



LAKE COUNTY
FLORIDA

Comprehensive Emergency Management Plan

Annex II

Mitigation

I. INTRODUCTION

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.

II. GENERAL

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. Furthermore, there are incentives to live in lower risk areas. Insurance rates and taxes are usually higher in coastal and riverine areas and lower in inland areas.

A. Costs to Communities

Hazards have real costs to businesses and residents. Businesses in high hazard areas can suffer financially when damaged. Residents, who build in flood prone areas are subject to evacuation, damage to their homes, 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.

B. Costs to 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 extremely costly 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 percent of their local public cost of a federally declared disaster and 100

percent of any damage from smaller incidents that are not declared disasters. These costs can put a significant strain on the local government budget.

C. Lead Agency for Pre-Disaster and Post-Disaster Mitigation Operations

The Lake County Emergency Management Division is the lead agency for all mitigation activities in the county. The municipalities within Lake County are responsible for their hazard mitigation. The Emergency Management Division Manager or designee has responsibility for directing all pre- and post-disaster mitigation activities and for coordinating mitigation activities with the Lake County Local Mitigation Strategy Task Force. The Emergency Management Division Manager or designee provides support to LMS Working Group by providing support staff, scheduling meetings, coordinating the activities of the participating organizations, and by maintaining the database used to track the proposed projects and update the plan.

D. Support Agencies for Pre-Disaster and Post-Disaster Mitigation Operations

The Lake County Emergency Management Division is responsible for coordinating mitigation planning with operational assistance from a number of supporting agencies. The municipalities within Lake County are responsible for their hazard mitigation. Lead and support agencies for mitigation activities are described in Exhibit 1.

Exhibit 1: Agency Responsibilities for Hazard Mitigation		
	Pre-Disaster Mitigation	Post-Disaster Mitigation
Lake County Board of County Commissioners – Chairperson or designee	S	S
Lake County Communications Department – Director or designee	S	S
Lake County Community Services Department – Director or designee	S	S
Lake County Community Safety and Compliance – Director or designee	S	S
Lake County Economic Development and Tourism Department - Director or designee	S	S
Lake County Facilities and Fleet Management Department – Director or designee	S	S
Lake County Fiscal and Administrative Services Department – Director or designee	S	S
Lake County Growth Management Department – Director or designee	S	S
Lake County Public Works Department – Director or designee	S	S
Lake County Emergency Management Division – Manager or designee	P	P
Lake County Fire Rescue Division – Fire Chief or designee	S	S
Lake County Information Technology Department – Director or designee	S	S
Lake County Property Appraiser’s Office – Appraiser or designee	S	S
Lake County Schools – Superintendant or designee	S	S
Lake County Sheriff’s Office – Sheriff or designee	S	S
<i>P = Primary Agency</i>		
<i>S = Support Agency</i>		

E. Concept of Operations

This section of the plan provides an overview of the management of pre- and post-disaster mitigation activities in Lake County. The purpose is to provide guidance for the activities necessary for Lake County to reduce the potential for damage and loss from future disasters affecting the county.

1. Notification and Coordination of Agency Participation in Mitigation Operations

a) Pre-Disaster Operations

Mitigation activities in the pre-disaster environment are the responsibility of the Lake County Emergency Management Division. Through the Local Mitigation Strategy (LMS) process Emergency Management coordinates pre-disaster mitigation activities. The Lake County LMS identifies the hazards to which Lake County is vulnerable; assesses the facilities and structures that are most vulnerable to hazards; offers a prioritized list of mitigation projects to take advantage of available funding; and links mitigation projects to these sources of funding. The responsible county and municipal agencies and points of contacts for each pre-identified mitigation project can be found in the Lake County LMS project list.

The LMS will be reviewed at least annually, after each major disaster, or on an as needed basis. The LMS will be revised and federally re-approved every five years. Our County has a State & FEMA-approved Local Mitigation Strategy, which expires on February 4, 2016.

b) Post-Disaster Operations

The Division Manager of Lake County Emergency Management or designee will be responsible for coordinating local agency participation in post-disaster mitigation activities. These agency representative contacts are maintained by the Emergency Management Division. These agency representatives could be contacted via an Emergency Notification System (ENS) through the use of cellular communications, landline phones, or use of any other available communication method. Local agencies involved in these operations will vary according to the specifics of each incident. The Emergency Management Division staff will be responsible for completing applications and submission for federal and state post-disaster mitigation funding.

Post-disaster permitting will follow the same policies and procedures as the pre-disaster permitting procedures.

2. **Coordination of Mitigation Activities with Municipalities and the State**

The Lake County Emergency Management Division will be responsible for coordinating mitigation activities with the municipalities. The municipal mayors or their designees will be updated throughout the response, recovery and mitigation phases of the incident. These agency representatives will be contacted via an Emergency Notification System (ENS) through the use of cellular communications, landline phones, or use of any other available communication method. During non-event periods, meetings will be held quarterly or monthly if needed. During incidents, briefing meetings will be held. Typically, coordination with Lake County and the State EOC takes place at the time that the State Division of Emergency Management holds area meetings prior to application submittals. Lake County and each of the municipalities are required to prepare, submit and administer their own applications. The Emergency Management Division Manager or designee will coordinate on an as needed basis with the Bureau of Recovery and Mitigation at the Florida Division of Emergency Management.

3. **Mitigation Memoranda of Understanding, Mutual Aid Agreements, or Inter-local Agreements**

The Lake County Emergency Management Division does not have any formal agreements with agencies to assist in post-disaster mitigation activities. Local agencies within the county have historically worked together as needed in the aftermath of disasters.

4. **Local Government Status in the National Flood Insurance Program**

Lake County participates in the National Flood Insurance Program (NFIP). The role of these local governments in NFIP is enforcement of standards adopted to manage flood hazards areas. The Lake County Local Mitigation Strategy (LMS) plan goes into great detail as to how Lake County and each community are supporting the federal mitigation efforts that are associated with the NFIP.

Exhibit 2: NFIP Policy Holders			
Community Name	Policy Holders (as of 8/31/14)	Insurance In force	Written Premium in force
Lake County	2,765	\$650,888,900	\$1,336,040
Astatula, Town of	6	\$904,500	\$2,818
Clermont, City of	232	\$56,719,500	\$101,296
Eustis, City of	103	\$29,281,400	\$48,373
Fruitland Park, City of	25	\$5,680,900	\$12,592
Groveland, City of	97	\$24,911,200	\$44,635
Howey in the Hills, Town of	17	\$4,020,000	\$5,767
Lady Lake, Town of	152	\$33,531,200	\$72,252
Leesburg, City of	290	\$71,397,900	\$166,947
Mascotte, City of	17	\$3,575,400	\$8,591
Minneola, City of	64	\$14,490,000	\$35,770
Montverde, Town of	24	\$7,388,400	\$14,134
Mt. Dora, City of	203	\$56,517,900	\$87,137
Tavares, City of	151	\$34,489,000	\$74,096
Umatilla, City of	12	\$2,499,000	\$5,349

Source: <http://bsa.nfipstat.fema.gov/reports/1011.htm>

5. Process for Identifying Mitigation Opportunities in the Post-Disaster Environment

The Lake County Emergency Management Division is responsible for coordinating all recovery operations in the county. This active role in the recovery process working with the Growth Management Department and Public Works Department, the County is well poised to identify opportunities for future mitigation projects such as elevation and/or acquisition of flood prone structures, drainage improvement projects and infrastructure enhancement projects. The Emergency Management Division works closely with the damage assessment teams in the field and the building inspectors for Lake County and the municipalities to identify potential mitigation opportunities. The Lake County Emergency Management Division maintains the Lake County LMS plan that contains a comprehensive list of proposed mitigation projects to be funded within Lake County and its municipalities.

6. Process to Manage Mitigation Assistance Funds

All mitigation and recovery grants are applied for and administered by the Lake County Emergency Management Division. The Division Manager or designee will inspect, monitor and report progress during the project. The Emergency Management Division has managed a variety of recovery and mitigation grants in the past including Hazard Mitigation Grant Program funds. Funding sources including technical assistance funding from FEMA and the Flood Mitigation Assistance Programs are available. The method used to manage mitigation assistance funds is the prescribed county grant management policies and procedures. Additional resources are identified in the Lake County LMS which has been updated. For any municipal projects, the municipality will be responsible for identifying and securing funding sources and guarantying any match funds that will need to be provided. Lake County will provide technical assistance to the municipalities to assist them in identifying potential funding sources and any other assistance they may required.

III. **PRE-DISASTER HAZARD MITIGATION ACTIVITIES**

Pre-disaster hazard mitigation activities are described in detail in the Lake County Local Mitigation Strategy. Lake County considers the following potential funding sources during prioritization utilizing the STAPLEE model for each initiative identified in the LMS: Hazard Mitigation Grant Program, Community Development Block Grant special disaster allocations, Infrastructure Program, Technical assistance funding from the Federal Emergency Management Agency, Flood Mitigation Assistance Program, Emergency Management and Preparedness Trust Fund, Community Development Block Grant Program, Florida Communities Trust, Florida Coastal Management Program, and any other funding to support mitigation activities. The Local Mitigation Strategy is a community-based plan to make the county and local communities safer and more resistant to natural and technological hazards. The copy of the Lake County LMS is available in Emergency Management's Office.

Note: FEMA recommends utilizing the STAPLEE evaluation process to address all significant factors when performing a cost-benefit analysis of implementing one action over another. STAPLEE stands for: **S** – Social; **T** – Technical; **A** – Administrative; **P** – Political; **L** – Legal; **E** – Economical; **E** – Environmental.

IV. POST-DISASTER MITIGATION FUNCTIONS

A. Planning Assumptions

Personnel resources for daily operations in Lake County are limited. In the aftermath of a disaster, these resources are stretched even further. As a result, the County relies in large part on information generated by the local damage assessment process, the prioritized project list from the Lake County LMS, in determining specific mitigation priorities following a disaster.

B. Lead Agency with Responsibility for Providing Mitigation Assessment

The Lake County Emergency Management Division is the primary agency charged with post-disaster mitigation assessment.

C. Local Agencies with Supporting Roles in Mitigation Assessment

The agencies in Exhibit 2 are the supporting agencies that work closest with the Lake County Emergency Management Division in post-disaster mitigation assessment. There are, however, a number of other local agencies that may indirectly support mitigation in Lake County.

D. Roles and Responsibilities of Lead and Support Agencies

1. The Lake County Emergency Management Division

The Lake County Emergency Management Division will coordinate with the support agencies for all post-disaster mitigation activities. The Emergency Management Division will notify all supporting agencies required for mitigation assessment operations; coordinate all activities required to identify potential mitigation projects and initiatives.

The Emergency Management Division also serves as the point of contact for providing information to residents of the county describing how they can minimize damage from future disasters.

The following support agencies work closest with Emergency Management and all other support agencies will function in their normal roles and responsibilities unless specifically tasked by Emergency Management for additional support duties.

2. Lake County Property Appraiser

The Lake County Property Appraiser will support the Lake County Emergency Management Division by providing technical expertise regarding property values, damages and losses to properties as a result of a disaster.

3. Lake County Public Works Department

The Lake County Public Works Department will assist the Emergency Management Division in identifying potential road, bridge, culvert, water and sewer mitigation projects.

4. Lake County Floodplain Administrator

The Lake County Floodplain Administrator coordinates Substantial Damage / Substantial Improvement (SI/SD) reviews with the Lake County Growth Management Department, Building and Planning and Zoning Divisions as part of the permitting process. This is done in accordance with LDR Chapter IX, Sec 9.07.03 - Duties and Powers of the Floodplain Administrator. The Lake County Emergency Management Division coordinates with the County Floodplain Administrator and other support agencies listed in Exhibit 1 to identify damaged structures in Special Flood Hazard Areas (SFHA) for substantial damage determination.

5. Other Support Agencies identified Exhibit 1

The roles and responsibilities for the remaining agencies identified in Exhibit 1 will be called into action as necessary. These agencies will contribute with their standard responsibilities.

E. Coordination Between Lead and Support Agencies

The Lake County Emergency Management Division will serve as the organization responsible for coordinating mitigation activities for lead and support agencies. The process of coordination is straightforward given the rural nature of the county and the small number of agencies actively involved in post-disaster mitigation activities.

In Lake County, much of the work involved in identifying opportunities for possible mitigation activities is carried out during the pre-disaster mitigation phase (e.g. during the mitigation project identification process carried out by the Lake County LMS Task Force). Opportunities for mitigation are also discovered during the initial and preliminary damage

assessments and throughout the public assistance processes. The supporting agencies noted above document damage to public infrastructure, businesses and residences. The Lake County LMS Task Force, along with input from supporting agencies, then considers the information gathered during the recovery phase and determinations are made regarding potential mitigation projects. All current and proposed projects and initiatives can be found in the Lake County LMS (Appendix I).

F. Equipment and Resources Necessary for Mitigation Assessment

1. The Division Manager of Lake County Emergency Management or designee will be responsible for ensuring all equipment and resources necessary for mitigation assessment are available when needed. Information regarding the availability of these resources is updated annually before hurricane season and are maintained by the Emergency Management Division. At the time of this writing, this resource inventory list was last updated in May, 2014. This list can be made available by the Emergency Management Division.
2. Vehicles used for mitigation assessment include city and county government vehicles, fire department vehicles and personal vehicles.
3. Equipment, vehicles and supplies necessary for mitigation activity are located throughout the county either in stations, assigned to individual personnel or readily accessible to department personnel.

G. Training Procedures for Mitigation Personnel

The Division Manager of Lake County Emergency Management or designee will work with all mitigation assessment team members to ensure all training needs are met. The primary source for mitigation training is the Florida Division of Emergency Management. More options for training can also be obtained through from the following:

1. Florida Division of Emergency Management; some example courses include:
 - a) G293 Mitigation Plan Review Reference Manual
 - b) G318 Mitigation Planning Workshop for Local Governments
 - c) G379 Interagency Hazard Mitigation Team Training
 - d) G393 Mitigation for Emergency Managers
 - e) G398.2 Flood Mitigation and Recovery Exercise
2. Emergency Management Institute (EMI) in Emmitsburg, Maryland.

3. Federal Emergency Management Agency (FEMA) Independent Study Courses; some example courses include:
 - a) IS-30 Mitigation eGrant System for the Sub grant Applicant
 - b) IS-31 Mitigation eGrants for the Grant Applicant
 - c) IS-393.a Introduction of Mitigation
4. Governors Hurricane Conference (conference is held annually www.flghc.org).
5. Florida Emergency Preparedness Association (FEPA) Annual Meeting (Meeting is held annually www.fepa.org).

H. Specific Mitigation Pre-Disaster Activities

The Lake County Emergency Management Division participates in providing information to the citizens of Lake County in ongoing public outreach activities. This includes the use of newspaper advertisements, public services announcements, radio spots, flyers, fairs and conferences. Presentations are made at both public and private meetings to inform attendees of mitigation activities available. The county also actively supports public education regarding building policies in flood prone areas, Firewise and other activities as addressed in the Lake County LMS.

The Lake County Local Mitigation Strategy Task Force involves members of the private industry and the community in mitigation activities. This civic involvement provides a meeting ground for resource and information sharing regarding mitigation problems and opportunities in the community.

Lake County currently does not receive financial incentives on ad valorem tax breaks on retrofitting improvements or financing for structural hardening funding.

V. MITIGATION INVENTORY LIST

The Disaster Assistance Specialist, under the lead of the Emergency Management Division Manager, will be responsible for disaster recovery activities, including mitigation assessments. The Emergency Management Division has three primary vehicles to conduct assessments:

- Chevrolet Trailblazer
- Dodge Dakota
- Jeep Liberty

However, should any of these vehicles not be available, the Emergency Management Division has vehicles available through the Lake County Facilities and Fleet Management Department to survey impacted areas. All other supplies needed to carry out assessment activities (such as cameras, utensils, paper and other supplies) will be provided by the Emergency Management Division's cache of office supplies that is readily available to support staff.