

Section I

EXECUTIVE SUMMARY

The Santee-Lynches Region is threatened by a number of natural hazards. These hazards endanger the health and safety of the population of the community, jeopardize its economic vitality, and imperil the quality of its environment. Because of the importance of avoiding or minimizing the vulnerabilities to these hazards, the public and private sector interests of the Santee-Lynches Region have joined together to undertake a comprehensive planning process that has culminated in the publication of this document: "The Santee-Lynches Hazard Mitigation Plan."

This is a multi-jurisdictional hazard mitigation plan, and the planning effort has been conducted through the coordinated, cooperative effort of several local governments including Clarendon County (Manning, Summerton, Paxville, and Turbeville), Kershaw County (Bethune, Camden, and Elgin), Lee County (Bishopville and Lynchburg), and Sumter County (Sumter, Mayesville, and Pinewood). Other key participants, organizations and agencies that have been included in the planning process include:

- South Carolina Emergency Management Division
- South Carolina Department of Health and Environmental Control
- Farmers Telephone Cooperative
- Dixie Pipeline
- USC Sumter, Central Carolina Technical College
- American Red Cross
- Local School Districts
- Santee Wateree Regional Transportation Authority
- Santee-Lynches Area Agency on Aging

The proposed projects and programs to reduce the impacts of future disasters are called "mitigation initiatives". Mitigation initiatives have been developed, and will continue to be developed. Whenever opportunities present themselves and resources become available initiatives will be implemented. Implementation of this plan will be through the implementation of local mitigation initiatives included in the plan. With the completion of each implementation effort, the participating communities **will become** more resistant to the human and economic costs of future natural disasters.

This document details the work of the local mitigation committees and Santee-Lynches planning staff over the **past six months** to develop the planning organization, to undertake the needed technical analyses, and to coordinate **and evaluate** the mitigation initiatives that have been proposed **and implemented** by the participating jurisdictions and their respective local organizations.

This plan will continue to be updated and expanded in the future to ensure it addresses changing conditions within the participating jurisdictions, current experiences with disasters that do occur, and any changes in the characteristics of the hazards that threaten the involved communities. This updating process and future editions of the mitigation plan will also be used as an opportunity to continue to inform and involve the general public and other interested groups in actively participating to make their

respective communities more resistant to the economic and social impacts of future disasters.

Section II

INTRODUCTION AND PURPOSE

2-1 Introduction

The Santee-Lynches **Regional** Hazard Mitigation Steering Committee (HMSC) and **County** Planning Committees have been established to make the population, neighborhoods, businesses and institutions of the community more resistant to the impacts of future disasters. The committees have been undertaking a comprehensive, detailed evaluation of the vulnerabilities of the community to all types of natural hazards in order to identify ways to make the communities of the area more resistant to their impacts. This document reports the results of that planning process for the current planning period.

2-2 Purpose

The Santee-Lynches Hazard Mitigation Plan and **the** underlying planning process are intended by the HMSC to serve many purposes. These include the following:

2-2-1: Provide a Methodical, Substantive Approach to Mitigation Planning

The approach utilized by the Santee-Lynches Hazard Mitigation Steering Committee (HMSC) and **County** Planning Committees relies on a step-wise application of soundly-based planning concepts in a methodical process to identify vulnerabilities to future disasters and to propose the mitigation initiatives necessary to avoid or minimize those vulnerabilities. Each step in the process builds upon the previous step, so that there is a high level of assurance that the mitigation initiatives proposed by the participants have a valid basis for both their justification and priority for implementation. One key purpose of this plan is to document that process and to present its results to the community.

2-2-2 Enhance Public Awareness and Understanding

The Hazard Mitigation Steering Committee is interested in finding ways to make the community as a whole more aware of the natural hazards that threaten the public health and safety, the economic vitality of businesses, and the operational capability of important facilities and institutions. The plan identifies the hazards threatening the Santee-Lynches Region and provides an assessment of the relative level of risk the Santee-Lynches Region and many of the facilities that are important to the community's daily life. The plan also includes a number of proposals of ways to avoid or minimize those vulnerabilities. This information will be very helpful to individuals that wish to understand how the community could become safer from the impacts of future disasters.

The HMSC and its member organizations also conduct a number of community outreach and public information programs. The purpose of these is to engage the community as a whole in the local mitigation planning process, in order to shape the goals, priorities, and content of the plan, as well as to provide information and education to the public regarding ways to be more protected from the impacts of future disasters. The committee has been, and will continue to be, active in communicating with the public and engaging interested members of the community in the planning process. This document, and the analyses contained

herein, is both the principal information resource for this activity and the documentation of past and planned public information activities.

2-2-3 Create a Decision Tool for Management

The Santee-Lynches Mitigation Plan provides information needed by the managers and leaders of local government, business and industry, community associations and other key institutions and organizations to take actions to address vulnerabilities to future disasters. It also provides proposals for specific projects and programs that are needed to eliminate or minimize those vulnerabilities.

2-2-4 Promote Compliance with State and Federal Program Requirements

There are a number of state and federal grant programs, policies, and regulations that encourage or even mandate local government to develop and maintain a comprehensive hazard mitigation plan. This plan is specifically intended to assist the participating local governments to comply with these requirements, and to enable them to more fully and quickly respond to state and federal funding opportunities for mitigation-related projects. Because the plan defines, justifies and prioritizes mitigation initiatives that have been formulated through a technically valid hazard analysis and vulnerability assessment process, the participating organizations are better prepared to more quickly and easily develop the necessary grant application materials for seeking state and federal funding.

2-2-5 Enhance Local Policies for Hazard Mitigation Capability

A component of the hazard mitigation planning process conducted by the Santee-Lynches Hazard Mitigation Committee is the analysis of the existing policy, program and regulatory basis for control of growth and development, as well as the functioning of key facilities and systems. This process involves cataloging the current mitigation-related policies of local government so that they can be compared against the hazards that threaten the jurisdiction and the relative risks these hazards pose to the community. When the risks posed to the community by a specific hazard are not adequately addressed in the community's policy or regulatory framework, the potential impacts of future disasters can be even more severe. Therefore, the planning process utilized by the committee supports evaluation of the adequacy of the community's policies and programs in light of the level of risk posed by specific hazards. This evaluation supports and justifies efforts to propose enhancements in the policies that should be promulgated by the involved local jurisdictions to create a more disaster-resistant future for the community.

2-2-6 Assure Inter-Jurisdictional Coordination of Mitigation-Related Programming

A key purpose of the planning process utilized by the Santee-Lynches Committee is to ensure that proposals for mitigation initiatives are reviewed and coordinated among the participating jurisdictions. In this way, there is a high level of confidence that mitigation initiatives proposed by one jurisdiction or participating organization, when implemented, will be compatible with the interests of adjacent jurisdictions and unlikely to duplicate or interfere with mitigation initiatives proposed by others. The operating procedures or guidelines

given in this plan document the details of the planning process utilized and mandate that all proposed mitigation initiatives, regardless of their origin, will be coordinated among all of the participants in the planning prior to their approval for incorporation into the plan.

2-2-7 Create Jurisdiction-Specific Hazard Mitigation Plans for Implementation

A key purpose of the Santee-Lynches Hazard Mitigation Plan is to provide each participating local jurisdiction with a specific plan of action that can be adopted and implemented pursuant to its own authorities and responsibilities. Therefore, a separate local mitigation plan for each separate participating jurisdiction has been prepared. This separate plan can be adopted and implemented for the jurisdiction's own purposes and on its own schedule, yet with implementation that is coordinated with other organizations making up the Santee-Lynches Hazard Mitigation Committee. This plan is also the mechanism by which all of the agencies, organizations and groups within or representing that jurisdiction can incorporate their own technical analyses and proposed mitigation initiatives.

In this way, the format of the plan and the operational concept of the planning process ensure that proposed mitigation initiatives are coordinated and prioritized effectively among jurisdictions using a consistent, valid planning process while, nonetheless, allowing each jurisdiction to adopt only the proposed mitigation initiatives that it actually has the authority, the responsibility, and/or the capability to implement when resources are available.

2-2-8 Provide a Flexible Approach to the Planning Process

The planning process used by the Santee-Lynches Hazard Mitigation Committee is very flexible in meeting the analysis and documentation needs of the planning participants. The planning program utilized provides for the creation of this document as well as the preparation of numerous other reports regarding the technical analyses undertaken. The planning participants have also included data and information unique to their communities and planning capabilities.

The following sections of the Santee-Lynches Hazard Mitigation Plan present the detailed information to support these purposes. The remainder of the plan describes the planning organization as well as its approach to managing the planning process. The plan provides a description of the mitigation-related characteristics of each participating jurisdiction, such as its land uses and population growth trends, the mitigation-related policies already in-place and, identified critical facilities present in the community. The plan then summarizes the results of the hazard identification and vulnerability assessment process and addresses the adequacy of the current policy basis for hazard management by the participating jurisdictions and organizations. The plan also documents the structural and non-structural mitigation initiatives proposed by the participating jurisdiction to address the identified vulnerabilities. The plan further addresses the mitigation goals and objectives established by the Steering Committee and the actions to be taken to maintain, expand and refine the Santee-Lynches Hazard Mitigation Plan and the planning process. Finally, the past and planned efforts of the Steering Committee to engage the entire community in the mitigation planning process are documented.

SECTION III

THE PLANNING PROCESS

3-1 The Planning Process Description

A. Direction of Professional Planner and GIS Manager

The Planning Director of the Santee-Lynches Regional Council of Governments, a professional planner, provided direction and guidance to the planning process utilized in **the development and updating** this plan. **The** GIS Manager at the Council of Governments compiled the Hazard Mitigation Maps.

B. Coordinating with Local Jurisdictions and the Public

The Santee-Lynches Hazard Mitigation Planning Process began with the formulation of Local Hazard Mitigation Planning Committees in each county to assist in **updating** the Plan. Individuals who worked with the Local Disaster Preparedness Agency on a regular basis or dealt with some phase of the Emergency Preparedness or response were asked to be involved in the process. The list of public and private agencies and the organizations is listed in Appendix C.

The Council of Governments staff worked to compile data regarding hazard events within the various jurisdictions since the adoption of the previous plan. Once compiled, this data was presented to the County Emergency Management Directors in a Planning Meeting held on October, 22, 2009. Also in attendance were representatives from the SC Emergency Management Division. Minutes from this meeting are available in Appendix *****

The Emergency Management Directors worked directly with Council of Governments staff and their local Hazard Mitigation Steering Committees to update information on any progress on the action items mentioned in the previous plan. During these meetings these groups worked to update the capability assessments for jurisdictions that have brought in new staff (e.g., administrators) or adopted new plans and ordinances pertaining to hazard mitigation (e.g., subdivision regulations and comprehensive plan updates). Information received from these meetings was then incorporated into the updated plan by Council of Governments Staff.

Contacts were made with the South Carolina Department of Health and Environmental Control, Dam Safety Program to obtain information and a list of unsafe dams in the region. Information of repetitive loss properties was gathered through the South Carolina Department of Natural Resources, Flood Plain Section. Information about local government participation in the National Flood Insurance Program and in the Community Rating System was obtained from the National Insurance Rating Office in Atlanta, Georgia.

Following the initial Planning Meeting, public hearings were scheduled in each county. A total of *** meeting notices were mailed out to individuals and organizations for the scheduled meetings. The draft plan was placed at Santee-Lynches Regional Council of Governments and on the Council of Government's website for review. This effort resulted in a total attendance of ***** persons region-wide. The number of letters mailed out and the meeting attendance by county are outlined in Table 3-1 below.**

**Table 3-1
Hazard Mitigation
Initial Public Meeting Attendance**

COUNTY	MEETING DATE (S) AND TIME	LETTERS MAILED, EMAILED, OR FAXED	ATTENDANCE
Lee			
Kershaw			
Clarendon			
Sumter			
Total			

At the public meetings information on the county natural hazards were presented along with a list of the critical facilities. Additional information and corrections were requested on the data and maps included in the Plan. The purpose and process for developing and updating the Hazard Mitigation Plan were outlined.

Information gathered from meeting with individuals from jurisdictions, information and comments received at public hearings, and changes and additions received from the individual Steering Committees was incorporated into the plan by the Council of Governments staff. A revised draft was then presented to jurisdictions and County Emergency Managers for final review and approval.

The revised plan was also made available to neighboring communities, local businesses, academia, and local nonprofits. A list of organizations and institutions that were contacted to solicit input is included in Appendix ****

A second round of public meetings were held on **** and **** in each county to present the revised plan and receive public comment. A paper copy of the Plan was made available at each County's Public Library, along with a digital copy of the plan being available to the public at the region's Town and City Halls, County Administrator's Offices or at the County Emergency Preparedness Offices.

**Table 3-2
Hazard Mitigation
Second Public Meeting Attendance**

COUNTY	MEETING DATE (S) AND TIME	LETTERS MAILED OR FAXED	ATTENDANCE
Lee			
Kershaw			
Clarendon			
Sumter			
Total			

D. Public Input

Prior to the public notices, a press release explaining the planning process was prepared and mailed to each of the four countywide newspapers in the region. See Appendix E for a copy of the news release and the public notices that were published.

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Copies of the Local Planning Committee meeting notices were also mailed to each of the county's major newspapers prior to the meetings. The objective here was to inform the public of the meetings and to invite their participation at the meetings.

E. Coordination with the South Carolina Emergency Management Division
Once a revised plan was reviewed by the Planning Committees and the Technical Review Committee and changes were incorporated into the plan **the plan was submitted to the South Carolina Emergency Management Division for review.**

F. Local Jurisdiction Adoption

The sample resolution that each local jurisdiction will be asked to adopt is included **on page (8).**

Hazard Mitigation Plan Adoption Resolution

Resolution Adopting the **Updated** Hazard Mitigation Plan for the Santee-Lynches Region of South Carolina

Whereas, (Name of local government) recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted hazard mitigation plan is required as a condition of future grant funding of mitigation projects; and

Whereas, (Name of local government) participated jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a hazard mitigation plan;

Whereas, (Name of local government) is aware that revision and updating of the plan is critical for active and effective hazard mitigation and that (Name of local government) will monitor and record hazard related data and events that can be used to update the all hazards mitigation plan;

Now, therefore, be it resolved, that the (Name of local government), hereby accepts and approves the **updated** Hazard Mitigation Plan and its designated portion in its entirety as its official plan and will undertake annual recording of its hazard events, their impact duration and cost.

Be it further resolved, that the (Name of local government council), accepts the **updated** Hazard Mitigation Plan from Hazard Mitigation Steering Committee, and the submission on behalf of the participating counties and municipalities the adopted Hazard Plan to the State Emergency Management Division and to the Federal Emergency Management Agency officials for formal review and approval.

Passed: (Date: _____)

Certifying Official:

(_____)

Type Name and Signature of Chief Administrative or Elected Officials

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F. The procedure for Jurisdictional Participation in the Planning Process
The planning process used in **updating the Hazard Mitigation Plan for the** Santee-Lynches Region and its counties was based on Section 322 of the local planning requirements of the Disaster Mitigation Act of 2000 and supporting guidance documents developed by FEMA and the S. C. Emergency Preparedness Division (EPD). The planning process included the following steps, which will be described in greater detail throughout the plan:

- Step 1: Meet with **the** County Hazard Mitigation Planning Committee
- Step 2: Conduct Risk Assessment
- Step 3: Develop Capabilities Assessment
- Step 4: Create the Mitigation Plan
- Step 5: Adopt and Implement the Plan

REVISION

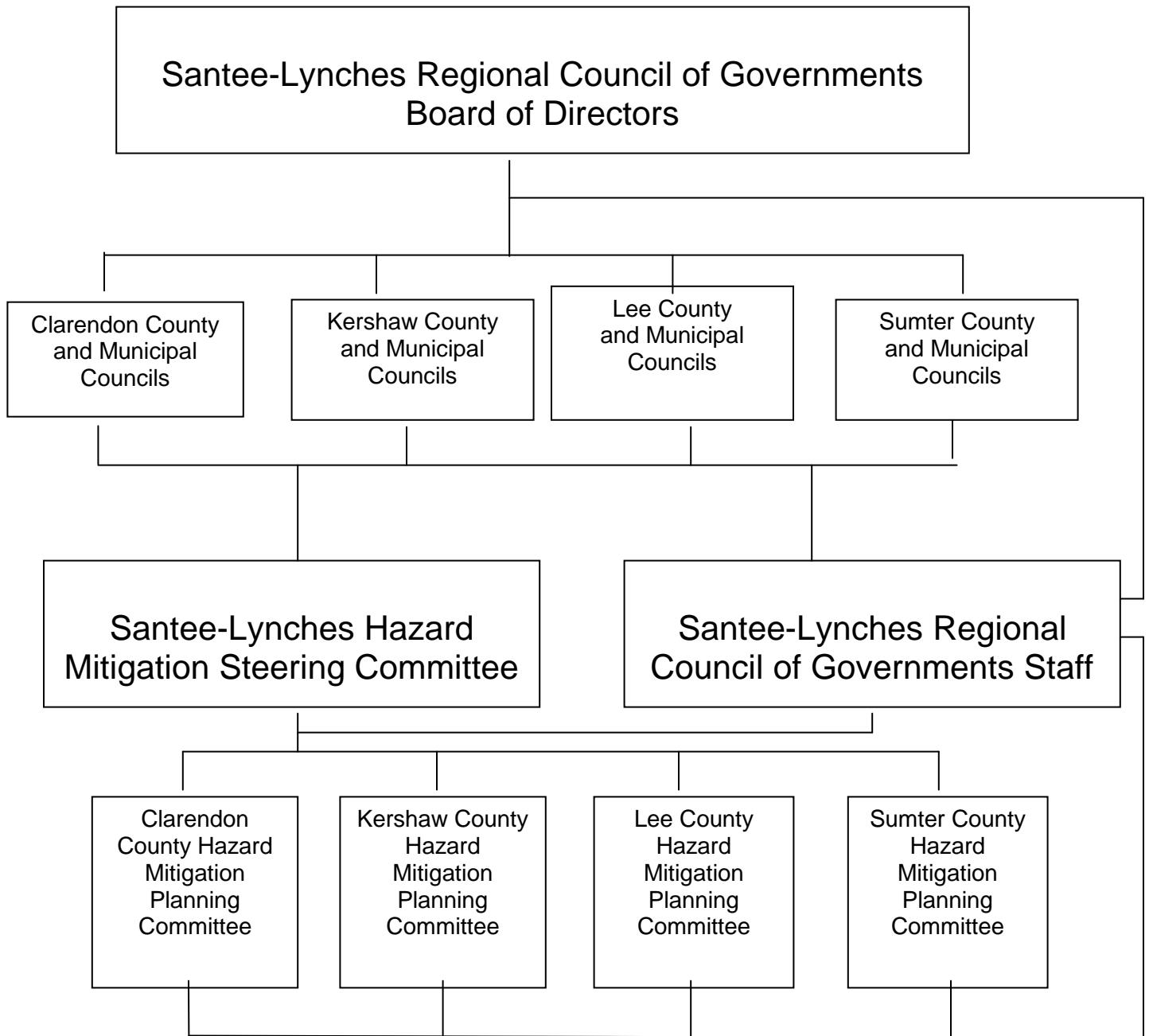
- **Step 1: Meet with the Hazard Mitigation Planning Committee**
- **Step 2: Update and Revise the Risk Assessment**
- **Step 3: Update and Revise the Capabilities Assessment**
- **Step 4: Update and Revise Goals, Objectives, and Actions**
- **Step 5: Review and Update the Mitigation Plan**
- **Step 6: Re-adopt and Continue to Implement the Plan**

This process was led by the member of Santee-Lynches **Regional** Hazard Mitigation Steering Committee and the **county** Hazard Mitigation Planning Committees **with** support from the planning staff of Santee-Lynches Regional Council of Governments.

The Santee-Lynches Hazard Mitigation Steering Committee had the role of oversight and coordination but it also worked alongside and with the support **the** of local Hazard Mitigation Planning Committee in each county of the region. The committee also determined whether a jurisdiction met the threshold for participation in the planning process. A jurisdiction had to do one or more of the following: (1) Participate in the activities of the Planning Committee, (2) Attend a meeting(s) of the county hazard mitigation planning committee, (3) respond to letters from staff asking for responses on natural hazard prioritization and mitigation measures, or (4) prepare and/or approve an action plan and adopted their portions of the Hazard Mitigation Plan for the Santee-Lynches Region.

This organizational structure provides for oversight and coordination of the entire planning effort by the Steering Committee, which is made up of emergency management directors and city and county administrators and managers. A table listing the designated representatives of participating organizations is included in **Appendix E**.

The following shows organizational structure established to produce and oversee the completion of the hazard mitigation and risk assessment plan and to ensure its ongoing implementation.



By creating a hazard mitigation planning committee in each county, all groups having a role/capacity in responding to emergency or hazard situations were involved in updating the risk assessment/capability assessment/mitigation project development process.

Section IV PROGRESS IN PLAN IMPLEMENTATION

4-1 Introduction

This section discusses the current status of implementation of the Hazard Mitigation Plan. There are several aspects of plan implementation that need to be addressed:

- The status of promulgation or formal adoption of the plan by the participating jurisdictions,
- The previously proposed mitigation initiatives that have been implemented,
- The activities of the Hazard Mitigation Steering Committee (HMSC) to engage the public and the community at large in the mitigation planning process
- The HMPC's priorities for implementation of approved mitigation initiatives now incorporated into the plan, and
- How recent disaster experience has illustrated the need for and success of the Santee-Lynches Hazard Mitigation Plan.

4-2 Status of Plan Promulgation and Approval

Promulgation and approval of the plan is a very important step in assuring its implementation. This plan is formatted to place all of the jurisdiction-specific information into separate discussions within Section 8. Section 8 contains separate documents that are referred to as "Individual Jurisdictional Mitigation Plans" and these have been developed through the efforts of the personnel representing the corresponding individual jurisdiction participating in the planning process.

It is the expectation of the Santee-Lynches HMSC that the governing body of each participating jurisdiction or organization will review, consider and act on their Individual Jurisdiction Mitigation Plan contained in Section 8. If the governing body acts in a positive manner, this is basically an approval or endorsement of the proposed mitigation initiatives contained in the corresponding individual section of the plan. This approval or endorsement, with or without modification by the governing body, represents both consent and commitment by the representatives of that organization or jurisdiction to seek the resources needed to implement the priority initiatives contained therein. Only through actual implementation of the proposed mitigation initiatives contained in this plan can it actually help to make the Santee-Lynches Region a disaster resistant community.

Table 4-1, "Status of Promulgation of the Local Hazard Mitigation Plan" tabulates the specific approval actions that have been taken by the local governing bodies of the participating jurisdictions. Copies of the approved resolutions are included in **Appendix I**.

As the HMSC continues their planning efforts in the future it is intended that additional updates of the mitigation plan will be published to provide both the participating organizations and the public current information regarding the mitigation planning process. Further, once every five years the HMSC will again seek the approval of the participating jurisdictions' governing bodies of the updated individual jurisdictional plans. This interval has been selected to provide a sufficient period for the HMSC to have made significant progress in further technical analysis, implementation of currently proposed initiatives, and development of new proposals prior to again seeking formal local approval of the plan. In this way, the plan can be kept up-to-date on a continuing basis

by HMSC participants while, nevertheless, assuring that the jurisdictions' governing bodies routinely review the plan and approve its implementation.

4-3 Public Information and Participation

The HMSC and individual participating agencies and organizations have been active in attempting to engage the general public in the planning process. Several public information activities have been undertaken to explain the mitigation planning process to the community and to solicit their input and involvement in the planning process, as well as to provide mitigation awareness and educational information. The HMSC welcomes public input to the planning process, and fosters public participation through the issuance of media releases, holding public meetings and hearings, etc.

4-4 Completed Mitigation Initiatives

The implementation of the mitigation initiatives proposed as a result of the HMSC's planning process is an important measure of the progress in implementation of the Santee-Lynches Hazard Mitigation Plan. As the participants in the planning are able to implement more and more of the proposed initiatives that have been incorporated into the plan the facilities, systems, and jurisdictions of the Santee-Lynches Region can become more and more resistant to the impacts of future disasters.

4-5 Priority for Initiative Implementation

As a part of its future planning process, the HMSC will also periodically review the proposed mitigation initiatives approved for incorporation into the plan to determine their priority for implementation during the next planning period. This assessment will provide guidance to the individual jurisdictions and organizations proposing the initiatives to encourage them to focus on those designated as priority. However, because each participating jurisdiction or organization has independent authority and responsibility for implementation of their proposed mitigation initiatives under the mitigation planning approach used by the HMSC, the jurisdictions and organizations retain the prerogative to act in their own interests, using their own priorities for mitigation initiative implementation.

In many ways, the priority for implementation assigned to proposed mitigation initiatives could be considered a suggestion or recommendation to the proposal sponsors to seek the resources for implementation. These resources may range from the normal budgeting process for the jurisdiction or organization to seeking state or federal financial or technical support for implementation of the initiative.

4-6 Effectiveness of Mitigation Initiatives

Of course, the true measure of progress in the implementation of mitigation initiatives is their success in saving lives, avoiding property damage, and protecting valuable or irreplaceable resources in the community. As the mitigation initiatives that have been incorporated into the Santee-Lynches Hazard Mitigation Plans are implemented, there will be more opportunities to measure the success of the HMSC's mitigation efforts.

The best opportunity for measuring this success is to evaluate the community's experience with actual disasters and to attempt to estimate the number of lives that were saved by the implemented initiatives or the value of the property protected from disaster-related damage.

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In addition, however, recent disaster events can be very helpful in highlighting the mitigation needs of the community based on the type, location or magnitude of the impacts experienced. In turn, this can be a major factor in the future progress of implementation of the plan as the HMSC considers and acts on actual disaster experience by the community. Such recommendations can be referred to a “lead” or responsible agency with the intention that that organization will use the information to propose additional mitigation initiatives for incorporation into the plan.

Compiling data on completed mitigation initiatives is an activity undertaken by the HMSC members on an ongoing basis and is an integral component of the process used to implement and maintain the Santee-Lynches Hazard Mitigation Plan, which is more fully discussed in Section 8. To date, the participating organizations have not had an opportunity to conduct extensive analysis of the effectiveness of the previously implemented mitigation initiatives. However, this is a planning activity to be included in the process to continue to expand and maintain this plan, as discussed in Section 8.

4-7 Summary

The HMSC recognizes that it will take a long period of time and implementation of many if not all of the proposed initiatives approved for this plan, to make the Santee-Lynches Region a truly disaster-resistant community. However, the continuing dedication to the safety and welfare of the community shown by the participants in this planning process will make this ambitious goal possible.

TABLE 4-1
Status of Promulgation of the Local
Hazard Mitigation Plan

JURISDICTION	PARTICIPATED	DATE OF INITIAL PLAN ADOPTED	DATE UPDATED PLAN ADOPTED
Clarendon County	Yes	Oct. 11, 2004	2009
City of Manning	Yes	Oct. 18, 2004	2009
Town of Summerton	Yes	Oct. 12, 2004	2009
Town of Paxville	Yes	March 8, 2005	2009
Town of Turbeville	Yes	Feb 9, 2005	2009
Kershaw County	Yes	Oct. 26, 2004	2009
City of Camden	Yes	Oct. 26, 2004	2009
Town of Bethune	Yes	Feb 10, 2005	2009
Town of Elgin	Yes	Feb. 8, 2005	2009
Lee County	Yes	Oct. 12, 2004	2009
City of Bishopville	Yes	Oct. 19, 2004	2009
Town of Lynchburg	Yes	Feb. 10, 2005	2009
Sumter County	Yes	Oct. 12, 2004	2009
City of Sumter	Yes	Oct. 5, 2004	2009
Town of Mayesville	Yes	Feb. 8, 2005	2009
Town of Pinewood	Yes	Feb. 8, 2005	2009
Santee-Lynches Regional Council of Governments	Yes	Nov. 1, 2004	2009

Section V

SUMMARY OF REGIONAL HAZARDS AND CAPABILITY ASSESSMENT

5-1 Introduction

This section of the Regional Hazard Mitigation Plan summarizes the results of the hazard identification and vulnerability assessment processes. The intent of this section is to provide a compilation of the information gathered and the judgments made about the hazards threatening the Santee-Lynches Region as a whole, and the **region's** potential vulnerability to those hazards. Additional information and details are provided in the individual jurisdictional mitigation plans included in Section 8 of this document. In this section information relevant to the entire planning area is compiled and an overview of the analyses is provided.

With the Mitigation planning approach the process utilized for the development of this plan is very specific to the jurisdictions within the Santee-Lynches Region and responsive to the unique characteristics of each. This is because the hazard identification process is implemented independently for each participating jurisdiction, to separately identify the hazards threatening that jurisdiction. Further, once the unique hazards identifying each jurisdiction are known, and the relative risks that they pose are defined, then organizations representing each jurisdiction can conduct a vulnerability assessment of important facilities within the jurisdiction. In this way, each participating jurisdiction's unique hazards, risks, and vulnerabilities are defined. This process is described in detail in this section.

5-2 Hazard Identification

As noted in Section 3, the Santee-Lynches Planning and GIS staff initiated the process of hazard identification. In this process, the HMPC and representatives of individual jurisdictions assisted in the identification all of the natural hazards that could threaten the community. When the hazard types are identified as relevant to, or of concern to that jurisdiction, the participants can make an estimate of the risk each poses to the jurisdiction being evaluated.

In 1984 the Federal Emergency Management Agency (FEMA), to better plan for and cope with all-hazards situations, initiated a national program known as the Integrated Emergency Management Systems (IEMS). The purpose was to have a comprehensive approach to emergency management with general guidelines and formats applicable to the local jurisdiction.

Essentially, this program determines the hazards and magnitude of risk for a local jurisdiction, assesses the existing and required capability to respond to a situation, and establishes realistic local plans that define necessary actions for closing any gap between existing and needed capability.

The Hazards Analysis involved determining the kinds of hazards which a local jurisdiction was vulnerable to based on history, research, and common knowledge. Combining knowledge of hazards possible with their potential impacts results in measuring the all-hazard vulnerability of the local area.

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The 1992 Hazard Analysis was a revised version of the 1984 Hazard Analysis. The countywide Hazard Analysis was based on FEMA 191, "Principal Threats Facing Communities and Local Emergency Management Coordinators," March 6, 1991. The criteria rating, the ranking system utilized by each County is included in Appendix G.

Pursuant to the requirements of the Disaster Mitigation Act of 2000, each jurisdiction is required to be evaluated for a prescribed list of natural hazards. These hazards are: Earthquakes; Tsunamis; Coastal and Riverine Erosion; Landslides/Sinkholes; Hurricanes and Coastal Storms; Severe Storms/Tornadoes; Floods; Wildfires; Dam/Levee Failure; Volcanic Activity; Drought/Heat Wave; and Winter Storms/Freezes. While many of these hazards are relevant to the Santee-Lynches Region and the participating jurisdictions, some are not due to the geographic location and characteristics of the planning area. In the Mitigation planning process, these listed hazards have been assessed by the participating jurisdictions. Under the Mitigation planning process if a specific hazard is assessed and the relative risk estimate for that hazard is determined to be zero (meaning the hazard actually poses no identifiable risk to the jurisdiction) that hazard is not considered further in the planning process, in the subsequent assessments of vulnerability of the community to that hazard, or evaluation of the adequacy of the policies of the jurisdiction to manage the risks posed by that hazard. Avalanches, Tsunamis, Landslides/sink holes, and volcanic activity were not ranked as significant to the area by those representatives making the planning decisions, for they have been designated as posing zero risk to the specific jurisdiction. The risk ranking for the hazards identified for each jurisdiction, excluding those evaluated as posing no or zero risk to the community, are given in the table entitled "Hazard Identification by Jurisdiction" given in an attachment to **Appendix G**.

In deriving these estimates of risk for each hazard, the participating jurisdictions have utilized any available information regarding the geographic areas that may be impacted by each identified hazard, as well as population, infrastructure, and facilities within those impacted areas. This has included inventories of valuable environmental resources as well as factors that are influential to the economic well being of the community. Examples of such existing information resources that have been accessed in this manner include Flood Insurance Rate Maps, Hurricane Zone Maps, tornado and severe weather frequency distribution maps, geologic hazard and soil characteristics maps, wildfire risk maps, and similar types of hazard zone delineation maps. For many of the participating jurisdictions, this information has been available in a geographic information system (GIS) database or has been accessed from internet websites and existing GIS databases available from state and federal agencies.

Information regarding the existing population and property at risk within these hazard zones has been obtained, where possible, from US census data, property appraisal records of the participating jurisdictions, aerial photographs, topographic maps, and similar information sources. Evaluations of the potential risk to valuable environmental resources in the impacted areas have been derived from review of available environmental inventories, maps of park lands, wildlife refuges, wetlands, potable water supplies, and other similar natural features. Information on the potential risk to the economic well being of the community, particularly regarding indirect economic costs of potential hazard events, has been derived from evaluating the number of businesses that may be affected by the event, the number of jobs involved, and the revenue these businesses return to the community.

A bibliography of information references and resources used by the planning participants has been included in Appendix A.

5-3 Repetitive Loss Properties

Another indication of the hazards threatening the Santee-Lynches Region, and the risk posed by those hazards, is to identify whether properties have been previously or repeatedly damaged by past disaster events. The properties, which may be buildings, roads, utilities, or similar construction, can be termed “repetitive loss properties.” Properties can fall into this classification based on repeated damages from any type of hazard.

A specific category of repetitive loss properties is those that are insured under the National Flood Insurance Program, and have had repeated claims for flood loss damages. **In the Santee-Lynches region no repetitive loss properties have been identified.**

5-4 Critical Facilities

Some facilities and systems in the community are very important to the health, safety and welfare of the community. Therefore, high priority is given to assessing their vulnerabilities to future disasters and proposing mitigation initiatives to address identified vulnerabilities. For the purposes of this plan these facilities are considered to be “critical facilities” and, as a part of the planning process the participating jurisdictions have identified selected facilities to warrant this designation. The State Emergency Management Agency defined a critical facility/infrastructure as those that perform emergency services or functions necessary for community survivability or the continuation of government services and must remain in operation or return to operation within 72 hours following a disaster.

The participating jurisdictions have conducted vulnerability assessments for a limited number of designated critical facilities. These vulnerability assessments are being utilized by the authorities responsible for these facilities to evaluate the need for proposing mitigation initiatives to address the defined vulnerabilities, if any, and include any proposed initiatives in the Santee-Lynches Hazard Mitigation Plan.

Given the large numbers of facilities that should be assessed for their vulnerabilities, the participating jurisdictions have attempted to identify and assess those of most concern, such as critical facilities. As the planning process continues the participating jurisdictions will continue to add more facility vulnerability assessments to the database, and to consider those with highest vulnerabilities as warranting the proposal of mitigation initiatives.

5-5 Jurisdiction Capability Assessment

An important aspect of the capability assessment process is to determine if the local jurisdictions have policies, plans, codes or requirements in place that are intended to avoid or minimize the vulnerability of the community to the hazards that threaten it. These policies and programs can take many forms, such as building and land use codes, hazard mitigation and emergency response plans, requirements for facility operations and maintenance, etc. If local government’s policies, plans, and requirements effectively address the hazards posing the greatest risk to the community the vulnerability to future disasters can be reduced.

Just like the vulnerability assessment process being undertaken by the HMPC for facilities, systems and neighborhoods, the assessment of the extent to which the policy framework responds to the hazards of concern is another vehicle to identify the need for mitigation initiatives. In this case, however, the mitigation initiatives proposed by a participating local government jurisdiction would be non-structural in concept (e.g., the development of new plans, codes or policies to address the identified hazards and to reduce the present or future vulnerabilities of the community).

Shown in Tables 5-1 and 5-2 is a listing of the codes, ordinances, and plans that local governments in the Santee-Lynches Region have adopted to mitigate the **impact** of natural hazards.

It is important to note that the Santee-Lynches Mitigation planning process intentionally encourages participating jurisdictions to continue to assess this information and to propose non-structural mitigation initiatives for the plan to strengthen their mitigation policy and program framework. Because modifications or enhancements to the policy and program framework are typically the responsibility of individual jurisdictions, the existing policies and program of the jurisdictions are further analyzed in the individual jurisdiction mitigation plans given in Section 8. These individual jurisdiction plans also include, where applicable, proposed modifications to existing plans and programs in order to improve the policy framework of the jurisdictions for control of risks and vulnerabilities.

5-6 Summary

It must be emphasized that the fundamental reason for undertaking the hazard identification and vulnerability assessment process is to highlight vulnerabilities that need to be addressed by the development of proposed mitigation initiatives for incorporation into the Santee-Lynches Hazard Mitigation Plan. Because there are numerous facilities, systems and, neighborhoods in the Santee-Lynches Region that should be assessed for their vulnerability to disasters, this component of the mitigation planning process can be expected to be continued in future updates of the plan until all necessary facilities, systems and neighborhoods have been assessed and their mitigation needs addressed.

**TABLE 5-1
REVIEW OF LOCAL POLICIES, PLANS, CODES, AND PROGRAMS
TO MINIMIZE VULNERABILITY OF HAZARDS TO COMMUNITIES
IN THE SANTEE-LYNCHES REGION**

Local Government	EM Director	Land Use Plan	Zoning Ordinance	Subdivision Regulations	Flood Damage Prevention Ordinance	International Building Code	Emergency Operations Plan	In-house Administrative & Enforcement Staff
CLARENDON COUNTY	Anthony Mack (803) 435-9310	✓	✓	✓	✓	✓	✓	✓
City of Manning		✓	✓	✓	✓	✓	✓	✓
Town of Paxville		-	-	-	✓	-	✓	-
Town of Summerton		✓	✓	✓	-	✓	✓	✓
Town of Turbeville		✓	✓	-	✓	✓	✓	-
KERSHAW COUNTY	Eugene Faulkenberry (803) 425-1500			✓	✓	✓	✓	✓
Town of Bethune		✓	✓	-	✓	✓	✓	-
City of Camden		✓	✓	✓	✓	✓	✓	✓
Town of Elgin		✓	✓	-	✓	✓	✓	-
LEE COUNTY	Mike Bedenbaugh (803) 424-4018	✓	✓	✓	✓	✓	✓	✓
City of Bishopville		✓	✓	✓	✓	✓	✓	-
Town of Lynchburg		✓	✓	-	✓	✓	✓	-
SUMTER COUNTY	Robbie Baker (803) 436-2158	✓	✓	✓	✓	✓	✓	✓
Town of Mayesville		✓	✓	-	✓	✓	✓	-
Town of Pinewood		✓	✓	-	✓	✓	✓	-
City of Sumter		✓	✓	✓	✓	✓	✓	✓

Source: Pete Hips, AICP, Planning Director (803) 775-7381
Santee-Lynches Regional Council of Governments

Revised July 21, 2009

TABLE 5-2
STATUS OF LOCAL PLANNING IN THE SANTEE-LYNCHES REGION
October 8, 2009

LOCAL GOVERNMENT	PLANNING/ ZONING OFFICIAL CONTACT	TELEPHONE NUMBER/ FAX NUMBER	PLANNING COMM. ORG./ ACTIVE	COMPREHENSIV E PLAN/DATE ADOPTED		ZONING ORDINANCE/ DATE ADOPTED		BUILDING CONSTRUCT/ BLDG CODES	BOARD OF ZONING APPEALS	SUB- DIVISION LAND DEV. REGS.	FLOOD DAMAGE PRE- VENTION ORDINANCE ADOPTED	HISTORIC PRESERV. COMMISSION
				Yes	1999	Yes	1999					
CLARENDON COUNTY	Maria M. Rose, PO	435.8672 435.2208	Yes	Yes	1999	Yes	1999	Yes	Yes	Yes	Yes	
City of Manning	Rebecca Rhodes, A/ZA	435.8477 435.4608	Yes	Yes	1996	Yes	1996	Yes	Yes	Yes	Yes	┆
Town of Paxville	Norma Brooks, C	452.5113 452.5199	No	No	┆	No	┆	No	No	No	Yes	┆
Town of Summerton	Mary Johnson, C Bruce Behrens, ZA	485.2914	Yes	Yes	1999	Yes	1999	Yes	Yes	Yes	Yes	┆
Town of Turbeville	Ray Morris, ZA Deborah B. Welch, C	843.659.2781 843.659.2782	Yes	Yes	1994	Yes	1994	Yes	Yes	Yes	Yes	┆
KERSHAW COUNTY	John Newman, PO/ZA	425.1500 425.7676	Yes	Yes	1996	Yes	1999	Yes	Yes	Yes	Yes	┆
Town of Bethune	Janice Hunter, C Lanis Huckabee, ZA	843.334.6238 843.334.6114	Yes	Yes	1999	Yes	1999	Yes	Yes	No	Yes	┆
City of Camden	Shaun Putnam, PO Betty Slade, C	432.2421 425.6049	Yes	Yes	1997	Yes	1999	Yes	Yes	Yes	Yes	Yes
Town of Elgin	Randy Pruitt, ZA Judy Darby, C	438.2362 408.1155	Yes	Yes	2002	Yes	2002	Yes	Yes	No	No	┆
LEE COUNTY	Arlene Sanders, PS	484.5341	Yes	Yes	1998	Yes	1998	Yes	Yes	Yes	Yes	┆
City of Bishopville	Retta Tindal, C/ZA	484.9418 484.5126	Yes	Yes	1997	Yes	1997	Yes	Yes	Yes	Yes	Yes
Town of Lynchburg	Jackie McDonald, C Nathaniel Bess, ZA	437.2933 437.2949	Yes	Yes	2005	Yes	2005	Yes	Yes	No	Yes	┆
SUMTER COUNTY	Donna McCullum, ZA George McGregor, PO	774.1660 774.1606	Yes	Yes	1999	Yes	1999	Yes	Yes	Yes	Yes	
Town of Mayesville	Bill Rhodes, C Paul McCombs, ZA	453.5919 453.5919	Yes	Yes	1995	Yes	1996	Yes	Yes	No	Yes	┆
Town of Pinewood	Jennifer A. Russell, C Benny McIntosh, ZA	452.5447 452.5878	Yes	Yes	1997	Yes	1997	No	Yes	No	Yes	┆
City of Sumter	Donna McCullum, ZA George McGregor, PO	774.1660 774.1606	Yes	Yes	1999	Yes	1999	Yes	Yes	Yes	Yes	Yes

Source: Pete Hippias, AICP Director of Planning (803) 775-7381 Santee-Lynches Regional Council of Governments
 2009

Revised June 24,

A = Administrator
 C = Town Clerk

PO = Planning Official/Director
 ZA = Zoning Administrator

Section VI Description of the Planning Area

6-1 Introduction

The Santee-Lynches Region has strategic linkage with the Southeastern Region through the federal interstate and aviation systems. The Region is within commuting distance of major cities and ports throughout the eastern and southeastern portion of the United States. The Region, as seen in Map 6-1, is served directly by, or within a reasonable distance of, four Interstate highways: I-95, I-20, I-26 and I-77, and is linked to major ports at Charleston and Georgetown, and to commercial airports located in Columbia and Florence.

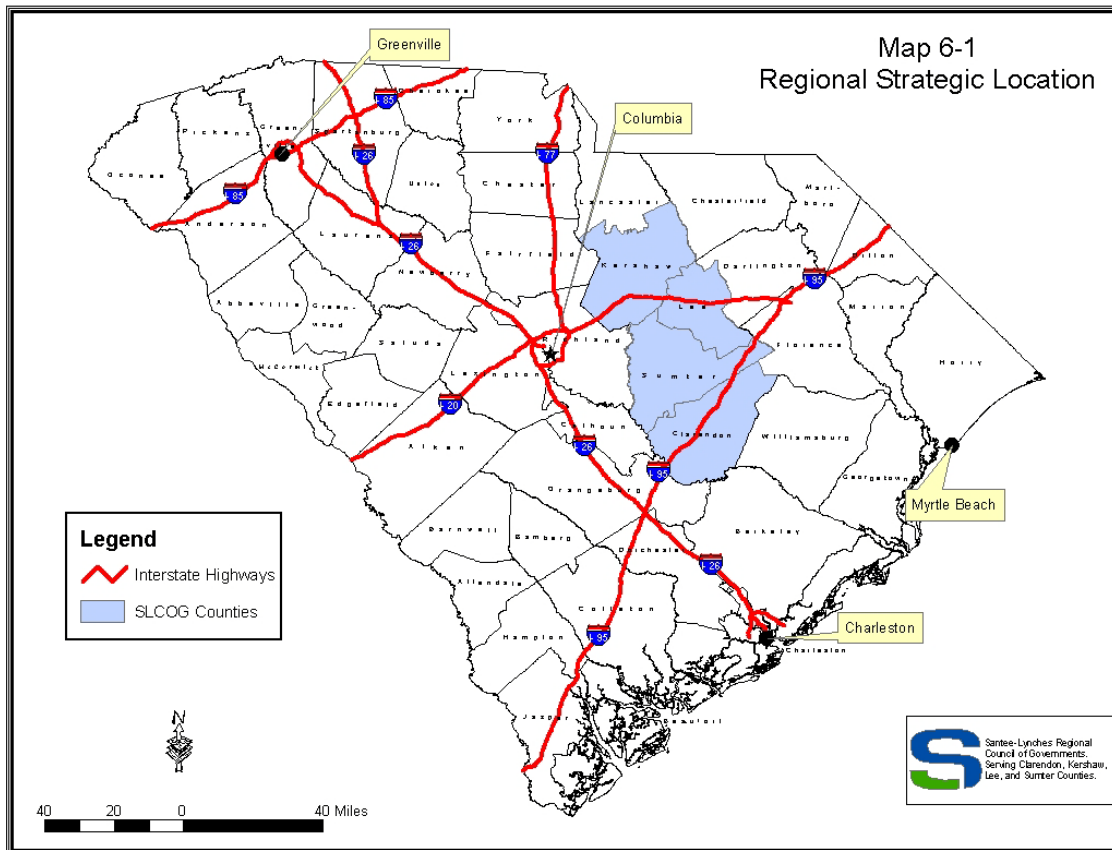
The Santee-Lynches Region includes Clarendon, Kershaw, Lee, and Sumter Counties. The Region is located in the upper coastal plain of South Carolina, with its boundaries approximately thirty-one (31) miles east of downtown Columbia, forty-six (46) miles north of Charleston, sixty-three (63) miles west of the Atlantic Ocean, and fourteen (14) miles south of the North Carolina State line.

The principal urbanized areas in the Region are the Cities of Sumter, Camden, Bishopville, and Manning located in Sumter, Kershaw, Lee, and Clarendon Counties, respectively. The City of Sumter, being centrally located and the largest city in the Region, serves as a regional focal point for economic and social activities. Camden serves as a secondary regional center. Bishopville and Manning both serve as **trade centers for the heavily agricultural Lee and Clarendon County, respectively**. The Region is unified by a reciprocal flow of goods and services within its boundaries. The Region's counties and their respective municipalities are all within the direct economic influence of the Midlands multi-county U. S. Department of Commerce-designated Bureau of Economic Analysis (BEA) area and specifically, the City of Columbia's metropolitan area.

The Santee-Lynches Region is a predominantly rural region with relatively small areas of urbanization in each county. The Region covers 2,409 square miles. **Based on the 2000 Census, only 59,317 persons or twenty-eight percent (28%) of this population lived within an urbanized community or municipality. The remaining 150,177 persons or seventy-two percent (72%) live in the rural areas or outside municipal areas. According to U.S. Census Bureau estimates, in 2008 these numbers had risen to an urban population of 59,187 and a population living in areas outside of municipalities of 162,912; or 73% in unincorporated areas and 27% in cities and towns.**

6-2 Growth Trends

Population changes in the region; most particularly in Clarendon, Lee, and Kershaw Counties, have resulted principally from the 1960's agricultural shift, the economic problems that it created, and efforts to diversify their economies through industrialization and business growth. In the post-1950's the large numbers of unskilled workers needed to plant, cultivate, harvest, and process crops in the post World War II agricultural economy were displaced by the rapid mechanization of farming processes. Fewer farmers were then able to produce more agricultural products on less land, while utilizing less unskilled human labor. Consequently, residents migrated from rural areas which



had insufficient numbers of non-agricultural positions to large urban areas in the Northeastern United States in search of employment. This trend, as seen in Table 1, ended for the most part in the late 1970's and by the mid-1980's had reversed in the Santee-Lynches Region. Lee County, however, still experienced a loss of population due to out-migration up to 1990.

As shown in Table 6-1, the Santee-Lynches Region recorded an increase in total population between 1980 and 2000. This increase amounted to a net gain of 36,343 (20.9%) over the Region's 1980 population. This was a sharp contrast, however, to the 1960 and 1970 population trends. In this decade negative growth occurred, as the number of persons residing in the Region decreased by 6773 (4%).

As shown in Table 6-1 and 6-2, the population of the Santee-Lynches Region increased from 209,994 persons in 2000 to 216,089 persons in 2008, an increase of some 6,095 (3%). Of the four counties in the Region, Kershaw County had the greatest population gain; an increase of 6,254 (12%) to 58,901 in 2008. Clarendon County's population gain of 647 (2%) to 33,149 was the second highest. Sumter County showed a decrease in population growth of -498 (-0.5%) to 104,148. Lee County also showed a decrease in population during this period of -308 (-1.5%) to 19,891.

**Table A-1
Santee-Lynches Region Population History and Estimates**

COUNTY	LAND AREA (Sq. Mile)	1940	1950	1960	1970	1980	1990	2000	Estimated 2008 Pop.	Change 2000-2008
CLARENDON COUNTY	607.21	31,500	32,215	29,494	25,604	27,464	28,450	32,502	33,149	647
City of Manning	2.41		2,775	3,917	4,025	4,746	4,428	4,025	3,943	-82
Town of Paxville	1.05		208	216	261	244	218	248	244	-4
Town of Summerton	1.15		1,419	1,504	1,305	1,176	975	1,061	1,028	-33
Town of Turbeville	1.26		271	355	422	544	698	602	707	105
Clarendon County (balance)	601.34	31,500	27,542	23,502	19,591	20,754	22,131	26,566	27,227	661
KERSHAW COUNTY	726.26	32,913	32,237	33,585	34,727	39,015	43,599	52,647	58,901	6,254
Town of Bethune	1.14		639	506	481	405	420	352	370	18
City of Camden	9.65		6,986	8,532	7,462	6,696	6,676	6,682	7,033	351
Town of Elgin	6.97		183	374	595	622	672	806	1,256	450
Kershaw County (balance)	708.50	32,913	24,429	24,173	26,189	31,292	35,831	44,807	50,242	5,435
LEE COUNTY	410.30	24,908	23,173	21,832	18,323	18,929	18,437	20,199	19,891	-308
City of Bishopville	2.36		3,076	3,586	3,404	3,429	3,560	3,670	3,859	189
Town of Lynchburg	1.13		506	544	546	534	475	588	553	-35
Lee County (balance)	406.81	24,908	19,591	17,702	14,373	14,966	14,402	15,941	15,479	-462
SUMTER COUNTY	665.50	52,463	47,634	79,941	79,425	88,243	102,637	104,646	104,148	-498
Town of Mayesville	1.03		706	750	757	663	694	1,001	1,007	6
Town of Pinewood	0.97		578	570	687	689	600	459	482	23
City of Sumter	26.58		20,185	23,062	24,555	27,650	41,943	39,643	38,625	-1,018
Sumter County (balance)	636.92	52,463	26,165	55,559	53,426	59,241	59,400	63,543	64,034	491
S-L REGION	2,409	141,784	135,259	164,852	158,079	173,651	193,123	209,994	216,089	6,095

Source: U.S. Bureau of Census, 1940, 1950, 1960, 1970, 1980, 1990, 2000 and 2008. Calculations by the Staff of Santee-Lynches Regional Council of Governments.

**TABLE 6-2
Santee-Lynches Region Growth Trends
1940 – 2008**

COUNTY	1940-1950	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2008
CLARENDON COUNTY	2.27%	-8.45%	-13.19%	7.26%	3.59%	14.24%	1.99%
KERSHAW COUNTY	-2.05%	4.18%	3.40%	12.35%	11.75%	20.75%	11.88%
LEE COUNTY	-6.97%	-5.79%	-16.07%	3.31%	-2.60%	9.56%	-1.52%
SUMTER COUNTY	-9.20%	67.82%	-0.65%	11.10%	16.31%	1.96%	-0.48%
S-L REGION	-4.60%	21.88%	-4.11%	9.85%	11.21%	8.74%	2.90%

SOURCE: U.S. Census Bureau, Census of Population between 2000 and 2008.

6-3 Regional Land Use Growth Patterns

This section will examine the growth trends and patterns within the Santee-Lynches Region. Included in Table 6-3 are the population projections for the Region over the next 10 years: 2010 through 2020. It is projected that the Region's population will increase from a total of 209,914 in the year 2000 to 238,720 in the year 2020. Along with the growth of 28,806 additional persons will come a change or expansion of the land use in the form of 18,109 additional housing units and the supporting facilities in the form of schools, shopping centers, roads, and highways. A large percentage (around 45%) of the growth in the region will be in Kershaw County, west of the Wateree River to include the Lugoff and Elgin areas. In Sumter County, Clarendon County, and Lee County the development pattern will continue to be clustered around the urban cores. However, in both Clarendon and Kershaw Counties, continued development is expected to take place around the large bodies of water. The proximity of Lake Marion in Clarendon County and Lake Wateree in Kershaw County to interstates I-95 and I-20, respectively, make the shorelines of these lakes attractive for both primary and secondary or recreational homes.

6-4 Current Land Use

The current residential growth pattern and development in the Region, as shown in Map 6-2, is predominately in the urbanized areas or around the cities. As indicated by the 2000 Census, scattered residential developments are occurring outside the area in the more rural portions of the counties. Sumter County is the most populated county in the region and portions of Kershaw County (Lugoff-Elgin area) have been classified as Metropolitan Statistical Areas because they have an urban area that meets the Census requirements of an urbanized area. The growth areas in Kershaw County are in the area west of the Wateree River and around the Lugoff/Elgin area. In Clarendon County, it is clustered around Lake Marion and the southwest portion of the county off Highway 260. Lee County, being the least developed county in the Region, continues to experience scattered single-family homes on individual lots throughout the rural portion of the county. Based on the 2000 Census, Kershaw County has met the density threshold and has been included as one of the five counties in the Columbia Metropolitan Statistical Area.

The industrial developments in each of the counties continue to be clustered in the urban areas where the supporting infrastructure facilities (water, sewer, and transportation) are available. All four counties have developed at least two or three industrial parks where most industries have recently located. Sufficient vacant lots within these parks are generally still available for new industrial prospects.

The major commercial developments, similar to industrial and residential land uses, are also occurring in the urbanized areas in the region, predominately along the major thoroughfares.

6-5 Future Land Use Development and General Trends

The Future Land Development Pattern (see Map 6-3) assumes a regional population growth of approximately 49,925 additional persons during the 2000 and 2020 planning period. The population growth for each county is indicated in Table 6-3. The growth assumptions are that the residential development will continue through natural increases in the population supplemented with the commercial and industrial developments

HAZARD MITIGATION PLAN

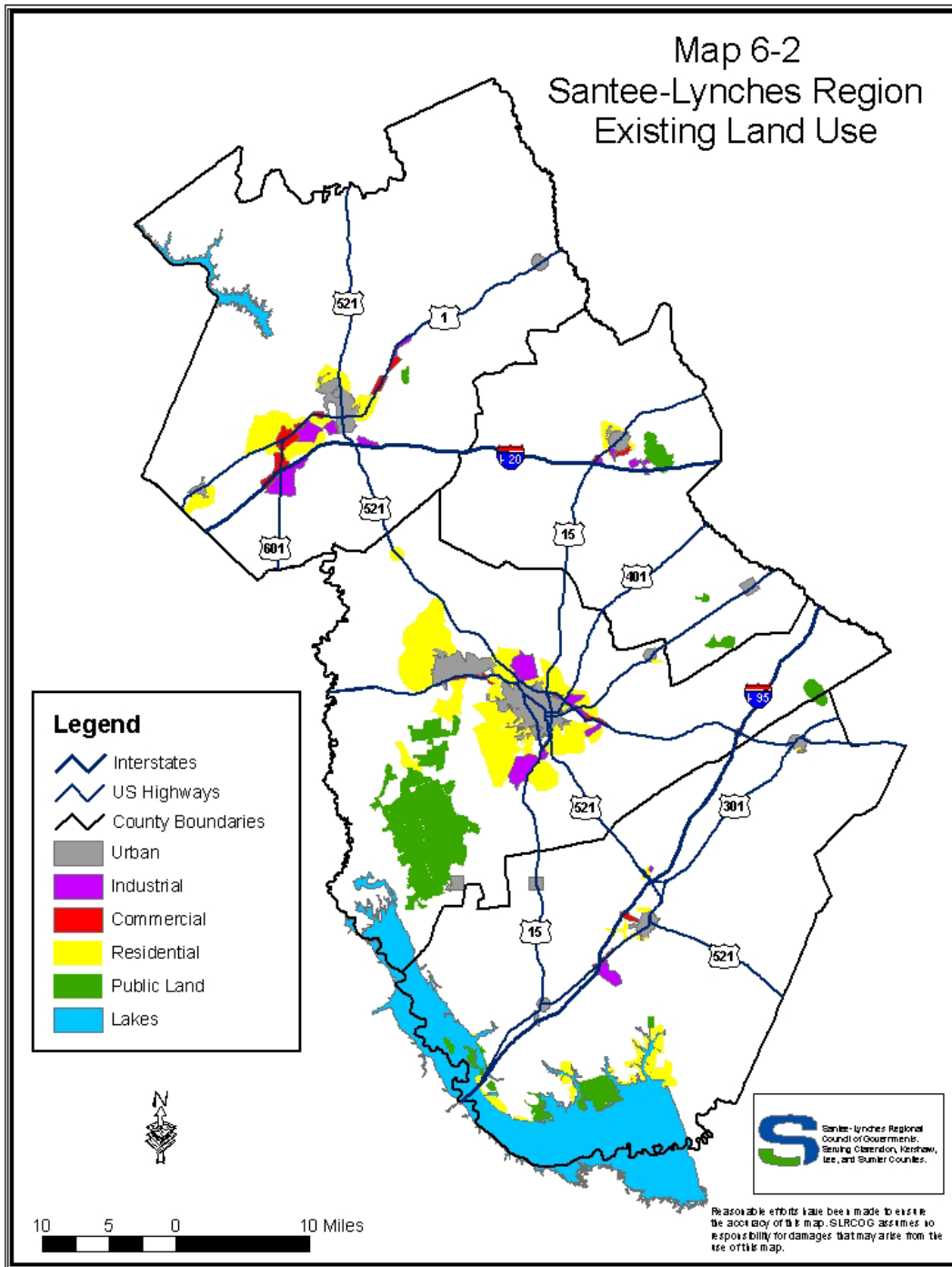
expansion creating new jobs occurring as a result of the labor force skill improvement and industrial recruitment efforts by local governments. The development projection is based on the assumption that development will occur within the existing urbanized areas where sewer and water facilities, public transit facilities, roads, highways, recreational facilities, and other quality of life amenities are available.

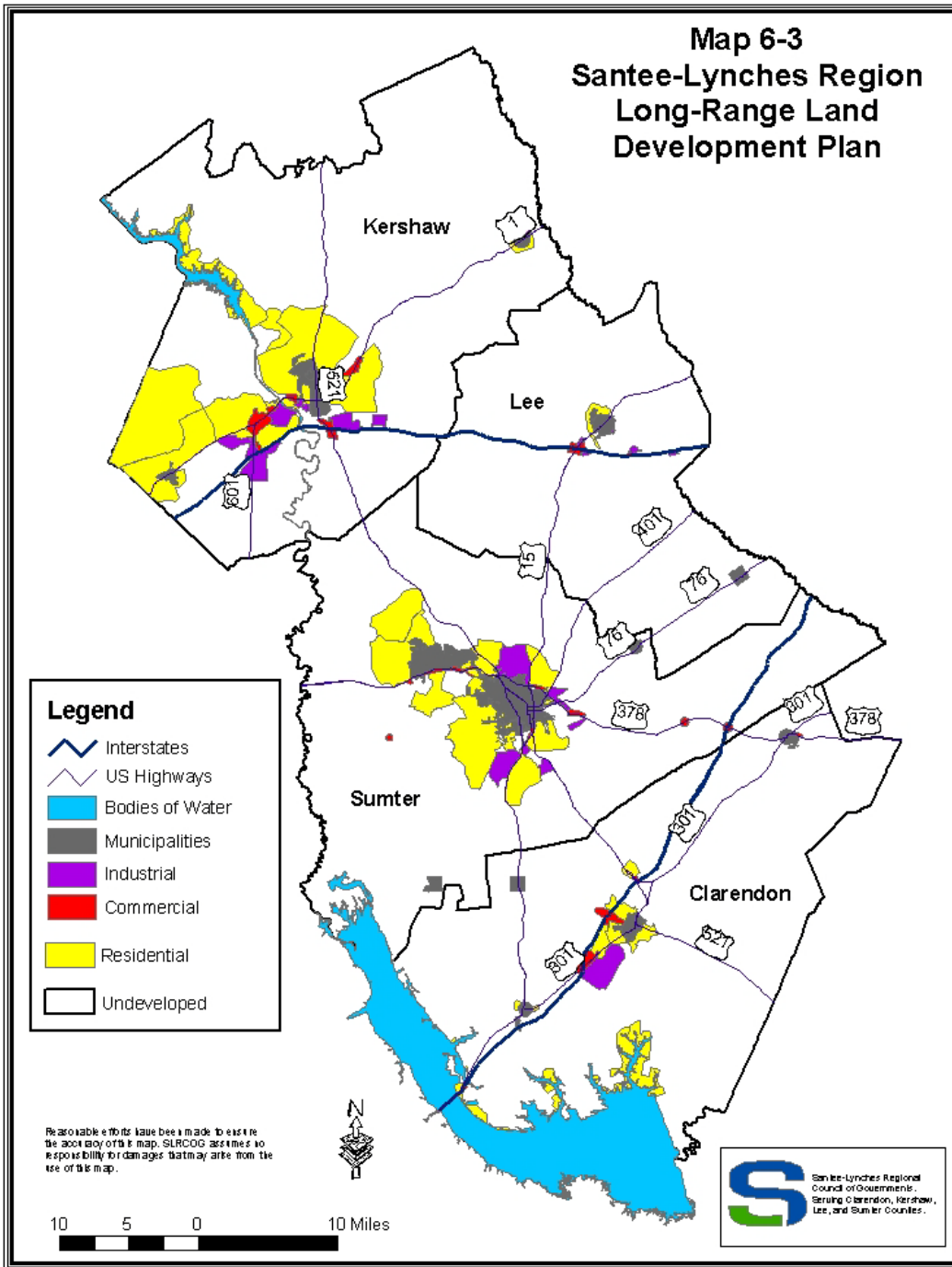
The amount of land forecast to be consumed under the Future Land Development Plan is not that significant from the Existing Land Development patterns. The predominate development pattern will be residential clusters around existing development infrastructure and public facilities.

**TABLE 6-3
SANTÉE-LYNHCES REGION
POPULATION PROJECTIONS 2008 – 2020**

County	2008	2020*	Change	% Change	% of Region Change
Clarendon	33,149	36,210	3,061	9%	14%
Kershaw	58,901	67,700	8,799	15%	39%
Lee	19,891	21,180	1,289	6%	6%
Sumter	104,148	113,630	9,482	9%	42%
SL-Region	216,089	238,720	22,631	10%	

Source: U.S. Bureau of Census, Census 2000, *Projections made by Staff of SC Budget and Control Board, Office of Research and Statistics





Section VII

PLAN IMPLEMENTATION AND MAINTENANCE

7-1 Introduction

This section of the Santee-Lynches Hazard Mitigation Plan describes anticipated actions for implementation and maintenance of this plan in an ongoing effort to achieve the mitigation goals and objectives.

7-2 Modification to Other Policies, Plans and Programs

It is the intention of the HMSC to continue to improve the existing policy framework for the participating jurisdictions so that they will be able to more effectively manage the community's vulnerabilities to future disasters. An analysis of the current policy framework of local jurisdictions is included in Section 8. Any shortfalls in the number of policies addressing identified higher risk hazards can be addressed by implementing non-structural initiatives intended to modify or enhance current plans, policies and programs. The Hazard Mitigation Planning approach enables organizations proposing initiatives to associate them, if applicable, with the plans or policies to be changed. These are reported on a jurisdiction-by-jurisdiction basis, and proposed mitigation initiatives intended to modify or improve existing policies and programs are listed in the individual jurisdiction mitigation plans, given in Section 8. The proposed modifications to the listed policies and programs are additional documentation of the HMSC's efforts to achieve its established goals and objectives.

7-3 Plan Implementation and Plan Maintenance Procedures

This portion of Section 7 discusses the manner in which the Santee-Lynches Mitigation Plan will continue to be implemented and maintained over time. "Plan implementation" is considered to be implementation of the proposed mitigation initiatives now included in the plan. "Plan maintenance" is considered to be the process by which the Santee-Lynches HMSC will continue to update, improve and expand the mitigation planning process. It also includes the technical analyses needed for the process to propose more mitigation initiatives for incorporation into the plan. "Plan maintenance" further includes the group's activities to monitor implementation of the plan, to evaluate the effectiveness of implemented mitigation initiatives, and to continually strive to engage the community in the planning process.

7-4 Plan Implementation Responsibility and Schedules

As noted above, implementation of the Santee-Lynches Hazard Mitigation Plan is basically through implementation of the approved mitigation initiatives incorporated into the plan. As these initiatives are implemented over the years, the facilities, systems and neighborhoods of the participating jurisdictions will become less vulnerable to the impacts of future disasters, and the communities of the Santee-Lynches Region will become increasingly disaster resistant.

Pursuant to the Hazard Mitigation planning process, the individual agencies and organizations that originally proposed the mitigation initiatives incorporated into the plan are responsible for their implementation when the resources or opportunities to do so become available. As a practical matter, in most cases, this means that the proposing agencies identify the most feasible funding source (e.g., a state or federal grant program, the agency's budgetary process, etc.), make application to the funding source

or otherwise allocate funds, and, upon receipt of funding, take the necessary steps to actually implement the project, whatever that may entail (e.g., design, permitting and construction, etc.). In other cases, this may mean that, should a unique opportunity for implementation of an initiative arise (e.g., upon receipt of unexpected funds, immediately after a disaster event, etc.) the agency can proceed with implementation of the initiative.

A list of Federal, State and local funding sources is available in Appendix E of this plan. The HMSC maintains this database as current, and encourages representatives of the agencies and organizations sponsoring a proposed initiative to associate it with one or more potential funding sources. The purpose of this is to facilitate implementation of a proposed initiative by the sponsoring agency by indicating the starting point for seeking funding for implementation.

While the actual responsibility for implementation of a mitigation initiative remains the responsibility of the sponsoring agency, the HMSC as a multi-jurisdictional, cooperative organization has a substantial involvement in plan implementation by assisting with the coordinating and scheduling of the implementation of approved mitigation initiatives.

As a part of the planning process, on a periodic basis or bi-annual basis, approved mitigation initiatives included in the plan will be re-evaluated based upon their continued value and the need for their implementation. The purpose of this re-evaluation is to assure that a proposed mitigation initiative remains a valuable component of the plan to determine whether any unique or unanticipated conditions warrant extra efforts to implement the initiative.

7-5 Plan Maintenance and Monitoring of Plan Implementation

Mitigation planning is a dynamic process that must be continually adjusted to account for changes in the community and to further refine the information, judgments and proposals documented in the local mitigation plan. The process used by the Santee-Lynches HMSC to maintain the plan consists primarily of four functions.

The first is to continue to expand and improve the mitigation plan by accomplishing additional technical analyses, such as vulnerability assessments, evaluation of the policy framework of the participating jurisdictions, and post-event analysis of disasters, etc. The second is to continue to expand participation in the planning process by soliciting the involvement of additional agencies from the participating jurisdictions, by implementing public information programs, and by inviting expanded participation by the private sector. The third is to routinely monitor implementation of the initiatives in the plan until each is completed and in-place, and to assess their actual effectiveness following the next relevant disaster event. The fourth is to issue an updated plan document for use by the participating jurisdictions, to inform the community, and, when appropriate, for submittal to state and federal agencies for approval pursuant to the Disaster Mitigation Act of 2000.

The technical analyses conducted by the participating jurisdictions will be an ongoing effort to continually assess the hazards threatening the community, the vulnerabilities to those hazards, and the adequacy of the participating jurisdictions' policy and program framework to control those vulnerabilities. When indicated, the technical analysis also includes formulating proposed mitigation initiatives to eliminate or minimize the identified vulnerabilities. Therefore, the extent to which all of the vulnerabilities of the important

HAZARD MITIGATION PLAN

facilities and neighborhoods in the planning area have been identified is a direct indicator of the mitigation planning remaining to be done. The participating jurisdictions have completed these vulnerability assessments based on the availability of jurisdiction staff. In the next planning cycles, the HMSC will continue to assess the vulnerabilities of facilities and neighborhoods, emphasizing major critical facilities. Vulnerability assessments are fundamental to identifying needed mitigation initiatives to propose for incorporation into the plan, and as this process is continued, additional mitigation initiatives will be proposed for incorporation into the plan.

Another technical analysis important to maintenance of the plan is the expanded and refined evaluation of the policy and program framework of the participating jurisdictions and the adequacy of this framework to control the vulnerabilities of the community. To date, the comprehensive land use plans and land development codes of 15 of the 16 participating jurisdictions have been assessed in detail. The emphasis of this plan maintenance activity during the upcoming planning cycle will be to evaluate the effectiveness of hazard specific local ordinances and the adequacy of their enforcement.

The second activity necessary to maintaining the Santee-Lynches Hazard Mitigation Plan will be to continue to expand participation in the HMSC and the mitigation planning process. The current participants in the planning process and their level of participation is addressed in Section 3 of the plan. Gaining additional participation in the planning is also part of the public information and community outreach component of the Hazard Mitigation approach to plan development. The planned public information activities are discussed in Section 4. Information on the planning process and copies of the Hazard Mitigation Plan will be made available at the County libraries and on each County and City website. In addition, before the Plan is updated and readopted by the respective council's, a public hearing will be conducted to get public input.

The third category of plan maintenance activities that will be undertaken by the Santee-Lynches HMSC will be to monitor the implementation of mitigation initiatives by the participating jurisdictions and their agencies. The HMPC will document the efforts to fund the initiative, to conduct required studies, and to obtain any needed permits, as well as to estimate the time remaining to complete design, needed studies and purchasing or construction. When an initiative is completed, this fact is noted in the program as well. The current status of initiative implementation has been discussed in Section 5 of this plan, and the HMSC will again update this section for the next publication of the plan.

As a part of monitoring the implementation of mitigation initiatives, following a disaster and as a part of the post-event analysis that the HMSC will conduct, the effectiveness of completed mitigation initiatives, or any pre-existing mitigation initiatives, in reducing the human and economic impacts of the event can be estimated. As time passes and disaster events occur, this will enable the HMSC to accumulate a database of "mitigation success stories" with regard to the value of the property losses avoided and the number of fatalities, injuries or illnesses prevented.

Monitoring of the effectiveness of plan implementation and maintenance also involves assessing the effectiveness of the mitigation goals and objectives established for the planning process. As noted above, the HMPC established general goals and a number of specific objectives to guide the participants in the mitigation planning process. The HMSC's attempts to address the established objectives, with the intent of achieving the

associated mitigation goals for the community, is a key measure of the effectiveness of the continuing plan maintenance and plan implementation. As these initiatives are implemented, and monitored for their effectiveness in future disasters, the HMPC will be able to determine the overall success of their mitigation planning effort. In future planning cycles, these goals will be reviewed and re-evaluated to ensure they are still relevant to the unique needs of the community and continue to address current and expected conditions.

The fourth category of plan maintenance activities is to actually incorporate the results of all technical analyses, including the development of new mitigation initiatives, into the updated edition of the Santee-Lynches Hazard Mitigation Plan. In addition to documenting additional technical analysis, efforts to continue to engage the public in the planning process, to expand direct participation in the planning, and to increase representation on the Santee-Lynches HMPC itself will be accomplished. In order to complete this category of plan maintenance activity, the participants will strive to meet the schedule deadlines.

7-6 Plan Updating, Review and Approval

The new planning period is to begin in October 2013. In addition to the start date for the planning cycle, this planning timeline also documents the intended deadlines for completion of key activities in the planning approach. The planned date for release of the next edition of the Santee-Lynches Mitigation Plan is intended to be October 2009.

At the conclusion of the planning cycle, a draft of the updated mitigation plan will be prepared and distributed for public comment and input. Copies of the draft will be at the public libraries and EM Director's office, advertising a review period, and holding a public meeting. Each update will then be provided to state and federal agencies, if desired, for review, comment and/or approval by February 2015. Formal plan approval by the governing bodies of the participating jurisdictions will be next planned for approximately July and August 2009, upon issuance of an updated plan document.

7-7 Implementation through Existing Plans and Programs

One of the methods to most effectively implement the Santee-Lynches Hazard Mitigation Plan is to propose and implement initiatives that will modify other community plans, policies and programs. In Section 8, the individual jurisdictional plans list any proposed initiatives by that jurisdiction that would, when implemented, modify or improve these other plans, policies and programs.

Particular highlights of the HMPC's efforts to implement the mitigation plan through other plans and programs are included in the local Hazard Mitigation Plan. During the revision and updating of the local Comprehensive Plans, flood plain ordinances and other development related regulations, local governments will be encouraged to incorporate provisions to provide for the mitigation of natural disasters and hazards.

7-8 Continued Public Involvement

The HMPC will continue efforts to develop and implement a year-round program to engage the community in the mitigation planning process and to provide them with mitigation-related information and education. These efforts will be to continually invite public comments and recommendations regarding the mitigation goals for the

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community, the priorities for the planning, and the unique needs of each community for mitigation-related public information.

Public information activities that have been completed or are planned by the organizations making up the Santee-Lynches HMSC are compiled in Section 8. Each of these activities continues to engage the community in the planning process through the presentation of a specific topic or program related to or relevant for, hazard mitigation.

Past efforts to engage the community in the mitigation planning process are detailed in Section 3 of this plan. In the future such activities as public meetings or hearings, media releases, public notices, and requests for comments will be used to get public involvement in the hazard mitigation planning process. All comments from the general public along with those from State and Federal agencies will be utilized in updating or modifying the Hazard Mitigation Plan.

7-9 Next Planning Cycles

As given in this section, the Santee-Lynches HMSC has established a schedule and procedure for both plan implementation and plan maintenance that is expected to be very helpful in improving and expanding the mitigation planning process. Initially, the planning efforts by the jurisdictions will seek to build on the analyses and proposals included in this edition of the mitigation plan, primarily by completing more vulnerability assessments, evaluations of plans and programs, and proposing additional mitigation initiatives. Eventually, after a number of planning cycles with ongoing new analyses, all important facilities and vulnerable neighborhoods within all of the participating jurisdictions will have been evaluated and the mitigation planning effort can enter more of a normal maintenance and implementation mode. During these continuing efforts, the HMPC will prioritize its efforts towards assessing all critical facilities.

In addition to these activities for plan maintenance, the HMSC has established a recommended schedule for implementation of the proposed priority initiatives included in this edition of the plan. It is expected that the agencies and organizations that sponsored these initiatives for the plan will, during the next planning cycles, take advantage of timely opportunities and available resources to implement them on the desired schedule, if it is possible to do so.

The Santee-Lynches Hazard Mitigation Plan is a dynamic document, reflecting a continuing and expanding planning process. The efforts of the HMSC will continue into the future, striving to make all of the jurisdictions of Santee-Lynches Region truly disaster resistant communities.