

**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.

