

LOCAL PLANNING AGENCY OLD LEE COUNTY COURTHOUSE 2120 MAIN STREET, FORT MYERS, FL 33901 BOARD CHAMBERS

MONDAY, MARCH 26, 2012 8:30 AM

AGENDA

- 1. Call to Order/Review of Affidavit of Publication
- 2. Pledge of Allegiance
- 3. Public Forum
- 4. Approval of Minutes February 27, 2012
- 5. New Horizon 2035: Plan Amendments
 - A. CPA2011-00014 Vision Statement
 - B. CPA2011-00017 Community Safety and Wellbeing
 - C. CPA2011-00005 Economic Element
- 6. Discussion: Promoting Green Planning Initiatives
- 7. Other Business
- 8. Adjournment Next Meeting Date: April 23, 2012

Any person appealing a decision made at this hearing must ensure a record of the proceedings is made. In accordance with the Americans with Disabilities Act, Reasonable Accommodations will be made upon request. If you are in need of a Reasonable Accommodation or would like additional information, please contact Janet Miller at 239-533-8583.

CPA2011-17 COMMUNITY SAFETY AND WELLBEING ELEMENT BOCC SPONSORED EAR BASED AMENDMENT TO THE

LEE COUNTY COMPREHENSIVE PLAN

THE LEE PLAN

Publicly Sponsored Amendment and Staff Analysis

LPA Public Hearing Document For the March 26th, 2012 Public Hearing

> Lee County Planning Division 1500 Monroe Street P.O. Box 398 Fort Myers, FL 33902-0398 (239) 533-8585

> > March 15, 2012

LEE COUNTY DIVISION OF PLANNING STAFF REPORT FOR COMPREHENSIVE PLAN AMENDMENT CPA2011-17



Map Amendment

	This Document Contains the Following Reviews
1	Staff Review
	Local Planning Agency Review and Recommendation
	Board of County Commissioners Hearing for Transmittal
	Staff Response to the DCA Objections, Recommendations, and Comments (ORC) Report
	Board of County Commissioners Hearing for Adoption

STAFF REPORT PREPARATION DATE: March 15, 2012

PART I - BACKGROUND AND STAFF RECOMMENDATION

A. SUMMARY OF APPLICATION

1. APPLICANT:

Lee County Board of County Commissioners Represented by Lee County Division of Planning

2. REQUEST:

Amend the Lee Plan to create a new Community Safety and Wellbeing Element, incorporating the recommendations of County staff and the March 1, 2011 Evaluation and Appraisal Report.

B. STAFF RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. RECOMMENDATION:

Staff recommends that the Board of County Commissioners **transmit** the proposed amendment to the Community Safety and Wellbeing Element of the Lee Plan as shown

below. Proposed text has been depicted in strikethrough and underline format as it relates to the existing provisions of the Lee Plan.

2. RECOMMENDED LANGUAGE FOR TRANSMITTAL:

10. PUBLIC HEALTH AND SAFETY ELEMENT

The intent of the Community Safety and Wellbeing Element is to prevent, mitigate, and reduce threats to the health and safety of the residents and visitors of Lee County. The provision of efficient and timely police, fire, and emergency medical services is a vital portion of this element. In addition to responding to hazards and dangerous situations, this element outlines measures to prevent and mitigate the negative impacts of hazardous situations through advance planning and preparedness. This element also addresses public health by encouraging healthier lifestyle choices for residents through urban design, transportation options, and increased recreational choices.

GOAL 1: PLANNING, COORDINATION AND IMPLEMENTATION. To protect the public from the effects of natural and technological hazards through County emergency plans and programs. <u>EMERGENCY MANAGEMENT.</u> Establish objectives and policies to prevent and mitigate threats from natural disasters by reducing their potential impact on future development and respond efficiently to disasters and hazards after the fact. (Formerly Goal 101) (MODIFIED)

OBJECTIVE 1.1: <u>PLANNING, COORDINATION AND IMPLEMENTATION.</u> In order to protect the public from the effects of natural and technological hazards through County emergency plans and programs, The Lee County will maintain a system that provides a reasonable opportunity for protecting the population at risk to injury or death from the natural and technological hazards defined in the 1984 Lee County Hazard Vulnerability Analysis or subsequent updates Lee County Comprehensive Emergency Management Plan. (Formerly Objective 101.1) (MODIFIED)

POLICY 1.1.1: The Lee County Comprehensive Emergency Management Plan will be used as the operational guide in preparing for, responding to, and recovering from <u>those</u> natural and technological hazards <u>that requiring require</u> emergency actions by local government officials. (Formerly Policy 101.1.1) (NO CHANGE)

POLICY 1.1.2: The County, in cooperation with local news media, educational institutions, public service groups, and other agencies will <u>implement maintain</u> a program of education and information describing the risks of hazards such as hurricanes, tropical storms, severe

thunderstorms, tornadoes, lightning, freezes, attack from hostile governments <u>hazardous</u> <u>materials and terrorist attacks</u>; and actions necessary to mitigate the dangers which these hazards present (Formerly Policy 101.1.2) (EDITED)

POLICY 1.1.3: The County will establish and maintain a <u>resource management</u> program describing facilities and sites designated to serve as local, state, and federally sponsored emergency assistance locations; examples of such facilities include disaster application centers, citizen assistance centers, <u>disaster joint</u> field offices, temporary housing sites, and debris disposal locations. (Formerly Policy 101.1.3) (EDITED)

POLICY 1.1.4: The County will maintain a mechanism program to coordinate the development and maintenance of emergency plans and programs among the relevant local, regional, and state governments, districts, the administration of the Florida Gulf Coast University, or agencies. (Formerly Policy 101.1.4) (EDITED)

POLICY 1.1.5: The County will maintain and update as necessary appropriate wildfire policies. (ADDED)

POLICY 1.1.6: The County will annually update the Joint Unified Local Mitigation Strategy for Lee County with state, regional, and municipal agencies and organizations. (ADDED)

POLICY 1.1.7: The County will maintain a training and exercise program designed to improve all-hazards capabilities and response at the local level by acquainting personnel with their roles and responsibilities in emergency management and incident response; and to evaluate these capabilities through performance-based exercises. (ADDED)

GOAL 102 <u>OBJECTIVE 1.2</u>: PEOPLE WITH SPECIAL NEEDS. To assist in the emergency preparedness requirements for people with functional access needs, such as of the County's elderly, frail, infirmed, or handicapped (people with special needs)-, the County will have mechanisms in place to assist people with special needs during an emergency. (Formerly Goal 102 and Objective 102.1) (MODIFIED)

OBJECTIVE 102.1: The County will continue to have mechanisms in place to assist people with special needs during an emergency. (Amended by Ordinance No. 94-30, 00-22) (DELETED)

POLICY 1.2.1: New hospital, nursing home, adult congregate living facility, or developmentally disabled projects must prepare an emergency preparedness plan acceptable to the Lee County Division of Public Safety prior to receiving a final development order. (Formerly Policy 102.1.1) (NO CHANGE)

POLICY 1.2.2: The County, in cooperation with other public agencies and service groups, will continue its efforts to assist in the emergency transportation needs of residents having limited mobility who do not reside in licensed institutions serving people with special needs. (Formerly Policy 102.1.2) (NO CHANGE)

POLICY 1.2.3: The County, in cooperation with other public agencies and service groups, will continue its efforts to provide basic medical services in selected emergency public shelters for people with special needs. (Formerly Policy 102.1.3) (NO CHANGE)

GOAL 105: PROTECTION OF LIFE AND PROPERTY IN COASTAL HIGH HAZARD AREAS. To protect human life and developed property from natural disasters. (See also Goal 110.) (Amended by Ordinance No. 94-30) (DELETED)

<u>OBJECTIVE 1.3:</u> DEVELOPMENT IN COASTAL HIGH HAZARD AREAS. In order to protect human life and developed property from natural disasters, Dedevelopment seaward of the 1991 Coastal Construction Control Line will require applicable State of Florida approval; new development on barrier islands will be limited to densities that meet required evacuation standards; new development requiring seawalls for protection from coastal erosion will not be permitted; and allowable densities for undeveloped areas within coastal high hazard areas will be considered for reduction. (Formerly Goal 105 and Objective 105.1) (MODIFIED)

POLICY 1.3.1: County policy regarding development seaward of the updated 1991 Coastal Construction Control Line will be re-evaluated approximately every five years beginning in 1995 <u>as part of every Lee Plan Evaluation and Appraisal Report</u> to assess the adequacy of policies and practices developed by the Department of Environmental Protection. (Formerly Policy 105.1.1) (MODIFIED)

POLICY 1.3.2: Shoreline development in <u>V Zones</u> <u>Coastal A Zone</u> will be protected from coastal erosion, wave action, and storms by vegetation, setbacks, and/or beach renourishment, rather than by seawalls or other hardened structures which tend to hasten beach erosion (see also policies under Objective 113.2). Repairs of lawfully constructed, functional, hardened structures as defined in F.S. Chapter 161 may be allowed subject to applicable state and local review and approval. (Formerly Policy 105.1.3) (EDITED)

POLICY 1.3.3: Zoning requests located in the coastal high hazard area will be considered for reduced or minimum density assignments, in accordance with their future land use category density range. Rezonings to allow higher densities will not be permitted on barrier and coastal

islands <u>or in the coastal high hazard area</u> if the capacity of critical evacuation routes would thereby be exceeded (see Objective $109.1 \ 1.5$). (Formerly Policy 105.1.2) (MODIFIED)

POLICY 1.3.4: Through the Lee Plan amendment process, future land use designations of undeveloped areas within coastal high hazard areas will be considered for reduced density categories in order to limit the future population exposed to coastal flooding. (Formerly Policy 105.1.4) (NO CHANGE)

POLICY 105.1.5: Zoning requests located in the coastal high hazard area will be considered for reduced or minimum density assignments, in accordance with their future land use category density range. This evaluation should be done in concert with an evaluation of other individual characteristics such as compatibility with existing uses, desired urban form, and availability of urban services. (Added by Ordinance No. 05-19) (DELETED)

GOAL 106: LIMITATION OF PUBLIC EXPENDITURES IN COASTAL HIGH HAZARD AREAS. To restrict public expenditures in areas particularly subject to repeated destruction by hurricanes, except to maintain required service levels, to protect existing residents, and to provide for recreation and open space uses. (Amended by Ordinance No. 94-30) (DELETED)

OBJECTIVE 1.4: <u>LIMITATION OF</u> COASTAL HIGH HAZARD AREA EXPENDITURES. Public expenditures in areas particularly subject to repeated destruction by hurricanes will be limited to necessary repairs, public safety needs, services to existing residents, and recreation and open space uses. (Formerly Goal 106 and Objective 106.1) (MODIFIED)

POLICY 1.4.1: All further public expenditures made for new facilities on undeveloped barrier islands or within V zones will require a finding by the County commission that such expenditures are necessary to maintain required service levels, to protect existing residents, or to provide for recreation and open space needs. (Formerly Policy 106.1.1) (NO CHANGE)

POLICY 1.4.2: No new causeways (public or private) will be constructed to any islands. (Formerly Policy 106.1.2) (NO CHANGE)

POLICY 1.4.3: No new bridges will be constructed to undeveloped barrier islands except where needed to achieve evacuation clearance time objectives on adjoining islands connected by existing bridges. In such a case, this plan will be amended to insure that the ultimate development of all areas served by the new bridge is limited to levels which can safely be served by the new and existing bridges. (Formerly Policy 106.1.3) (NO CHANGE)

POLICY 1.4.4: When state funding is required for the relocation or replacement of infrastructure currently within the Coastal Building Zone, the capacity of the replacement structure will be limited to maintaining required service levels, protecting existing residents, and providing for recreation and open space needs. (Formerly Policy 106.1.4) (NO CHANGE)

GOAL 109: EVACUATION AND SHELTER. To provide evacuation and shelter capabilities adequate to safeguard the public against the effects of hurricanes and tropical storms (DELETED)

OBJECTIVE 1.5: EVACUATION. In order to provide evacuation and shelter capabilities adequate to safeguard the public against the effects of hurricanes and tropical storms, Bby 2030 2035 Lee County will work towards attaining a level of service for out of County hurricane evacuation for a Category 5 storm event Level D or E storm surge threat that does not exceed 18 hours the timeframe recommended by the State Evacuation Study. (Formerly Objective 109.1) (MODIFIED)

POLICY 1.5.1: The County will assess the impact of all new residential development upon the projected hurricane evacuation network and upon projected hurricane evacuation times, and will require mitigation either through structural (on-site, off-site shelter) provisions or through non-structural methods or techniques. (Formerly Policy 109.1.1) (NO CHANGE)

POLICY 1.5.2: By 1995, pPeriodic updates of the hurricane evacuation portion of the Comprehensive Emergency Management Plan will be coordinated with computer transportation modeling to identify critical roadway links. transportation facilities. (Formerly Policy 109.1.2) (MODIFIED)

POLICY 1.5.3: Critical roadway links causing congestion on evacuation routes will receive high priority for capital improvement expenditures. (Formerly Policy 109.1.3) (NO CHANGE)

POLICY 1.5.4: New or replacement bridges on evacuation routes spanning major or marked navigable waterways will be designed, constructed, and operated to adequately accommodate the safe and timely evacuation needs of both motor vehicle and marine traffic. (Formerly Policy 109.1.4) (NO CHANGE)

POLICY 1.5.5: Comprehensive plan amendments that increase density within coastal high hazard areas must meet one of the following criteria in accordance with Section 163.3178(9), F.S.:

1. The proposed amendment will not exceed a 16 hour out of County hurricane evacuation time for a category 5 Level D or E storm surge threat level event; or

- 2. Maintain a 12 hour evacuation time to shelter for a category 5 Level D or E storm surge threat level event and ensure shelter space is available to accommodate the additional residents of the development allowed by the proposed comprehensive plan amendment; or
- 3. Provide appropriate mitigation to satisfy the provisions of either of the previous two paragraphs, which may include without limitation, the payment of money, contribution of land, or construction of hurricane shelters and transportation facilities. The developer must enter into a binding agreement to memorialize the mitigation plan prior to adoption of the plan amendment.

(Formerly Policy 109.1.5) (EDITED)

OBJECTIVE 1.6: SHELTER. By 2010 2030, adequate shelter space will be available for the population in the Hurricane Vulnerability Zone at risk under a Category 3 storm Level C storm surge threat level. (Formerly Objective 109.2) (EDITED)

POLICY 1.6.1: The percentage rate of the evacuation population to be used as the basis for in-County and on-site shelter demand will be ten (10) percent of the population at risk in the Hurricane Vulnerability Zone under a Category 5 storm hazard scenario Level D or E Storm surge threat level. This rate will also be the target shelter capacity for a program to provide an emergency shelter supply within Lee County by the year 2030. (Formerly Policy 109.2.1) (EDITED)

POLICY 1.6.2: By 1995, \notin The County will <u>continue to</u> implement a program designed to meet the level of service in Policy 109.2.1 <u>1.6.1</u> by 2010–2030. Components of this program may include:

- 1. Funding of the All-Hazards MSTU;
- 2. An impact fee or fee in lieu for new residential developments, with appropriate credits for the construction of on-site shelters outside of category 1 areas the Coastal High Hazard Areas;
- 3. Mandatory on-site shelters for new residential developments (including mobile home and recreational vehicle parks) over a specified size threshold and outside Category 1 areas of the Hurricane Vulnerability Zone the Coastal High Hazard Areas; and
- 4. Any available state funds. (Formerly Policy 109.2.2) (EDITED)

POLICY 1.6.3: On-site shelters will be required to meet standards established by the County, including provision of adequate shelter space, elevation above Category 3 the Level C hurricane storm surge threat flooding levels, adequate wind proofing, glass protection, emergency power where needed, water supplies, and other basic needs. (Formerly Policy 109.2.3) (EDITED)

POLICY 1.6.4: On-site shelters for the general public must not be built on barrier or coastal islands. (Formerly Policy 109.2.4) (NO CHANGE)

POLICY 1.6.5: By 1995 tThe County will determine the feasibility of evacuating allowing residents evacuating from the level A and B Storm Surge threat levels Category 1 area to vertical shelters within residential, commercial, and industrial sites in the Category 2, 3, 4, and 5 areas Level C Storm Surge threat level of the Hurricane Vulnerability Zone. (Formerly Policy 109.2.5) (EDITED)

GOAL 110: HAZARD MITIGATION. To provide through County plans, programs, and regulations means to minimize future property losses from natural disasters such as flooding, tropical storms and hurricanes. (See also Goal 105.) (Amended by Ordinance No. 94-30) (DELETED)

OBJECTIVE 1.7: DEVELOPMENT REGULATIONS. In order to provide the means to minimize future property losses from natural disasters such as flooding, tropical storms and hurricanes through County plans, programs, and regulations, By 2007, all development regulations will be reviewed and revised <u>as necessary</u> to require that the vulnerability of future development in the A-Zone (as defined by the Federal Emergency Management Agency) Coastal High Hazard Area be reduced. (Formerly Objective 110.1) (MODIFIED)

POLICY 1.7.1: Regulations and incentives will be examined for additional setbacks in critical erosion areas, conservation and enhancement of dunes and vegetation, flood proofing of utilities, and appropriate requirements for structural wind resistance and floodplain management. (Formerly Policy 110.1.1) (NO CHANGE)

POLICY 1.7.2: The County will not permit new or expanded mobile home or recreational vehicle development on barrier islands or in <u>V-Zones</u> <u>Coastal A Zones</u> as defined by the Federal Emergency Management Agency (Formerly Policy 110.1.2) (NO CHANGE)

POLICY 1.7.3: All new residential development of more than 50 units will be required to provide continuing information to residents concerning hurricane evacuation and shelters, through the establishment of a homeowners' or residents' association. (Formerly Policy 110.1.3) (NO CHANGE)

POLICY 1.7.4: All new residential development of more than 100 units will be required to formulate an emergency hurricane preparedness plan; this plan is subject to the approval of the Lee County Division of Public Safety. (Formerly Policy 110.1.4) (NO CHANGE)

POLICY 1.7.5: The County will maintain the flood plain management plan and will analyze the flooding problem of the unincorporated areas of Lee County, inventory the flood hazard area, review possible activities to remedy identified flooding problems, select appropriate alternatives, and formulate a schedule for implementation. (Formerly Policy 110.1.5) (NO CHANGE)

POLICY 1.7.6: Maintain the provisions of the Flood Plain Management Ordinance that interpret the 50% improvement threshold as cumulative for any improvement, modification, addition or reconstruction project to an existing building or structure identified as part of a repetitive loss property by the Federal Emergency Management Agency (FEMA). A repetitive loss property is defined as one for which two or more National Flood Insurance Program (NFIP) losses of at least \$1000.00 each have been paid since 1978 out within any ten-year period. (Formerly Policy 110.1.6) (EDITED)

POLICY 1.7.7: Maintain the current County development regulations requiring that any building that is improved, modified, added on to, or reconstructed by more than twenty five (25) percent of its replacement value and which has recorded a repetitive loss as defined by the Federal Emergency Management Agency will be brought into compliance with current regulatory standards for new construction. (Formerly Policy 110.1.7) (NO CHANGE)

OBJECTIVE 1.8: POST-DISASTER REDEVELOPMENT. To provide for planning and decision-making to guide redevelopment during the response and recovery period following major emergencies, such as tropical storms and hurricanes. (Formerly Goal 111) (NO CHANGE)

POLICY 1.8.1: POST-DISASTER STRATEGIC PLAN. The County will maintain a postdisaster institutions and procedures to guide County actions following a natural or technological disaster. <u>This plan will:</u>

- 1. <u>Maintain a Recovery Task Force to work with state and federal emergency officials,</u> <u>assess damage, review emergency actions, prepare a redevelopment plan, and</u> <u>recommend needed changes to the Strategic Plan and to this comprehensive plan;</u>
- 2. <u>Maintain guidelines for determining priorities for the acquisition of storm-damaged</u> property in hazard-prone areas;
- 3. <u>Establish principles for repairing, replacing, modifying, or relocating public facilities in</u> <u>hazard-prone areas; and</u>

4. <u>Be modified to comply with these policies, and will contain step-by-step details for post-disaster recovery operations.</u>

(Formerly Objective 111.1 and Policies 111.1.1, 111.1.2, 111.1.3, and 111.1.4) (MODIFIED)

POLICY 111.1.1: The plan will maintain a Recovery Task Force to work with state and federal emergency officials, assess damage, review emergency actions, prepare a redevelopment plan, and recommend needed changes to the Strategic Plan and to this comprehensive plan. (Amended by Ordinance No. 94-30, 00-22) (DELETED)

POLICY 111.1.2: The plan will maintain guidelines for determining priorities for the acquisition of storm-damaged property in hazard-prone areas. (Amended by Ordinance No. 94-30, 00-22) (DELETED)

POLICY 111.1.3: The plan will establish principles for repairing, replacing, modifying, or relocating public facilities in hazard prone areas. (Amended by Ordinance No. 00-22) (DELETED)

POLICY 111.1.4: The applicable portions of the Comprehensive Emergency Management Plan will be modified to comply with these policies, and will contain step by step details for postdisaster recovery operations. (Amended by Ordinance No. 00-22) (DELETED)

POLICY 1.8.2: POST-DISASTER ORDINANCE. Maintain an ordinance that implements (where necessary) the Post-Disaster Strategic Plan, and provides regulations that may be needed following a natural or technological disaster. The Recovery Task Force will recommend amendments as needed to the Post-Disaster Strategic Plan. <u>This ordinance will:</u>

- 1. Provide for enactment of a temporary moratorium on rebuilding not immediately needed for the public health, safety, and welfare (e.g., to allow repairs to water, power, fire, police, and medical facilities; debris removal; stabilization or removal of structures in danger of collapsing; and minimal repairs to make dwellings habitable);
- 2. incorporate a redevelopment plan for hazard-prone areas where such a plan would minimize repeated exposures to life-threatening situations; and
- 3. <u>implement the County build back policy</u>. (see Procedures and Administration Section) (Formerly Objective 111.2 and Policies 111.2.1, 111.2.2, and 111.2.3) (MODIFIED)

POLICY 111.2.1: The ordinance will continue to provide for enactment of a temporary moratorium on rebuilding not immediately needed for the public health, safety, and welfare (e.g.,

to allow repairs to water, power, fire, police, and medical facilities; debris removal; stabilization or removal of structures in danger of collapsing; and minimal repairs to make dwellings habitable). (Amended by Ordinance No. 94-30, 00-22) (DELETED)

POLICY 111.2.2: The ordinance may incorporate a redevelopment plan for hazard-prone areas where such a plan would minimize repeated exposures to life threatening situations. (DELETED)

POLICY 111.2.3: The ordinance will implement the County build back policy (see Procedures and Administration Section). (Amended by Ordinance No. 94–30, 00–22) (DELETED)

OBJECTIVE 1.9: COMMUNICATIONS. In order to provide flexible and affordable communications systems to emergency responders and their affiliated organizations, the County will maintain and update common communications plans, processes, and standards to enable the dissemination of information among emergency responders' command and support elements. (ADDED)

POLICY 1.9.1: The County will develop and maintain communication plans and procedures to insure local interoperable capability as well as connectivity with federal, state, local and voluntary agencies during emergency incidents or planned events. (ADDED)

POLICY 1.9.2: The County will maintain the necessary communications equipment and architecture to link emergency responders and support agencies. (ADDED)

POLICY 1.9.3: The County will utilize funds from the Government Communication Network to implement and update necessary communications systems for all agencies in the County's Government Communications Network. (ADDED)

POLICY 1.9.4: The County will provide emergency dispatching services for emergency responders, including training of call taking and dispatch personnel. (ADDED)

POLICY 1.9.5: The County will maintain an affordable and sustainable information management system to coordinate and execute operational decisions and requests during emergency incidents. (ADDED)

GOAL 2: HAZARDOUS MATERIALS. ENVIRONMENTAL HAZARDS

To protect the public and the environment from accidental contact with hazardous materials. <u>To</u> prevent and mitigate the impact of environmental hazards through pre-disaster measures and respond effectively to such hazards when they occur. (Formerly Goal 103) (MODIFIED)

OBJECTIVE 2.1: <u>HAZARDOUS MATERIALS.</u> In order to protect the public and the environment from accidental contact with hazardous materials, <u>T</u>the County will support and assist in the creation, maintenance, and improvement of appropriate responses to hazardous material accidents, spills, or leaks. (Formerly Objective 103.1) (MODIFIED)

POLICY 2.1.1: The County will strive to maintain a representative on the Local Emergency Planning Committee (as required by the provisions of Title III: The Federal Emergency Planning and Community Right-To-Know Act of 1986). Through this representative, the County will continue to support and implement to the extent practicable the responsibilities set forth by the Local Emergency Planning Committee until such time as the Committee is terminated. (Formerly Policy 103.1.1) (EDITED)

POLICY 2.1.2: The County will assist the various fire districts and other interested parties in the <u>development</u> and maintenance of a hazardous material response team; will provide notification, resource, and logistical support to the response team and other primary agencies responding to hazardous material incidents; and will assist in coordinating the various resources to ensure proper containment, cleanup and disposal of hazardous materials involved in an emergency incident. (Formerly Policy 103.1.2) (EDITED)

POLICY 2.1.3: The County will develop and maintain a hazardous material emergency response plan that complies with applicable federal and state regulations and guidelines. (Formerly Policy 103.1.3) (EDITED)

POLICY 2.1.4: The County will assist the various fire districts and appropriate parties in the development and maintenance of a training program for hazardous material response. (Formerly Policy 103.1.4) (NO CHANGE)

POLICY 2.1.5: Any new development involved in the manufacturing, production, use, application, and storage of hazardous materials or toxic substances contained on the list of extremely hazardous substances published in the Federal Register on 11/17/86 (or subsequent updates) must establish an emergency notification system in the event of a release of a listed hazardous substance. Notification information will conform to requirements set forth in Section 304 of Title III: The Federal Emergency Community Right-to-Know Act of 1986. (Formerly Policy 103.1.5) (NO CHANGE)

POLICY 2.1.6: Any new development involved in the manufacturing, production, use, application, and storage of hazardous materials or toxic substances listed in Chapter 38F-41, Florida Administrative Code (or subsequent updates), must prepare or have available material

safety data sheets (MSDS) under the Occupational Safety and Health Administration regulations and submit either copies of MSDS or a list of MSDS chemicals to the applicable fire department or district and to the Lee County Division of Public Safety. (Formerly Policy 103.1.6) (NO CHANGE)

POLICY 2.1.7: The County will review <u>disaster emergency</u> preparedness plans for all petroleum storage facilities including any petroleum port or storage facility. This review will also include an assessment of the engineering specifications of the containment dikes at the site in a 100-year storm surge. (Formerly Policy 103.1.7) (EDITED)

OBJECTIVE 2.2: WILDFIRE. Reduce and mitigate the dangers of wildfires within Lee County. (ADDED)

POLICY 2.2.1: Promote collaboration among agencies responsible for wildfire mitigation and suppression within Lee County. (ADDED)

POLICY 2.2.2: Provide opportunities for public awareness and education relating to wildfire mitigation. (ADDED)

POLICY 2.2.3: Encourage new development to incorporate fire-wise techniques. (ADDED)

POLICY 2.2.4: Continue to improve local fire services' wildfire suppression capabilities and interagency coordination and communications. (ADDED)

GOAL 69: POLLUTION CONTROL. To ensure a safe and healthful environment for all Lee County residents. (Renumbered by Ordinance No. 08-17) (DELETE)

OBJECTIVE 2.3: <u>POLLUTION CONTROL.</u> In order to ensure a safe and healthful environment for all Lee County residents, Lee County will continue its local pollution control program by educating the public on proper storage, handling and disposal methods for hazardous waste and providing collection days for homeowners and small businesses. (Formerly Objective 69.1) (MODIFIED)

POLICY 2.3.1: Lee County will continue mechanisms to educate and train small businesses in waste minimization and the proper storage, handling and disposal of hazardous materials. through increased occupational license fees. (Formerly Policy 69.1.1) (NO CHANGE)

POLICY 2.3.2: Efforts to protect public health through clean air and water requirements will be expanded and improved. (Formerly Policy 69.1.2) (NO CHANGE)

POLICY 2.3.3: Natural and manmade environmental health hazards should be identified. (Formerly Policy 69.1.3) (NO CHANGE)

POLICY 2.3.4: Information about environmental health conditions will be made available to the public. (Formerly Policy 69.1.4) (NO CHANGE)

GOAL 118: AIR QUALITY. To maintain the best possible air quality, meeting or exceeding state and federal air quality standards. (DELETED)

OBJECTIVE 2.4: <u>AIR QUALITY</u>. In order to maintain the best possible air quality, meeting or exceeding state and federal air quality standards, The Lee County will prepare a plan to promote measures for preserving and improving current air quality to maintain the present attainment status. (Formerly Objective 118.1) (MODIFIED)

POLICY 2.4.1: Development must prevent significant emissions of air pollution. (Formerly Policy 118.1.1) (NO CHANGE)

POLICY 2.4.2: Identify major sources of air pollution in Lee County and develop a program for reducing these emissions. (Formerly Policy 118.1.2) (NO CHANGE)

POLICY 2.4.3: The County will encourage alternatives (such as composting or chipping facilities) to open burning of debris from land clearing. (Formerly Policy 118.1.3) (NO CHANGE)

POLICY 2.4.4: Research the use of bio diesel and other clean fuels in public vehicles. <u>Promote</u> the use of reduced emissions vehicles and the infrastructure necessary to support them. (Formerly Policy 118.1.4) (MODIFY)

POLICY 2.4.5: Enhance the multi-mode transportation system identified in the Transportation Element to increase opportunities for walking, biking, and transit use to reduce transportation emissions. (ADDED)

POLICY 2.4.6: Lee County will set desired levels of greenhouse gas emissions and set emission reduction targets based on data from the Lee County Greenhouse Gas Emissions Inventory completed in 2010. (ADDED)

GOAL 3: FIRE PROTECTION. <u>PUBLIC SAFETY SERVICES.</u> To assist fire districts in providing appropriate levels of high quality cost effective fire prevention and suppression services throughout the unincorporated County. <u>To provide the residents of Lee County with effective fire protection, law enforcement, and emergency medical services.</u> (Formerly Goal 65) (MODIFIED)

OBJECTIVE 3.1: FIRE PROTECTION. Improve ISO ratings of the independent fire services throughout the unincorporated County. Assist fire districts in providing appropriate levels of high-quality cost-effective fire prevention and suppression services throughout the unincorporated County in order to Himprove ISO ratings of the independent fire services. throughout the unincorporated County. (Formerly Objective 65.1) (MODIFIED)

POLICY 3.1.1: Support mutual aid and joint venture agreements between the fire districts and provide certain types of services which the individual districts cannot duplicate individually at similar or lower costs. (Formerly Policy 65.1.1) (NO CHANGE)

POLICY 3.1.2: Reexamine the fire flow and pressure standards for water facilities that are contained in Chapter 10 of the Land Development Code on a periodic basis to ensure that they are in compliance with recognized engineering standards. (Formerly Policy 65.1.2) (NO CHANGE)

POLICY 3.1.3: When cost-effective and technically feasible, existing potable water systems will be refitted to current fire flow standards. (Formerly Policy 65.1.3) (NO CHANGE)

POLICY 3.1.4: Refer requests for rezonings and development reviews to independent fire districts for comments and recommendations (when requested by the individual districts). (Formerly Policy 65.1.4) (NO CHANGE)

POLICY 3.1.5: Maintain a fire and EMS impact fee program that allows for voluntary participation of the individual fire districts. (Formerly Policy 65.1.5) (NO CHANGE)

POLICY 3.1.6: Provide technical assistance to fire districts (when requested) on site selection and continue to assist the districts in the rezoning process. (Formerly Policy 65.1.6) (NO CHANGE)

POLICY 3.1.7: Maintain and, where feasible, enhance the "911" emergency communications system to improve communications with the fire districts. (Formerly Policy 65.1.7) (NO CHANGE)

OBJECTIVE 65.2 POLICY 3.1.8: AREAS OUTSIDE THE EXISTING FIRE SERVICE. <u>In order to ensure that County development orders outside the established fire service areas are granted only if fire service expansions or other mitigation measures are approved concurrently-, all new development (excluding single-family, mobile home, duplex, and agricultural structures) should be located in an established fire district in an area provided with public water. Provisions in the Land Development Code that require adequate fire protection systems in areas where no public water is available will be maintained. (Formerly Objective 65.2 and Policy 65.2.1) (MODIFIED)</u>

POLICY 65.2.1: All new development (excluding single-family, mobile home, duplex, and agricultural structures) should be located in an established fire district in an area provided with public water. Provisions in the Land Development Code that require adequate fire protection

systems in areas where no public water is available will be maintained. (Amended by Ordinance No. 94-30, 00-22) (DELETED)

OBJECTIVE 3.2: FIRE CODE ENFORCEMENT. Ensure the consistent and uniform enforcement of the Lee County Fire Code. (Formerly Objective 65.3) (NO CHANGE)

POLICY 3.2.1: Maintain a uniform fire code for the unincorporated portion of Lee County and provide for its uniform and consistent interpretation and effective enforcement. (Formerly Policy 65.3.1) (NO CHANGE)

POLICY 3.2.2: Ensure the enforcement of the fire code by the establishment of a mechanism to fund the service provided by a County Fire Marshall to any fire district that chooses not to accept the responsibility of enforcing the fire code. (Formerly Policy 65.3.2) (NO CHANGE)

POLICY 3.2.3: The County will notify all independent fire districts of all written interpretation of fire code matters. (Formerly Policy 65.3.3) (NO CHANGE)

GOAL 70: OBJECTIVE 3.3: POLICE AND JUSTICE. To ensure the effective and efficient provision of facilities and services in support of law enforcement and justice for the growing population of Lee the County-, Lee County will regularly evaluate the effects of both private development and public service provision of services on law enforcement. (Formerly Goal 70 and Objective 70.1) (MODIFIED)

OBJECTIVE 70.1: PLANNING AND BUDGETING. Regularly evaluate the effects of both private development and public service provision of services on law enforcement. (Amended by Ordinance No. 94-30, 07-09; Renumbered by Ordinance No. 08-17) (DELETED)

POLICY 3.3.1: The County, in collaboration with the Lee County Sheriff and the Courts Administrator, will continue to cooperatively examine, evaluate, and project law enforcement budget needs. (Formerly Policy 70.1.1) (NO CHANGE)

POLICY 3.3.2: The County, in collaboration with the Lee County Sheriff, will study the development of workable standards and criteria upon which to project long-range law enforcement needs. (Formerly Policy 70.1.2) (NO CHANGE)

OBJECTIVE 70.2: FACILITIES PLANNING PROGRAM. Maintain a facilities planning program for justice and law enforcement needs. (Amended by Ordinance No. 94-30; Renumbered by Ordinance No. 08-17) (DELETED)

POLICY 3.3.3: The County <u>will maintain a facilities planning program for justice and law</u> <u>enforcement needs and</u> with the help of the Lee County Sheriff will evaluate justice and law enforcement facilities and review and revise (as necessary) plans for such facilities. (Formerly Objective 70.2 and Policy 70.2.1) (MODIFIED)

POLICY 3.3.4: The County will cooperate with the Sheriff to evaluate the need for substation facilities in Lee County and will assist in the expansion, relocation, or reduction of the number of existing substation facilities as is necessary. (Formerly Policy 70.2.2) (NO CHANGE)

POLICY 3.3.5: The County will cooperate with the Sheriff's Office to identify potential areas to share County facilities in an effort to reduce the overall cost of providing law enforcement services throughout Lee County. (Formerly Policy 70.2.3) (NO CHANGE)

GOAL 68: SERVICE PROVISION. To ensure the efficient provision of public services to health care facilities. (Renumbered by Ordinance No. 08-17) (DELETED)

OBJECTIVE 3.4: EMERGENCY MEDICAL SERVICES. In order to ensure the efficient provision of public services to health care facilities, The Lee County will maintain and improve the Emergency Medical Services Division to keep up with new population growth and technological advancements. As part of this effort, the County will cooperate with and assist the independent fire districts and other units of government who operate first-provider rescue services to maintain those services in the face of new population growth and technological advancements. (Formerly Goal 68 and Objective 68.1) (MODIFIED)

POLICY 3.4.1: The "911" emergency telephone system and centralized dispatcher program will be evaluated as to possible improvements. (Formerly Policy 68.1.1) (NO CHANGE)

POLICY 3.4.2: The County will encourage and facilitate the inclusion of other jurisdictions in cooperative service extensions of centralized communication and dispatch systems. (Formerly Policy 68.1.2) (NO CHANGE)

GOAL 4: HEALTHY LIFESTYLES. Promote the health of Lee County residents and visitors through healthier urban environments, providing increased active recreational opportunities, and alternative modes of transportation. (ADDED)

OBJECTIVE 4.1: Urban Design. The County will promote development patterns and forms that encourage healthier lifestyles for residents and visitors through the use of human-scale built environments. (ADDED)

POLICY 4.1.1: The County will promote the use of Complete Street design in new development and redevelopment of existing urban areas. (ADDED)

POLICY 4.1.2: New development and redevelopment in locations within the Greenways Trail system will incorporate the greenways into their site design and provide pedestrian access to the system. (ADDED)

POLICY 4.1.3: The County will promote the creation of community gardens within new development and redeveloped areas. (ADDED)

POLICY 4.1.4: The County will encourage new development at a pedestrian scale and redevelopment to feature closer proximity and greater pedestrian access between residential uses and commercial, retail, and employment centers. (ADDED)

POLICY 4.1.5: During the development review process, planning staff will consider whether the proposed new development encourages healthier lifestyle opportunities. (ADDED)

POLICY 4.1.6: The County will promote the use of sustainable development practices in new development and redevelopment. (ADDED)

POLICY 4.1.7: Encourage redevelopment of existing structures in built-up areas instead of Greenfield development except where such development would provide increased connectivity or be considered infill development in order to minimize environmental impacts and maximize financial, social, and health benefits. (ADDED)

POLICY 4.1.8: Promote the creation of outdoor activity space within built-up or urban areas in both public projects and private developments. (ADDED)

OBJECTIVE 4.2: Recreational Opportunities Lee County will provide greater opportunities for residents and visitors to partake in healthy recreation choices. (ADDED)

POLICY 4.2.1: The County will promote hiking and biking facilities as part of County-owned properties and on privately developed and redeveloped property. (ADDED)

POLICY 4.2.2: The County will promote the Lee County Blueways system through the creation of County-owned access points and by encouraging private developments to accommodate Blueway access points. (ADDED)

POLICY 4.2.3: The Recreational Opportunities Objective will be coordinated with the Parks and Recreation Element of the Lee Plan. (ADDED)

POLICY 4.2.4: The County will support public educational programs for residents and visitors to promote active living opportunities in the Lee County Parks and Recreation system. (ADDED)

OBJECTIVE 4.3: Alternative Transportation In order to promote healthier, non-automotive modes of travel, Lee County will encourage a more diverse selection of travel modes for residents and visitors. (ADDED)

POLICY 4.3.1: The County will facilitate increased alternative travel modes on existing and future road facilities through road design identified in the Transportation Element, future land

use policies in the Form and Character Element, and educational programs for residents and visitors. (ADDED)

POLICY 4.3.2: The County will promote through urban design increased non-automotive travel connections between destinations. (ADDED)

POLICY 4.3.3: The County will increase the level of off-road facilities for non-automotive travel modes. (ADDED)

POLICY 4.3.4: In order to encourage a lifestyle that is not dependent upon private automobiles, Lee County will promote transit use as outlined in the Transportation Element. (ADDED)

3. BASIS AND RECOMMENDED FINDINGS OF FACT:

- The Public Health and Safety Element is a new proposed element
- This element combines existing goals, objectives and policies already found in different elements of the Lee Plan into one element.
- New goals, objectives and policies are being proposed to address new areas of concern and new development trends.
- Lee County adopted the Lee County Community Wildfire Protection Plan in May 2011.
- Lee County maintains a Comprehensive Emergency Management Plan.
- Wildfire prevention, mitigation and protection are pressing needs within Lee County.
- There is currently a lack of healthy, active lifestyle options in Lee County's communities.

C. BACKGROUND INFORMATION

The New Horizon 2035: Evaluation and Appraisal Report (EAR) did not identify a need for a Community Safety and Wellbeing Element as goals, objectives, and policies that addressed police, fire and emergency medical services already existed in other sections of the Lee Plan. Goals, objectives, and policies that addressed environmental hazards, natural disasters, and emergency preparedness are currently located in the Conservation and Coastal Management

Element. However, based on further analysis, Staff proposes to relocate these public safety sections under this new element along with new goals, objectives, and policies related to areas of public health. This element will also address issues of public health as it relates to urban design, transportation networks, and County health programs. This is part of Lee County's efforts to promote healthier lifestyles. Although the EAR Report did not specifically address a separate Community Safety and Wellbeing Element, some of its recommendations on related issues are applicable to this new element. Recommendations for general governmental operation are also applicable to this element. County staff from relevant departments such as Department of Transportation, Parks and Recreation, and the Office of Sustainability have also provided recommendations for this element.

PART II - STAFF ANALYSIS

A. STAFF DISCUSSION

This analysis of the Community Safety and Wellbeing Element is presented in policy order, including the recommended changes to language for those specific goals, objectives and policies which are recommended for substantial changes.

This element is proposed to be created by taking sub-elements of other current elements and combining them here. The four sub-elements to be moved from the Community Facilities and Services Element are: the goals, objectives and policies for Fire Protection, Health Care, Police and Justice and Pollution Control. The goals, objectives and policies being relocated from the Conservation and Coastal Management Element concern: Emergency Management; Special Needs Citizens; Hazardous Materials; Protection of Life and Property in Coastal High Hazard Areas; Limitation of Public Expenditures in Coastal High Hazard Areas; Evacuation and Shelter; Hazard Mitigation; Post-Disaster Development; and Air Quality. Currently these subsections include 13 goals and 18 objectives. These goals will be grouped into three sections. Goals 101, 102, 105, 106, 101, 110, and 111 will be grouped under the heading of "Emergency Management System." Goals 103, 69, and 118 will be grouped in that order under the heading of "Environmental Hazards." Goals 65, 68, and 70 will be grouped under the heading "Public Safety Services." This reorganization and updating will create a more logical grouping and "user friendly" element. The revised plan will establish an overall element purpose and outline the manner through which health and public safety issues will be addressed. The following section lists the goals in the order in which they are recommended to be listed in the Public Health and Safety Element. However, as noted above, some of the goals will be combined and the objectives and policies of both original goals reorganized.

There are also new proposed goals, objectives, and policies included within this element. Under the Emergency Management System goal, a new objective has been added to address communication needs of emergency response personnel. Under the proposed Environmental Hazards goal, a new objective is proposed to address wildfires. Lastly, an entirely new goal is proposed to address healthy lifestyle options for Lee County residents and visitors.

The adopted New Horizon 2035 Evaluation and Appraisal Report included several organizational recommendations. One of these recommendations was to provide a clear overview section in each element that sets the context for the goals, objectives, and policies that follow, in addition to describing the relationships and linkages to other elements in the plan. Therefore, staff recommends that the following overview be incorporated as the preamble to the Community Safety and Wellbeing Element:

The intent of the Community Safety and Wellbeing Element is to prevent, mitigate, and reduce threats to the health and safety of the residents and visitors of Lee County. The provision of efficient and timely police, fire, and emergency medical services is a vital portion of this element. In addition to responding to hazards and dangerous situations, this element outlines measures to prevent and mitigate the negative impacts of hazardous situations through advance planning and preparedness. This element also addresses public health by encouraging healthier lifestyle choices for residents through urban design, transportation options, and increased recreational choices.

The recommended changes to the goals, objectives and policies of the proposed element fall under five categories in this report: No change, edit, modify, add, and delete. Those goals, objectives and policies that are considered satisfactory are being left as they are. Those goals, objectives and policies that are substantively satisfactory but may require a change in language or terminology are recommended to be edited. Those goals, objectives and policies that have been determined to require a substantive change are recommended to be modified. New goals, objectives, and policies that are recommended for adoption into the proposed element are listed as Added. Some goals, objectives, and policies are recommended to be deleted from the proposed element.

The goals, objectives and policies of the proposed element are listed in order below with an explanation of the change in Italics, where appropriate. The goals, objectives and policies have been renumbered starting with Goal 1. The former number is noted at the end of the recommended language.

GOAL 1: PLANNING, COORDINATION AND IMPLEMENTATION. To protect the public from the effects of natural and technological hazards through County emergency plans and programs. **EMERGENCY MANAGEMENT** Establish objectives and policies to prevent and mitigate threats from natural disasters by reducing their potential impact on future development and respond efficiently to disasters and hazards after the fact. (Formerly Goal 101) (MODIFIED)

Goal 1 has been modified to include as objectives several existing goals. The original language in this goal has been moved to Objective 1.1 while the proposed new language widens the scope of the Goal to include the additional former goals.

OBJECTIVE 1.1: <u>PLANNING, COORDINATION AND IMPLEMENTATION.</u> In order to protect the public from the effects of natural and technological hazards through county emergency plans and programs, **T**the County will maintain a system that provides a reasonable opportunity for protecting the population at risk to injury or death from the natural and technological hazards defined in the <u>1984 Lee County Hazard Vulnerability</u> Analysis or subsequent updates Lee County Comprehensive Emergency Management Plan. (Formerly Objective 101.1) (MODIFIED)

This objective has been modified to include the language of former Goal 101. Terminology for the Emergency management plan has been updated.

POLICY 1.1.1: The Lee County Comprehensive Emergency Management Plan will be used as the operational guide in preparing for, responding to, and recovering from <u>those</u> natural and technological hazards <u>that</u> <u>requiring</u> <u>require</u> emergency actions by local government officials. (Formerly Policy 101.1.1) (NO CHANGE)

This policy is recommended to be clarified with more specific language.

POLICY 1.1.2: The County, in cooperation with local news media, educational institutions, public service groups, and other agencies will <u>implement maintain</u> a program of education and information describing the risks of hazards such as hurricanes, tropical storms, severe thunderstorms, tornadoes, lightning, freezes, <u>attack from hostile governments hazardous materials and terrorist attacks</u>; and actions necessary to mitigate the dangers which these hazards present. (Formerly Policy 101.1.2) (EDITED)

This policy is updated to include hazardous materials and terrorists while removing hostile governments since the latter falls under state and federal authority.

POLICY 1.1.3: The County will <u>establish and</u> maintain a <u>resource management</u> program describing facilities and sites designated to serve as local, state, and federally sponsored emergency assistance locations; examples of such facilities include disaster application centers, citizen assistance centers, <u>disaster joint</u> field offices, temporary housing sites, and debris disposal locations. (Formerly Policy 101.1.3) (EDITED)

This policy is changed to include updated terminology.

POLICY 1.1.4: The County will maintain a <u>mechanism program</u> to coordinate the development and maintenance of emergency plans and programs among the relevant local, regional, and state governments, districts, the administration of the Florida Gulf Coast University, or agencies. (Formerly Policy 101.1.4) (EDITED)

This policy is changed to include updated terminology.

POLICY 1.1.5: The County will maintain and update as necessary appropriate wildfire policies. (ADDED)

This policy is recommended in order to address the overall topic of wildfire management.

POLICY 1.1.6: The County will annually update the Joint Unified Local Mitigation Strategy for Lee County with state, regional, and municipal agencies and organizations. (ADDED)

This policy is recommended to further the coordination of Lee County emergency response personnel with outside organizations.

POLICY 1.1.7: The County will maintain a training and exercise program designed to improve all hazards Capabilities and response at the local level by acquainting personnel with their roles and responsibilities in emergency management and incident response; and to evaluate these capabilities through performance-based exercises. (ADDED)

This policy helps maintain a high level of service for Lee County emergency response services.

GOAL 102 <u>OBJECTIVE 1.2</u>: To assist in the emergency preparedness requirements <u>for</u> <u>people with functional access needs, such as of</u> the <u>County's</u> elderly, frail, infirmed, or handicapped (people with special needs)., <u>the County will have mechanisms in place to</u> <u>assist people with special needs during an emergency.</u> (Formerly Goal 102 and Objective 102.1) (MODIFIED)

Former Goal 102 is recommended to be an objective under proposed Goal 1 of the proposed element. As an objective, more specific language has been added from former Objective 102.1. Additional language is recommended to clarify the term "Special Needs."

OBJECTIVE 102.1: The County will continue to have mechanisms in place to assist people with special needs during an emergency. (Amended by Ordinance No. 94-30, 00-22) (DELETED)

This objective is being deleted since its language has been included under proposed Objective 1.2.

POLICY 1.2.1: New hospital, nursing home, adult congregate living facility, or developmentally disabled projects must prepare an emergency preparedness plan acceptable to the Lee County Division of Public Safety prior to receiving a final development order. (Formerly Policy 102.1.1) (NO CHANGE)

No changes are recommended for policy 1.2.1.

POLICY 1.2.2: The County, in cooperation with other public agencies and service groups, will continue its efforts to assist in the emergency transportation needs of residents having limited mobility who do not reside in licensed institutions serving people with special needs. (Formerly Policy 102.1.2) (NO CHANGE)

No changes are recommended for policy 1.2.2.

POLICY 1.2.3: The County, in cooperation with other public agencies and service groups, will continue its efforts to provide <u>functional and access basic medical</u> services in selected emergency public shelters for people with special needs. (Formerly Policy 102.1.3) (NO CHANGE)

This policy language is recommended to be made more specific.

GOAL 105: PROTECTION OF LIFE AND PROPERTY IN COASTAL HIGH HAZARD AREAS. To protect human life and developed property from natural disasters. (See also Goal 110.) (Amended by Ordinance No. 94-30) (DELETED)

This goal's language is being incorporated under proposed Objective 1.3.

<u>OBJECTIVE 1.3:</u> DEVELOPMENT IN COASTAL HIGH HAZARD AREAS. <u>To</u> protect human life and developed property from natural disasters, Ddevelopment seaward of the 1991 Coastal Construction Control Line will require applicable State of Florida approval; new development on barrier islands will be limited to densities that meet required evacuation standards; new development requiring seawalls for protection from

coastal erosion will not be permitted; and allowable densities for undeveloped areas within coastal high hazard areas will be considered for reduction. (Formerly Goal 105 and Objective 105.1) (MODIFIED)

This objective is incorporating the language of former Goal 105. This is to accommodate the change of former Goal 105 into an objective under proposed Goal 1.

POLICY 1.3.1: County policy regarding development seaward of the updated 1991 Coastal Construction Control Line will be re-evaluated approximately every five years beginning in 1995 as part of every Lee Plan Evaluation and Appraisal Report to assess the adequacy of policies and practices developed by the Department of Environmental Protection. (Formerly Policy 105.1.1) (MODIFIED)

This policy is being updated to match the frequency of review with the Evaluation and Appraisal Report process.

POLICY 1.3.2: Shoreline development in <u>V-Zones</u> <u>Coastal A Zone</u> will be protected from coastal erosion, wave action, and storms by vegetation, setbacks, and/or beach renourishment, rather than by seawalls or other hardened structures which tend to hasten beach erosion (see also policies under Objective 113.2). Repairs of lawfully constructed, functional, hardened structures as defined in F.S. Chapter 161 may be allowed subject to applicable state and local review and approval. (Formerly Policy 105.1.3) (EDITED)

This policy is being updated to incorporate new terminology.

POLICY 1.3.3: Zoning requests located in the coastal high hazard area will be considered for reduced or minimum density assignments, in accordance with their future land use category density range. Rezonings to allow higher densities will not be permitted on barrier and coastal islands <u>or in the coastal high hazard area</u> if the capacity of critical evacuation routes would thereby be exceeded (see Objective 109.1 <u>1.5</u>). (Formerly Policy 105.1.2) (MODIFIED)

This policy is incorporating language from former Policy 105.1.5.

POLICY 1.3.4: Through the Lee Plan amendment process, future land use designations of undeveloped areas within coastal high hazard areas will be considered for reduced density categories in order to limit the future population exposed to coastal flooding. (Formerly Policy 105.1.4) (NO CHANGE)

No change is recommended for policy 1.3.4.

POLICY 105.1.5: Zoning requests located in the coastal high hazard area will be considered for reduced or minimum density assignments, in accordance with their future land use category density range. This evaluation should be done in concert with an evaluation of other individual characteristics such as compatibility with existing uses, desired urban form, and availability of urban services. (Added by Ordinance No. 05-19) (DELETED)

This policy is recommended to be deleted since its language has been incorporated into proposed Policy 1.3.3.

GOAL 106: LIMITATION OF PUBLIC EXPENDITURES IN COASTAL HIGH HAZARD AREAS. To restrict public expenditures in areas particularly subject to repeated destruction by hurricanes, except to maintain required service levels, to protect existing residents, and to provide for recreation and open space uses. (Amended by Ordinance No. 94-30) (DELETED)

This goal is recommended to be an objective under the proposed Goal 1. Therefore, it is recommended to be deleted and its language incorporated into proposed Objective 1.4.

OBJECTIVE 1.4: <u>LIMITATION OF</u> COASTAL HIGH HAZARD AREA EXPENDITURES. Public expenditures in areas particularly subject to repeated destruction by hurricanes will be limited to necessary repairs, public safety needs, services to existing residents, and recreation and open space uses. (Formerly Goal 106 and Objective 106.1) (MODIFIED)

This objective is recommended to incorporate language from former Goal 106.

POLICY 1.4.1: All further public expenditures made for new facilities on undeveloped barrier islands or within V zones will require a finding by the County commission that such expenditures are necessary to maintain required service levels, to protect existing residents, or to provide for recreation and open space needs. (Formerly Policy 106.1.1) (NO CHANGE)

No change is recommended for policy 1.4.1.

POLICY 1.4.2: No new causeways (public or private) will be constructed to any islands. (Formerly Policy 106.1.2) (NO CHANGE)

No change is recommended for policy 1.4.2.

POLICY 1.4.3: No new bridges will be constructed to undeveloped barrier islands except where needed to achieve evacuation clearance time objectives on adjoining islands connected by existing bridges. In such a case, this plan will be amended to insure that the ultimate development of all areas served by the new bridge is limited to levels which can safely be served by the new and existing bridges. (Formerly Policy 106.1.3) (NO CHANGE)

No change is recommended for policy 1.4.3.

POLICY 1.4.4: When state funding is required for the relocation or replacement of infrastructure currently within the Coastal Building Zone, the capacity of the replacement structure will be limited to maintaining required service levels, protecting existing residents, and providing for recreation and open space needs. (Formerly Policy 106.1.4) (NO CHANGE)

No change is recommended for policy 1.4.4.

GOAL 109: EVACUATION AND SHELTER. To provide evacuation and shelter capabilities adequate to safeguard the public against the effects of hurricanes and tropical storms. (DELETED)

This goal is recommended to be an objective under proposed Goal 1. Therefore, it is recommended to be deleted and its language incorporated into proposed Objective 1.5.

OBJECTIVE 1.5: EVACUATION. In order to provide evacuation and shelter capabilities adequate to safeguard the public against the effects of hurricanes and tropical storms, Bby 2030 2035 Lee County will work towards attaining a level of service for out of County hurricane evacuation for a Category 5 storm event Level D or E storm surge threat that does not exceed 18 hours the timeframe recommended by the State Evacuation Study. (Formerly Objective 109.1) (MODIFIED)

This objective is incorporating language from former Goal 109.

POLICY 1.5.1: The County will assess the impact of all new residential development upon the projected hurricane evacuation network and upon projected hurricane evacuation times, and will require mitigation either through structural (on-site, off-site

shelter) provisions or through non-structural methods or techniques. (Formerly Policy 109.1.1) (NO CHANGE)

No change is recommended for policy 1.5.1.

POLICY 1.5.2: By 1995, pPeriodic updates of the hurricane evacuation portion of the Comprehensive Emergency Management Plan will be coordinated with computer transportation modeling to identify critical roadway links. transportation facilities. (Formerly Policy 109.1.2) (MODIFIED)

This policy is recommended to be updated to include new terminology.

POLICY 1.5.3: Critical roadway links causing congestion on evacuation routes will receive high priority for capital improvement expenditures. (Formerly Policy 109.1.3) (NO CHANGE)

This policy is recommended for deletion since its language is being incorporated into proposed Policy 1.5.2.

POLICY 1.5.4: New or replacement bridges on evacuation routes spanning major or marked navigable waterways will be designed, constructed, and operated to adequately accommodate the safe and timely evacuation needs of both motor vehicle and marine traffic. (Formerly Policy 109.1.4) (NO CHANGE)

No change is recommended for policy 1.5.4.

POLICY 1.5.5: Comprehensive plan amendments that increase density within coastal high hazard areas must meet one of the following criteria in accordance with Section 163.3178(9), F.S.:

- 1. The proposed amendment will not exceed a 16 hour out of County hurricane evacuation time for a category 5 Level D or E storm surge threat level event; or
- 2. Maintain a 12 hour evacuation time to shelter for a category 5 Level D or E storm surge threat level event and ensure shelter space is available to accommodate the additional residents of the development allowed by the proposed comprehensive plan amendment; or

Provide appropriate mitigation to satisfy the provisions of either of the previous two paragraphs, which may include without limitation, the payment of money, contribution of land, or construction of hurricane shelters and transportation facilities. The developer must enter into a binding agreement to memorialize the mitigation plan prior to adoption of the plan amendment.

(Formerly Policy 109.1.5) (EDITED)

This policy is recommended to be updated to include new terminology.

OBJECTIVE 1.6: SHELTER. By 2010 2030, adequate shelter space will be available for the population in the Hurricane Vulnerability Zone at risk under a Category 3 storm Level C storm surge threat level. (Formerly Objective 109.2) (EDITED)

This objective is recommended to be updated to include new terminology.

POLICY 1.6.1: The percentage rate of the evacuation population to be used as the basis for in-County and on-site shelter demand will be ten (10) percent of the population at risk in the Hurricane Vulnerability Zone under a Category 5 storm hazard scenario Level D or <u>E Storm surge threat level</u>. This rate will also be the target shelter capacity for a program to provide an emergency shelter supply within Lee County by the year 2030. (Formerly Policy 109.2.1) (EDITED)

This policy is recommended to be updated to include new terminology.

POLICY 1.6.2: By 1995, \notin The County will <u>continue to</u> implement a program designed to meet the level of service in Policy 109.2.1 <u>1.6.1</u> by 2010 2030. Components of this program may include:

- 1. Funding of the All-Hazards MSTU;
- 2. An impact fee or fee in lieu for new residential developments, with appropriate credits for the construction of on-site shelters outside of category 1 areas the Coastal High Hazard <u>Areas;</u>
- 3. Mandatory on-site shelters for new residential developments (including mobile home and recreational vehicle parks) over a specified size threshold and outside Category 1 areas of the Hurricane Vulnerability Zone the Coastal High Hazard Areas; and
- 4. Any available state funds. (Formerly Policy 109.2.2) (EDITED)

This policy is recommended to be updated to include new terminology.

POLICY 1.6.3: On-site shelters will be required to meet standards established by the County, including provision of adequate shelter space, elevation above Category 3 the Level C hurricane storm surge threat flooding levels, adequate wind proofing, glass protection, emergency power where needed, water supplies, and other basic needs. (Formerly Policy 109.2.3) (EDITED)

This policy is recommended to be updated to include new terminology.

POLICY 1.6.4: On-site shelters for the general public must not be built on barrier or coastal islands. (Formerly Policy 109.2.4) (NO CHANGE)

No changes are recommended for policy 1.6.4.

POLICY 1.6.5: By 1995, & The County will determine the feasibility of evacuating allowing residents evacuating from the level A and B Storm Surge threat levels Category 1 area to vertical shelters within residential, commercial, and industrial sites in the Category 2, 3, 4, and 5 areas Level C Storm Surge threat level of the Hurricane Vulnerability Zone. (Formerly Policy 109.2.5) (EDITED)

This policy is recommended to be updated to include new terminology.

GOAL 110: HAZARD MITIGATION. To provide through County plans, programs, and regulations means to minimize future property losses from natural disasters such as flooding, tropical storms and hurricanes. (See also Goal 105.) (Amended by Ordinance No. 94-30) (DELETED)

This goal is recommended to be an objective under the proposed Goal 1. Therefore, it is recommended to be deleted and its language incorporated into the proposed Objective 1.7.

OBJECTIVE 1.7: DEVELOPMENT REGULATIONS. In order to provide through County plans, programs, and regulations means to minimize future property losses from natural disasters such as flooding, tropical storms and hurricanes, By 2007, all development regulations will be reviewed and revised <u>as necessary</u> to require that the vulnerability of future development in the A-Zone (as defined by the Federal Emergency Management Agency) Coastal High Hazard Area be reduced. (Formerly Objective 110.1) (MODIFIED)

This objective is recommended to incorporate language from former Goal 110 and to include updated terminology.

POLICIES 1.7.1: Regulations and incentives will be examined for additional setbacks in critical erosion areas, conservation and enhancement of dunes and vegetation, flood proofing of utilities, and appropriate requirements for structural wind resistance and floodplain management. (Formerly Policy 110.1.1) (NO CHANGE)

There are no recommended changes for policy 1.7.1.

POLICY 1.7.2: The County will not permit new or expanded mobile home or recreational vehicle development on barrier islands or in <u>V-Zones</u> <u>Coastal A Zones</u> as defined by the Federal Emergency Management Agency (Formerly Policy 110.1.2) (NO CHANGE)

There are no recommended changes for policy 1.7.2.

POLICY 1.7.3: All new residential development of more than 50 units will be required to provide continuing information to residents concerning hurricane evacuation and shelters, through the establishment of a homeowners' or residents' association. (Formerly Policy 110.1.3) (NO CHANGE)

There are no recommended changes for policy 1.7.3.

POLICY 1.7.4: All new residential development of more than 100 units will be required to formulate an emergency hurricane preparedness plan; this plan is subject to the approval of the Lee County Division of Public Safety. (Formerly Policy 110.1.4) (NO CHANGE)

There are no recommended changes for policy 1.7.4.

POLICY 1.7.5: The County will maintain the flood plain management plan and will analyze the flooding problem of the unincorporated areas of Lee County, inventory the flood hazard area, review possible activities to remedy identified flooding problems, select appropriate alternatives, and formulate a schedule for implementation. (Formerly Policy 110.1.5) (NO CHANGE)

There are no recommended changes for policy 1.7.5.

POLICY 1.7.6: Maintain the provisions of the Flood Plain Management Ordinance that interpret the 50% improvement threshold as cumulative for any improvement,

modification, addition or reconstruction project to an existing building or structure identified as part of a repetitive loss property by the Federal Emergency Management Agency (FEMA). A repetitive loss property is defined as one for which two or more National Flood Insurance Program (NFIP) losses of at least \$1000.00 each have been paid since 1978 out within any ten-year period. (Formerly Policy 110.1.6) (EDITED)

This policy is recommended to be updated to include new terminology.

POLICY 1.7.7: Maintain the current County development regulations requiring that any building that is improved, modified, added on to, or reconstructed by more than twenty five (25) percent of its replacement value and which has recorded a repetitive loss as defined by the Federal Emergency Management Agency will be brought into compliance with current regulatory standards for new construction. (Formerly Policy 110.1.7) (NO CHANGE)

There are no recommended changes for policy 1.7.7.

OBJECTIVE 1.8: POST-DISASTER REDEVELOPMENT. To provide for planning and decision-making to guide redevelopment during the response and recovery period following major emergencies, such as tropical storms and hurricanes. (Formerly Goal 111) (NO CHANGE)

No change is recommended for objective 1.8.

POLICY 1.8.1: POST-DISASTER STRATEGIC PLAN. The County will maintain post-disaster institutions and procedures to guide County actions following a natural or technological disaster. <u>This plan will:</u>

- 1. Maintain a Recovery Task Force to work with state and federal emergency officials, assess damage, review emergency actions, prepare a redevelopment plan, and recommend needed changes to the Strategic Plan and to this comprehensive plan;
- 2. <u>Maintain guidelines for determining priorities for the acquisition of storm-damaged</u> property in hazard-prone areas;
- 3. Establish principles for repairing, replacing, modifying, or relocating public facilities in hazard-prone areas; and

 <u>4.</u> Be modified to comply with these policies, and will contain step-by-step details for postdisaster recovery operations (Formerly Objective 111.1 and Policies 111.1.1, 111.1.2, 111.1.3, and 111.1.4) (MODIFIED)

This policy is recommended to incorporate the language of former policies 111.1.1, 111.1.2, 111.1.3, and 111.1.4.

POLICY 111.1.1: The plan will maintain a Recovery Task Force to work with state and federal emergency officials, assess damage, review emergency actions, prepare a redevelopment plan, and recommend needed changes to the Strategic Plan and to this comprehensive plan. (Amended by Ordinance No. 94-30, 00-22) (DELETED)

This policy is recommended to be deleted and its language incorporated into proposed Policy 1.8.1.

POLICY 111.1.2: The plan will maintain guidelines for determining priorities for the acquisition of storm-damaged property in hazard-prone areas. (Amended by Ordinance No. 94-30, 00-22) (DELETED)

This policy is recommended to be deleted and its language incorporated into proposed Policy 1.8.1.

POLICY 111.1.3: The plan will establish principles for repairing, replacing, modifying, or relocating public facilities in hazard prone areas. (Amended by Ordinance No. 00-22) (DELETED)

This policy is recommended to be deleted and its language incorporated into proposed Policy 1.8.1.

POLICY 111.1.4: The applicable portions of the Comprehensive Emergency Management Plan will be modified to comply with these policies, and will contain stepby-step details for post-disaster recovery operations. (Amended by Ordinance No. 00-22) (DELETED)

This policy is recommended to be deleted and its language incorporated into proposed Policy 1.8.1.

POLICY 1.8.2: POST-DISASTER ORDINANCE. Maintain an ordinance that implements (where necessary) the Post-Disaster Strategic Plan, and provides regulations that may be needed following a natural or technological disaster. The Recovery Task Force will recommend amendments as needed to the Post-Disaster Strategic Plan. <u>This ordinance will:</u>

- 1. Provide for enactment of a temporary moratorium on rebuilding not immediately needed for the public health, safety, and welfare (e.g., to allow repairs to water, power, fire, police, and medical facilities; debris removal; stabilization or removal of structures in danger of collapsing; and minimal repairs to make dwellings habitable);
- 2. <u>incorporate a redevelopment plan for hazard-prone areas where such a plan would</u> <u>minimize repeated exposures to life-threatening situations; and</u>
- 3. <u>implement the County build back policy (see Procedures and Administration Section)</u> (Formerly Objective 111.2 and Policies 111.2.1, 111.2.2, and 111.2.3) (MODIFIED)

This policy is recommended to incorporate the language of former policies 111.2.1, 111.2.2, and 111.2.3.

POLICY 111.2.1: The ordinance will continue to provide for enactment of a temporary moratorium on rebuilding not immediately needed for the public health, safety, and welfare (e.g., to allow repairs to water, power, fire, police, and medical facilities; debris removal; stabilization or removal of structures in danger of collapsing; and minimal repairs to make dwellings habitable). (Amended by Ordinance No. 94-30, 00-22) (DELETED)

This policy is recommended to be deleted and its language incorporated into proposed Policy 1.8.2.

POLICY 111.2.2: The ordinance may incorporate a redevelopment plan for hazardprone areas where such a plan would minimize repeated exposures to life threatening situations. (DELETED)

This policy is recommended to be deleted and its language incorporated into proposed Policy 1.8.2.
POLICY 111.2.3: The ordinance will implement the County build back policy (see Procedures and Administration Section). (Amended by Ordinance No. 94-30, 00-22) (DELETED)

This policy is recommended to be deleted and its language incorporated into proposed Policy 1.8.2.

OBJECTIVE 1.9: COMMUNICATIONS. In order to provide flexible and affordable communications systems to emergency responders and their affiliated organizations, the County will maintain and update common communications plans, processes, and standards to enable the dissemination of information among emergency responders' command and support elements. (ADDED)

Effective communication systems are vital to maximize the ability of County personnel to respond to emergencies.

POLICY 1.9.1: The County will develop and maintain communication plans and procedures to insure local interoperable capability as well as connectivity with federal, state, local and voluntary agencies during emergency incidents or planned events. (ADDED)

This policy addresses the need for County agencies to coordinate with all levels of government during emergencies.

POLICY 1.9.2: The County will maintain the necessary communications equipment and architecture to link emergency responders and support agencies. (ADDED)

This policy addresses the need to maintain adequate infrastructure for emergency communication needs.

POLICY 1.9.3: The County will utilize funds from the Government Communication Network to implement and update necessary communications systems for all agencies in the County's Government Communications Network. (ADDED)

Adequate funding is vital to ensure that necessary emergency communication systems are kept up to date.

POLICY 1.9.4: The County will provide emergency dispatching services for emergency responders, including training of call taking and dispatch personnel. (ADDED)

This policy addresses the need for adequately trained emergency communications personnel.

POLICY 1.9.5: The County will maintain an affordable and sustainable information management system to coordinate and execute operational decisions and requests during emergency incidents. (ADDED)

An information management system greatly increases the capabilities of communication systems to respond effectively to emergencies.

GOAL 2: HAZARDOUS MATERIALS. ENVIRONMENTAL HAZARDS

To protect the public and the environment from accidental contact with hazardous materials. To prevent and mitigate the impact of environmental hazards through predisaster measures and respond effectively to such hazards when they occur. (Formerly Goal 103) (MODIFIED)

Proposed Goal 2 incorporates several former goals as objectives. Therefore, the specific language addressing hazardous materials is being included under proposed Objective 2.1 and new language is being incorporated that addresses the broader topic of environmental hazards.

OBJECTIVE 2.1: <u>HAZARDOUS MATERIALS.</u> In order to protect the public and the <u>environment from accidental contact with hazardous materials</u>, <u>T</u>the County will support and assist in the creation, maintenance, and improvement of appropriate responses to hazardous material accidents, spills, or leaks. (Formerly Objective 103.1) (MODIFIED)

This objective is recommended to incorporate the language from former Goal 103.

POLICY 2.1.1: The County will strive to maintain a representative on the Local Emergency Planning Committee (as required by the provisions of Title III: The Federal Emergency Planning and Community Right-To-Know Act of 1986). Through this representative, the County will continue to support and implement to the extent practicable the responsibilities set forth by the Local Emergency Planning Committee until such time as the Committee is terminated. (Formerly Policy 103.1.1) (EDITED)

This policy is recommended to be amended to include better wording.

POLICY 2.1.2: The County will assist the various fire districts and other interested parties in the development and maintenance of a hazardous material response team; will provide notification, resource, and logistical support to the response team and other

primary agencies responding to hazardous material incidents; and will assist in coordinating the various resources to ensure proper containment, cleanup and disposal of hazardous materials involved in an emergency incident. (Formerly Policy 103.1.2) (EDITED)

This policy is recommended to be amended to include better wording.

POLICY 2.1.3: The County will develop and maintain a hazardous material emergency response plan that complies with applicable federal and state regulations and guidelines. (Formerly Policy 103.1.3) (EDITED)

This policy is recommended to be amended to include better wording.

POLICY 2.1.4: The County will assist the various fire districts and appropriate parties in the development and maintenance of a training program for hazardous material response. (Formerly Policy 103.1.4) (NO CHANGE)

No changes are recommended for policy 2.1.4.

POLICY 2.1.5: Any new development involved in the manufacturing, production, use, application, and storage of hazardous materials or toxic substances contained on the list of extremely hazardous substances published in the Federal Register on 11/17/86 (or subsequent updates) must establish an emergency notification system in the event of a release of a listed hazardous substance. Notification information will conform to requirements set forth in Section 304 of Title III: The Federal Emergency Community Right-to-Know Act of 1986. (Formerly Policy 103.1.5) (NO CHANGE)

No changes are recommended for policy 2.1.5.

POLICY 2.1.6: Any new development involved in the manufacturing, production, use, application, and storage of hazardous materials or toxic substances listed in Chapter 38F-4l, Florida Administrative Code (or subsequent updates), must prepare or have available material safety data sheets (MSDS) under the Occupational Safety and Health Administration regulations and submit either copies of MSDS or a list of MSDS chemicals to the applicable fire department or district and to the Lee County Division of Public Safety. (Formerly Policy 103.1.6) (NO CHANGE)

No changes are recommended for policy 2.1.6.

POLICY 2.1.7: The County will review <u>disaster emergency</u> preparedness plans for all petroleum storage facilities including any petroleum port or storage facility. This review will also include an assessment of the engineering specifications of the containment dikes at the site in a 100-year storm surge. (Formerly Policy 103.1.7) (EDITED)

This policy is recommended to be updated to include new terminology.

OBJECTIVE 2.2: WILDFIRE. Reduce and mitigate the dangers of wildfires within Lee County. (ADDED)

This objective is added to incorporate portions of the Lee County Community Wildfire Protection Plan. The LCCWPP contains specific recommendations for Goals, Objectives, and policies. Many of these recommendations have been used to create this objective and its policies.

POLICY 2.2.1: Promote collaboration among agencies responsible for wildfire mitigation and suppression within Lee County. (ADDED)

This policy is recommended to reduce redundancy and increase efficiency in wildfire responders.

POLICY 2.2.2: Provide opportunities for public awareness and education relating to wildfire mitigation. (ADDED)

This policy is recommended to reduce both the chances of human-caused wildfires and the potential impact of those wildfires on existing development.

POLICY 2.2.3: Encourage new development to incorporate fire-wise techniques. (ADDED)

This policy is recommended to further reduce the impact of wildfires on future development.

POLICY 2.2.4: Continue to improve local fire services' wildfire suppression capabilities and interagency coordination and communications. (ADDED)

Continuous improvements are vital to maintaining an effective wildfire response.

GOAL 69: POLLUTION CONTROL. To ensure a safe and healthful environment for all Lee County residents. (Renumbered by Ordinance No. 08-17) (DELETE)

This goal is being changed to an objective under the proposed Goal 2. Therefore, it is being deleted and its language incorporated under proposed Objective 2.3.

OBJECTIVE 2.3: <u>POLLUTION CONTROL.</u> In order to ensure a safe and healthful environment for all Lee County residents, Lee County will continue its local pollution control program by educating the public on proper storage, handling and disposal methods for hazardous waste and providing collection days for homeowners and small businesses. (Formerly Objective 69.1) (MODIFIED)

This objective is recommended to incorporate the language from former Goal 69.

POLICY 2.3.1: Lee County will continue mechanisms to educate and train small businesses in waste minimization and the proper storage, handling and disposal of hazardous materials. through increased occupational license fees. (Formerly Policy 69.1.1) (NO CHANGE)

This policy is recommended to delete the language pertaining to occupational license fees.

POLICY 2.3.2: Efforts to protect public health through clean air and water requirements will be expanded and improved. (Formerly Policy 69.1.2) (NO CHANGE)

No changes are recommended for policy 2.3.2.

POLICY 2.3.3: Natural and manmade environmental health hazards should be identified. (Formerly Policy 69.1.3) (NO CHANGE)

No changes are recommended for policy 2.3.3.

POLICY 2.3.4: Information about environmental health conditions will be made available to the public. (Formerly Policy 69.1.4) (NO CHANGE)

No changes are recommended for policy 2.3.4.

GOAL 118: AIR QUALITY. To maintain the best possible air quality, meeting or exceeding state and federal air quality standards. (DELETED)

This goal is recommended to be an objective under the proposed Goal 2. Therefore, it is being deleted and its language incorporated under proposed Objective 2.4.

OBJECTIVE 2.4: <u>AIR QUALITY</u>. In order to maintain the best possible air quality, meeting or exceeding state and federal air quality standards, The Lee County will prepare a plan to promote measures for preserving and improving current air quality to maintain the present attainment status. (Formerly Objective 118.1) (MODIFIED)

This objective is recommended to incorporate the language from former Goal 118. Additional language is recommended to address emission standards.

POLICY 2.4.1: Development must prevent significant emissions of air pollution. (Formerly Policy 118.1.1) (NO CHANGE)

No changes are recommended for policy 2.4.1.

POLICY 2.4.2: Identify major sources of air pollution in Lee County and develop a program for reducing these emissions. (Formerly Policy 118.1.2) (NO CHANGE)

No changes are recommended for policy 2.4.2.

POLICY 2.4.3: The County will encourage alternatives (such as composting or chipping facilities) to open burning of debris from land clearing. (Formerly Policy 118.1.3) (NO CHANGE)

No changes are recommended for policy 2.4.3.

POLICY 2.4.4: Research the use of bio diesel and other clean fuels in public vehicles. Promote the use of reduced emissions vehicles and the infrastructure necessary to support them. (Formerly Policy 118.1.4) (NO CHANGE)

This policy is recommended for additional language that will expand the County's measures to reduce automobile emissions and provide higher air quality.

POLICY 2.4.5: Enhance the multi-mode transportation system identified in the Transportation Element to increase opportunities for walking, biking, and transit use to reduce transportation emissions. (ADDED)

This policy is recommended to address the impact of private automobiles on Lee County's air quality and promote alternative modes of transportation. Reducing the amount of individual passenger cars on roadways in favor of alternative travel modes can help improve air quality within Lee County.

POLICY 2.4.6: Lee County will set desired levels of greenhouse gas emissions and set emission reduction targets based on data from the Lee County Greenhouse Gas Emissions Inventory completed in 2010. (ADDED) This policy is proposed to set standards for greenhouse gas levels and provide a means to address them.

GOAL 3: FIRE PROTECTION. <u>PUBLIC SAFETY SERVICES.</u> To assist fire districts in providing appropriate levels of high-quality cost-effective fire prevention and suppression services throughout the unincorporated County. To provide the residents of Lee County with effective fire protection, law enforcement, and emergency medical services. (Formerly Goal 65) (MODIFIED)

Proposed Goal 3 incorporates those goals, objectives, and policies that address fire protection services, law enforcement, and emergency medical services. Those separate former goals are recommended to be objectives under this proposed goal. Therefore, the language of former Goal 65 is recommended to be incorporated into proposed Objective 3.1 and new language addressing the broader scope of the proposed goal is recommended to be added.

OBJECTIVE 3.1: FIRE PROTECTION. Improve ISO ratings of the independent fire services throughout the unincorporated County. Assist fire districts in providing appropriate levels of high-quality cost-effective fire prevention and suppression services throughout the unincorporated County in order to- Iimprove ISO ratings of the independent fire services. throughout the unincorporated County. (Formerly Objective 65.1) (MODIFIED)

This objective is recommended to incorporate the language of former Goal 65.

POLICY 3.1.1: Support mutual aid and joint venture agreements between the fire districts and provide certain types of services which the individual districts cannot duplicate individually at similar or lower costs. (Formerly Policy 65.1.1) (NO CHANGE)

No changes are recommended for policy 3.1.1.

POLICY 3.1.2: Reexamine the fire flow and pressure standards for water facilities that are contained in Chapter 10 of the Land Development Code on a periodic basis to ensure that they are in compliance with recognized engineering standards. (Formerly Policy 65.1.2) (NO CHANGE)

No changes are recommended for policy 3.1.2.

POLICY 3.1.3: When cost-effective and technically feasible, existing potable water systems will be refitted to current fire flow standards. (Formerly Policy 65.1.3) (NO CHANGE)

No changes are recommended for policy 3.1.3.

POLICY 3.1.4: Refer requests for rezonings and development reviews to independent fire districts for comments and recommendations (when requested by the individual districts). (Formerly Policy 65.1.4) (NO CHANGE)

No changes are recommended for policy 3.1.4.

POLICY 3.1.5: Maintain a fire and EMS impact fee program that allows for voluntary participation of the individual fire districts. (Formerly Policy 65.1.5) (NO CHANGE)

No changes are recommended for policy 3.1.5.

POLICY 3.1.6: Provide technical assistance to fire districts (when requested) on site selection and continue to assist the districts in the rezoning process. (Formerly Policy 65.1.6) (NO CHANGE)

No changes are recommended for policy 3.1.6.

POLICY 3.1.7: Maintain and, where feasible, enhance the "911" emergency communications system to improve communications with the fire districts. (Formerly Policy 65.1.7) (NO CHANGE)

No changes are recommended for policy 3.1.7.

OBJECTIVE 65.2 POLICY 3.1.8: AREAS OUTSIDE THE EXISTING FIRE SERVICE. In order to ensure that County development orders outside the established fire service areas are granted only if fire service expansions or other mitigation measures are approved concurrently-, all new development (excluding single-family, mobile home, duplex, and agricultural structures) should be located in an established fire district in an area provided with public water. Provisions in the Land Development Code that require adequate fire protection systems in areas where no public water is available will be maintained. (Formerly Objective 65.2 and Policy 65.2.1) (MODIFIED)

This policy is recommended to incorporate the language of former Policy 65.2.1.

POLICY 65.2.1: All new development (excluding single family, mobile home, duplex, and agricultural structures) should be located in an established fire district in an area provided with public water. Provisions in the Land Development Code that require adequate fire protection systems in areas where no public water is available will be maintained. (Amended by Ordinance No. 94-30, 00-22) (DELETED)

This language is recommended to be deleted and its language incorporated into proposed Policy 3.1.8.

OBJECTIVE 3.2: FIRE CODE ENFORCEMENT. Ensure the consistent and uniform enforcement of the Lee County Fire Code. (Formerly Objective 65.3) (NO CHANGE)

No change is recommended for objective 3.2.

POLICY 3.2.1: Maintain a uniform fire code for the unincorporated portion of Lee County and provide for its uniform and consistent interpretation and effective enforcement. (Formerly Policy 65.3.1) (NO CHANGE)

No change is recommended for Policy 3.2.1.

POLICY 3.2.2: Ensure the enforcement of the fire code by the establishment of a mechanism to fund the service provided by a County Fire Marshall to any fire district that chooses not to accept the responsibility of enforcing the fire code. (Formerly Policy 65.3.2) (NO CHANGE)

No change is recommended for Policy 3.2.2.

POLICY 3.2.3: The County will notify all independent fire districts of all written interpretation of fire code matters. (Formerly Policy 65.3.3) (NO CHANGE)

No change is recommended for Policy 3.2.3.

GOAL 70: OBJECTIVE 3.3: POLICE AND JUSTICE. To ensure the effective and efficient provision of facilities and services in support of law enforcement and justice for the growing population of Lee the County-, Lee County will regularly evaluate the effects of both private development and public service provision of services on law enforcement. (Formerly Goal 70 and Objective 70.1) (MODIFIED)

This goal is recommended to be an objective under proposed Goal 3. Therefore, it is recommended to incorporate the language of former Objective 70.1.

OBJECTIVE 70.1: PLANNING AND BUDGETING. Regularly evaluate the effects of both private development and public service provision of services on law enforcement. (Amended by Ordinance No. 94-30, 07-09; Renumbered by Ordinance No. 08-17) (DELETED)

This objective is recommended to be deleted and its language incorporated into proposed Objective 3.3.

POLICY 3.3.1 The County, in collaboration with the Lee County Sheriff and the Courts Administrator, will continue to cooperatively examine, evaluate, and project law enforcement budget needs. (Formerly Policy 70.1.1) (NO CHANGE)

No change is recommended for Policy 3.3.1.

POLICY 3.3.2: The County, in collaboration with the Lee County Sheriff, will study the development of workable standards and criteria upon which to project long-range law enforcement needs. (Formerly Policy 70.1.2) (NO CHANGE)

No change is recommended for Policy 3.3.2.

OBJECTIVE 70.2: FACILITIES PLANNING PROGRAM. Maintain a facilities planning program for justice and law enforcement needs. (Amended by Ordinance No. 94-30; Renumbered by Ordinance No. 08-17) (DELETED)

This objective is recommended to be deleted and its language incorporated into proposed Policy 3.3.3.

POLICY 3.3.3: The County <u>will maintain a facilities planning program for justice and</u> <u>law enforcement needs and</u> with the help of the Lee County Sheriff will evaluate justice and law enforcement facilities and review and revise (as necessary) plans for such facilities. (Formerly Objective 70.2 and Policy 70.2.1) (MODIFIED)

This policy is recommended to incorporate the language of former Objective 70.2.

POLICY 3.3.4: The County will cooperate with the Sheriff to evaluate the need for substation facilities in Lee County and will assist in the expansion, relocation, or reduction of the number of existing substation facilities as is necessary. (Formerly Policy 70.2.2) (NO CHANGE)

No changes are recommended for policy 3.3.4.

POLICY 3.3.5: The County will cooperate with the Sheriff's Office to identify potential areas to share County facilities in an effort to reduce the overall cost of providing law enforcement services throughout Lee County. (Formerly Policy 70.2.3) (NO CHANGE)

No changes are recommended for policy 3.3.5.

GOAL 68: SERVICE PROVISION. To ensure the efficient provision of public services to health care facilities. (Renumbered by Ordinance No. 08-17) (DELETED)

This goal is recommended to be an objective under proposed Goal 3. Therefore, its language is recommended to be incorporated into proposed Objective 3.4.

OBJECTIVE 3.4: EMERGENCY MEDICAL SERVICES. In order to ensure the efficient provision of public services to health care facilities, The Lee County will maintain and improve the Emergency Medical Services Division to keep up with new population growth and technological advancements. As part of this effort, the County will cooperate with and assist the independent fire districts and other units of government

who operate first-provider rescue services to maintain those services in the face of new population growth and technological advancements. (Formerly Goal 68 and Objective 68.1) (MODIFIED)

This objective is recommended to incorporate the language of former Goal 68.

POLICY 3.4.1: The "911" emergency telephone system and centralized dispatcher program will be evaluated as to possible improvements. (Formerly Policy 68.1.1) (NO CHANGE)

No changes are recommended for policy 3.4.1.

POLICY 3.4.2: The County will encourage and facilitate the inclusion of other jurisdictions in cooperative service extensions of centralized communication and dispatch systems. (Formerly Policy 68.1.2) (NO CHANGE)

No changes are recommended for policy 3.4.2.

GOAL 4: HEALTHY LIFESTYLES. Promote the health of Lee County residents and visitors through healthier urban environments, providing increased active recreational opportunities, and alternative modes of transportation. (ADDED)

This goal is intended to address the lack of opportunities in Lee County for active lifestyle choices. The three objectives in this goal address this issue where it relates to urban design, recreation, and transportation.

OBJECTIVE 4.1: Urban Design. The County will promote development patterns and forms that encourage healthier lifestyles for residents and visitors through the use of human-scale built environments. (ADDED)

This objective can work in conjunction with other elements of the Lee Plan such as urban form and character to ensure that future development provides for healthy lifestyle needs.

POLICY 4.1.1: The County will promote the use of Complete Street design in new development and redevelopment of existing urban areas. (ADDED)

Complete street design increases opportunities for active lifestyle options.

POLICY 4.1.2: New development and redevelopment in locations within the Greenways Trail system will incorporate the greenways into their site design and provide pedestrian access to the system. (ADDED) There is currently a policy in the Parks and Recreation Element that contains this requirement. It is included in this element to emphasize the health benefits of increased pedestrian access to the Greenways system within developed areas.

POLICY 4.1.3: The County will promote the creation of community gardens within new development and redeveloped areas. (ADDED)

Not only do community gardens promote healthy outdoor activity, they also help provide healthier diet options for residents.

POLICY 4.1.4: The County will encourage new development at a pedestrian scale and redevelopment to feature closer proximity and greater pedestrian access between residential uses and commercial, retail, and employment centers. (ADDED)

Shortening the actual and perceived walking distances within developed areas encourages increased levels of walking and biking versus automobile use in residents.

POLICY 4.1.5: During the development review process, planning staff will consider whether the proposed new development encourages healthier lifestyle opportunities. (ADDED)

This policy is intended to encourage developers to include healthy lifestyle considerations as part of the development design process.

POLICY 4.1.6: The County will promote the use of sustainable development practices in new development and redevelopment. (ADDED)

This policy is intended to encourage developers to include sustainable development criteria as part of the development design process.

POLICY 4.1.7: Encourage redevelopment of existing structures in built-up areas instead of Greenfield development except where such development would provide increased connectivity or be considered infill development in order to minimize environmental impacts and maximize financial, social and health benefits. (ADDED)

Redevelopment of existing built-up areas reduces sprawl and increases walkability for residents.

POLICY 4.1.8: Promote the creation of outdoor activity space within built-up or urban areas in both public projects and private developments. (ADDED)

Increasing the amount of outdoor activity space in developed areas provides more opportunities for active lifestyles.

OBJECTIVE 4.2: Recreational Opportunities Lee County will provide greater opportunities for residents and visitors to partake in healthy recreation choices. (ADDED)

Opportunities for outdoor, active recreation are an effective way to provide healthy opportunities for Lee County residents and visitors.

POLICY 4.2.1: The County will promote hiking and biking facilities as part of Countyowned properties and on privately developed and redeveloped property. (ADDED)

Increasing the amount of hiking and biking facilities creates greater opportunities for active recreation options.

POLICY 4.2.2: The County will promote the Lee County Blueways system through the creation of County-owned access points and by encouraging private developments to accommodate Blueway access points. (ADDED)

The Lee County Blueways system provides a unique opportunity for outdoor activity for residents and visitors.

POLICY 4.2.3: The Recreational Opportunities Objective will be coordinated with the Parks and Recreation Element of the Lee Plan. (ADDED)

Coordinating this goal with the Parks and recreation Element is intended to make healthy lifestyle choices part of the Parks and Recreation development process.

POLICY 4.2.4: The County will support public educational programs for residents and visitors to promote active living opportunities in the Lee County Parks and Recreation system. (ADDED)

Increased public awareness of the Lee County Parks and Recreation system increases the opportunity for healthy activity choices.

OBJECTIVE 4.3: Alternative Transportation In order to promote healthier, nonautomotive modes of travel, Lee County will encourage a more diverse selection of travel modes for residents and visitors. (ADDED) Non-automotive transportation can be an effective part of a healthy lifestyle. This objective addresses the health aspects of alternative transportation. It is intended to increase the opportunities for Lee County residents and visitors to use alternative transportation modes.

POLICY 4.3.1: The County will facilitate increased alternative travel modes on existing and future road facilities through road design identified in the Transportation Element, future land use policies in the Form and Character Element, and educational programs for residents and visitors. (ADDED)

These measures will make development more accessible to all travels modes and conforms to the complete streets concept.

POLICY 4.3.2: The County will promote through urban design increased nonautomotive travel connections between destinations. (ADDED)

Increasing non-automotive travel options provides greater opportunities for healthy outdoor activity.

POLICY 4.3.3: The County will increase the level of off-road facilities for nonautomotive travel modes. (ADDED)

Off-road facilities are more attractive and desirable for many non-automotive travel modes.

POLICY 4.3.4: In order to encourage a lifestyle that is not dependent upon private automobiles, Lee County will promote transit use as outlined in the Transportation <u>Element.</u> (ADDED)

Transit use provides a healthier option for residents than private automotive travel.

B. STAFF RECOMMENDATION

County staff recommends that the Board of County Commissioners **transmit** the proposed Public Health and Safety Element of the Lee Plan.

PART III - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: March 26, 2012

A. LOCAL PLANNING AGENCY REVIEW

B. LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. **RECOMMENDATION:**

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

NOEL ANDRESS	
WAYNE DALTRY	
JIM GREEN	
MITCH HUTCHCRAFT	
RONALD INGE	
ANN PIERCE	
ROGER STRELOW	

COMMUNITY SAFETY AND WELLBEING ELEMENT

The intent of the Community Safety and Wellbeing Element is to prevent, mitigate, and reduce threats to the health and safety of the residents and visitors of Lee County. The provision of efficient and timely police, fire, and emergency medical services is a vital portion of this element. In addition to responding to hazards and dangerous situations, this element outlines measures to prevent and mitigate the negative impacts of hazardous situations through advance planning and preparedness. This element also addresses public health by encouraging healthier lifestyle choices for residents through urban design, transportation options, and increased recreational choices.

GOAL 1: EMERGENCY MANAGEMENT. Establish objectives and policies to prevent and mitigate threats from natural disasters by reducing their potential impact on future development and respond efficiently to disasters and hazards after the fact. (MODIFIED)

OBJECTIVE 1.1: PLANNING, COORDINATION AND IMPLEMENTATION. In order to protect the public from the effects of natural and technological hazards through County emergency plans and programs, Lee County will maintain a system that provides a reasonable opportunity for protecting the population at risk to injury or death from the natural and technological hazards defined in the Lee County Comprehensive Emergency Management Plan. (MODIFIED)

POLICY 1.1.1: The Lee County Comprehensive Emergency Management Plan will be used as the operational guide in preparing for, responding to, and recovering from those natural and technological hazards that require emergency actions by local government officials. (NO CHANGE)

POLICY 1.1.2: The County, in cooperation with local news media, educational institutions, public service groups, and other agencies will maintain a program of education and information describing the risks of hazards such as hurricanes, tropical storms, severe thunderstorms, tornadoes, lightning, freezes, hazardous materials and terrorist attacks; and actions necessary to mitigate the dangers which these hazards present (EDITED)

POLICY 1.1.3: The County will maintain a resource management program describing facilities and sites designated to serve as local, state, and federally sponsored emergency assistance locations; examples of such facilities include disaster application centers, citizen assistance centers, joint field offices, temporary housing sites, and debris disposal locations. (EDITED)

POLICY 1.1.4: The County will maintain a program to coordinate the development and maintenance of emergency plans and programs among the relevant local, regional, and state governments, districts, the administration of the Florida Gulf Coast University, or agencies. (EDITED)

POLICY 1.1.5: The County will maintain and update as necessary appropriate wildfire policies. (ADDED)

POLICY 1.1.6: The County will annually update the Joint Unified Local Mitigation Strategy for Lee County with state, regional, and municipal agencies and organizations. (ADDED)

POLICY 1.1.7: The County will maintain a training and exercise program designed to improve all-hazards capabilities and response at the local level by acquainting personnel with their roles and responsibilities in emergency management and incident response; and to evaluate these capabilities through performance-based exercises. (ADDED)

OBJECTIVE 1.2: PEOPLE WITH SPECIAL NEEDS. To assist in the emergency preparedness requirements for people with functional access needs, such as the elderly, frail, infirmed, or handicapped (people with special needs), the County will have mechanisms in place to assist people with special needs during an emergency. (MODIFIED)

POLICY 1.2.1: New hospital, nursing home, adult congregate living facility, or developmentally disabled projects must prepare an emergency preparedness plan acceptable to the Lee County Division of Public Safety prior to receiving a final development order. (NO CHANGE)

POLICY 1.2.2: The County, in cooperation with other public agencies and service groups, will continue its efforts to assist in the emergency transportation needs of residents having limited mobility who do not reside in licensed institutions serving people with special needs. (NO CHANGE)

POLICY 1.2.3: The County, in cooperation with other public agencies and service groups, will continue its efforts to provide basic medical services in selected emergency public shelters for people with special needs. (NO CHANGE)

OBJECTIVE 1.3: DEVELOPMENT IN COASTAL HIGH HAZARD AREAS. In order to protect human life and developed property from natural disasters, development seaward of the Coastal Construction Control Line will require applicable State of Florida approval; new development on barrier islands will be limited to densities that meet required evacuation

standards; new development requiring seawalls for protection from coastal erosion will not be permitted; and allowable densities for undeveloped areas within coastal high hazard areas will be considered for reduction. (MODIFIED)

POLICY 1.3.1: County policy regarding development seaward of the updated Coastal Construction Control Line will be re-evaluated as part of every Lee Plan Evaluation and Appraisal Report to assess the adequacy of policies and practices developed by the Department of Environmental Protection. (MODIFIED)

POLICY 1.3.2: Shoreline development in Coastal A Zone will be protected from coastal erosion, wave action, and storms by vegetation, setbacks, and/or beach renourishment, rather than by seawalls or other hardened structures which tend to hasten beach erosion (see also policies under Objective 113.2). Repairs of lawfully constructed, functional, hardened structures as defined in F.S. Chapter 161 may be allowed subject to applicable state and local review and approval. (EDITED)

POLICY 1.3.3: Zoning requests located in the coastal high hazard area will be considered for reduced or minimum density assignments, in accordance with their future land use category density range. Rezonings to allow higher densities will not be permitted on barrier and coastal islands or in the coastal high hazard area if the capacity of critical evacuation routes would thereby be exceeded (see Objective 1.5). (MODIFIED)

POLICY 1.3.4: Through the Lee Plan amendment process, future land use designations of undeveloped areas within coastal high hazard areas will be considered for reduced density categories in order to limit the future population exposed to coastal flooding. (NO CHANGE)

OBJECTIVE 1.4: LIMITATION OF COASTAL HIGH HAZARD AREA EXPENDITURES. Public expenditures in areas particularly subject to repeated destruction by hurricanes will be limited to necessary repairs, public safety needs, services to existing residents, and recreation and open space uses. (MODIFIED)

POLICY 1.4.1: All further public expenditures made for new facilities on undeveloped barrier islands or within V zones will require a finding by the County commission that such expenditures are necessary to maintain required service levels, to protect existing residents, or to provide for recreation and open space needs. (NO CHANGE)

POLICY 1.4.2: No new causeways (public or private) will be constructed to any islands. (NO CHANGE)

POLICY 1.4.3: No new bridges will be constructed to undeveloped barrier islands except where needed to achieve evacuation clearance time objectives on adjoining islands connected by existing bridges. In such a case, this plan will be amended to insure that the ultimate development of all areas served by the new bridge is limited to levels which can safely be served by the new and existing bridges. (NO CHANGE)

POLICY 1.4.4: When state funding is required for the relocation or replacement of infrastructure currently within the Coastal Building Zone, the capacity of the replacement structure will be limited to maintaining required service levels, protecting existing residents, and providing for recreation and open space needs. (NO CHANGE)

OBJECTIVE 1.5: EVACUATION. In order to provide evacuation and shelter capabilities adequate to safeguard the public against the effects of hurricanes and tropical storms, by 2035 Lee County will work towards attaining a level of service for out of County hurricane evacuation for a Level D or E storm surge threat that does not exceed the timeframe recommended by the State Evacuation Study. (MODIFIED)

POLICY 1.5.1: The County will assess the impact of all new residential development upon the projected hurricane evacuation network and upon projected hurricane evacuation times, and will require mitigation either through structural (on-site, off-site shelter) provisions or through non-structural methods or techniques. (NO CHANGE)

POLICY 1.5.2: Periodic updates of the hurricane evacuation portion of the Comprehensive Emergency Management Plan will be coordinated with computer transportation modeling to identify critical transportation facilities. (MODIFIED)

POLICY 1.5.3: Critical roadway links causing congestion on evacuation routes will receive high priority for capital improvement expenditures. (NO CHANGE)

POLICY 1.5.4: New or replacement bridges on evacuation routes spanning major or marked navigable waterways will be designed, constructed, and operated to adequately accommodate the safe and timely evacuation needs of both motor vehicle and marine traffic. (NO CHANGE)

POLICY 1.5.5: Comprehensive plan amendments that increase density within coastal high hazard areas must meet one of the following criteria in accordance with Section 163.3178(9), F.S.:

1. The proposed amendment will not exceed a 16 hour out of County hurricane evacuation time for a Level D or E storm surge threat level; or

- 2. Maintain a 12 hour evacuation time to shelter for a Level D or E storm surge threat level and ensure shelter space is available to accommodate the additional residents of the development allowed by the proposed comprehensive plan amendment; or
- 3. Provide appropriate mitigation to satisfy the provisions of either of the previous two paragraphs, which may include without limitation, the payment of money, contribution of land, or construction of hurricane shelters and transportation facilities. The developer must enter into a binding agreement to memorialize the mitigation plan prior to adoption of the plan amendment. (EDITED)

OBJECTIVE 1.6: SHELTER. By 2030, adequate shelter space will be available for the population in the Hurricane Vulnerability Zone at risk under a Level C storm surge threat level. (EDITED)

POLICY 1.6.1: The percentage rate of the evacuation population to be used as the basis for in-County and on-site shelter demand will be ten (10) percent of the population at risk in the Hurricane Vulnerability Zone under a Level D or E Storm surge threat level. This rate will also be the target shelter capacity for a program to provide an emergency shelter supply within Lee County by the year 2030. (EDITED)

POLICY 1.6.2: The County will continue to implement a program designed to meet the level of service in Policy 1.6.1 by 2030. Components of this program may include:

- 1. Funding of the All-Hazards MSTU;
- 2. An impact fee or fee in lieu for new residential developments, with appropriate credits for the construction of on-site shelters outside of the Coastal High Hazard Areas;
- 3. Mandatory on-site shelters for new residential developments (including mobile home and recreational vehicle parks) over a specified size threshold and outside the Coastal High Hazard Areas; and
- 4. Any available state funds. (EDITED)

POLICY 1.6.3: On-site shelters will be required to meet standards established by the County, including provision of adequate shelter space, elevation above the Level C hurricane storm surge threat levels, adequate wind proofing, glass protection, emergency power where needed, water supplies, and other basic needs. (EDITED)

POLICY 1.6.4: On-site shelters for the general public must not be built on barrier or coastal islands. (NO CHANGE)

POLICY 1.6.5: The County will determine the feasibility of allowing residents evacuating from the level A and B Storm Surge threat levels to vertical shelters within residential, commercial,

and industrial sites in the Level C Storm Surge threat level of the Hurricane Vulnerability Zone. (EDITED)

OBJECTIVE 1.7: DEVELOPMENT REGULATIONS. In order to provide the means to minimize future property losses from natural disasters such as flooding, tropical storms and hurricanes through County plans, programs, and regulations, all development regulations will be reviewed and revised as necessary to require that the vulnerability of future development in the Coastal High Hazard Area be reduced. (MODIFIED)

POLICY 1.7.1: Regulations and incentives will be examined for additional setbacks in critical erosion areas, conservation and enhancement of dunes and vegetation, flood proofing of utilities, and appropriate requirements for structural wind resistance and floodplain management. (NO CHANGE)

POLICY 1.7.2: The County will not permit new or expanded mobile home or recreational vehicle development on barrier islands or in Coastal A Zones as defined by the Federal Emergency Management Agency (NO CHANGE)

POLICY 1.7.3: All new residential development of more than 50 units will be required to provide continuing information to residents concerning hurricane evacuation and shelters, through the establishment of a homeowners' or residents' association. (NO CHANGE)

POLICY 1.7.4: All new residential development of more than 100 units will be required to formulate an emergency hurricane preparedness plan; this plan is subject to the approval of the Lee County Division of Public Safety. (NO CHANGE)

POLICY 1.7.5: The County will maintain the flood plain management plan and will analyze the flooding problem of the unincorporated areas of Lee County, inventory the flood hazard area, review possible activities to remedy identified flooding problems, select appropriate alternatives, and formulate a schedule for implementation. (NO CHANGE)

POLICY 1.7.6: Maintain the provisions of the Flood Plain Management Ordinance that interpret the 50% improvement threshold as cumulative for any improvement, modification, addition or reconstruction project to an existing building or structure identified as part of a repetitive loss property by the Federal Emergency Management Agency (FEMA). A repetitive loss property is defined as one for which two or more National Flood Insurance Program (NFIP) losses of at least \$1000.00 each have been paid out within any ten-year period. (EDITED)

POLICY 1.7.7: Maintain the current County development regulations requiring that any building that is improved, modified, added on to, or reconstructed by more than twenty five (25) percent of its replacement value and which has recorded a repetitive loss as defined by the Federal Emergency Management Agency will be brought into compliance with current regulatory standards for new construction. (NO CHANGE)

OBJECTIVE 1.8: POST-DISASTER REDEVELOPMENT. To provide for planning and decision-making to guide redevelopment during the response and recovery period following major emergencies, such as tropical storms and hurricanes. (NO CHANGE)

POLICY 1.8.1: POST-DISASTER STRATEGIC PLAN. The County will maintain **a** postdisaster institutions and procedures to guide County actions following a natural or technological disaster. This plan will:

- 1. Maintain a Recovery Task Force to work with state and federal emergency officials, assess damage, review emergency actions, prepare a redevelopment plan, and recommend needed changes to the Strategic Plan and to this comprehensive plan;
- 2. Maintain guidelines for determining priorities for the acquisition of storm-damaged property in hazard-prone areas;
- 3. Establish principles for repairing, replacing, modifying, or relocating public facilities in hazard-prone areas; and
- 4. Be modified to comply with these policies, and will contain step-by-step details for postdisaster recovery operations. (MODIFIED)

POLICY 1.8.2: POST-DISASTER ORDINANCE. Maintain an ordinance that implements (where necessary) the Post-Disaster Strategic Plan, and provides regulations that may be needed following a natural or technological disaster. The Recovery Task Force will recommend amendments as needed to the Post-Disaster Strategic Plan. This ordinance will:

- 1. Provide for enactment of a temporary moratorium on rebuilding not immediately needed for the public health, safety, and welfare (e.g., to allow repairs to water, power, fire, police, and medical facilities; debris removal; stabilization or removal of structures in danger of collapsing; and minimal repairs to make dwellings habitable);
- 2. incorporate a redevelopment plan for hazard-prone areas where such a plan would minimize repeated exposures to life-threatening situations; and

3. implement the County build back policy. (see Procedures and Administration Section) (MODIFIED)

OBJECTIVE 1.9: COMMUNICATIONS. In order to provide flexible and affordable communications systems to emergency responders and their affiliated organizations, the County will maintain and update common communications plans, processes, and standards to enable the dissemination of information among emergency responders' command and support elements. (ADDED)

POLICY 1.9.1: The County will develop and maintain communication plans and procedures to insure local interoperable capability as well as connectivity with federal, state, local and voluntary agencies during emergency incidents or planned events. (ADDED)

POLICY 1.9.2: The County will maintain the necessary communications equipment and architecture to link emergency responders and support agencies. (ADDED)

POLICY 1.9.3: The County will utilize funds from the Government Communication Network to implement and update necessary communications systems for all agencies in the County's Government Communications Network. (ADDED)

POLICY 1.9.4: The County will provide emergency dispatching services for emergency responders, including training of call taking and dispatch personnel. (ADDED)

POLICY 1.9.5: The County will maintain an affordable and sustainable information management system to coordinate and execute operational decisions and requests during emergency incidents. (ADDED)

GOAL 2: ENVIRONMENTAL HAZARDS

To prevent and mitigate the impact of environmental hazards through pre-disaster measures and respond effectively to such hazards when they occur. (MODIFIED)

OBJECTIVE 2.1: HAZARDOUS MATERIALS. In order to protect the public and the environment from accidental contact with hazardous materials, the County will support and assist in the creation, maintenance, and improvement of appropriate responses to hazardous material accidents, spills, or leaks. (MODIFIED)

POLICY 2.1.1: The County will maintain a representative on the Local Emergency Planning Committee (as required by the provisions of Title III: The Federal Emergency Planning and

Community Right-To-Know Act of 1986). Through this representative, the County will continue to support and implement to the extent practicable the responsibilities set forth by the Local Emergency Planning Committee until such time as the Committee is terminated. (EDITED)

POLICY 2.1.2: The County will assist the various fire districts and other interested parties in the maintenance of a hazardous material response team; will provide notification, resource, and logistical support to the response team and other primary agencies responding to hazardous material incidents; and will assist in coordinating the various resources to ensure proper containment, cleanup and disposal of hazardous materials involved in an emergency incident. (EDITED)

POLICY 2.1.3: The County will maintain a hazardous material emergency response plan that complies with applicable federal and state regulations and guidelines. (EDITED)

POLICY 2.1.4: The County will assist the various fire districts and appropriate parties in the development and maintenance of a training program for hazardous material response. (NO CHANGE)

POLICY 2.1.5: Any new development involved in the manufacturing, production, use, application, and storage of hazardous materials or toxic substances contained on the list of extremely hazardous substances published in the Federal Register on 11/17/86 (or subsequent updates) must establish an emergency notification system in the event of a release of a listed hazardous substance. Notification information will conform to requirements set forth in Section 304 of Title III: The Federal Emergency Community Right-to-Know Act of 1986. (NO CHANGE)

POLICY 2.1.6: Any new development involved in the manufacturing, production, use, application, and storage of hazardous materials or toxic substances listed in Chapter 38F-4l, Florida Administrative Code (or subsequent updates), must prepare or have available material safety data sheets (MSDS) under the Occupational Safety and Health Administration regulations and submit either copies of MSDS or a list of MSDS chemicals to the applicable fire department or district and to the Lee County Division of Public Safety. (NO CHANGE)

POLICY 2.1.7: The County will review emergency preparedness plans for all petroleum storage facilities including any petroleum port or storage facility. This review will also include an assessment of the engineering specifications of the containment dikes at the site in a 100-year storm surge. (EDITED)

OBJECTIVE 2.2: WILDFIRE. Reduce and mitigate the dangers of wildfires within Lee County. (ADDED)

POLICY 2.2.1: Promote collaboration among agencies responsible for wildfire mitigation and suppression within Lee County. (ADDED)

POLICY 2.2.2: Provide opportunities for public awareness and education relating to wildfire mitigation. (ADDED)

POLICY 2.2.3: Encourage new development to incorporate fire-wise techniques. (ADDED)

POLICY 2.2.4: Continue to improve local fire services' wildfire suppression capabilities and interagency coordination and communications. (ADDED)

OBJECTIVE 2.3: POLLUTION CONTROL. In order to ensure a safe and healthful environment for all Lee County residents, Lee County will continue its local pollution control program by educating the public on proper storage, handling and disposal methods for hazardous waste and providing collection days for homeowners and small businesses. (MODIFIED)

POLICY 2.3.1: Lee County will continue mechanisms to educate and train small businesses in waste minimization and the proper storage, handling and disposal of hazardous materials. (NO CHANGE)

POLICY 2.3.2: Efforts to protect public health through clean air and water requirements will be expanded and improved. (NO CHANGE)

POLICY 2.3.3: Natural and manmade environmental health hazards should be identified. (NO CHANGE)

POLICY 2.3.4: Information about environmental health conditions will be made available to the public. (NO CHANGE)

OBJECTIVE 2.4: AIR QUALITY. In order to maintain the best possible air quality, meeting or exceeding state and federal air quality standards, Lee County will prepare a plan to promote measures for preserving and improving current air quality to maintain the present attainment status. (MODIFIED)

POLICY 2.4.1: Development must prevent significant emissions of air pollution. (NO CHANGE)

POLICY 2.4.2: Identify major sources of air pollution in Lee County and develop a program for reducing these emissions. (NO CHANGE)

POLICY 2.4.3: The County will encourage alternatives (such as composting or chipping facilities) to open burning of debris from land clearing. (NO CHANGE)

POLICY 2.4.4: Research the use of bio diesel and other clean fuels in public vehicles. Promote the use of reduced emissions vehicles and the infrastructure necessary to support them. (MODIFY)

POLICY 2.4.5: Enhance the multi-mode transportation system identified in the Transportation Element to increase opportunities for walking, biking, and transit use to reduce transportation emissions. (ADDED)

POLICY 2.4.6: Lee County will set desired levels of greenhouse gas emissions and set emission reduction targets based on data from the Lee County Greenhouse Gas Emissions Inventory completed in 2010. (ADDED)

GOAL 3: PUBLIC SAFETY SERVICES. To provide the residents of Lee County with effective fire protection, law enforcement, and emergency medical services. (MODIFIED)

OBJECTIVE 3.1: FIRE PROTECTION. Assist fire districts in providing appropriate levels of high-quality cost-effective fire prevention and suppression services throughout the unincorporated County in order to improve ISO ratings of the independent fire services. (MODIFIED)

POLICY 3.1.1: Support mutual aid and joint venture agreements between the fire districts and provide certain types of services which the individual districts cannot duplicate individually at similar or lower costs. (NO CHANGE)

POLICY 3.1.2: Reexamine the fire flow and pressure standards for water facilities that are contained in Chapter 10 of the Land Development Code on a periodic basis to ensure that they are in compliance with recognized engineering standards. (NO CHANGE)

POLICY 3.1.3: When cost-effective and technically feasible, existing potable water systems will be refitted to current fire flow standards. (NO CHANGE)

POLICY 3.1.4: Refer requests for rezonings and development reviews to independent fire districts for comments and recommendations (when requested by the individual districts). (NO CHANGE)

POLICY 3.1.5: Maintain a fire and EMS impact fee program that allows for voluntary participation of the individual fire districts. (NO CHANGE)

POLICY 3.1.6: Provide technical assistance to fire districts (when requested) on site selection and continue to assist the districts in the rezoning process. (NO CHANGE)

POLICY 3.1.7: Maintain and, where feasible, enhance the "911" emergency communications system to improve communications with the fire districts. (NO CHANGE)

POLICY 3.1.8: AREAS OUTSIDE THE EXISTING FIRE SERVICE. In order to ensure that County development orders outside the established fire service areas are granted only if fire service expansions or other mitigation measures are approved concurrently, all new development (excluding single-family, mobile home, duplex, and agricultural structures) should be located in an established fire district in an area provided with public water. Provisions in the Land Development Code that require adequate fire protection systems in areas where no public water is available will be maintained. (MODIFIED)

OBJECTIVE 3.2: FIRE CODE ENFORCEMENT. Ensure the consistent and uniform enforcement of the Lee County Fire Code. (NO CHANGE)

POLICY 3.2.1: Maintain a uniform fire code for the unincorporated portion of Lee County and provide for its uniform and consistent interpretation and effective enforcement. (NO CHANGE)

POLICY 3.2.2: Ensure the enforcement of the fire code by the establishment of a mechanism to fund the service provided by a County Fire Marshall to any fire district that chooses not to accept the responsibility of enforcing the fire code. (NO CHANGE)

POLICY 3.2.3: The County will notify all independent fire districts of all written interpretation of fire code matters. (NO CHANGE)

OBJECTIVE 3.3: POLICE AND JUSTICE. To ensure the effective and efficient provision of facilities and services in support of law enforcement and justice for the growing population of the County, Lee County will regularly evaluate the effects of both private development and public service provision of services on law enforcement. (MODIFIED)

POLICY 3.3.1: The County, in collaboration with the Lee County Sheriff and the Courts Administrator, will continue to cooperatively examine, evaluate, and project law enforcement budget needs. (NO CHANGE)

POLICY 3.3.2: The County, in collaboration with the Lee County Sheriff, will study the development of workable standards and criteria upon which to project long-range law enforcement needs. (NO CHANGE)

POLICY 3.3.3: The County will maintain a facilities planning program for justice and law enforcement needs and with the help of the Lee County Sheriff will evaluate justice and law enforcement facilities and review and revise (as necessary) plans for such facilities. (MODIFIED)

POLICY 3.3.4: The County will cooperate with the Sheriff to evaluate the need for substation facilities in Lee County and will assist in the expansion, relocation, or reduction of the number of existing substation facilities as is necessary. (NO CHANGE)

POLICY 3.3.5: The County will cooperate with the Sheriff's Office to identify potential areas to share County facilities in an effort to reduce the overall cost of providing law enforcement services throughout Lee County. (NO CHANGE)

OBJECTIVE 3.4: EMERGENCY MEDICAL SERVICES. In order to ensure the efficient provision of public services to health care facilities, Lee County will maintain and improve the Emergency Medical Services Division to keep up with new population growth and technological advancements. As part of this effort, the County will cooperate with and assist the independent fire districts and other units of government who operate first-provider rescue services to maintain those services in the face of new population growth and technological advancements. (MODIFIED)

POLICY 3.4.1: The "911" emergency telephone system and centralized dispatcher program will be evaluated as to possible improvements. (NO CHANGE)

POLICY 3.4.2: The County will encourage and facilitate the inclusion of other jurisdictions in cooperative service extensions of centralized communication and dispatch systems. (NO CHANGE)

GOAL 4: HEALTHY LIFESTYLES. Promote the health of Lee County residents and visitors through healthier urban environments, providing increased active recreational opportunities, and alternative modes of transportation. (ADDED)

OBJECTIVE 4.1: Urban Design. The County will promote development patterns and forms that encourage healthier lifestyles for residents and visitors through the use of human-scale built environments. (ADDED)

POLICY 4.1.1: The County will promote the use of Complete Street design in new development and redevelopment of existing urban areas. (ADDED)

POLICY 4.1.2: New development and redevelopment in locations within the Greenways Trail system will incorporate the greenways into their site design and provide pedestrian access to the system. (ADDED)

POLICY 4.1.3: The County will promote the creation of community gardens within new development and redeveloped areas. (ADDED)

POLICY 4.1.4: The County will encourage new development at a pedestrian scale and redevelopment to feature closer proximity and greater pedestrian access between residential uses and commercial, retail, and employment centers. (ADDED)

POLICY 4.1.5: During the development review process, planning staff will consider whether the proposed new development encourages healthier lifestyle opportunities. (ADDED)

POLICY 4.1.6: The County will promote the use of sustainable development practices in new development and redevelopment. (ADDED)

POLICY 4.1.7: Encourage redevelopment of existing structures in built-up areas instead of Greenfield development except where such development would provide increased connectivity or be considered infill development in order to minimize environmental impacts and maximize financial, social, and health benefits. (ADDED)

POLICY 4.1.8: Promote the creation of outdoor activity space within built-up or urban areas in both public projects and private developments. (ADDED)

OBJECTIVE 4.2: Recreational Opportunities Lee County will provide greater opportunities for residents and visitors to partake in healthy recreation choices. (ADDED)

POLICY 4.2.1: The County will promote hiking and biking facilities as part of County-owned properties and on privately developed and redeveloped property. (ADDED)

POLICY 4.2.2: The County will promote the Lee County Blueways system through the creation of County-owned access points and by encouraging private developments to accommodate Blueway access points. (ADDED)

POLICY 4.2.3: The Recreational Opportunities Objective will be coordinated with the Parks and Recreation Element of the Lee Plan. (ADDED)

POLICY 4.2.4: The County will support public educational programs for residents and visitors to promote active living opportunities in the Lee County Parks and Recreation system. (ADDED)

OBJECTIVE 4.3: Alternative Transportation In order to promote healthier, non-automotive modes of travel, Lee County will encourage a more diverse selection of travel modes for residents and visitors. (ADDED)

POLICY 4.3.1: The County will facilitate increased alternative travel modes on existing and future road facilities through road design identified in the Transportation Element, future land use policies in the Form and Character Element, and educational programs for residents and visitors. (ADDED)

POLICY 4.3.2: The County will promote through urban design increased non-automotive travel connections between destinations. (ADDED)

POLICY 4.3.3: The County will increase the level of off-road facilities for non-automotive travel modes. (ADDED)

POLICY 4.3.4: In order to encourage a lifestyle that is not dependent upon private automobiles, Lee County will promote transit use as outlined in the Transportation Element. (ADDED)

Lee County Community Wildfire Protection Plan

May 2011







LEE COUNTY PUBLIC SAFETY 14752 SIX MILE CYPRESS FORT MYERS, FLORIDA 33912

FLORIDA DIVISION OF FORESTRY CALOOSAHATCHEE FORESTRY CENTER 10941 PALM BEACH BOULEVARD FORT MYERS, FLORIDA 33905

Executive Summary

The Community Wildfire Protection Plan (CWPP) is a unique opportunity to address the challenges of fire protection in the wildland urban interface through locally-supported solutions. CWPPs are authorized by the Healthy Forests Restoration Act of 2003 and provide communities with a tremendous opportunity to influence: (1) where and how wildland fuel management projects are implemented on federally managed lands, and (2) how federal funds are distributed for fuel reduction projects on non-federal lands. Having a CWPP gives the county priority status when applying for federal funding for wildfire mitigation projects.

The CWPP includes an assessment of the community's wildfire vulnerability, local organizations and resources available to assist with wildfire mitigation and response, and an action plan for reducing wildfire vulnerability in the county. Recommended actions to reduce wildfire vulnerability have been collaboratively developed for the following mitigation categories: 1) wildland fuel management, 2) community outreach and education, 3) Firewise building retrofit and landscaping, 4) policy and regulation recommendations, and 5) wildland fire response improvements. Details for implementing the actions, such as responsible agencies and funding considerations, are included in the Plan.

The CWPP meets the minimum requirements of the Healthy Forests Restoration Act. The Plan was developed in a collaborative process with input from state and federal partners, as well as other relevant stakeholders. It identifies and prioritizes areas for wildland fuel management and includes actions that will inform residents of measures to reduce the ignitability of their homes and community. The CWPP also furthers the goals and mitigation strategies of the Local Mitigation Strategy (LMS) and is consistent with recommendations from the LMS Working Group.

Plan Approval

This Community Wildfire Protection Plan (CWPP) is a cooperative effort to improve wildfire protection and response. The individuals listed below comprise the core decision-making team responsibilities for the development of this plan and mutually agree on the plan contents.

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Local Government Representative

John D. Wilson, Director Lee County Division of Public Safety P.O. Box 398 Fort Myers, Florida 33902-0398 239-533-3905 wilsonjd@leegov.com

Signature:

Local Fire Services Representative

William "Bud" Elliot Iona-McGregor Fire Protection & Rescue Service District (Chief) Lee County Fire Chief's Association (President) 6061 South Pointe Boulevard Fort Myers, Florida 33919 239-433-0660

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welliott@ionafire.com Signature: Wellien Bed Clhatt Date: 6/10/2011

_____ Date: _____

2011

Local Florida Division of Forestry Representative

____ Date: <u>613</u>11

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PLAN APPROVAL	
Local Government Representative	
LOCAL FIRE SERVICES REPRESENTATIVE	
LOCAL FLORIDA DIVISION OF FORESTRY REPRESENTATIVE	
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1. Community Background and Existing Situation

Description of Community

Lee County is located along the Gulf of Mexico in Southwest Florida. The City of Fort Myers serves as the county seat. The County is bordered by Charlotte County to the north, Glades County to the northeast, Collier County to the south and east and Hendry County to the east. There are five incorporated jurisdictions within the County (Bonita Springs, Cape Coral, Fort Myers, Fort Myers Beach and Sanibel) and over thirty unincorporated jurisdictions. Lee County's estimated population as of the 2010 Census was 618,754. This represents a growth rate of over 40% from the 2000 Census making Lee County the 7th fastest growing county (by growth rate) in Florida.

Community Statistics

Total Land Area

Lee County covers a total of 1,211.9 square miles, of which 803.6 square miles are land and 153.6 square miles are water.

Jurisdiction	2010 Census Population	Rate of Growth (2000-2010)
Bonita Springs	43,914	33.9%
Cape Coral	154,305	50.9%
Fort Myers	62,298	29.2%
Fort Myers Beach	6,277	-4.3%
Sanibel	6,469	6.7%
Unincorporated	345,491	
TOTAL LEE COUNTY	618,754	40.3%

County Jurisdictions' Population

Source: U.S Census Bureau American FactFinder 2010

Lee County Demographics

Census People QuickFacts	Lee County	Florida
Persons 65 years old and over, percent, 2009	22.7%	17.2%
Living in same house in 1995 and 2000, percent 5 yrs old & over	47.7%	48.9%
Language other than English spoken at home, percent age 5+, 2000	13.5%	23.1%
Persons with a disability, age 5+, 2000	90,925	3,274,566
Housing units, 2009	365,447	8,852,755
Homeownership rate, percent 2000	76.5%	70.1%
Median household income, 2008	\$50,863	\$47,802
Persons below poverty level, percent, 2008	10.6%	13.3%

Source: U.S. Census Bureau QuickFacts, 2010

Wildfire Problem Statement

Lee County was selected as one of 10 counties to receive assistance in developing a CWPP because of its high wildfire vulnerability relative to other counties in Florida. In fact, the Florida Division of Forestry ranked Lee County as the most vulnerable county to wildfire in the State of Florida.

Florida's natural environment is adapted to fire and many forest ecosystems need regular cycles of fire to be healthy systems. Efforts to eliminate wildfires from the natural environment have served to make these events much more severe when they do occur due to accumulated vegetative fuels. The severity of the events impacts the health of the ecosystem and puts neighboring developments in danger. Residents in Florida vary in their understanding and acceptance of the use of prescribed fire and mechanical fuel management methods. Much of the population has moved to Florida from regions where there was not an abundance of wildlands and fire dependant ecosystems, resulting in decreased awareness of the hazard (FDOF, 2010). The role of wildfires in the natural environment needs to be integrated into public education programs and future plans for development within the wildland/urban interface.

As the County continues to grow as projected and more development occurs adjacent to or intermixed within these areas, the vulnerability of wildfire impacts to people and improved property increase. Lee County has experienced a large increase in population in recent decades and a good portion majority of its housing stock has been built in unincorporated areas of the County. Future growth in the County is predicted to continue despite a weakened economy in recent years. Lee County officials project that there will be a need for over 203,000 single-family residences in the next 20 years. This growth without consideration of Firewise development methods could result in an increase in population and homes vulnerable to wildfire.
Region	2007 Total Units	2030 Total Units	Unit Change
The Beaches	52,402	54,935	2,533
Boca Grande	1,226	1,570	344
The Cape	77,075	138,554	61,479
Central Lee	26,353	43,722	17,369
East Lee	46,071	93,949	47,878
Fort Myers	31,476	49,532	18,056
Islands	8,299	9,215	916
North Lee	25,240	56,249	31,009
Sanibel/Captiva	7,902	8,004	102
South Lee	68,614	92,251	23,637
Total	344,658	547,981	203,323

Lee County Single-Family Residential Demand over next 20 years

Source: Lee County LMS 2010

2. Planning Process

The CWPP planning process is a collaborative effort among local, regional, state, and federal government agencies to engage in protecting the community from wildfire and residents. This plan was produced through a project led by the Florida Division of Forestry (FDOF) with funding from the American Recovery and Reinvestment Act of 2009. A kickoff meeting was held via web conference on September 13, 2010 for all counties participating in the FDOF project. Additional meetings were held in Lee County on October 28, 2010 and March 16, 2011. Summaries of meetings to develop this plan are included in **Appendix A**. The following individuals participated in the planning process and provided input in the preparation of this CWPP.

	CWPP	Working	Group	Members	
-					

Representative	Name	Title/Department	Address	Phone	Email Address
DOF Local Representative	Victor Hill	Wildfire Mitigation Specialist	10941 Palm Beach Blvd, Ft. Myers, FL 33905	239-690-3500 x 104	Victor.Hill@freshfromflorida.com
LMS Coordinator	John Wilson	Director of Lee County Public Safety	14752 Six Mile Cypress Parkway, Ft. Myers, FL 33912	239-533-3911	wilsonjd@leegov.com
Fire Services Representative	Chief William "Bud" Elliot	Fire Chief, President of Lee County Fire Chiefs Association	6061 South Pointe Blvd, Ft. Myers, FL 33919	239-433-0660	welliot@ionafire.com
Growth Management Representative	Peter Eckenrode	Director of Lee County Development Services Division	Building 1, 1500 Monroe St., Ft. Myers, FL 33901	239-533-8348	peckenrode@leegov.com

In addition to the CWPP Working Group members listed above, this plan was presented to the Lee County Fire Chiefs Association on March 16, 2011. More information about the association can be found in Section 4 of this plan.

3. Vulnerability Assessment

Wildfire Vulnerability Overview

The Florida Fire Risk Assessment System (FL FRAS), updated in January 2011 by FDOF, provides a spatial analysis of wildfire vulnerability across the state. The primary output of the risk assessment is the Level of Concern (LOC) map discussed in the next section. The LOC rates areas based on their susceptibility to wildfire occurrence and estimated impact. **Appendix B** contains FL FRAS methodology, maps, and charts of wildfire vulnerability.

In addition to the countywide FL FRAS assessment, the Caloosahatchee District of FDOF has completed a district-level Mitigation Action Plan that contains vulnerability information pertinent to Lee County. A full version of the assessment has been included as **Appendix D**.

Estimated Wildland Urban Interface (WUI) Area

The wildland/urban interface (WUI) is defined in the National Fire Plan as the area where houses and wildland vegetation coincide. There are three types of WUI:

- 1) Boundary areas where development is adjacent to public or private wildlands
- 2) Intermix structures are scattered and interspersed among wildland areas
- 3) Island or occluded area of wildland surrounded by development, i.e. a subdivision preserve



Countywide Total Acres by Wildfire Risk

Countywide Total Population by Wildfire Risk



Countywide Total Structures by Wildfire Risk



Countywide Value of Structures (millions) by Wildfire Risk



Wildfire Vulnerability by Land Use

Countywide Population by Wildfire Risk and Land Use

_	Risk	Total Pop	%	Single Family Residential	Multi-Family Residential	Mobile Homes
	LOC 0	483,965	71.9%	353,705	75,402	29,269
Low	LOC 1	6,937	1.0%	5,225	430	79
Ĕ	LOC 2	12,083	1.8%	9,475	781	265
	LOC 3	41,531	6.2%	32,140	3,876	1,090
	Subtotal	544,516	80.9%	400,545	80,489	30,702
Ξ	LOC 4	13,208	2.0%	9,760	1,522	207
Medium	LOC 5	15,366	2.3%	10,835	2,720	271
Σ	LOC 6	21,980	3.3%	15,840	3,968	542
	Subtotal	50,554	7.5%	36,434	8,210	1,020
	LOC 7	31,469	4.7%	22,723	4,930	1,208
High	LOC 8	18,129	2.7%	11,970	3,590	1,268
	LOC 9	28,202	4.2%	19,698	4,008	2,462
	Subtotal	77,800	11.6%	54,391	12,528	4,938
	TOTAL	672,870	100.0%	491,370	101,227	36,660

Source Data: 2010 Florida Assessor Data, 2000 Census Persons per Household Statistics, 2010 Florida Dept of Revenue Parcel Data

cou	ntywiae s	No.		Singl	e Family	Multi-Family	Mobile	Vacant
	Risk	Structures 180,815	% 73.1%	Res	dential 143,696	Residential 10,977	Homes 14,082	Residential 400
	LOC 0	2,477	1.0%		2,241		35	0
Low	LOC 1	4,377	1.8%		3,936	148	108	1
	LOC 2	14,628	5.9%		12,911	492	490	16
	LOC 3	202,296	81.8%		162,785	11,688	14,715	418
	Subtotal	4,723	1.9%		4,192	89	96	
Medium	LOC 4	5,254	2.1%		4,679	102	122	0
Med	LOC 5	7,787	3.1%		6,828	102	246	2
	LOC 6	17,765	7.2%		15,699	368	465	2
	Subtotal		4.6%		9,478	448	405 520	5
÷	LOC 7	11,318			-			
High	LOC 8	6,319	2.6%		4,927	383	545	3
	LOC 9	9,566	3.9%		7,390	630	1,032	5
	Subtotal	27,202	11.0%		21,795	1,461	2,097	13
	TOTAL	247,263	100.0%		200,278	13,517	17,276	432
							Vacant	
					Institutional/		Vacant Commercial/ Industrial/	Misc/
	Risk	Agricultural	Comm	ercial	Institutional/ Government	Industrial		Misc/ Undefined
		Agricultural 423		ercial 5,817	-	Industrial	Commercial/ Industrial/	
MC	Risk	-			Government	Industrial 2,502	Commercial/ Industrial/ Institutional	Undefined
Low	Risk LOC 0	423		5,817	Government 2,841	Industrial 2,502 1	Commercial/ Industrial/ Institutional 0	Undefined 77
Low	Risk LOC 0 LOC 1	423 46		5,817 47	Government 2,841 27	Industrial 2,502 1 5	Commercial/ Industrial/ Institutional 0 0	Undefined 77 10
Low	Risk LOC 0 LOC 1 LOC 2	423 46 78		5,817 47 41	Government 2,841 27 48	Industrial 2,502 1 5 55	Commercial/ Industrial/ Institutional 0 0 0	Undefined 77 10 11
	Risk LOC 0 LOC 1 LOC 2 LOC 3	423 46 78 148		5,817 47 41 268	Government 2,841 27 48 239	Industrial 2,502 1 5 55 2,563	Commercial/ Industrial/ Institutional 0 0 0 0	Undefined 77 10 11 8
	Risk LOC 0 LOC 1 LOC 2 LOC 3 Subtotal	423 46 78 148 695		5,817 47 41 268 6,172	Government 2,841 27 48 239 3,155	Industrial 2,502 1 5 55 55 2,563	Commercial/ Industrial/ Institutional 0 0 0 0 0	Undefined 77 10 11 8 106
Medium Low	Risk LOC 0 LOC 1 LOC 2 LOC 3 Subtotal LOC 4	423 46 78 148 695 53		5,817 47 41 268 6,172 150	Government 2,841 27 48 239 3,155 90	Industrial 2,502 1 5 55 55 2,563 49 51	Commercial/ Industrial/ Institutional 0 0 0 0 0 0 0	Undefined 77 10 11 8 106 3
	Risk LOC 0 LOC 1 LOC 2 LOC 3 Subtotal LOC 4 LOC 5	423 46 78 148 695 53 56		5,817 47 268 6,172 150 145	Government 2,841 27 48 239 3,155 90 98	Industrial 2,502 1 5 55 2,563 49 51 66	Commercial/ Industrial/ Institutional 0 0 0 0 0 0 0 0 0	Undefined 77 10 11 8 106 3 2
Medium	Risk LOC 0 LOC 1 LOC 2 LOC 3 Subtotal LOC 4 LOC 5 LOC 6	423 46 78 148 695 53 56 75		5,817 47 268 6,172 150 145 251	Government 2,841 27 48 239 3,155 90 98 140	Industrial 2,502 1 5 5 5 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Commercial/ Industrial/ Institutional 0 0 0 0 0 0 0 0 0 0 0	Undefined 77 10 11 8 106 3 2 2 2
Medium	Risk LOC 0 LOC 1 LOC 2 LOC 3 Subtotal LOC 4 LOC 5 LOC 6 Subtotal	423 46 78 148 695 53 56 75 184		5,817 47 268 6,172 150 145 251 546	Government 2,841 27 48 239 3,155 90 90 98 140 329	Industrial 2,502 1 5 5 5 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Commercial/ Industrial/ Institutional 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Undefined 77 10 11 8 106 3 2 2 2 6
	Risk LOC 0 LOC 1 LOC 2 LOC 3 Subtotal LOC 4 LOC 5 LOC 6 Subtotal LOC 7	423 46 78 148 695 53 56 75 75 184 102		5,817 47 268 6,172 150 145 251 546	Government 2,841 27 48 239 3,155 90 90 90 98 140 329 177	Industrial 2,502 1 5 5 5 5 5 5 7 6 7 7 7 7 7 7 7 7 7 7 7 7	Commercial/ Industrial/ Institutional 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Undefined 77 10 11 8 106 3 2 2 2 2 6 3

Countywide Structures by Wildfire Risk and Land Use

TOTAL

1,127

3,884

3,078

0

118

7,554

_	Risk	Millions	%	Single Family Residential	Multi-Family Residential	Mobile Homes	Vacant Residential
	LOC 0	\$32,978.86	63.0%	\$21,302.00	\$1,090.86	\$848.98	\$1,581.79
Low	LOC 1	\$1,224.51	2.3%	\$734.49	\$24.12	\$4.32	\$87.65
Ĕ	LOC 2	\$1,414.93	2.7%	\$918.44	\$32.30	\$7.39	\$102.57
	LOC 3	\$4,521.45	8.6%	\$3,035.36	\$129.57	\$35.26	\$383.47
	Subtotal	\$40,139.75	76.7%	\$25,990.29	\$1,276.85	\$895.95	\$2,155.47
Ę	LOC 4	\$1,718.47	3.3%	\$1,150.08	\$29.67	\$9.07	\$84.32
Medium	LOC 5	\$1,887.64	3.6%	\$1,262.83	\$31.89	\$8.16	\$81.12
2	LOC 6	\$2,626.94	5.0%	\$1,706.37	\$48.61	\$14.60	\$116.06
	Subtotal	\$6,233.05	11.9%	\$4,119.28	\$110.18	\$31.84	\$281.49
-	LOC 7	\$3,077.40	5.9%	\$1,743.23	\$50.99	\$25.23	\$140.52
High	LOC 8	\$1,372.58	2.6%	\$791.18	\$40.91	\$21.21	\$76.13
	LOC 9	\$1,486.50	2.8%	\$816.74	\$38.18	\$34.27	\$109.48
	Subtotal	\$5,936.48	11.3%	\$3,351.16	\$130.09	\$80.70	\$326.13
	TOTAL	\$52,309.28	100.0%	\$33,460.73	\$1,517.11	\$1,008.49	\$2,763.10

Countywide Structure Value (millions) by Wildfire Risk and Land Use

	Risk	Agricultural	Commercial	Institutional/ Government	Industrial	Vacant Commercial/ Industrial/ Institutional	Misc/ Undefined
	LOC 0	\$434.85	\$4,002.68	\$2,191.00	\$895.37	\$435.92	\$195.42
Low	LOC 1	\$85.67	\$44.57	\$219.81	\$0.86	\$7.99	\$15.04
Ľ	LOC 2	\$109.37	\$65.26	\$150.75	\$4.45	\$11.81	\$12.59
	LOC 3	\$157.76	\$228.95	\$442.61	\$24.62	\$64.66	\$19.18
	Subtotal	\$787.65	\$4,341.45	\$3,004.17	\$925.30	\$520.38	\$242.23
Ē	LOC 4	\$58.91	\$160.00	\$160.73	\$16.46	\$35.09	\$14.13
Medium	LOC 5	\$63.66	\$191.94	\$164.39	\$21.10	\$55.10	\$7.45
2	LOC 6	\$72.18	\$363.19	\$182.36	\$35.38	\$81.97	\$6.23
	Subtotal	\$194.75	\$715.13	\$507.48	\$72.93	\$172.17	\$27.80
_	LOC 7	\$90.45	\$573.26	\$226.33	\$86.77	\$128.93	\$11.69
High	LOC 8	\$50.47	\$158.34	\$117.55	\$59.31	\$54.22	\$3.25
	LOC 9	\$49.48	\$200.58	\$86.46	\$53.30	\$94.83	\$3.18
	Subtotal	\$190.40	\$932.18	\$430.35	\$199.38	\$277.98	\$18.13
	TOTAL	\$1,172.80	\$5,988.77	\$3,942.00	\$1,197.61	\$970.52	\$288.16

Source Data: 2010 Florida Assessor Data, 2010 Florida Dept of Revenue Parcel Data

Communities at Risk

The Healthy Forests Restoration Act of 2003 defined at-risk communities as interface communities within the vicinity of Federal lands that are at high risk from wildfire. The intent of identifying these at-risk communities was that they would prepare CWPPs and would ultimately then receive priority for Federal funding to implement hazardous fuel reduction projects as described in the Act. The concept of at-risk communities has been expanded since the passage of the Act to include vulnerable communities that are not adjacent to Federal lands and the responsibility to identify at-risk communities has been given to the States. The Florida Division of Forestry maintains a list of Communities at Risk (CAR) that is based on vulnerability information from the FL FRAS. The communities at-risk located within Lee County are listed in the table below.

The rank provided in the table is based, in part, on data from the Florida Fire Risk Analysis System (FRAS), developed by the Florida Division of Forestry. FRAS maps show key areas of concern. FRAS data is indicated on a numerical scale from 0 (low) to 9 (high). Ranks listed here are based on those numbers.

Caloosahatchee Forestry Center staff members focus on areas of higher fire risk largely because of limited manpower and resources. FRAS data provides a starting point for Center programs and provides another means to track successes. Rank is also based on wildfire history of the areas listed. All areas considered high risk have significant, frequent fires that threaten structures. Consistent threats to structures are also factored into this ranking.

	iunities at Risk, 2009
Community at Risk	Rank
Bonita Springs	High
Buckingham	High
Estero	High
Lehigh Acres	High
Suncoast Estates	High
Alva	Medium
Bayshore	Medium
Burnt Shore	Medium
Forest Island Park	Medium
North Cape Coral	Medium
North Fort Myers	Medium
Pineland	Medium
San Carlos Park	Medium
Bokeelia	Low
Fort Myers	Low
Sanibel	Low
St. James City	Low
	Source: EDOI

Lee County Communities at Risk, 2009

Source: FDOF

Critical Facilities Vulnerability

The Lee County Office of Emergency Management works cooperatively with local law enforcement and GIS professionals on the development and maintenance of a protected asset inventory which reflects facilities and infrastructure of significant value to the community. Emergency Management staff may want to determine which of those assets are within high-risk wildfire areas according to the latest LOC map included in this plan. That analysis could not be accomplished within this planning period due to the timing of the FL FRAS being completed.

Predominant Wildland Fuel Types

FDOF maintains a Fire Activity Report database that includes information on all wildfires that FDOF responded to dating back to 1980. It does not include brush fires that were suppressed by local firefighters without FDOF assistance. According to these records, 69 percent of the total acres that have burned in Lee County were associated with palmetto-galberry fuels; a fuel typical of Florida Scrub ecosystems. The largest numbers of fire events have also occurred in areas of palmetto-galberry fuels.

Lee County Fires by Fuel Type, 1980-2010

Fuel Type	Fires	Acres
Palmetto-Galberry	2,602	73,563.8
Grass	737	12,318.7
Other	378	12,190.4
Dense Pine	158	5,640.8
Swamp	68	2,581.2
Unspecified	28	115.0
Blowy Leaf	16	33.9
Muck	8	25.8
Total	3,995	106,469.6
		Source: EDOE

Source: FDOF

Wildfire History

In the past 30 years there have been 106,469 acres burned from wildfires in Lee County. This amount does not include brush fires that were suppressed by local firefighters without FDOF assistance. A majority of the fires have been relatively small in size, under 9 acres.

The causes of wildfires vary. From 2005-2009, lightning (25 percent), unknown causes (18 percent), incendiary (15 percent) and children (9 percent) were the leading causes. Incendiary causes were up 2 percent from the previous average. From 1999-2009, lightning was first (29 percent), unknown causes were second (22 percent) and incendiary fires were third (14 percent). Children and miscellaneous causes accounted for 7 percent each of calls.

To address the high number of wildfire occurrences, Federal stimulus funds allowed for the creation of a Lehigh mitigation team that began work in 2010. The team averages 10-15 acres of mechanical mitigation work per day. Wildfire numbers and acreages have been dramatically lower in Lehigh since 2006. In addition, rangers continue to use prescribed fires on wildland-urban interface areas throughout

Lee County and cooperate with county preserve managers, among other officials, to conduct other prescribed fires.

Fires Classified by Fire Size, 1980-2010

Fire size	Fires	Acres
0.1- 1.2 acres	557	65.4
0.3- 9 acres	2,364	5,857.3
10-99 acres	873	26,612.3
100-299 acres	121	19,225.1
300-999 acres	65	30,449.5
1000-4999 acres	15	24,260.0
5000 and greater acres	0	0.0
Total	3,995	106,469.6

Source: FDOF

4. Local Capacity and Current Wildfire Protection Activities

Organizations and Resources

Local Emergency Management

The County's emergency management program is an entity within the Lee County Division of Public Safety. Within this Division, the Emergency Management staff maintains the Lee County All-Hazards Comprehensive Emergency Management Plan (CEMP) as well as the LMS.

The Lee County Emergency Operations Center (EOC) serves as the primary multi-agency coordination center for emergency response. Lee County Emergency Management will staff the EOC on a 24-hour basis during full EOC activation; municipal fire service, FDOF, and Florida Fire Chiefs Association (FFCA) representatives may co-locate at the Lee County EOC if it is determined that multi-agency coordination would be enhanced or if Area Command is established. Municipal fire service representatives may choose to perform multi-agency coordination out of a facility within their own jurisdiction.

Lee County Emergency Operations Center

2665 Ortiz Avenue Fort Myers, FL 33905-7812 (239) 533-3622

Local disaster support agencies may be needed in the event of a major wildfire that impacts developed areas of the county. In addition, Community Emergency Response Teams (CERTs) might also be a resource for assisting wildfire victims.

Local Disaster Support Agencies

Agency	Phone
American Red Cross, Lee County Chapter	239-278-3401
Salvation Army of Lee, Hendry and Glades Counties	239-278-1551
Sanibel CERT	239-472-5525
Ft. Myers Beach CERT	239-590-4200
Lehigh Acres CERT	239-303-5300
San Carlos Park CERT	239-267-7525
Cape Coral CERT	239-242-3603
North Ft. Myers CERT	239-997-8654
South Trail CERT	239-936-5281
Iona-McGregor CERT	239-425-9316

Local Fire Services

Local fire services are the responsibility of a combination of 17 independent fire districts located throughout the County, two city fire departments (Fort Myers and Cape Coral) and the Lee County Port Authority Crash Fire Rescue Department. A listing of local fire service stations is provided below.

An inventory of vehicles and equipment that will be available for firefighting activities including the last date of revision is maintained by each agency and is housed at the respective administrative offices or headquarters.

Staffed Fire Stations

Fire Station	Address			Phone
Alva Fire & Rescue - Station #1	2660 Styles Rd	Alva	33920	239-728-2223
Bayshore Fire Protection & Rescue Service District	17350 Nalle Rd	North Fort Myers	33917	239-543-3443
Boca Grande Fire Control District	360 East Railroad Ave	Boca Grande	33921	941-964-290
Bonita Springs Fire & Rescue - Station #1	27490 Old 41 Rd	Bonita Springs	34135	239-949-627
Bonita Springs Fire & Rescue - Station #2	28055 Mango Dr	Bonita Springs	34134	239-949-620
Bonita Springs Fire & Rescue - Station #3	25001 S Tamiami Trl	Bonita Springs	34134	239-949-621
Bonita Springs Fire & Rescue - Station #4	27701 Bonita Grande Dr	Bonita Springs	34135	239-949-622
Bonita Springs Fire & Rescue - Station #5	26890 South Bay Dr	Bonita Springs	34134	239-949-622
Cape Coral Fire - Station #10t	3623 West Gator Cir	Cape Coral	33909	239-458-129
Cape Coral Fire - Station #3	1627 Everest Pkwy	Cape Coral	33904	239-772-813
Cape Coral Fire - Station #4	2007 SE Santa Barbara Blvd	Cape Coral	33990	239-772-354
Cape Coral Fire - Station #5	1029 Diplomat Pkwy E	Cape Coral	33909	239-574-469
Cape Coral Fire - Station #7	3942 Burnt Store Rd N	Cape Coral	33993	239-283-003
Cape Coral Fire - Station #8	707 SW 1st St	Cape Coral	33993	239-573-138
Cape Coral Fire - Station #9	4107 Pelican Blvd	Cape Coral	33914	239-540-497
Cape Coral Fire & Rescue - Station #1	4610 Coronado Pkwy	Cape Coral	33904	239-542-070
Cape Coral Fire & Rescue - Station #2	701 Nicholas Pkwy E	Cape Coral	33990	239-573-848
Cape Coral Fire & Rescue - Station #6	4540 Chiquita Blvd S	Cape Coral	33914	239-542-325
Captiva Fire Control District	14981 Captiva Dr	Captiva	33924	239-472-949
Caya Costa - Park Patrol	Access Undetermined	Captiva	33924	
Division Of Forestry	10941 Palm Beach Blvd	Fort Myers	33905	239-690-350
Estero Fire - Station #41	8631 County Rd	Estero	33928	239-390-800
Estero Fire - Station #42	8005 Sweetwater Ranch Blvd	Estero	33928	239-390-800
Estero Fire - Station #43	21500/510 Three Oaks Pkwy	Estero	33928	239-390-800
Estero Fire - Station #44	21300 Fire House Ln	Estero	33928	239-390-800
Fort Myers Beach Fire - Station #31	3043 Estero Blvd	Fort Myers Beach	33931	239-590-423
Fort Myers Beach Fire - Station #32	17891 San Carlos Blvd	Fort Myers Beach	33931	239-590-423
Fort Myers Beach Fire - Station #33	121 Lenell Rd	Fort Myers Beach	33931	239-590-423
Fort Myers Fire Department - Central Station #1	2404 Dr Martin Luther King Jr Blvd	Fort Myers	33901	239-321-731
Fort Myers Fire Department - Station #2	3400-20 Palm Beach Blvd	Fort Myers	33916	
Fort Myers Fire Department - Station #3	1915 Jefferson Ave	Fort Myers	33901	
Fort Myers Fire Department - Station #4	4520 Cummins Ct	Fort Myers	33905	
Fort Myers Fire Department - Station #5	9700 Treeline Ave	Fort Myers	33913	
Fort Myers Fire Department - Station #6	3600 Veronica S Shoemaker Blvd	Fort Myers	33916	
Fort Myers Shores Fire & Rescue Control District	12345 Palm Beach Blvd	Fort Myers	33905	239-694-283
Iona Mcgregor Fire - Station #71	5401 Winkler Rd	Fort Myers	33919	239-433-066
Iona Mcgregor Fire - Station #72	16551 Mcgregor Blvd	Fort Myers	33908	239-433-066
Iona Mcgregor Fire - Station #73	15961 Winkler Rd	Fort Myers	33908	239-433-066
Iona Mcgregor Fire - Station #74	6061 South Pointe Blvd	Fort Myers	33919	239-433-066

Iona Mcgregor Fire - Station #75	15650 Pine Ridge Rd	Fort Myers	33908	239-433-0660
Lcpa Page Field Airport Fire - Station #91	4682-4700 Terminal Dr	Fort Myers	33907	239-936-3717
Lcpa SWFL Intl Airport Fire - Station #92	11901 Regional Ln	Fort Myers	33913	239-590-4566
Lehigh Acres Fire - Station #101	1000 Joel Blvd	Lehigh Acres	33972	239-303-5311
Lehigh Acres Fire - Station #102	11 Homestead Rd S	Lehigh Acres	33936	239-303-5312
Lehigh Acres Fire - Station #103	308 Gunnery Rd S	Lehigh Acres	33971	239-303-5313
Lehigh Acres Fire - Station #104	3102 16th St SW	Lehigh Acres	33976	239-303-5314
Lehigh Acres Fire - Station #105	636 Thomas Sherwin Ave S	Lehigh Acres	33974	239-303-5300
Matlacha - Pine Island Fire - Station #1	5700 Pine Island Rd NW	Bokeelia	33922	239-283-0030
Matlacha - Pine Island Fire - Station #2	5015 Stringfellow Rd	St James City	33956	239-283-3836
North Fort Myers Fire - Station #1	42 Willis Rd	North Fort Myers	33917	239-997-3344
North Fort Myers Fire - Station #2	1280 Barrett Rd	North Fort Myers	33903	239-997-4546
North Fort Myers Fire - Station #3	16290 Slater Rd	North Fort Myers	33917	239-543-6000
North Fort Myers Fire - Station #4	2900 Trail Dairy Cir	North Fort Myers	33917	239-731-5200
San Carlos Park Fire - Station #51	8013 Sanibel Blvd	Fort Myers	33967	239-267-6039
San Carlos Park Fire - Station #52	16901 Island Park Rd	Fort Myers	33908	239-489-3114
San Carlos Park Fire - Station #53	19591 Ben Hill Griffin Pkwy	Fort Myers	33913	239-267-7525
Sanibel Fire - Station #1	2351 Palm Ridge Rd	Sanibel	33957	239-472-5525
Sanibel Fire - Station #2	5171 Sanibel Captiva Rd	Sanibel	33957	239-472-5525
South Trail Fire - Station #61	2100 Crystal Dr	Fort Myers	33907	239-936-4321
South Trail Fire - Station #62	9450 Daniels Pkwy	Fort Myers	33912	239-768-0222
South Trail Fire - Station #63	5531 Halifax Ave	Fort Myers	33912	239-433-0080
South Trail Fire - Station #64	12780 Commonwealth Dr	Fort Myers	33913	239-454-2505
Tice Fire - Station #1	9351 Workmen Way	Fort Myers	33908	239-694-2380
Tice Fire - Station #3	5850 Buckingham Rd	Fort Myers	33905	239-694-2537
Upper Captiva Fire Department	4511 Hodgepodge Ln	Captiva	33924	239-472-8899

Volunteer Fire Stations

Fire Station	Address	Phone
Matlacha – Pine Island Fire – Station #3	14861 Stringfellow Rd, Bokeelia, 33922	239-283-8231
Useppa Island Fire Department - (volunteer)	200 Useppa Island, Captiva, 33924	239-283-7578

Florida Division of Forestry

FDOF provides wildfire prevention, mitigation and response services in collaboration with local fire services. The Wildfire Mitigation Specialist for the Caloosahatchee Forestry Center is a resource for Firewise education and planning assistance as well as coordinating and implementing fuel management needs. The Mitigation Specialist is responsible for all fuel management projects in the wildland-urban interface. See **Wildland Fuel Management Capabilities** section for more details on FDOF fuel reduction projects.

The Lee County Forest Area Supervisor directs FDOF fire suppression activities. More details on FDOF and local wildfire suppression are discussed in the **Wildland Fire Response Capabilities** section.

FDOF also has direct land management responsibilities for the Caloosahatchee State Forest.

FDOF	Work Station	1
rDUr	WUIK SLULIUI	L

Work Station	Address	Phone
Caloosahatchee Forestry Center	10941 Palm Beach Boulevard	239-690-3500
	Fort Myers, Florida 33905	

Community Development

Each jurisdiction within Lee County has a comprehensive plan detailing future land uses and land development codes that are enforced for new development. These tools can also be used to mitigate wildfire impacts for future development.

A review of the Lee County Comprehensive Plan found some policies that support wildfire mitigation; however, the plan is fairly limited in wildfire mitigation and management practices goals, objectives and policies. The Future Land Use Element Policy 16.6.1 directs the developer to perpetually manage natural areas with Best Management Practices including a natural area management plan which must include prescribed fires. However helpful, this policy only applies to private recreational facilities located within the County. The Conservation and Coastal Management Element directs the County to implement a natural resources management plan including fire management. There are policies in the Comprehensive Plan that encourage on-site preservation of indigenous plant communities and encourage removal/discourages planting of invasive species.

Local Mitigation Strategy (LMS) Working Group

The Lee County LMS addresses all-hazard mitigation from a County-wide level. The plan is coordinated and prepared by the Lee County Division of Public Safety and developed and approved by the Lee County Disaster Advisory Council, as well as participants and other interested parties. The Lee County Disaster Advisory Council has representation from each of the five municipalities, and numerous county departments. Only the Public Safety Director is on both the Lee County Disaster Advisory Council and the CWPP Working Group, but he serves as the Chair for both. The Lee County Fire Chiefs Association is also represented on both the LMS and CWPP planning teams.

The LMS addresses wildfire as a high risk hazard for all jurisdictions in Lee County. The goals and objectives of the plan are consistent with the CWPP. Additional projects from this CWPP should be added to the LMS Project List. Grant funding can be collaboratively sought between both the LMS and CWPP planning efforts for wildfire mitigation projects.

Firewise Communities

Firewise Communities is a national certification program that provides a framework for neighborhoods to reduce wildfire risks. The program is run by the National Fire Protection Association and managed locally by the Florida Division of Forestry. FDOF officials work in partnership with local fire districts and emergency management to implement the program in neighborhoods. Residents create a Firewise Board and work with FDOF to complete a wildfire risk assessment that serves as a guide to reduce

wildfire risks. The assessment is turned into a risk reduction plan for a community. The certification is renewed each year upon completion of community workshops and neighborhood Firewise activities.

There are three Firewise Communities in Lee County. They are:

- Seven Lakes Association, Fort Myers, 2010
- The Resort on Carefree Boulevard, North Fort Myers, 2006
- Verandah, Fort Myers, 2003

Lee County Fire Chiefs Association

There are 17 independent fire districts in Lee County. Representatives from those fire districts, together with FDOF and Lee County Public Safety, EMS and Port Authority have joined together to form the Lee County Fire Chiefs Association.

The mission of the Lee County Fire Chiefs Association is:

To provide leadership for interagency cooperation by providing education, communication, assisting in the mitigation of diverse emergency incidents and influencing the local government process in a manner that supports the mission.

The Association was briefed on and participated in the development of this plan. The President of the Association served as a signatory in endorsing the plan.

Lee County All Hazards Protection District Municipal Service Taxing Unit

The Lee County All-Hazards Protection Fund is an ad valorem tax based on the assessment of the taxable value of the property in unincorporated Lee County and the City of Cape Coral. Monies from the fund can be used for hazardous materials response, emergency preparedness efforts, emergency contingency fund and for acquisition of properties meeting eligible criteria. Examples of projects funded include hurricane shelter improvements, the County's hazardous materials response team, public information programs, emergency transportation efforts, public safety infrastructure and mitigation projects such as the fire fuel load reduction program in Lehigh Acres.

The property tax began collecting funds in FY 93-94. The current millage rate is 0.0693 per \$1,000 of taxable property value. The property owner pays the Lee County Tax Collector, who remits collections to the Clerk of the Circuit Court for Deposit.

Conservation 20/20

After a 1994 land use study was released indicating that only 10% of Lee County was set aside for conservation, a group of concerned citizens organized to begin lobbying for a county-based land acquisition program to increase the amount of conservation lands in the County. As a result, Lee County established the Conservation 20/20 program to achieve the following four objectives:

- Protect and preserve natural wildlife habitat
- Protect and preserve water quality and supply
- Protect developed lands from flooding

• Provide resource-based recreation

The program is administered from two departments within Lee County, the Division of County Lands and Lee County Parks and Recreation. Through the Conservation 20/20 program, Lee County has purchased over 100 properties totaling over 24,000 acres.

Other Stakeholders

Other stakeholders in Lee County with interest and capabilities to help reduce the impacts of wildfires include Florida Fish and Wildlife Service, U.S. Fish and Wildlife Service, Lee County Environmental Services, Native Plant Society, Audubon Society, DEP, South Florida Water Management District and other local outdoor and environmental advocacy groups.

Wildland Fire Response Capabilities

Lee County has established an Area Command procedure to coordinate firefighting response between districts for wildfire operations. In addition, the State Emergency Response Plan maintained by the Florida Fire Chiefs Association governs the procedures in place for requesting additional firefighting equipment and resources. Lee County incorporates this plan into the CEMP by reference (Annex D-4). The County also has a mutual aid plan that governs general procedures for requesting and using mutual aid resources (Annex C-4).

In addition to the practices detailed above, the following Fire Districts have access to wildland fire response equipment for fighting wildfires locally.

- Alba
- Bay Shore
- Bonita
- Cape Coral
- Estero
- Fort Myers
- Lehigh
- North Fort Myers
- Pine Island
- San Carlos
- South Trail
- Tice

Wildland Fuel Management Capabilities

FDOF conducts fuel management projects throughout the year in areas prone to wildfire risk that include prescribed burns and mechanical vegetation removal. FDOF utilizes local rangers, a federally funded mitigation team and a regional mitigation team to conduct these projects. Rangers may work anywhere in Lee County, provided areas to be treated are identified as high wildfire risk areas in

accordance with Florida statute. The federally funded team conducts work in Lehigh Acres and is funded through 2012. The regional mitigation team is available several times throughout the year for projects.

Experience Implementing Wildfire Protection Programs

Lee County previously funded a mitigation team as part of an interlocal agreement with FDOF in which FDOF managed the team and used its statutory authority to conduct mechanical vegetation removal projects in Lehigh Acres on public and private property. The county was unable to continue to fund the team and it subsequently disbanded in 2010. However, FDOF subsequently received an infusion of federal stimulus funds to revive the team. The team resumed work in 2010 and is funded through 2012. More than 3,000 acres of dense vegetation in the wildland-urban interface has been chopped.

FDOF continues to work with neighborhoods to conduct regular prescribed burns in interface areas and preserve areas. The work helps ensure healthy preserves and reduces wildfire risks.

5. Goals and Objectives

Goal 1: Promote collaboration among agencies responsible for wildfire mitigation and suppression within Lee County

Objective 1.1: Maintain a recurring, cooperative review process among Lee County's independent fire districts, the city fire departments, FDOF, and public and private land managers to review high-risk wildfire areas and develop and prioritize fuel management plans to mitigate that risk.

Objective 1.2: Work with the Local Mitigation Strategy Working Group and State and regional agencies to seek funding sources for wildfire mitigation projects and to include CWPP projects on the LMS Project List when applicable.

Objective 1.3: Share educational materials among agencies and collaborate on a communications plan that prioritizes outreach to at-risk neighborhoods within the county.

Goal 2: Provide a broad range of opportunities for public awareness and education relating to wildfire mitigation

Objective 2.1: Expand the knowledge and practice of Firewise principles by Lee County residents through public education programs.

Objective 2.2: Reduce the County's arson and careless burning fire statistics using public education and intervention programs.

Goal 3: Advance community resiliency to wildfire for new development through community development tools.

Objective 3.1: Evaluate the feasibility of enacting development standards in the wildland-urban interface areas to mitigate future fire losses, will include vegetative buffers, fire-resistant roofing materials, screened gable and roof openings, and minimum width requirements for fire response vehicles.

Objective 3.2: Encourage development standards to be consistent with National Fire Protection Agency standards for water supply and access in suburban and rural communities at risk from wildfire

Goal 4: Continue to improve local fire services' wildfire suppression capabilities and interagency coordination and communications.

6. Implementation and Plan Maintenance

The CWPP is to be implemented as resources become available to incrementally mitigate community wildfire vulnerability. An action plan has been collaboratively developed by the CWPP Working Group to guide implementation efforts over the next five years. An action as listed in this Plan is a strategy, project, or program that reduces wildfire vulnerability in the community. Each action will be assigned a lead agency or organization that will be responsible for implementation. Interagency and public-private partnerships in CWPP implementation are encouraged.

Potential Funding Sources

Project funding and/or local and state agency staff time should be continually sought in order to implement the CWPP Action Plan. The CWPP Working Group should meet annually to discuss budget requests among the partner agencies and determine potential grant opportunities that can be applied for during the year. Descriptions of major federal and state funding sources applicable to wildfire mitigation and response improvements are available in the Florida State Hazard Mitigation Plan in the Wildfire Mitigation Annex.

Plan Maintenance and Evaluation

The CWPP should be updated on an annual basis to ensure information is current, monitor progress of the Plan, and alter Plan content as necessary. Every five years the plan should receive a major update in which the vulnerability assessment is updated and the action plan is evaluated for its effectiveness over the past five years and its suitability for the next five years. A resource for evaluating the plan is the *Community Wildfire Protection Plan Evaluation Guide* prepared by the University of Oregon Resource Innovations Institute for a Sustainable Environment in 2008. The FDOF has adapted evaluation questions from this resource to guide Florida communities in assessing the CWPP during a major plan update. The organizational representation from the Working Group should be reconvened, at a minimum, to conduct the major update. The five-year update should ideally occur prior to or

simultaneously with the five-year update to the Local Mitigation Strategy. Only the five-year update requires new plan approval signatures (**page ii**).

7. Action Plan

This section describes implementation strategies or actions that will advance the goals and objectives of this CWPP. The actions are organized by one of the following mitigation categories: 1) wildland fuel management, 2) community outreach and education, 3) Firewise building retrofit and landscaping, 4) policy and regulation recommendations, and 5) wildland fire response improvements. The following action recommendations are listed in priority order within each mitigation category based upon its ability to most significantly decrease wildfire vulnerability in the community. Detailed information for high priority actions, including participating agencies and evaluation criteria, can be found in **Appendix C**.

Wildland Fuel Management

Fuel management projects help reduce the size and intensity of wildland fires and may also decrease the likelihood that a wildfire will start in an area. These actions can increase the safety of people and property while reducing response and suppression costs. Fuel management methods, which can be used alone or in combination with other methods to achieve site-specific benefits, include:

- Prescribed burning;
- Mechanical treatment (e.g., mowing, mulching, disking, fire line plowing, and chopping);
- Chemical treatment (herbicide application);
- Biomass removal (e.g., pine straw harvesting, vegetation or tree thinning, and timber harvesting); and
- Biomass conversion (grazing).

Fuel management treatments designed to reduce wildfire risk are temporary and in most cases reduce the hazard in the treated area for three to five years. Periodic management is required on a regular basis to maintain fuels at an acceptable level to reduce wildfire risk.

Wildland Fuel Management Actions

Action	Lead Agency	Timeframe	Potential Funding
Identify strategic fuel reduction areas and annually prioritize areas for prescribed burns/mechanical fuel management	Florida Division of Forestry, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Annually	Lee County All Hazards MSTU funds, federal and state grant funds, State general revenue
Increase County and partner agency capacity and funding for fuel management	Lee County Public Safety and the independent fire district/city fire department of Lee County	Annual budget preparation	Lee County All Hazards MSTU funds, federal and state grant funds, State general revenue
Control flammable invasive vegetation on County conservation properties	Lee County Parks and Recreation Department	Annually	Conservation 20/20 land management funds
Continue mechanical fuel reduction, as appropriate in North Fort Myers	Florida Division of Forestry, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Ongoing	Federal and state grants, local funds
Continue mechanical fuel reduction and prescribed burns in Greenbriar Estates	Florida Division of Forestry, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Ongoing	Federal and state grants, local funds
Continue mechanical fuel reduction and prescribed burns in Briar Cliff	Florida Division of Forestry, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Ongoing	Federal and state grants, local funds

Continue prescribed burns and use roller chopping in Gator Slough in Cape Coral	Florida Division of Forestry, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Ongoing	Federal and state grants, local funds
Continue mechanical fuel reduction and prescribed burns in Lehigh Acres	Florida Division of Forestry, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Ongoing	Federal and state grants, local funds
Implement controlled burning project at Prairie Pines (North Ft. Myers Conservation 20/20 land) to expand clearance between railroad tracks and brush line	Lee County Parks and Recreation (Conservation 202/20)	Ongoing	Federal and state grants, local funds

Community Outreach and Education

Outreach and education initiatives are designed to raise awareness and improve community knowledge of wildfire risk and mitigation strategies. A good example of an education program is the Florida Firewise Communities Program. Education and outreach programs can influence attitudes and opinions and lead to behavioral changes, such as homeowners' participation in fuel management strategies.

Community Outreach and Education Actions

Action	Lead Agency	Timeframe	Potential Funding
Post the Lee County CWPP and wildfire educational information on Lee County's web site	Lee County Division of Public Safety	Upon CWPP adoption and development of suitable public education materials	County general revenue funds
Include wildfire mitigation materials and/or presentations at community events that target at- risk population and invite DOF to participate in those events	Independent Fire Districts of Lee County	Annually during wildfire season	Various funding sources

Provide updates on mitigation project schedules and wildfire risk outlooks on Lee County's website	Lee County Public Safety, working with the Division of Forestry who will provide the project schedules and wildfire risk outlook information	Quarterly for mitigation project schedules – weekly during fire season for wildfire risk outlooks	N/A
Target neighborhoods that would benefit from Firewise Communities Program and coordinate outreach	Independent Fire Districts of Lee County, working with the Division of Forestry	Annually	N/A

Policy and Regulation Recommendations

Updating local government plans, policies, and regulations is another effective way to advance wildfire mitigation goals. By modifying requirements for development, high risk wildfire zones can be avoided or new development can be proactively designed to reduce wildfire risk and therefore make living and working in these areas safer.

Action	Lead Agency	Timeframe	Potential Funding
Evaluate and propose policies to the Lee Comprehensive Plan (Lee Plan) that provide direction for new development in identified high risk areas in the wildland- urban interface to meet Firewise design standards	Lee County Public Safety, in coordination with the Lee County Department of Community Development, Division of Planning	One year from plan adoption	N/A
Include wildfire mitigation projects from the Lee County CWPP on the County's Local Mitigation Strategy Project Initiative List where outside funding may be available	Local Mitigation Strategy Working Group	One year from plan adoption and updated before each January thereafter	Federal and state grant funds

Policy and Regulation Actions

Wildland Fire Response Improvements

Opportunities to improve wildland fire response capabilities are also critical to reducing the risk of wildfire damage to people and property. Improvements in response capabilities can include advanced

training, increasing staff or volunteer fire fighting resources, and developing new procedures or protocols.

Wildland	Fire	Response	Improvement Actions
<i>winding</i>	1110	nesponse	improvement metions

Action	Lead Agency	Timeframe	Potential Funding
Increase the number of independent fire district/city fire department fire fighters certified to fight wildfires with S130/190 training classes	Florida Division of Forestry	Annually	State general revenue funds, federal and state grant funds
Improve and maintain radio communications between DOF and County/City firefighters during brushfire incidents	Lee County Public Safety, Government Communications Network, in concert with Florida Division of Forestry	As required	Local intergovernmenta enterprise funding, State general revenue funds, federal and state grant funds

Appendix A: Planning Process Meetings

Working Group Meeting #1, October 28, 2010

Attendees:

John Wilson, Director, Lee County Division of Public Safety Victor Hill, Wildfire Mitigation Specialist, Division of Forestry Nathan Slaughter, Project Manager, Atkins (formerly PBS&J)

Summary:

The first meeting of the Lee County CWPP Working Group was held on October 28, 2010 at the Lee County Emergency Operations Situation Room. The purpose of the meeting was to assemble the core working group (planning team) to review the CWPP planning process, planning team roles, project schedule and deliverables. It was established that John Wilson, Lee County Public Safety, will be the county lead for the CWPP development. The CWPP template was presented, with emphasis placed on the content that will be included in the upcoming risk assessment and capacity assessment sections. The Capacity Information Request questions were reviewed and discussed by the attendees to identify points of contacts for information or data needed for the CWPP.

Mr. Wilson and Mr. Hill both spoke about the County's past and current wildfire mitigation efforts, projects and capacities. Lee County has been identified as the most "at-risk" County in the state of Florida. However, while the risk of wildfires is high in the County, so is the capability. Two CWPPs have already been developed in the County (Lehigh Acres and Sanibel). The County has provided money to establish wildfire mitigation activities including money to start a wildfire mitigation team. The Division of Forestry has developed a Mitigation Action Plan that includes the County. There is a lot of good data in the plan that can, and should, be incorporated into the County's CWPP.

Issues:

 Need to get the multiple fire districts in the County involved before the next meeting (Coordinate with William "Bud" Wilson – Mr. Wilson was invited to attend the working group meeting, but was unable to attend)

Actions:

- Mr. Wilson to help coordinate GIS data collection efforts
- Follow-up with County Planning Department (Peter Eckenrode) for planning related capability questions Mr. Eckenrode was invited to attend the working group meeting, but was unable to attend
- Set next meeting for February 16, 2011 to be held in conjunction with the monthly fire chiefs meeting
- Coordinate with upcoming Firewise Training
- Draft goals and objectives based on the County's LMS and the Division of Forestry's Mitigation Action Plan for the Caloosahatchee District
- County will continue to provide information, as requested by Atkins (formerly PBS&J)

Presentation to Lee County Fire Chiefs Association, March 16, 2011

Attendees:

John Wilson, Director, Lee County Division of Public Safety Chief William "Bud" Elliot, Wildfire Mitigation Specialist, Division of Forestry Nathan Slaughter, Project Manager, Atkins (formerly PBS&J) Association membership

Summary:

At the regularly schedule monthly meeting of the Lee County Fire Chiefs Association, Mr. Slaughter was allowed the opportunity to present an overview of the Lee County CWPP. Mr. Slaughter began the presentation with an overview of the statewide pilot project and explained the benefits of developing a CWPP.

Mr. Slaughter presented preliminary wildfire risk assessment findings that are to be used in the plan. He then explained how the CWPP would be a complimentary document to the Caloosahatchee District's Mitigation Action Plan for the region and how the two plans would share similar goals and actions.

Mr. Slaughter concluded the presentation by stating that the plan was an opportunity for the fire districts in the County to include mitigation actions for wildfire projects they would like to see implemented. Mr. Slaughter distributed handouts to meeting attendees in an effort to collect information on the goals and actions of the CWPP. He instructed meeting attendees to complete the forms and return them to him by March 31, 2011.

Following the presentation there was a brief question and answer period.

Appendix B: Wildfire Vulnerability Assessment Maps

This Appendix includes the following maps and information:

- Lee County: Surface Fuels
- Lee County: Wildfire Susceptibility Index
- Lee County: Wildfire Risk (Level of Concern)
- Florida Fire Risk Assessment System



Sanborn Map Company, 2011



Sanborn Map Company, 2011



Sanborn Map Company, 2011

Florida Fire Risk Assessment System

The Florida Fire Risk Assessment System (FL FRAS) provides up to date wildfire occurrence, hazard, and risk data. This data is available as a 30 meter resolution dataset in GIS format. For this project, maps of surface fuels, Wildland Fire Susceptibility Index (WFSI), and Level of Concern (LOC) were generated for the County. Tabulations of acres within each LOC were also generated.



The LOC model integrates the WFSI output with the Fire Effects Index (FEI) to derive an overall Level of Concern. LOC is calculated by simply multiplying WFSI x FEI. The output values were assigned to nine LOC categories ranging from Level 1 to Level 9. The LOC output can be used to prioritize areas for further analysis. The LOC results can be used to complete a more detailed analysis at the local level and communicate wildland fire management concerns.

Source: Florida Fire Risk Assessment System, FLFRAS v9.3 User Guide, 2011, Sanborn.

Methods for determining population and structures at risk

The population and structure risk assessment was conducted for all Florida counties as part of a project to develop a Wildfire Mitigation Annex for the State of Florida Hazard Mitigation Plan. The following is a summary of the methodology used. A full methodology can be found in the State Wildfire Mitigation Annex.

The assessment combined FL FRAS LOC outputs with parcel and assessor data obtained from the Florida Division of Revenue (DOR). Data was combined to generate summaries consistent with FEMA Hazard Mitigation Planning methodologies that defined:

- total population by wildfire risk zone in each county
- total number of structures by wildfire risk zone in each county
- total value (\$) of structures by wildfire risk zone in each county

The primary sources of data for this assessment were as follows:

- FL FRAS, 2011 update
- Parcel Data Florida Department of Revenue, 2010
- Assessor data Florida Department of Revenue, 2010
- Census data Census Bureau, Summary File 1(SF1) table, 2000 (2010 was not available at the time analysis was conducted)

The population was determined on a parcel basis by generalized land use code. The assessor data was utilized to assign a generalized land use code to each parcel based on the detailed DOR code for the parcel. The population was calculated as follows:

Population of Parcel = PPH x Res_Units

where:

PPH = persons per household in the census tract containing the parcel (derived from 2000 census figures)

Res_Units = the number of residential units in the parcel as identified in the assessor data (derived from 2010 assessor data)

Certain caveats and assumptions exist with respect to the estimation of population. These include:

• *Parcels* - Each county provides their parcel data to the Florida Department of Revenue - each county's property appraiser is different and has different work flows and different base data. The information provided by one county may be different than the information provided by another. We can only work with the data that was provided and if the property appraiser did

not populate the number of units for a property we cannot determine the population of that parcel.

- *PPH Factors* The people per household factors were calculated based on 2000 Census Tract data. The 2000 Census data was all that was available at the time of this project. In addition, due to the volume of data for the entire state the Census Tracts were used instead of Block Groups. The differences between using the Block Group level data and Tract level data would probably not be that great, but this was not tested. The PPH values are calculated based on data from the 2000 census so some tracts resulted in zero PPH values since they didn't have information in the 2000 census to determine the PPH values. In this case these tracts were given the average PPH of the state.
- *Population Control Totals* The population is being compared to Florida Bureau of Economic and Business Research (BEBR) quality control totals that those control totals are estimates based off of 2000 census data and that not every county accepts the BEBR control totals.
- Population values are created as Integer so there are no partial people calculated of course this means there is rounding in the population.
- The Commercial/Industrial generalized land use class includes the "Mixed Use" DOR Code which by definition includes "store and office or store and residential or residential combination". It is therefore reasonable for this class to have a population count.

A summary of the number of structures and the dollar value of structures for each parcel was also calculated using methods similar to the population summary described above. The assessed dollar value for each parcel and the number of structures on each parcel were available in the Assessor data¹.

Source: Florida Division of Forestry, State Hazard Mitigation Plan Annex Project Documentation, Sanborn, 2011.

¹ As with population, the quality of the assessor data varies from county to county.

Appendix C: CWPP Projects

This Appendix is designed to help provide more description to the wildfire mitigation actions identified in the CWPP. These Project Detail Sheets can be used in adding projects to the Local Mitigation Strategy Project List and applying for grant funding. The following information will be provided for each project, as available.

Project Name

Project Type [i.e. fuel mitigation, education, policy/regulations, or response improvement]

Timeframe for Implementation

Agency Responsible for Implementation

Project Description

Estimated Cost

Potential Funding Source

Target Population Benefited

Estimated Size:

Method for determining:

Partnerships for Implementation

Project Evaluation Criteria

Appendix D: Caloosahatchee Forestry Center Mitigation Action Plan

MITIGATION ACTION PLAN



1/31/2010

CALOOSAHATCHEE FORESTRY CENTER

Wildfire mitigation efforts must address the challenges posed by poorly maintained properties and the greater potential for flammability of dilapidated structures. Education and prevention initiatives must become more innovative and provide residents and business owners the means to protect themselves from wildfires in this changed landscape.

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CENTER OVERVIEW

The Caloosahatchee Forestry Center serves Collier, Hendry and Lee counties, an area of approximately 4,000 square miles that includes two state forests and significant wildland-urban interface issues.

The counties vary dramatically in economics, development, demographics and topography. Collier and Lee counties include coastal communities, barrier islands and densely wooded areas that alternately offer high rise condominiums on the Gulf of Mexico and single family homes inland. Hendry County, by contrast, is less developed, located well inland and offers fewer amenities than the other two counties, largely due to its location. Sugar cane and agriculture industries dominate the county's economy.

Southwest Florida was one of the most sought after locations during the real estate boom of the first decade of the 21st century. Those years brought explosive growth and development, exponentially growing the wildland-urban interface in Caloosahatchee Forestry Center boundaries. The population grew in all three counties, land development codes changed and more residential and commercial structures were built close to densely wooded areas, many of which had seen little or no vegetation or fuel management. The real estate market crash in the latter half of the decade left numerous vacant homes and businesses within the wildland-urban interface, the newest challenge in the Center's efforts to educate residents about the dangers of wildfire and properly manage its forest resources.

Wildfire mitigation efforts must address the challenges posed by poorly maintained properties and the greater potential for flammability of dilapidated structures. Education and prevention initiatives must become more innovative and provide residents and business owners the means to protect themselves from wildfires in this changed landscape. Forestry staff members must aggressively conduct mitigation campaigns that include prescribed fire and mechanical fuel reduction activities -- in addition to aggressive fire prevention campaigns -- to show residents that as officials proactively reduce wildfire risks, residents must do the same for homes.

COLLIER COUNTY

Collier County is the largest of the three in the Center's area with more than 2,305 square miles, the second largest county in the state. Picayune Strand State Forest covers more than 72,000 acres and is located in the southeastern portion of the county. That part of the county also includes federally owned Big Cypress Preserve and a portion of Everglades National Park. Collier County also boasts a large coastal population that includes the densely populated barrier island of Marco Island and also Key Marco.

In 2008 the county population was estimated at 315,258 compared to 251,377 in 2000, according to U.S. Census Bureau figures. The population is concentrated in the western and northern areas and grows in winter months to more than 350,000. About 24 percent of the population is Hispanic, six percent is African-American and one percent is Asian. In 2000, the median income for a household in the county was \$48,289, and the median income for a family was \$54,816. The per capita income for the county was \$31,195. About 7 percent of families and 10 percent of the population were below the poverty line.

HENDRY COUNTY

Hendry County is the least developed of the three counties and covers 1,190 square miles. It includes the Okaloacoochee Slough State Forest, which covers more than 31,000 acres.

The population was 39,453 in 2008 compared to 36,210 in 2000. In 2005 the population included: 46 percent Hispanic, 13 percent African-American and 1 percent Native American residents. The median income for the average household was \$33,592, and the median income for a family was \$34,902. About 17 percent of families and 24 percent of the population were below the poverty line.

Wildland-urban interface areas are largely concentrated in small residential areas around Clewiston and LaBelle. Large land tracts grow citrus, sugar cane, trees and graze livestock. Limited roads and infrastructure increase response times to fires. Hendry County was previously looked at as primed for development, though those plans are likely on hold with the decline in the real estate market. Troubles in the citrus and sugar industries created land sell-offs. The trend, occurring nationwide in traditionally agricultural areas, could drastically change the face of the county and eventually increase the wildland-urban interface.

LEE COUNTY

Lee County covers approximately 1,212 square miles. Its population was 593,136 in 2008 compared to 440,888 in 2000. In 2005 the population included 14 percent Hispanic, 7 percent African-American and 1 percent Asian residents. The median income for a household was \$40,319, and the median income for a family was \$46,430. Seven percent of families and 10 percent of the population were below the poverty line. Most of the population is concentrated in the western portion of county.

Most of Lee County is wildland-urban interface and includes large tracts of melaleuca trees in many areas. Like Collier County, Lee County includes populated barrier islands that present unique challenges to wildfire suppression. Sanibel Island is particularly unique because, unlike Marco Island in Collier County, Sanibel includes significant preserve area that presents a far more significant wildland-urban interface issue.

WILDFIRE HISTORY

Lightning remains the leading non-human cause for wildfires in the Center's boundaries, accounting for 26 percent of all wildfires since 1981. The center manager and field area supervisors continue efforts to educate wildland firefighters to better identify causes of fires to reduce the percentage of unknown causes. Incendiary and debris burns make up the other largest leading causes of fires. Incendiary and debris burns are tied at 11 percent each as the second leading, non-human cause of wildfires since 1981.

GRAPH 1 – AVERAGE TOP CAUSES OF WILDFIRES, 1981-PRESENT



FIVE AND 10-YEAR TRENDS

The numbers and sizes of wildfires in Collier, Hendry and Lee County have generally decreased from 1999-2009. Lightning and incendiary fires usually remain the dominant, non-human causes of wildfires. The reasons for the decreases have not yet been thoroughly researched. Center officials offer these possible reasons:

- Population density has increased the wildland-urban interface but reduced the amount of woodlands that burn, reducing the acreage of wildfires throughout the years.
- The population has a greater understanding of wildfire danger and, in recent years, has been more willing to embrace wildfire prevention methods such as creating defensible space and changing behaviors.
- Wildland firefighters and partner agencies have become more aggressive in suppression efforts to reduce the number of fires and potential damage.

The following graphs show the number of fires and acreages in the Center's three counties across five and 10 years. Graphs 4-5 show a generally lower amount of acreage with the significant exception of 2007. That year saw Collier, Hendry and Lee counties all involved in federally declared Complex fires. Numerous resources from multiple agencies responded that year to assist with the 300 fires that impacted the area.



GRAPH 2 – NUMBER OF DISTRICT WILDFIRES, 2004-2009



GRAPH 3 – NUMBER OF DISTRICT WILDFIRES, 1999-2009

GRAPH 4 – ACREAGE OF DISTRICT WILDFIRES, 2004-2009





GRAPH 5 – ACREAGE OF DISTRICT WILDFIRES, 1999-2009

COLLIER COUNTY TRENDS

Lightning and incendiary causes remain at the top for Collier County from 2004-2009, accounting for 32 percent and 15 percent of calls. Children and equipment each come in at 6 percent. Unknown causes account for 22 percent. From 1999-2009, lightning represents 33 percent of calls, incendiary causes account for 13 percent of calls, and unknown causes account for 25 percent. Children and equipment come in at five and 4 percent, while miscellaneous causes (a listed category) account for 6 percent.

Eastern Collier County experienced a significant wildfire in 2008 that burned 800 acres and destroyed three homes. The cause for the wildfire was never determined, but was considered suspicious. The 2009 wildfire season was busy but not especially significant in any of the Center's three counties.



GRAPH 6 – NUMBER OF FIRES, 2004-2009, COLLIER COUNTY

GRAPH 7 - NUMBER OF WILDFIRES, 1999-2009, COLLIER COUNTY





GRAPH 8 – ACREAGE OF WILDFIRES, 2004-2009, COLLIER COUNTY

GRAPH 9 – ACREAGE OF WILDFIRES, 1999-2009, COLLIER COUNTY



YEAR

HENDRY COUNTY TRENDS

Lightning is the leading non-human cause of wildfires in Hendry County from 2004-2009, accounting for 26 percent of wildfires, while unauthorized yard debris burns make up 10 percent of the causes. Equipment (10 percent), authorized pile burning (7 percent), and incendiary causes (6 percent) follow. Unknown causes account for 23 percent. From 1999-2009, lightning accounts for 22 percent of calls, and debris burns, equipment fires and incendiary fires are tied at 7 percent. Unknown calls rose to 33 percent.



GRAPH 10 – NUMBER OF WILDFIRES, 2004-2009, **HENDRY COUNTY**





GRAPH 11 – NUMBER OF WILDFIRES, 1999-2009, HENDRY COUNTY

GRAPH 12 - ACREAGE OF WILDFIRES, 2004-2009, HENDRY COUNTY





GRAPH 13 – ACREAGE OF WILDFIRES, 1999-2009, HENDRY COUNTY

LEE COUNTY TRENDS

Lee County trends slightly differ. From 2004-2009, lightning (27 percent), incendiary (13 percent) and children (nine percent) are the top causes. Unknown causes account for 18 percent of wildfires. From 1999-2009, lightning is first (30 percent), unknown causes are second (22 percent) and incendiary fires are third (14 percent). Miscellaneous causes account for 8 percent of calls, and fires caused by children make up 7 percent of calls.

GRAPH 14 - NUMBER OF WILDFIRES, 2004-2009, LEE COUNTY





GRAPH 15 - NUMBER OF WILDFIRES, 1999-2009, LEE COUNTY

GRAPH 16 - ACREAGE OF WILDFIRES, 2004-2009, LEE COUNTY





GRAPH 17 – ACREAGE OF WILDFIRES, 1999-2009, LEE COUNTY

WILDFIRE RISK AND COMMUNITIES AT RISK

The following maps show the current areas of wildfire risk in each county as taken from the Florida Fire Risk Analysis System (FRAS), developed by the Florida Division of Forestry. FRAS maps show key areas of concern.

Center staff members focus on areas of higher fire risk largely because of limited manpower and resources. FRAS data provides a starting point for Center programs and provides another means to track successes.

The Level of Concern (LOC) in the maps is an integer scaled from zero to nine that indicates relative risk of wildland fire as determined by FRAS. The Level of Concern scale runs from low (one) to high (nine).

The data on the following pages comes from A Natural Hazards Risk Assessment to Support Local Mitigation Strategies in Florida FDOF Wildland Fire Levels of Concern for 051 County by Charles C. Watson, Jr. and Mark E. Johnson, May 15, 2005.

COLLIER COUNTY

Collier County's primary areas of concern are located in the eastern portion of the county. The residential area known as Golden Gate Estates consists mostly of single-family homes located in heavily wooded areas, creating a significant wildland-urban interface. Wildfire prevention and education efforts are largely concentrated in eastern Collier County.

The Picayune Strand State Forest and federally managed lands are located in the southeastern portion of the county and have suffered several large wildfires.



FIGURE 1 – LEVELS OF CONCERN, COLLIER COUNTY

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	2227	339	503	695	395	195	126
Level 2	7286	586	1615	2491	464	46	258
Level 3	9061	383	2959	2278	421	0	281
Level 4	2392	276	434	915	520	0	156
Level 5 (medium)	26398	2941	9202	7443	1836	18	931
Level 6	7571	1143	460	1971	452	0	359
Level 7	49823	6056	11297	17621	4291	46	2594
Level 8	37437	6840	7533	10730	3751	80	1780
Level 9 (high)	60932	11991	14150	21092	8751	80	3010

TABLE 1 – POPULATION AT RISK, COLLIER COUNTY

TABLE 2 – STRUCTURES AT RISK, COLLIER COUNTY

							· · ·
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Inst.
Level 1 (low)	49816	1412	28702	3119	14410	1689	484
Level 2	33982	4479	12442	3162	12071	1315	513
Level 3	55352	10185	20565	8064	13221	2159	1158
Level 4	4054	2473	54	1212	193	39	83
Level 5 (medium)	35789	19860	1604	11383	2105	579	258
Level 6	5219	3348	331	1237	121	76	106
Level 7	49242	28702	3119	14410	1689	484	838
Level 8	29830	12442	3162	12071	1315	513	327
Level 9 (high)	45730	20565	8064	13221	2159	1158	563

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Inst.
Level 1 (low)	\$ 17.33 BI	\$ 281.75 MI	\$ 6.77 BI	\$ 477.48 MI	\$ 8.61 BI	\$ 831.95 MI	\$ 348.91 MI
Level 2	\$ 13.63 BI	\$ 1.11 BI	\$ 2.96 BI	\$ 1.06 BI	\$ 7.34 BI	\$ 842.47 MI	\$ 318.28 MI
Level 3	\$ 20.16 BI	\$ 2.16 BI	\$ 4.87 BI	\$ 3.08 BI	\$ 7.44 BI	\$ 947.94 MI	\$ 1.66 BI
Level 4	\$ 1.45 BI	\$ 610.71 MI	\$ 1.31 MI	\$ 637.37 MI	\$ 89.74 MI	\$ 16.21 MI	\$ 97.29 MI
Level 5 (medium)	\$ 13.82 BI	\$ 3.82 BI	\$ 32.41 MI	\$ 7.34 BI	\$ 1.27 BI	\$ 895.73 MI	\$ 452.25 MI
Level 6	\$ 1.46 BI	\$ 774.71 MI	\$ 7.40 MI	\$ 515.69 MI	\$ 40.91 MI	\$ 21.17 MI	\$ 96.05 MI
Level 7	\$ 18.54 BI	\$ 6.77 BI	\$ 477.48 MI	\$ 8.61 BI	\$ 831.95 MI	\$ 348.91 MI	\$ 1.49 BI
Level 8	\$ 12.76 BI	\$ 2.96 BI	\$ 1.06 BI	\$ 7.34 BI	\$ 842.47 MI	\$ 318.28 MI	\$ 245.47 MI
Level 9 (high)	\$ 18.80 BI	\$ 4.87 BI	\$ 3.08 BI	\$ 7.44 BI	\$ 947.94 MI	\$ 1.66 BI	\$ 795.70 MI

TABLE 3 - VALUE OF STRUCTURES BY USE AT RISK, COLLIER COUNTY

HENDRY COUNTY

Hendry County is a largely rural area, and most of the wildland-urban interface – and levels of concern – are concentrated in Clewiston and Labelle.



FIGURE 2 – LEVELS OF CONCERN, HENDRY COUNTY

TABLE 4 – POPULATION AT RISK, HENDRY COUNTY

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	136	129	11	62	50	790	30
Level 2	0	0	0	0	0	0	0
Level 3	6160	1697	444	1914	1846	0	305
Level 4	0	0	0	0	0	0	0
Level 5 (medium)	6311	897	1085	2471	817	0	240
Level 6	1312	1283	155	440	515	0	194
Level 7	5948	1972	575	3067	1298	0	358
Level 8	2272	606	283	610	283	0	79
Level 9 (high)	3243	932	290	715	719	0	183

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Inst.
Level 1 (low)	2336	50	605	882	226	223	350
Level 2	1547	184	384	512	194	92	181
Level 3	2135	333	868	256	99	97	482
Level 4	254	86	103	18	23	12	12
Level 5 (medium)	3163	1014	833	247	253	233	583
Level 6	1030	344	266	133	86	94	107
Level 7	2644	605	882	226	223	350	358
Level 8	1393	384	512	194	92	181	30
Level 9 (high)	1833	868	256	99	97	482	31

TABLE 5 – STRUCTURES AT RISK, HENDRY COUNTY

TABLE 6 - VALUE OF STRUCTURES BY USE AT RISK, HENDRY COUNTY

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	\$ 580.42 MI	\$ 15.54 MI	\$ 119.20 MI	\$ 64.69 MI	\$ 34.63 MI	\$ 81.67 MI	\$ 264.68 MI
Level 2	\$ 477.40 MI	\$ 47.16 MI	\$ 54.03 MI	\$ 38.27 MI	\$ 20.96 MI	\$ 179.19 MI	\$ 137.78 MI
Level 3	\$ 1.30 BI	\$ 79.83 MI	\$ 130.55 MI	\$ 23.43 MI	\$ 77.01 MI	\$ 44.85 MI	\$ 945.90 MI
Level 4	\$ 54.14 MI	\$ 18.33 MI	\$ 7.00 MI	\$ 2.10 MI	\$ 3.63 MI	\$ 10.50 MI	\$ 12.59 MI
Level 5 (medium)	\$ 1.26 BI	\$ 205.02 MI	\$ 65.55 MI	\$ 28.33 MI	\$ 68.73 MI	\$ 105.85 MI	\$ 788.30 MI
Level 6	\$ 351.03 MI	\$ 73.62 MI	\$ 19.32 MI	\$ 17.79 MI	\$ 29.63 MI	\$ 84.23 MI	\$ 126.44 MI
Level 7	\$ 1.01 BI	\$ 119.20 MI	\$ 64.69 MI	\$ 34.63 MI	\$ 81.67 MI	\$ 264.68 MI	\$ 442.43 MI
Level 8	\$ 466.24 MI	\$ 54.03 MI	\$ 38.27 MI	\$ 20.96 MI	\$ 179.19 MI	\$ 137.78 MI	\$ 36.01 MI
Level 9 (high)	\$ 1.25 BI	\$ 130.55 MI	\$ 23.43 MI	\$ 77.01 MI	\$ 44.85 MI	\$ 945.90 MI	\$ 29.36 MI

LEE COUNTY

Lee County has several areas of concern, the largest in eastern Lee County in the area known as Lehigh Acres. Cape Coral and south Lee County also present several wildland-urban interface issues.



FIGURE 3 – LEVELS OF CONCERN, LEE COUNTY

TABLE 7 – POPULATION AT RISK, LEE COUNTY

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	1036	23	353	330	65	0	19
Level 2	8969	610	3051	3430	821	66	321
Level 3	12512	404	5402	4653	602	188	289
Level 4	10548	621	2938	3042	532	124	541
Level 5 (medium)	24599	2236	6187	7843	2514	26	1196
Level 6	9959	1187	2733	3019	670	228	302
Level 7	87639	11772	22996	29215	8495	1078	4403
Level 8	42380	9175	7016	16096	6614	254	2995
Level 9 (high)	79582	14726	17542	30522	9158	464	4783

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Inst.
Level 1 (low)	41880	1416	21620	4706	12151	1469	518
Level 2	20423	1614	10807	2631	4046	806	519
Level 3	38371	2940	19449	4767	8696	1568	951
Level 4	2161	1315	219	411	73	27	116
Level 5 (medium)	13709	6508	857	4961	741	267	375
Level 6	5778	3066	542	1741	171	54	204
Level 7	41507	21620	4706	12151	1469	518	1043
Level 8	19209	10807	2631	4046	806	519	400
Level 9 (high)	35875	19449	4767	8696	1568	951	444

TABLE 8 – STRUCTURES AT RISK, LEE COUNTY

TABLE 9 - VALUE OF STRUCTURES BY USE AT RISK, LEE COUNTY

				-			
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	\$ 20.49 BI	\$ 1.03 BI	\$ 9.33 BI	\$ 2.10 BI	\$ 5.34 BI	\$ 1.78 BI	\$ 900.47 MI
Level 2	\$ 8.96 BI	\$ 909.79 MI	\$ 3.79 BI	\$ 620.48 MI	\$ 1.59 BI	\$ 1.30 BI	\$ 745.71 MI
Level 3	\$ 16.90 BI	\$ 1.37 BI	\$ 6.69 BI	\$ 977.87 MI	\$ 3.62 BI	\$ 2.42 BI	\$ 1.82 BI
Level 4	\$ 1.12 BI	\$ 601.77 MI	\$ 23.09 MI	\$ 183.66 MI	\$ 54.77 MI	\$ 126.59 MI	\$ 126.39 MI
Level 5 (medium)	\$ 8.05 BI	\$ 3.25 BI	\$ 94.76 MI	\$ 2.96 BI	\$ 749.86 MI	\$ 519.62 MI	\$ 478.21 MI
Level 6	\$ 2.94 BI	\$ 1.47 BI	\$ 57.40 MI	\$ 920.44 MI	\$ 182.14 MI	\$ 65.06 MI	\$ 250.66 MI
Level 7	\$ 20.50 BI	\$ 9.33 BI	\$ 2.10 BI	\$ 5.34 BI	\$ 1.78 BI	\$ 900.47 MI	\$ 1.04 BI
Level 8	\$ 8.54 BI	\$ 3.79 BI	\$ 620.48 MI	\$ 1.59 BI	\$ 1.30 BI	\$ 745.71 MI	\$ 487.62 MI
Level 9 (high)	\$ 16 BI	\$ 6.69 BI	\$ 978 MI	\$ 3.62 BI	\$ 2.42 BI	\$ 1.82 BI	\$ 432 MI

WILDFIRE MITIGATION GOALS

Caloosahatchee Forestry Center staff members believe equally aggressive mitigation efforts and wildfire prevention programs provide the best solutions to protect the population. Federal economic stimulus monies awarded in 2009 gave the Center the means to increase wildfire fuel reduction work in areas where rangers were previously unable to perform significant work due to limited staffing and resources.

Center staff members agree any available funds from the stimulus or other sources will be concentrated on wildfire fuel reduction work and education. Wildfire prevention programs will emphasize the need for residents and business owners to take responsibility to protect their assets and show the work Forestry staff members and partner agencies conduct to assist them.

CENTER GOALS, STRATEGY AND IMPLEMENTATION PLANS

Mitigation and wildfire education goals for the Caloosahatchee Forestry Center this year include the following goals, strategies and plans for implementation. More specific information is included in each county plan.

2010 GOALS

- Develop a uniform system to track fuel reduction projects and place them on a calendar of priorities to ensure proper management every three to five years, or as appropriate based on wildfire risk
 - Center staff members agree a better system to track and manage projects must be created. The wildfire mitigation specialist will work with staff to compile an inventory of all areas managed throughout the Center's history. Rangers will conduct site inspections, and staff members will use the information to readjust mitigation priorities for incorporation into the Center's 2011 Mitigation Action Plan.
- Increase prescribed burns conducted in all three counties
 - New areas and opportunities for prescribed burns to reduce catastrophic wildfire risk arrive frequently. Center staff members will take advantage of the new, stimulus-funded burn teams based on their availability and when conditions permit.
- Pursue additional funding sources for fuel reduction work and fire prevention materials
 - The wildfire mitigation specialist and prevention team members will seek additional funds for contract and in-house mitigation work. Aggressive project planning yielded additional stimulus funds for two contract projects in 2009-2010, and staff will continue plotting additional projects based on priorities, whether or not funds become available.
- Complete Community Wildfire Protection Plans (CWPP) for Sanibel Island and Golden Gate Estates
 - These projects began prior to the arrival of the current wildfire mitigation specialist. He restarted these projects and expects to complete them this year by reinvigorating each CWPP committee and assigning them tasks to update information previously compiled. Each plan and community are unique, but the plans should be done this year.
- Obtain Firewise Communities, USA recognition for six communities in Center boundaries
 - The wildfire mitigation specialist is working with two communities that need preserve management assistance and four other communities that expressed interest in the recognition. The hope is that these communities complete plans and receive Firewise recognition this year.
- Partner with Community Emergency Response Teams (CERT) to conduct Firewise risk assessments
 - CERT members desire ongoing training outside their basic training. The wildfire mitigation specialist will teach members to conduct wildfire risk assessments and use the teams as

neighborhood Firewise Boards to develop a wildfire protection plan and apply for Firewise recognition.

- Create additional Center publications to address the unique needs of the district
 - The wildfire mitigation specialist will use his graphic design skills to develop local Firewise Landscaping brochures, Community Forest Designation brochure and other publications to address unique needs of the Center's service area. This project will likely be ongoing, but at least two publications are planned for 2010.
- Build a Firewise Landscape area around a new Center sign at the headquarters in a space that incorporates mulches and native vegetation and doubles as a media interview area
 - The sign, similar to the one at Waccasassa District, is ready and will be installed when it arrives. Rangers will landscape around it, install five different mulches, plant native vegetation and install interpretive signs, ideally paid for with outside, available fire prevention money.

ONGOING GOALS

- Continue in-house and contract fuel reduction projects in Collier, Hendry and Lee Counties
 - Center staff members continue to perform work and compile service reports for entry into the state mitigation database. Contract projects are managed by the wildfire mitigation specialist and sought as additional funds become available.
- Continue aggressive educational efforts to explain benefits of prescribed fire and mechanical fuel reduction work
 - The Center Fire Prevention Team conducts several presentations or attends outside functions each month to present educational materials about wildfire prevention and Center activities. The Center's Wildfire Mitigation brochure is a key component of these initiatives.
- Target fire prevention and education programs in areas where mitigation work occurs
 - Center staff members utilize local media and go door-to-door to explain mitigation work to residents and business owners. Presentations are frequently scheduled to address a broader audience.
- Increase the number of Firewise Communities, USA in each county
 - This general goal currently includes an ongoing list of at-risk communities tracked by the wildfire mitigation specialist and identified by all Center staff members. The potential number Firewise candidates is about 35 and fluctuates based on contacts with residents. The number reflects contacts made, though communities within high-risk areas identified on FRAS maps are possible candidates for the recognition.
- Build, grow and expand partnerships with local government agencies
 - Center staff members continue offering wildfire training, attending meetings and offering opportunities to partner with Forestry to properly explain wildfire risk to residents.
- Develop new relationships with neighborhoods to create wildfire mitigation and preserve management plans
 - Center staff members continue speaking to residents about ways to reduce wildfire risk and use every available program to encourage communities to reduce wildfire risk, including Firewise.
- Develop new relationships with local government planners to properly integrate Firewise landscaping principles into land development codes and refine the review of overgrown preserves to provide neighborhoods a more efficient means of safely reducing overgrown vegetation without compromising the intent of the preserve

 Local government planning staffs have been cut significantly in Collier and Lee counties. Center staff members hope to convince planners that incorporating Firewise principles into land development codes will promote government efficiency (a political issue in the recession) and fulfill Forestry's mission to make communities safer from catastrophic wildfires.

CHALLENGES

The Center faces a mixture of bureaucratic and political challenges to complete these goals. Homeowner associations present a significant challenge because many of them are unwilling to commit time and resources to revising their preserve management plans or pursuing Firewise designations in the absence of tangible benefits other than an award or recognition. Local government agencies continue to resist incorporating Firewise landscaping into land development codes. This is the result of several factors, the most notable being staff reductions in planning and community development divisions within local governments. Ideally, planners will see the potential efficiency increase by working with Forestry, though they remain reluctant due to time constraints. Center staff members hope to work with remaining environmental planners to forge better partnerships and gain input into the review process that will be accepted by local elected officials.

Perhaps the greatest mitigation challenge the Center faces is addressing concern among residents about smoke from prescribed fires and consequences of mechanical fuel reduction work. Center staff members will continue to work with residents to help them understand the benefits of the work and why it maintains their safety and improves the diversity of the Center's forest resources.

MITIGATION PROJECTS AND COMMUNITIES AT RISK

All projects are listed in order of importance under each county.

COLLIER COUNTY PROJECT PRIORITIES

Collier County has five priority areas for wildfire fuel reduction work. Fuel reduction efforts will largely consist of cutting 70-foot-wide corridors through neighborhood blocks to slow the spread of wildfires, should they strike. This method maximizes available funds and resources in a large community where more aggressive efforts cannot be undertaken due to limited resources. Center staff members agree this is the best approach for Collier County. Prescribed fires will be conducted, if possible, but the density of homes often makes burns impractical.



GOLDEN GATE ESTATES

Fuel reduction work will first focus on eastern Golden Gate Estates. Hawkins Bill areas in the community are shown above. Federal stimulus money will be used to cut 70-foot-wide corridors through neighborhood blocks to slow the spread of wildfires. Three contract stimulus projects were completed in 2009 and a fourth will be completed in 2010. Rangers also conducted three projects. The work will continue in the eastern portion of the neighborhood and gradually move west toward Collier Boulevard (County Road 951).

EAST NAPLES

The second priority is known as East Naples (eastern Collier County). The map below shows the area for mitigation.



IMMOKALEE

Immokalee is considered the lowest of the priority mitigation areas for Collier County because much of the neighborhood has experienced wildfires that have reduced dense vegetation. However, several areas continue to be problematic including the neighborhood near Sanders Pine Circle, below. The Center is working with Immokalee Non-Profit Housing and Collier County, which owns the neighboring preserve to the east and south, to conduct mechanical fuel reduction work and prescribed burns. This area falls under the Hawkins Bill.



FIRE PREVENTION AND EDUCATION PRIORITIES

The following is a priority list of education initiatives Center staff will take on in 2010 to work with residents. CWPPs and Firewise communities are all listed based on priority of at-risk neighborhoods. Resident interest is also a factor, though it is secondary to the potential wildfire risk.

- 1. Golden Gate Estates wildfire workshop and CWPP completed by the end of 2010
 - a. Continue developing plan to become a Firewise Community
- 2. Firewise Communities, USA recognitions:
 - a. Vanderbilt Country Club (Renew)
 - b. Key Marco (Renew)
 - c. Veronawalk (East Naples)
 - d. Fiddler's Creek (East Naples)
 - e. Maplewood (East Naples)
 - f. Autumn Woods (North Naples)
 - g. Immokalee Non-Profit Housing
 - h. Forest Glen (Golden Gate)
 - i. Naples Lakes (Golden Gate)
 - j. Sapphire Lakes (Golden Gate)
 - k. Stonebridge (North Naples)
 - I. Pebblebrooke (Golden Gate)
 - m. Wilshire Lakes (North Naples)

HENDRY COUNTY PROJECT PRIORITIES

Hendry County mitigation priorities are concentrated in Port Labelle and Montura.

Rangers plan to burn 500-1,000 acres around the homes in Port Labelle. The map below shows the expected area to conduct burns in 2010-2011. The burn will be a perimeter burn around the neighborhood, as illustrated.





Rangers plan to cut or chop vegetation in Montura Ranch. They expect to conduct roller chopping to create a 30-foot-buffer along the rights of way to reduce wildfire risk to residents, as shown below.

FIRE PREVENTION AND EDUCATION PRIORITIES

The wildfire mitigation specialist is working with county emergency management staff members to pursue Firewise Communities designations for Clewiston and Labelle. Specific neighborhoods will be better identified as county staff assist in developing relationships with residents. The Center is has partnered with Okeechobee District to, potentially, obtain Firewise recognition for Port Labelle.

LEE COUNTY PROJECT PRIORITIES

Lee County has six priority areas for fuel reduction, four of which will be primarily addressed in 2010. The work will include prescribed burns and mechanical fuel reduction, as appropriate. The map below shows areas designed under the Hawkins Bill.



LEHIGH ACRES

Forestry partnered with Lee County to conduct fuel reduction work in Lehigh Acres that resulted in about 18 acres of vegetation cut per day of work. The project cannot continue because the county can no longer fund it. Rangers will continue mechanical work. Efforts include prescribed burns in areas where mechanical work was previously done to burn off the debris created. Work in this area will first start along Abbot and Hines Lanes. Corridors will be cut north to south along the entire stretch of road to create better buffers near homes.

NORTH FORT MYERS

Mechanical fuel reduction work will be conducted in the area below. Center staff members hope to log the area as well to eliminate melaleuca growing near homes and businesses.



GREENBRIAR ESTATES

Greenbriar Estates is located in northern Lehigh Acres off Joel Boulevard. Mechanical fuel reduction and prescribed fires will reduce dense vegetation near homes. The area of work is marked below.



BRIAR CLIFF

Briar Cliff is located in Fort Myers off U.S. Highway 41. Mechanical fuel reduction and prescribed fires will reduce dense vegetation in the areas bordered below.



NORTH CAPE CORAL

Rangers will conduct prescribed burns and use roller chopping in Gator Slough in Cape Coral.

FIRE PREVENTION AND EDUCATION PRIORITIES

The following is Lee County's priority list of education initiatives Center staff will take on in 2010 to work with residents. Like Collier County, the list is presented in order:

- 1. Complete Sanibel CWPP by the end of 2010
- 2. Participate in yearly wildfire campaigns with local fire districts
- 3. Firewise Communities, USA recognitions:
 - a. Veranda
 - b. Varsity Lakes
 - c. Alva
 - d. Vasari
 - e. South Trail neighborhoods
 - f. Hancock and Littleton Elementary schools

CENTER MITIGATION PRIORITIES

Center staff members rank the projects for each county in the following order:

- 1. Golden Gate Estates
- 2. Lehigh Acres
- 3. East Naples
- 4. North Fort Myers
- 5. Greenbriar Estates
- 6. Briar Cliff
- 7. East Naples
- 8. Immokalee
- 9. Port Labelle
- 10. Montura

WILDFIRE MITIGATION SPECIALIST WORK PLAN, RESPONSIBILITIES

The primary goals of the Center wildfire mitigation specialist this year will be to coordinate fuel reduction projects, including Phase 2 stimulus work, and increase the number of Firewise communities in Collier, Hendry and Lee County. Specific activities have already been outlined in previous sections. In general, the wildfire mitigation specialist will:

- Coordinate all fuel reduction projects in Collier, Hendry and Lee counties and work with forest area supervisors to address priority areas for mitigation work
- Manage all projects that include federal economic stimulus dollars, including working with contractors to ensure outside contract work is completely properly and in a timely manner
- Coordinate all fire prevention activities with the Fire Prevention Team and conduct presentations, especially in wildfire prone areas and neighborhoods impacted by mitigation work
- Complete CWPPs for Golden Gate Estates in Collier County and Sanibel in Lee County
- Aggressively pursue Firewise Communities, USA designations for the many communities referenced in this plan
- Grow partnerships with neighborhoods and government agencies
- Create Center publications to address the unique needs of the Caloosahatchee Forestry Center

RESPONSIBILITIES

Caloosahatchee Forestry Center's wildfire mitigation specialist:

- Serves as information officer for the Center
- Maintains contacts with local media, provides releases and story ideas
- Works with counterparts in other agencies to ensure accurate dissemination of information and partners with local agencies, including fire districts, to provide accurate wildfire information
- Promotes mitigation programs, explains projects and provides presentations for residents and community stakeholders

- Provides training to employees and community members about wildfire, wildfire prevention, mitigation, Firewise Communities, USA, Community Wildfire Protection Plans, and the wildland-urban interface problem
- Works with Local Mitigation Strategy groups to ensure wildfire is properly listed as a hazard and fuel reduction projects are included in plans
- Develops the Center's annual Mitigation Action Plan
- Works with staff to identify at-risk communities and neighborhoods that require education about wildfire risk
- Works with county officials to incorporate Firewise principles into land development codes, ordinances and comprehensive plans
- Prepares a budget based on the Mitigation Action Plan
- Works with the Region 4 Fire Management Team to coordinate mitigation projects
- Supports the Center Fire Prevention Team
- Seeks outside funding for mitigation projects and fire prevention initiatives
- Develops mitigation project plans, prepares maps, project descriptions and serves as the contract manager on mitigation projects under contract with private vendors

TRAINING NEEDS

The Center wildfire mitigation specialist has several training requests, chief among them Type 2 Information Officer and Geographic Information Systems (GIS). The latter is the most challenging because of costs and computer hardware requirements to deploy the technology. However, the mitigation specialist frequently uses GIS to plot and manage mitigation projects. In the absence of the training, he relies on the Center's senior forester and forest resource manager, which takes them away from their projects. GIS training is invaluable and necessary for this position, not only for mitigation projects and planning, but for tracking wildfire history and using the data to develop wildfire prevention programs. Facilitative Instructor and additional courses in Fire Prevention rank at the top of training needs. Opportunities to attend Firewise conferences and receive ongoing training specific to wildland-urban interface issues are also priorities.

The mitigation specialist will pursue other courses as time and funds allow.

BUDGET

The Center received funds for the Wildland-Urban Interface grant in 2009. Region 4 split \$5,000 for fire prevention materials. The Center received two stand-up Smokey Bear cut-outs, two table skirts and two tabletop display signs.

MITIGATION PROJECT COST ESTIMATES

The budget below is an estimate of project costs for Center mitigation priorities. Prices are based on \$250 per acre. The price generally covers costs for in-house work and is on the lower side of prices for private contract work. Total costs will likely be different based on which projects are completed and other variables including personnel and equipment costs.

Neighborhood	Acres	Cost
Golden Gate Estates	500	\$125,000
East Naples	100	\$25,000
Immokalee	20	\$5,000
Hendry County	1,000	\$250,000
Lehigh Acres	500	\$125,000
North Fort Myers	100	\$25,000
Briar Cliff	100	\$25,000
Greenbriar	100	\$25,000
North Cape Coral	100	\$25,000
Total	2,520	\$630,000

OTHER FUNDING NEEDS

The budget below includes publications created since May 2009 and publications scheduled for completion in 2010. The mitigation specialist is designing several localized publications to address needs of each county.

Publications	Quantity	Cost
Mitigation Brochure	1,500	\$500
Firewise Doorhangers	5,000	\$475
P-Fire Doorhangers	5,000	\$475
Firewise Plants	1,500	\$500
Media Guide	250	\$430
Miracle B-Ball Materials	3000	\$2,000
Total	13,250	\$4,380

The mitigation specialist does not have wireless Internet access at incidents and would like an aircard for his laptop. The Center does not have funding available for the equipment and monthly fees.

GRANTS

The mitigation specialist will seek local, state and federal grants as they become available. A local vendor may donate time and materials to a display at the headquarters. Center staff members rely on Gerry LaCavera and Ronda Sutphen to provide guidance about available funds and eligible projects for the Center. The mitigation specialist has only been with the Center since May and is still learning about available grant funding.

CONCLUSION

Caloosahatchee Forestry Center faces ongoing challenges to protect its communities from catastrophic wildfires. The Mitigation Action Plan provides an overview of those challenges includes plans to address them and offers goals and objectives for the year.

Wildfire mitigation is a shared responsibility between the Florida Division of Forestry, emergency response agencies, governments, organizations and the community. Forestry Center staff members continue to actively protect the community and educate residents about ways to reduce their wildfire risks.

Changes to Hurricane Surge Threat



Previous Storm Surge Threat



Current Storm Surge Threat



Comparison of previous storm surge threat map with current map



Storm Surge Threat vs. Evacuation Zones



Revised Evacuation Time Scenarios.....

Base (100% at risk evacaate)

Operational (actual experience)

	Evacuation Level A Base Scenario	Evacuation Level B Base Scenario	Evacuation Level C Base Scenario	Evacuation Level D Base Scenario	Evacuation Level E Base Scenario
Clearance Time	to Shelter				
Charlotte County	13.5	18.5	25.5	50.0	62.0
Collier County	13.0	19.0	38.5	45.5	66.5
Glades County	11.5	11.5	11.5	11.5	12.0
Hendry County	13.5	16.0	31.5	39.5	55.5
Lee County	13.0	19.0	42.0	48.0	63.0
Sarasota County	13.0	19.5	30.5	40.5	65.5
In-County Clear	ance Time				
Charlotte County	15.0	26.5	45.0	52.0	70.5
Collier County	14.0	19.0	39.0	46.0	68.5
Glades County	13.0	13.0	13.0	13.0	13.5
Hendry County	14.0	16.5	43.5	52.0	66.0
Lee County	13.5	23.0	43.5	52.5	66.0
Sarasota County	15.5	27.0	45.0	52.5	69.5
Out-of-County C	learance Time				
Charlotte County	15.0	26.5	45.0	52.0	70.5
Collier County	14.5	19.5	44.5	46.0	69.0
Glades County	15.5	24.0	45.0	62.5	89.5
Hendry County	14.5	24.0	44.5	53.5	71.0
Lee County	14.0	23.0	43.5	52.5	66.0
Sarasota County	15.5	27.0	45.0	52.5	69.5
Regional Clearar	nce Time				
Southwest	15.5	27.0	45.0	62.5	89.5

	Evacuation Level A Operational Scenario	Evacuation Level B Operational Scenario	Evacuation Level C Operational Scenario	Evacuation Level D Operational Scenario	Evacuation Level E Operational Scenario
Clearance Time	to Shelter				
Charlotte County	0.0	13.5	19.0	19.5	27.0
Collier County	10.0	13.0	17.0	28.5	35.5
Glades County	7.0	9.0	10.5	14.0	15.0
Hendry County	10.5	12.0	17.0	19.5	35.0
Lee County	10.0	13.0	19.5	27.5	35.5
Sarasota County	0.0	13.0	14.5	19.0	30.0
In-County Clear	ance Time				
Charlotte County	0.0	14.0	25.0	33.0	51.0
Collier County	10.0	14.0	17.5	28.5	37.0
Glades County	9.0	12.5	12.5	16.5	17.0
Hendry County	11.0	13.5	17.5	29.5	37.5
Lee County	10.5	14.0	20.0	32.5	40.5
Sarasota County	0.0	14.5	25.5	33.5	51.0
Out-of-County C	learance Time				
Charlotte County	12.5	14.5	25.0	33.0	51.0
Collier County	10.5	14.0	19.0	31.5	38.0
Glades County	12.5	16.0	27.0	33.0	42.5
Hendry County	11.5	14.5	23.0	32.5	42.5
Lee County	10.5	14.0	20.0	32.5	40.5
Sarasota County	12.5	15.0	26.0	34.0	51.5
Regional Cleara	nce Time				
Southwest	13.0	16.0	27.0	34.0	51.5