

Integrating Hazard Mitigation into Comprehensive Planning

Hardee County Profile

Florida Department of Community Affairs

Executive Summary

The experiences of the 2004 hurricane season epitomize the importance of better integrating hazard mitigation activities into local comprehensive planning. That 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 Hardee 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 Hardee 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, we present an argument for why hazard mitigation needs to 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 Hardee 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.

HARDEE COUNTY GENERAL RECOMMENDATIONS

- The Hardee County 2003 Comprehensive Emergency Management Plan, Section IV Mitigation Recommendations contains 37 hazard mitigation recommendations. The recommendations focus on hazard mitigation issues of Emergency Management, Public Education and Awareness, Land Use Planning and Growth Management, Rebuilding, Recovery, and Redevelopment, Floodplain Management, Infrastructure, Building Codes and Ordinances, and Natural Resources and the Environment. Much like the analysis in this report, these recommendations offer a way to improve hazard mitigation in the County based on existing procedures and policies. Many of these recommendations are

mirrored in the LMS. Including all of these recommendations in the LMS may be more useful in order to tie in the recommended strategies to LMS initiatives and ultimately capital improvement projects. Many of the CEMP recommendations could also be implemented through policies in the Comprehensive Plan as well.

- The Comprehensive Plan can include a goal that aims to promote education of hazard mitigation related information to the public and to County personnel. There were no existing Comprehensive Plan goals, objectives, or policies that support the dissemination of hazard mitigation information, however, the LMS includes several goals and objectives that promote disaster training, hazard preparedness, and public education. The best way to mitigate against existing hazards is through education and proper implementation. If County staff are better informed of hazard mitigation techniques and the County's policies related to hazard mitigation, better implementation of all hazard mitigation plans and policies can be achieved. There are several recommendations that address public education in the CEMP which could be integrated into this strategy.
- There currently are no policies in the Comprehensive Plan that address evacuation routes. It is important to consider that future development may create higher congestion of evacuation routes, as suggested in this analysis. A Comprehensive Plan policy may help keep evacuation route safety and capacity in the forefront of the County's strategy. Evacuation concerns could be addressed during site plan review or during concurrency review. Also, the County could simply add a policy that supports the regional evacuation plan. There are several excellent recommendations in the CEMP which address mass evacuations.
- The LMS could include a goal or objective to provide adequate shelter space based on shelter demand studies. Projects for hardening of schools to use as emergency shelters could support such an objective. The Comprehensive Plan could also encourage new single-family and multi-family homes to include safe rooms. The current deficit of shelter space, 8,388 people, poses a significant challenge to the County. The Policy to require mobile home parks to include a community shelter is a great step toward resolving the shelter deficit but the LMS plays a key role in providing public shelters and this should be addressed in its goals and objectives.
- The Comprehensive Plan could help to implement LMS Objective 3.1 regarding disaster resiliency of critical facilities by including a similar policy. This is also *Recommendation 1* found on page 61 of the CEMP. The County could also work on *Recommendation #4* of the CEMP that aims to flood-proof and wind-proof critical facilities by including a comprehensive plan policy that requires all new critical facilities to be built to a higher code. Taking measures to protect critical facilities may help ensure these structures and systems remain in operation during and after a natural disaster..
- The County can explore the use of geological testing in potential sinkhole areas in order to test for collapse prior to development. Currently, there is development in these hazard areas and future development of the hazard area north of Wauchula on Route 17 is likely to occur, as shown on the maps in **Appendix C** of this report. Addressing this hazard prior to development could limit the amount of structures and infrastructure at risk to sinkholes.
- Currently, there are many polices that address the preservation of historic structures, but not in regards to natural hazards. The LMS could access the vulnerability and risk of historic sites and structures to natural hazards. It could also prioritize drainage projects that will protect historical structures.

- The Comprehensive Plan could include objectives or policies to limit development in the 100-year floodplain through land use and zoning regulations. It could also limit residential development in high-risk fire areas, such as adjacent to conservation lands and restrict development through overlay zones or preservation districts in high-risk, karst- sensitive areas. Limiting development in high-risk hazard areas is a best management practice from *Protecting Florida's Communities* (FDCA, 2005b).
- The analysis of this report suggests there are 2,688 homes in wildfire hazard zones. The County could initiate an effort to mitigate wildfire and urban fire hazards near residential areas by promoting a Firewise program to educate home and business owners on ways to defend their property. Wildfires do occur in Hardee County and mitigation such as defensible space around property can reduce the vulnerability of homes and businesses.
- Currently, there are many policies in the Comprehensive Plan that aim to protect and conserve the natural environment. Protecting the County's natural resources also "maximize(s) their mitigative benefits and... safeguard(s) them from damage caused by natural disasters," (Hardee County. 2005). Including a similar objective or policy in the Comprehensive Plan can help protect natural resources as a means of hazard mitigation.

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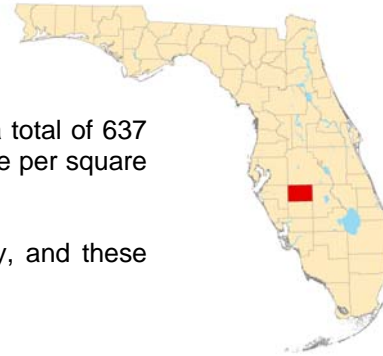
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1. County Overview

Geography and Jurisdictions

Hardee County is located in West-Central Florida. It covers a total of 637 square miles with an average population density of 42.3 people per square mile (U.S. Census, 2000).



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

Population and Demographics

Official 2004 population estimates for all jurisdictions within Hardee 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 Hardee County is 27,787 people (University of Florida, Bureau of Economic and Business Research, 2004). The most populated city in Hardee County is Wauchula, but 67.1% of the countywide population lives in the unincorporated portion of the County. Between 1990 and 2000, Hardee County as a whole had a growth rate of 38.2%, which was greater than the statewide growth rate of 23.5% in those 10 years.

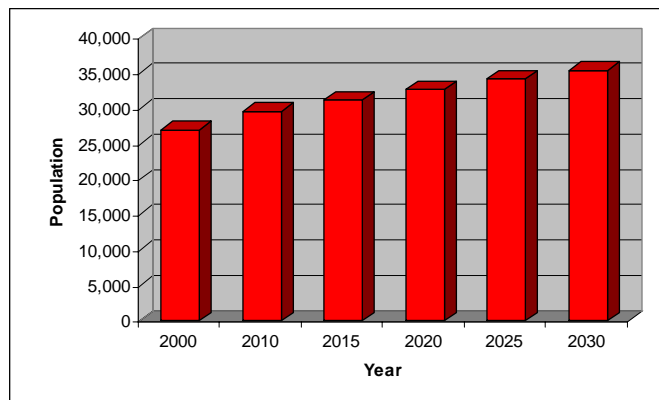
Table 1.1 Population Estimates by Jurisdiction

Jurisdiction	Population, Census 2000	Population Estimate, 2004	% Change, 2000-2004	% of Total Population (2004)
UNINCORPORATED	18,037	18,648	3.4%	67.1%
Bowling Green	2,892	3,072	6.2%	11.1%
Wauchula	4,368	4,405	0.8%	15.9%
Zolfo Springs	1,641	1,662	1.3%	6.0%
Countywide Total	26,938	27,787	3.2%	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), Hardee County’s population is projected to grow steadily for the next 25 years, reaching 35,400 people by the year 2030. **Figure 1.1** illustrates medium population projections for Hardee County based on 2004 calculations.

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



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

Of particular concern within Hardee 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, 13.9% of Hardee County residents are listed as 65 years old or over, 24.2% are listed as having a disability, 24.6% are listed as below poverty, and 32.1% 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): hurricanes, floods, thunderstorms, wildfire, tornados, freezes, and sinkholes. The LMS prioritized these hazards and lists hurricanes, floods, and thunderstorms as posing high risks to the county. Wildfire, tornadoes, and freezes were ranked as medium risk hazards, while sinkholes were ranked a low risk. (Hardee County. 2005)

In 2004 Hurricane Charley caused county rivers to rise three feet above flood level. It was reported the storm caused \$750 million in property damage and destroyed 1,400 homes. Also, in 2000, there was a wildfire in the southwestern portion of the county that burned approximately 700 acres. The LMS also reports a tornado touched down in 2000 near Highway 62, but caused no damage. (Hardee County. 2005)

Hazards Analysis

The following analysis looks at three major hazard types: 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 under contract with the Florida Department of Community Affairs (FDCA). Estimated exposure values were determined using 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 adjacent risk zones for sinkholes. 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 Hardee County that live within FEMA Flood Insurance Rate Map zones that signify special flood hazard areas. According to these maps, only 7.7% of the population, or 2,074 people, live within the 100-year flood zone. An estimated 478 of those at risk of flooding are disabled and 1,299 people are minority, below poverty, or both. These special-needs citizens require extra planning by local governments to ensure their safety. In Hardee County, sinkholes do pose a risk with 10.1% of the population residing within a high to adjacent-risk sinkhole zone. Steps can be taken to further define potential sinkhole locations and to build in a way that lessens the risk. Wildfires pose a large threat to the County, since 90.0% of the population live in medium- to high-risk wildfire zones. Thirty percent of those at risk from wildfire are disabled, making a quick evacuation more difficult. .

Table 2.1 Estimated Number of Persons at Risk from Selected Hazards

Population	Flood	Sinkhole (high-adjacent risk)	Wildfire (medium-high risk)
Minority	757	953	5,430
Over 65	146	206	2,456
Disabled	478	752	7,285
Poverty	542	721	4,498
Language Isolated	74	0	3,609
Single Parent	77	90	960
Countywide Total	2,074	2,722	24,238

Source: Florida Department of Community Affairs, 2005a.

Evacuation and Shelters

As discussed in the previous sections, population growth in Hardee County has been steady, 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 Hardee County are estimated to be 5 hours for all 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 storm-force winds make landfall. Hardee County is able to meet this recommendation, but it is important Hardee County take proactive measures to maintain this evacuation clearance time, as development is likely to occur. Additionally, 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 Hardee 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)**

County	Hurricane Category				
	1	2	3	4	5
Desoto	18	18	18	18	18
Glades	3	3	3	9	9
Hardee	5	5	5	5	5
Hendry	6	6	6	6	6
Highlands	2	2	2	2	2
Polk	13	13	13	13	13

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)

Coupled with evacuation is the need to provide shelters. If adequate space can be provided in safe shelters for Hardee County residents, then this could be a partial solution to increasing clearance times for evacuation. Currently, the State Shelter Plan reports that there is space for 1,267 people in the County’s shelters, and there are 8,388 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 9,722 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 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 Hardee County by structure type that are at risk from each of the four hazards being analyzed.

Flooding presents a large risk to property in the County, with 8,868 structures within a flood zone. As shown in **Table 2.3**, a majority of those buildings are agricultural structures while 1,942 are single-family homes. According to the latest National Flood Insurance Program Repetitive Loss Properties list, there are 5 homes in unincorporated Hardee County that have had flood damage multiple times and received insurance payments but have not remedied the recurring problem.

Table 2.3 also shows 7,790 structures at risk from wildfire, with 34% of those structures being single-family homes. Another 27.4% of the structures at risk from wildfire are government and institutional buildings which the County and its municipalities can easily take steps to reducing the vulnerability of these structures. There are only 375 structures within areas of high to adjacent risk to sinkholes.

Table 2.3 Estimated Number of Structures at Risk from Selected Hazards

Structure Type	Flood	Sinkhole (high-adjacent risk)	Wildfire (medium- high risk)
Single-Family Homes	1,942	202	2,680
Mobile Homes	755	46	920
Multi-Family Homes	867	12	439
Commercial	621	36	552
Agriculture	4,093	9	1,066
Gov./Institutional	590	70	2,133
Total	8,868	375	7,790

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, and wildfire. This section demonstrates the County's vulnerabilities to these hazards spatially and in relation to existing and future land uses. The following maps and tabulations of existing land use within hazard areas are based on the 2004 geographic information system (GIS) shapefiles from the Hardee County Property Appraiser and the Florida Department of Revenue. Maps and tabulations of future land uses in hazard areas were developed using the Hardee County future land use map obtained March 2005.

In **Attachment A**, two maps present the existing and future land uses within a 100-year flood zone. Most of the flood-prone land is adjacent to rivers and streams throughout the county. The maps show a vast majority of the land within the 100-year floodplain is currently used for agricultural use, which is positive since development regulations limit the amount and type of structures allowable through zoning on this land use. Out of the 90,938 total flood-prone acres, 78,791 acres, or 86.6% of land within the 100-year floodplain, is designated for agricultural use as shown in **Table 2.4**. An additional 8,823 acres, or 9.7%, is currently vacant. **Table 2.5** shows that out of the existing vacant acreage within the floodplain, 8,551 acres, or 96.9%, is designated for future agriculture use.

In **Attachment B**, maps present the land uses associated with high-risk wildfire zones. Small wildfire hazard areas are scattered throughout the county, however the largest concentration of risk areas are found around Wauchula. Most of the 14,365 acres susceptible to wildfires are currently in agricultural use, 62.6%, or are vacant, 16.0%, as shown in **Table 2.4**. There are also 2,098 acres of unincorporated land with a risk for wildfire currently used for residences. Much of this land falls outside jurisdictional boundaries near Wauchula and Zolfo Springs, and also along Highway 64. **Table 2.5** shows that out of the 2,292 vacant acres in wildfire zones, 85.6% are designated for future agricultural use. Future land use designations in the County other than agricultural use are located near existing development in a compact nature, which not only discourages urban sprawl but also limits the area of developed land that would need to be defended in the event of a wildfire.

Attachment C includes maps of potential sinkhole areas in the County. Potential sinkhole areas pose the least amount of risk to the unincorporated county. There is one area high to adjacent risk of sinkholes just north of the city limits of Wauchula and another area to the east of Zolfo Springs. Of the 1,437 acres in these zones, 62.5% is used for agriculture. Another 21% of these potential hazard areas have homes on them. On a positive note, only 33.9 acres of land within the zone are designated for the future land use of Town Center. Geological testing can be done prior to development in order to further analyze the potential risks of sinkhole in these small areas.

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

Existing Land Use Category		Flood Zones	Wildfire Susceptible Areas	Potential Sinkhole Areas
Agriculture	Acres	78,790.8	8,990.5	898.4
	%	86.6	62.6	62.5
Attractions, Stadiums, Lodging	Acres	43.7	26.5	0.0
	%	0.0	0.2	0.0
Places of Worship	Acres	15.6	67.8	4.2
	%	0.0	0.5	0.3
Commercial	Acres	26.5	59.1	43.9
	%	0.0	0.4	3.1
Government, Institutional, Hospitals, Education	Acres	904.2	474.6	0.9
	%	1.0	3.3	0.1
Industrial	Acres	124.4	48.2	3.8
	%	0.1	0.3	0.3
Parks, Conservation Areas, Golf Courses	Acres	385.4	236.1	0.0
	%	0.4	1.6	0.0
Residential Group Quarters, Nursing Homes	Acres	0.0	10.7	0.0
	%	0.0	0.1	0.0
Residential Multi-Family	Acres	42.1	78.7	11.6
	%	0.0	0.5	0.8
Residential Mobile Home, or Commercial Parking Lot	Acres	794.5	877.9	148.0
	%	0.9	6.1	10.3
Residential Single-Family	Acres	822.2	1,130.5	142.5
	%	0.9	7.9	9.9
Transportation, Communication, Rights-of-Way	Acres	28.8	2.5	0.0
	%	0.0	0.0	0.0
Utility Plants and Lines, Solid Waste Disposal	Acres	137.3	70.4	22.7
	%	0.2	0.5	1.6
Vacant	Acres	8,822.7	2,291.7	160.5
	%	9.7	16.0	11.2
Total Acres	Acres	90,938.2	14,365.2	1,436.5
	%	100.0	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		Flood Zones		Wildfire Susceptible Areas		Potential Sinkhole Areas	
		Total	Undev.	Total	Undev.	Total	Undev.
Agriculture	Acres	88,374.8	8,551.1	12,032.9	1,962.5	804.1	80.0
	%	97.2	96.9	83.8	85.6	56.0	49.8
Conservation	Acres	61.3	0.0	9.6	0.0	0.0	0.0
	%	0.1	0.0	0.1	0.0	0.0	0.0
Highway Mixed Use	Acres	393.2	42.6	411.5	78.2	462.4	46.6
	%	0.4	0.5	2.9	3.4	32.2	29.0
Public Institutional	Acres	287.8	0.0	278.9	0.0	0.0	0.0
	%	0.3	0.0	1.9	0.0	0.0	0.0
Recreation	Acres	660.5	0.7	81.8	1.3	0.0	0.0
	%	0.7	0.0	0.6	0.1	0.0	0.0
Residential Mixed Use	Acres	814.1	174.3	487.5	57.3	18.3	0.0
	%	0.9	2.0	3.4	2.5	1.3	0.0
Rural Center	Acres	109.7	25.2	338.2	109.0	0.0	0.0
	%	0.1	0.3	2.4	4.8	0.0	0.0
Town Center	Acres	236.8	28.8	724.7	83.4	151.8	33.9
	%	0.3	0.3	5.0	3.6	10.6	21.1
Total	Acres	90,938.3	8,822.7	14,365.2	2,291.7	1,436.6	160.5
	%	100.0	100.0	100.0	100.0	100.0	100.0

Table 2.6 presents the total numbers of acres in a hazard zone in Hardee County's incorporated areas and how many of those acres are currently undeveloped. Due to the small size of the incorporated municipalities, very little land falls within each of the hazard zones. There is no known incorporated land at risk from sinkholes, as shown in **Table 2.6**. Wildfire susceptible land accounts for 990 acres of incorporated land. The maps in **Appendix B** show land adjacent to each of the municipalities is also susceptible to wildfire creating a multi-jurisdictional challenge. Only 383 acres of incorporated land are located within the flood plain, and Bowling Green only has 32 of those acres. Each of the municipalities can continue to promote conservation of wetlands and setbacks from waterbodies in order to limit the amount of development at risk from flooding.

Table 2.6 Total and Vacant Incorporated Acres in Hazard Areas

Jurisdiction		Flood Zones		Wildfire Susceptible Areas		Sinkhole Susceptible Areas	
		Total	Vacant	Total	Vacant	Total	Vacant
Bowling Green	Acres	32.1	4.0	288.7	41.5	0.0	0.0
	%	100.0	12.5	100.0	14.4	0.0	0.0
Wauchula	Acres	171.4	6.0	460.4	43.9	0.0	0.0
	%	100.0	3.5	100.0	9.5	0.0	0.0
Zolfo Springs	Acres	179.9	25.6	241.0	32.8	0.0	0.0
	%	100.0	14.3	100.0	13.6	0.0	0.0
Total Acres	Acres	383.4	35.7	990.0	118.2	0.0	0.0
	%	100.0	9.3	100.0	11.9	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):

Hazard Identification and Vulnerability Assessment (HIVA). 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.

Guiding Principles. 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 Hardee County LMS (adopted in 2005) 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 identifies natural hazards that pose a risk to the county and describes the location of high risk areas. Maps of the high risk areas are included in Appendix C of the LMS. A similar vulnerability analysis is included for Wauchula, Bowling Green, and Zolfo Springs. High risk areas of the unincorporated county were also listed by subdivision, proximity to major road, or parcel location. The LMS includes a table that identifies the probability of future occurrences by jurisdiction. There is a table listing the number and value of structures vulnerable by jurisdiction for each natural disaster type. The vulnerability of critical facilities and public buildings are also analyzed. The HIVA requirements are met with the exception of a vulnerability assessment for infrastructure and economic profile. The LMS states this analysis is included in the Comprehensive Plan. All of the hazard identification in Hardee's LMS would be very useful to planners because of the way it relates the risk to the built environment. (Hardee County. 2005)

Guiding Principles

The Hardee LMS has a great guiding principles section. It lists policies from the Hardee County Comprehensive Plan, the comprehensive plans of each jurisdiction, the County's Unified Land Development Code, and the land development regulations of each municipality. It also goes a step beyond this and rates each policy according to its effectiveness. This allows all jurisdictions and County departments access to information on existing mitigation policies 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 D**. The goals and objectives are also summarized in **Section 5** as part of the recommendations analysis. The following is a summary of how well the LMS has addressed mitigation issues that coincide with planning concerns.

The LMS goals and objectives provide a strong, multi-dimensional hazard mitigation strategy, employing both a structural and non-structural approach. Information sharing and plan development between emergency managers and planners is promoted through LMS Goal 2 and several LMS objectives, as is the coordination and consistency between governing documents. There are several objectives that promote education and training to county personnel and to the public through planned exercises and media coordination in a multi-lingual capacity.

The Hardee County LMS includes one goal and 9 objectives that directly address environmental protection as a way of enhancing hazard mitigation in the county. This is a very strong hazard mitigation strategy often underutilized by jurisdictions. Objectives directly mention acquisition, conservation, and the restoration of natural resources to maximize natural hazard mitigation functions.

Goals and objectives also address the built environment by incorporating hazard mitigation strategies into codes and ordinances, retrofitting structures and infrastructure, and rebuilding safer communities in a post-disaster scenario. Over all, the goals and objective offer considerable guidance to the County and offer a good base for the hazard mitigation strategy.

Comprehensive Emergency Management Plan

The Mitigation Annex of the 2003 Hardee 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 also gives direction to planners as well as other county personnel and emergency managers in the event of a natural disaster or emergency. The responsibilities of planners include the collection, analysis, forecasting, and dissemination of information related to emergency response and preparedness. Planning personnel also participate in the damage assessment during recovery operations. This is a good way to allow planners to see the strengths and weaknesses of the existing hazard mitigation strategy first hand and may provide insight for improvements. The CEMP also provides information on disaster issues planners can address prior to an event including the location of debris sites, staging areas, and safe zones. The CEMP also includes LMS goals and objectives as well as 37 mitigation recommendations that aim to avoid loss of life and property. If implemented, these recommendations may benefit the County greatly and enhance hazard mitigation to a very high level compared to other rural counties in the State.

Post-Disaster Redevelopment Plan

A PDRP for Hardee County was not available for review at the time this profile was drafted. If Hardee 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

Hardee County participates in the National Flood Insurance Program and the Community Rating System (CRS). Its CRS current rating is a 10. No incorporated municipalities participate in either program in Hardee County.

4. Comprehensive Plan Review

Hardee County's Comprehensive Plan (adopted in 2002) 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 E**. 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.

Flooding Hazards

There are many policies and objectives that aim to mitigate flood hazards. The County employs density limitations on or near wetlands, structure elevation regulations within the flood plain, land development regulations and restrictions on areas subject to seasonal or periodic flooding, stormwater regulations, transfer of development rights, clustering, setbacks, and buffers in order to protect the environment as well as limit the amount of property and persons at risk from flood hazards. (Hardee County, 2002)

Wildfire Hazards

There were no policies in the Comprehensive Plan that directly address wildfire hazards. There are policies that support potable water conservation in accordance with Southwest Florida Water Management District practices. Water conservation could decrease the severity of a drought and insure adequate supplies for fire-fighting although this is not the intention of these policies.

Sinkhole Hazards

No policies were found during this review that directly related to sinkhole hazards. There was a policy that states that soils are analyzed when making land use decisions, however, this most likely does not include testing for sinkhole potential.

Other Hazard Mitigation Policies

There was only one policy that addressed emergency shelters in the county. It states that shelters will be provided for mobile home residents. There were no policies found during this review that address evacuation routes. There are policies that address historic properties but do not mention hazard mitigation measures as a means for protecting these structures. (Hardee County, 2002)

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.

Hardee 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.

Table 5.1 Options for Integrating LMS Hazard Mitigation Principles into Hardee County's Comprehensive Plan (DRAFT)

Strategies & Integration Topics	Current LMS Information, Goals, or Objectives	Current Comprehensive Plan Policies	Options for Further Integration into the Comprehensive Plan	Options for Enhancement of the LMS	Basis For Suggested Options
Strategy 1 - Collaboration, coordination, and education					
<p>a) Is there information sharing &/or involvement in plan development between planners & emergency managers?</p>	<p>Goal 2: In order to enhance hazard mitigation planning and subsequent mitigation actions, the Hardee County Office of Emergency Management will take a proactive lead to ensure intergovernmental coordination within its own agencies, and intergovernmental coordination between other government agencies. Objective 2.3: Establish and protect the essential flow of information before, during, and after a disaster. Objective 2.4: Encourage cooperation and participation between and among all Hardee County departments in mitigation planning. Objective 2.5: Ensure that the Hardee County Hazard Mitigation Plan incorporates appropriate hazard mitigation measures as reflected in each agency Emergency Support Function or Departmental Standard Operating Procedures.</p>	<p>FLUE Policy L.1.20: The County shall coordinate future land uses by encouraging the elimination or reduction of uses that are inconsistent with any interagency hazard mitigation report recommendations that the County determines to be appropriate.</p>			

Table 5.1 Options for Integrating LMS Hazard Mitigation Principles into Hardee County's Comprehensive Plan (DRAFT)

Strategies & Integration Topics	Current LMS Information, Goals, or Objectives	Current Comprehensive Plan Policies	Options for Further Integration into the Comprehensive Plan	Options for Enhancement of the LMS	Basis For Suggested Options
<p>b) Do the Comp Plan, LMS, CEMP, & other local and regional plans cross-reference each other & include consistent data on hazardous locations?</p>		<p>FLUE Policy L.1.20: The County shall coordinate future land uses by encouraging the elimination or reduction of uses that are inconsistent with any interagency hazard mitigation report recommendations that the County determines to be appropriate.</p>	<p>The Comprehensive Plan could include high-risk hazard zones as an overlay in its Future Land Use Map Series.</p>	<p>The County can add a goal to the LMS that promotes using the document as a tool for basing land use decisions.</p>	<p>By overlaying hazard information over future land uses, planners can more easily follow Policy L.1.20. Maps, such as the ones in this profile, provide useful visual knowledge on the relationship between land uses and hazard zones that can be used for planning mitigation or changes in future land use.</p> <p>Referencing the importance of the LMS as a planning tool in the LMS as well as the County's Comprehensive Plan will reinforce the connection between the documents and encourage the municipalities to also look to the LMS before making land-use decisions. By using consistent data and showing linkages between the different plans, each plan will be stronger.</p>
<p>c) Are hazard mitigation projects addressed in the 5-year schedule of Capital Improvement Projects?</p>			<p>The Comprehensive Plan can include some of the criteria used to prioritize hazard mitigation initiatives found in the LMS into the 5-year schedule of Capital Improvement Projects. They can also include some of the major LMS projects into the Capital Improvements Schedule.</p>		<p>By including hazard mitigation criteria for Capital Improvements Projects and including LMS projects in the schedule, the County can insure that it is wisely spending public funds on projects that will make the community safer.</p>

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<p>d) Are there measures to educate residents, homeowner/property associations, & the business community of ways they can mitigate against hazards?</p>	<p>Objective 2.1: Implement disaster training programs and exercises. Goal 5: Improve coordination of emergency management information, through the media, to increase public awareness and participation in preparedness, response, mitigation, and recovery. Objective 5.1: Develop and maintain a comprehensive, multi-media/multi-lingual public education campaign on emergency preparedness, response, mitigation, and recovery. Objective 5.2: Establish coordinated information and procedures for public information officers and media working in disasters.</p>		<p>The Comprehensive Plan can include a goal that aims to promote education of hazard mitigation related information to the public and to County personnel.</p>		<p>There were no existing Comprehensive Plan goals, objectives, or policies that support the dissemination of hazard mitigation information to either the public or to County personnel. The best way to mitigate against existing hazards is through education and proper implementation. If County staff are better informed of hazard mitigation techniques and the County's policies related to hazard mitigation, better implementation of all hazard mitigation plans and policies can be achieved.</p>
<p>Strategy 2 - Get out of the way: provide evacuation and sheltering services</p>					
<p>a) Are there measures to provide adequate evacuation clearance time to support current population and population growth?</p>	<p>Objective 1.5: Develop advance plans for the safe evacuation of all vulnerable county residents.</p>		<p>A Comprehensive Plan policy may help keep evacuation route safety and capacity in the forefront of the County's strategy. Evacuation concerns could be addressed during site plan review or during concurrency review. Also, the County could simply add a policy that supports the regional evacuation plan.</p>		<p>There currently are no policies in the Comprehensive Plan that address evacuation routes. It is important to consider that future development may create a higher congestion on evacuation routes, as suggested in this analysis.</p>

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<p>b) Are there measures to provide adequate shelter space to meet population growth and special needs?</p>		<p>HE Policy H4.3: Developers of new mobile home, recreational vehicle, or park model recreational vehicle projects shall provide public shelter space sufficient to meet the needs of the development's estimated hurricane season population, based on consultations with the County Building Department, emergency management staff, and the American Red Cross.</p>	<p>The Comp Plan could also encourage new single-family and multi-family homes to include safe rooms.</p>	<p>The LMS could include a goal or objective to provide adequate shelter space based on shelter demand studies. Projects for hardening of schools to use as emergency shelters could support such an objective.</p>	<p>The current deficit of shelter space poses a significant challenge to the County. The Policy to require mobile home parks to include a community shelter is a great step toward resolving the shelter deficit but the LMS plays a key role in providing public shelters and this should be addressed in its goals and objectives.</p>
<p>Strategy 3 - Make the environment less hazardous: Protect and enhance natural protective features</p>					
<p>a) Are there measures to protect and/or restore natural resources that might in turn decrease the risk from natural hazards?</p>	<p>Objective 1.3: Require the protection of natural resources (such as environmentally sensitive lands) in order to maximize their mitigative benefits and to safeguard them from damage caused by natural disasters.</p> <p>Objective 1.6: Ensure mitigation measures are effectively incorporated in the comprehensive system of coordinated planning, management, and land acquisition.</p>	<p>FLUE GOAL LI: Provide the foundation for land use decision-making and regulations to achieve and maintain a high quality human, natural and agricultural environment. It is the desire to achieve and maintain a well-planned mix of compatible land uses that promote the public's health, safety, morals and welfare.</p> <p>FLUE Objective Li: coordinate land use with the natural environment, including soils, topography, and other resources,</p> <p>FLUE Policy Li .9: Conservation category is to preserve and protect the unique natural resources of Hardee County, and to maintain public ownership of certain properties. A "Conservation" area is further defined as an area vital to the maintenance of environmental quality, least tolerant to changes caused by development, and vital to the ecological integrity of the region. Commercial and industrial development shall be prohibited in Conservation areas. Appropriate structures and facilities, including residential development at a density not to exceed 1 unit per 20 acres for park rangers, security and/or necessary maintenance personnel, are permissible, provided that they further the intent of a conservation area, and are necessary for the public appreciation of such areas.</p> <p>FLUE Policy Li .i2: In order to protect the natural function of the 100-year floodway of the Peace River, Horse Creek, Charlie Creek and Payne Creek, a setback from the banks of the</p>	<p>Include a goal or objective that states the importance of protecting the County's natural resources, such as wetlands, for hazard mitigation.</p>		<p>Currently, there are many policies in the Comprehensive Plan that aim to protect and conserve the natural environment. Protecting the County's natural resources also "maximizes their mitigative benefits and to safeguard them from damage caused by natural disasters," (Hardee County, 2005. Objective 1.3). Including a similar objective or policy in the Comprehensive Plan can help implement the protection of natural resources as a means of hazard mitigation.</p>

Table 5.1 Options for Integrating LMS Hazard Mitigation Principles into Hardee County's Comprehensive Plan (DRAFT)

Strategies & Integration Topics	Current LMS Information, Goals, or Objectives	Current Comprehensive Plan Policies	Options for Further Integration into the Comprehensive Plan	Options for Enhancement of the LMS	Basis For Suggested Options
		<p>waterways is hereby established, in which only pasturing of livestock and residential development at a density of not more than one dwelling unit per 20 gross acres are permitted. Structures must be flood-proofed and the floor level shall be at least one foot above the 100-year flood elevation. The setback shall be 500 feet on each side of the river and creeks or the width of the 100-year floodway as shown on the FEMA flood map, whichever is less.</p>			

Table 5.1 Options for Integrating LMS Hazard Mitigation Principles into Hardee County's Comprehensive Plan (DRAFT)

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	<p>Goal 6: Hardee County shall protect and acquire unique natural habitats and ecological systems (such as wetlands, hardwood hammocks, palm hammocks, and virgin longleaf pine forests) and restore degraded natural systems to a functional condition in order to maximize hazard mitigation values.</p> <p>Objective 6.1: Conserve forests, wetlands, and other natural features to maintain their economic, aesthetic, and recreational values.</p> <p>Objective 6.2: Acquire, retain, manage, and inventory public lands to provide conservation and related public benefits including hazard mitigation.</p> <p>Objective 6.3: Promote the use of agricultural practices that are compatible with the protection of natural systems.</p> <p>Objective 6.5: Protect and restore the ecological functions of wetland systems to ensure their long-term environmental, economic, and recreational values, including hazard mitigation practices.</p> <p>Objective 6.6: Develop and implement a comprehensive planning, management, and acquisition program to ensure the integrity of Hardee County's waterways.</p> <p>Objective 6.7: Emphasize the acquisition and maintenance of ecologically intact systems in all land and water planning, management, and regulation.</p>	<p>FLUE Policy Li.i6: Hardee County shall maintain land development regulations that contain specific provisions to implement the adopted Comprehensive Plan. The land development regulation process shall focus on efficiency and effectiveness through a streamlining of procedures. An assessment shall be made of integrating all appropriate Land Development Regulations into a single Ordinance. Land development regulations shall, at a minimum:</p> <p>b) Regulate areas subject to seasonal and periodic flooding and continue to enforce the County's stormwater management ordinance.</p> <p>f) Protect environmentally sensitive lands and provide for open space by including in the County's site plan review process provisions for the protection of environmentally sensitive lands identified in the conservation element of this Plan, and a definition of appropriate open space.</p> <p>FLUE Policy L4.1: Hardee County shall require that all development proposals be accompanied by evidence that an inventory of wetlands; soils posing severe limitations to construction; unique habitat; endangered species of wildlife and plants; significant historic structures and/or sites; and areas prone to periodic flooding has been conducted. IE Objective S3: As an ongoing process, Hardee County will encourage conservation of potable water by existing and future water users. IE Objective S6: The County shall maintain, as part of its land development regulations, stormwater drainage regulations providing for the protection of natural drainage features and provisions for ensuring that future development utilizes appropriate stormwater management techniques. IE Objective S8: Through land development regulations, Hardee County will protect the function of areas of high natural groundwater aquifer recharge and natural drainage features. CE GOAL C1: The natural resources of Hardee County shall be conserved, protected and used for the benefit of the citizens of the county.</p>			<p>One of the best ways to reduce damages is to let the natural environment protect you. If natural drainage is not altered and structures are not built in the floodplain, there will not be as much risk of flooding. Forests that are maintained, naturally or through prescribed fire, will not become a wildfire risk to the nearby community.</p>

Table 5.1 Options for Integrating LMS Hazard Mitigation Principles into Hardee County's Comprehensive Plan (DRAFT)

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		<p>CE Policy C2.4: In order to protect the natural function of the 100-year floodway of the Peace River, Horse Creek, Charlie Creek and Payne Creek, a setback from the banks of the waterways is hereby established, in which only pasturing of livestock and residential development at a density of not more than one dwelling unit per 20 gross acres are permitted. Structures must be flood-proofed and the floor level shall be at least one foot above the 100-year flood elevation. The setback shall be 500 feet on each side of the river and creeks or the width of the 100-year floodway as shown on the FEMA flood map, whichever is less.CE Policy C3.3: Hardee County shall encourage year-round water conservation practices consistent with those adopted by the Southwest Florida Water Management District by adhering to its water restriction ordinance adopted in 1990, which provides for local enforcement of SWFWMD policies, as defined in Chapter 40D-21, FAC, or any modification or derivative of this chapter which may be current at the time a water shortage or water shortage emergency is declared.CE Objective C4: Hardee County shall continue to implement policies and enforce land development regulations which provide for the appropriate use, conservation, and/or protection of minerals, soils, and native vegetative communities within the County.CE Policy C4.3: By September 1, 2003, Hardee County's land development regulations shall be amended to ensure that designated conservation and open space land use categories will be altered only to mitigate activities harmful to the continued productivity, economic value, and natural function of those areas.CE Policy 04.4: Upon Plan adoption, Hardee County shall require that all development proposals be accompanied by evidence that an inventory of wetlandsCE Policy 04.5: Hardee County shall encourage development activities to avoid natural wetland areas to the greatest extent feasible. Determination of potential impacts on wetlands shall consider the type, density and intensity of proposed land use as well as the type, function and quality of the wetland system. CE Policy 04.6: Transfer of development rights or</p>			

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		<p>density/intensity bonuses shall be considered by Hardee County to protect wetland and other environmentally sensitive areas. The County may provide the option to a developer in exchange for the long-term protection of the wetland or environmentally sensitive area the ability to transfer the development right from the wetland or environmentally sensitive area to upland portions of the site or to another appropriate site. CE Policy C5.2: Local regulations shall establish criteria for the requirement of clustering, setbacks, buffers, and other appropriate development techniques to protect or mitigate fisheries, wildlife and wildlife habitat. Criteria shall be based on project size, in number of acres and/or units, and on project type. Mitigation may occur on- site or off-site, as appropriate. Hardee County shall consider the formation of a land bank for purposes of acquiring and mitigating wildlife habitat, including wetlands. CE Policy C5.3: Hardee County shall work with appropriate state agencies to encourage the identification and state purchase of sensitive wildlife habitat, and shall notify appropriate state agencies of potential sites for acquisition. CE Policy C5.4: By September 1, 2003, Hardee County shall amend its land development regulations to protect any natural reservations identified in the Recreation and Open Space Element from incompatible land uses or activities. Adjacent land uses shall be regulated, and potentially incompatible adjacent land uses shall require setbacks or be buffered, mitigated, or prohibited.</p>			

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Strategies & Integration Topics	Current LMS Information, Goals, or Objectives	Current Comprehensive Plan Policies	Options for Further Integration into the Comprehensive Plan	Options for Enhancement of the LMS	Basis For Suggested Options
Strategy 4 - Make structures more resistant to natural hazard forces					
<p>a) Are there measures that support relocating or retrofitting private &/or public structures in hazard areas?</p>	<p>Goal 3: Reduce the vulnerability of critical and public facilities from natural disasters. Objective 3.1: Disaster-proof existing and proposed critical facilities, in regards to location and construction.</p>		<p>The Comprehensive Plan could implement LMS Objective 3.1 of "Disaster-proof existing and proposed critical facilities, in regards to location and construction," by including a similar policy.</p>		<p>This is also "Recommendation #1" in the CEMP. By including a policy in the comp plan related to protecting critical facilities from hazards, the County is showing its commitment to wise use of public funds.</p>
<p>b) Are there measures to require compliance with or exceed building codes &/or design standards for certain hazard areas?</p>	<p>Objective 1.4: Ensure that Hardee County's code and ordinances are sufficient to protect public safety and property.</p>	<p>FLUE Policy Liii: Residential development in any land use category must demonstrate that floor elevations are above the 100-year flood elevation, as designated on Federal Emergency Management Agency Flood Insurance Rate Maps, and do not alter the functions or quality of the natural resources in a flood prone area. FLUE Policy Li .i2: In order to protect the natural function of the 100-year floodway of the Peace River, Horse Creek, Charlie Creek and Payne Creek, a setback from the banks of the waterways is hereby established, in which only pasturing of livestock and residential development at a density of not more than one dwelling unit per 20 gross acres are permitted. Structures must be flood-proofed and the floor level shall be at least one foot above the 100-year flood elevation. The setback shall be 500 feet on each side of the river and creeks or the width of the 100-year floodway as shown on the FEMA flood map, whichever is less. FLUE Policy Li.i6: Hardee County shall maintain land development regulations that contain specific provisions to implement the adopted Comprehensive Plan. The land development regulation process shall focus on efficiency and effectiveness through a streamlining of procedures. An assessment shall be made of integrating all appropriate Land Development Regulations into a single Ordinance. Land development regulations shall, at a minimum: b) Regulate areas subject to seasonal and periodic flooding and continue to enforce the County's stormwater management ordinance.</p>	<p>The County could explore the use of geological testing in potential sinkhole areas in order to test for collapse prior to development.</p>		<p>Currently, there is development in these hazard areas and future development of the hazard area north of Wauchula on Route 17 is likely to occur, as shown on the maps in Appendix C of this report. Addressing this hazard prior to development could limit the amount of development at risk to sinkhole impacts.</p>

Table 5.1 Options for Integrating LMS Hazard Mitigation Principles into Hardee County's Comprehensive Plan (DRAFT)

Strategies & Integration Topics	Current LMS Information, Goals, or Objectives	Current Comprehensive Plan Policies	Options for Further Integration into the Comprehensive Plan	Options for Enhancement of the LMS	Basis For Suggested Options
		<p>f) Protect environmentally sensitive lands and provide for open space by including in the County's site plan review process provisions for the protection of environmentally sensitive lands identified in the conservation element of this Plan, and a definition of appropriate open space.</p> <p>CE Policy C2.4: In order to protect the natural function of the 100-year floodway of the Peace River, Horse Creek, Charlie Creek and Payne Creek, a setback from the banks of the waterways is hereby established, in which only pasturing of livestock and residential development at a density of not more than one dwelling unit per 20 gross acres are permitted. Structures must be flood-proofed and the floor level shall be at least one foot above the 100-year flood elevation. The setback shall be 500 feet on each side of the river and creeks or the width of the 100-year floodway as shown on the FEMA flood map, whichever is less.</p>			
<p>c) Are there measures to protect cultural resources from natural disasters?</p>		<p>FLUE Objective L4: Through land development regulations, the natural and historic resources of Hardee County shall be protected from the adverse impacts of development and redevelopment activities, and shall be coordinated with designated future land uses and appropriate topography and soil conditions.</p>		<p>The LMS could access the vulnerability and risk of historic sites and structures to natural hazards. It could also prioritize drainage projects that will protect historical structures.</p>	
<p>Strategy 5 - Manage the development and redevelopment of land in hazardous areas</p>					
<p>a) Are there measures to limit population densities in high-hazard areas?</p>			<p>The Comp Plan could include objectives or policies to limit development in the 100-year floodplain through land use and zoning regulations. It could also limit residential development in high-risk fire areas, such as adjacent to conservation lands and restrict development through overlay zones or preservation districts in high-risk, karst-sensitive areas.</p>		<p>Best management practices from <i>Protecting Florida's Communities</i></p>

Table 5.1 Options for Integrating LMS Hazard Mitigation Principles into Hardee County's Comprehensive Plan (DRAFT)

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<p>b) Are there measures to limit public expenditures that subsidize development in high-hazard areas?</p>			<p>The County could explore the inclusion of a Comprehensive Plan policy that limits public investment in high-hazard areas. A policy framework could include the discouragement of placing new public facilities within the 100-year flood plain or wildfire hazard zones.</p>		<p>Wise use of public funds should always include avoiding expenditures in high hazard areas so as to create a safer and more disaster- resilient community</p>
<p>c) Are there creative neighborhood design solutions or development regulations that mitigate hazards, such as clustering or transfer of development rights?</p>		<p>FLUE Policy LI.1: Hardee County's land development regulations shall be consistent with the following future land use categories: Town Center, Highway Mixed Use, Residential Mixed Use, Rural Center, Agricultural, Conservation, Public/Institutional, and Recreation. Land development regulations shall also include provisions that permit or require a variety of land development techniques to discourage sprawl while protecting natural resources, including:b) The clustering of development to protect natural resources, open space and agricultural uses, provide for access management to arterial or collector roadways, provide for appropriate buffering, and make efficient use of public facilities and services;d) The County shall consider the establishment of a transfer of development right program to transfer development rights from natural areas protected through conservation easements or other means of long-term protection to other lands suitable for development.FLUE Policy Li .6: The primary functions of Agricultural areas, as designated on the Future Land Use Map, shall be to protect and encourage agricultural activities, while providing for low density residential use, and to protect unique native habitats and maintain open space.e) The following planning controls shall guide development within Agricultural areas: • Development of 20 units or more shall retain a minimum of 80 percent of the project site as open space, and shall be clustered or otherwise developed as suitable for the site to protect agricultural areas, wetlands, native vegetative communities and wildlife habitats;</p>			

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<p>d) Are there measures to limit redevelopment in hazard areas and procedures for post-disaster recovery that will lead to a more disaster-resistant community?</p>	<p>Objective 3.3: Incorporate hazard mitigation measures in any rehabilitation or reuse of existing public facilities, structures, and buildings. Goal 4: Strengthen plans for post-disaster, recovery, and mitigation. Objective 4.1: Analyze, review and update Hardee County post-disaster, recovery, and mitigation plans.</p>				

Abbreviations: G= Goal; O= Objective; P=Policy; PDRP= Post-Disaster Redevelopment Plan; HVZ= Hurricane vulnerability zone; CHHA= Coastal High Hazard Area; LMS= Local Mitigation Strategy; CEMP= Comprehensive Emergency Management Plan; DEM= Department of Emergency Management; LDRs= Land Development Regulations; ESLs= Environmentally Sensitive Lands; ULDC= Unified Land Development Code; SFWMD= South Florida Water Management District; TDR= Transfer of Development Rights.
 CE= Conservation Element; CME= Coastal Management Element FLUE= Future Land Use Element; ; CIE= Capital Improvements Element; ICE= Intergovernmental Coordination Element; ROSE= Recreational and Open Space Element; PWWSE= Potable Water and Wastewater Sub-Element; HHSE=Health and Human Services Element; SE= School Element; FRSE= Fire-Rescue Services Element

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Attachment A

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

Attachment B

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

Attachment C

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

Attachment D

Hardee County Local Mitigation Strategy Goals and Objectives

- Goal 1: Hardee County shall reduce the vulnerability and exposure of the public by protecting lives and property from the losses of natural disasters.
- Objective 1.1: Maximize the protection of the public's health, safety, and welfare as they are related to natural disasters.
- Objective 1.2: Reduce the loss of personal and public property due to natural disasters.
- Objective 1.3: Require the protection of natural resources (such as environmentally sensitive lands) in order to maximize their mitigative benefits and to safeguard them from damage caused by natural disasters.
- Objective 1.4: Ensure that Hardee County's code and ordinances are sufficient to protect public safety and property.
- Objective 1.5: Develop advance plans for the safe evacuation of all vulnerable county residents.
- Objective 1.6: Ensure mitigation measures are effectively incorporated in the comprehensive system of coordinated planning, management, and land acquisition.
- Goal 2: In order to enhance hazard mitigation planning and subsequent mitigation actions, the Hardee County Office of Emergency Management will take a proactive lead to ensure intergovernmental coordination within its own agencies, and intergovernmental coordination between other government agencies.
- Objective 2.1: Implement disaster training programs and exercises.
- Objective 2.2: Pre-establish and update a network of state and local contacts to coordinate Hardee County needs.
- Objective 2.3: Establish and protect the essential flow of information before, during, and after a disaster.
- Objective 2.4: Encourage cooperation and participation between and among all Hardee County departments in mitigation planning.
- Objective 2.5: Ensure that the Hardee County Hazard Mitigation Plan incorporates appropriate hazard mitigation measures as reflected in each agency Emergency Support Function or Departmental Standard Operating Procedures.
- Goal 3: Reduce the vulnerability of critical and public facilities from natural disasters.
- Objective 3.1: Disaster-proof existing and proposed critical facilities, in regards to location and construction.
- Objective 3.2: Develop and maintain energy preparedness plans that will be both practical and effective under circumstances of disrupted energy supplies.
- Objective 3.3: Incorporate hazard mitigation measures in any rehabilitation or reuse of existing public facilities, structures, and buildings.
- Goal 4: Strengthen plans for post-disaster, recovery, and mitigation.

- Objective 4.1: Analyze, review and update Hardee County post-disaster, recovery, and mitigation plans.
- Goal 5: Improve coordination of emergency management information, through the media, to increase public awareness and participation in preparedness, response, mitigation, and recovery.
- Objective 5.1: Develop and maintain a comprehensive, multi-media/multi-lingual public education campaign on emergency preparedness, response, mitigation, and recovery.
- Objective 5.2: Establish coordinated information and procedures for public information officers and media working in disasters.
- Goal 6: Hardee County shall protect and acquire unique natural habitats and ecological systems (such as wetlands, hardwood hammocks, palm hammocks, and virgin longleaf pine forests) and restore degraded natural systems to a functional condition in order to maximize hazard mitigation values.
- Objective 6.1: Conserve forests, wetlands, and other natural features to maintain their economic, aesthetic, and recreational values.
- Objective 6.2: Acquire, retain, manage, and inventory public lands to provide conservation and related public benefits including hazard mitigation.
- Objective 6.3: Promote the use of agricultural practices that are compatible with the protection of natural systems.
- Objective 6.4: Encourage multiple use of forest resources, where appropriate, to provide for watershed protection and erosion and maintenance of water quality.
- Objective 6.5: Protect and restore the ecological functions of wetland systems to ensure their long-term environmental, economic, and recreational values, including hazard mitigation practices.
- Objective 6.6: Develop and implement a comprehensive planning, management, and acquisition program to ensure the integrity of Hardee County's waterways.
- Objective 6.7: Emphasize the acquisition and maintenance of ecologically intact systems in all land and water planning, management, and regulation.

Attachment E

Hardee County Comprehensive Plan Excerpts Related to Hazard Mitigation

Future Land Use Element

GOAL LI: Provide the foundation for land use decision-making and regulations to achieve and maintain a high quality human, natural and agricultural environment. It is the desire to achieve and maintain a well-planned mix of compatible land uses that promote the public's health, safety, morals and welfare.

Objective Li: New or amended uses of land shall be consistent with the Future Land Use designations as described in this element and as portrayed on the Hardee County Future Land Use Map. The Future Land Use designations are intended to: a) coordinate land use with the natural environment, including soils, topography, and other resources, b) appropriately mix and distribute residential, commercial, industrial, recreation, public and mining land uses, and c) encourage an efficient pattern of development and discourage sprawl. The Hardee County Future Land Use Map series, as part of this plan, shall be applied only in conjunction with the policies of this element and other elements of this plan.

Policy LI.I: Hardee County's land development regulations shall be consistent with the following future land use categories: Town Center, Highway Mixed Use, Residential Mixed Use, Rural Center, Agricultural, Conservation, Public/Institutional, and Recreation. Land development regulations shall also include provisions that permit or require a variety of land development techniques to discourage sprawl while protecting natural resources, including:

b) The clustering of development to protect natural resources, open space and agricultural uses, provide for access management to arterial or collector roadways, provide for appropriate buffering, and make efficient use of public facilities and services;

d) The County shall consider the establishment of a transfer of development right program to transfer development rights from natural areas protected through conservation easements or other means of long-term protection to other lands suitable for development.

Policy Li .6: The primary functions of Agricultural areas, as designated on the Future Land Use Map, shall be to protect and encourage agricultural activities, while providing for low density residential use, and to protect unique native habitats and maintain open space.

e) The following planning controls shall guide development within Agricultural areas: • Development of 20 units or more shall retain a minimum of 80 percent of the project site as open space, and shall be clustered or otherwise developed as suitable for the site to protect agricultural areas, wetlands, native vegetative communities and wildlife habitats;

Policy Li .9: Conservation category is to preserve and protect the unique natural resources of Hardee County, and to maintain public ownership of certain properties. A “Conservation” area is further defined as an area vital to the maintenance of environmental quality, least tolerant to changes caused by development, and vital to the ecological integrity of the region. Commercial and industrial development shall be prohibited in Conservation areas. Appropriate structures and facilities, including residential development at a density not to exceed 1 unit per 20 acres for park rangers, security and/or necessary maintenance personnel, are permissible, provided that they further the intent of a conservation area, and are necessary for the public appreciation of such areas.

Policy Liii: Residential development in any land use category must demonstrate that floor elevations are above the 100-year flood elevation, as designated on Federal Emergency Management Agency Flood Insurance Rate Maps, and do not alter the functions or quality of the natural resources in a flood prone area.

Policy Li .i2: In order to protect the natural function of the 100-year floodway of the Peace River, Horse Creek, Charlie Creek and Payne Creek, a setback from the banks of the waterways is hereby established, in which only pasturing of livestock and residential development at a density of not more than one dwelling unit per 20 gross acres are permitted. Structures must be flood-proofed and the floor level shall be at least one foot above the 100-year flood elevation. The setback shall be 500 feet on each side of the river and creeks or the width of the 100-year floodway as shown on the FEMA flood map, whichever is less.

Policy Li.i6: Hardee County shall maintain land development regulations that contain specific provisions to implement the adopted Comprehensive Plan. The land development regulation process shall focus on efficiency and effectiveness through a streamlining of procedures. An assessment shall be made of integrating all appropriate Land Development Regulations into a single Ordinance. Land development regulations shall, at a minimum:

b) Regulate areas subject to seasonal and periodic flooding and continue to enforce the County's stormwater management ordinance.

f) Protect environmentally sensitive lands and provide for open space by including in the County's site plan review process provisions for the protection of environmentally sensitive lands identified in the conservation element of this Plan, and a definition of appropriate open space.

Policy L.1.20: The County shall coordinate future land uses by encouraging the elimination or reduction of uses that are inconsistent with any interagency hazard mitigation report recommendations that the County determines to be appropriate.

Objective L4: Through land development regulations, the natural and historic resources of Hardee County shall be protected from the adverse impacts of development and redevelopment activities, and shall be coordinated with designated future land uses and appropriate topography and soil conditions.

Policy L4.1: Hardee County shall require that all development proposals be accompanied by evidence that an inventory of wetlands; soils posing severe limitations to construction; unique habitat; endangered species of wildlife and plants; significant historic structures and/or sites; and areas prone to periodic flooding has been conducted. Hardee County shall further require that the extent to which any development or redevelopment is proposed to be placed in/on, to disturb, or to alter the natural functions of any of these resources be identified. Such identification shall occur at a phase in the development review process that provides the opportunity for Hardee County to review the proposed project so that direct and irreversible impacts on the identified resources are minimized, or in the extreme, mitigated. The County shall prohibit all development within jurisdictional wetlands unless appropriate mitigation is provided consistent with Federal and State regulations. Where mitigation is approved, wetlands shall be replaced with the same type and form that perform the same function as the wetland lost to development. Where development is determined to encroach upon a resource, Hardee County shall require a specific management plan to be prepared by the developer, which results in no net loss of wetlands and which includes necessary modifications to the proposed development, specific setback and buffers, and location of development away from site resources to protect and preserve the natural functions of the resource. The minimum setback shall be 25 feet and the average of all setbacks from the resource shall be 40 feet. Areas designated as buffers shall preserve all natural vegetative cover, except where drainage-ways and access ways are approved to cross the buffer. Buffers

may be supplemented only with native trees, shrubs and ground covers. On all existing parcels of land, at the time of adoption of the plan, development shall be located away from wetlands on the upland portion of the site. Where no upland exists, development may occur so long as all applicable environmental permit requirements can be satisfied. All future subdivision of land shall contain adequate uplands for the permitted use.

Policy L4.5: By September 1, 2003, Hardee County shall establish criteria concerning the identification and protection of historically significant structures or archeological sites. All sites listed in the Florida Master Site File and National Register shall be considered for local designation. Local designation, as well as authorization for alteration or demolition of locally designated sites or structures, shall be by action of the Board of County Commissioners. The Department of State, Bureau of Historical Resources, shall be requested to assist the County in the identification of sites or structures local designation and protection.

Housing Element

Objective H3: Hardee County shall conserve its standard-condition housing stock, and improve, as necessary, the structure and aesthetics of existing housing. Historically significant units will be identified and given special consideration. Land development regulations, ongoing code enforcement activities and technical assistance shall be utilized to implement this objective.

Policy H3.3: By September 1, 2003, criteria for local designation of sites or structures of historical or archeological significance will be included in the County’s land development regulations. All sites listed in the Florida Master Site File or National Register shall be considered for local designation. Local designation, and authorization for the alteration or demolition of locally designated sites or structures, shall be by the Board of County Commissioners. This procedure does not replace or diminish established procedures for the alteration or demolition of structures or sites in the County, but is an additional safeguard to protect structures and sites designated by the Board of County Commissioners as historically or archaeologically significant.

Objective H4: Land development regulations, including provisions for zoning, clustering and other development techniques shall allow for adequate sites for housing for low and moderate income families and for mobile homes.

Policy H4.3: Developers of new mobile home, recreational vehicle, or park model recreational vehicle projects shall provide public shelter space sufficient to meet the needs of the development’s estimated hurricane season population, based on consultations with the County Building

Department, emergency management staff, and the American Red Cross.

Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element

Policy S2.5: Hardee County’s land development regulations shall be consistent with Chapter 1OD-6, FAC, “Standards for On-Site Sewage Disposal Systems.” Standards shall include: minimum performance specifications for the placement of septic systems in unsuitable soils and in soils prone to seasonal flooding for determining the size, design and location of drain fields; and minimum specifications for the placement of septic tanks above seasonal high water and for minimum setback restrictions from potable water wells, natural water bodies and protected natural resources.

Objective S3: As an ongoing process, Hardee County will encourage conservation of potable water by existing and future water users.

Objective S6: The County shall maintain, as part of its land development regulations, stormwater drainage regulations providing for the protection of natural drainage features and provisions for ensuring that future development utilizes appropriate stormwater management techniques.

Policy S6.1: Hardee County’s land development regulations shall include stormwater drainage provisions which ensure that:

- a) new developments are required to manage runoff from the 25-year frequency, 24- hour duration storm event on-site so that post-development runoff rates, volumes and pollutant loads do not exceed pre-development conditions;
- b) stormwater engineering, design and construction standards for on-site systems are provided;
- c) erosion and sediment controls are used during development; and,
- d) periodic inspection and maintenance of on-site systems is provided by the developer as a condition of system permit renewal.

Objective S7: Hardee County shall maximize existing drainage facilities, undertake programs to correct existing deficiencies, and coordinate with other public providers regarding the maintenance and extension of drainage facilities.

Policy S7.1: By September 2003, with a minimum of 50 percent funding assistance from the Southwest Florida Water Management District and/or the Florida Department of Environmental Protection, the Hardee County Road and Budget Department shall begin drainage studies prioritized by drainage basin. Studies shall be based on population and known or suspected drainage

deficiencies. Upon completion of these studies, the County shall implement these studies to require that all development meets the established level of service for stormwater management quality and quantity. Hardee County shall consider a stormwater utility district(s), as well as other funding sources, to undertake and implement these studies to achieve and maintain the established level of service.

Objective S8: Through land development regulations, Hardee County will protect the function of areas of high natural groundwater aquifer recharge and natural drainage features.

Policy S8. 1: As part of its land development regulations, Hardee County will include provisions protecting the function of natural drainage features and areas of high groundwater aquifer recharge as identified by the Southwest Florida Water Management District. Regulations shall include criteria for appropriate setbacks, buffers, provisions for the use of open space and native vegetation as buffers, regulation of the use or storage of hazardous materials, and appropriate land uses and densities and intensities of land use within and adjacent to natural drainage features and areas of high natural groundwater aquifer recharge.

Conservation Element

GOAL CI: The natural resources of Hardee County shall be conserved, protected and used for the benefit of the citizens of the county.

Policy C2.4: In order to protect the natural function of the 100-year floodway of the Peace River, Horse Creek, Charlie Creek and Payne Creek, a setback from the banks of the waterways is hereby established, in which only pasturing of livestock and residential development at a density of not more than one dwelling unit per 20 gross acres are permitted. Structures must be flood-proofed and the floor level shall be at least one foot above the 100-year flood elevation. The setback shall be 500 feet on each side of the river and creeks or the width of the 100-year floodway as shown on the FEMA flood map, whichever is less.

Policy C3.3: Hardee County shall encourage year-round water conservation practices consistent with those adopted by the Southwest Florida Water Management District by adhering to its water restriction ordinance adopted in 1990, which provides for local enforcement of SWFWMD policies, as defined in Chapter 40D-21, FAC, or any modification or derivative of this chapter which may be current at the time a water shortage or water shortage emergency is declared.

Policy C3.4: At such time as the Southwest Florida Water Management District designates any prime recharge

area in Hardee County, county land and water use approvals will protect designated recharge areas from incompatible activities or uses. Land development regulations shall address land use activities that may impact natural groundwater aquifer recharge. Future development in areas of high aquifer recharge shall require restrictions on impervious surface ratios, shall require appropriate open space, shall require clustering or other development techniques to maintain aquifer recharge, and shall require appropriate vegetative buffers or setbacks to protect the surficial aquifer.

Objective C4: Hardee County shall continue to implement policies and enforce land development regulations which provide for the appropriate use, conservation, and/or protection of minerals, soils, and native vegetative communities within the County.

Policy C4.2: Hardee County shall cooperate with adjoining cities and counties to conserve or protect native vegetative communities listed as rare, threatened or endangered by the U.S. Fish and Wildlife Service. Hardee County shall work with adjoining jurisdictions to identify rare, threatened or endangered vegetative communities in need of protection, and to establish similar protection criteria in local regulations.

Policy C4.3: By September 1, 2003, Hardee County's land development regulations shall be amended to ensure that designated conservation and open space land use categories will be altered only to mitigate activities harmful to the continued productivity, economic value, and natural function of those areas.

Policy 04.4: Upon Plan adoption, Hardee County shall require that all development proposals be accompanied by evidence that an inventory of wetlands; soils posing severe limitations to construction; unique habitat; endangered species of wildlife and plants; significant historic structures and/or sites; and areas prone to periodic flooding has been conducted. Hardee County shall further require that the extent to which any development or redevelopment is proposed to be placed in/on, to disturb, or to alter the natural functions of any of these resources be identified. Such identification shall occur at a phase in the development review process that provides the opportunity for Hardee County to review the proposed project so that direct and irreversible impacts on the identified resources are minimized, or in the extreme, mitigated. The County shall prohibit all development within jurisdictional wetlands unless appropriate mitigation is provided and is consistent with all Federal and State regulations. Where mitigation is approved, wetlands shall be replaced with the same type and form that perform the same function as the wetland lost to development. Where development is determined to encroach upon a resource, Hardee County shall

require a specific management plan to be prepared by the developer, which results in no net loss of wetlands and which includes necessary modifications to the proposed development, specific setback and buffers, and location of development away from site resources to protect and preserve the natural functions of the resource. The minimum setback shall be 25 feet and the average of all setbacks from the resource shall be 40 feet. Areas designated as buffers shall preserve all natural vegetative cover, except where drainage-ways and access ways are approved to cross the buffer. Buffers may be supplemented only with native trees, shrubs and ground covers. On all existing parcels of land, at the time of adoption of the plan, development shall be located away from wetlands on the upland portion of the site. Where no upland exists, development may occur so long as all applicable environmental permit requirements can be satisfied. All future subdivision of land shall contain adequate uplands for the permitted use.

Policy 04.5: Hardee County shall encourage development activities to avoid natural wetland areas to the greatest extent feasible. Determination of potential impacts on wetlands shall consider the type, density and intensity of proposed land use as well as the type, function and quality of the wetland system.

Policy 04.6: Transfer of development rights or density/intensity bonuses shall be considered by Hardee County to protect wetland and other environmentally sensitive areas. The County may provide the option to a developer in exchange for the long-term protection of the wetland or environmentally sensitive area the ability to transfer the development right from the wetland or environmentally sensitive area to upland portions of the site or to another appropriate site.

Policy C5.2: Local regulations shall establish criteria for the requirement of clustering, setbacks, buffers, and other appropriate development techniques to protect or mitigate fisheries, wildlife and wildlife habitat. Criteria shall be based on project size, in number of acres and/or units, and on project type. Mitigation may occur on-site or off-site, as appropriate. Hardee County shall consider the formation of a land bank for purposes of acquiring and mitigating wildlife habitat, including wetlands.

Policy C5.3: Hardee County shall work with appropriate state agencies to encourage the identification and state purchase of sensitive wildlife habitat, and shall notify appropriate state agencies of potential sites for acquisition.

Policy C5.4: By September 1, 2003, Hardee County shall amend its land development regulations to protect any natural reservations identified in the Recreation and Open Space Element from incompatible land uses or activities.

Adjacent land uses shall be regulated, and potentially incompatible adjacent land uses shall require setbacks or be buffered, mitigated, or prohibited.

Recreation and Open Space Element

Policy R2.3: Hardee County will coordinate with the Florida Department of Environmental Protection, and other relevant state agencies to assure that resource-based parks providing passive activity areas continue to be provided and maintained by the state park system.

Policy R3.2: Hardee County will coordinate with the Florida Department of Environmental Protection to assure that open space will continue to be provided by the state park system