date for release of the next edition of the LMS is intended to be June 30, 2010. The Task Force has agreed to meet annually (at a minimum) in order to regularly update the LMS. As necessary, the county's Emergency Management Department staff will make minor revisions to the document and contact the Task Force for meetings.

At the conclusion of the planning cycle, a draft of the updated LMS will be prepared and distributed for public comment and input. The draft will be placed in a public archive, advertised for a specified review period, and discussed at a public hearing. A planning process following similar procedures to those detailed in Section 2: The Planning Process will be used to receive public commentary on the update LMS. Each update will then be provided to State and Federal agencies, if desired, for review, comment and / or approval. Formal LMS approval by the governing bodies of the participating jurisdictions will be provided upon issuance of an updated LMS.



Status of Plan Promulgation

Promulgation of the LMS is a very important step in assuring its implementation through the implementation and actual functioning of the mitigation incorporated into it. The LMS is formatted to place all of the jurisdiction-specific information into discussions throughout this document. Jurisdiction-specific information has been developed through the efforts of the personnel representing the corresponding individual jurisdiction or organization participating in the planning process.

It is the expectation of the Task Force that governing body or executive leadership of each participating jurisdiction or organization will review, consider, and act on the information provided in the LMS. If the governing body acts in a positive manner, this is basically an approval or endorsement of the proposed mitigation initiatives. This approval or endorsement, with or without modification by the governing body, represents both consent and commitment by the representatives of that organization or jurisdiction to seek the resources needed to implement the priority initiatives contained therein. In addition, resolutions signed by each jurisdiction have been included with this document as approval of the LMS and inter-agency agreement to implement its initiatives. Only through actual implementation of the proposed mitigation initiatives contained in the LMS can it actually help to make the county a disaster resistant community.

Implementation through Existing Plans and Programs

One of the methods to most effectively implement the LMS is to propose and implement initiatives that will modify other community plans, policies, and programs. In Section 6: Compilation of Mitigation Initiatives, each jurisdiction proposed initiatives that would, when implemented, modify or improve these other plans, policies, and programs.

Particular highlights of the Task Force's efforts to implement the LMS through other plans and programs include updates to the comprehensive future land use plans of the county, Port St. Joe and Wewahitchka. During the updating process, both of these documents will be revised to limit development in hazard areas, etc. In addition, the county will draft a stormwater management plan which, when approved, will minimize the damage done to the community by stormwater flooding. These examples demonstrate that each participating jurisdiction is committed to incorporating mitigation principles and concepts into their normal operations and activities via their existing planning and programming responsibilities.

Continued Public Involvement

The Task Force will continue efforts to develop and implement a year-round program to engage the community in the mitigation planning process and to provide them with mitigation-related information and education. These efforts will be to continually invite public comments and recommendations regarding the mitigation goals for the



community, the priorities for the planning, and the unique needs of each community for mitigation-related public information. A copy of the LMS will be posted to the internet making access to this important documents easily accessible to the residents of the county. LMS issues will be discussed at the county's Planning and Development Review Board meetings to update the public on LMS issues while receiving public commentary. Each of these activities continues to engage the community in the planning process through the presentation of a specific topic or program related to, or relevant for, hazard mitigation.

Past efforts to engage the community in the mitigation planning process are detailed in Section 2: The Planning Process of this document. These efforts will be continued in the future. Input received via the internet and Task Force members will be recorded and brought for consideration at the annual Task Force meeting. Any revisions that have the support of the Task Force will be submitted as an amendment to the LMS to the applicable jurisdiction's county or city commission for approval. Upon approval, the amendment will be integrated into the LMS at the earliest opportunity. Approved mitigation initiatives may be implemented as soon as they are approved.

The Next Planning Cycles

As given in this section, the Task Force has established a schedule and procedure for both LMS implementation and LMS maintenance that is expected to be very helpful in improving and expanding the mitigation planning process. Initially, the planning efforts by the jurisdictions will seek to build on the analyses and proposals included in this edition of the LMS, primarily by completing more vulnerability assessments, evaluations of plans and programs, and proposing additional mitigation initiatives. Eventually, after a number of planning cycles with ongoing new analyses, all important facilities and vulnerable neighborhoods within all of the participating jurisdictions will have been evaluated and the mitigation planning effort can enter more of a normal maintenance and implementation mode. During these continuing efforts, the Task Force will prioritize its efforts towards assessing all critical facilities and expanding information about known hazard areas.

The LMS is a dynamic document, reflecting a continuing and expanding planning process. The efforts of the Task Force will continue into the future, striving to make all of the jurisdictions in the county truly disaster resistant communities.

Modification to Other Policies, Plans and Programs

Finally, it is the intention of the Task Force to continue to improve the existing policy framework for the participating jurisdictions so that they will be able to more effectively manage the community's vulnerabilities to future disasters. An analysis of the current policy framework is included in Section 5: Mitigation Goals and Policies of this document. Any shortfalls in the number of policies addressing identified higher risk hazards can be addressed by implementing non-structural initiatives intended to modify



or enhance current plans, policies, and programs. The Task Force's approach enables organizations proposing initiatives to associate them, if applicable, with the plans or policies to be changed. These are reported on a jurisdiction-by-jurisdiction basis. The proposed modifications to the listed policies and programs are additional documentation of the Task Force's efforts to achieve its established goals.

The following procedures have been outlined by the Task Force to resolve conflicts arising from the modification of other policies or the development of the LMS:

1. The Task Force will follow the guidelines contained in the Intergovernmental Coordination Element of the county's Comprehensive Plan before beginning any hazard mitigation initiative in the final LMS. This includes contacting and coordinating mitigation strategies with agencies within the county, adjacent local governments and any regional, State and / or Federal agencies that are likely to be affected by the initiative or having jurisdiction and / or permit authority over the initiative. In addition, the county, along with the cities of Port St. Joe and Wewahitchka request to be informed of agency or neighboring government's actions that may affect community health, safety and welfare.
2. If any agency or government body undertakes an initiative that is inconsistent with the LMS, the agency or government body should be notified by a representative of the local government and informed of the inconsistency. Conflicts or complaints against an agency outside of the county will be expressed in writing and delivered to the agency in question with a request to a timely and fair response.
3. Should a conflict arise during the coordination of mitigation strategies as discussed above that cannot be resolved through continued coordination and discussion, the Task Force may request to use the Apalachee Regional Planning Council's dispute resolution process.

The county's Planning Department will be responsible for processing of complaints made to the county. Complaints can be addressed to:

- Planning Department
Gulf County
1000 Cecil G Costin Blvd # 301
Port St. Joe FL 32456
Phone # 850/229-8944

The City Clerk will be responsible for processing complaints made to the City of Port St. Joe. Complaints can be addressed to:

- City Clerk
City of Port St Joe
P O Box 278
Port St. Joe FL 32457



Phone # 850/229-8261

The City Clerk / Manager will be responsible for processing complaints made to the City of Wewahitchka. Complaints can be addressed to:

- City Manager
City of Wewahitchka
P O Box 966
Wewahitchka Fl 32465
Phone # 850/639-2605

All complaints should be filed within forty-five (45) days of the alleged incident. Upon receipt of the complaint, notice of the same will be provided to the agency, department, individual or company against whom the complaint has been filed, as applicable within 15 days. A copy of the complaint will be forwarded to the county's Emergency Management Department for consideration.

The government clerk or manager receiving the complaint will investigate and provide written answers to complaints and grievances within 45 days of their receipt. Should the conflict remain unresolved after the steps detailed above have been taken, the local government receiving the complaint or the Task Force may request to use the Apalachee Regional Planning Council's (ARCP) dispute resolution process. If the ARPC's assistance is requested, a letter requesting assistance and copies of all complaints and responses will be sent to:

- Executive Director
Apalachee Regional Planning Council
20776 Central Ave E # 1
Blountstown Fl 32424
Phone # 850/674-4571



Table # 7.1 Meeting Schedule and Activities for LMS Maintenance

Activity by Group		
Time Period	Task Force	
Month	Support Staff	
1	<ul style="list-style-type: none"> Review current LMS and identify portions that require updating. 	<ul style="list-style-type: none"> Review participant list and continue to solicit additional involvement as indicated. Strive for active involvement by each jurisdiction. Review committee membership list and make adjustments as indicated. Compile and review comments received on last LMS issued.
2		<ul style="list-style-type: none"> Receive and process any proposed mitigation initiatives.
3		<ul style="list-style-type: none"> Update LMS web site and send articles to the chambers of commerce.
4	<ul style="list-style-type: none"> Review status of organizational and jurisdictional participation and progress in completion of the needed technical analyses; Make recommendations to support staff of the additional involvement to solicit. 	
7	<ul style="list-style-type: none"> Review schedule for finalization of next LMS. Review current progress in initiative and LMS implementation. 	<ul style="list-style-type: none"> Establish final deadline for receipt of any mitigation initiatives for incorporation into the LMS.



10	<ul style="list-style-type: none"> • Review draft LMS. 	<ul style="list-style-type: none"> • Finalize data entry regarding all technical analyses and proposed mitigation initiatives • Prepare, print, and distribute draft edition of the LMS.
11	<ul style="list-style-type: none"> • Meet to review, discuss, and approve release of draft LMS 	<ul style="list-style-type: none"> • Schedule and support meeting
12	<ul style="list-style-type: none"> • Secure approval or adoption of final LMS issued by participating jurisdictions governing bodies 	<ul style="list-style-type: none"> • Prepare and release final LMS, adjusted in accord with directions of the Task Force. • Submit updated data to the state on request.



**APPENDIX
A**

TASK FORCE BYLAWS

This appendix provides supplementary information for Section 2: The Planning Process.

Article I

Purpose of the Task Force

The purpose of the Task Force is to decrease the vulnerability of the citizens, governments, businesses and institutions of the county to the future human, economic and environmental costs of natural, technological and societal disasters. The Task Force will develop, monitor, implement and maintain a comprehensive plan for hazard mitigation, which will be intended to accomplish this purpose.

Article II

Membership

Participation in the Task Force is voluntary by all entities. Membership in the Task Force is open to all jurisdictions, organizations and individuals supporting its purposes.

Article III

Organizational Structure

The organizational structure of the Task Force shall consist of the Task Force, county support staff and other temporary subcommittees as deemed necessary by the Task Force.

A

Task Force

The Task Force shall consist of designated representatives of the following:

- Representatives from the government of Gulf County and the cities of Port St. Joe and Wewahitchka.
- Representatives from organizations and associations representing key business, industry and community interest groups from throughout the county.
- Other such individuals.

Members of the Task Force will be designated by informal resolution, appointment or other action to serve as the official representative and spokesperson for the jurisdiction or organization regarding the activities and decisions of the Task Force.

B

Subcommittees

Temporary subcommittees may be established at any time for special purposes by the chair of the Task Force, and their membership designated at that time.



Membership in the subcommittees is not restricted. There are no requirements for individuals to maintain good standing as members of a permanent or temporary subcommittee.

C Support Staff

The Gulf County Emergency Management Department serves as the program staff for the Task Force, and assists in the coordination and support of the Task Force's activities.

Article IV Officers

Any member in good standing of the Task Force is eligible for election as an officer. The Task Force will have a chair elected by a majority vote of a quorum of the members. The Task Force will also elect by majority vote a vice chair. Representatives of both local government and any participating private sector organizations will be eligible for election as an officer. Each will serve a term of one year, and be eligible for re-election for an unlimited number of terms.

The chair of the Task Force will preside at each meeting of the Task Force, 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.

The chair of each permanent or temporary subcommittee will be designated from the members in good standing of the Task Force by its chair, and will serve at the pleasure of the chair of the Task Force.

Article V Responsibilities

A Task Force

The Task Force will be responsible for oversight and coordination of all actions and decisions by the Task Force, and is solely responsible for formal actions in the name of the Task Force, including the release of reports, development of resolutions, issuance of position papers, and similar activities. The Task Force makes assignments to the subcommittees, coordinates their work and takes action on their recommendations.

In addition, the Task Force will have the following responsibilities:

Planning – To identify, analyze and monitor the hazards threatening the county and the vulnerabilities of the community to those hazards, as well as to assist in the definition of actions to mitigate the impacts of those hazards; to define structural and non-structural actions needed to decrease the human, economic and environmental impacts of disasters, and to prepare for consideration and action by the Task Force a strategy for



implementation of those initiatives in both the pre- and post-disaster time frame; to define the general financial vulnerability of the community to the impacts of disasters; to assist with identification of initiatives to minimize vulnerabilities; and to seek funding sources for all priority mitigation initiatives identified in the mitigation strategy developed by the Task Force.

Public Information – To secure public input and comment on the efforts of the support staff; to inform the public about the activities of the Task Force; to conduct public information and education programs regarding hazard mitigation; to assist with the conduct of public hearings; and to promote public acceptance of the strategy developed by the Task Force.

The responsibilities of temporary subcommittees will be defined at the time they are established by the chair of the Task Force.

B

The Task Force

Technical, clerical and other types of support activities to the Task Force and subcommittees will be provided through the county or other agency or organizational staff as designated by the Task Force. The Task Force will also designate an agency of county to serve as the legal representative and agent of the Task Force, and to be empowered under county statutes 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 Task Force. Other jurisdictions and organizations may also provide such services on a voluntary basis upon request of the chair of the Task Force.

Article VI

Actions by the Task Force

A

Authority for Actions

Only the Task Force has the authority to take final actions in the name of the Task Force. Actions by subcommittees or program staff are not considered as final until affirmed by action of the Task Force.

B

Meetings, Voting and Quorum

Meetings of the Task Force and its subcommittees will be conducted informally but may be carried out in accord with Robert's Rules of Order, if and when deemed necessary by chair of the meeting. Regular meetings of the Task Force will be scheduled at least quarterly with a minimum of 10 working days' notice. Subcommittees will meet at least quarterly prior to Task Force meetings, or more frequently as deemed necessary, at the discretion of their chairperson.

All final actions and decisions made in the name of the Task Force will be by affirmative vote of a quorum of the Task Force. A quorum shall be 50 percent of the members of



the Task Force in good standing at the time of the vote. Each member of the Task Force will have one vote. Voting by proxy, written or otherwise, is not permitted.

C

Special Votes

Special votes may be taken under emergency situations or when there are other extenuating circumstances that are judged by both the chair and vice chair of the Task Force to prohibit scheduling of a regular meeting of the Task Force. Special votes may be by telephone, e-mail and / or first class mail, and shall be in accord with all applicable statutes for such actions.

D

Public Hearings

When required by statute or the policies of the county, or when deemed necessary by the Task Force, a public hearing regarding actions under consideration for implementation by the Task Force will be held. All formal Task Force meetings will be conducted as public hearings.

E

Documentation of Actions

All meetings and other forms of action by the Task Force and permanent subcommittees will be documented and made available for inspection by the public.

Article VII

Adoption of and Amendments to the Bylaws

The Bylaws of the Task Force may be adopted and / or amended by a two-thirds majority vote of the members in good standing of the Task Force. All proposed changes to the bylaws will be provided to each member of the Task Force not less than ten working days prior to such a vote.

VIII

Dissolution of the Task Force

The Task Force may be dissolved by affirmative vote of 100% of the members in good standing of the Task Force at the time of the vote, by order of a court of competent jurisdiction, and / or by instruction of the county's governing body. At the time of dissolution, all remaining documents, records, equipment and supplies belonging to the Task Force will be transferred to the county for disposition.



This appendix provides supplementary information for Section 2: The Planning Process.



Local Mitigation Strategy Task Force Meeting Scheduled

NOTICE OF PUBLIC MEETING

For Immediate Release

Date: February 25 2009

Public Notice is hereby given that the Gulf County Local Mitigation Strategy (LMS) Task Force will hold a public meeting on Tuesday March 17 2009 at the Gulf County Emergency Operations Center located at 1000 Cecil G Costin Sr Blvd # 500 in Port St Joe at 3:00PM. The purpose of this meeting is to organize the Local Mitigation Strategy Task Force in preparation for the annual update and begin working on the re-submittal of the Local Mitigation Strategy for Gulf County.

Gulf County in coordination with the City of Port St Joe, the City of Wewahitchka, the LMS Task Force and various members of the community developed a Local Mitigation Strategy in 1999. An update to the plan was issued to bring the Local Mitigation Strategy into compliance with the local hazard mitigation requirements of Section 322 of the Disaster Mitigation Act of 2000. The plan update was approved by FEMA in 2004. The current Local Mitigation Strategy approval will expire in 2010. The Local Mitigation Strategy is a plan developed with input from the community, business and industry and local government to guide and promote hazard mitigation activities in Gulf County. Actions include planning to reduce or eliminate long-term risks to people and property, the environment and financial investments and to manage post-disaster recovery. The plan must be updated and reviewed annually and re-submitted in total every five years to address the federal guidance promulgated as a result of the Disaster Mitigation Act of 2000.

Gulf County Emergency Management is requesting the participation of members of the public as well as community and business leaders to help review and implement the LMS. While Emergency Management will coordinate the plan, it is anticipated that there will be three LMS Task Force meetings to be held within the next several months to review the plan and provide input on projects and priorities.

If there are any questions or comments regarding this meeting, please contact Emergency Management at 850/229-9110. Written comments can be mailed to: 1000 Cecil G Costin Sr Blvd # 500 Port St Joe FL 32456

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GULF COUNTY EMERGENCY MANAGEMENT
1000 Cecil G Costin Sr Blvd
Port St. Joe, Florida 32456

Email: mnelson@gulfcountry-fl.gov
Web Site: www.gulfcountry-fl.gov

Voice: (850) 229-9110
Fax: (850) 229-9115

March 4, 2009

Gulf County LMS Task Force,

We would like to take this opportunity to extend an invitation to you to participate as a member of the Gulf County Local Mitigation Strategy (LMS) Task Force.

Gulf County is threatened by a number of different types of natural, technological, and societal or man-made hazards. These hazards endanger the health and safety of the population of the county, jeopardize its economic vitality, and imperil the quality of its environment. Because of the importance of avoiding or minimizing the vulnerabilities to these hazards, the public and private sector interests of Port St. Joe, Wewahitchka, and unincorporated Gulf County are joining together to reassemble the Task Force to update "The Gulf County Local Mitigation Strategy (LMS)."

In 2004 the Gulf County LMS Task Force conducted detailed studies to identify the hazards threatening the jurisdictions of Port St. Joe, Wewahitchka, and unincorporated Gulf County and has estimated the relative risks posed to the community by those hazards. This information has been used by the Task Force to assess the vulnerabilities of the facilities and jurisdictions of Gulf County to the impacts of disasters involving those hazards. With these identified, the Task Force has worked to identify proposed projects and programs that will avoid or minimize these vulnerabilities to make the communities of Gulf County more resistant to the impacts of future disasters.

These proposed projects and programs aimed at reducing the impacts of future disasters are termed "mitigation initiatives". Mitigation initiatives have been developed by the Task Force for implementation whenever the resources become available. The list of mitigation initiatives have been updated as projects are undertaken and completed, when disasters have affected the county, when new needs are identified, and as local priorities have changed.

Attached is a meeting schedule. The first meeting will be at 3:00pm ET on Tuesday, March 17, 2009 at the Gulf County Emergency Operations Center (EOC), located at 1000 Cecil G. Costin, Sr. Blvd., Bldg. 500, Port St. Joe, FL. We look forward to seeing you there.



As always, if you have any questions or need additional information please call me at (850) 229-9110.

Sincerely,

Marshall Nelson, FPEM, Director

Event	Date / Time	Location
Post to LMS Web	3/6/09 5:00PM	N/A
LMS Task Force Meeting	3/17/09 3:00PM	Gulf County EOC
LMS Task Force Meeting	4/23/09 3:00PM	Gulf County EOC
LMS Public Hearing	5/20/09 6:00PM	TBD
Final Draft	6/8/09 5:00PM	N/A





Gulf County Local Mitigation Strategy Task Force Meeting

March 12, 2009 - 9:35AM

The Gulf County Local Mitigation Strategy (LMS) Task Force will hold a public meeting at 3 p.m. ET on Tuesday, March 17 at the Gulf County Emergency Operations Center located at 1000 Cecil G. Costin, Sr. Blvd. 500 in Port St. Joe. The purpose of this meeting is to organize the Local Mitigation Strategy Task Force in preparation for the annual update and begin working on the re-submittal of the Local Mitigation Strategy for Gulf County.

Gulf County in coordination with the City of Port St. Joe, the City of Wewahitchka, the LMS Task Force and various members of the community developed a Local Mitigation Strategy in 1999. An update to the plan was issued to bring the Local Mitigation Strategy in compliance with the local hazard mitigation requirements of Section 322 of the Disaster Mitigation Act of 2000. The plan update was approved by FEMA in 2004. The current Local Mitigation Strategy approval will expire in 2010. The Local Mitigation Strategy is a plan developed with input from the community, business and industry and local government to guide and promote hazard mitigation activities in Gulf County. Actions include planning to reduce or eliminate long-term risks to people and property, the environment and financial investments and to manage post-disaster recovery. The plan must be updated and reviewed annually and re-submitted in total every five years to address the federal guidance promulgated as a result of the Disaster Mitigation Act of 2000.

Gulf County Emergency Management is requesting the participation of members of the public as well as community and business leaders to help review and implement the LMS. While Emergency Management will coordinate the plan, it is anticipated that there will be three LMS Task Force meetings to be held within several months to review the plan and provide input on projects and priorities.

If there are any questions or comments regarding this meeting, please contact the Office of Emergency Management at 850-229-9110. Written comments can be mailed to: 1000 Cecil G. Costin, Sr. Blvd., Building 500, Port St. Joe, FL 32456.



Gulf County Local Mitigation Strategy Task Force Meeting Agenda March 17 2009 3:00PM EDT



Welcome

Introductions

LMS Task Force Structure

- Chairman, Vice-Chairman etc...

LMS Web

LMS Renewal Date 3/17/2010

LMS Review / Revision Schedule

Event	Date / Time	Location
LMS Task Force Meeting	3/17/09 3:00PM	Gulf County EOC
LMS Task Force Meeting	4/23/09 3:00PM	Gulf County EOC
LMS Public Hearing	5/20/09 6:00PM	Gulf County EOC
Final Draft	6/8/09 5:00PM	N/A

Review LMS Crosswalk Process

Review Revised LMS Submittal Process

Review Mitigation Initiatives

Open Discussion



Gulf County Local Mitigation Strategy Task Force Meeting Minutes March 17 2009 3:00PM EDT



The meeting of the Gulf County Local Mitigation Strategy Task Force was held at the county's Emergency Operations Center in Port St Joe Fl. The meeting began shortly after 3:00PM EDT with all meeting participants introducing themselves.

The following individuals representing various governmental and non-governmental organizations participated

Name	Agency	E-Mail
Donald Minchew	City of Wewahitchka	citywewa@fairpoint.net
Scott Warner	Gulf County / GIS Department	swarner@gulfcountry-fl.gov
Ben Guthrie	Gulf County / Emergency Management Department	bguthrie@gulfcountry-fl.gov
David Garner	City of Port St Joe / Police Department	dgarner@psj.fl.gov
David Barnes	City of Port St Joe / Police Department	dbarnes@psj.fl.gov
Marshall Nelson	Gulf County / Emergency Management Department	mnelson@gulfcountry-fl.gov
Bobby Knee	Gulf County / Road Department	
John Grantland	City of Port St Joe	jgrantland@psj.fl.gov
Gerald Shearer	Gulf County / Public Works Department	gshearer@gulfcountry-fl.gov
Towan Kopinsky	Gulf County / Grants Department	tkopinsky@gulfcountry-fl.gov
David Richardson	Gulf County / Planning Department	drichardson@gulfcountry-fl.gov
Tom Williams	Salvation Army	tom_williams@uss.salvationarmy.org
Patricia Hardman	Coastal Community Assoc	gulftobay@fairpoint.net



Chris Floyd	DRC Group	floydchris@aol.com
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After the introductions Chris Floyd was introduced as the individual who will be leading the Task Force through the revision and up-date process. Chris is with the Disaster Resistant Communities Group in Tallahassee.

A brief review of the Task Force By-Laws was facilitated by Chris Floyd. During this review Chris pointed out the need for the Task Force to elect a Chairman and Vice-Chairman. Following a short discussion, Marshall Nelson was nominated as the Chairman and Ben Guthrie was nominated as the Vice-Chairman. A vote by all of the participants was held with both Marshall and Ben being confirmed as Chairman and Vice-Chairman.

Chris Floyd then presented a short overview of the process that the Task Force will be working through over the next several months. These processes include:

1. A thorough review of the current Local Mitigation Strategy to ensure it is in compliance with the July 2008 FEMA Local Multi-Hazard Mitigation Planning Guidelines.
2. The revision of identified portions of the Local Mitigation Strategy not meeting current FEMA guidelines.
3. The evaluation of the current listing of Proposed Mitigation Initiatives to determine which have been completed as well as to identify new initiatives that will need to be ranked and added to the strategy.
4. A series of meetings that will be undertaken as the strategy is reviewed and up-dated. The current schedule of meetings follows:

Event	Date / Time	Location
LMS Task Force Meeting	4/23/09 3:00PM	Gulf County EOC
LMS Public Hearing	5/20/09 6:00PM	Gulf County EOC
Final Draft	6/8/09 5:00PM	N/A

5. Post the strategy to LMS WEB an internet web site. Posting the strategy on the internet will allow for enhance public participation in the review process as well as permit the Task Force and the general public to make comments and recommendations on how the strategy can be enhanced.

With the current strategy expiring in 3/17/2010 the Task Force will need to deliver a final draft of the up-dated strategy to the Florida Department of Community Affairs (DCA) by mid September. This will give DCA and FEMA the necessary time to review and approve the final draft before the current strategy expires.



Marshall Nelson then led the participants through a preliminary analysis of the current Proposed Mitigation Initiatives contained in the strategy. During this analysis a number of the initiatives were removed as having been completed and changes were made to several more.

In an effort to have the Task Force members look beyond the norm for new initiatives, Chris Floyd suggested that all of the members review the Proposed Mitigation Initiatives contained in the Leon and Bay County Local Mitigation Strategies. It was agreed that this would be a good thought provoker. Chris will obtain copies of both strategies and share them with the Task Force in an electronic format.

The meeting was adjourned at 4:32PM EDT



Local Mitigation Strategy Task Force Meeting Scheduled

NOTICE OF PUBLIC MEETING

For Immediate Release

Date: April 10 2009

Public Notice is hereby given that the Gulf County Local Mitigation Strategy (LMS) Task Force will hold a public meeting on Thursday April 23 2009 at the Gulf County Emergency Operations Center located at 1000 Cecil G Costin Sr Blvd # 500 in Port St Joe at 3:00PM. The purpose of this meeting is for the Local Mitigation Strategy Task Force to continue with its review and revision of the county's Local Mitigation Strategy (MS).

A copy of the Working Draft version of the county's Local Mitigation Strategy can be found at the following web site:

www.drc-group.com/lms/florida/gulf

By placing the county's Local Mitigation Strategy on the internet, the Gulf County Emergency Management Department has made it easy for the county's residents and business owners to access this important disaster planning document.

According to Marshal Nelson, Gulf County Emergency Managers, "The reason for placing the Working Draft copy of the LMS on the internet is to give the county's residents an opportunity to make comments on the strategy and to offer new ideas on how to enhance Gulf County's disaster preparedness".

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Local Mitigation Strategy Task Force Meeting

April 16, 2009 - 9:09AM

Public Notice is hereby given that the Gulf County Local Mitigation Strategy (LMS) Task Force will hold a public meeting at 3:00PM EDT on Thursday, April 23, 2009 at the Gulf County Emergency Operations Center located at 1000 Cecil G Costin Sr Blvd # 500 in Port St Joe. The purpose of this meeting is for the Local Mitigation Strategy Task Force to continue with its review and revision of the county's Local Mitigation Strategy (LMS).

A copy of the Working Draft version of the county's Local Mitigation Strategy can be found at the following web site:

www.drc-group.com/lms/florida/gulf

By placing the county's Local Mitigation Strategy on the internet, the Gulf County Emergency Management Department has made it easy for the county's residents and business owners to access this important disaster planning document.

According to Marshall Nelson, Gulf County Emergency Management Director, "The reason for placing the Working Draft copy of the LMS on the internet is to give the county's residents an opportunity to make comments on the strategy and to offer new ideas on how to enhance Gulf County's disaster preparedness".



Gulf County Local Mitigation Strategy Task Force Meeting Agenda April 23 2009 3:00PM EDT



Welcome

Introductions

Gulf County Local Mitigation Strategy Web Site:

- Working draft copies of the various sections and appendixes are constantly posted web site.
- The general public has access to the planning process and can make comments and submit ideas for Mitigation Initiatives via the web site.
- The URL for the web site is: www.drc-group.com/lms/florida/gulf

Involving the general public in the planning process by promoting the Local Mitigation Strategy web site via:

- E-mail list serves
- Web Linkage
- Newsletters

Review of working draft copies of selected sections and appendixes of the Local Mitigation Strategy.

- Section 6 – Compilation of Mitigation Initiatives (This will enclose current and proposed initiatives)
- Section 4 – Hazards and Vulnerability

LMS Review / Revision Schedule

Event	Date / Time	Location
LMS Public Hearing	5/20/09 6:00PM	Gulf County EOC
Final Draft	6/8/09 5:00PM	N/A

Open Discussion



Public Input E-Mail Template



The purpose of this template is to provide a simple message that can be e-mailed to various community organizations, businesses and governmental agencies list-serves regarding community involvement in county's Local Mitigation Strategy review and revision process.

Public input on how the county should prepare itself, its residents and its businesses is vital to enhancing the Local Mitigation Strategy and making Gulf County a "Disaster Resistant Community".

All that is required to use this template is to copy and paste the **A** **A** and the **A** **A** into your e-mail send window.

Subject

Gulf County Disaster Planning Initiative

Message Text

Gulf County is in the process of enhancing its ability to respond to the next disaster and is in need of your help.

As part of this process the county is up-dating its Disaster Preparedness Strategy.

As a resident of the county it is important that you provide your comments regarding the strategy as well as offer recommendations on how individuals, families, neighborhoods and businesses as well as city and county governments can become as prepared as possible for future disasters.

Please log onto the strategy's web site listed below and provide your thoughts and ideas as to how Gulf County can become better prepared for the next disaster.

Disaster Preparedness Strategy web site:

www.drc-group.com/lms/florida/gulf

Thanks for your help in preparing Gulf County for the next disaster.

Marshall Nelson

Gulf County Emergency Management Department



Gulf County Local Mitigation Strategy Task Force Meeting Minutes April 23 2009 3:00PM EDT



The meeting of the Gulf County Local Mitigation Strategy Task Force was held at the county's Emergency Operations Center in Port St Joe Fl. The meeting began shortly after 3:00PM EDT with all meeting participants introducing themselves.

The following individuals representing various governmental and non-governmental organizations participated.

Name	Agency	E-Mail
Scott Warner	Gulf County / GIS Department	swarner@gulfcountry-fl.gov
Mark Cothran	Gulf County / Mosquito Control Department	mcothran@gulfcountry-fl.gov
Lee Collinsworth	Gulf County / Building Department	lcollinsworth@gulfcountry-fl.gov
George Knight	Gulf County / Building Department	gknight@gulfcountry-fl.gov
Ben Guthrie	Gulf County / Emergency Management Department	bguthrie@gulfcountry-fl.gov
David Barnes	City of Port St Joe / Police Department	dbarnes@psj.fl.gov
Marshall Nelson	Gulf County / Emergency Management Department	mnelson@gulfcountry-fl.gov
Bobby Knee	Gulf County / Road Department	gcrd@gtcome.net
Towan Kopinsky	Gulf County / Grants Department	tkopinsky@gulfcountry-fl.gov
David Richardson	Gulf County / Planning Department	drichardson@gulfcountry-fl.gov
Chris Floyd	DRC Group	floydchris@aol.com

After the introductions Marshall Nelson turned the meeting over to Chris Floyd.

Chris then began a review of the Gulf County LMS web site which can be found at:



The web site was designed to provide an informational platform of the review and revision process of the county's LMS. It has two primary purposes:

- First it serves as a means by which members of the LMS Task Force can monitor the changes being made to the various sections and appendixes of the LMS.
- Second by being on the internet residents and business owners within Gulf County have an opportunity to monitor the revision process and to offer their comments and ideas regarding the county's disaster preparedness and mitigation planning activities.

Chris stated that as portions of the LMS were reviewed and up-dated they were being posted to the web site and the date of the Working Draft was being changed accordingly. By doing this the Task Force members could review the most current version of the LMS at any given time.

In an effort to gain public support and involvement for the LMS review and revision process Chris presented a plan to inform the county's residents of the LMS web site via a media and e-mail campaign.

Discussion regarding the campaign brought to light several additional resources that could be utilized to spread the message throughout the county. These resources will be utilized in the weeks to come to involve as many individuals a possible in the LMS revision process.

Chris then proceeded to review "Section 4 – Hazards and Vulnerability" of the LMS. This 109 page section contains the important historical and antidotal information on the disasters that have occurred in the recent past and those that currently threaten Gulf County.

Much of this section has been up-dated to reflect current data. However assistance from the county's GIS and Planning Departments were solicited to finish the up-date of this section of the LMS.

The next phase of the meeting involved the review of "Section 6 – Compilation of Mitigation Initiatives". Chris began to lead the Task Force through the current and proposed mitigation initiatives.

During this process Chris discussed the change in format and available information for the mitigation initiatives listing. All the Task Force members agreed that the changes were a good idea. As the review continued Task Force members became bogged down in some of the aspects of the review process. Chris agreed to conduct additional



research and bring a combined current and proposed mitigation initiatives list back to the Task Force for a final review and adoption.

To gain greater participation in the LMS review process Chris recommend that the final Task Force meeting be facilitated via a webinar. This would allow Task Force members to access the meeting from their office computer. The proposed date for this meeting can be found listed below in the remaining LMS review and revision timeline.

LMS Review and Revision Timeline

Event	Date / Time	Location
LMS Task Force Webinar Meeting	5/20/09 1:00PM	On-Line
LMS Public Hearing	5/20/09 6:00PM	Gulf County EOC
Final Draft	6/8/09 5:00PM	N/A

The meeting was adjourned at 4:17PM EDT



This appendix provides supplementary information for Section 2: The Planning Process.

Procedure 1.0**Background and Purpose**

The Task Force was established to identify and recommend projects and programs that, when implemented, would eliminate, minimize, or otherwise mitigate the vulnerability of the people, property, environmental resources and economic vitality of the community to the impacts of future disasters. These identified projects and programs are termed “mitigation initiatives” and constitute the principal component of the LMS. The fundamental purpose of the LMS is to guide, coordinate and facilitate the efforts of the agencies, organizations and individuals participating in the Task Force as they seek funding, authorities or other resources necessary for implementation of the identified mitigation initiatives.

The Task Force has established an organizational structure to support its operations, and has adopted bylaws that govern the membership and functioning of the group. To complement these bylaws, these procedures have been prepared to define how this organizational structure identifies, evaluates and processes the mitigation initiatives needed to reduce the community’s vulnerability to future disasters. The procedures identify the steps through which newly proposed mitigation initiatives are evaluated and coordinated among the participants in the Task Force, and then incorporated into the LMS. The procedures also define how the local mitigation plan will be routinely updated, enhanced and maintained in the future.

Procedure 2.0**Overview of the Procedure**

This procedure defines the fundamental operations by the Task Force to develop, expand and maintain the LMS, including the following:

- Support of the organization and its operations.
- Identification of the natural, technological and societal hazards threatening the community.
- Evaluation of the human, economic and environmental vulnerabilities to those hazards.
- Assessment of the existing framework of policies, plans and requirements of the community as related to the capability to eliminate, reduce or mitigate the community’s vulnerabilities to the identified hazards.
- Identification, characterization, justification and prioritization of new initiatives to eliminate, reduce or mitigate the community’s vulnerabilities.
- Evaluation and coordination of new mitigation initiatives by the Task Force.



- Resolution of conflicts between participants in the planning regarding proposed mitigation initiatives and their implementation.
- Incorporation of mitigation initiatives into the plan for future implementation.
- Coordination of the implementation of mitigation initiatives in the LMS.
- Periodic review of the status of implementation of the initiatives incorporated into the LMS and assessment of their priority for the ensuing planning period.
- Preparation and distribution of updated editions of the LMS to the community for review and adoption by the jurisdictions and organizations represented on the Task Force.

Procedure 3.0

Development and Maintenance of the Task Force's Organization

The categories and types of participants that are eligible for membership in the Task Force are specified in the bylaws. Participants in the Task Force include many different types of agencies, organizations and individuals, such as government agencies, regional authorities, community and neighborhood groups, business associations, private businesses and industries, local institutions, and even interested individuals.

Organizational participants in the Task Force have the following duties:

- The county Emergency Management Department will serve as support staff for the Task Force and LMS.
- To assign individuals to serve as agency or organizational representatives on the Task Force.
- To have these representatives attend meetings and contribute to the discussions and decision making conducted by the Task Force.
- To provide expertise, information or perspective on the identification and definition of hazards threatening the community.
- To conduct technical evaluations of the vulnerabilities of the facilities, systems, neighborhoods, operations and / or valuable resources for which they are responsible or otherwise depend upon.
- To identify, characterize, prioritize and propose for incorporation into the LMS various structural and non-structural mitigation initiatives that would eliminate, reduce or mitigate the vulnerabilities of their facilities, systems, operations or resources to the impacts of future disasters.
- To adopt, endorse or otherwise approve their portion of the LMS.
- To strive to implement the mitigation initiatives identified by the organization and incorporated into the LMS by the Task Force as the resources and / or authorities to do so become available.
- To continue to apprise the Task Force of the implementation status of the organization's proposed mitigation initiatives incorporated into the LMS.
- To support or otherwise participate in the Task Force's activities in the community to further develop its overall mitigation capability.



The bylaws of the Task Force also establish the organizational structure and responsibilities of the Task Force for development, maintenance and implementation of the LMS. The general duties and responsibilities of this group are identified in the bylaws and this procedure defines how these groups carry out those duties.

The support staff will establish a schedule of meetings, notify individuals and the public of the meeting time and locations and otherwise aid the Task Force in their activities. The support staff will also routinely issue reports to the Task Force regarding the status of participation of the agencies and organizations with membership in the Task Force, as well as on the progress of these agencies and organizations in developing and maintaining their role in the strategy. To do this, the support staff will maintain a list of the public and private organizations and agencies making up the Task Force.

The support staff will also help the organization through the following operations:

- Scheduling meetings of the Task Force and public hearings.
- Supporting meetings as needed by preparing agendas and facilitating discussion, as well as preparing and distributing summaries of meetings.
- Training and informing participants in the technical and administrative operations needed for development and maintenance of the strategy.
- Assisting with the technical analyses, when necessary.
- Processing information and data provided by the participants for its use in the LMS.
- Supporting agency and organizational efforts for the implementation of the mitigation initiatives incorporated into the LMS.
- Maintaining the computer database of the mitigation initiatives proposed by the participants and incorporated into the LMS.
- Providing other such information and support as feasible to accomplish the mission of the Task Force.

Procedure 4.0

Increasing Community Awareness and Understanding of Hazard Mitigation

One of the key roles of the Task Force is to increase the general public's awareness of the benefits of hazard mitigation and the available techniques for making the community more disaster resistant. An important assessment necessary for the effective development and maintenance of the LMS is to evaluate the current level of the public's understanding of, acceptance for and willingness to implement a range of mitigation initiatives. Periodically, as indicated or upon the request of the Task Force, the support staff will survey portions of the community or otherwise solicit information regarding the public's perspective on mitigation needs and programs, as well as the factors that make the public more vulnerable to disasters than is warranted.

The support staff will be responsible for ensuring that processes undertaken for the development, implementation and maintenance of the LMS have adequately considered public needs and viewpoints. As needed, the support staff will encourage appropriate



participating agencies and organizations to propose mitigation initiatives that would, upon implementation, further public understanding and utilization of good mitigation practices.

Procedure 5.0

Identification of the Hazards Threatening the Community

The support staff is responsible for the Task Force's ongoing efforts to identify the natural, technological and societal hazards threatening the community. The purpose of this analysis is to define those locations, facilities or systems within the county that may be vulnerable to the impacts of those hazards and warrant further assessment. For the convenience of subsequent planning, the analysis will be conducted, as much as feasible, on the basis of local government jurisdictional boundaries.

At their discretion, the county's Emergency Management Department may conduct this analysis on behalf of all jurisdictions, or may request each local government jurisdiction to conduct the analysis independently. To the extent information is available, these local governmental jurisdictions will utilize data provided in a Geographic Information System (GIS) format for those identified hazards that have been so characterized. When feasible, information and data resulting from the Task Force's efforts will be recorded a GIS format as well. In the absence of available GIS data, the analysis will be conducted on the basis of "best judgment" by the planning participants.

The hazard identification analysis will be accomplished through the following general methodology:

- Identifying all significant natural, technological and societal hazards that threaten the county.
- Defining or estimating the geographic and / or operational scope of the areas and / or community functions within the county that could be impacted by the hazard.
- Determining or estimating the probability or frequency of occurrence of the hazard event.
- Defining, estimating or predicting the general consequences of the event to human health and safety, to property, to valuable environmental resources and the economic vitality of the community.
- Deriving a measure of risk to reflect the relative significance of hazard being addressed to the jurisdiction being evaluated.

The measure of relative risk may then be used by the jurisdiction and / or the county's Emergency Management Department to guide and prioritize the subsequent mitigation planning process. The hazard identification process is intended to encompass both developed areas of the county as well as those likely to be developed in the future.

Hazard identification information and other findings from this analysis will be made available for use by the public and other interested organizations and agencies. As applicable, the findings of the analysis will be included in the individual jurisdictional and / or organizational sections of the LMS.



Considering the relative risk of the identified hazards for each local jurisdiction, the participants in the Task Force will then conduct an assessment of the vulnerability of specific facilities, systems, and / or neighborhoods within those jurisdictions, as applicable to their authorities, responsibilities and / or interests. The Task Force is responsible for monitoring progress in implementation of the vulnerability assessment process.

The vulnerability assessments of specific facilities and systems will be conducted by those agencies, organizations or individuals represented on the Task Force that have established operational control over the facilities or systems, or otherwise have been designated as responsible for their operation and maintenance. For neighborhoods, the assessment will be conducted by the local government agency with expertise, responsibility or interest in the location, and / or by representatives of the applicable neighborhood or community association.

Vulnerability assessments will include evaluation of the potential for physical damage or operational failure due to the occurrence of the hazards identified as threatening the community. This evaluation will also include the vulnerability of the community to physical damage or operational failure of that facility, system or neighborhood.

The vulnerability assessment process will identify, for the evaluated facilities, systems and neighborhoods, those features or functions relatively more vulnerable to damage or failure in the event of the occurrence of a specified hazard. This finding is then available for the Task Force participants and / or the Task Force to use in the development of proposed initiatives needed to eliminate, reduce or otherwise mitigate those vulnerabilities.

For each update of the LMS, the Task Force will identify those facilities, systems and / or neighborhoods thought to be vulnerable to the impacts of a disaster that have not yet been subject to a vulnerability assessment. The Task Force will strive to obtain assessments for all potential vulnerable facilities, systems or neighborhoods until the entire community has been evaluated.

In addition, to the extent feasible, the Task Force will strive to obtain vulnerability assessments for undeveloped land that is likely to be developed in the future. This will be done to identify the mitigation actions necessary during the land's development, should it occur, to protect new facilities, systems and neighborhoods from future hazard events. These identified mitigation actions will be formulated as proposed mitigation initiatives for incorporation into the LMS and that would, upon implementation, guide the development of the land in the desired manner.

The findings from the vulnerability assessment will be made available for use by the public and other interested organizations and agencies. As applicable, the findings of



the analysis will be included in the individual jurisdictional and/or organizational sections of the LMS.

Procedure 7.0

Evaluation of Existing Policies, Plans and Regulations

Using the results of the hazard identification and vulnerability assessment process, the Task Force will maintain an ongoing effort to evaluate the existing policies, plans and regulations of the local government jurisdictions in the planning area. This analysis will be used to define the capabilities of the local jurisdiction's policies, plans and regulations to effectively control or manage the identified hazards and / or eliminate or minimize the vulnerability to those hazards. The Task Force will implement a common analysis methodology to define the following characteristics of the policy, planning and regulatory framework of the county and its local jurisdictions:

- The existing array of policies, plans and regulations established by local jurisdictions and the county that are relevant to the control and management of hazards and vulnerabilities to those hazards.
- Shortfalls or gaps in the policies, plans and regulations of the local jurisdictions to adequately eliminate or reduce vulnerabilities to identified hazards.
- Inconsistencies or conflicts between the policies, plans and regulations of local jurisdictions resulting in reduced capabilities to eliminate or reduce vulnerabilities to identified hazards.
- Inadequacies of local jurisdiction's policy, planning or regulatory framework to fully comply with State or Federal hazard mitigation requirements.

This analysis may be conducted by the support staff or individual local jurisdictions using the established methodology. The findings of the analysis will be available for the applicable participating local jurisdictions to identify mitigation initiatives to modify or enhance the existing policy, planning and regulatory framework and to incorporate these initiatives into the corresponding section of the LMS.

Procedure 8.0

Identification and Characterization of Proposed Mitigation Initiatives

All agencies and organizations participating in the Task Force are encouraged to propose mitigation initiatives for processing and incorporation into the LMS, based on the findings of the hazard identification, vulnerability assessment and evaluation of policies, plans and regulations. Formulation of mitigation initiatives will be done only by those individual agencies, organizations or jurisdictions participating in the Task Force that have the responsibility or authority to implement the identified mitigation initiative should the resources and / or authorities become available to do so. When needed, the Task Force may request an agency, organization or jurisdiction that has such responsibility or authority for its cooperation and support to formulate proposed mitigation initiatives determined to be needed based on the results of the hazard identification, vulnerability assessment or evaluation of policies, plans and regulations.



The identification and characterization of proposed mitigation initiatives for incorporation into the LMS will be in accord with a common methodology. Proposed mitigation initiatives may be structural, non-structural or combined structural and non-structural, and will be identified and characterized by representatives of the agency or organization intending to propose that initiative for incorporation into the strategy. The county's Emergency Management Department may offer assistance and guidance to the participating agency or organization regarding the process to identify and characterize mitigation initiatives, but the participant is responsible for the validity of the information utilized to characterize the proposed initiative. A participating agency or organization may identify and characterize as many mitigation initiatives as desired to propose for incorporation into the LMS.

Procedure 9.0

Prioritization and Submission of Proposed Mitigation Initiatives

In order to most effectively allocate limited resources available for implementation of mitigation actions in the community, all initiatives proposed for incorporation into the LMS will be prioritized in accord with the common. The participating agency or organization proposing each initiative is responsible for use of this methodology.

Upon completion of the identification, characterization and prioritization of a mitigation initiative proposed for incorporation into the strategy, the participating agency or organization will submit the proposal to the Task Force for review and coordination with other proposed mitigation initiatives. The submittal will be on a schedule and in a format established by the Task Force for this purpose.

Procedure 10.0

Review and Coordination of Proposed Mitigation Initiatives

The Task Force is responsible for ensuring the inter-jurisdictional and inter-organizational review and coordination of proposed mitigation initiatives. To accomplish this responsibility, the Task Force will do the following:

- Establish a schedule for the participants to submit proposed mitigation initiatives to be considered for incorporation into the next edition of the LMS.
- Distribute the guidance, training or information incorporated as needed to facilitate complete and accurate submittals by the participants.
- Review each proposed mitigation initiative received for completeness, adherence to the prescribed methodology, the validity of the characterization information and data used by the participant, and the likelihood that the proposal will actually mitigate the hazard(s) or vulnerability(ies) of concern.
- Compare proposed mitigation initiatives with others already incorporated into the LMS or being submitted during the current planning period to ensure an absence of conflict or redundancy in purpose.



- If needed, return the proposed mitigation initiatives to the submitting agency or organization for additional information or analysis and re-submittal.
- Prepare a recommendation for action to incorporate the proposed mitigation initiative into the LMS and to consent to the participant listing the proposed initiative in their section of the LMS. In preparing a recommendation, the Task Force will make every reasonable effort to work with the agency or organization proposing an initiative to avoid making a disagreeable recommendation.

Procedure 11.0

Incorporation of Proposed Mitigation Initiatives into the Strategy

The Task Force will review and act upon that recommendation regarding incorporation of the proposed mitigation initiatives into the LMS. The support staff may concur with the recommendation or disagree. Upon concurrence, the Task Force will vote to incorporate or refuse to incorporate the proposed mitigation initiative into the strategy.

In the event that the support staff refuses to incorporate the proposed mitigation initiative into the LMS, a full explanation for the action will be provided to the participant and suggestions made regarding corrective actions that could be taken to enable the proposal to be so incorporated. The proposing agency or organization would then be responsible for taking such actions and resubmitting the proposal for incorporation into the strategy.

In the event the support staff disagrees with a recommendation made by the Task Force, it will inform the Task Force of the points of disagreement and suggest steps to be taken to make the recommendation acceptable for action. The Task Force would implement these steps as soon as feasible.

No proposed mitigation initiative will be considered as incorporated into the LMS until it is given an affirmative majority vote by the support staff for incorporation into the LMS.

Procedure 12.0

Resolving Conflicts

In the event that a mitigation initiative proposed by a participating agency or organization is determined by the Task Force to be in conflict with one or more other initiatives in the LMS or being submitted by others, the support staff will take action to resolve the conflict. This will be done in the following manner:

- The participants proposing the conflicting mitigation initiatives will be notified of the findings of the Task Force and requested to make any such modifications to the proposals needed to resolve the conflicts.
- Should the participants be initially unwilling or unable to make such modifications to their proposed mitigation initiatives, the Task Force will schedule and hold a detailed



discussion of the matter and involve both participants and any other interested parties.

- In the event that such detailed discussions do not result in voluntary action on the part of the participants making the proposals, the Task Force will formulate a recommendation to resolve the conflict. In making this recommendation, in its discretion, the Task Force may give preference to the proposal already incorporated into the strategy, to that first submitted to the support staff for review, and / or to the proposal achieving the highest priority.
- The Task Force recommendation will be transmitted for action to the support staff.
- The support staff will review the recommendation and take any such action as deemed appropriate to reconcile the conflict prior to incorporation of the proposal(s) into the next edition of the strategy.

Procedure 13.0

Incomplete Processing of Proposed Mitigation Initiatives

If proposed mitigation initiatives are submitted to the Task Force after the deadline established for that purpose, in its discretion, the support staff may decline to process such proposed initiatives for the next edition of the LMS. However, the support staff will retain the submissions, and review and process the initiatives in accord with this procedure for purposes of incorporating them into the subsequent edition of the LMS. These unprocessed mitigation initiatives will be termed "pending" mitigation initiatives, and may be listed in the next published edition of the LMS under that term. Pending mitigation initiatives will not be eligible for funding or resources made available through the Task Force and / or the LMS in the same manner as would proposed initiatives that are fully processed, prioritized and incorporated into the strategy. The participating agencies and organizations may separately, in their discretion, pursue implementation of pending mitigation initiatives at any time.

Procedure 14.0

Implementation of Proposed Mitigation Initiatives

Following its incorporation into the LMS, each participating agency or organization is responsible to attempting to secure the funding, resources or other approvals and permits necessary to implement the proposed mitigation initiative. The Task Force will provide such support to the agency or organization as is feasible at the time, but the agency or organization itself maintains full legal, financial and administrative responsibility for implementation of the proposed action.

On request of the agency or organization attempting to implement an approved mitigation initiative, the support staff will certify to any identified party that the proposed mitigation initiative was subjected to the Task Force's review and coordination process, and that it has been approved for incorporation into the strategy.

Procedure 15.0

Monitoring of Implementation of Mitigation Initiatives



The Task Force will be responsible for monitoring the status of implementation of proposed mitigation initiatives incorporated into the LMS. On an annual basis, the participating agencies and organizations will make information available to identify if one or more of the following actions have been accomplished by the agency or organization proposing the initiative:

- Initial actions to obtain funding, permits, approvals or other resources needed to begin implementation of the initiative.
- Any necessary design or development actions have been initiated or completed, or if funding has been obtained.
- Complete implementation of the mitigation initiative.
- If the agency or organization proposing the initiative no longer intends to implement the initiative.
- Additional information or analysis has been developed that would modify the priority originally assigned to the initiative upon its incorporation into the strategy.

In monitoring the implementation status of the mitigation initiatives incorporated into the LMS, the Task Force will evaluate the continued priority for implementation to be afforded each initiative incorporated into the strategy. This determination will be made with consideration of the following factors:

- The proposed initiative's relationship to current or more recent hazard identification and risk assessment evaluations conducted by the Task Force.
- Recent experience with hazard events in the county and the relevance to the proposed initiative to mitigating the vulnerabilities to those hazards.
- The initiative's predicted current and / or continuing acceptance to the community for implementation.
- The current probability of receiving funding for implementation from local, State or Federal governmental sources and its consistency with current local, State and Federal governmental program priorities.

On an annual basis, and for preparation of the next updated edition of the LMS, the Task Force will recommend to the support staff that an initiative be designated as priority for initiation, continued at its currently designated priority, or deferred for future action. The Task Force will also advise the support staff when an initiative is being or has been implemented and can be removed from the LMS or the proposing agency or organization has terminated action on the initiative and has requested its removal from the LMS.

The support staff will consider and act on the Task Force's recommendation in order to finalize the list of approved proposed mitigation initiatives to be incorporated into the next updated edition of the LMS.



On an annual cycle, the Task Force will approve and issue an update of the LMS. To do this, the Task Force will, by affirmative majority vote, allow release of the updated version of the strategy, which will contain at least the following information:

- The currently approved listing of the mitigation initiatives proposed by participating agencies and organizations.
- A statement of the Task Force's goals and objectives for initiative implementation for the coming planning period.
- Updated information regarding the findings of the hazard identification, vulnerability assessment and evaluation of policies, plans and regulations.
- Progress on implementation of the mitigation initiatives previously incorporated into the strategy.
- A listing of the currently participating agencies and organizations and the status of their participation.
- The current edition of the Task Force's bylaws and operating procedures.

The updated LMS will contain any proposed and approved or pending mitigation initiatives processed by the Task Force during the preceding planning period. It will also include the approved proposed mitigation initiatives listed in any previous editions of the LMS unless they are recommended for removal by the Task Force and the support staff has concurred with that recommendation.

Each major jurisdiction and / or organization participating in the mitigation planning process will have a separate section of the LMS document specifically intended to list the findings of any analyses done for that jurisdiction. This separate section will also contain the complete list of mitigation initiatives proposed by that jurisdiction or organization.

The support staff will announce the completion, approval and release of the LMS by the Task Force. Prior to or concurrent with formal action to release the LMS, the Task Force may determine that a public hearing or public forum is necessary or required to allow the community an opportunity to review and comment on the strategy. Upon such a determination, the support staff will take the necessary actions to plan, conduct and document the hearing process.

The support staff will also take such actions as feasible to make the LMS readily available to members of the public and other interested organizations and agencies. At a minimum, a full copy of the LMS will be available to each participating jurisdiction or organization via the internet.

Upon release of the LMS, the support staff will request the governing body of each participating jurisdiction or organization to take action to adopt, approve and / or endorse their designated section of the plan. It is not necessary for individual jurisdictions or organizations to take any action concerning the portions of the plan pertaining to another jurisdiction or organization. Upon approval of their portion of the LMS, the participating jurisdiction or organization will notify the support staff. In the



event that their portion of the LMS is rejected or disapproved in whole or in part, the support staff will be notified of the reasons for the rejection or disapproval. The representatives of that jurisdiction or organization will then be requested to work with the Task Force to address and resolve the impediments interfering with receipt of approval or endorsement by the participating jurisdiction or organization.

Procedure 17.0

Approval of Supplements to the LMS

When indicated, the Task Force may elect to approve issuance of a supplement to the currently approved LMS. This supplement may contain one or more proposed mitigation initiatives that have been fully processed by the Task Force in accord with this procedure. Upon its issuance, the supplement and the mitigation initiatives contained therein are considered to be an integral part of the LMS pending the approval of the supplement by the governing body of the jurisdiction or organization that proposed the initiatives.

Procedure 18.0

Assistance with Initiative Funding and Implementation

Each participating agency and organization is responsible for implementation of the mitigation initiatives contained within their portion of the LMS when the necessary resources, funding, authorities, and / or authorizations to do so become available. The Task Force will, nevertheless, offer assistance and support to the participating agencies and organizations in implementing their proposed mitigation initiatives as appropriate opportunities arise.

The Task Force, with the assistance of the support staff will, during each planning cycle, attempt to obtain information regarding upcoming State and Federal programs which may offer opportunities for participating agencies and organizations to receive funding for initiative implementation. The Task Force will assess the proposed mitigation initiatives listed in the current approved edition of the LMS for all jurisdictions and organizations, and identify the proposed mitigation initiatives matching the funding requirements and / or limitations of the applicable state and federal program. The Task Force will then select the proposed initiatives in descending order of priority ranking and, in turn, notify the participating agency or organization of the potential availability of funding for initiative implementation. If it wished to apply for the funding available, the applicable agency or organization would be responsible for then agreeing to complete the necessary application forms, provide any matching funds, etc. If the agency or organization was unable or unwilling to undertake the application process, the Task Force and / or support staff would notify the agency or organization with the next highest ranked proposed mitigation initiative listed in the current strategy. In the event that two or more proposed mitigation initiatives listed in the LMS were eligible for the funding opportunity and had the same priority ranking, the Task Force and / or support staff would simultaneously notify the proposing agencies or organizations.



This action by the Task Force and support staff is only intended to facilitate implementation of the various initiatives listed in the LMS. Nothing in this procedure or the bylaws of the Task Force is intended to prohibit, interfere with, or discourage any participating agency or organization from seeking the funding, resources or authorities at any time to implement proposed mitigation initiatives listed in the LMS.

Procedure 19.0

Assessment of Recent Disaster Events

Within 60 days following a significant disaster or emergency event impacting the county or any of its municipal jurisdictions, the county's Emergency Management Department will conduct an informal analysis of the event to capture any "lessons learned" for the purpose of continuing development of the LMS. With the aid of the support staff, it will classify the event based on the hazard category and assess the magnitude of the event and the community's reaction to it. The direct and indirect damage, response and recovery costs will also be gathered or estimated. Any mitigation techniques in place in the impacted areas would be assessed for their apparent effectiveness in decreasing damages. The type and extent of the damages that were experienced would also be evaluated to determine the types of mitigation initiatives that should be incorporated into the LMS to avoid similar losses during future hazard events of the same type. Based on this assessment, the support staff would recommend to one or more of the participating agencies or organizations that they propose appropriate mitigation initiatives for incorporation into the next edition of the LMS. In its discretion, the agency or organization could then propose such an initiative and transmit it to the Task Force for processing in accord with this procedure.



The following tables provide further information regarding Section 5: Mitigation Goals and Policies in the LMS. Each table presents the local policies of the county, Port St. Joe and Wewahitchka that support hazard mitigation and the corresponding locations in jurisdictional documents. Comments pertaining to each policy have been added by the Task Force.

Table # D.1

Evaluation of Local Policies List for the City of Port St. Joe

Policies	Location	Notes
By the year 2000, the vacant/undeveloped land use acreage (presently 860 acres) will decrease in order for the land use categories to accomplish the projected growth. Development of this land will require provisions for drainage and stormwater management in compliance with State regulations. Open space provisions, as well as safe and convenient on-site traffic flow provisions will be required for developments under the City's adopted land development regulation.	Land Use Element Policy 1.1.1:	There is a missed opportunity to describe provisions such as stormwater and drainage as an issue of local health and safety.
The City will develop and maintain an on-going program of stormwater management, including both regulation and capital improvements. Stormwater regulations shall rely upon existing laws and rules for permitting criteria. Stormwater permits must be obtained pursuant to the provisions of Chapter 17-25, Florida Administrative Code (F.A.C.) prior to the City issuing final development approval.	Land Use Element Policy 1.1.2:	80% of stormwater problems solved with Reid Ave renovation; T-section installed at Reid and 4th St. Still problems at Ave. A, B and C at Battle and at 98 & Ave. A. Preble-Rish engineers have project drawings.
The City will, upon adoption of development regulations, strictly enforce standards on non-conforming land uses.	Land Use Element Policy 1.3.2:	Enforcement is fairly strict at County level. City does not issue building permits. City and County subscribe to Southern Building Code.



<p>The City will utilize land development review procedures which encourage mixed land uses when beneficial, to include conservation uses and natural groundwater aquifer recharge areas.</p>	<p>Land Use Element Policy 1.3.5</p>	<p>Few projects have been large enough to accommodate multiple or mixed land uses.</p>
<p>Emphasis will be placed by the City in activities that will assist in revitalizing the downtown area. The City will cooperate with the downtown merchants and Downtown Redevelopment Advisory Committee in providing assistance to further the recommendations from a recent downtown redevelopment plan conducted by the University of Florida.</p>	<p>Land Use Element Policy 1.4.1:</p>	<p>Downtown area renovated according to plan. Stormwater, underground utilities, curbs, gutters, and repaving funded by CDBG.</p>
<p>The City will protect potable water wellfields and natural groundwater aquifer recharge areas by working with the Northwest Florida Water Management District to develop protective measures such as a radius buffer zone around the existing public supply wells will be located to avoid the potential for degradation of groundwater due to the close proximity of the saltwater/freshwater interface both coastward and within the aquifer. Management of pollutant sources will be controlled by provision of or reference to specific requirements that shall include, but not be limited to, zoning ordinances, source permitting, prohibition and site plan review.</p>	<p>Land Use Element Policy 1.5.1:</p>	<p>Supply wells for City water are near the Intercoastal (Gulf Canal). This area along the canal is largely zoned industrial and commercial. This area is mostly undeveloped, but as it is developed, this policy should be used to protect wellheads and groundwater quality.</p>
<p>The City will adopt guidelines for addressing the preservation of historic resources, as a part of its site plan development review regulations.</p>	<p>Land Use Element Policy 1.5.3:</p>	<p>Guidelines do not address hazards. Historic resources are few. Just the museum for Florida constitution, Maddox house and 1 other</p>
<p>Historic resources will be subject to conditional development requirements prior to permits being issued for demolition or substantial alteration. Rehabilitation guidelines shall be as specified in the Secretary of the Interior's Standards for Rehabilitation, 1983.</p>	<p>Land Use Element Policy 1.5.4:</p>	<p>This is done but few historic resources.</p>



The City will enforce building regulations in areas subjected to seasonal flooding and in coastal high hazard areas designated by the Federal Emergency Management Administration	Land Use Element Policy 1.6.2:	This is done.
The City shall limit the density of dwelling units in the coastal area so as not to exceed hurricane evacuation capabilities within the City's jurisdiction. This will be accomplished as part of the development review process.	Land Use Element Policy 1.6.4:	This is not a problem as there has been little growth in the City.
The City will address areas subject to seasonal and periodic flooding and provide for drainage and stormwater management through provision of (by means of Code or land development regulations) or reference to specific requirements and/or standards for construction in designated flood-prone areas.	Land Use Element Policy 1.6.5:	
Provide an alternate evacuation route to that segment of State Road 30 which lies within the 100-year flood (FEMA V) zone.	Traffic Circulation OBJECTIVE 1.5:	City unaware of a flood problem on SR 30.
All major developers will demonstrate their impact on traffic circulation and, if increased traffic volumes or safety at new or existing intersections cause a change in the existing level of service, the developers will contribute toward the elimination or mitigation of impacts on the roadway system.	Traffic Circulation Policy 1.6.1:	No major development since comprehensive plan was put in place.
The City shall review subsequent versions of the Florida DOT 5-Year Transportation Plan in order to update/modify this element as may be necessary.	Traffic Circulation Policy 1.7.1:	This is done but DOT is always late in providing plan for comment.
The City will strive to condemn housing units only if they pose a serious health and safety problem and are unoccupied.	Housing Element Policy 1.1.1:	City police have condemned 40 structures used in the drug trade.
The City will support public and private efforts which are directed at improving housing. Such actions could include sponsorship of "fix-ups, clean-ups" days, utilizing City resources and personnel to assist such efforts and coordinating with various entities (e.g. church groups, non-	Housing Element Policy 1.2.3:	This has not been done on any regular basis.



<p>profit organizations, etc.) to undertake housing improvements.</p>		
<p>The following level of service drainage standards shall be used as the basis for determining the availability of facility capacity and the demand generated by a development:</p> <p>25-yr. frequency, 24-hr. duration storm event for those areas designated as residential, commercial, mixed commercial/residential, public, and industrial land use on the Future Land Use Map; and</p> <p>3-yr. frequency, 24-hr. duration storm event for those areas designated as agricultural, conservation, and recreation land use on the Future Land Use Map.</p> <p>Treatment of the first one-half inch of run-off on sites less than 100 acres, and treatment of the first inch of run-off on sites greater than 100 acres.</p>	<p>Infrastructure Policy 1.1.5:</p>	<p>These drainage level of service standards been adequate. The 3 year frequency standard has never been used. The only major development has been the US Post Office complex which did comply to 25 year standard.</p>
<p>The City will institute a water distribution leak prevention program in an effort to conserve our natural resource, "water." In addition, water customers will be continuously informed to conserve water for conservation sakes. Programs instituted by the Water Management District, such as alternate irrigation program, will be supported by the City.</p>	<p>Infrastructure Policy 1.1.17:</p>	<p>This has not been done. However, City is actively pursuing a leak prevention grant for sewer system piping.</p>
<p>Proposed capital improvement projects will be evaluated and ranked according to the following priority level guidelines:</p> <p>Level One -- whether the project is needed to protect public health and safety, to fulfill the City's legal commitment to provide facilities and services, or to preserve or achieve full use of existing facilities.</p> <p>Level Two -- whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement</p>	<p>Infrastructure Policy 1.2.2</p>	<p>Good system of prioritizing that could inform the process of prioritizing mitigation initiatives.</p>



<p>costs or provides service to developed areas lacking full service.</p> <p>Level Three -- whether the project represents a logical extension of facilities and services within a designated service area.</p>		
<p>Projected demands for the period 1996 through 2000 will be met by undertaking the following projects:</p> <p>Drainage Projects</p> <ol style="list-style-type: none"> 1. Construct a supplemental 24" diameter culvert across Fifth Street to relieve flooding on Park Avenue and work with the DOT to provide funding and coordination of work schedules with State Five-Year Plan. <p>Potable Water Projects</p> <ol style="list-style-type: none"> 1. Construct a 10" diameter distribution main around the southern portion of the City limits to provide adequate flows to the Ward Ridge area. 2. Construct a 6" diameter distribution main on Tapper Avenue, Barbara Drive and Monica Drive in the Ward Ridge Area to provide proper water service to the residents. 	<p>Infrastructure OBJECTIVE 2.2:</p>	<p>These projects are completed and were successful.</p>
<p>Repair and Replacement projects for the Planning Period 1990 through 2000 will be met by establishing an annual budget for:</p> <ol style="list-style-type: none"> a) \$40,000 per fiscal year for repairing or replacing old and defective sewer pipes and manholes, on an as needed basis to be determined by the Public Works Department. b) \$5,000 per calendar for replacing potable water distribution pipes under 6" diameter, on an as needed basis to be determined by the Public Works Department. c) Fiscal Years 1993 and 1994 a budget \$65,000 per year will be established to include not only annual repair and replacement but funds to update the Drainage Master Plan 	<p>Infrastructure OBJECTIVE 2.3:</p>	<p>Still looking for technique to establish which pipes are leaking. Smoke test is one possibility that has been examined. Noted that some unsupervised demolition crews failed to cap sewer lines after houses were demolished. Now it is always done.</p>
<p>The city will identify and map areas with the greatest recharge potential based on</p>	<p>Infrastructure Policy 3.1.1:</p>	<p>Mapping as a planning tool could</p>



infiltration characteristics identified in the Conservation Element for Port St. Joe.		be expanded into hazard mapping.
The land in the coastal high hazard area serves as a natural buffer to the coastal shoreline and estuarine areas. The Future Land Use Plan will provide classification in the category of Open Space for this area. Standards in accordance with the Federal Emergency Management Administration's regulations for this area will be supported by the City.	Coastal Element Policy 1.2.1:	This is done
The City shall limit specific and cumulative impacts upon coastal wetlands, water quality, wildlife habitat and living marine resources using the following regulatory and management techniques: require protection of identified wildlife habitat as part of enforceable development agreements, coordinate with the Florida Department of Natural Resources to restrict construction activities which would permanently damage marine resources unless appropriate mitigation measures are undertaken, and enforcement of policies.	Coastal Element Policy 1.2.3:	The City has upgraded the sewer system to Advance Waste Treatment to help preserve water quality.
In order to protect the human population and the shoreline and estuarine resources of the Coastal zone all infrastructure improvements will be designed in accordance with standards which consider impacts to the Coastal zone (natural disasters such as hurricanes, flooding, etc. with resultant emergency evacuation requirements).	Coastal Element Policy 1.4.1:	This is done, however it may be wise to exceed minimum standards for infrastructure that has long design life.
As part of the post-disaster redevelopment process, the City shall structurally modify or remove infrastructure facilities which have experienced repeated storm damage.	Coastal Element Policy 1.5.1:	This was done at least once. Restroom facilities in gulf front park were redesigned to be hazard and vandal resistant after Opal destroy them.
When undertaking post-disaster redevelopment activities, development permits may be waived for short-term recovery measures such as; emergency	Coastal Element Policy 1.5.2:	County handles most permitting.



repairs to streets, water, electricity or other utilities to restore service; removal of debris; and public assistance matters including temporary shelter or housing.		
Long-term redevelopment shall require approval of development permits and be consistent with this plan. These activities include: repair or restoration of private residential or commercial structures with damage in excess of 50% of market value; non-emergency repairs to bridges, highways, streets, or public facilities; repair or restoration of docks, seawalls, groins, or other similar structures.	Coastal Element Policy 1.5.3:	No permitting issues with respect to nonconforming land uses have come up during redevelopment activities.
The city will, upon completion of the Master Drainage Plan update in 1994, incorporate the recommendations of the update into (1) the Analysis, and (2) the Goals, Objectives and Policies of the Coastal Management element as they pertain to maintaining the water quality and estuarine resources of St. Joseph's Bay.	Coastal Element Policy 1.6.1:	This has been done.
The city will reserve final approval of development permits until all applicable permits are obtained from jurisdictional agencies, including stormwater discharge permits obtained pursuant to Chapter 17-25, F.A.C., and jurisdictional interpretation on wetlands conducted pursuant to Chapter 17-12, F.A.C.	Coastal Element Policy 1.6.4:	This was done for the one major development in the City since the time of Comprehensive Plan
The city recognizes the need to establish the public interest between competing waterfront land uses. The city shall choose the following land uses in priority order: water-dependent, water-related land uses where a definitive public purpose has been established, and other land uses (residential commercial, institutional, or industrial).	Coastal Element Policy 1.8.1:	This is accomplished and supported through future land use map.
Specific and detailed provisions for the siting of marinas shall be included in the land development regulations. Such provisions shall include, but not be limited to, the following criteria: 1. Demonstrate the presence of sufficient	Coastal Element Policy 1.8.2:	This is done and is demonstrated in City Marina complex currently under construction. It may be good to establish



<p>upland area to accommodate parking, utility and support facilities;</p> <p>2. Provide a hurricane mitigation and evacuation plan;</p> <p>3. Be located in proximity to natural channels so that minimum or no dredging shall be required for provision of docking facilities.</p> <p>4. Maintain water quality standards as provided by Chapter 403, Florida Statutes;</p> <p>5. Demonstrate that it meets a public need thereby demonstrating economic viability/feasibility.</p>		<p>a periodic review of marina hurricane mitigation and evacuation plan.</p>
<p>The city shall require the enforcement of the provisions of the Flood Ordinance, building set-backs from the shoreline and stormwater permits pursuant to Chapter 17-25, F.A.C. in order to lessen the impact of man-made structures on the coastal zone.</p>	<p>Coastal Element Policy 1.9.1:</p>	<p>This is done.</p>
<p>The city shall provide specific provisions to include set backs from the shoreline for non-water dependent structures and coordination of permitting with appropriate jurisdictional agencies</p>	<p>Coastal Element Policy 1.10.1:</p>	<p>This is done.</p>
<p>Land development regulations will be used to discourage the locating of hospitals, nursing homes and other similar structures which concentrate population in coastal high hazard areas</p>	<p>Coastal Element Policy 1.11.1:</p>	<p>Land Development Code prohibits group homes hospitals or other uses having special evacuation requirements in the coastal high hazard area (section 4.08)</p>
<p>The city shall review and, where appropriate, incorporate applicable recommendations regarding hurricane evacuation from other disaster preparedness plans (county, regional, state and federal) into this Plan. Specific inclusions of future recommendations will be undertaken as Plan amendments.</p>	<p>Coastal Element Policy 1.12.2:</p>	<p>Because of lack of development and population growth, no updating has been necessary.</p>
<p>The city shall maintain existing evacuation times by maintaining existing level of service standards on evacuation roadways. These</p>	<p>Coastal Element Policy 1.12.13:</p>	<p>This has not been an issue. The policy language should be</p>



measures shall be incorporated into the Gulf County Peacetime Emergency Plan upon its next revision. Upon its next revision, recommendations from the Gulf County Peacetime Emergency Plan will also be included in this Plan.		changed to Comprehensive Emergency Management Plan
The city will initiate a public awareness program to inform citizens of the recycling alternatives for hazardous waste.	Conservation Policy 1.4.1:	The County does this. The City does not.
The city will enter into an agreement with the county for temporary storage of any future hazardous waste that the City might generate based on Gulf County constructing a temporary storage / transfer facility as recommended in the 1986 Gulf County Hazardous Waste Management Assessment.	Conservation Policy 1.4.2:	This agreement is in effect.
The city will inform the St. Joe Paper Company of aquifer recharge areas.	Conservation Policy 1.5.1:	There is a water well on St. Joe property and the company is informed.
If natural resources are contaminated by hazardous wastes, the party responsible for the contamination will be responsible for appropriate remedial actions.	Conservation Policy 1.6.2:	This has not come up as an issue so far. It may some day. Federal law required the owner of the property to assume liability which should be considered in any future land deals between the City and local industry.
If natural systems are degraded by stormwater runoff from transportation facilities which are under the authority and maintenance of the state (Florida Department of Transportation), the City will take the necessary actions to improve the conditions by notifying appropriate state agencies.	Conservation Policy 1.6.3:	DOT maintains stormwater facilities for Hwy. 98 and on Hwy. 71 between Marvin and Woodward.
Maximize the utilization of existing parks and facilities. Lands acquired through purchase or easement for public works projects shall be used to fulfill recreation and open space	Recreation & Open Space Policy 1.3.1:	City will acquire 38 acres for recreation from St. Joe Co. as well as the land



needs if site conditions and public safety considerations allow for such use.		currently leased and used as a ball park.
The city's development regulations will contain provisions for review of proposed developments which may impact public access and the preservation of scenic vistas in regard to recreation and open space areas.	Recreation & Open Space Policy 1.5.1.:	This hasn't come up. No large development in scenic area since Comprehensive Plan in effect.
Promote an environment of cooperation in dealing with regional problems by establishing increased representation by regional boards, commission and committees.	Intergovernmental Coordination Policy 1.2.1:	This is done and helps to promote City's interest and mutual understanding.
Develop and coordinate a M.O.U. with FDOT and the county which addresses transportation planning issues in regard to emergency hurricane evacuation routes.	Intergovernmental Coordination Policy 1.2.3:	Trying to increase FDOT interest in an alternate Hwy. 98.
The city will resolve conflicts with other local governments through the Apalachee Regional Planning Council's informal mediation process, including conflicts involving annexation issues	Intergovernmental Coordination Policy 1.2.5:	Policy used to support the LMS conflict resolution policy.
Redevelopment planning for the city's downtown area will be coordinated with the Downtown Redevelopment Advisory Committee.	Intergovernmental Coordination Policy 1.4.2:	This is done.
The city shall fund only those projects for replacement and renewal of existing public facilities.	Capital Improvements Policy 1.2.1:	Policy could be limiting if projects would strengthen existing public facilities.
Funding will not be established for projects not included in this Comprehensive Plan, or in later approved and adopted amendments, in high hazard coastal areas	Capital Improvements Policy 1.2.2:	This is done. May wish to consider enlarging the coastal high hazard area, which is only the coastal V zones.
The following criteria will be used to evaluate projects for inclusion in the Five-Year Schedule of Capital Improvements: <ul style="list-style-type: none"> • The relationship to individual elements of the Comprehensive Plan; 	Policy 1.5.2:	Supports guiding principles and prioritizing criteria. Another criteria could be improving



<ul style="list-style-type: none"> • The elimination of public hazards; • The elimination of existing capacity deficiencies; • The impact on the annual operating and capital budgets; • Location in relation to the Future Land Use Map; • The accommodation of new development and redevelopment facility demands; • The financial feasibility of the proposed project; and • The relationship of the improvements to the plans of State agencies and the Northwest Florida Water Management District. 		resistance to disasters.
Applicable outside funding sources shall be examined for eligibility of funding for the specific projects under the city's capital improvements budget for the fiscal year.	Policy 2.3 2	Supports principles LMS

Table # D.2 Evaluation of Local Mitigation Policies for the City of Wewahitchka

Policies	Location	Notes
To manage land development in such a way that the health, safety, social, and economic well being of the citizens of Wewahitchka is ensured.	Wewahitchka Comprehensive Plan, Land Use GOAL 1:	Supports local mitigation strategy Guiding Principles
Within one year of Comprehensive Plan submittal, the City shall adopt and enforce Land Development Regulations that require land development to be compatible with the topography, soil conditions, natural resources and the availability of facilities and services.	Land Use OBJECTIVE 1:	Could add risk from hazards as a criteria for development.
The City Land Development Regulations shall require that the provision of continued maintenance of stormwater and drainage facilities be submitted as part of any development plan.	Land Use POLICY 1.4:	No new development has been large enough to require stormwater and drainage facilities



The City shall require that the owner of any development project shall be responsible for the provision of adequate drainage and stormwater controls in compliance with State stormwater management regulations.	Land Use POLICY 1.5:	No new development has been large enough to require stormwater and drainage facilities
Wewahitchka's Land Development Regulations, required to be adopted by January 1991, will include the following principles aimed at protecting surface water resources: a) require the use of Best Management Practices for agriculture and silviculture; b) require that all federal, state, and local regulations regarding stormwater runoff and drainage be met; and c) require the use of vegetative buffer zones adjacent to surface waters.	Land Use POLICY 1.10	This has been done.
To promote the protection of wetlands, the City's Land Development Regulations, to be adopted by January 1991, will include the following principle: 1. Provisions will be made for innovative land development techniques which allow the clustering of higher density development in areas that would have the least impact on wetlands such as upland areas and existing developed areas. 2. Requirements for buffering wetlands from high density and inappropriate adjacent land uses.	Land Use POLICY 1.11:	Clustering has never been used so far. Minimum buffers are required.
The City Council shall coordinate with the Regional Planning Council to develop alternative methods for development of blighted areas.	Land Use POLICY 2.1:	Local mitigation strategy could help with this.
The City Council shall continue to seek funding sources such as the Community Development Block Grant Program, for the redevelopment of blighted areas.	Land Use POLICY 2.2:	This has been done and will continue through LMS.
The city shall continue to enforce City building code regulations to ensure the maintenance of existing structures.	Land Use POLICY 2.3:	This is done.
Development in identified flood prone areas	Land Use	This is done,



must be in accordance with the Wewahitchka Flood Plain Management Ordinance.	POLICY 4.5:	however some older housing should be elevated
The City Planning Board shall review changes in land use practice on a continuing basis.	Land Use POLICY 7.2:	This is done.
The city will consider the utilization of Federal, State, and local subsidy programs to provide adequate housing.	Housing POLICY 1.3:	Add elevation or relocation funding programs to mitigate flood hazards
By 1993 the city will adopt a minimum housing code which specifies regulatory authority for enforcing code.	Housing POLICY 2.1:	Any special elements to housing code?
Upon adoption of the Housing Code, the City will initiate enforcement activities aimed at reducing the number of substandard units by one percent annually	Housing POLICY 2.2:	Enforcement has been casual.
The city will include in its zoning Ordinance, principles and criteria to guide the location of group homes and foster care facilities. These principles and criteria will seek to foster non-discrimination and encourage the development of community residential alternatives to institutionalization.	Housing POLICY 4.1:	Could include safety considerations such as location away from vulnerability zones and flood zones.
The city's program for the conservation, rehabilitation, or demolition of housing will be designed to extend the useful life of the housing stock and existing stabilize or improve existing neighborhoods.	Housing POLICY 5.1:	Elevation relocation or floodproofing could be added.
Within five years of Comprehensive Plan adoption, the city will adopt procedures for emergency water conservation in accordance with the plans of the Northwest Florida Water Management District.	Infrastructure POLICY 4.3:	This has not been done
Those developments that protect, enhance, or utilize natural drainage features will be given preference when issuing building permits.	Infrastructure POLICY 5.2:	Has not been an issue since there is not much development.
The alteration of natural drainage features will be prohibited unless no reasonable development alternatives exist and adequate man-made drainage facilities are installed	Infrastructure POLICY 5.3:	This has not come up so far.



The city will continue to enforce its Floodplain Management Ordinance to protect the natural function of floodplains within Wewahitchka.	Infrastructure POLICY 5.6:	This has been done and seems to be successful.
By January 1, 1991, the city will adopt as part of its Land Development Regulations a minimum locational criteria of a 200 foot radius from a wellhead for the following potentially adverse uses: sanitary landfills, wastewater treatment facilities, and/or other land uses which store or handle toxic or hazardous waste.	Conservation POLICY 2.1:	This has been done. City might also consider a minimum buffer between water treatment facilities and residential development.
By 1993, the city will adopt procedures for emergency water conservation in accordance with the plans of the Northwest Florida Water Management District.	Conservation POLICY 2.3:	This has not been done at local level.
Activities that would withdraw groundwater to the point of saltwater intrusion, or would damage important ecosystems (such as wetlands and surface water bodies), agriculture, or area geology, shall be prohibited in the city.	Conservation POLICY 2.4:	This has not been tested and thus has not been an issue.
By January 1, 1991, the city will adopt, as part of its Land Development Regulations, criteria to be addressed and measures to be taken to protect native vegetative communities from destruction by development activities. The criteria will specifically address protection within erosion sensitive areas.	Conservation POLICY 3.1:	Sensitive areas are designated as conservation lands on Future Land Use Map.
Wewahitchka will initiate a public awareness program to inform citizens of the recycling alternatives for hazardous waste.	Conservation POLICY 4.1	This has not been done at local level.
Where contamination of natural resources by hazardous wastes has occurred, the party responsible for the contamination will be required to monitor and, where necessary, restore the contaminated area.	POLICY 4.2:	This has not come up as an issue. Could include reference federal regulations.
The city will maintain current levels of shoreline access to recreational surface waters within its jurisdiction.	Recreation POLICY 1.4:	Possible alternative use for flood prone property acquired by city.



<p>The city will coordinate its Comprehensive Plan with the plans of Gulf County, the Gulf County School District, and other units of local government which provide services but do not have regulatory authority over the use of land, by implementing policies 2.1 through 2.4. These policies shall apply to coordination with the Gulf County Peacetime Emergency Preparedness Plans, the Hazardous Materials Response Plan, and the Hazardous Waste Assessments.</p>	<p>Intergovernmental Coordination <u>OBJECTIVE 2:</u></p>	<p>Consistent with local mitigation strategy. Could change plan name to Comprehensive Emergency Management Plan</p>
<p>The following criteria will be used to evaluate projects contained in the individual comprehensive plan elements for inclusion in the Five-Year Schedule of Capital Improvements:</p> <ul style="list-style-type: none"> • the elimination of public hazards; • the elimination of existing capacity deficiencies; • the impact on the annual operating and capital budgets; • location in relation to the Future Land Use Map; • the accommodation of new development and redevelopment facility demands; • the financial feasibility of the proposed project; and • the relationship of the improvements to the plans of State agencies and the Northwest Florida Water Management District. 	<p>Capital Improvements <u>POLICY 4.2:</u></p>	<p>Provides local support for priorities for local mitigation strategy initiatives.</p>

Table # D.3 State and Regional Mitigation Evaluation

Programs, Projects, Policies and Location or Reference	Evaluation Notes
County Emergency Management – State	



CEMPs (Comprehensive Emergency Management Plans) are to be updated as needed (at least annually) and are reviewed by DCA every 4 years. Rule 9G-6 F.A.C.	Update of local mitigation strategy hazard identification and vulnerability analysis can also serve as a portion of the CEMP update.
Northwest Water Management District Plan – Water Management Goals	
Ensure an adequate supply of water for all reasonable and beneficial purposes through the promotion of conservation, resource protection, and the development of alternative water supplies. Northwest Water Management District Plan (1994) Goal 1, Page 43	Conservation, water resource protection and alternative water supplies can help reduce vulnerability to drought and fire. Conservation and recreation can also serve as alternative uses for flood prone land.
Provide for the protection and enhancement of natural systems through integrated land and water resource management programs. Northwest Water Management District Plan (1994) Goal 2, Page 43	WMD helps protect natural systems. Natural systems tend to be more erosion resistant than disturbed areas, and thus serve a mitigation function.
Minimize harm from flooding, and otherwise protect the health, safety, and welfare of the residents of the region. Northwest Water Management District Plan (1994) Goal 3, Page 43	WMD a partner in floodplain management.
Enhance public awareness, understanding, and participation in comprehensive water resource management. Northwest Water Management District Plan (1994) Goal 4, Page 43	WMD a potential partner in local public information campaigns regarding flood hazards, resource conservation, drought management..
Develop the District's overall water management capabilities, expertise, and abilities to provide technical assistance for local needs. Northwest Water Management District Plan (1994) Goal 5, Page 43	WMD a potential partner for technical data regarding watershed and floodplain.
State Water Resource Act (NFWMD)	
To develop and regulate dams, impoundments, reservoirs, and other works and to provide water storage for beneficial purposes (permits to ensure that non-exempt, non-agricultural impoundments meet minimum design and safety standards). Water Resources Act Chapter 373, F.S. 373.016(2)©	WMD develops and regulates (permits) flood control projects



<p>To prevent damage from floods, soil erosion, and excessive drainage. Water Resources Act Chapter 373, F.S. 373.016(2)(d)</p>	<p>WMD partner in flood damage prevention via flood and stormwater management (Do they team with DOT on stormwater and road drainage projects?).</p>
<p>Utilize, preserve, restore, and enhance natural water management systems and discourage the channelization or other alteration of natural streams, rivers, and lakes. State Water Policy, Chapter 17-40 F.A.C. 17.40.310(6)</p>	<p>WMD helps protect natural systems. Natural systems tend to be more erosion resistant than disturbed areas, and thus serve a mitigation function.</p>
<p>Protect the water storage and water quality enhancement functions of wetlands, floodplains, and aquifer recharge areas through acquisition, enforcement of laws, and the application of land and water management practices that provide for compatible uses. State Water Policy, Chapter 17-40 F.A.C. 17.40.310(7)</p>	<p>See note above</p>
<p>Encourage non-structural solutions to water resource problems and give adequate consideration to nonstructural alternatives whenever structural works are proposed. State Water Policy, Chapter 17-40 F.A.C. 17.40.310(10)</p>	<p>See note above</p>
<p>Encourage the management of floodplains and other flood hazards areas to prevent or reduce flood damage, consistent with establishment and maintenance of desirable hydrologic characteristics of such areas. State Water Policy, Chapter 17-40 F.A.C. 17.40.310(13)</p>	<p>WMD partner in flood damage prevention</p>
<p>Manage the construction and operation of facilities that dam, divert, or otherwise alter the flow of surface waters to prevent increased flooding, soil erosion, or excessive drainage. State Water Policy, Chapter 17-40 F.A.C. 17.40.310(14)</p>	<p>WMD partner in flood damage prevention</p>
<p>State Comprehensive Plan</p>	
<p>Protect and use natural water systems in lieu of structural alternatives and restore modified systems. State Comprehensive Plan, Chapter 187, F.S., 187.201(8)(b)4</p>	<p>Natural systems tend to be more erosion resistant than disturbed areas, and thus serve a mitigation function.</p>



Encourage the development of a strict floodplain management program by state and local government designed to preserve hydrologically significant wetlands and other natural floodplain features. State Comprehensive Plan, Chapter 187, F.S., 187.201(8)(b)8	Supports local floodplain management and protection of natural systems.
Avoid transportation improvements that encourage or subsidize development in coastal high hazard areas or in identified environmentally sensitive areas such as wetlands, floodways, or productive marine areas. State Comprehensive Plan, Chapter 187, F.S.187.201(20)(b)12	Supports removal of public money from hazardous and environmentally sensitive areas.
State Hazard Mitigation Plan	
Florida shall reduce the vulnerability and exposure of the public by protecting lives and property from losses by natural disasters. State Hazard Mitigation Plan, Goal 1, Page 159.	Reducing vulnerability and exposure are the keys to successful mitigation initiatives.
Maximize the protection of the public's health, safety and welfare as they relate to natural disasters. State Hazard Mitigation Plan, Objective 1.1	Places a strong emphasis on public health and safety.
Reduce the loss of personal and public property due to natural disasters. State Hazard Mitigation Plan, Objective 1.2	Supports efforts to reduce property loss.
Require the protection of natural resources (such as environmentally sensitive lands and endangered species habitat) in order to maximize their mitigative benefits and to safeguard them from damage caused by natural disasters. State Hazard Mitigation Plan, Objective 1.3	Recognizes mitigation benefits of natural systems such as how wetlands store floodwater. Provides support to local government to protect natural systems.
Ensure that Florida's codes and standards are sufficient to protect public safety and property. State Hazard Mitigation Plan, Objective 1.4	The State is engaged in an evaluation of a state-wide building code. Of course code enforcement is as important as the codes.
Require local governments, in cooperation with regional and state agencies, to prepare advance plans for the safe evacuation of coastal residents. State Hazard Mitigation Plan, Objective 1.5	This is done although evacuation standards need a consistent methodology. So many local policies regarding coastal development rely on consistency with evacuation plans.



Require local governments, in cooperation with regional and state agencies, to adopt plans and policies to protect public and private property and human lives from the effects of natural disasters. State Hazard Mitigation Plan, Objective 1.6	This is done through local comprehensive plan, comprehensive emergency management plan, and the local mitigation strategy.
Avoid expenditure of state funds that subsidize development in high hazard coastal areas. State Hazard Mitigation Plan, Objective 1.7	Supports local coastal management policies.
Protect coastal resources, marine resources, and dune systems from the adverse effects of development. State Hazard Mitigation Plan, Objective 1.8	Natural coastal systems have a mitigating effect on coastal storms.
Ensure mitigation measures are effectively incorporated in the comprehensive system of coordinated planning, management, and land acquisition. State Hazard Mitigation Plan, Objective 1.9	Few local policies mention acquisition as a mitigation measure.
Encourage land and water uses that are compatible with the protection of sensitive coastal resources having value and benefits as mitigative measures. State Hazard Mitigation Plan, Objective 1.10	Natural coastal systems have a mitigating effect on coastal storms.
Prohibit development and other activities that disturb coastal dune systems, and ensure and promote the restoration of coastal dune systems that are damaged. State Hazard Mitigation Plan, Objective 1.11	Supports local dune protection ordinances and policies. Dunes have a mitigating effect on coastal storm erosion.
In order to enhance hazard mitigation planning and subsequent mitigation actions, DEM will take a proactive lead to ensure intergovernmental coordination (before, during, and after a natural disaster) among cities, counties, regions, federal agencies and public service groups. State Hazard Mitigation Plan, Goal 2	Local mitigation strategy and EMPA grants are proactive activities offered by DEM in which local government can participate
Implement a series of regularly schedules on-going interagency disaster training programs and exercises. State Hazard Mitigation Plan, Objective 2.1	This is done and training is very beneficial for local emergency management personnel.
Pre-establish and regularly update a network of state interagency contacts to coordinate intergovernmental needs. State Hazard Mitigation Plan, Objective 2.2	This also needs expansion in the area of local government. The local mitigation strategy addresses this to a small degree.



Computerize information systems between state agencies and within the state emergency operations center to speed response, recovery, and mitigation decisions. State Hazard Mitigation Plan, Objective 2.3	Cannot comment on this.
Increase the availability of computerized information to all counties to speed response, recovery, and mitigation decisions. State Hazard Mitigation Plan, Objective 2.4	TAOS is a great tool for local disaster planning.
Promote the coordination of appropriate regional and local plans and studies (i.e., Comprehensive Plans, Beach Management Plans, and Redevelopment Plans). State Hazard Mitigation Plan, Objective 2.5	Cannot comment on this.
Establish and protect the essential flow of information before, during, and after a natural disaster. State Hazard Mitigation Plan, Objective 2.6	This has been done. Generally good comments on conference calls with state EOC.
Encourage greater cooperation between, among, and within all levels of Florida government through the use of appropriate interlocal agreements and mutual participation for mutual benefit. State Hazard Mitigation Plan, Objective 2.7	Need examples of good working relationships between levels of government to help inspire local government. Most benefits seem to come from training, information sharing.
Ensure that the State Hazard Mitigation Plan incorporates appropriate hazard mitigation measures as reflected in each state agency's functional plan. State Hazard Mitigation Plan, Objective 2.8	Cannot comment on this.
Ensure the development of comprehensive regional policy and local plans that implement and accurately reflect state goals and objectives reflected in Florida's 409 Hazard Mitigation Plan that addresses hazard related problems, issues, and conditions that are of particular concern in a region. State Hazard Mitigation Plan, Objective 2.9	
Reduce the vulnerability of critical and public facilities from natural disasters. State Hazard Mitigation Plan, Goal 3	Need improvements in getting long term transportation planning to consider mitigation..



Establish uniform criteria for identifying and rating at-risk potential of critical facilities for the purpose of protection in the event of a natural disaster. State Hazard Mitigation Plan, Objective 3.1	If this has been done, the local mitigation strategy committee steering committee would like to see as we are trying to do the same thing. TAOS should help.
State Hazard Mitigation Plan, Objective 3.2 Disaster proof existing and proposed critical facilities, in regards to location and construction.	Should change wording to: "Improve disaster resistance" (nothing is disaster proof)
Promote the development and application of solar energy technologies and passive solar design techniques. State Hazard Mitigation Plan, Objective 3.3	Cannot comment on this.
Develop and maintain energy preparedness plans that will be both practical and effective under circumstances of disrupted energy supplies. State Hazard Mitigation Plan, Objective 3.4	Cannot comment on this.
Incorporate hazard mitigation measures in any rehabilitation or reuse of existing public facilities, structures, and buildings. State Hazard Mitigation Plan, Objective 3.5	This would be a good policy to add to local comprehensive plan capital improvement elements.
Strengthen plans for post-disaster redevelopment, recovery, and mitigation. State Hazard Mitigation Plan, Goal 4	Local mitigation strategy does this.
Provide incentives and guidance for responsible post-disaster redevelopment. State Hazard Mitigation Plan, Objective 4.2	Local mitigation strategy does this, as does Hazard Mitigation Grant Program
Encourage the adoption of local post-disaster redevelopment plans that specifically identify potential hazard mitigation projects in advance of disaster events. State Hazard Mitigation Plan, Objective 4.3	Local mitigation strategy does this.
Improve coordination of emergency management information, through the media, to increase public awareness and participation in preparedness, response, mitigation and recovery. State Hazard Mitigation Plan, Goal 5	This needs to be done at the local level too, especially with respect to mitigation as well as evacuation and re-entry issues.
Develop and implement a comprehensive, multi-media/multi-lingual public education campaign on emergency preparedness, response, recovery and hazard mitigation. State Hazard Mitigation Plan, Objective 5.1	Cannot comment on this.



Provide educational programs and research to meet state, regional and local planning, growth management and hazard mitigation needs. State Hazard Mitigation Plan, Objective 5.2	Governor's Hurricane Conference, DEM training, and Local mitigation strategy do this.
Integrate planning capabilities into all levels of government in Florida with particular emphasis on maximizing citizen awareness and involvement. State Hazard Mitigation Plan, Objective 5.3	Local mitigation strategy does this.
Establish standardized format for use in the dissemination of information to the media during a disaster. State Hazard Mitigation Plan, Objective 5.4	Cannot comment on this.
Establish coordinated information and procedures for public information officers and the media working in disasters. State Hazard Mitigation Plan, Objective 5.5	Cannot comment on this except to say that public information procedures seem adequate.
Florida shall protect and acquire unique natural habitats and ecological systems, (such as: wetlands, tropical hardwood hammocks, palm hammocks, and virgin longleaf pine forests) and restore degraded natural systems to a functional condition in order to maximize hazard mitigation values. State Hazard Mitigation Plan, Goal 6	Florida has been very proactive in acquiring environmental lands. More emphasis needs to be placed on public safety as a factor in public acquisition.
Conserve forests, wetlands, and coastal natural features to maintain their economic, aesthetic, and recreational values. State Hazard Mitigation Plan, Objective 6.1	See above
Acquire, retain, manage, and inventory public lands to provide conservation and related public benefits including hazard mitigation. State Hazard Mitigation Plan, Objective 6.2	See above
Promote the use of agricultural practices that are compatible with the protection of natural systems. State Hazard Mitigation Plan, Objective 6.3	How well does information reach the small farmer?
Encourage multiple use of forest resources, where appropriate, to provide for watershed protection and erosion control and maintenance of water quality. State Hazard Mitigation Plan, Objective 6.4	In some counties there seems to be a relationship between logging and increased stormwater runoff.
Protect and restore the ecological functions of wetland systems to ensure their long-term environmental, economic, and recreational values including hazard mitigation values. State Hazard Mitigation Plan, Objective 6.5	More emphasis needs to be placed on public safety as a factor in protecting natural systems.



Develop and implement a comprehensive planning, management and acquisition program to ensure the integrity of Florida's river systems. State Hazard Mitigation Plan, Objective 6.7	More emphasis needs to be placed on public safety as a factor in protecting natural systems.
Emphasize the acquisition and maintenance of ecologically intact systems in all land and water planning, management, and regulation. State Hazard Mitigation Plan, Objective 6.8	More emphasis needs to be placed on public safety as a factor in protecting natural systems.
Improve communication capabilities among state, regional, local, and federal governments and public service groups. State Hazard Mitigation Plan, Goal 7	Local mitigation strategy helps. What other initiatives improve intergovernmental communication?
Encourage greater efficiency and economy at all levels of government through adoption and implementation of effective record management, information management and evaluation procedures. State Hazard Mitigation Plan, Objective 7.1	The LMS helps. A real emphasis and a great deal of support should be given to this issue at the local level. The state needs to help show local government how to managed local information for disaster mitigation.
Apalachee Regional Policy Plan	
Be prepared for hazards associated with tropical cyclones. Apalachee Regional Policy Plan REGIONAL GOAL EP 1.1	Preparation is an ongoing process. The local mitigation strategy is a great tool to really prepare for the long term future.
Assist counties in the Region in the preparation, implementation, and coordination of Comprehensive Emergency Management Plans. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.1.1.	ARPC staff stress the importance of this in CEMP reviews.
The ARPC will provide technical assistance in the preparation and review of County CEMPs. This assistance will include identification of hazards, vulnerability analyses, and coordination of plans through Mutual Aid Agreements and Memoranda of Understanding. Apalachee Regional Policy Plan Implementation Strategy: 1.	Data and technical assistance are available.



<p>Provide mapping assistance, if funding is available, to counties preparing and implementing CEMPs. Apalachee Regional Policy Plan Implementation Strategy 2.</p>	<p>Data and technical assistance are available. Mapping services are part of the services we are providing under local mitigation strategy subcontracts.</p>
<p>Use land development regulations to guide development of any scale on barrier islands, beach and dune systems, and coastal areas that are subject to storm surge and flooding, in order to reduce state subsidization of such development. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.1.2.</p>	<p>ARPC has and will make objections to development that does not address risks to public safety or environmentally sensitive areas.</p>
<p>Coastal local governments should include restrictions on development within the Coastal High Hazard Area in their local comprehensive plans and land development regulations. Apalachee Regional Policy Plan Implementation Strategy 1.</p>	<p>ARPC has and will make objections to development that does not address risks to public safety.</p>
<p>The ARPC, if requested, will assist local governments in establishing redevelopment standards for property damaged by 50 percent or greater during by a storm event. Apalachee Regional Policy Plan Implementation Strategy 2</p>	<p>Most local governments already have standards in place for redevelopment of public and private property. More emphasis should be placed on the disaster resistance of public facilities.</p>
<p>Reduce the amount of public expenditures for private development on barrier islands, beach and dune systems, or in surge and flood prone coastal areas. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.1.3.:</p>	<p>This is standard policy that are coastal governments have. Difficulty can arise if existing population lives in flood prone coastal areas but, long term development and critical public facilities should always be places out of flood prone areas.</p>
<p>The ARPC, with the help of local governments, should compile an inventory of all barrier islands, beach and dune systems, surge and flood prone areas. Apalachee Regional Policy Plan Implementation Strategy 1.</p>	<p>We have done this on GIS (geographical information systems). These data resources are available to all.</p>



<p>Local government should not appropriate money to provide public facilities in those areas of the above inventory considered high hazard areas. Apalachee Regional Policy Plan Implementation Strategy 2.</p>	<p>Local policies often allow recreation and public access facilities in high hazard areas. This is fair, although disaster resistance should be built into facility.</p>
<p>Be prepared for hazards associated with floods. Apalachee Regional Policy Plan REGIONAL GOAL EP 1.2:</p>	<p>ARPC maintains flood maps and other hazard information, and assists local governments with hazard planning and grant writing.</p>
<p>Reduce the amount of public expenditures for private development in flood prone coastal and inland areas. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.2.2.:</p>	<p>ARPC has and will make objections to public expenditures in flood prone areas that do not address risks to public safety and property.</p>
<p>Promote flood hazard awareness among local officials, business owners, and private citizens in flood prone communities throughout the Region. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.2.3</p>	<p>We do individually and in cooperation with American Red Cross. Local mitigation strategy will help.</p>
<p>The ARPC and the American Red Cross will operate a Mobile Community Disaster Education Classroom in communities throughout the Region providing hazard education and emergency preparedness information. Apalachee Regional Policy Plan Implementation Strategy 1</p>	<p>We helped find funds for the American Red Cross Mobile Community Disaster Education Classroom</p>
<p>Provide hazardous material training throughout the Region for those persons who may be required to respond to hazardous materials incidents. Apalachee Regional Policy Plan REGIONAL POLICY 1.3.1.:</p>	<p>ARPC, as coordinator for the Local Emergency Planning Committee, helps finds funding for training and assists in planning for hazardous materials incidents.</p>
<p>Mitigate impacts to critical facilities (hospitals, schools, law enforcement, fire departments) locating within the vulnerable zones of hazardous materials facilities or near transportation routes frequented by carriers of hazardous materials. Apalachee Regional Policy Plan REGIONAL POLICY 1.3.2.:</p>	<p>As part of hazardous materials incidents response training, the ARPC can provide exercises or help obtain funding to get response exercises brought into the region.</p>



ARPC staff will provide information describing the nature and extent of hazardous materials that have the potential to affect a critical facility. Apalachee Regional Policy Plan Implementation Strategy: 1.	ARPC as coordinator for the Local Emergency Planning Committee, maintains records of all hazardous materials storage facilities in the region.
ARPC staff will provide information to critical facilities describing procedures to follow in the event of a hazardous materials incident. Apalachee Regional Policy Plan Implementation Strategy: 2.	This is done through LEPC.
Encourage public and private members of the community to support and participate in the District II LEPC (Local Emergency Planning Committee). Apalachee Regional Policy Plan REGIONAL POLICY 1.3.3.:	This is done.
ARPC staff will make presentations to the public and private sectors describing the EPCRA program and informing individuals and agencies of the benefits associated with increased involvement in the process of planning for a hazardous materials emergency. Apalachee Regional Policy Plan Implementation Strategy: 1.	This is done through LEPC.
Support public education efforts throughout the Region to promote awareness of hazardous materials. Apalachee Regional Policy Plan REGIONAL POLICY 1.3.4.:	This is done through LEPC.
ARPC staff will organize public education activities throughout the Region to increase public awareness of hazardous materials. Apalachee Regional Policy Plan Implementation Strategy: 1.	This is done through LEPC.
Disaster preparedness materials and classes available to every school, business, and governmental agency in the Region. Apalachee Regional Policy Plan REGIONAL GOAL EP 1.4.:	This is done through American Red Cross, LEPC, ARPC, and local planning departments.
Develop and implement public education programs for all hazards. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.4.1.:	The local mitigation strategy is helping ARPC to do this for several of the counties in the region.
Identify and pursue funding for the development and implementation of public education campaigns. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.4.2.:	The local mitigation strategy is helping ARPC to do this for several of the counties in the region.



<p>ARPC staff will research potential funding opportunities for public education programs. In addition, ARPC staff will provide technical assistance in the preparation and submittal of funding requests by outside agencies. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>The local mitigation strategy is helping ARPC to do this for several of the counties in the region.</p>
<p>Establish relationships with local media for the dissemination of information concerning emergencies. Apalachee Regional Policy Plan REGIONAL POLICY 1.4.3.:</p>	<p>Relationships are not fully developed.</p>
<p>The ARPC will inventory the media within the area, analyze existing mechanism for information sharing between emergency personnel and the media, and assist in the development and implementation of MOUs between the media and local government. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>Media has been inventoried. Relationships are not fully developed.</p>
<p>Develop and pursue funding alternatives for the provision, operation, and maintenance of river gauges in the Apalachicola and Chipola Rivers. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.5.1.</p>	<p>This is not fully executed. Efforts are underway regarding river gauge funding for LMS</p>
<p>ARPC staff, in conjunction with local emergency management personnel DEM, and USGS will develop a regional hazards monitoring system needs analysis. Apalachee Regional Policy Plan Implementation Strategy 1</p>	<p>This has not been done.</p>
<p>ARPC staff will assist local governments to develop funding proposals to implement the findings of the regional needs analysis. Apalachee Regional Policy Plan Implementation Strategy: 2.</p>	<p>This has not been done.</p>
<p>Implement a regional notification system, accessible to all governments in the Region, for severe weather events and other emergencies. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.5.2.:</p>	<p>This has not been done.</p>
<p>Adequate training for all emergency management personnel. Apalachee Regional Policy Plan REGIONAL GOAL EP 2.1.:</p>	<p>This is done.</p>



<p>Identify the training needs of emergency management personnel in the Region. Apalachee Regional Policy Plan REGIONAL POLICY EP 2.1.1.:</p>	<p>This is done. See below.</p>
<p>The ARPC will interview local emergency service agencies to determine the number of persons requiring training, present training levels of existing personnel, and type and frequency of training needed. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This is done, although methods are somewhat casual except for hazardous materials training.</p>
<p>ARPC staff will research potential funding opportunities for public education programs. In addition, ARPC staff will provide technical assistance in the preparation and submittal of funding requests by outside agencies. Apalachee Regional Policy Plan Implementation Strategy 2</p>	<p>This is done, although methods are somewhat casual.</p>
<p>Maintain a centralized emergency management training database. Apalachee Regional Policy Plan REGIONAL POLICY 2.1.2.:</p>	<p>For hazardous materials incident training only.</p>
<p>Roadway improvements will be made in a coordinated, timely, and orderly manner to avoid the potential for exceeding the evacuation capacity of the Region's road network by (a) consulting with local governments and the Regional Planning Council prior to road construction, (b) avoiding, where possible, construction activities on critical evacuation routes during hurricane season, and (c) by completing the job according to the work schedule. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.1.4.:</p>	<p>Great policy but ARPC has no jurisdiction and can only encourage coordination.</p>
<p>The ARPC, with the cooperation of local governments, will compile an inventory of the components of the regional evacuation network. Prior to road construction or improvement, the jurisdiction doing the maintenance work should check if the road is part of the evacuation network so that alternate routes could be determined or other measures to minimize the impact on evacuation times be observed. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This is not done but ARPC encourages foresight and cooperation. See below.</p>



<p>All jurisdictions should avoid blocking any part of the evacuation network during hurricane season, unless alternate routes are defined. Apalachee Regional Policy Plan Implementation Strategy: 2.</p>	<p>Good policy.</p>
<p>State and Local Governments should prioritize road improvements that reduce the evacuation times. Implementation Strategy: 3.</p>	<p>Excellent addition to capital improvements priorities for local governments to consider.</p>
<p>Require all new development in category 1, 2 and 3 storm zones and/or with evacuating population to mitigate impact on inland shelter space. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.1.5.</p>	<p>Not applicable in coastal counties where generally the entire county evacuates.</p>
<p>Through the Development of Regional Impact (DRI) and Intergovernmental Coordination and Review (ICR) processes, all reviewing agencies should ensure that all new development that exceeds shelter capacity will provide funds for additional public shelter space, or provide its own shelter space. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This is done. ARPC objects when impacts are not considered and addressed.</p>
<p>Require all new development in category 1, 2 and 3 storm zones and/or with evacuating population to mitigate adverse impacts on the evacuation road network. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.1.6.:</p>	<p>This is done. ARPC objects when impacts are not considered and addressed.</p>
<p>Through the DRI and ICR development review processes, all reviewing agencies should ensure that all new development mitigate impacts to evacuation clearance times. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This is done. ARPC objects when impacts are not considered and addressed.</p>
<p>ARPC staff will evaluate new development and its potential impact on Level of Service Standards on evacuation network roads. Apalachee Regional Policy Plan Implementation Strategy: 2.</p>	<p>This is done. ARPC objects when impacts are not considered and addressed.</p>
<p>Prepare and distribute an audio visual program to inform the regional population about evacuation plans and the safety of evacuation in general. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.1.7.:</p>	<p>This has not been done.</p>



<p>Copies of the above mentioned program will be distributed to county libraries for loan to public schools, local government, and other interested parties. Apalachee Regional Policy Plan Implementation Strategy: 2.</p>	<p>This has not been done.</p>
<p>Operators of critical facilities that are necessary to assist a county in responding to a hurricane should be contacted by local governments and be made aware of hurricane preparedness planning activities. Apalachee Regional Policy Plan REGIONAL POLICY EP 1.1.8:</p>	<p>This is a local responsibility that the ARPC encourages.</p>
<p>The ARPC will assist local governments' in identifying and mapping local critical facilities. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This is done. ARPC has critical facilities in GIS (geographical information systems).</p>
<p>Increase opportunities for emergency management personnel and emergency responders to be involved in tabletop, functional, or full scale exercises. Apalachee Regional Policy Plan REGIONAL POLICY 2.1.3.:</p>	<p>This is done</p>
<p>ARPC staff will provide emergency service personnel with information describing public and private sector exercise opportunities in the Region. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This is done</p>
<p>Incorporate the provision of EOCs into the local comprehensive plan Capital Improvements Element. Apalachee Regional Policy Plan Implementation Strategy: 2.</p>	<p>This is a local responsibility that the ARPC encourages.</p>
<p>Implement the multi-jurisdictional use of unused or underutilized public owned buildings or land for EOCs and alternate EOCs. Apalachee Regional Policy Plan REGIONAL POLICY EP 2.2.2.:</p>	<p>This is a local responsibility that the ARPC encourages.</p>
<p>Local governments should enter local agreements to jointly fund and operate public facilities that have inter-jurisdictional service areas. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This is a local responsibility that the ARPC encourages.</p>
<p>Include the maintenance and operation of Volunteer Donation and Staging Areas in the Capital Improvements planning process. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This is a local responsibility that the ARPC encourages.</p>



Expedient recovery from natural and technological disasters affecting the region. Apalachee Regional Policy Plan REGIONAL GOAL EP 3.1.:	The local mitigation strategy is helping ARPC to do this for several of the counties in the region.
Assist pre-disaster recovery planning efforts in all local governments in the Region. Apalachee Regional Policy Plan REGIONAL POLICY EP 3.1.1.:	The local mitigation strategy is helping ARPC to do this for several of the counties in the region.
The ARPC will provide technical assistance to local governments developing pre-disaster recovery plans. Apalachee Regional Policy Plan Implementation Strategy: 1.	The local mitigation strategy is helping ARPC to do this for several of the counties in the region.
Assist local governments in short-term recovery operations following a natural or technological disaster. Apalachee Regional Policy Plan REGIONAL POLICY EP 3.1.2.:	This is done.
Qualified ARPC staff will assist local governments or the American Red Cross in performing damage assessments for homeowners and businesses, if requested. Apalachee Regional Policy Plan Implementation Strategy: 1.	This is done.
Qualified ARPC staff will assist the American Red Cross as a volunteer member of the Disaster Services Human Resources Team. Apalachee Regional Policy Plan Implementation Strategy: 2.	This is done.
Assist local governments in long-term disaster recovery following natural or technological disasters. Apalachee Regional Policy Plan REGIONAL POLICY EP 3.1.2.:	The local mitigation strategy is helping ARPC to do this for several of the counties in the region.
Provide technical assistance to local governments seeking state and federal disaster aid. Apalachee Regional Policy Plan Implementation Strategy: 1.	This is done.
Continue developing a long-term economic redevelopment strategy for Counties affected by Tropical Storm. Alberto, Tropical Storm Beryl, and Tropical Depression #10. Apalachee Regional Policy Plan Implementation Strategy 2	The local mitigation strategy is helping ARPC to do this for several of the counties in the region.
Mitigation for future emergency events. Apalachee Regional Policy Plan REGIONAL GOAL EP 4.1:	The local mitigation strategy is helping ARPC to do this for several of the counties in the region.



<p>Identify and prioritize, using a cost-benefit analysis, areas suitable for mitigation. Apalachee Regional Policy Plan REGIONAL POLICY EP 4.1.1.:</p>	<p>The local mitigation strategy is helping ARPC to do this for several of the counties in the region.</p>
<p>The ARPC will provide technical assistance in the preparation of county CEMPs. This assistance will include identification of hazards, vulnerability analyses, and coordination of plans through Mutual Aid Agreements and Memoranda of Understanding. Apalachee Regional Policy Plan Implementation Strategy: 1.</p>	<p>This has been done. The local mitigation strategy is helping ARPC to do this for several of the counties in the region and improve staff capabilities.</p>
<p>The ARPC will compile information concerning innovative mitigation techniques. Apalachee Regional Policy Plan Implementation Strategy: 2.</p>	<p>ARPC has a library of FEMA and other documents containing innovative mitigation techniques.</p>
<p>The ARPC will research funding alternatives to implement mitigation activities. Apalachee Regional Policy Plan Implementation Strategy: 3.</p>	<p>ARPC continues to attempt to learn as much as possible about funding alternative for all local government activities.</p>
<p>Construction or replacement of public facilities should be performed in a manner that will reduce their vulnerability to natural and technological hazards. Apalachee Regional Policy Plan REGIONAL POLICY EP 4.1 2</p>	<p>This should be a larger part of local comprehensive planning policy</p>
<p>The ARPC will review and comment on plans for the construction and replacement of infrastructure. Staff will provide technical assistance to local governments interested in hazard mitigation as it relates to the siting of infrastructure. Apalachee Regional Policy Plan Implementation Strategy: 1</p>	<p>This is done.</p>
<p>Develop and implement mitigation strategies as part of disaster recovery activities. Apalachee Regional Policy Plan REGIONAL POLICY EP 4.1.3:</p>	<p>The local mitigation strategy is helping ARPC to do this for several of the counties in the region.</p>
<p>Local governments should provide financial incentives for relocation of structures outside of high hazard areas. Apalachee Regional Policy Plan Implementation Strategy 1</p>	



Avoid development in the 100 year flood zones; buildings in less frequently flooded areas should be required to be elevated and designed so damage from flooding will be minimal. Apalachee Regional Policy Plan REGIONAL POLICY EP 4.1.4.:

Although elevation is standard procedure, there are unrated flood zones where elevations are not established. It is difficult but possible to avoid development in flood plain.



**APPENDIX
E**

FUNDING SOURCES BY CATEGORY

This appendix catalogs potential funding sources for mitigation initiatives listed in the LMS. Section 7: Plan Implementation, Maintenance and Updating contains information regarding the pursuit of funding by the county's jurisdictions and the Task Force.

State Agencies

Program	Hazard Mitigation Grant Program (HMGP)
Mitigation Type	General
Agency	Division of Emergency Management
Web Site	www.floridadisaster.org/mitigation/hazard/funding.htm
Required Match	25%

Program	Florida Coastal Management Grants Program
Mitigation Type	General
Agency	Department of Environmental Protection
Web Site	www.dep.state.fl.us/cmp
Required Match	Unknown

Program	Waterfronts Florida
Mitigation Type	Parks / Natural Areas
Agency	Department of Environmental Protection
Web Site	www.dep.state.fl.us/cmp/waterfronts/index.htm
Required Match	Unknown

Program	Payments in Lieu of Taxes Program
Mitigation Type	Parks / Natural Areas
Agency	Northwest Florida Water Management District



Web Site	www.nwfwmd.state.fl.us
Required Match	0

Program	Florida Communities Trust Program
Mitigation Type	Parks / Natural Areas
Agency	Department of Community Affairs
Web Site	www.floridacommunitiestrust.org
Required Match	0

Program	Flood Mitigation Assistance Program (FMAP)
Mitigation Type	Stormwater / Flood Control Structures
Agency	Division of Emergency Management
Web Site	www.floridadisaster.org/mitigation/fmap/index.htm
Required Match	25%

Program	Florida Small Cities (CDBG)
Mitigation Type	Support Services
Agency	Department of Community Affairs
Web Site	www.floridacommunitydevelopment.org
Required Match	0

Program	State Housing Initiatives Partnership (SHIP)
Mitigation Type	Support Services
Agency	Department of Community Affairs
Web Site	www.floridahousing.org/home/housingpartners/localgovernments
Required Match	0



Federal Agencies

Program	Conservation Reserve Program
Mitigation Type	Agricultural Assistance
Agency	US Department of Agriculture
Web Site	www.nrcs.usda.gov/programs/crp
Required Match	50%

Program	Emergency Conservation Program
Mitigation Type	Agricultural Assistance
Agency	US Department of Agriculture
Web Site	www.fsa.usda.gov/fsa/webapp?area=home&subject=copr&topic=ecp
Required Match	0

Program	Emergency Haying and Grazing Assistance
Mitigation Type	Agricultural Assistance
Agency	US Department of Agriculture
Web Site	www.fsa.usda.gov/fsa/webapp?area=home&subject=copr&topic=crp-eg
Required Match	0

Program	Emergency Loan Assistance
Mitigation Type	Agricultural Assistance
Agency	US Department of Agriculture
Web Site	www.fsa.usda.gov/fsa/webapp?area=home&subject=fmlp&topic=efl
Required Match	0

Program	Environmental Quality Incentives Program
Mitigation	Agricultural Assistance



Type	
Agency	US Department of Agriculture
Web Site	www.nrcs.usda.gov/programs/eqip
Required Match	Unknown

Program	Farm and Ranch Land Protection Program
Mitigation Type	Agricultural Assistance
Agency	US Department of Agriculture
Web Site	www.nrcs.usda.gov/programs/frpp
Required Match	50

Program	Livestock Indemnity Program
Mitigation Type	Agricultural Assistance
Agency	US Department of Agriculture
Web Site	www.fsa.usda.gov/internet/fsa_file/lip08.pdf
Required Match	0

Program	National Disaster Assistance Program
Mitigation Type	Agricultural Assistance
Agency	US Department of Agriculture
Web Site	www.disaster.fsa.usda.gov
Required Match	0

Program	Noninsured Crop Disaster Assistance Program
Mitigation Type	Agricultural Assistance
Agency	US Department of Agriculture
Web Site	www.disaster.fsa.usda.gov
Required Match	0



Match

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RESOLUTION NO. 2011- 20

WHEREAS, the Gulf County Board of County Commissioners created a Local Mitigation Strategy Task Force comprised of County and municipal representatives, private citizens, local and regional agencies involved in hazard mitigation activities, and agencies having authority to regulate development including businesses and other private and non-profit interests; and

WHEREAS, the Board charged the Task Force with the responsibility to assess the hazards facing the County and to identify initiatives designed to reduce the impact of those hazards; and

WHEREAS, the Task Force has completed the hazard assessment and has identified numerous initiatives designed to reduce the impact of future disasters; and

WHEREAS, the Task Force has incorporated their findings and recommendations into the *Gulf County Local Mitigation Strategy*; and

WHEREAS, the Board is committed to reducing the impact of hazards for all County residents; and

WHEREAS, the *Gulf County Local Mitigation Strategy* supports hazard mitigation actions throughout the entire County;

NOW, THEREFORE, BE IT RESOLVED the Board adopts the *Gulf County Local Mitigation Strategy* to reflect the current need and citizen desire to identify and implement hazard mitigation initiatives that will reduce the County's susceptibility to numerous hazards. And, at the appropriate time, the Board will develop and submit funding proposals to the appropriate agencies to implement the hazard mitigation initiatives identified in the *Gulf County Local Mitigation Strategy*.

ADOPTED this 23rd day of August, 2011.

BY: 
Warren J. Yeager, Jr. – Chairman

ATTEST:


CLERK/DEPUTY CLERK