

## **Executive Summary**

The experiences of the 2004 hurricane season epitomize the importance of better integrating hazard mitigation activities into local comprehensive planning. Last fall, residents all over the state experienced significant damages from Hurricanes Charley, Frances, Jeanne, and Ivan as a result of winds, tornadoes, surge, and/or flooding. But this was not the only time we have experienced natural disasters, nor will it be the last. In 1992, Hurricane Andrew devastated South Florida. In 1998 and 1999, most counties in Florida experienced wildfires. In some cases, despite firefighters' best efforts, fires advanced through neighborhoods and homes were lost. Every year in Central Florida, new sinkholes emerge, swallowing homes and damaging infrastructure. The cost of recovery for these various disasters ranges from hundreds of thousands to billions of dollars, significantly taxing local, state, and federal financial sources. Losses covered through federal funding as a result of the 2004 hurricanes alone could reach as high as \$7 billion. Worst of all, however, are the many lives that, directly or indirectly, are lost due to natural disasters. It is imperative that we reduce the human and financial costs of natural disasters. Through better integration of natural hazard considerations into local comprehensive planning, we can build safer communities.

This Jefferson County Profile has been prepared as part of a statewide effort by the Florida Department of Community Affairs to guide local governments in integrating hazard mitigation principles into local Comprehensive Plans. Information provided in this profile will enable planners to (1) convey Jefferson County's existing and potential risk to identified hazards; (2) assess how well local hazard mitigation principles have been incorporated into the County's Comprehensive Plan; (3) provide recommendations on how hazard mitigation can be better integrated into the Comprehensive Plan; and (4) determine if any enhancements could be made to the Local Mitigation Strategy (LMS) to better support comprehensive planning. Best available statewide level data are provided to convey exposure and risk as well as illustrate the vulnerability assessment component of the integration process.

In this profile, guidance is provided on how hazard mitigation can be a part of comprehensive planning through an examination of population growth, the hazards that put the County at risk, the special needs population and structures that could be affected by these hazards, and the distribution of existing and future land uses in different hazard areas. We hope that this analysis will serve as an example of the issues each jurisdiction should consider as they update their plans to include hazard mitigation. The profile also contains a review of the LMS and the Comprehensive Plan. Based on the analysis and review, we were able to develop specific options for the County on how to incorporate more hazard mitigation into the Comprehensive Plan and how to enhance the LMS so that it is also a better tool for local planners.

During our review, we found that Jefferson County had many strengths regarding hazard mitigation in both its LMS and Comprehensive Plan, and these are outlined in the profile. There are always ways to further strengthen such plans, however, and the following is a summary of some of the options that would enable the County to do so.

Currently Jefferson County does a fantastic job mitigating the impacts of coastal storms and coastal flooding by restricting development in the CHHA through conservation land use designations comprised of both the Aucilla Wildlife Management Area and the St. Marks Wildlife Refuge. The conservation of these areas highly prone to flooding not only mitigates the impacts of flooding in the community, but also act as a buffer between coastal storms and inland areas as well as other inland counties. However, the purpose of this conservation area is related to wildlife preservation, rather than hazard mitigation. Our recommendations include programs to educate the public as well as local government officials on the benefits of hazard mitigation and how Jefferson County is currently succeeding in these efforts. It also suggests employing various growth management techniques already listed in the Comprehensive Plan for the purposes of

# INTEGRATION OF THE LOCAL MITIGATION STRATEGY INTO THE LOCAL COMPREHENSIVE PLAN

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hazard mitigation. These recommendations have been curtailed to the specific needs and issues of the community.

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# 1. County Overview

### **Geography and Jurisdictions**

Jefferson County is located in the Florida Big Bend area. It covers a total of 598square miles with an average population density of 21.6 people per square mile (U.S. Census, 2000).

There is one incorporated municipalities within the County, and these are listed in **Table 1.1**.

# **Population and Demographics**

Official 2004 population estimates for all jurisdictions within Jefferson County as well as the percent change in population from the 2000 U.S. Census are presented in **Table 1.1**. The most current estimated countywide population of Jefferson County is 12,902 people (University of Florida, Bureau of Economic and Business Research, 2004). The most populated city in Jefferson County is Monticello, but 82% of the countywide population lives in the unincorporated portion of the County. Between 1990 and 2000, Jefferson County as a whole had a growth rate of 14.2%, which was lower than the statewide growth rate of 23.5% in those 10 years.

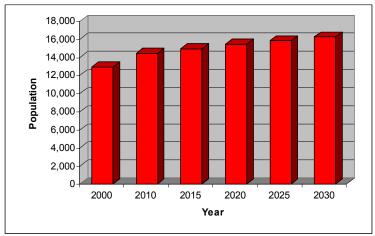
**Table 1.1 Population Estimates by Jurisdiction** 

Jurisdiction	Population, Census 2000	Population Estimate, 2004	% Change, 2000-2004	% of Total Population (2004)
Unincorporated	10,369	11,527	11.2%	82.0%
Monticello	2,533	2,537	0.2%	18.0%
Countywide Total	12,902	14,064	9.0%	100.0%

Source: University of Florida, Bureau of Economic and Business Research, 2004.

According to the University of Florida, Bureau of Economic and Business Research (2004), Jefferson County's population is projected to increase slowly for the next 25 years, reaching 16,200 people by the year 2030. **Figure 1.1** illustrates medium population projections for Jefferson County based on 2004 calculations.

Figure 1.1 Medium Population Projections for Jefferson County, 2010-2030



Source: University of Florida, Bureau of Economic and Business Research, 2004.

Of particular concern within Jefferson County's population are those persons with special needs and/or limited resources such as the elderly, disabled, low-income, or language-isolated residents. According to the 2000 U.S. Census, 14.5 of Jefferson County residents are listed as 65 years old or over, 24.4% are listed as having a disability, 17.1% are listed as below poverty, and 3.1% live in a home with a primary language other than English.

# 2. Hazard Vulnerability

#### **Hazards Identification**

The following are natural hazards that pose a risk for the County as identified in the County's Local Mitigation Strategy (LMS): flooding, wildfire, lightning, high winds, drought, urban fire, winter storms, landslide/erosion, hail, storm surge, dam/levee failure and subsidence/expansive soils. These hazards have been listed in order of their priority. The hazards with the highest probability include flooding, wildfire, lightning and high winds. Drought, urban fire, winter storms, landslide/erosion, hail and storm surge were given a moderate probability score and the remaining 2 hazards, dam/levee failure and subsidence/expansive soils were given a low probability score.

Since 1998 the County has received damages from various hazard types including flooding (both coastal and riverine), wildfire and tropical events. In 1998 and 1999 the couty received both crop and fire damages from a wildfire and drought. The Hurricane Season 2004 caused damages to the County's infrastructure, wind damages to other structures and debris. Jefferson County was affected by Hurricane Frances, Hurricane Jeanne and Hurricane Ivan,. A tornado associated with Hurricane Ivan also caused damages in the county. Other tropical storms and hurricane events have also caused past damages in the county.

#### **Hazards Analysis**

The following analysis looks at four major hazard types: hurricanes and tropical storms (specifically surge), flooding, sinkholes, and wildfire. All of the information in this section, except the evacuation and shelter estimates, was obtained through the online Mapping for Emergency Management, Parallel Hazard Information System (MEMPHIS). MEMPHIS was designed to provide a variety of hazard related data in support of the Florida Local Mitigation Strategy DMA2K revision project. It was created by Kinetic Analysis Corporation (KAC) under contract with the Florida Department of Community Affairs (FDCA). Estimated exposure values were determined using the Category 3 Maxima Scenario for storm surge, the Federal Emergency Management Agency's (FEMA's) designated 100-year flood zones (A, AE, V, VE, AO, 100 IC, IN, AH), levels of concern 5 through 9 for wildfire, and high through adjacent risk zones for sinkholes. Storm surge exposure data are a subset of flood exposure, therefore the storm surge results are also included in the flood results. For more details on a particular hazard or an explanation of the MEMPHIS methodology, consult the MEMPHIS Web site (http://lmsmaps.methaz.org/lmsmaps/index.html) or your countywide LMS.

#### Existing Population at Risk

**Table 2.1** presents the estimated countywide population at risk from hazards, as well as a breakdown of the sensitive needs populations at risk. The first column in the table summarizes the residents of Jefferson County that live within FEMA Flood Insurance Rate Map zones that signify special flood hazard areas. According to these maps, none of the county's residents live within the 100-year flood zone. In Jefferson County, sinkholes are considered to not be a risk as none of the population is within a high to adjacent risk sinkhole zone. However, 12.2% of the population live in medium- to high-risk wildfire zones, making this a moderate risk to the county population. Forty-two percent of those at risk from wildfire are disabled, making a quick

evacuation difficult. Although the county has a stretch of coastline, storm surge is not considered to be a risk to the residents of the county as it is not populated.

Table 2.1 Estimated Number of Persons at Risk from Selected Hazards

Population	Flood	Sinkhole (high-adjacent risk)	Wildfire (medium-high risk)
Minority	0	0	821
Over 65	0	0	263
Disabled	0	0	660
Poverty	0	0	376
Language Isolated	0	0	0
Single Parent	0	0	131
Countywide Total	0	0	1,575

Source: Florida Department of Community Affairs, 2005a.

#### Evacuation and Shelters

As discussed in the previous sections, population growth in Jefferson County has been slow, and this trend is projected to continue. As the population increases in the future, the demand for shelter space and the length of time it takes to evacuate the County is only going to increase. Currently, evacuation clearance times for Jefferson County are estimated to be 5.25 hours for Category 3, 4 and 5 Hurricanes, as shown in Table 2.2. These data were derived from 11 regional Hurricane Evacuation Studies that have been produced by FEMA, the U.S. Army Corps of Engineers, and Florida Regional Planning Councils. The study dates range from 1995 to 2004 and are updated on a rotating basis. According to Rule 9J-5, counties must maintain or reduce hurricane evacuation times. Some experts have suggested that counties should try to achieve 12 hours or less clearance time for a Category 3 hurricane. This is due to the limited amount of time between the National Hurricane Center issuing a hurricane warning and when the tropical stormforce winds make landfall. Jefferson County is able to meet this recommendation and with a slow projected growth trend, this will most likely not be an immediate problem for the community. However, storm events requiring evacuation typically impact larger areas, often forcing multiple counties to issue evacuation orders and placing a greater number of evacuees on the major roadways, further hindering evacuation progress. Thus, it is important to not only consider evacuation times for Jefferson County, but also for other counties in the region as shown in Table 2.2.

Table 2.2 County Evacuation Clearance Times in Hours (High Tourist Occupancy, Medium Response)

Country	Hurricane Category										
County	1	2	3	4	5						
Dixie	6	6	6	6	6						
Franklin	5.5	8	8	8	8						
Gulf	7	9.75	9.75	10.75	10.75						
Jefferson	3.5	3.5	5.25	5.25	5.25						
Leon	15.75	23	23	24.5	24.5						
Taylor	12	12	12	24	24						
Wakulla	13.25	21.25	21.25	22	22						

Note: Best available data as of 7/05

Source: State of Florida, 2005

(some counties may be in the process of determining new clearance times)

NA = Not available.

Coupled with evacuation is the need to provide shelters. If adequate space can be provided in safe shelters for Jefferson County residents, then this could be a partial solution to the everincreasing clearance times for evacuation. Currently, the State Shelter Plan reports that there is space for 626 people in the County's shelters, and there are 253 more people that will need sheltering in the case of a Category 5 hurricane. It is projected that by 2009 the deficit will increase to 308 people in need of space (FDCA, 2004). The County will need to address this deficiency but might also try to decrease the demand for public shelters by encouraging new homes to be built with safe rooms if they are outside of flood and surge zones. Residents who are further inland in the County and not in a flood zone could shelter in place if they had a safe room that could withstand hurricane-force winds. Safe rooms could at least be a last option for residents who cannot evacuate in time, especially in the case of a tornado.

## Existing Built Environment

While the concern for human life is always of utmost importance in preparing for a natural disaster, there also are large economic impacts to local communities, regions, and even the State when property damages are incurred. To be truly sustainable in the face of natural hazards, we must work to protect the residents and also to limit, as much as possible, property losses that slow down a community's ability to recover from a disaster. **Table 2.3** presents estimates of the number of buildings in Jefferson County by structure type that are at risk from each of the four hazards being analyzed.

Flooding presents a minimal risk to property in the County, with 38 structures within a flood zone. A majority of those structures are used for agricultural purposes. According to the latest National Flood Insurance Program Repetitive Loss Properties list, there are no homes in unincorporated Jefferson County that have had flood damage multiple times (FDCA, 2005). There also are 37 structures at risk from surge, as shown in **Table 2.3**. A majority of these structures are used for agricultural purposes as well.

**Table 2.3** also shows 53 structures within high to adjacent risk sinkhole areas, with 77% of those structures used for government or institutional purposes. Single-family homes are at risk from wildfire, with 16.6% of the total 5,833 structures at risk being single-family homes. However, structures utilized for agricultural purposes seem to face the highest risk from wildfire with 56.2% of the structures being located within a medium to high wildfire risk area.

Table 2.3 Estimated Number of Structures at Risk from Selected Hazards

Structure Type	Flood	Sinkhole (high-adjacent risk)	Wildfire (medium- high risk)	Surge
Single-Family Homes	3	3	977	5
Mobile Homes	0	8	237	0
Multi-Family Homes	0	1	242	0
Commercial	0	0	282	0
Agriculture	27	0	3,282	32
Gov./Institutional	8	41	813	0
Total	38	53	5,833	37

Source: Florida Department of Community Affairs, 2005a.

In addition to understanding exposure, risk assessment results must also be considered for prioritizing and implementing hazard mitigation measures. The risk assessment takes into account not only the people and property in a hazard area, but also the probability of occurrence that is necessary to understand the impacts to people and property. Although people and property are exposed to hazards, losses can be greatly reduced through building practices, land use, and structural hazard mitigation measures. The next section of this report examines the existing and future land use acreage in hazard areas. This information can be useful in considering where to implement risk reducing comprehensive planning measures.

# **Analysis of Current and Future Vulnerability**

The previous hazards analysis section discussed population and existing structures at risk from flooding, sinkholes, wildfire, and surge according to MEMPHIS estimates. This section demonstrates the County's vulnerabilities to these hazards spatially and in relation to existing and future land uses. The following maps of existing land use within hazard areas are based on the 2001 geographic information system (GIS) shapefiles from Jefferson County. Maps of future land uses in hazard areas were developed using the Jefferson County future land use map obtained February 2001.

In Attachment A, four maps show the existing and future land uses within the coastal hazard zone (Category 1 storm surge zone) and the hurricane vulnerability zone (Category 1 evacuation zone). The affected area for the coastal hazard and hurricane vulnerability zones is located within the Aucilla Wildlife Management and St. Marks National Wildlife Refuge. Table 2.4 presents the number of acres of land in both of these zones. A majority of the land in these two categories is either used for agriculture or parks and conservation. The largest percentage of acreage in these categories is found in agriculture, with 52.5% in the coastal hazard zone and 66.9% in the hurricane vulnerability zone. This is very positive for the County since a large portion of these hazard areas are being conserved or have not yet been developed, thereby giving the County opportunities to limit the amount of people needing evacuation or shelter and the amount of property damage that can occur from a hurricane. Table 2.5 presents future land use estimates and a breakdown of how currently undeveloped land has been designated for future use. For the coastal hazard zone, 95.9% is designated for conservation use, and for the hurricane vulnerability zone, 38.9% is to be conserved. These percentages are just slightly less than the existing acreage in parks and conservation, meaning that the County has done a terrific job at targeting coastal hazard areas for conservation and not allowing land use amendments to change that plan.

**Attachment B**, two maps present the existing and future land uses within a 100-year flood zone, is currently unavailable for this draft.

In **Attachment C**, maps present the land uses associated with high-risk wildfire zones. The majority of the land (89.5%) is designated for agricultural uses. A total of 6.4% of the land within these wildfire zones is currently vacant, as shown in **Table 2.4**. Of those 509.6 undeveloped acres, 6.3% is shown to be designated for residential mixed uses or residential use in the future (**Table 2.5**). This is a relatively low percentage which means that the county is doing a good job keeping populations out of the high-risk wildfire areas. However, if homes are built in these risk areas, Jefferson County's vulnerability to wildfire hazards will increase. Currently, 1.5% of the wildfire susceptible areas already have residential development present, as seen in **Table 2.4**. Large-lot residential development is the most at risk since these homes typically are surrounded by wooded lots and often do not have enough defensible space to stop a wildfire from spreading throughout the neighborhood.

**Attachment D** includes maps of potential sinkhole areas in the County. Parts of the northwest and southwest portions of the county, along the Leon County border, are at risk from sinkholes due to the karst foundation of the area. Again, though, a large portion of the sinkhole hazard area is being used for agriculture, 86% (**Table 2.4**). There are also 125.5 acres, or 8.2% of the potential sinkhole area, in residential use, however. Of the undeveloped land at risk, 91.2%, or 48.8 acres, is designated for future use as agriculture-5 as seen in **Table 2.5**.

Table 2.4 Total Unincorporated Acres in Hazard Areas by Existing Land Use Category

Existing Land Use Cat	Coastal Hazard Zone	Hurricane Vulnerability Zone	Flood Zones	Wildfire Susceptible Areas	Potential Sinkhole Areas	
Agriculture	Acres	16,552.3	72,782.6	N/A	7,173.4	1,319.1
Agriculture	%	52.5	66.9	N/A	89.9	86.0
Attractions, Stadiums,	Acres	0.0	3.3	N/A	2.5	0.0
Lodging	%	0.0	0.0	N/A	0.0	0.0
Places of Worship	Acres	0.0	10.9	N/A	1.6	0.7
Flaces of Worship	%	0.0	0.0	N/A	0.0	0.0
Commercial	Acres	0.0	2.7	N/A	2.2	0.0
Commercial	%	0.0	0.0	N/A	0.0	0.0
Government, Institutional,	Acres	14,492.0	33,890.3	N/A	40.8	0.0
Hospitals, Education	%	46.0	31.2	N/A	0.5	0.0
Industrial	Acres	0.0	1.3	N/A	1.1	0.0
iriuustriai	%	0.0	0.0	N/A	0.0	0.0
Residential Multi-Family	Acres	0.0	0.0	N/A	0.7	0.0
residential Multi-Lanliy	%	0.0	0.0	N/A	0.0	0.0
Residential Mobile Home,	Acres	0.0	167.9	N/A	41.5	78.2
or Commercial Parking Lot	%	0.0	0.2	N/A	0.5	5.1
Residential Single-Family	Acres	4.2	142.2	N/A	83.6	47.3
Residential Single-Family	%	0.0	0.1	N/A	1.0	3.1
Submerged Land	Acres	111.2	111.0	N/A	51.3	0.0
(Water Bodies)	%	0.4	0.1	N/A	0.6	0.0
Transportation,	Acres	109.0	364.3	N/A	60.6	32.3
Communication, Rights-Of-Way	%	0.3	0.3	N/A	0.8	2.1
Utility Plants and Lines,	Acres	142.9	149.8	N/A	11.6	2.0
Solid Waste Disposal	%	0.5	0.1	N/A	0.1	0.1
Vacant	Acres	92.1	1,153.9	N/A	509.6	53.5
Vacant	%	0.3	1.1	N/A	6.4	3.5
Total Acres	Acres	31,503.7	108,780.2	N/A	7,980.5	1,533.1
Total Acres	%	100.0	100.0	N/A	100.0	100.0

Table 2.5 Total and Undeveloped Acres in Hazard Areas by Future Land Use Category for the Unincorporated County

Future Land Use Category		Coastal Hazard Zone		Hurricane Vulnerability Zone		Flood Zones		Wildfire Susceptible Areas		Potential Sinkhole Areas	
		Total	Undev.	Total	Undev.	Total	Undev.	Total	Undev.	Total	Undev.
Agriculture - 20	Acres	1,161.2	0.0	62,627.1	80.9	N/A	N/A	3,495.1	101.2	770.9	0.0
Agriculture - 20	%	3.7	0.0	57.6	7.0	N/A	N/A	43.8	19.9	50.3	0.0
Agriculture - 3	Acres	0.0	0.0	0.0	0.0	N/A	N/A	39.5	0.0	0.0	0.0
Agriculture - 3	%	0.0	0.0	0.0	0.0	N/A	N/A	0.5	0.0	0.0	0.0
Agriculture - 5	Acres	0.0	0.0	3,101.2	198.2	N/A	N/A	3,576.7	318.1	641.8	48.8
Agriculture - 5	%	0.0	0.0	2.9	17.2	N/A	N/A	44.8	62.4	41.9	91.2
Conservation	Acres	30,207.0	92.1	42,289.4	827.5	N/A	N/A	408.9	57.7	0.0	0.0
Conservation	%	95.9	100.0	38.9	71.7	N/A	N/A	5.1	11.3	0.0	0.0
Mining	Acres	135.5	0.0	176.3	0.0	N/A	N/A	0.0	0.0	0.0	0.0
Mining	%	0.4	0.0	0.2	0.0	N/A	N/A	0.0	0.0	0.0	0.0
Mix-use	Acres	0.0	0.0	0.0	0.0	N/A	N/A	121.1	0.7	0.0	0.0
Business-Residential	%	0.0	0.0	0.0	0.0	N/A	N/A	1.5	0.1	0.0	0.0
Mix use int/Dusiness	Acres	0.0	0.0	0.0	0.0	N/A	N/A	48.2	1.6	0.0	0.0
Mix-use int/Business	%	0.0	0.0	0.0	0.0	N/A	N/A	0.6	0.3	0.0	0.0
Mix-use	Acres	0.0	0.0	62.4	5.8	N/A	N/A	55.7	4.9	0.0	0.0
sub/Residential	%	0.0	0.0	0.1	0.5	N/A	N/A	0.7	1.0	0.0	0.0
Prison	Acres	0.0	0.0	0.0	0.0	N/A	N/A	10.5	0.0	0.0	0.0
Prison	%	0.0	0.0	0.0	0.0	N/A	N/A	0.1	0.0	0.0	0.0
Dec 4	Acres	0.0	0.0	281.1	23.6	N/A	N/A	119.9	25.2	120.4	4.7
Res-1	%	0.0	0.0	0.3	2.0	N/A	N/A	1.5	4.9	7.9	8.8
Dec 2	Acres	0.0	0.0	242.8	17.8	N/A	N/A	105.0	0.2	0.0	0.0
Res-2	%	0.0	0.0	0.2	1.5	N/A	N/A	1.3	0.0	0.0	0.0
Total	Acres	31,503.8	92.1	108,780.3	1,153.9	N/A	N/A	7,980.4	509.6	1,533.1	53.5
TOTAL	%	100.0	100.0	100.0	100.0	N/A	N/A	100.0	100.0	100.0	100.0

**Table 2.6** presents the total numbers of acres in a hazard zone in Jefferson County's incorporated areas and how many of those acres are currently undeveloped. Monticello is not vulnerable to coastal storms, as it isn't located along the coastline. Monticello's vulnerability will be presented in more detail in **Section 6** of this profile. All of the acreage within Monticello is considered to be in a wildfire susceptible area, however 2.7% is still considered vacant. The city is not considered to be vulnerable to sinkholes as well. The City can use some of the recommendations for wildfire from this profile to decrease Monticello's vulnerability.

**Table 2.6 Total and Vacant Incorporated Acres in Hazard Areas** 

Jurisdiction		Coastal Hazard Zone		Hurricane Vulnerability Zone		Flood Zones		Wildfire Susceptible Areas		Sinkhole Susceptible Areas	
		Total	Vacant	Total	Vacant	Total	Vacant	Total	Vacant	Total	Vacant
Monticello	Acres	0.0	0.0	0.0	0.0	N/A	N/A	66.2	1.8	0.0	0.0
Monticello	%	0.0	0.0	0.0	0.0	N/A	N/A	100.0	2.7	0.0	0.0
Total Acres	Acres	0.0	0.0	0.0	0.0	N/A	N/A	66.2	1.8	0.0	0.0

%	0.0	0.0	0.0	0.0	N/A	N/A	100.0	2.7	0.0	0.0

# 3. Existing Mitigation Measures

#### **Local Mitigation Strategy**

The LMS is an ideal repository for all hazard mitigation analyses, policies, programs, and projects for the County and its municipalities due to its multi-jurisdictional and intergovernmental nature. The LMS identifies hazard mitigation needs in a community and structural or non-structural initiatives that can be employed to reduce community vulnerability. Communities can further reduce their vulnerability to natural hazards by integrating the LMS analyses and mitigation objectives into their Comprehensive Plans.

An LMS prepared pursuant to the State's 1998 guidelines has three substantive components (FDCA, 2005b):

<u>Hazard Identification and Vulnerability Assessment (HIVA)</u>. This section identifies a community's vulnerability to natural hazards. Under Florida rules, the HIVA is required to include, at a minimum, an evaluation of the vulnerability of structures, infrastructure, special risk populations, environmental resources, and the economy to any hazard the community is susceptible to. According to FEMA, LMSs revised pursuant to the Disaster Mitigation Act of 2000 (DMA 2000) criteria must include maps and descriptions of the areas that would be affected by each hazard, information on previous events, and estimates of future probabilities. Vulnerability should be assessed for the types and numbers of exposed buildings, infrastructure, and critical facilities with estimates of potential monetary losses. Plan updates will be required to assess the vulnerability of future growth and development.

<u>Guiding Principles</u>. This section lists and assesses the community's existing hazard mitigation policies and programs and their impacts on community vulnerability. The Guiding Principles typically contain a list of existing policies from the community's Comprehensive Plan and local ordinances that govern or are related to hazard mitigation. Coastal counties frequently include policies from their Post-Disaster Redevelopment Plans (PDRPs).

Mitigation Initiatives. This component identifies and prioritizes structural and non-structural initiatives that can reduce hazards vulnerability. Proposals for amendments to Comprehensive Plans, land development regulations, and building codes are often included. Structural projects typically address public facilities and infrastructure, and buy-outs of private structures that are repetitively damaged by flood. Many of these qualify as capital improvement projects based on the magnitude of their costs and may also be included in the capital improvements elements of the Counties' and Cities' Comprehensive Plans. The LMS Goals and Objectives will guide the priority of the mitigation initiatives.

The Jefferson County LMS (adopted in 2001) was used as a source of information in developing this profile and was also reviewed for any enhancements that could be made to allow better integration with other plans, particularly the local Comprehensive Plans.

Hazard Identification and Vulnerability Assessment

This section of the LMS was briefly reviewed for its ability to provide hazard data that can support comprehensive planning. The LMS uses sufficient data on structures at risk for all of the major hazards discussed in this profile. It also discuss populations at risk and potential dollar losses by structure typle. While future land use is discussed, and the Future Land Use Map is provided, this information is not integrated and analyzed. The maps in the LMS show only the hazard areas

and do not attempt to correlate this with population centers or land uses. Incorporating land use and population data into the risk assessment of the LMS provides a better source of data for planners to use in policy making and policy evaluation of the local Comprehensive Plan. The LMS also sets a standard for the quality of data that should be used in determining risk and thereby used to determine mitigation policies. Jefferson County's goals are broad-reaching and lack both objectives and policies. This makes it difficult to determine the actions the County intends to take to reach their goals.

#### **Guiding Principles**

The Jefferson County LMS contains a list of existing mitigation policies from other planning documents. Included on this list are excepts from the Jefferson County Comprehensive Plan and the Jefferson County Land Development Regulations. It would be much more useful if a list of the hazard-related policies from the City of Monticello's Comprehensive Plan were included in the LMS for reference as well as the Jefferson County Comprehensive Emergency Management Plan. This would allow all jurisdictions and County departments' access to this information that can be used to judge whether more integration is needed.

#### LMS Goals and Objectives

The LMS Goals and Objectives can be found in **Attachment E**. The following is a summary of how well the LMS has addressed mitigation issues that coincide with planning concerns.

Jefferson County has a list of 14 broad-reaching mitigation goals however it does not include the corresponding objectives and policies that indicate how the community intends to reach their goals. The following goals found in the County LMS could have land use solutions: Maintain the availability and functioning of the community's infrastructure during a disaster; Protect the health, safety and welfare of the community's residents and visitors from disasters; Promote community awareness of local hazards and the techniques to minimize vulnerability; Protect scenic, historical and recreational community resources; Minimize government expenditures for public goods and services; Seek preventative measures which would reduce loss and the need for response and recovery measures; and Maintain the condition of coastal and riverine environmental systems, especially those that provide natural protection and have economic value. A portion of the recommendations found in Section 5, will discuss suggested corresponding land use objectives and policies that would further the listed goals of the community.

#### **Comprehensive Emergency Management Plan**

The Mitigation Annex of the 1998 Jefferson County CEMP was reviewed for consistency with the other plans and evaluated in its effectiveness as a tool for planners. The Annex does a good job of summarizing the responsibilities of hazard mitigation among the different agencies and organizations within the County. The CEMP designates the lead agency and while it states that all other municipal and county governments will provide back up, there is no direct tie to the Planning and Zoning Department. While mitigation planning is discussed in terms of funding sources, it does not explain the LMS process and how it plays a role in mitigation planning.

#### **Post-Disaster Redevelopment Plan**

A PDRP for Jefferson County was not available for review at the time this profile was drafted. If Jefferson County has a current PDRP, this will be obtained and reviewed for the final version of this document.

# National Flood Insurance Program/Community Rating System

Jefferson County and the City of Monticello are both participating communities in the National Flood Insurance Program. In addition, Jefferson County participates in the Community Rating System and has a current class of 9.

# 4. Comprehensive Plan Review

Jefferson County's Comprehensive Plan (adopted in 2001) was reviewed in order to see what the County has already done to integrate their LMS policies, and hazard mitigation in general, into their planning process. A list of the goals, objectives, and policies currently in the plan that contribute to hazard mitigation is found in **Attachment F**. These policies are also presented in **Section 5**. The following is a summary of how well the plan addressed the four hazards of this analysis.

#### **Coastal Hazards**

Jefferson County's Comprehensive Plan has taken the ultimate mitigation action to protect their populations from coastal flooding due to storm surge as well as wind damages by prohibiting the development of settlements in the CHHA. Almost all of the land within the CHHA has been designated as conservation, with a smaller inland portion designated for agricultural uses. Most of this land makes up the Aucilla Wildlife Management Area, with a portion in the St. Marks Wildlife Refuge. Not only does this mitigation action prevent the coastal flooding risks to structures, it also creates a strong buffer between the coastal areas and inland areas, which acts as a barrier for the county and other inland counties such as Leon. In this way, the wind damages to inland areas are also mitigated.

## Flooding Hazards

Flooding was addressed in the Comprehensive Plan in multiple policies. There were many policies for protecting or limiting densities in floodplains and wetlands. The plan also addresses the use of buffer zones and cluster development in areas highly susceptible to flooding. The county utilizes stormwater management drainage planning for all new developments, which mitigates the flooding of not only future developments, but the adjacent properties as well. Furthermore the plan states that schools cannot be located in flood prone areas County has several policies that regulate new construction to be compliant with the County Floodplain Standards, and they require repetitive loss properties to be modified to remedy the recurring damage.

#### Wildfire Hazards

There were no policies in the Comprehensive Plan that related to wildfire hazards.

#### Sinkhole Hazards

There was a one policy in the Comprehensive Plan that designates sinkholes as environmentally sensitive areas stating that these areas will be protected by land development regulations, in order to reduce the threat posed by urban development.

#### 5. Recommendations

For the LMS to be effective in the decision-making process of growth management, its objectives and policies must be integrated into the Comprehensive Plan. The Plan is the legal basis for all local land use decisions made. If hazard mitigation is to be accomplished beyond the occasional drainage project, these hazards must be addressed in comprehensive planning, where development can be limited or regulated in high-risk hazard areas just as sensitive environments are routinely protected through growth management policies. Mitigation of hazards is considerably easier and less expensive if done when raw land is being converted into development. Retrofitting structure and public facilities after they have been built is significantly more expensive. However, if older neighborhoods or communities are scheduled to be revitalized or redeveloped, hazard mitigation needs to be an aspect considered and integrated into the project prior to the time of development approval.

Jefferson County has begun this process of integrating hazard mitigation throughout its Plan's elements. The prior section summarized how the major hazards for the County have been for the most part well-addressed. There is, however, still some disconnection between the LMS objectives and initiatives, and the policies in the Comprehensive Plan. By tightening the connection between these documents, the County will find it easier to implement hazard mitigation, and there will be higher awareness of these issues within more departments of the County government. **Table 5.1** presents options for further integration as well as the basis for these recommendations.

NOTE: The recommendations set out in this section are only suggestions. Through the workshop process and contact with the local governments, the goal of this project is to result in specific recommendations tailored and acceptable to each county. While the profile addresses hurricanes, flooding, wildfire, and sinkholes, the County should consider other hazards, if appropriate, such as tornadoes and soil subsidence, during the update of the local Comprehensive Plan.

#### General Recommendations

- --The county has many measures, being currently undertaken that serve to mitigate the impacts of hazards, however they have not been identified as beneficial in this area. Current growth management techniques such as the land conservation program, conservation of floodplains and wetlands, the prohibition of development within the CHHA as well as cluster development that are employed by the community to protect natural water bodies and habitats also provide the major benefit of protecting the inland areas from coastal storms and flooding. Therefore the county should update these policies in the comprehensive plan emphasizing the benefits of hazard mitigation.
- --In addition to the above recommendation, the community should also update their comprehensive plan to indicate that growth management techniques such as the buffer zones currently employed around archeological and historical sites, could also be used in to mitigate the impacts of hazards. Cluster developments and buffer zones can be used to mitigate the impacts of flooding, wildfire and sinkholes.
- --The county should determine whether or not the conserved areas in the county have lifetime designations. In North Florida, some areas that were formally designated as uses with low densities are being slated for rural and urban development. It is important to determine if and when, all of the conservation agreements end, in order to determine if additional actions can be taken in the Comprehensive Plan to ensure that the property is protected.
- --Create a public outreach program aimed at all local citizens, business owners as well as local elected officials explaining the hazard mitigation benefits of the coastal area conservation lands. This could be an initiative included on their LMS project list for funding.

#### INTEGRATION OF THE LOCAL MITIGATION STRATEGY INTO THE LOCAL COMPREHENSIVE PLAN

JEFFERSON COUNTY

--The goals and objectives found in the Jefferson County LMS are broad-reaching and due to this it is hard to determine if the community plans to take any comprehensive planning related actions in an effort to further their goals. As listed in the analysis there are several, however, that indirectly promote the integration of hazard mitigation into comprehensive planning efforts.

#### Wildfire Hazards

-- Create a policy in the Comprehensive Plan to update the Land Development Regulations for the County to include wildfire mitigation principles, such as defensible space buffering surrounding development or multiple exits for large development. This could also include provisions for vegetation maintenance and the required removal of exotic vegetation or land cover that could be conducive to wildfire. Although wildfire isn't a major threat to the county, it could become a threat as the population increases in the future. Jefferson County should determine how to mitigate wildfires through planning before it is faced with this as a major threat.

#### Coastal Hazards

--Create a public outreach program aimed at all local citizens, business owners as well as local elected officials explaining the hazard mitigation benefits of the coastal area conservation lands. This could be an initiative included on their LMS project list for funding.

#### Flooding Hazards

- --The Comprehensive Plan contains a policy that indicates their intention of preparing a stormwater Drainage Plan to further mitigate the impacts of flooding in the community. This should be listed as a prioritized project on their LMS project list for possible funding sources such as FEMA's Hazard Mitigation Grant Program.
- --Currently the Jefferson County Comprehensive Plan, Capital Improvements Element gives a priority ranking to projects that are needed to protect public health and safety. In order to further integrate Capital Improvements Projects onto the LMS project list priority should also be given to those projects listed on the LMS project list. This would ensure that projects to mitigate vulnerable infrastructure is completed first, while also providing an alternative funding source for capital improvement projects that will serve a hazard mitigation function.

#### Sinkhole Hazards

--Currently the county has a policy in their Comprehensive Plan that designates sinkholes as environmentally sensitive areas that are protected by the way of land development regulations. The county should further the efforts of protecting the communities from sinkholes by also designating areas highly prone to sinkholes as environmentally sensitive efforts through revising the language in the Comprehensive Plan. Furthermore, the community should revise their comprehensive plan to include other protection measures such as buffer zones around current sinkholes and cluster development aimed at directing populations away from hazard prone areas.

## 6. Sources

- Jefferson County. 2001. Jefferson County Comprehensive Plan.
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- Florida Department of Community Affairs. 2005b. *Protecting Florida's Communities: Land Use Planning Strategies and Best Development Practices for Minimizing Vulnerability to Flooding and Coastal Storms.* Tallahassee, FL.
- State of Florida. 2005. Hurricane Evacuation Study Database. Florida Department of Community Affairs, Division of Emergency Management.
- University of Florida, Bureau of Economic and Business Research. 2004. *Florida Statistical Abstract*. Gainesville, FL.
- U.S. Census Bureau. 2000. State & County Quickfacts. Retrieved in 2005 from http://quickfacts.census.gov/qfd/index.html.

# **Attachment A**

Maps of the Existing and Future Land Uses within the Coastal Hazard Zone and the Hurricane Vulnerability Zone

# **Attachment B**

Maps of the Existing and Future Land Uses within the 100-year Floodplain

# **Attachment C**

Maps of the Existing and Future Land Uses within Wildfire Susceptible Areas

# **Attachment D**

Maps of the Existing and Future Land Uses within Potential Sinkhole Hazard Areas

# Attachment E

# Jefferson County Local Mitigation Strategy Goals and Objectives

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

# Attachment F

# Jefferson County Comprehensive Plan Excerpts Related to Hazard Mitigation

## **Future Land Use Element**

Policy 1-3:

It shall be the policy of the county to encourage but not require clustering of residential units permitted in new subdivisions in these categories. The County shall adopt a system of incentives in the Land Development Code which promotes and encourages clustering of residential units. In addition, the Land Development Code shall also include provisions to ensure that clustering of residential uses will be compatible with adjacent residential uses of a lower density and to reduce potential incompatibility that adjacent agricultural uses may present.

Policy 1-5:

The County's land development regulations shall ensure protection of environmentally sensitive lands. Environmentally sensitive lands include areas designated as Conservation on the Future Land Use Map, and may include other isolated areas identified on a site-by-site basis, based on the presence of poor soils, wetlands, flood prone areas, and habitat for threatened and endangered wildlife. All development is subject to site plan review which is the primary means of ensuring protection. This process will include a review of the FIRM and Archaeological Sites Maps and for any major development a survey showing any critical areas on the site. Also refer to specific objectives and policies of the Conservation Element.

Objective 3:

Throughout the planning period, the county shall require that the natural and historic resources of the county be protected from the negative impacts of development activities, and shall require that future land uses are coordinated with the appropriate topography and soil conditions.

- **Policy 3-1**: Encourage development and allow growth only in areas with suitable soil conditions.
- Policy 3-2: Drainage improvement plans will be submitted as part of the site plan and/or subdivision review process. Standards will be included in the land development regulations for drainage improvements during development.
- Policy 3-3: Existing regulations in the Jefferson County Development Code shall be continued; these regulations are designed to ensure protection from flood damage, protection of the aquifer, protection of both historical and archaeological sites, and protection of lands adjacent to lakes, streams, and within wetlands as shown on the FIRM. Regulations will be revised for consistency with the objectives and policies of the Jefferson County Comprehensive Plan.

**Policy 3-4**: Jefferson County shall ensure the protection of historic or archaeological

resources identified from the Florida Master Site File, and shown on a map maintained in the office of the Jefferson County Building Official. Prior to the issuance of any development approval, preliminary or final, this map shall be consulted to determine whether historic or archaeological resources extension the site proposed for development., And known by the County Planning

Department. The Planning Department will check for any known site.

**Policy 3-5:** Jefferson County shall work with DEP, NFWMD, SRWMD, and other groups to

improve and enhance the County's stormwater management system. Particular emphasis will be placed on the "Saint Marks Watershed" areas that are stream to

sink watersheds.

**Policy 9-4:** Schools shall not be located in flood prone areas.

#### **Housing Element**

**Policy C2-2:** Permit the use of innovative construction techniques that are consistent with the,

safety, and welfare concerns which have the potential of lowering the cost while maintaining quality. Discuss with the Building Official the concept before

proceeding with drawings for obtaining the building permit.

**Policy C1-5:** All public planning studies – subdivisions, transportation, drainage, stormwater

and utilities – will identify the presence of historic resources, if applicable, and the

impact of any proposal on these resources.

**Policy C1-8:** Develop a land conservation program that is in agreement with the owner to

protect historic, natural, and scenic resources.

## **Infrastructure Element**

Objective 3: Throughout the planning period, the County shall require County residents to

conserve water

Policy 3-1: During periods of water shortage or drought, the County shall initiate procedures

to restrict potable water usage in keeping with The Water Shortage Restrictions contained in the Northwest Florida and Suwannee River Water Management Districts' Water Shortage Plans. Such procedures shall be advertised through

public notice.

GOAL 3: Adequate stormwater drainage will be provided to afford reasonable protection

from flooding, and to prevent degradation of quality of receiving waters.

Objective 1: The County will alleviate the one existing drainage deficiency by 1998, and

enforce land development regulations for protection of natural drainage features and to ensure that future developments provide adequate stormwater drainage facilities. The deficiency to be corrected is: Limerock (entrance) Road in Lloyd

Acres.

**Policy 1-1:** The County shall prepare a stormwater Drainage Plan after completion of the

County Jail and the capital projects in the CIE. A specific date shall be established during the annual monitoring, evaluation, and update of the CIE, as soon as funds can be made available. The Stormwater Drainage Plan, when

prepared, shall include:

- An inventory of stormwater quality and quantity management deficiencies within the Lake Miccosukee Drainage Basin and the Aucilla River north of US 19/27, and recommendations for improvements.
- b. Analysis of whether adopted level of service standards in these areas are appropriate, and recommendations for alternative standards, if the study indicates.
- c. Evaluation of all farms adjacent to the river, in coordination with the Water Management Districts and Soil Conservation Service, for erosion and sediment controls, and other best management practices, to be used by agricultural lands to eliminate sedimentation into those water bodies. Recommendations shall evaluate the need for, and implementation mechanism for, such areas to have an approved US Soil Conservation Service Conservation plan (there is no cost to the farmer to have this plan completed, and the plan provides recommendations for additional best management practices to be followed.)
- Policy 1-4: The County shall continue to enforce the existing floodplain ordinance restricting development in flood prone areas. The ordinance shall continue to prohibit the following within the Floodway: fill; structures (other than on stilts); common water supplies or sewage treatment facilities; and roads, except at infrequent intervals as necessary to provide access to private or public property. Septic tanks, to serve residential structures, are permitted if they can meet all Federal, State and local requirements. Permitted uses in the 100 year floodplain shall include: agriculture; silviculture; residential and farm structures, the first floor elevation is at least one foot above the 100 year flood elevation, and only at very low densities; recreation (such as hiking trails); native vegetation and, wildlife habitat. The ordinance shall continue to protect the functions of floodprone areas through its requirement that flood areas are to be treated as positive visual open space, wildlife habitat, and as water recharge and discharge resources.
- **Policy 1-5:** The County shall require that adopted levels of service for stormwater management provided for all new development, at the developer's expense. The developer's engineer shall be required to prove that the standards are being met for the new development by sealing the plans.
- **Policy 1-8:** The county shall commit adequate monies in the Capital Improvements Element to alleviate the drainage deficiency on the access road to Lloyd Acres.

## **Conservation Element**

- GOAL 1: Preserve, protect, and conserve the natural resources and the ecological integrity now existing in Jefferson County.
- Objective 1.2: Conserve and protect the quality and quantity of the current water sources by the following methods:
  - Implement and enforce the County's land development code, which requires a site plan review process for all development.
  - Correct major drainage deficiencies throughout this planning period.

- Policy 1.2.2: County shall require all new developments to provide a stormwater management system so designed that post development rates of runoff shall not exceed predevelopment rates. In addition, the designed system for stormwater shall include its treatment prior to its discharge into the public waterway system that meets the requirements of Ch. 17-25 F.A.C. Permits for the stormwater system design shall be obtained from the applicable water management district, which are the Suwannee River Water Management District and the Northwest Florida Water Management District.
- **Policy 1.2.3:** County shall require, where appropriate, on-site stormwater management system to be functioning prior to the beginning of constructing the infrastructures or buildings.
- **Policy 1.2.4**: County, during this planning period, shall review existing code requirements for impervious areas for parking and set minimum and maximum standards that are more conducive than existing standards in order to reduce the size of impervious surfaces.
- **Policy 1.2.5:** The land development regulations shall limit impervious surfaces as well as require on-site detention of stormwater runoff within the County.
- Objective 1.3: Protect all areas that fall within the 100-year floodplain as shown on the Flood Insurance Rate Map.
- Policy 1.3.1: The County shall enforce the existing floodplain ordinance restricting development of flood prone areas. Permitted uses in the 100-year floodplain shall be limited to the following: agriculture, silviculture, and residential and farm structures.
- **Policy 1.4.1:** The County shall adhere to any emergency water conservation measures imposed by the Northwest Florida and Suwannee River Water Management Districts.
- **Policy 1.4.4:** The County shall promote and illustrate to owners of agricultural land by means of public awareness programs how to incorporate the water conserving methods of farming as recommended by the Soil Conservation Service, Watershed Protection Plan and other methods that have been developed by other soil conservation organizations.
- Objective 1.5: Conserve and protect soils, native vegetative communities, wildlife, and wildlife habitats from adverse effects with an emphasis on threatened, endangered, and species of special concern. Conserve, protect, and appropriately use mineral sources.
- **Policy 1.5.1:** The County shall use its land development regulations for the preservation and conservation of those areas, which are known habitats for threatened and endangered species as well as species of special concern. In addition, the land development regulations shall include and govern those areas characterized by wetlands

- Policy 1.5.4: To ensure future mining activities are environmental sound, the following criteria, to be included in the Land Development Regulations, shall be used to examine the applicant's plan: No regionally significant wetlands shall be adversely affected. Any non-regionally significant wetlands in the area to be mined shall be avoided, if practicable, and if such wetlands are adversely affected, adequate mitigation shall be required, or if applicable, wetlands destroyed shall be replaced on a acre for acre basis with a wetland of similar size, type of vegetation, water flow, and topographical farmland with sinilar functions as the destroyed wetland; and in a location approved by the County's planning official
- Policy 1.5.8: Wetlands, water bodies, springs, sinkholes, caves and habitat of endangered, threatened and species of special concern are designated as environmentally sensitive lands. These lands, when threatened by urban development, shall be protected by land development regulations. In addition, protection shall also be extended to vegetative and wildlife habitats that are critical for designated species. The regulations shall establish performance standards for development in such environmentally sensitive areas. All environmentally sensitive lands designated for silviculture shall require the owner or operator to use the U.S. Forest Service's best management practices as well as abide by the the requirements of POLICY 1.5.11.
- Policy 1.6.2: The floodplain ordinance shall protect the water quality, the wildlife habitat, the shorelines, and the riparian areas of rivers with the establishment of a contiguous vegetative buffer along the Wacissa and Aucilla Rivers. The minimum width shall be twenty five (25) feet as measured from the wetlands jurisdictional line. In these areas, permanent structures shall be prohibited and clearing of native vegetation other then that required for silviculture operations will be limited to reasonable access to shorelines based upon an ecosystem analysis. This shoreline buffer will also apply to Lake Miccosukee.
- Policy 1.6.5: The County shall continue its efforts to reduce erosion in coordination with the Soil Conservation Service. To do so, the County shall notify the farmers of the opportunities that are available for reducing erosion under the Aucilla River Water Management Plan. In addition, farmers shall be directed to the local Soil Conservation District to receive technical and other assistance on the subject of erosion control.

#### **Costal Management Element**

- GOAL 1: Protect, preserve, and enhance the natural resources of the coastal area.
- Objective 1.1: Protect native vegetation, archaeological sites, and historical resources by prohibiting development in the Coastal High Hazard Area using the land development regulations, .
- Policy 1.1.2: If a known or unknown archaeological site is located in close proximity to any proposed activity which may be permitted within the Coastal High Hazard Area (such as recreational sites, coastal access, or transmission facility), no work may be begun until the applicant consults with the Division of Historic Resources in developing a preservation plan for that discovered resource. The map of known resources shall be maintained at the County Building Department and must be reviewed during the approval process of the project.

- **Policy 1.1.3:** The land development regulation shall require that all development (regardless of location) maintain a minimum buffer of 25-feet from known archaeological or historical sites. The regulations shall also include provisions for the protection, preservation, or sensitive re-use of historical structures.
- **Policy 1.1.4:** The County will coordinate with the Division of Historic Resources to establish historic preserves or parks at sites of known historical or archaeological sites of significance.
- Policy 1.1.5: The land development regulations shall prohibit all dredge and fill activities in wetlands within the Coastal High Hazard Area, except where conclusive demonstration shows the necessity of the proposal in the public interest, and where the applicant has demonstrated that such activity will not negatively impact water quality or endanger species habitat.
- Objective 1.3: Where necessary, the County shall coordinate with the Federal government and other appropriate State agencies to promote natural resources by means of conservation and protection techniques.
- **Policy 1.3.1:** The County shall continue to cooperate with all appropriate agencies to protect areas that have been set aside as conservation or recreation areas as shown on the Future <u>Land Use Map.</u>
- Policy 1.3.2: In order to protect the Aucilla River Estuary, the County shall develop coordinate mechanisms with Suwannee River Water Management District regarding estuarine pollution, surface water runoff, protection of living marine resources, reduction of exposure to natural hazards, and ensuring safe public access. Coordination mechanisms shall include consideration of an informal agreement between all entities that each will notify the other jurisdictions upon receipt of development proposals along the estuary which may affect the above issues. Further, all entities should notify each other upon receipt of proposals for plan amendments affecting these issues.
- GOAL 2: Reduce vulnerability to hurricane and protect human life from such natural disasters.
- Objective 2.1: Protect the population from the effects of hurricane storms and also delays in evacuating storm areas by prohibiting future settlements from being built within the Coastal High Hazard Area as shown on the Future Land Use Map.
- **Policy 2.1.1:** The County shall continue to implement the hurricane evacuation timetable in the Federal Emergency Management 1993 Hurricane Evacuation Study.
- **Policy 2.1.2:** Every two years, or earlier, if new plans should become available, the County shall review hurricane evacuation plans with the Federal Emergency Management Agency and other relevant agencies to be prepared for most eventualities.
- **Policy 2.1.3:** The County shall require that impacts on the transportation system relative to hurricane evacuation be evaluated and mitigated as part of the development approval process.
- Policy 2.1.4: The recommendations of any interagency hazard mitigation report, which addresses future flood losses and in response to a Presidential Disaster

Declaration shall be incorporated into the County's Disaster Plan.

# **Capital Improvements Element**

Policy 1-3: Capital Improvement projects will be prioritized according to the following set of criteria and a fiscal impact review, as part of the annual budgeting process. The assigned priority will be designated on the Five-Year Schedule of Capital Improvements.

CRITERIA FOR NUMERICAL RANKING OF CAPITAL IMPROVEMENTS PROJECTS

PRIORITY I	<u>WEIGHT</u>	SCORE Yes (1) No (0) N/A (1) WEIGHT X SCO
The project is needed to and safety.	3	protect public health
<ol> <li>The project fulfills the County's legal commitment to provide facilities and services.</li> </ol>	3	
3. The project corrects an existing facility deficiency or provides for needed replacement of facility components, in order to preserve or achieve full use of existing facilities.	3	
<ol> <li>The project is required in order to comply with state law, water manage- ment district regulations, or federal law.</li> </ol>	3	
<ol><li>The project is finan- cially feasible.</li></ol>	3	
The project maintains adopted LOS standards.		3
PRIORITY II		
The project increases efficient use of existing facilities.		2
<ol><li>The project prevents or reduces future improve- ment costs.</li></ol>	2	
3. The project provides	2	

service to developed areas currently lacking full service.

- 4. The project promotes in-fill development and discourages urban sprawl.
- 2

- 5. The project supports the GOP's of the FLUE.
- 2

## PRIORITY III

- The project represents a logical extension of facilities and services within a designated service area.
- 1
- 2. The project promotes economic development within the County and/or redevelopment of blighted areas.

1

**TOTAL SCORE** 

Total Possible Score = 30

**Policy 1-5:** The County will seek funding outside the current budget for capital improvement projects that it cannot fund from it's general fund. These projects are:

- 1. Water system for Aucilla, Lamont, Lloyd, Wacissa, and Waukeenah areas of the County.
- 2. Road resurfacing of roads once owned by the state and now maintained by the County.
- 3. Expansion of the Recreation Park for regulation baseball fields, additional restrooms, tennis courts, and trails for bicycles, nature and walking.
- 4. Sewer system for the Lloyd vicinity with special emphasis on the interchange.
- 5. Advanced mapping facilities and equipment for the Property Appraiser's Office to facilitate better appraisals in case of a disaster such as a hurricane, tornado, flooding etc. The intent is to improve citizen warning, damage assessment, damage analysis, debris management and community, neighborhood outreach.
- 6. Restoration of old high school building (A building) to create economic development.

# Objective 7: Public expenditure for infrastructure in high hazard coastal areas will be limited to improvements for water dependent facilities in order to provide public access to water areas.