

# TABLE OF CONTENTS

	Page
<b>EXECUTIVE SUMMARY</b> .....	ES-1
<b>LIST OF TABLES</b> .....	ix
<b>LIST OF FIGURES</b> .....	xi
<b>1.0 INTRODUCTION</b> .....	1-1
1.1 PURPOSE .....	1-1
1.2 PLANNING PROCESS .....	1-3
1.3 PUBLIC PARTICIPATION PROCESS .....	1-5
1.3.1 Steering Committee .....	1-5
1.3.1.1 <i>Role of Committee</i> .....	1-6
1.3.1.2 <i>Composition</i> .....	1-6
1.3.1.3 <i>Committee Responsibilities</i> .....	1-7
1.3.1.4 <i>Voting</i> .....	1-7
1.3.1.5 <i>Participation Requirement</i> .....	1-7
1.3.2 Subcommittees .....	1-7
1.3.3 Community Stakeholder Groups .....	1-8
1.3.3.1 <i>Role of Community Stakeholder Groups</i> .....	1-8
1.3.3.2 <i>Composition</i> .....	1-8
1.3.3.3 <i>Responsibilities</i> .....	1-8
1.3.4 Citizen Participation .....	1-8
1.3.4.1 <i>Role of the Citizen</i> .....	1-8
1.3.4.2 <i>Participation Responsibilities</i> .....	1-9
1.3.5 New Jurisdictions/Entities .....	1-9
1.3.6 Documentation .....	1-9
<b>2.0 COMMUNITY PROFILE</b> .....	2-1
2.1 GEOGRAPHY .....	2-1
2.2 POPULATION .....	2-2
2.3 INFRASTRUCTURE .....	2-5
2.3.1 Public Buildings .....	2-5
2.3.2 Transportation .....	2-5
2.3.3 Utilities .....	2-5
2.4 PROPERTY AND DEVELOPMENT .....	2-6
2.5 ECONOMIC RESOURCES .....	2-10
2.6 ENVIRONMENTAL RESOURCES .....	2-10
2.7 HISTORIC AND CULTURAL RESOURCES .....	2-12
2.8 CRITICAL FACILITIES .....	2-12
<b>3.0 INSTITUTIONAL ANALYSIS</b> .....	3-1
3.1 FEDERAL GOVERNMENT .....	3-1
3.1.1 FEMA .....	3-1
3.1.1.1 <i>PDM Program</i> .....	3-1
3.1.1.2 <i>National Flood Insurance Program (NFIP)</i> .....	3-1
3.1.1.3 <i>Community Rating System (CRS)</i> .....	3-2

## TABLE OF CONTENTS (Continued)

	Page	
3.1.1.4	Map Modernization . . . . .	3-2
3.1.1.5	FMA Program . . . . .	3-2
3.1.1.6	National Hurricane Program . . . . .	3-2
3.1.1.7	Other Programs . . . . .	3-2
3.1.2	United States Environmental Protection Agency (EPA) . . . . .	3-3
3.1.3	United States Forest Service . . . . .	3-3
3.1.4	United States Fish and Wildlife Service (USFWS) . . . . .	3-3
3.1.5	United States Department of Commerce (DOC) . . . . .	3-3
3.1.6	National Weather Service (NWS) . . . . .	3-3
3.1.7	United States Geological Survey (USGS) . . . . .	3-4
3.1.8	United States Army Corps of Engineers (USACE) . . . . .	3-4
3.1.9	United States Fire Administration (USFA) . . . . .	3-4
3.1.10	National Response Team (NRT) . . . . .	3-4
3.1.11	United States Department of Housing and Urban Development (HUD) . . . . .	3-4
3.1.12	United States Department of the Interior (USDOI) . . . . .	3-5
3.1.13	United States Department of Agriculture (USDA) . . . . .	3-5
3.1.14	United States Department of Transportation . . . . .	3-5
3.2	NON-GOVERNMENT . . . . .	3-5
3.2.1	Firewise Communities USA . . . . .	3-5
3.2.2	Institute for Business and Home Safety (IBHS) . . . . .	3-5
3.2.3	American Red Cross . . . . .	3-5
3.2.4	National Fire Protection Association (NFPA) . . . . .	3-6
3.2.5	Association of State Floodplain Managers (ASFPM) . . . . .	3-6
3.3	STATE GOVERNMENT . . . . .	3-6
3.3.1	FDCA . . . . .	3-6
3.3.2	FDOF . . . . .	3-6
3.3.3	Department of Environmental Protection (DEP) . . . . .	3-7
3.3.4	Florida Fish and Game Conservation Commission . . . . .	3-7
3.3.5	Florida Inland Navigation District (FIND) . . . . .	3-7
3.3.6	Florida Department of Transportation (FDOT) . . . . .	3-7
3.3.7	Building Officials Association of Florida (BOAF) . . . . .	3-7
3.3.8	Florida Department of Insurance (FDOI) . . . . .	3-7
3.3.9	Agency for Health Care Administration . . . . .	3-7
3.3.10	Florida Department of Business and Professional Regulation (FDBPR) . . . . .	3-8
3.3.11	Florida Department of Corrections (FDOC) . . . . .	3-8
3.3.12	Florida Department of Education (FDOE) . . . . .	3-8
3.3.13	Florida Department of Management Services (FDOMS) . . . . .	3-8
3.3.14	Florida Department of State (FDOS) . . . . .	3-8
3.4	REGIONAL GOVERNMENT . . . . .	3-8
3.4.1	Treasure Coast Regional Planning Council . . . . .	3-8
3.4.2	South Florida Water Management District . . . . .	3-9

## TABLE OF CONTENTS (Continued)

	Page
3.5 COUNTY GOVERNMENT .....	3-11
3.5.1 Listing of County Agencies .....	3-11
3.5.2 County Mitigation Policies and Ordinances .....	3-13
3.5.3 County Mitigation Projects/Initiatives .....	3-16
3.6 MUNICIPALITIES .....	3-17
3.6.1 Listing of Municipal Agencies .....	3-17
3.6.2 Municipal Mitigation Policies and Ordinances .....	3-18
3.6.3 Municipal Mitigation Projects/Initiatives .....	3-22
3.7 COMMUNITY ORGANIZATIONS .....	3-24
3.7.1 University of Florida/St. Lucie County Cooperative Extension .....	3-24
3.7.2 FPUA .....	3-24
3.8 INTERGOVERNMENTAL COORDINATION .....	3-25
3.8.1 Metropolitan Planning Organization .....	3-25
3.8.2 Local Government Comprehensive Plans .....	3-25
3.8.3 St. Lucie County Comprehensive Emergency Plan .....	3-25
3.8.4 District X Local Emergency Planning Committee .....	3-26
3.8.5 State Emergency Management Plan .....	3-26
3.9 STRENGTHENING THE ROLE OF LOCAL GOVERNMENTS .....	3-26
3.10 PRIVATE SECTOR BACKGROUND AND ANALYSIS .....	3-28
<b>4.0 HAZARD IDENTIFICATION, VULNERABILITY, AND RISK .....</b>	<b>4-1</b>
4.1 NATURAL HAZARDS .....	4-6
4.1.1 Floods .....	4-8
4.1.1.1 Hazard Identification .....	4-8
4.1.1.2 Vulnerability Assessment .....	4-13
4.1.1.3 Risk Assessment .....	4-24
4.1.2 Hurricanes/Tropical Storms .....	4-27
4.1.2.1 Hazard Identification .....	4-27
4.1.2.2 Vulnerability Assessment .....	4-33
4.1.2.3 Risk Assessment .....	4-33
4.1.3 Tornadoes .....	4-36
4.1.3.1 Hazard Identification .....	4-36
4.1.3.2 Vulnerability Assessment .....	4-38
4.1.3.3 Risk Assessment .....	4-39
4.1.4 Severe Thunderstorms .....	4-39
4.1.4.1 Hazard Identification .....	4-39
4.1.4.2 Vulnerability Assessment .....	4-40
4.1.4.3 Risk Assessment .....	4-40
4.1.5 Lightning .....	4-40
4.1.5.1 Hazard Identification .....	4-40
4.1.5.2 Vulnerability Assessment .....	4-41
4.1.5.3 Risk Assessment .....	4-41

## TABLE OF CONTENTS (Continued)

	Page
4.1.6 Wildland/Urban Interface Zone . . . . .	4-41
4.1.6.1 Hazard Identification . . . . .	4-41
4.1.6.2 Vulnerability Assessment . . . . .	4-44
4.1.6.3 Risk Assessment . . . . .	4-45
4.1.7 Muck Fires . . . . .	4-46
4.1.7.1 Hazard Identification . . . . .	4-46
4.1.8 Extreme Temperatures . . . . .	4-46
4.1.8.1 Freezing Temperatures . . . . .	4-46
4.1.8.2 Extreme Heat . . . . .	4-46
4.1.8.3 Vulnerability Assessment . . . . .	4-47
4.1.8.4 Risk Assessment . . . . .	4-48
4.1.9 Erosion . . . . .	4-48
4.1.9.1 Soil Erosion . . . . .	4-48
4.1.9.2 Beach Erosion . . . . .	4-49
4.1.9.3 Vulnerability Assessment . . . . .	4-49
4.1.9.4 Risk Assessment . . . . .	4-50
4.1.10 Drought . . . . .	4-52
4.1.10.1 Hazard Identification . . . . .	4-52
4.1.10.2 Vulnerability Assessment . . . . .	4-53
4.1.10.3 Risk Assessment . . . . .	4-54
4.1.11 Seismic Hazards . . . . .	4-54
4.1.11.1 Dam/Levee Failure . . . . .	4-54
4.1.11.2 Earthquakes . . . . .	4-54
4.1.11.3 Sinkholes and Subsidence . . . . .	4-55
4.1.11.4 Vulnerability Assessment . . . . .	4-55
4.1.11.5 Risk Assessment . . . . .	4-55
4.1.12 Agricultural Pests and Diseases . . . . .	4-56
4.1.12.1 Citrus Canker . . . . .	4-56
4.1.12.2 Mediterranean fruit fly (Medfly) . . . . .	4-56
4.1.12.3 Sugarcane Pests . . . . .	4-57
4.1.12.4 TYLCV . . . . .	4-57
4.1.12.5 Vulnerability Assessment . . . . .	4-57
4.1.12.6 Risk Assessment . . . . .	4-58
4.1.13 Epidemics . . . . .	4-58
4.1.13.1 Hazard Identification . . . . .	4-58
4.1.13.2 Vulnerability Assessment . . . . .	4-58
4.1.13.3 Risk Assessment . . . . .	4-59
4.2 TECHNOLOGICAL HAZARDS . . . . .	4-59
4.2.1 Radiological Accidents . . . . .	4-59
4.2.1.1 Hazard Identification . . . . .	4-59
4.2.1.2 Vulnerability Assessment . . . . .	4-60
4.2.1.3 Risk Assessment . . . . .	4-61
4.2.2 Power Failures (Outages) . . . . .	4-61
4.2.2.1 Hazard Identification . . . . .	4-61
4.2.2.2 Vulnerability Assessment . . . . .	4-62
4.2.2.3 Risk Assessment . . . . .	4-62

## TABLE OF CONTENTS (Continued)

	Page
4.2.3 Hazardous Materials Accidents . . . . .	4-62
4.2.3.1 <i>Hazard Identification</i> . . . . .	4-62
4.2.3.2 <i>Vulnerability Assessment</i> . . . . .	4-63
4.2.3.3 <i>Risk Assessment</i> . . . . .	4-64
4.2.4 Transportation System Accidents . . . . .	4-64
4.2.4.1 <i>Hazard Identification</i> . . . . .	4-64
4.2.4.2 <i>Vulnerability Assessment</i> . . . . .	4-65
4.2.4.3 <i>Risk Assessment</i> . . . . .	4-66
4.2.5 Wellfield Contaminations . . . . .	4-66
4.2.5.1 <i>Hazard Identification</i> . . . . .	4-66
4.2.5.2 <i>Vulnerability Assessment</i> . . . . .	4-67
4.2.5.3 <i>Risk Assessment</i> . . . . .	4-67
4.2.6 Communications Failures . . . . .	4-68
4.2.6.1 <i>Hazard Identification</i> . . . . .	4-68
4.2.6.2 <i>Vulnerability Assessment</i> . . . . .	4-68
4.2.6.3 <i>Risk Assessment</i> . . . . .	4-68
4.2.7 Military Ordnance . . . . .	4-68
4.2.7.1 <i>Hazard Identification</i> . . . . .	4-68
4.2.7.2 <i>Vulnerability Assessment</i> . . . . .	4-69
4.2.7.3 <i>Risk Assessment</i> . . . . .	4-69
4.3 SOCIETAL HAZARDS . . . . .	4-69
4.3.1 Terrorism and Sabotage . . . . .	4-69
4.3.1.1 <i>Terrorism</i> . . . . .	4-69
4.3.1.2 <i>Computer Accidents and Sabotage</i> . . . . .	4-70
4.3.1.3 <i>Vulnerability Assessment</i> . . . . .	4-71
4.3.1.4 <i>Risk Assessment</i> . . . . .	4-71
4.3.2 Civil Disturbance . . . . .	4-71
4.3.2.1 <i>Hazard Identification</i> . . . . .	4-71
4.3.2.2 <i>Vulnerability Assessment</i> . . . . .	4-72
4.3.2.3 <i>Risk Assessment</i> . . . . .	4-72
4.3.3 Immigration Crises . . . . .	4-72
4.3.3.1 <i>Hazard Identification</i> . . . . .	4-72
4.3.3.2 <i>Vulnerability Assessment</i> . . . . .	4-73
4.3.3.3 <i>Risk Assessment</i> . . . . .	4-73
4.3.4 Societal Alienation . . . . .	4-73
4.3.4.1 <i>Hazard Identification</i> . . . . .	4-73
4.3.4.2 <i>Vulnerability Assessment</i> . . . . .	4-73
4.3.4.3 <i>Risk Assessment</i> . . . . .	4-73
4.3.5 Substance Abuse . . . . .	4-74
4.3.5.1 <i>Hazard Identification</i> . . . . .	4-74
4.3.5.2 <i>Vulnerability Assessment</i> . . . . .	4-74
4.3.5.3 <i>Risk Assessment</i> . . . . .	4-74
4.3.6 Economic Collapse (Recession/Depression) . . . . .	4-74
4.3.6.1 <i>Hazard Identification</i> . . . . .	4-74
4.3.6.2 <i>Vulnerability Assessment</i> . . . . .	4-74
4.3.6.3 <i>Risk Assessment</i> . . . . .	4-75
4.4 HAZARDS SUMMARY . . . . .	4-75

## TABLE OF CONTENTS (Continued)

	Page
<b>5.0 MITIGATION OPTIONS</b> .....	5-1
5.1 MITIGATION DEFINITION AND INTRODUCTION .....	5-1
5.2 MITIGATION CATEGORIES .....	5-1
5.3 MITIGATION OPTIONS BY CATEGORY .....	5-1
5.4 MITIGATION OPTIONS BY HAZARD .....	5-3
5.5 MITIGATION OPTIONS ADDRESSING SPECIAL ISSUES .....	5-5
5.5.1 Repetitive Flood Loss Properties .....	5-7
5.5.2 Barrier Islands .....	5-7
5.5.3 CRS Projects .....	5-8
5.6 MITIGATION IN DEPTH .....	5-8
5.6.1 Floating Zoning .....	5-9
5.6.1.1 <i>Definition</i> .....	5-9
5.6.1.2 <i>Implementation</i> .....	5-9
5.6.1.3 <i>Critique</i> .....	5-9
5.6.2 Impact Fees/System Development Charges .....	5-9
5.6.2.1 <i>Definition</i> .....	5-9
5.6.2.2 <i>Implementation</i> .....	5-9
5.6.2.3 <i>Critique</i> .....	5-10
5.6.3 Porous Pavement .....	5-10
5.6.3.1 <i>Definition</i> .....	5-10
5.6.3.2 <i>Implementation</i> .....	5-10
5.6.3.3 <i>Critique</i> .....	5-10
5.6.4 Transfer of Development Rights (TDR) .....	5-10
5.6.4.1 <i>Definition</i> .....	5-10
5.6.4.2 <i>Implementation</i> .....	5-11
5.6.4.3 <i>Critique</i> .....	5-11
5.6.4.4 <i>Example</i> .....	5-11
<b>6.0 IMPLEMENTATION STRATEGY</b> .....	6-1
6.1 INTRODUCTION .....	6-1
6.2 INSTITUTIONAL ARRANGEMENT .....	6-1
6.2.1 Organizational Structure .....	6-1
6.2.2 Administrative – Lead Responsibility .....	6-1
6.2.3 Administrative – Support Responsibility .....	6-3
6.3 IMPLEMENTATION STRATEGY .....	6-4
6.3.1 Goals and Objectives .....	6-4
6.4 INTEGRATION INTO LOCAL PLANS .....	6-11
6.4.1 The Integration Process .....	6-12
6.5 PLAN MONITORING .....	6-12
6.5.1 Process .....	6-13
6.6 UPDATING THE PLAN .....	6-13
6.6.1 Project Prioritization List .....	6-13
6.6.1.1 <i>Prioritization Process</i> .....	6-44
6.6.1.2 <i>Prioritization Scoring</i> .....	6-45
6.6.1.3 <i>Project Evaluation</i> .....	6-46

## TABLE OF CONTENTS (Continued)

	<b>Page</b>
6.6.1.4 <i>Tie Break Methodology</i> .....	6-48
6.6.2 Comprehensive Update .....	6-48
6.6.2.1 <i>Regular LMS Update Procedures</i> .....	6-49
6.6.2.2 <i>Declared Emergency Assessment</i> .....	6-52
6.7 CONTINUING PUBLIC INVOLVEMENT .....	6-54
6.8 CONFLICT RESOLUTION .....	6-55
6.8.1 Background .....	6-55
6.8.2 Conflict Resolution Procedure .....	6-55
6.9 FUNDING .....	6-57
<b>7.0 REFERENCES</b> .....	<b>7-1</b>
 <b>APPENDICES</b>	
<b>APPENDIX A: POLICIES</b> .....	<b>A-1</b>
<b>APPENDIX B: MITIGATION OPTIONS</b> .....	<b>B-1</b>
<b>APPENDIX C: FUNDING SOURCES</b> .....	<b>C-1</b>
<b>APPENDIX D: DATA SOURCES</b> .....	<b>D-1</b>
<b>APPENDIX E: PARTICIPATION DOCUMENTATION</b> .....	<b>E-1</b>
<b>APPENDIX F: ACRONYMS</b> .....	<b>F-1</b>

## LIST OF TABLES

<b>Table</b>		<b>Page</b>
2.1	Population growth in St. Lucie County . . . . .	2-3
2.2	Community characteristics within St. Lucie County . . . . .	2-6
2.3	Building permits, St. Lucie County, 1980 – 2000 . . . . .	2-7
3.1	Emergency support functions (ESFs) and their designations . . . . .	3-16
3.2	Comprehensive Growth Management Plan hazard mitigation inventory . . . . .	3-19
4.1	Preliminary identification and projected impact potential for St. Lucie County hazards . . . . .	4-3
4.2	Total exposure by structure type, St. Lucie County, 2004 . . . . .	4-6
4.3	Key for Figure 4.2 . . . . .	4-14
4.4	Flooding source discharge, St. Lucie County, 1991 . . . . .	4-16
4.5	Potential storm surge water height in feet above National Geodetic Vertical Datum 88 for specific locations in St. Lucie County . . . . .	4-17
4.6	Repetitive loss properties for St. Lucie County and incorporated areas . . . . .	4-21
4.7	Flooding exposure, St. Lucie County, 2004 . . . . .	4-25
4.8	Federal Emergency Management Agency flood zones . . . . .	4-25
4.9	Flooding exposure, St. Lucie County, 2004 . . . . .	4-26
4.10	Hurricane flood exposure, St. Lucie County, 2004 . . . . .	4-26
4.11	Mitigation savings by structure type . . . . .	4-27
4.12	Debris accumulation in St. Lucie County in cubic yards per acre . . . . .	4-33
4.13	Wind damage exposure, St. Lucie County, 2004 . . . . .	4-34
4.14	Hurricane wind damage exposure, St. Lucie County, 2004 . . . . .	4-35
4.15	Wind mitigation savings, St. Lucie County, 2004 . . . . .	4-35

## LIST OF TABLES (Continued)

Table		Page
4.16	Wind related exposure and mitigation savings, St. Lucie County, 2004 . . . . .	4-36
4.17	Flood related exposure and mitigation savings, St. Lucie County, 2004 . . . . .	4-36
4.18	Fujita-Pearson scale . . . . .	4-37
4.19	Wind speed category . . . . .	4-37
4.20	Tornado incidents, St. Lucie County, 1953 – 2003 . . . . .	4-38
4.21	Wildland fire occurrence, St. Lucie County, 2002 . . . . .	4-43
4.22	Wildland fire exposure, St. Lucie County, 2004 . . . . .	4-45
4.23	Nourishment effects . . . . .	4-50
4.24	St. Lucie County hazard vulnerability by incorporated jurisdiction and population centers . . . . .	4-76
4.25	Risk assessment and hazard evaluation for St. Lucie County . . . . .	4-80
5.1	Mitigation options by category and hazard . . . . .	5-6
6.1	St. Lucie County Local Mitigation Strategy Project Prioritization List . . . . .	6-17

## LIST OF FIGURES

Figure		Page
1.1	Local Mitigation Strategy (LMS) Planning Process . . . . .	1-4
2.1	Population growth, St. Lucie County, 1960 – 2000 . . . . .	2-4
2.2	Projected population, St. Lucie County, 2010 – 2030 . . . . .	2-4
2.3	St. Lucie County Urban Service Area (From St. Lucie County Board of County Commissioners and St. Lucie County Department of Community Development, 2002) . . . . .	2-8
2.4	St. Lucie County future land use . . . . .	2-11
4.1	Risk triangle . . . . .	4-5
4.2	Flood prone areas of St. Lucie County based on the National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (1999) . . . . .	4-15
4.3	Category 3 storm surge in St. Lucie County based on the Arbiter of Storms (TAOS) modeling (2004) . . . . .	4-19
4.4	Category 5 storm surge in St. Lucie County based on the Arbiter of Storms (TAOS) modeling (2004) . . . . .	4-20
4.5	Category 3 wind speeds in St. Lucie County based on The Arbiter of Storms (TAOS) modeling (2004) . . . . .	4-31
4.6	Number of wildland fires, State of Florida, 1981-2002 . . . . .	4-44
4.7	Wildland fire acres burned, State of Florida, 1981-2002 . . . . .	4-44
4.8	Critical erosion areas map . . . . .	4-51
4.9	Periods of 3 to 4 weeks (hatched bars) or more than 4 weeks (solid bars) for 1953-2002 with less than 0.25 inch of cumulative rainfall (data from the Indian River Research and Education Center as reported in Boman and Shukla, 2004) . . . . .	4-53
6.1	Local Mitigation Strategy (LMS) organizational structure . . . . .	6-2
6.2	Review and revision procedures for updating the single, countywide St. Lucie County Local Mitigation Strategy (LMS) . . . . .	6-50
6.3	St. Lucie County conflict resolution process . . . . .	6-56

# EXECUTIVE SUMMARY

## OVERVIEW

In 1992, Hurricane Andrew left South Florida devastated. In its wake, it left the area struggling to recover from \$27 billion in damages. In 1997, wildland fires burned Flagler County. During the spring of that same year, tornadoes ripped through Osceola and Volusia counties, leaving not only destroyed homes, but also fatalities in their path. In 1998, nearly 50 homes were consumed by wildland fire in Port St. Lucie. All these events could have occurred in St. Lucie County; fortunately, only one did. Natural hazards are not the only type of hazards that create disaster situations. Disaster management changed forever following the events of September 11<sup>th</sup> in New York City and Washington, DC. Mitigating and responding to technological hazards has come to the forefront of emergency management. Throughout the state, technological disasters occur daily – truck rollovers, communication failures, toxic spills, and wellfield contamination. Only recently, a fertilizer plant in St. Lucie County was razed by a fire that released toxic fumes and polluted nearby water sources. These type of events as well as other historic disasters led the Florida Department of Community Affairs to create the Local Mitigation Strategy (LMS) Program. The goal of the program was to encourage public and private sector entities to take actions that permanently reduce or eliminate the long-term risk to people and property from the different types of hazards faced by Florida residents.

Both public and private sectors win by developing an LMS. It leads to

- reducing future vulnerability to disasters;
- reducing the time (and cost) of recovery from such events when they do happen;
- minimizing disruption to the local economy;
- facilitating recovery and the receipt of post-disaster funding; and
- educating and informing the public about hazards and steps they can take to mitigate the effects.

## INITIATING ACTION

In 1998, St. Lucie County, along with all the municipalities, the local business community, and non-profit organizations such as the American Red Cross, joined together to develop a countywide LMS. During that time, the St. Lucie County LMS Steering Committee, the policy body for this program, has had the responsibility for developing the LMS. This committee focused on achieving two key results:

- the creation of a long-term LMS planning process; and
- the development of the LMS document itself along with a list of prioritized mitigation projects.

In the year 2000, the Federal Emergency Management Agency's (FEMA's) recognition of the growing costs of responding to and recovering from disasters materialized in the Disaster Mitigation Act of 2000 (DMA2K). DMA2K created a new Pre-Disaster Mitigation (PDM) Program aimed at reducing the cost of disasters as well as risk through comprehensive planning before disasters occur. DMA2K requires that all communities,

tribes, and states have a FEMA-approved hazard mitigation plan consistent with the DMA2K requirements in place to retain eligibility for PDM project funds and post-disaster Hazard Mitigation Grant Program funds. This plan was developed following the guidelines of the DMA2K.

## **THE PROCESS**

The process by which the LMS was completed involved

- describing current community conditions;
- identifying the potential hazards;
- assessing each community's vulnerabilities to those specific hazards;
- proposing initiatives to reduce these vulnerabilities;
- developing evaluation criteria to rank mitigation projects regardless of jurisdiction; and
- establishing procedures that will be needed if the LMS Program is to retain long-term viability.

All of these aspects are integrated into this unified LMS document, which has been provided to St. Lucie County Department of Community Development.

## **FINDINGS**

Some of the key findings pertinent to St. Lucie County include the following:

- Flooding and hurricanes occur the most frequently, place the most people at risk, and produce the greatest amount of damage of all the natural hazards faced by the County.
- While wildland fires do not occur with the frequency of flooding and hurricanes, major drought periods over the past several years have made the County extremely vulnerable to wildland fires. Exposure to the impacts of wildland fire continues to increase as new development pushes further west into wildland areas.
- Agriculture is an important component of the local economy; therefore, drought and agricultural pests and disease are as important to the agriculture community as beach erosion and flooding are to the coastal communities.
- While a major focus of mitigation is on retrofitting, the most effective time to mitigate is before development orders are approved. Adding hazard mitigation requirements may add to the cost of development, but this cost is relatively small. Following a disaster the cost of recovery and redevelopment can be enormous. Recovery cost tends to become public cost that local governments must assume.
- While all jurisdictions in St. Lucie County are in the National Flood Insurance Program, not all eligible local governments have participated in the Community Rating System Program (CRS) or the Flood Mitigation Assistance (FMA) Program to the maximum extent possible. Having a strong CRS Program reduces the cost of flood insurance premiums to St. Lucie County residents, and the FMA Program is a major source of funding to assist in retrofitting flooding problems.

- Properties on north and south Hutchinson, along the Intracoastal Waterway (Indian River Lagoon), and along the St. Lucie River are susceptible to both flooding and wind-related storm damage. There are a number of important public facilities in those areas. By hardening these facilities, the chance of them being impacted by storm events can be significantly reduced.
- As the amount of trucking on Interstate 95 increases in the future, the probability of truck rollovers and spilling of toxic contaminants will continue to increase, and hazard management teams need to plan now for this eventuality.
- The Florida East Coast Railroad passes through several areas of coastal urban population and development, putting an ever increasing number of people at risk from train derailment and potentially significant toxic materials spills.
- The County currently has limited staff resources available to effectively manage the LMS Program.

## **PROJECT PRIORITIZATION LIST (PPL)**

St. Lucie County government, as well as the individual cities, have already implemented numerous mitigation projects, such as

- installing storm shutters on public buildings;
- retrofitting stormwater drainage systems;
- raising finished floor elevation to 18 inches above base flood elevation;
- distributing informative publications on hurricanes to local residents; and
- installing emergency generators at key critical facilities.

The objective of developing a unified, countywide PPL for mitigation projects is to allow the St. Lucie County City and County governments to better focus their mitigation efforts and dollars. The existence of this list will speed local receipt of Federal disaster mitigation funds after a disaster, and will place St. Lucie County in a more competitive position when competing for other, non-disaster-related mitigation grant funds.

To develop the PPL, each local government was invited to submit a list of mitigation projects for inclusion in the unified, countywide list. A project prioritization methodology was developed by the Steering Committee as a means of scoring each project, and developing a ranked list of projects. The St. Lucie County LMS Steering Committee last updated the PPL in January 2002.

The development of this PPL is not a one-time process. To be effective, this list must be dynamic. It will need to be revised as old projects are accomplished and new hazards or increased vulnerabilities are identified. The PPL process will be implemented on an ongoing basis.

## **UPDATING PROCESS**

Like all local comprehensive planning efforts, the LMS itself will need to be reviewed and updated from time to time to ensure that it adequately addresses the various types of hazards currently facing the community. An LMS updating process was prepared and adopted by the Steering Committee. The St. Lucie County LMS will be updated every 5 years.