Santee-Lynches Regional Hazard Mitigation Plan 2020-2025

Acknowledgement

Clarendon County Emergency Service
Kershaw County Emergency Service
Lee County Emergency Service
Sumter County Emergency Service

Prepared by
Santee-Lynches Regional Council of Governments

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December 31, 2019

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SECTION 1 – EXECUTIVE SUMMARY

The Santee-Lynches region in South Carolina is comprised of Clarendon, Kershaw, Lee, and Sumter counties. Primarily rural, this region lies between the state's established commercial/ governmental center (Columbia) and the booming coastal region (Myrtle Beach and Charleston). It boasts a population of 223,000 residents and a sprawling rural geography of 2,409 square miles. It is also an aging region -- the population of residents ages 45 and older is growing, increasing from 34.7% of the population in 2000 to 41.5% in 2019. If the same rate of change occurs over the next two decades, half of the region's population will be 45 or older in 2040. The poverty rate, according to the American Community Survey 2013-2017 5-year estimate, is 20.63%. The aging population in combination with the poverty rate, present real challenges for local preparedness officials during a hazardous event. Generally, these individuals along with others create the social vulnerability within a municipality. Communities must take extra effort to ensure that these vulnerable individuals have the appropriate means to find and reach safety in the event of evacuation. Furthermore, community officials must ensure these individuals are reached after a disaster to confirm they have food and necessary medication. Normally, these individuals may not be able to maintain a family disaster safety kit due to living on a fixed income and or lack reliable transportation to acquire the necessary items.

The region is threatened by several natural hazards. These hazards can endanger the health and safety of the population of the community, jeopardize its economic vitality, and threaten the quality of its environment. Because of these vulnerabilities the public and private sector have developed this multi-jurisdictional hazard mitigation plan. Planning for this document has been conducted through local governments of Clarendon County (with municipalities Manning, Summerton, Paxville, and Turbeville), Kershaw County (with municipalities Bethune, Camden, and Elgin), Lee County (with municipalities Bishopville and Lynchburg), and Sumter County (with municipalities Sumter, Mayesville, and Pinewood), and included public input.

This document details the work of the local mitigation committees and Santee-Lynches planning staff over the past year to develop the planning organization, undertake the needed technical analyses, and coordinate and evaluate the mitigation initiatives that have been proposed and implemented by the participating entities. Mitigation actions identified in Section 5 of this plan describe the proposed projects and programs each jurisdiction intends to undertake to reduce the impacts of future disasters.

Each county and municipality established specific goals pertinent to their respective jurisdiction, in order to mitigate potential hazards. Normally, funding is a critical factor in accomplishing some of the goals; however, proactive initiatives in seeking grants and or other funding sources have proven successful. A synopsis of the multi-jurisdictional Regional Goals is provided below:

1. Ensure the protection of critical facilities.
2. Increase public education and awareness of natural hazards.

3. Ensure that the availability and operation of infrastructure will not be significantly disrupted by a natural disaster.
4. Reduce the potential impact of natural disasters on new and existing development.
5. Ensure that emergency shelters have adequate capacity and resources.
6. Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.
7. Reduce the impact of severe winds on homes, buildings, critical facilities, and infrastructure.
8. Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.
9. Ensure the protection and functionality of Communications.
10. Facilitate the preparedness of Emergency Response.

Finally, this plan updates the 2015-2020 Hazard Mitigation Plan, and will continue to be updated and expanded in the future to ensure it addresses changing conditions. *Changes and updates to this plan will be documented in Appendix K.*

[redacted]

Introduction

The Santee-Lynches Regional Hazard Mitigation Planning Committee and the Steering Committees for Clarendon, Kershaw, Lee, and Sumter Counties were convened to update the 2015 – 2020 multi-jurisdiction Hazard Mitigation Plan. More importantly, this update would not be complete without the incorporation of comments received from the general public.

Purpose

The objective is to evaluate and if needed update the hazards, risks, and mitigation strategies / actions in order to ensure the population, neighborhoods, businesses and institutions of the community remain resistant to the impacts of hazards and reduce the vulnerability to hazards.

This update to the multi-jurisdiction Hazard Mitigation Plan is required "…as a condition for receiving certain types of non-emergency disaster assistance, including funding from mitigation projects. The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), as amended by the Disaster Mitigation Act of 2000, provides the legal basis … to undertake a risk-based approach to reducing risks from natural hazards through mitigation planning."[1]

The completion of this document in no way finishes the mitigation efforts; this document will become a living document meant to be reviewed and updated as vulnerabilities are discovered or new methods to mitigate hazards are suggested. Furthermore, various portions of this document are pertinent for planners and municipal officials to consider incorporating into other planning / municipal documents such as comprehensive plans, zoning ordinances, transportation plans, economic development plans, etc.

[1] Source: FEMA – Mitigation Planning Laws, Regulations & Guidance found at http://www.fema.gov/mitigation-planning-laws-regulations-guidance

The Planning Process

Each phase of the planning process was stipulated by U.S. Law governed by the Federal Emergency Management Agency (FEMA). The following FEMA requirements addressed in this process were outlined in FEMA March 2013 Local Mitigation Planning Handbook:

- FEMA 44CFR §201.6(c)(1): The plan shall document the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.
- FEMA 44CFR §201.6(b)(1): The planning process shall include an opportunity for the public to comment on the plan during the drafting stage and prior to plan approval.
- FEMA 44CFR §201.6(b)(2): The planning process shall include an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process.
- FEMA 44CFR §201.6(b)(3): The planning process shall include the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.
- FEMA 44CFR §201.6(c)(4) (iii): The plan maintenance process shall include a discussion on how the community will continue public participation in the plan maintenance process.
- FEMA 44CFR §201.6(c)(4)(i) The plan maintenance process shall include a section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

Direction of Professional Staff

Santee-Lynches Regional Council of Governments (SLRCOG) staff provided direction and guidance to the planning process utilized in the development and updating of this plan.

Coordinating with Local Jurisdictions

The Santee-Lynches Hazard Mitigation Planning Process began with the formulation of Hazard Mitigation Planning Committee and Local Hazard Mitigation Steering Committee.

The Planning Committee consists of Emergency Management Directors and key representatives. The Steering Committee consists of representatives from each jurisdiction within the county and representatives from the various departments within those jurisdictions. Individuals who worked with the Local Disaster Preparedness Agency on a regular basis or dealt with some phase of Emergency Preparedness or response, were also asked to be involved in the process. The list of individuals and agencies on the Planning and Steering Committees are found in Appendix C.
Those agencies identified in Appendix C were sent an e-mail in July of 2019 reminding each of the appropriate Planning and Steering Committees that it was time to update the Inter-jurisdiction Hazard Mitigation Plan. Each member

was asked to review and update the existing plan.

Once the vast majority of necessary updates were received, the SLRCOG staff included the updates in the plan. Upon completion of the updates, a series of other meetings were held with the individual Steering Committee members. Meetings were held on the following dates and locations:

- Clarendon County – September 17, 2019 and September 23, 2019
- Kershaw County – September 12, 2019 and September 16, 2019
- Lee County – September 13, 2019 and September 18, 2019
- Sumter County – September 19, 2019

During these meetings, the 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). Applicable departments also provided updates on any progress made on the individual action items within the Mitigation Strategies. Information received from these meetings was then incorporated into the updated plan by SLRCOG Staff.

Note: In some cases where representatives of smaller jurisdictions were not able to attend meetings they were contacted by telephone or email by SLRCOG staff to receive their input into the updated plan.

After a series of meetings, SLRCOG staff worked to compile data regarding hazard events within the various jurisdictions since the adoption of the previous plan. A preliminary draft of the plan was compiled and sent out via Dropbox and by e-mail to both the Planning and Steering Committees so that they might begin to review the plan and provide any necessary updates.

A Planning Committee was scheduled on August 23, 2019 to discuss next steps and status of the distributed draft updated plan. SLRCOG staff took this opportunity to update the Emergency Management Directors and the South Carolina Emergency Management Division (SCEMD) staff on the progress that had been made in updating the plan.

Coordinating with the Public

During the August 23, 2019 Planning meeting a schedule for public meetings were agreed upon. The dates for the public meetings in each county are listed below:

- September 16, 2019 – Kershaw County
- September 17, 2019 – Lee and Sumter Counties
- September 18, 2019 – Clarendon County

A preliminary draft of the plan was also placed on the SLRCOG website prior to the public meetings to allow the public to view or submit comments if they were unable to attend the public meetings. Additionally, comment and suggestion boxes were placed in conspicuous locations within county libraries. Furthermore, once all public comments were addressed, the public notice placed in the newspapers stated the plan would again be placed on the SLRCOG website from August 23, 2019 – December 1, 2019 in order to receive any final public

comments before submission of the plan to SCEMD and FEMA.

Coordination with the South Carolina Emergency Management Division

Once a revised plan was reviewed by the Planning Committee, individual Steering Committees and the public, changes, input, and suggestions were incorporated into the plan. The plan was then submitted to the SCEMD for review.

Local Jurisdiction Adoption

Adoption of the Multi-Jurisdictional Hazard Mitigation Plan will be done per FEMA guidance reflected in FEMA March 2013 Local Mitigation Planning Handbook, which states the following:

- FEMA 44 CFR §201.6(c)(5) The plan shall include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan.
- FEMA 44 CFR §201.6(c)(5) For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

According to the FEMA March 2013 Local Mitigation Planning Handbook, as a time saving measure, formal adoption of the plan will be done after Approval Pending Adoption (APA) from FEMA. The sample resolution that each local jurisdiction will be asked to adopt is included on the following page. Once APA is received from FEMA, the plan will be officially adopted by each jurisdiction. Once adopted, copies of the resolutions will be added to the plan in Appendix J, and a copy of each jurisdiction's resolution will be forwarded to appropriate State and Federal officials.

Sample Adoption Resolution

RESOLUTION

CALLING FOR THE ADOPTION OF THE UPDATED HAZARD MITIGATION PLAN FOR THE SANTEE-LYNCHES REGION OF SOUTH CAROLINA

Whereas, (Name of local government) has experienced the effects of natural hazard events; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm and damage to people and property; 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; and

WHEREAS, the Hazard Mitigation Plan for the Santee-Lynches Region has been widely circulated for review by residents, business organizations / professional organizations, regional, and local government agencies and has been supported by those reviewers; and

NOW, THEREFORE Be It Resolved: The Santee-Lynches Hazard Mitigation Plan is hereby adopted as an official plan of (Name of local government), and

(Name of local government or appropriate Hazard Mitigation Planning Committee) will continue to monitor, review, maintain and periodically report on the progress towards achieving the Action Plan Goals; and will submit appropriate revisions, updates and hazard occurrences as stipulated in the plan.

This Resolution becomes effective as of the _____day of _____, 20__.

_____
Type Name and Signature of Chief
Administrative or Elected Officials

ATTEST:

_____
Typed Name and Title

Jurisdictional Participation

The planning process used in updating the Hazard Mitigation Plan for the Santee-Lynches Region and its counties was based on the FEMA *Local Mitigation Planning Handbook*, March 2013. The handbook provided the necessary guidance on developing and updating this plan in order to meet the requirements of Title 44 Code of Federal Regulations (CFR) §201.6 for FEMA approval and eligibility to apply for FEMA Hazard Mitigation Assistance grant programs

The planning process was led by members of the Santee-Lynches Regional Hazard Mitigation Planning Committee and the county Hazard Mitigation Steering Committees with support from the staff of SLRCOG.

The Santee-Lynches Hazard Mitigation Planning Committee had the role of oversight and coordination, but it also worked alongside and with the support of the local Hazard Mitigation Steering Committee in each county of the region.

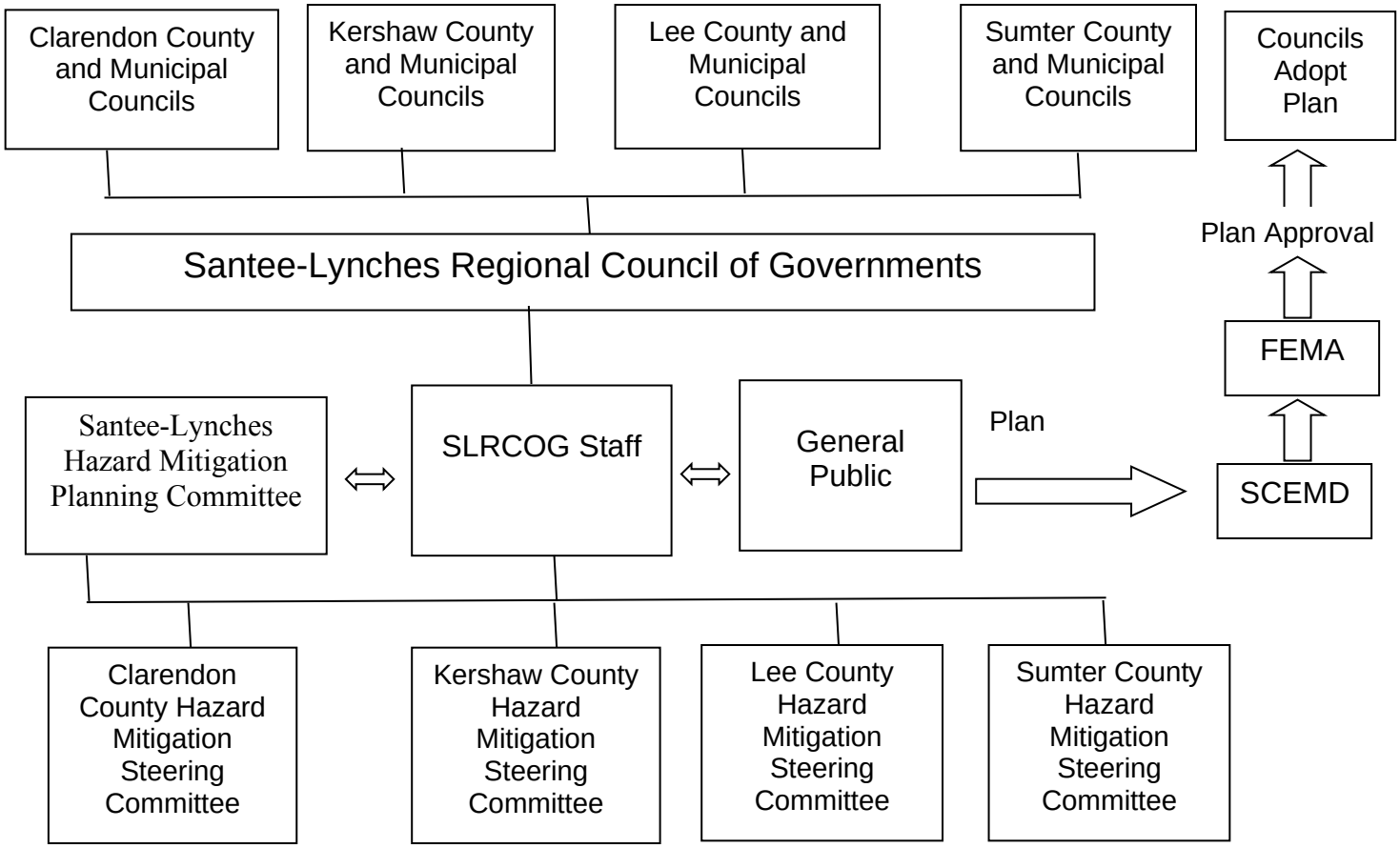
The committee also determined whether a jurisdiction met the threshold for participation in the planning process. A jurisdiction had to do one or more of the following:

1. Participate in the activities of the Planning Committee;
2. Attend a meeting(s) of the County Hazard Mitigation Steering Committee;
3. Respond to correspondence from staff asking for responses on natural hazard prioritization and mitigation measures; or
4. Prepare and/or approve an action plan and adopt applicable portions of the Hazard Mitigation Plan.

In some cases, while representatives from smaller jurisdictions were not able to attend meetings of the Steering Committees, the SLRCOG staff was able to consult with them via email and telephone conversations.

Figure 1 on the next page shows organizational structure established to produce and oversee the completion of the hazard mitigation and risk assessment plan, and to ensure its ongoing implementation.

Figure 1 - Organizational Structure for Hazard Mitigation Plan



By creating a Hazard Mitigation Steering Committee in each county, all groups having a role/capacity in responding to emergency or hazard situations were involved in updating the risk assessment and capability assessment as well as the mitigation project development process.

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 governments' policies, plans, and requirements effectively address the hazards posing the greatest risk to the community, the vulnerability to future disasters can be reduced.

Shown in Tables 2 lists the codes, ordinances, plans that local governments in the Santee-Lynches Region have adopted to mitigate the impact of natural hazards, and Table 3 lists the points of contact for planning in the Santee-Lynches Region.

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. 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. This extensive review of the existing plans, studies, reports, and technical information within each county and their respective municipalities were key in the update this plan.

General Public Participation

The Planning and Steering Committees and other participating agencies and organizations have been active in attempting to engage the general public in the planning process. Furthermore, with the plan adoption, it is the intent to have the public engaged in identifying risks, areas of concern, recommendations for mitigation, and to address new issues that have surfaced since the release of the document. One method to ensure public input is to make this plan readily accessible. Upon the official adoption of the inter-jurisdictional hazard mitigation plan, the plan will be available in each county and respective municipality and on the website of the Santee-Lynches Regional Council of Governments.

The bottom-line is, the public is always welcome to make comments and recommendations regarding the mitigation goals for the community, the priorities for the planning, and the unique needs of each community.

Public Comments can be sent to the Santee-Lynches Regional Council of Governments at any time by the following methods:

- Mail: 2525 Corporate Way Suite 200, Sumter SC 29154
- FAX at 803-773-9903

Each comment received will be addressed to the specific county and/or municipality for consideration and inclusion into Appendix K.

Additional comments on how to continue and maintain public involvement is included in Section 6 – Plan Maintenance.

Summary

The Steering Committees recognize the need to be dedicated to the safety and welfare of the communities within their respective jurisdiction. Within this planning process update all jurisdictions that participated in the previous plan participated in the update of this plan and there were no new jurisdictions participating. See Table 3-1 which identifies jurisdictions that participated. Furthermore, the participating jurisdictions reviewed and incorporated existing plans, studies, reports, and technical information into this plan update such as the information outlined in Table 2, as well as the 2018 South Carolina State Hazard Mitigation Plan, and data from various other sources.

Table 1 - Jurisdiction Participation

JURISDICTION	PARTICIPATED	Continuing/ New/ Not Participating
Clarendon County	Yes	Continuing
City of Manning	Yes	Continuing
Town of Summerton	Yes	Continuing
Town of Paxville	Yes	Continuing
Town of Turbeville	Yes	Continuing
Kershaw County	Yes	Continuing
City of Camden	Yes	Continuing
Town of Bethune	Yes	Continuing
Town of Elgin	Yes	Continuing
Lee County	Yes	Continuing
City of Bishopville	Yes	Continuing
Town of Lynchburg	Yes	Continuing
Sumter County	Yes	Continuing
City of Sumter	Yes	Continuing
Town of Mayesville	Yes	Continuing
Town of Pinewood	Yes	Continuing
SLRCOG (Planning Agency for the region)	Yes	Continuing

Table 2 - 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	Scott Tanner (803) 435-8477	✓	✓	✓	✓	✓	✓	✓
Town of Paxville		-	-	-	✓	✓	✓	-
Town of Summerton		✓	✓	✓	✓	✓	✓	✓
Town of Turbeville		✓	✓	-	✓	✓	✓	✓
KERSHAW COUNTY	Eugene Faulkenberry (803) 425-1522	✓	✓	✓	✓	✓	✓	✓
Town of Bethune		✓	✓	-	✓	✓	✓	-
City of Camden		✓	✓	✓	✓	✓	✓	✓
Town of Elgin		✓	✓	-	✓	✓	✓	-
LEE COUNTY	Mike Bedenbaugh (803) 484-5274	✓	✓	✓	✓	✓	✓	✓
City of Bishopville		✓	✓	✓	✓	✓	✓	-
Town of Lynchburg		✓	✓	-	✓	✓	✓	-
SUMTER COUNTY	Erick D. Hayes (803) 436-2158	✓	✓	✓	✓	✓	✓	✓
Town of Mayesville		✓	✓	-	✓	✓	✓	-
Town of Pinewood		✓	✓	-	✓	✓	✓	-
City of Sumter		✓	✓	✓	✓	✓	✓	✓

Source: SLRCOG - Revised 2019

Table 3 - Points of Contact for Local Planning in the Santee-Lynches Region

LOCAL GOVERNMENT	PLANNING / ZONING OFFICIAL CONTACT	TELEPHONE NUMBER / FAX NUMBER
Clarendon County	Maria M. Rose, PO/ZA David Epperson, A	(803) 435-8672 / (803) 435-2208 (803) 435-0135 /
City of Manning	Scott Tanner, ZA	(803) 435-8477 / (803) 435-4608
Town of Paxville	Elisabeth Milam, C	(803) 452-5113 / (803) 452-5199
Town of Summerton	Bucky Brailsford, ZA	(803) 485-2525 / (803) 485-2914
Town of Turbeville	Ray Morris, ZA	(843) 659-2781 / (843) 659-2781
Kershaw County	Michael Conley, ZA	(803) 425-1500 / (803) 425-7676
Town of Bethune	Randy Pruitt, ZA	(843) 334-6238 / (843) 334-6114
City of Camden	Shaun Putnam, PO	(803) 432-2421 / (803) 425-6049
Town of Elgin	Randy Pruitt, ZA	(803) 438-2362 / (803) 408-1155
Lee County	Arlene Samuel, PO Alan Watkins, A	(803) 484-5341 / (803) 484-5735
City of Bishopville	Hanna Parler, PO/ZA	(803) 484-9418 / (803) 484-5126
Town of Lynchburg	Alan Watkins, A	(803) 437-2933 / (803) 437-2949
Sumter County	George McGregor, PO Gary Mixon, A	(803) 774-1660 / (803) 774-1606 (803) 436-2102 / (803) 436-2108
Town of Mayesville	Theresa Castillo, C	(803) 453-6161 / (803)453-5920
Town of Pinewood	George McGregor, PO Gary Mixon, A	(803) 452-5447 / (803) 452-5878
City of Sumter	George McGregor, PO Helen Roodman, ZA	(803) 774-1660 / (803) 774-1606 (803) 774-1636 / (803)774-1606

Source: SLRCOG - Revised 2014
Note: A = Administrator PO = Planning Official/Director C = Town Clerk ZA = Zoning Administrator

SECTION 4 – HAZARD IDENTIFICATION AND RISK ASSESSMENT

Introduction

Since this is a multi-jurisdictional hazard mitigation plan, a brief overview of the region is provided to show the interconnectivity associated in the region, and how associated risks cut across municipal and county jurisdictional lines.

Moreover, hazard identification and associated risks are consistent with the steps outlined in FEMA March 2013 Local Mitigation Planning Handbook which are as follows:

- FEMA 44CFR §201.6(c) (2)(iii) For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.
- FEMA 44CFR §201.6(c) (2)(i) The risk assessment shall include a description of the type, location, and extent of all-natural hazards that can affect the jurisdiction.
- FEMA 44 CFR §201.6(c) (2)(i) The risk assessment shall include information on previous occurrences of hazard events on the probability of future hazard events.
- FEMA 44 CFR §201.6(c) (2)(ii) The risk assessment shall include an overall summary of each hazard and its impact on the community.
- FEMA 44 CFR §201.6(c) (2)(ii) All plans must address NFIP insured structures that have been repetitively damaged by floods.
- FEMA 44 CFR §201.6(d)(3) A local jurisdiction must review and revise its plan to reflect changes in development.

Regional Overview

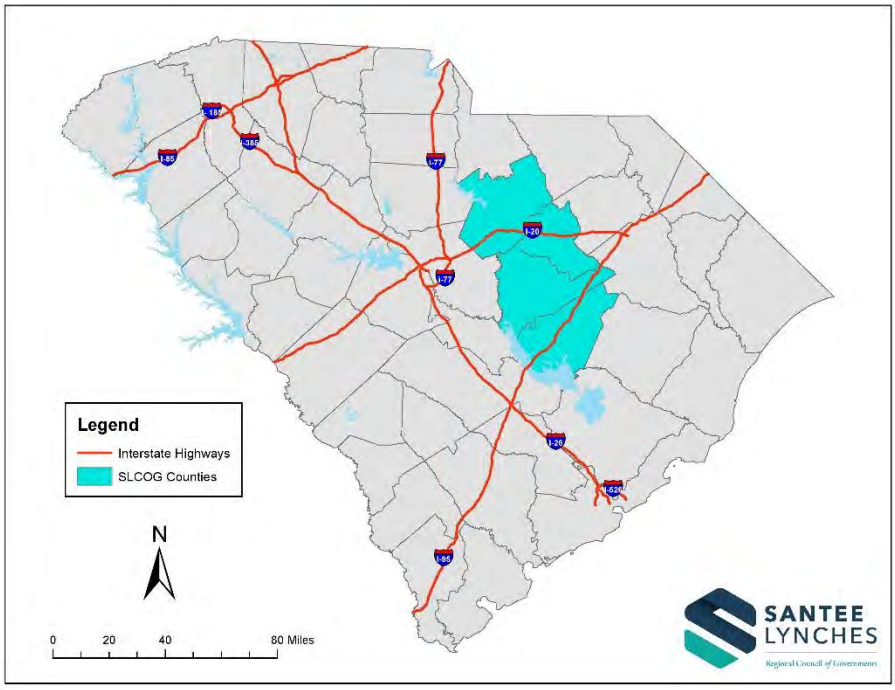
The Santee-Lynches Region has strategic linkages with the Southeastern Region through the federal interstate and aviation systems. The Region is within commuting distance of major cities and ports throughout the eastern and southeastern portion of the United States. The Region is served directly by, 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. Map 1 depicts the regional jurisdictional region strategic location. The jurisdiction area is highlighted in blue.

Map 1 – Regional Strategic Location



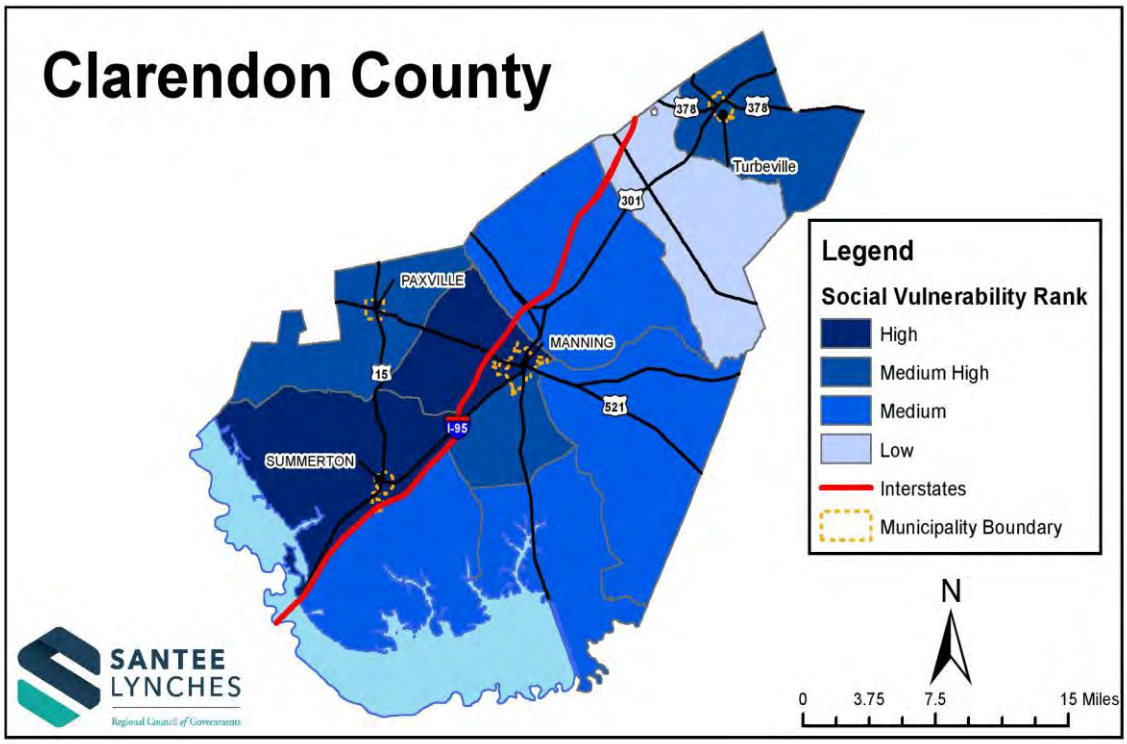
Growth Trends and Population Vulnerability

Tables 4, 5 and 6 provide a brief snapshot of the population fluctuations growth threads, and future population projections within the region. All the counties within the region increased in populations as reflected in the 2018 U.S. Census estimate except for Lee County which lost population.

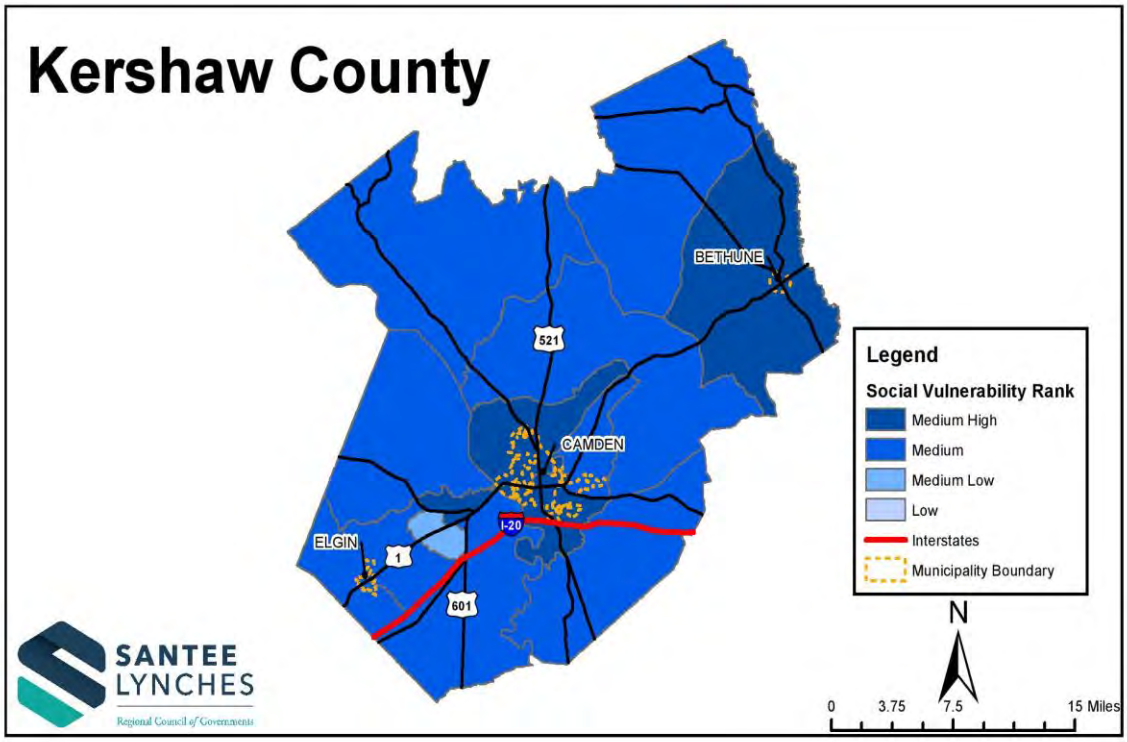
Population Vulnerability remains a vital concern when a natural hazard strike. The vulnerable populations are the most at risk in finding alternative options for safety. Lee County, according to the State of South Carolina Hazards assessment of 2015 - 2019,[2] was ranked in the top 20% most socially vulnerable counties out of the State's 46 counties. The main driver of increasing social vulnerability was due to race, gender, unemployment, migrants and ethnicity, and rural special needs. Those conditions still impact Lee County, as well as the other counties within the regional jurisdiction. Broken out on the following pages are maps that depict the social vulnerability of each of the counties (Maps 2 through 5). The highlighted dark blue and light blue areas are high to medium vulnerability. Lee County out of the four counties within the region still has the greatest vulnerability risk.

[2] Source: State of South Carolina Hazards Assessment 2010-2014, American Community Survey

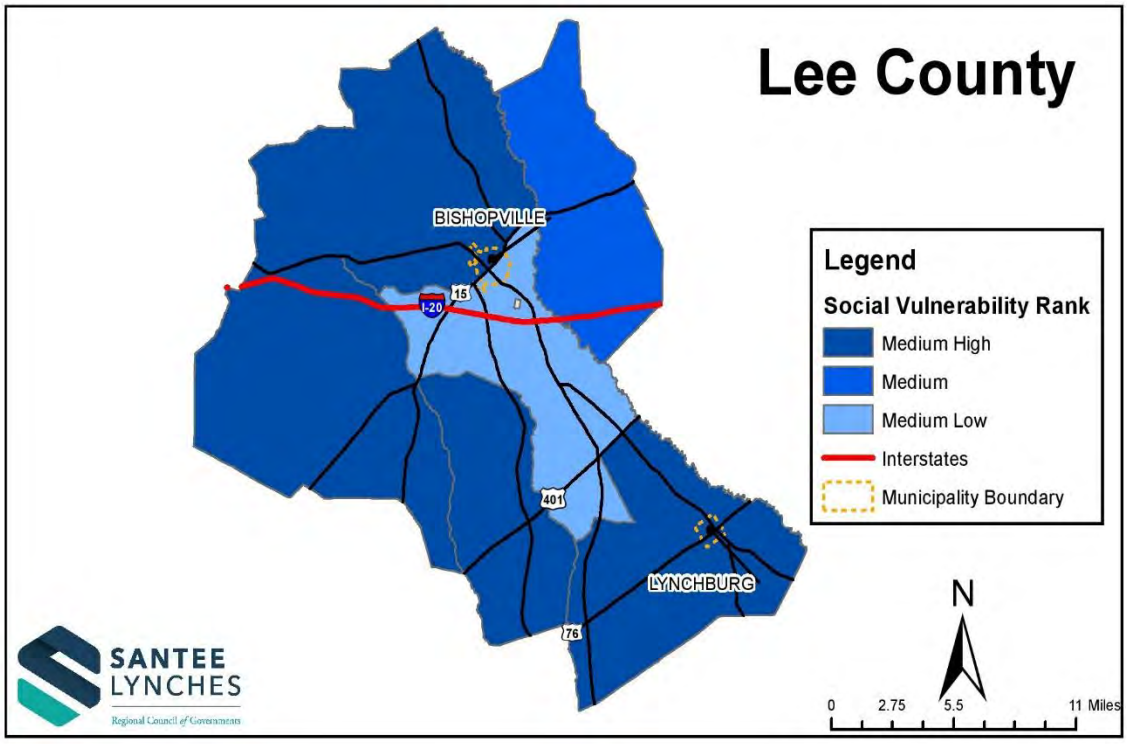
Map 2 - Social Vulnerability Clarendon County



Map 3 - Social Vulnerability Kershaw County



Map 4 - Social Vulnerability Lee County



Map 5 - Social Vulnerability Sumter County

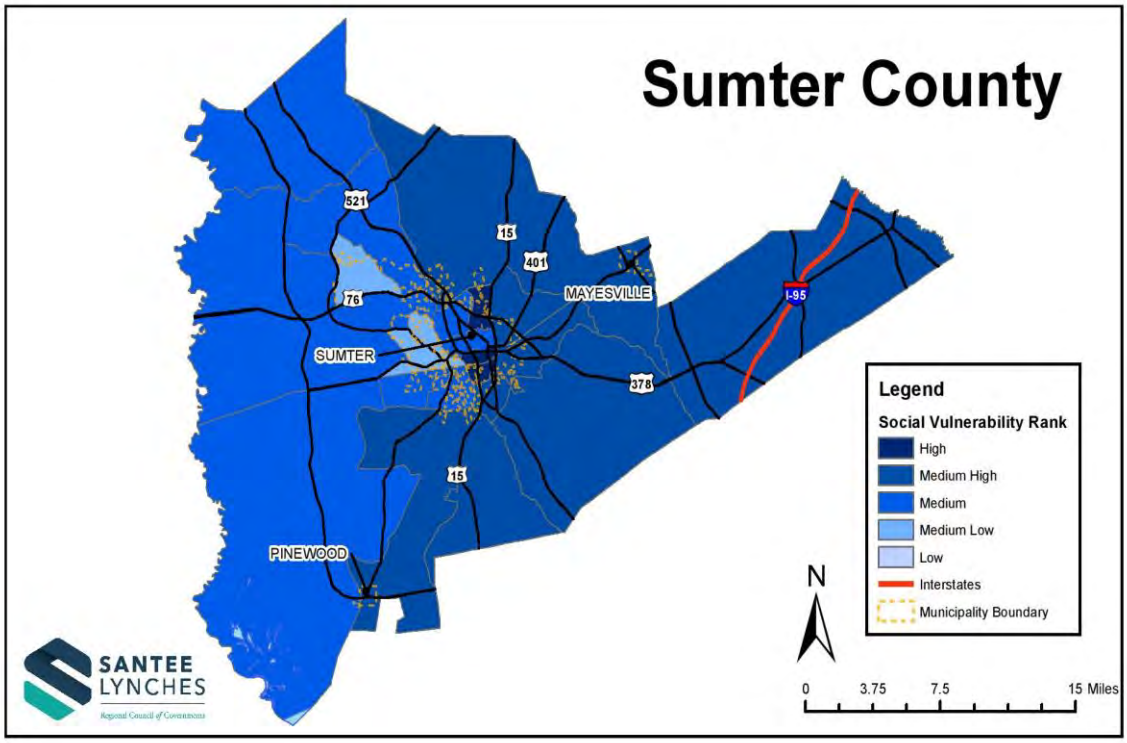


Table 4 - Santee-Lynches Region Population History

COUNTY	LAND AREA (Sq Mi)	1940	1950	1960	1970	1980	1990	2000	2010	2018 Census Estimate	Change 2010-2018
Clarendon County	607.21	31,500	32,215	29,494	25,604	27,464	28,450	32,502	34,971	33,700	-1271
City of Manning	2.41		2,775	3,917	4,025	4,746	4,428	4,025	4,108	3,941	-167
Town of Paxville	1.05		208	216	261	244	218	248	185	179	-6
Town of Summerton	1.15		1,419	1,504	1,305	1,176	975	1,061	1,000	945	-55
Town of Turbeville	1.26		271	355	422	544	698	602	766	789	23
Clarendon County (balance)	601.34	31,500	27,542	23,502	19,591	20,754	22,131	26,566	28,912	27,846	-1066
Kershaw County	726.26	32,913	32,237	33,585	34,727	39,015	43,599	52,647	61,697	65,592	3,895
Town of Bethune	1.14		639	506	481	405	420	352	334	347	13
City of Camden	9.65		6,986	8,532	7,462	6,696	6,676	6,682	6,838	7,196	358
Town of Elgin	6.97		183	374	595	622	672	806	1,311	1,579	268
Kershaw County (balance)	708.50	32,913	24,429	24,173	26,189	31,292	35,831	44,807	53,214	74,714	21,500
Lee County	410.30	24,908	23,173	21,832	18,323	18,929	18,437	20,199	19,220	17,142	2,078
City of Bishopville	2.36		3,076	3,586	3,404	3,429	3,560	3,670	3,471	2,983	488
Town of Lynchburg	1.13		506	544	546	534	475	588	373	343	30
Lee County (balance)	406.81	24,908	19,591	17,702	14,373	14,966	14,402	15,941	15,376	20,468	5,092
Sumter County	665.50	52,463	47,634	79,941	79,425	88,243	102,637	104,646	107,456	106,512	-944
Town of Mayesville	1.03		706	750	757	663	694	1,001	731	718	-13
Town of Pinewood	0.97		578	570	687	689	600	459	538	533	-5
City of Sumter	26.58		20,185	23,062	24,555	27,650	41,943	39,643	40,524	39,656	-868
Sumter County (balance)	636.92	52,463	26,165	55,559	53,426	59,241	59,400	63,543	65,663	65,605	-58
S-L Region	2,409	141,784	135,259	164,852	158,079	173,651	193,123	209,994	223,344	297,918	74,574

Source: U.S. Census Bureau, 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010 and 2018. Calculations by SLRCOG Staff.

Table 5 - Santee-Lynches Region Growth Trends 1940 – 2018

County	1940-1950	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	2010-2018 (Estimate)
Clarendon	2.27%	-8.45%	-13.19%	7.26%	3.59%	14.24%	7.60%	3.6%
Kershaw	-2.05%	4.18%	3.40%	12.35%	11.75%	20.75%	17.19%	6.5%
Lee	-6.97%	-5.79%	-16.07%	3.31%	-2.60%	9.56%	-4.47%	-10.8%
Sumter	-9.20%	67.82%	-0.65%	11.10%	16.31%	1.96%	2.69%	-0.9%
S-L Region	-4.60%	21.88%	-4.11%	9.85%	11.21%	8.74%	6.40%	6.39%

Table 6 - Santee-Lynches Region Population Projection 2018 - 2030

County	2018	2030*	Change	% Change	% Regional Change
Clarendon	33,700	29,030	-4,670	-13.9	38%
Kershaw	65,592	67,870	2,278	3.5	18.75%
Lee	17,142	14,100	-3,042	-17.7	25%
Sumter	106,512	104,290	-2,222	-2.1	18.25%
S-L Region	222,946	215,290	-7,656	-3.4	

Source: U.S. Census Bureau, 2018 estimates

*Projections made by staff of SC Revenue and Fiscal Affairs Office, http://abstract.sc.gov/chapter14/pop5.html

Regional Development

During the past 5 - 10 years, the physical growth in the region has varied from County to County. Overall, the development trend has most noticeably been along the thoroughfares that have adequate infrastructure in place, or in areas where infrastructure can be made available. Maps 7 through 15 depict the Inter-jurisdictional transportation infrastructure, Water Lines and Wastewater Lines. These maps show the interconnection of these vital assets. Table 8 reflects the square mileage located within the inter-jurisdictional area. Plus, an overview of development by county is reflected in Table 9.

Moreover, it is imperative to mitigate natural hazards in order to keep the regional jurisdictional businesses and industrial complexes open so that individuals will not lose wages due to a natural hazard that closes business and industries over an extended period. The loss wages of employees will impact the economic vitality of the region. The U.S. Department of Labor Quarterly Census of Employment and Wages has the ability to break out weekly wages, number of employees, and number of employment establishments for each county in the State. A map insert of this data is below. Additionally, listed to the right is a breakout for our region jurisdiction for weekly wages, number of employed and number of employment establishments.

Table 7 – Wages & Employment

County	Wages	Employed	Number of Establishments
Clarendon	$569	6,808	590
Kershaw	$685	15,866	1,123
Lee	$624	3,468	287
Sumter	$697	35,865	1,967

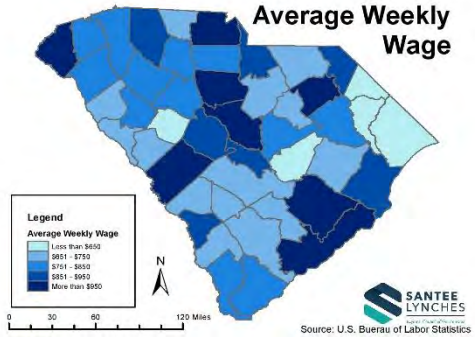
Not only will employee wages impact the region but the loss of employment establishments.

Moreover, in Tables 10 through 13 are listed the historical economic loss associated with the identified hazards. The data is from 1960 – 2018 and provided by The SHELDUS database maintained By Arizona State University. These associated hazard costs reinforce the need to find ways to mitigate hazards within the jurisdiction.

Table 8 - Regional Area in Square Miles

County	Population	Total Area	Water Area	Land Area
Clarendon	34,971	695.65	88.71	606.94
Kershaw	61,697	740.40	13.83	726.56
Lee	19,220	411.23	1.05	410.18
Sumter	107,456	682.00	17.02	665.07
Total	223,344	2,529.00	121.00	2408.75
State	4,625,364	32,020.49	1,959.79	30,060.70
Regional%	4.83%	7.90%	6.15%	8.01%

Source: US Census 2010

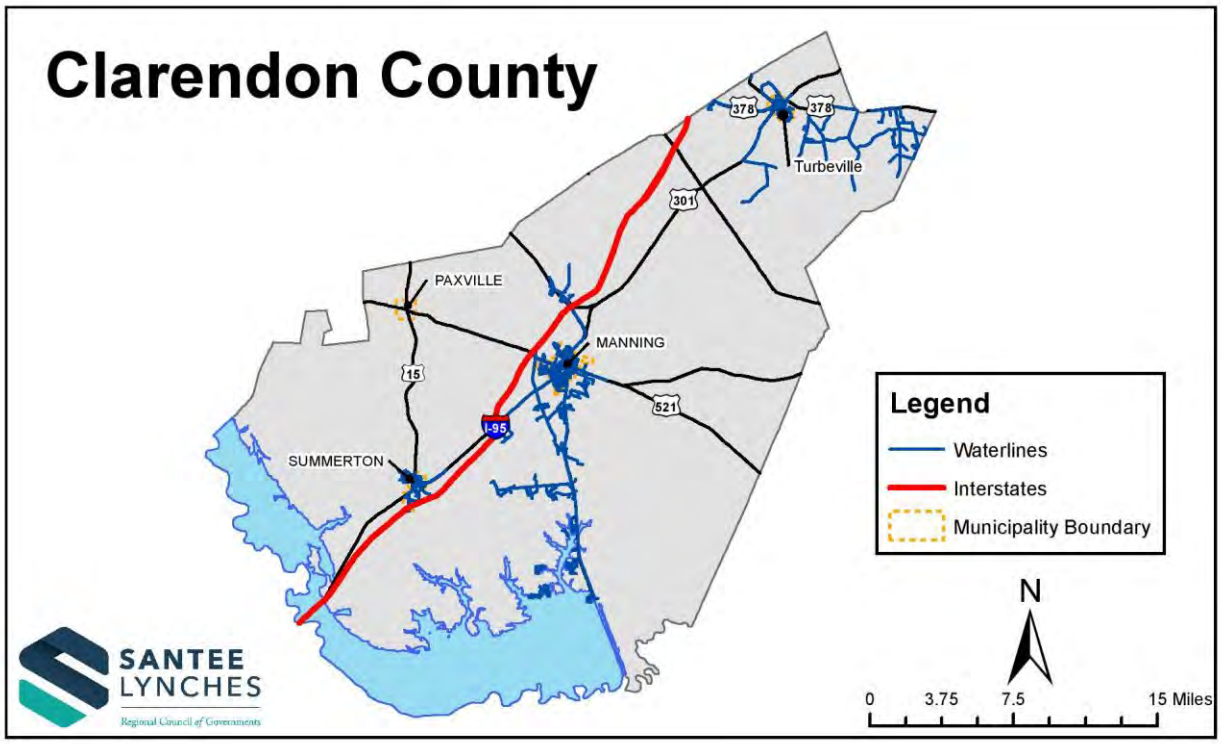


Map 6 - State Average Weekly Wages

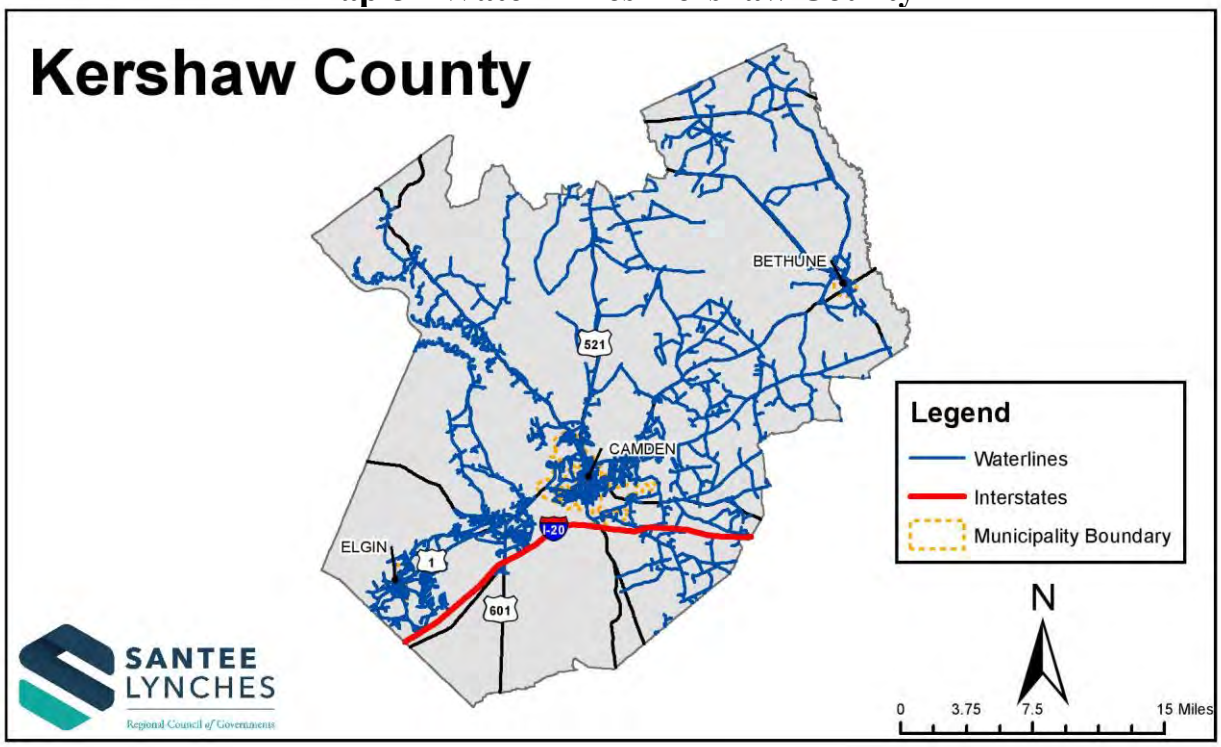
Table 9 - Regional Growth Development

Clarendon County	Kershaw County	Lee County	Sumter County
Potential residential growth is being focused around Lake Marion and along Highway 260 in the corridor from Manning to Lake Marion. Since the SLRCOG's highway improvement of U.S. Highway 521 from Manning to Sumter, which connects with Interstate 95 and has access to rail, commercial development along this stretch has been ongoing. Investment in solar energy has steadily been growing in South Carolina with Clarendon County beginning to receive significant investment and inquiries about developing solar energy facilities. In 2016, Adger Solar announced a $200 million investment into two solar farm projects in the county which are expected to generate enough electric to supply 25,000 homes annually. This has helped in opening new jobs and economic development opportunities in the county.	Residential development continues to be west of the Wateree River primarily in the Elgin-Lugoff area of the County, with Camden and surrounding area becoming a bedroom community for the Columbia Metro area. Commercial and industrial developments remain concentrated along US Highway 601 and US Highway 1.	As of December 2018, the Agtruss Corporation, a leading manufacturer of agricultural trusses for the poultry and livestock industries, is expanding its Lee County operations. The company's $2.8 million investment is projected to create 25 new jobs.	With the addition of 3rd Army from Atlanta being reassigned to Shaw Air Force Base (AFB) and the completion of Continental Tire opening up a major manufacturing distribution center, residential and commercial development has allowed for the growth around Shaw AFB in the Dalzell area on the North and Highway 15, and the Furman areas on the South plus growth southward around the Lakewood area. Additionally, Central Carolina Technical College in the city of Sumter has been instrumental in constructing a new Advanced Manufacturing Technology Training center that opened in May 2015.

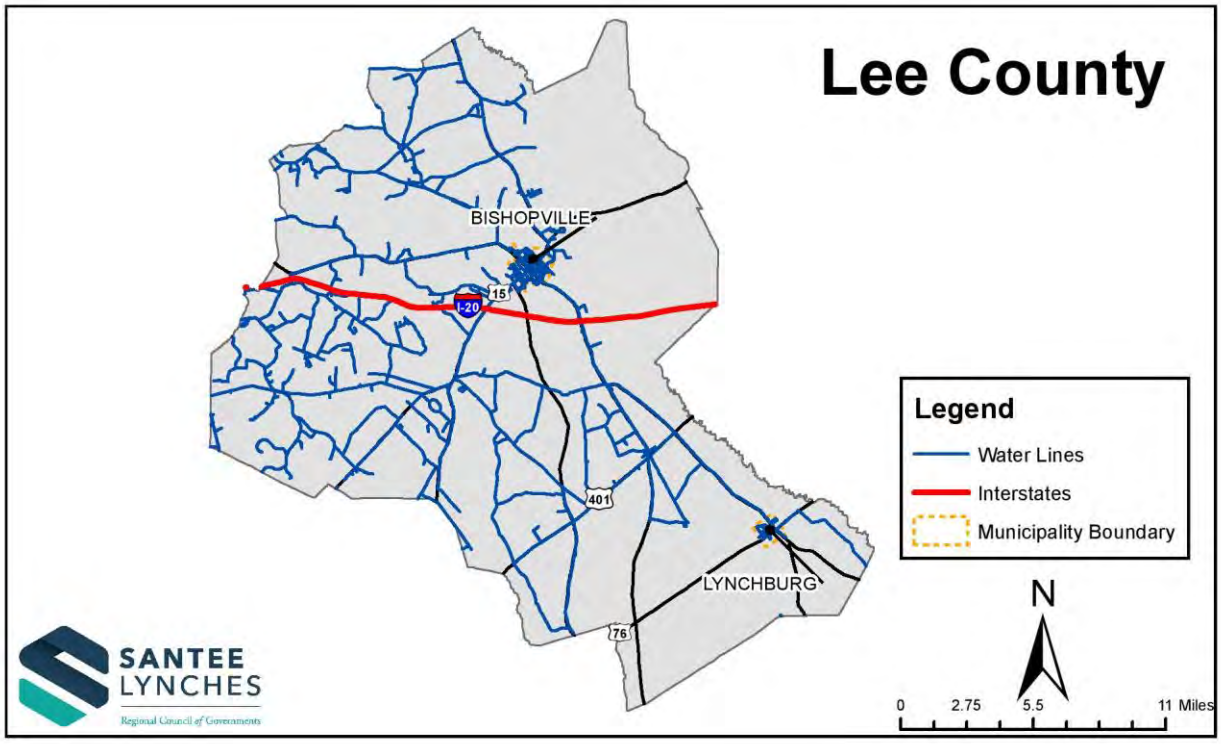
Map 7 - Water Lines Clarendon County



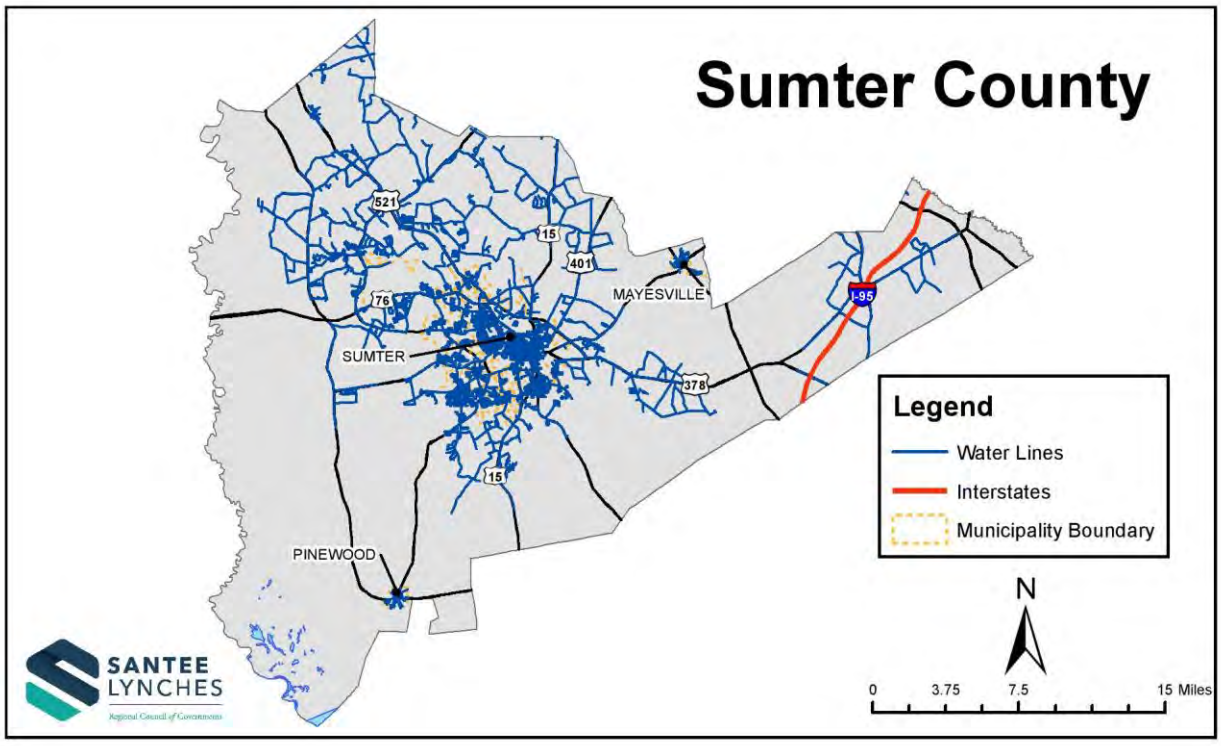
Map 8 - Water Lines Kershaw County



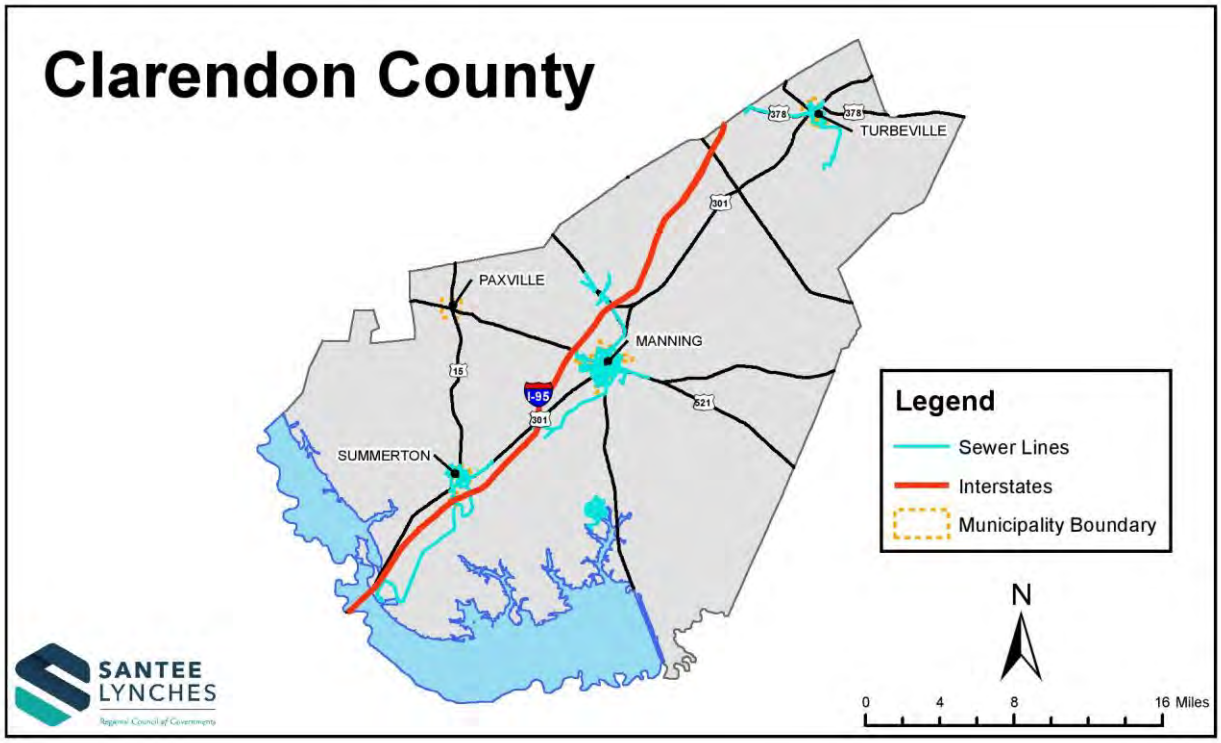
Map 9 - Water Lines Lee County



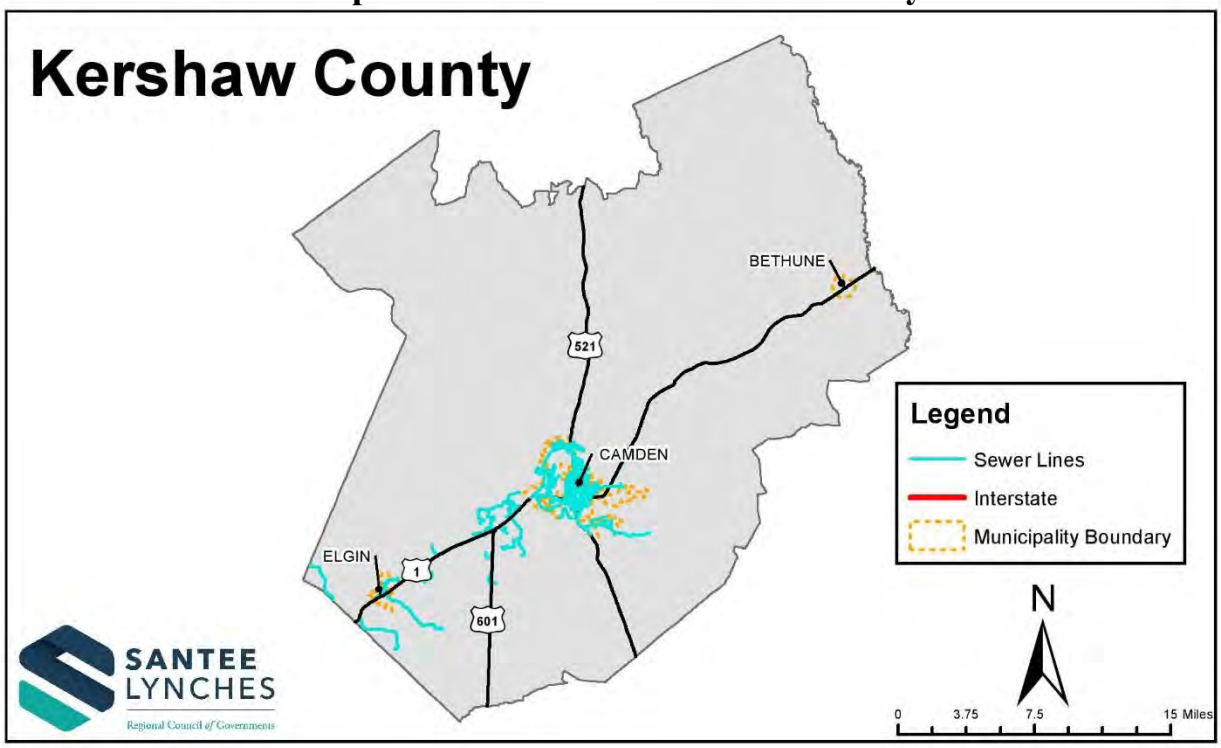
Map 10 - Water Lines Sumter County



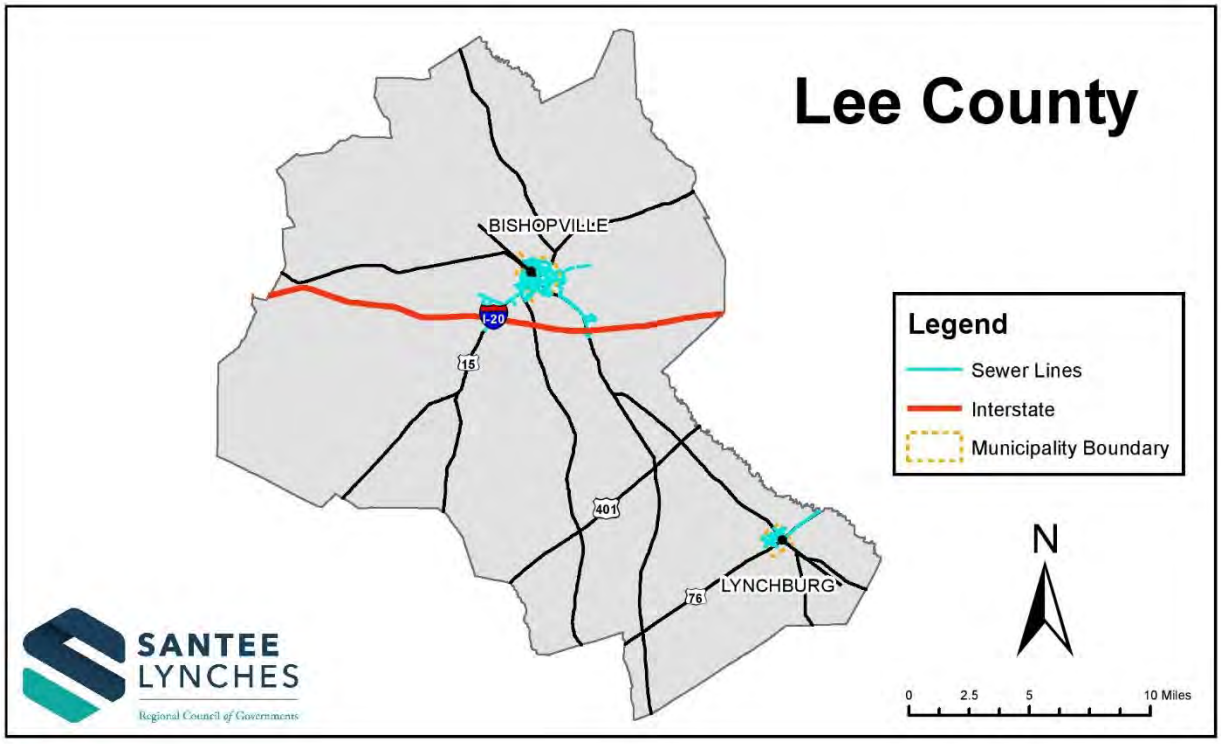
Map 12 - Sewer Lines Clarendon County



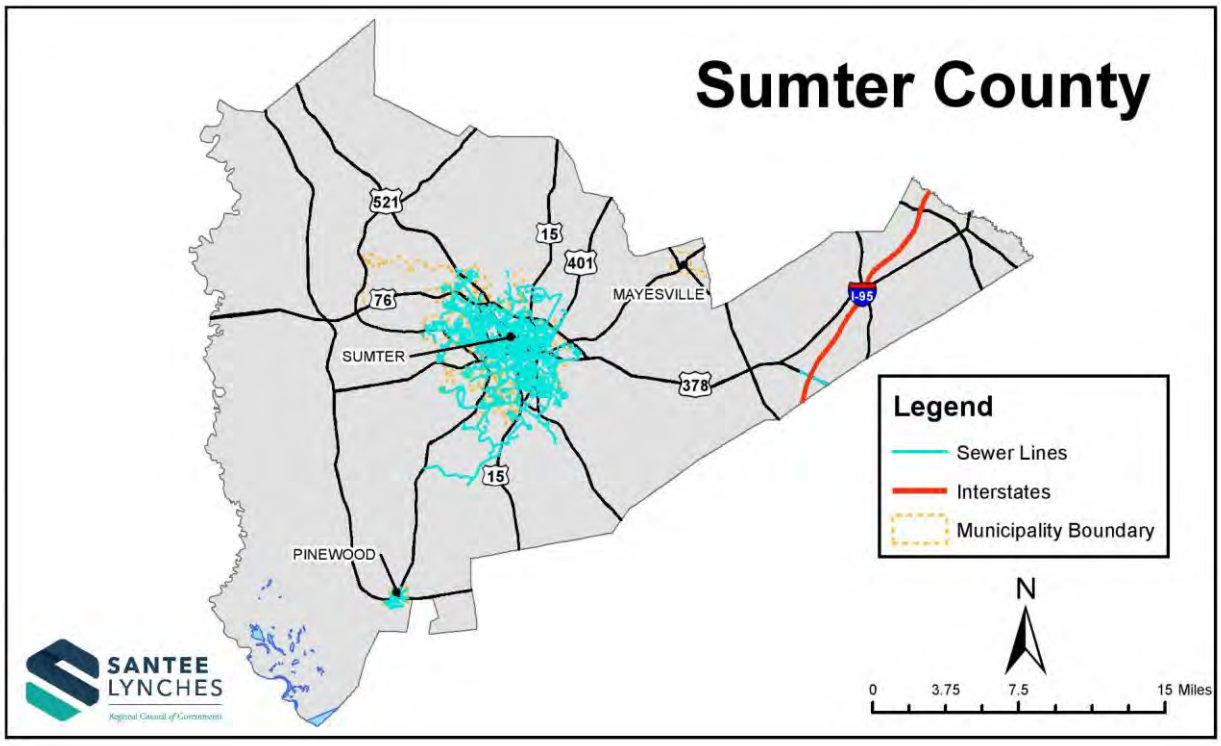
Map 11 - Sewer Lines Kershaw County



Map 13 - Sewer Lines Lee County



Map 14 - Sewer Lines Sumter County



Map 15 - Region Roadways

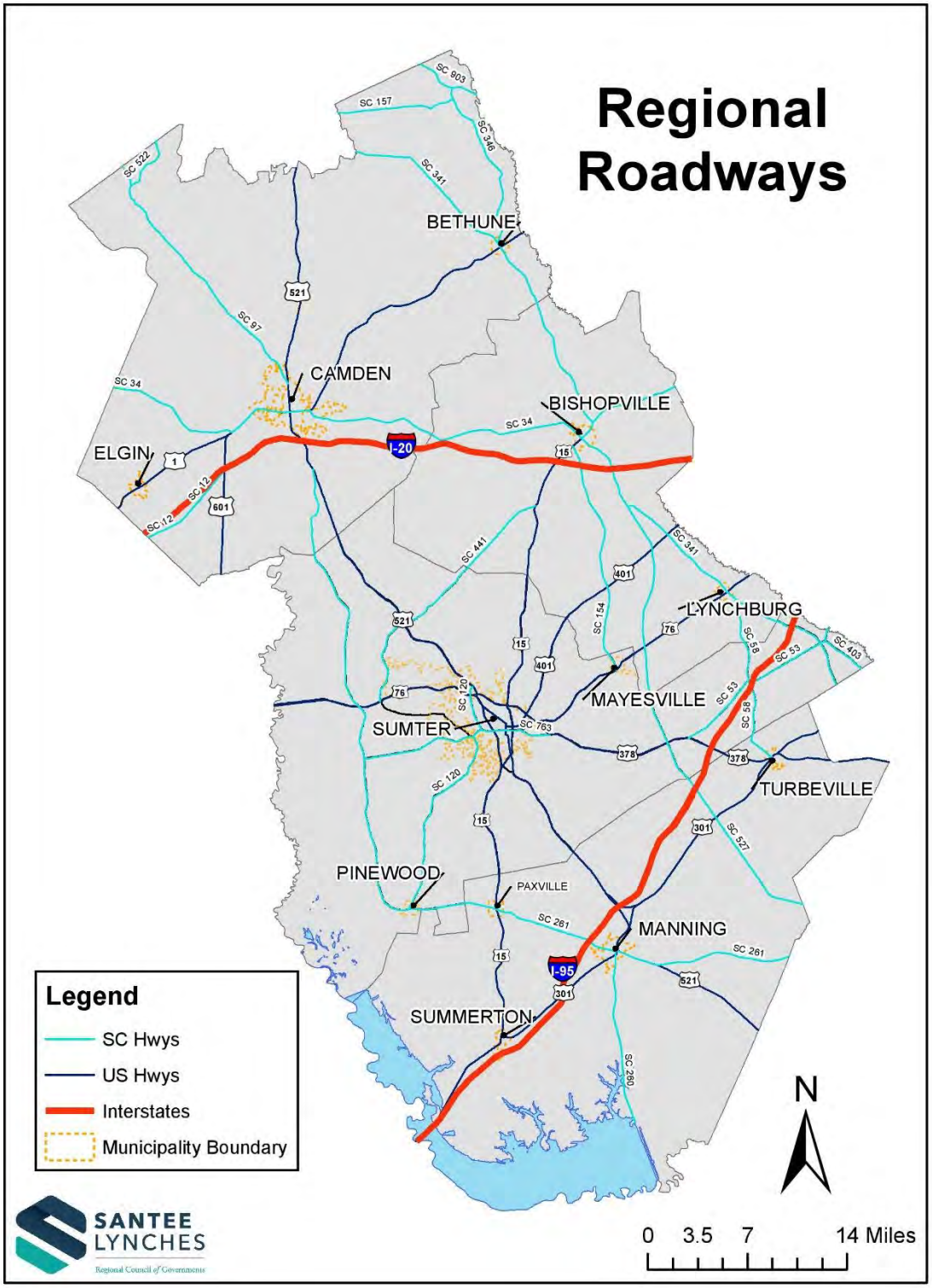


Table 10 - Clarendon County Historical Economic Cost Impacts 1960 - 2018

Hazard	Property Damage	Crop Damage
Drought	$5,243,218.73	$10,324,560.64
Flooding	$11,889,851.36	$7,507,988.38
Hail	$ 332,385.39	$ 471,110.31
Heat	$4,989,570.19	$7,361,257.77
Hurricane/Tropical Storm	$ 102,377,260.70	$101,279,861.20
Lightning	$648,244.72	$282,163.49
Severe Storm/Thunderstorm	$1,045,930.48	$840,403.58
Tornado	$1,956,877.29	$12,456.12
Wildfire	$109,861.59	$279,030.40
Wind	$891,095.09	$328,008.25
Winter Weather	$1,944,348.15	$15,805,901.60

Source: Arizona State University (SHELDUS) Spatial Hazard Events and Losses Databases for the United States.

Table 11 - Kershaw County Historical Economic Cost Impacts 1960 - 2018

Hazard	Property Damage	Crop Damage
Drought	$5,243,218.73	$10,324,560.64
Flooding	$1,867,590.60	$961,322.88
Hail	$4,754,224.21	$2,979,909.72
Heat	$4,989,570.19	$7,361,257.77
Hurricane/Tropical Storm	$185,607,080.90	$60,778,732.10
Lightning	$1,220,944.81	$122,041.52
Severe Storm/Thunderstorm	$2,691,061.97	$838,436.23
Tornado	$4,532,490.71	$2,215,413.60
Wildfire	$115,695.86	$862,457.45
Wind	$6,542,107.56	$2,969,970.32
Winter Weather	$2,237,097.56	$18,055,159.49

Source: Arizona State University (SHELDUS) Spatial Hazard Events and Losses Databases for the United States)

Table 12 - Lee County Historical Economic Cost Impacts 1960 -2018

Hazard	Property Damage	Crop Damage
Drought	$5,243,218.73	$10,324,560.64
Flooding	$777,164.29	$960,269.26
Hail	$410,039.28	$361,706.03
Heat	$4,989,570.19	$7,361,257.77
Hurricane/Tropical Storm	$102,377,260.70	$101,279,861.20
Lightning	$270,416.03	$108,346.10
Severe Storm/Thunderstorm	$1,957,780.85	$10,962,280.31
Tornado	$118,264.18	$3,215.29
Wildfire	$109,861.59	$279,030.40
Wind	$663,728.59	$147,145.55
Winter Weather	$1,964,624.88	$15,806,826.50

Source: Arizona State University (SHELDUS) Spatial Hazard Events and Losses Databases for the United States

Table 13 - Sumter County Historical Economic Cost Impacts 1960 - 2018

Hazard	Property Damage	Crop Damage
Drought	$5,243,218.73	$10,324,560.64
Flooding	$833,800.62	$9,960,250.59
Hail	$761,862.49	$545,210.43
Heat	$4,989,570.19	$7,361,257.77
Hurricane/Tropical Storm	$406,135,728.60	$405,038,329.10
Lightning	$2,393,910.07	$289,241.03
Severe Storm/Thunderstorm	$1,782,162.03	$854,435.97
Tornado	$7,481.28	$3,770,814.90
Wildfire	$109,861.59	$279,030.40
Wind	$1,395,446.36	$336,946.86
Winter Weather	$1,944,117.58	$15,806,826.50

Source: Arizona State University (SHELDUS) Spatial Hazard Events and Losses Databases for the United States

Critical Facility Vulnerability

This part of the Natural Hazard Mitigation Plan addresses the assets within each County and the critical facilities located within their boundaries. The USC Hazards and Vulnerability Research Institute compiled the initial critical facilities data with the criteria that these critical facilities are vital to the safety and well fare of the community. Thus, they are essential for community survivability, along with the continuation of government and must remain operational or return to operation within 72 hours following a disaster. Also included were facilities that served at-risk or special needs populations, which would need to be addressed in the event of a disaster. The critical facilities include the following:

- Police Stations
- Hospitals/Medical Clinics
- Emergency Shelters
- Fire Stations
- Dams
- Communication Facilities
- Schools
- Residential Care Facilities
- Daycare Centers
- Transportation Infrastructure
- Electric, Water, and Wastewater Utilities

Once SLRCOG received the critical facility data from the University it was reviewed by SLRCOG staff to ensure accuracy, and SLRCOG added data from their own database for the information to be complete. Furthermore, the information was presented in a public meeting for general input and comments. A complete list of these critical facilities is included with this section of the plan.

Table 14 - Clarendon County Critical Facilities

Clarendon County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Airport	Clarendon Regional Airport	8668 Hwy 260	Critical Infrastructure –essential to the community to access critical facilities/locations or evacuation
Emergency Facility	Fire/Police	219 Commerce St.	Essential
Fire Station	Alcolu Station	1626 Main St.	Essential
Fire Station	Davis Station	2684 M. W. Rickenbacker Rd.	Essential
Fire Station	Paxville Station	10279 Lewis Rd.	Essential
Fire Station	Gable Station	12878 Hwy 301	Essential
Fire Station	Union Station	1757 Fire Tower Rd.	Essential
Fire Station	Turbeville Station	1292 Green St.	Essential
Fire Station	Foreston Station	1015 N. Brewington Rd.	Essential
Fire Station	North Santee Station	1023 State Rd.	Essential
Fire Station	Taw Caw Station	7896 Wash Davis Rd.	Essential
Fire Station	Wyboo Station	1101 Herring Dr.	Essential
Fire Station	Summerton Station	6 N. Cantey St.	Essential
Fire Station	Barrineau Station	3803 St. James Rd.	Essential
Fire Station	Liberty Station	5119 Brewer Rd.	Essential
Fire Station	Rimini Station	1984 Elliott Rd.	Essential

Clarendon County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Emergency Shelter	Clarendon Memorial Hospital	10 Hospital St.	Essential & Serves "At-Risk" Population
Emergency Shelter	East Clarendon Middle High	1171 Pope St.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Manning Elementary	Hwy 261	Critical Infrastructure – essential for evacuation
Emergency Shelter	Lake Marion Nursing Home	1527 Urbana Rd.	Critical Infrastructure – essential for evacuation & serves "At-Risk" Population
Emergency Shelter	Manning High	2155 Paxville Hwy.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Manning Middle	311 W Boyce St.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Manning Primary	125 N Boundary St.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Scott's Branch Elementary	Fourth St.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Scott's Branch Middle High	9253 Alex Harvin Hwy.	Critical Infrastructure – essential for evacuation
Emergency Shelter	St. Paul Elementary	9272 Alexa Harvin Hwy.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Walker Gamble Elementary	2358 Walker Gamble Rd.	Critical Infrastructure – essential for evacuation
Emergency Shelter	CCDSN Board	312 Pine St.	Critical Infrastructure – essential for evacuation & serves "At-Risk" Population
Fire Station	Manning Fire/Police	42 W Boyce St.	Essential
City Hall	Manning	29 W Boyce St.	Essential
Town Hall	Turbeville	1400 Main St.	Essential
Town Hall	Summerton	10 W. Main St.	Essential
Sewer Treatment	Wyboo Facility	White Oak Dr.	Critical Wastewater Utilities Infrastructure
Sewer Treatment	Manning Facility	Memorial St.	Critical Wastewater Utilities Infrastructure
Emergency Facility	Summerton Police Dept.	W Main St.	Essential
Sewer Treatment	Summerton Facility	Hemmingway Rd.	Critical Wastewater Utilities Infrastructure
Emergency Facility	Turbeville Police Dept.	1400 Main St.	Essential
Sewer Treatment	Turbeville Facility	Seloc Rd.	Critical Wastewater Utilities Infrastructure
Electric Power	Manning	Huggins St.	Critical Utilities Infrastructure
Electric Power	Summerton	Mood St.	Critical Utilities Infrastructure
Hospital	Clarendon County Memorial Hospital	10 Hospital St.	Critical Infrastructure – serves "At-Risk" Population
EMS Station	EMS Station HQs	509 S Church St.	Essential
EMS Station	WYBOO	1595 Players Course	Essential
EMS Station	New Zion	Highway 301 N.	Essential
EMS Station	Summerton	1455 Urbana Rd.	Essential
Alternate EOC	County Courthouse	3 W Keitt St.	Critical Infrastructure – backup for evacuation & community access to manage emergency situations
Alternate Command Center	Correctional Center	320 E Boyce St.	Critical Infrastructure – backup for evacuation & community access to manage emergency situations

Clarendon County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Public Library	Harvin Library	215 Brooks St.	Critical Infrastructure
Archives	Archives	211 Brooks St.	Critical Infrastructure
Social Services	DSS	236 Commerce St., Ste 2	Serves "At-Risk" Population
Water System	Clarendon County Water System	Locations of County Water System maintained at 411 Sunset Blvd. in the city Manning	Critical Water Utilities Infrastructure
Water System	Johnson NG Armory	2883 Raccoon Rd.	Critical Infrastructure – essential for community access to critical facilities or evacuation
Water System	City of Manning	411 N. Brooks St.	Critical Water Utilities Infrastructure
Water System	Town of Summerton	10 Main St.	Critical Water Utilities Infrastructure
Water System	Town of Turbeville	1400 Main St.	Critical Water Utilities Infrastructure

Table 15 - Kershaw County Critical Facilities

Kershaw County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Airport	Woodward Field	2203 Airline Dr.	Critical Infrastructure –essential to the community to access critical facilities/locations or evacuation
Fire Station	Baron Dekalb Station	2457 Baron Dekalb Rd.	Essential
Fire Station	Charlotte Thompson Station	746 St Matthews Rd.	Essential
Fire Station	Beaver Creek Station	Hwy 97	Essential
Fire Station	Lugoff Station	892 Hwy 1	Essential
Fire Station	Pine Grove Station	833 Pine Grove Rd.	Essential
Fire Station	Blaney Station	2344 Highway 1 S.	Essential
Fire Station	Westville Station	2 Payne Pond Rd.	Essential
Fire Station	Bethune Station	304 Chestnut St.	Essential
Fire Station	Mt Pisgah Station	5203 Mt Pisgah Rd.	Essential
Fire Station	Doby's Mill Station	1971 Porter's Cross Rd.	Essential
Fire Station	Shepard Station	1057 State Rd, S2-28-547	Essential
Fire Station	Antioch Station	1617 Bishopville Hwy.	Essential
Fire Station	Cassatt Station	1876 Red Hill Church Rd.	Essential
Fire Station	North Central-Westville Substation	2978 Lockhart Rd., Kershaw	Essential
Fire Station	Pine Grove Substation	1995 Lake Rd., Ridgeway	Essential
Fire Station	Charlotte-Thompson Substation (Boykin)	1741 Boykin Rd., Rembert	Essential
Fire Station	Shepard Substation (Flat Rock Road)	1404 Flat Rock Rd.	Essential
Fire Station	Gates Ford Station-BM Substation	4366 Bethune Rd., Bethune	Essential
Fire Station	Camden Station	3381 John G Richards Rd.	Essential
Emergency Facility	Sheriff's Office	821 Ridgeway Rd.	Essential

Kershaw County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Sewer Treatment Facility	Lugoff Facility	40 Renew Rd.	Critical Wastewater Infrastructure
Emergency Facility	Detention Center	101 Bramblewood Plantation Rd.	Essential
Fire Station	Camden Fire Dept.	1000 Lyttleton St.	Essential
Electric Power Facility	Camden	Hwy 1 S.	Critical Utilities Infrastructure
Emergency Facility	Camden Police Dept.	1000 Lyttleton St.	Essential
Fire Station	Substation 1	2009 Liberty Hill Rd.	Essential
Emergency Facility	Bethune Police Dept.	101 Elm St.	Essential
Sewer Treatment Facility	Camden Facility	Bramblewood Plantation Rd.	Critical Wastewater Infrastructure
Emergency Facility	Elgin Police Dept.	Main St.	Essential
Electric Power Facility	Bethune	Railroad Ave.	Critical Utilities Infrastructure
Electric Power Facility	Elgin	Bowen St.	Critical Utilities Infrastructure
Hospital	Kershaw Health	Haile and Roberts St.	Critical Infrastructure & serves “At-Risk” Population
Communication	Central Communications/EOC	515 Walnut St.	Critical Communication Infrastructure

Table 16 - Lee County Critical Facilities

Lee County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Fire Station	Station 1	122 East Church St. Bishopville, SC	Essential – Also quick emergency shelters
Fire Station	Station 2	521 Lynchburg Hwy., Lynchburg, SC	Essential – Also quick emergency shelters
Fire Station	Station 3	4396 Sumter Hwy., Bishopville, SC	Essential – Also quick emergency shelters
Fire Station	Station 4	3018 Una Rd., Bishopville, SC	Essential – Also quick emergency shelters
Fire Station	Station 5	763 McCaskill Rd., Camden, SC	Essential – Also quick emergency shelters
Fire Station	Station 6	2386 Hubb Kelley Rd., Bishopville, SC	Essential – Also quick emergency shelters
Fire Station	Station 7	1417 Darlington Hwy, Bishopville, SC	Essential – Also quick emergency shelters
Fire Station	Station 8	2346 Hartsville Hwy, Bishopville SC	Essential – Also quick emergency shelters
Fire Station	Station 9	20 Shearer Rd., Bishopville SC	Essential – Also quick emergency shelters
Fire Station	Station 10	130 Industrial Blvd., Bishopville SC	Essential – Also quick emergency shelters

Lee County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Fire Station	Station 11	122 E. Church St., Bishopville, SC	Essential – Also quick emergency shelters
Emergency Facility	Sheriff Office	113 Gregg St., Bishopville, SC	Essential
Emergency Facility	City Police Dept.	112 East Council St., Bishopville, SC	Essential
Emergency Facility	Town Police Dept.	Main Street	Essential
EMS	Lee County Emergency Medical Services	130 Industrial Blvd., Bishopville, SC	Critical Infrastructure – essential for evacuation and community access to critical situations & Serves "At-Risk" Population
Communications	Lee County E911 Communication Office	109 Deschamps St, Bishopville, SC	Critical Communication Infrastructure
EMS	Lee County Emergency Medical Services	515 SC Hwy 341 S. Lynchburg, SC	Critical Infrastructure – essential for evacuation and community access to critical situations & Serves "At-Risk" Population
County Administration Building	Lee County Court House	123 South Main St., Bishopville, SC	Essential
City Administration Building	City Administration Building	135 East Church St, Bishopville, SC	Essential
Lynchburg Administration Building	Lynchburg Administration Building	81 Magnolia St., Lynchburg, SC	Essential
Public Works	Public Works	116 Airport Rd., Bishopville, SC	Critical Infrastructure – Public Works
Sewer Treatment Facility	Bishopville, Facility	1022 Lagoon Ln. Bishopville, SC	Critical Wastewater Infrastructure
Sewer Treatment Facility	Lynchburg, Facility	US 76 E.	Critical Wastewater Infrastructure
Health Department	Lee County Health Department	810 Brown St., Bishopville, SC	Critical Infrastructure & serves "At-Risk" Population
Department of Social Services	Lee County Department of Social Services	820 Brown St., Bishopville, SC	Critical Infrastructure serves "At-Risk" Population

Table 17 - Sumter County Critical Facilities

Sumter County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Airport	Sumter Municipal Airport	Airport Rd.	Critical Infrastructure –essential to the community to access critical facilities/locations or evacuation
Fire Station	Bethel Station #13	1865 Nettles Rd.	Essential
Fire Station	Dabbs Station #19	6090 Myrtle Beach Hwy.	Essential
Fire Station	Byrd's Station #18	10735 Douglas Swamp Rd.	Essential
Fire Station	Concord Station #10	1600 Plowden Mill Rd.	Essential
Fire Station	Dalzell Station #6	3211 Frierson Rd.	Essential

Sumter County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Fire Station	Wedgefield Station #7	2035 SC-261	Essential
Fire Station	Pinewood Station #2	140 Epperson Ave.	Essential
Fire Station	Oswego Station #14	1260 Jessamyn Rd.	Essential
Fire Station	Pleasant Grove Station # 4	720 Pleasant Grove Rd.	Essential
Fire Station	Cherryvale Station #1	1453 Cherryvale Dr.	Essential
Fire Station	Dubose Station #12	3805 Hwy 15 South	Essential
Fire Station	Graham Station #3	150 Britton Rd.	Essential
Fire Station	Rembert Station #8	7045 Post Office St.	Essential
Fire Station	Horatio Station #11	7720 Sumter Landing Rd.	Essential
Fire Station	521 South Substation	1121 Manning Rd.	Essential
Fire Station	Mayesville Station	20 S. Main St.	Essential
Emergency Shelter	Alice Drive Middle	40 Miller Rd.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Furman Middle	3400 Bethel Church Rd.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Hillcrest Middle	SC 441 at US 521	Critical Infrastructure – essential for evacuation
Emergency Shelter	Brewington Academy	4300 Brewington Rd.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Sumter High	2580 McCrays Mill Rd.	Critical Infrastructure – essential for evacuation
Emergency Shelter	Prisma Health Tuomey Hospital	129 N. Washington St.	Critical Infrastructure – essential for evacuation
Administration	County Administration Building	20 Magnolia St.	Essential
Administration	Sumter County EOC	141 N. Main St.	Essential
Administration	Sumter County EMS	127 E. Hampton St.	Essential
Administration	Sumter County Detention Center	1250 Winkles Rd.	Essential
Administration	County Public Works	1289 N. Main St.	Essential
Fire Station	Headquarters	35 N. Lafayette Dr.	Essential
Fire Station	City of Sumter FD	2020 Thomas Sumter Hwy.	
Fire Station	City of Sumter FD	225 Alice Dr.	Essential
Fire Station	City of Sumter FD	2041 Stadium Rd.	Essential
Administration	Sumter City Hall	21 N. Main St.	Essential
Pumping Station	Wedgefield Water Pumping Station	6200 McLaurin Rd. Wedgefield, SC 29168	Critical Utilities Infrastructure
Administration	Sumter City Public Works	303 E. Liberty St.	Serves Critical Utilities Infrastructure
Sewer Treatment Facility	Pocotaligo Facility	600 Justin Lane	Critical wastewater Infrastructure
Sewer Treatment Facility	City of Sumter Plant	US 521	Critical wastewater Infrastructure
Sewer Treatment Facility	Pinewood Facility	Ball Park Rd.	Critical wastewater Infrastructure
Communication	WKHT	51 Commerce St.	Critical Communication Infrastructure

Sumter County Critical Facilities			
Facility Type	**Name**	**Location**	**Critical Importance of Facility**
Airport	Shaw AFB	Hwy 378/76	Critical Infrastructure –essential to the community to access critical facilities/locations or evacuation
Electric Power Facility	Shaw Field	Hwy 378/76	Critical Utilities Infrastructure
Hospital	Shaw Hospital	431 Meadowlark St.	Critical Infrastructure & serves "At-Risk" Population
Sewer Treatment Facility	Shaw Facility	Country Squire Ct.	Critical Wastewater Infrastructure
Communication	Miller Communication	51 Commerce St.	Critical Communication Infrastructure
Communication	WSSC	201 Oswego Rd.	Critical Communication Infrastructure
Communication	WHRI	1965 Stadium Rd.	Critical Communication Infrastructure
Communication	The Item Newspaper	36 W. Liberty	Critical Communication Infrastructure
Electric Power Facility	Sumter	315 E. Red Bay Rd.	Critical Utilities Infrastructure
Electric Power Facility	Sumter Industrial	1175 Cockerill Rd.	Critical Utilities Infrastructure
Electric Power Facility	Sumter North	780 Jefferson Rd.	Critical Utilities Infrastructure
Electric Power Facility	Sumter-Wedgefield Rd	2434 Wedgefield Rd.	Critical Utilities Infrastructure
Electric Power Facility	Wateree	Unknown	Critical Utilities Infrastructure
Water Facility	Dalzell Water	4305-C Camden Hwy.	Critical Water Infrastructure
Water Facility	High Hills Water District	2720 Peach Orchard Rd.	Critical Water Infrastructure
Water Facility	Oswego Water Company	3060 Oswego Rd.	Critical Water Infrastructure
Health Care	Fresenius Kidney care and Dialysis Center	615 Wesmark Blvd.	Critical Infrastructure & serves "At-Risk" Population
Health Care	Prisma Health Tuomey Medical Park	1215 Alice Dr.	Critical Infrastructure & serves "At-Risk" Population
Health Care	Prisma Health Tuomey Cancer Center	130 N. Washington St.	Critical Infrastructure & serves "At-Risk" Population
Hospital	Prisma Health Tuomey Hospital	129 N. Washington St.	Critical Infrastructure & serves "At-Risk" Population

Hazard Identification

The Hazards Analysis determined the kinds of hazards which a local jurisdiction was vulnerable 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. The update of this plan revealed no change in hazards.

The inter-jurisdictional hazards are as follow:

- Flooding
- Hurricane, Tropical, or Coastal Storm
- Tornado
- Winter Storm / Freezes / ice / snow
- Dam Failure
- Severe Storm / wind / hail / lightning
- Wildfire
- Earthquake
- Drought / Heat

Table 18 shows the potential hazards that could impact the local jurisdictions in Clarendon, Kershaw, Lee, and Sumter Counties.

Table 18 - Hazard Identification and Assessment Jurisdiction Affected by Hazard Type

Local Government	Flooding	Hurricane / Tropical / Coastal Storm	Tornado	Winter Storm/Freezing /Ice/Snow	Dam Failure	Severe Storm/Wind /Hail/Lightning	Wildfire	Earthquake	Drought/Heat
Unincorporated Clarendon County	X	X	X	X	X	X	X	X	X
City of Manning	X	X	X	X	X	X	-	X	X
Town of Paxville	X	X	X	X	-	X	-	X	X
Town of Summerton	X	X	X	X	-	X	-	X	X
Town of Turbeville	-	X	X	X	-	X	-	X	X
Unincorporated Kershaw County	X	X	X	X	X	X	X	X	X
Town of Bethune	X	X	X	X	-	X	-	X	X
Town of Elgin	X	X	X	X	-	X	-	X	X
City of Camden	X	X	X	X	X	X	X	X	X
Unincorporated Lee County	X	X	X	X	X	X	X	X	X
Town of Lynchburg	X	X	X	X	-	X	-	X	X
City of Bishopville	X	X	X	X	-	X	-	X	X
Unincorporated Lee County	X	X	X	X	X	X	X	X	X
Unincorporated Sumter County	X	X	X	X	X	X	X	X	X
Town of Pinewood	X	X	X	X	-	X	X	X	X
Town of Mayesville	X	X	X	X	-	X	X	X	X
City of Sumter	X	X	X	X	X	X	X	X	X

("X" indicates that the governmental entity could potentially experience the type hazard indicated)

Description of Hazards

Some of these hazards are interrelated (i.e., hurricanes can cause flooding and tornadoes), and some consist of hazardous elements that are not listed separately (i.e., severe thunderstorms can cause lightning). This section provides general descriptions for each of the above listed hazards.

Flooding

Flooding is the most frequent and costly natural hazard in the United States. Floods are generally the result of excessive precipitation, and can be classified under two categories: flash floods, the product of heavy localized precipitation in a short time period over a given location, and general floods caused by precipitation over a longer time period and over a given river basin. The severity of a flooding event is determined by a combination of stream and river basin topography, precipitation, and weather patterns, recent soil moisture conditions and the degree of vegetative clearing.

Flash flooding events usually occur within minutes or hours of heavy amounts of rainfall, from a dam or levee failure, or from a sudden release of water held by an ice jam. Most flash flooding is caused by slow-moving thunderstorms in a local area or by heavy rains associated with hurricanes and tropical storms. Although flash flooding occurs often along mountain streams, it is also common in urbanized areas where much of the ground is covered by impervious surfaces. General floods are usually longer-term events and may last for several days.

Figure 2 - Flash flooding in Sumter from Facebook

The primary types of general flooding include riverine flooding, coastal flooding and urban flooding. Riverine flooding is a function of excessive precipitation levels and water runoff volumes within the watershed of a stream or river. Coastal flooding is typically a result of storm surge, wind-driven waves, and heavy rainfall produced by hurricanes, tropical storms, nor'easters and other large coastal storms. Urban flooding occurs where man-made development has obstructed the natural flow of water and/or decreased the ability of natural groundcover to absorb and retain surface water runoff.

Periodic flooding of lands adjacent to rivers, streams, and shorelines is a natural and inevitable occurrence that can be expected to take place based upon established recurrence intervals. The recurrence interval of a flood is defined as the average time interval, in years, expected between a flood event of a particular magnitude and an equal or larger flood. Flood magnitude increases with increasing recurrence interval.

A "floodplain" is a lowland area adjacent to a river, lake, or ocean. Floodplains are designated by the frequency of the flood that is large enough to cover them. For example, the 10-year floodplain will be covered by the 10-year flood and the 100-year floodplain by the 100-year flood.

Flood frequencies, such as the "100-year flood," are determined by plotting a graph of the size of all known floods for an area and determining how often floods of a particular size occur. Another way of expressing the flood frequency is the chance of occurrence each year, which is the percentage of the probability of flooding each year. For example, the 100-year flood has a 1% chance of occurring in any given year.

Hurricanes & Tropical Storms

Hurricanes and tropical storms, both classified as tropical cyclones, are low pressure storm systems that originate over warm ocean waters but can cause immense destruction when crossing the coastline into land.

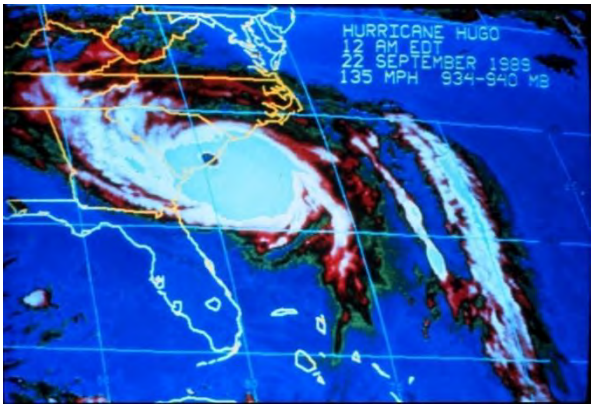


Figure 3 – Hurricane Hugo weather map

The primary damaging forces associated with these storms are high-level sustained winds, heavy precipitation, and tornadoes. Coastal areas are also vulnerable to the additional forces of storm surge, wind-driven waves, and tidal flooding. The key energy source for a tropical cyclone is the release of latent heat from the condensation of warm water. Their formation requires a low-pressure disturbance, sufficiently warm sea surface temperatures, rotational force from the spinning of the earth, and the absence of wind shear in the lowest 50,000 feet of the atmosphere.

Hurricanes and tropical storms can form in the Atlantic Ocean, Caribbean Sea and Gulf of Mexico from the months of June to November, but the peak of the Atlantic hurricane season is early to mid-September. The average number of storms that reach hurricane intensity per year in the Atlantic basin is about six.

As an incipient hurricane develops, barometric pressure at its center falls and winds increase. If the atmospheric and oceanic conditions are favorable, it can intensify into a tropical depression. When maximum sustained winds reach or exceed 39 miles per hour the system is designated a tropical storm, given a name and closely monitored by the National Hurricane Center in Miami, Florida. When sustained winds reach or exceed 74 miles per hour, the storm is deemed a hurricane.

Hurricane intensity is further classified by the Saffir-Simpson Scale, which rates hurricane intensity on a scale of 1 to 5, with 5 being the most intense. The Saffir-Simpson scale is shown in Table 19.

Table 19 - Saffir-Simpson Scale

Saffir-Simpson Scale / Category	Maximum Sustained Wind Speed (mph)	Minimum Surface Pressure (millibars)
1	74-95	Greater than 980
2	96-110	979-965
3	111-130	964-945
4	131-155	944-920
5	155+	Less than 920

Source: National Hurricane Center

The Saffir-Simpson scale categorizes hurricane intensity linearly based upon maximum sustained winds, barometric pressure and storm surge potential, which are combined to estimate potential damage. Categories 3, 4, and 5 are classified as "major" hurricanes, and while hurricanes within this range comprise only 20% of total tropical cyclone landfalls, they account for over 70% of the damage in the U.S. Table 4-12 describes the damage that could be expected for each category hurricane.

Table 20 - Hurricane Damage Classification

Classification	Category Damage Level Description
1 – Minimal	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal flooding and minor pier damage.
2 – Moderate	Some roofing material, door, and window damage. Considerable damage to vegetation, mobile homes, etc. Flooding damages piers and small craft in unprotected moorings may break their moorings.
3 – Extensive	Some structural damage to small residences and utility buildings, with a minor amount of curtain wall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris. Terrain may be flooded well inland.
4 – Extreme	More extensive curtain wall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Terrain may be flooded well inland.
5 – Catastrophic	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Flooding causes major damage to lower floors of all structures near the shoreline. Massive evacuation of residential areas may be required.

Source: National Hurricane Center

Damage during hurricanes may also result from spawned tornadoes and inland flooding associated with heavy rainfall that usually accompanies these storms. Hurricane Hugo in 1989, for example, caused massive inland flooding when it made landfall in Charleston County and proceeded inland towards Columbia and ultimately continued North through Sumter and Kershaw Counties.

Tornadoes

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. It is most often generated by a thunderstorm (but sometimes results from hurricanes) and produced when cool, dry air intersects and overrides a layer of warm, moist air forcing the warm air to rise rapidly. The damage from a tornado is a result of the high wind velocity and wind-blown debris, although they are commonly accompanied by large hail as well. The most violent tornadoes have rotating winds of 250 miles per hour or more and can cause extreme destruction.

Most tornadoes are just a few dozen yards wide and touch down only briefly, but highly destructive tornadoes may carve out a path over a mile wide and several miles long. The level of destruction caused by tornadoes may range from light to catastrophic depending on the intensity, size and duration of the storm. Typically, tornadoes cause the greatest damage to structures of light construction, such as residential homes, and are quite localized in their impact.

Each year, an average of 800-1000 tornadoes are reported nationwide, and they are more likely to occur during the spring and early summer months of March through June. Tornadoes can occur at any time of day but are mostly likely to form in late afternoons and early evenings.

The Fujita-Pearson Scale for Tornadoes was developed to measure tornado strength and is shown below in Table 21.

Table 21 - Enhanced Fujita-Pearson Scale for Tornadoes

FUJITA SCALE			OPERATIONAL EF-SCALE	
F Number	Fastest 1/4-mile (mph)	3 Second Gust (mph)	EF Number	3 Second Gust (mph)
0	40-72	45-78	0	65-85
1	73-112	79-117	1	86-110
2	113-157	118-161	2	111-135
3	158-207	162-209	3	136-165
4	208-260	210-261	4	166-200
5	261-318	262-317	5	Over 200

Severe Winter Storms

Severe winter storms can produce an array of hazardous weather conditions, including heavy snow, freezing rain and ice pellets, high winds and extreme cold. Severe winter storms are usually extra-tropical cyclones (storms that form outside of the warm tropics) fueled by strong temperature gradients and an active upper-level cold jet stream. Winter storms can paralyze a community by shutting down normal day-to-day operations as accumulating snow and ice result in downed trees, power outages, and blocked or hazardous transportation routes. Heavy snow can also lead to the collapse of weak roofs or unstable structures. Frequently the loss of electricity means loss of heat for residents which poses a significant threat to human life, particularly the elderly.

The level of impact severe winter weather will have upon the community greatly depends on its ability to manage and control its effects, such as the rapid mobilization of snow removal equipment. Due to the rare occurrence of severe winter weather in South Carolina, coupled with the expensive costs to acquire and maintain the necessary resources to combat their effects, many communities are not prepared for such events.

Figure 4 - Sumter County Ice Storm

Dam Failure

Dams are water storage, control, or diversion barriers that impound water upstream in reservoirs. Dam failure is a collapse or breach in the structure. While most dams have storage volumes small enough that failures have little or no repercussions, dams with large storage amounts can cause significant flooding downstream.

Dam failures can result from any one or a combination of the following causes:

- Prolonged periods of rainfall and flooding, which cause most failures
- Inadequate spillway capacity, resulting in excess overtopping flows.

Figure 5 - Dam Failure – Water overtopping the Lake Wateree Dam

- Internal erosion caused by embankment or foundation leakage or piping.
- Improper maintenance, including failure to remove trees, repair internal seepage problems, replace lost material from the cross section of the dam and abutments, or maintain gates, valves, and other operational components.
- Improper design, including the use of improper construction materials and construction practices.
- Negligent operation, including the failure to remove or open gates or valves during high flow periods.
- Failure of upstream dams in the same drainage basin.
- Landslides into reservoirs, which cause surges that result in overtopping.
- High winds, which can cause significant wave action and result in substantial erosion.
- Earthquakes, which typically cause longitudinal cracks at the tops of the embankments, leading to structural failure.

Dam Classification

The South Carolina Department of Health and Environmental Control, Dam Safety Programs has classified dams that would pose a safety hazard to human life and property. Classifications are listed below:[3]

- A Class I dam failure will likely cause a loss of life or serious damage to homes(s), industrial and commercial facilities, important public utilities, main highway(s) or railroads.
- A Class II dam failure will not likely cause loss of life but may damage home(s), industrial and commercial facilities, secondary highway(s) or railroad(s) or cause interruption of use or service of relatively important public utilities.
- A Class III dam failure may cause minimal property damage and loss of life is not expected

There are one hundred and seventy-three (173) Dams within the Santee-Lynches Region. Kershaw County has the most at seventy (70) Dams with Sumter County having the second highest number of dams at fifty-four (54). The number of Dams broken out by Class I, II, and III by County are indicated below in Table 22. A list of dams is included in Appendix G.

Table 22 - Dams by Classes by County

County	Class I	Class II	Class III	Total
Clarendon County	0	4	24	28
Kershaw County	6	11	53	70
Lee County	0	7	14	21
Sumter County	1	13	40	54
SL Region	7	35	131	173

[3] Source: South Carolina Department of Health and Environmental Control – "Dams and Reservoirs Safety Act Regulations" Regulation 72-1 thru 72-9; Amended July 25, 1997; Bureau of Water

Severe Thunderstorms, Wind Events, Hail, & Lightning

Severe thunderstorms are defined by the National Weather Service as storms that have wind speeds of 58 miles per hour or higher, produce hail at least three quarters of an inch in diameter, or produces tornadoes. In order to form, thunderstorms simply require moisture to form clouds and rain, coupled with an unstable mass of warm air that can rise rapidly.

Figure 6 - Clarendon County Severe Thunderstorm (church steeple off with downed trees)

Thunderstorms affect relatively small areas when compared with hurricanes and winter storms, as the average storm is 15 miles in diameter and lasts an average of 30 minutes. Nearly 1,800 thunderstorms are occurring at any moment around the world, however, of the estimated 100,000 thunderstorms that occur annually in the United States only about 10 percent are classified as severe.

Thunderstorms are most likely to happen in the spring and summer months and during the afternoon and evening hours but can occur year-round and at all hours. Despite their small size, all thunderstorms are dangerous and capable of threatening life and property in localized areas. Every thunderstorm produces lightning, which results from the buildup and discharge of electrical energy between positively and negatively charged areas. Each year, lightning is responsible for an average of 93 deaths (more than tornadoes), 300 injuries, and several hundred million dollars in damage to property and forests.

Thunderstorms can also produce large, damaging hail, which causes nearly $1 billion in damage to property and crops annually. Straight-line winds, which in extreme cases have the potential to exceed 100 miles per hour, are responsible for most thunderstorm wind damage. One type of straight-line wind, the downburst, can cause damage equivalent to a strong tornado and can be extremely dangerous to aviation. Thunderstorms are also capable of producing tornadoes and heavy rain that can lead to flash flooding.

Moreover, the Tornado and storm Research Organization (TORRO) has classified how the size of the hail and associated wind speeds create intensity categories that can be directly related to the expected typical damage impacts. Tables 23 and 24, respectively, reflect the TORRO Hailstorm Intensity scale and the description of the hail size in relation to the Hailstorm Intensity Scale.

Table 23 - TORRO Hailstorm Intensity Scale

Scale	Intensity Category	Typical Hail Diameter (mm)*	Probable Kinetic Energy, J-m^2	Typical Damage Impacts
H0	Hard Hail	5	0-20	No damage
H1	Potentially Damaging	5-15	>20	Slight general damage to plants, crops
H2	Significant	10-20	>100	Significant damage to fruit, crops, vegetation
H3	Severe	20-30	>300	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	25-40	>500	Widespread glass damage, vehicle bodywork damage
H5	Destructive	30-50	>800	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	40-60		Bodywork of grounded aircraft dented; brick walls pitted
H7	Destructive	50-75		Severe roof damage, risk of serious injuries
H8	Destructive	60-90		(Severest recorded in the British Isles) Severe damage to aircraft bodywork
H9	Super Hailstorms	75-100		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	>100		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

Table 24 - Description of Hail Size in Relation to the Hailstorm Intensity Scale

Size code	Maximum Diameter mm	Description
0	5-9	Pea
1	10-15	Mothball
2	16-20	Marble, grape
3	21-30	Walnut
4	31-40	Pigeon's egg > squash ball
5	41-50	Golf ball > Pullet's egg
6	51-60	Hen's egg
7	61-75	Tennis ball > cricket ball
8	76-90	Large orange > Soft ball
9	91-100	Grapefruit
10	>100	Melon

Wildfires

A wildfire is an undesirable, uncontrolled burning of grasslands, brush or woodlands. According to the South Carolina Forestry Commission the State 20-year average reflected 2,657 fires that covered 17,576.1 acres.

The Jurisdictional region 20-year average is as follows:

- Clarendon County with 94 fires that covered 698.8 acres.
- Kershaw County with 74 fires that covered 359.8 acres.
- Lee County with 52 fires that covered 318.6 acres.
- Sumter County with 92 fires that covered 615.3 acres.

Nationally, about 90% of wildfires are started by humans (e.g., campfires, debris burning, smoking, etc.) while the other 10% are started by lightning.

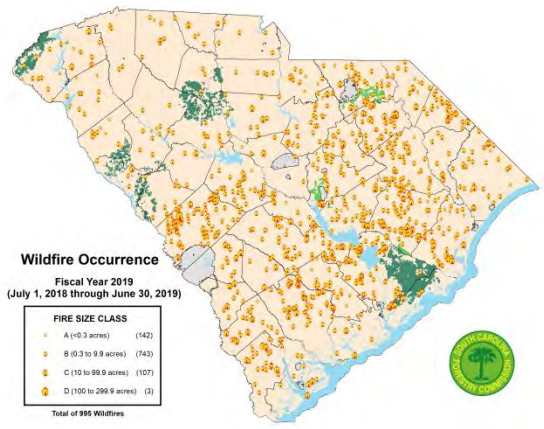


Figure 7 - FY 2019 Wildfires
Source: SC Forestry Commission

The potential for wildfire depends upon surface fuel characteristics, weather conditions, recent climate conditions, topography, and fire behavior. Fuels are anything that fire can burn and are the combustible materials that sustain a wildfire. Typically, this is the vegetation in a given area.

Weather is one of the most significant factors in determining the severity of wildfires. The intensity of fires and the rate with which they spread is directly related to the wind speed, temperature and relative humidity. Climatic conditions such as long-term drought also play a major role in the number and intensity of wildfires. Topography is important because the slope and shape of the terrain can change the speed at which fire travels.

There are four major types of wildfires.

- Ground fires burn in natural litter, duff, roots or sometimes highly organic soils. Once started they are very difficult to control, and it may even rekindle after being extinguished.
- Surface fires burn in grasses and low shrubs up to 4' tall or in the lower branches of trees. They have the potential to spread rapidly, and the ease of their control depends upon the fuel involved.
- Crown fires burn in the tops of trees, and the ease of their control depends greatly upon wind conditions.
- Spotting fires occur when burning embers are thrown ahead of the main fire and can be produced by crown fires as well as wind and topographic conditions. Once spotting begins, the fire will be very difficult to control.

Wildfires become significant threats to life and property along what is known as the "wildland / urban interface." The wildland / urban interface is defined as the area where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Since 2000, approximately 38,000 homes have been lost to urban / wildland interface fires across the United States.

Earthquakes

An earthquake is the motion or trembling of the ground produced by sudden displacement of rock in the Earth's crust. Earthquakes result from crustal strain, volcanism, landslides, or the collapse of caverns. Earthquakes can affect hundreds of thousands of square kilometers; cause damage to property measured in the tens of billions of dollars; result in loss of life and injury to hundreds of thousands of persons; and disrupt the social and economic functioning of the affected area.

Most property damage and earthquake-related deaths are caused by the failure and collapse of structures due to ground shaking. The level of damage depends upon the amplitude and duration of the shaking, which are directly related to the earthquake size, distance from the fault, and site and regional geology. Other damaging earthquake effects include landslides, the down-slope movement of soil and rock (mountain regions and along hillsides) in which ground soil loses its ability to resist shear and flows much like quicksand. In the case of liquefaction, anything relying on the substrata for support can shift, tilt, rupture, or collapse.

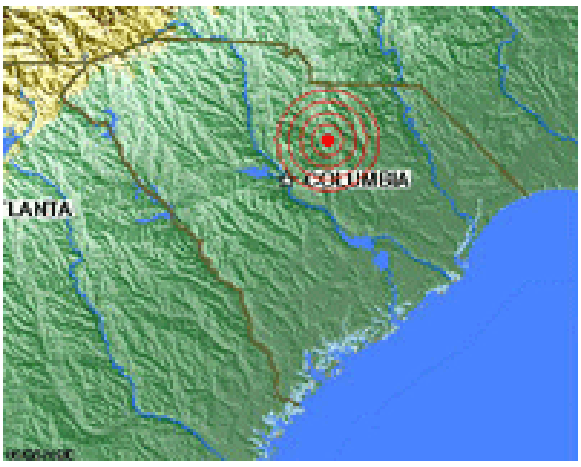


Figure 9 - Shallow Earthquake near Camden SC (June 24, 2011)

Most earthquakes are caused by the release of stresses accumulated as a result of the rupture of rocks along opposing fault planes in the Earth's outer crust. These fault planes are typically found along borders of the earth's ten tectonic plates. These plate borders generally follow the outlines of the continents, with the North American plate following the continental border with the Pacific Ocean in the west, and the mid-Atlantic trench in the east. As earthquakes occurring in the mid-ocean trench usually pose little threat to humans, the greatest earthquake threat in North America is along the Pacific coast.

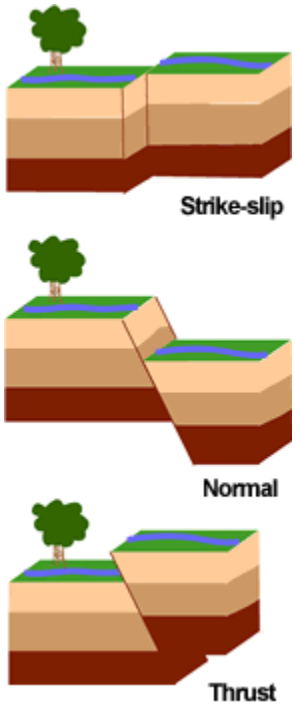


Figure 8 - Fault Types

The areas of greatest tectonic instability occur at the perimeters of the slowly moving plates, as these locations are subjected to the greatest strains from plates traveling in opposite directions and at different speeds. Deformation along plate boundaries causes strain in the rock and the consequent buildup of stored energy. When the built-up stress exceeds the rocks' strength, a rupture occurs. The rock on both sides of the fracture is snapped, releasing the stored energy and producing seismic waves, which generates an earthquake.

Earthquakes are measured in terms of their magnitude and intensity. Magnitude is measured using the Richter Scale, an open-ended logarithmic scale that describes the

energy release of an earthquake through a measure of shock wave amplitude. Each unit increase in magnitude on the Richter Scale corresponds to a ten-fold increase in wave amplitude, or a 32-fold increase in energy. Intensity is most measured using the Modified Mercalli Intensity (MMI) Scale. It is a twelve-level scale based on direct and indirect measurements of seismic effects. The scale levels are typically described using roman numerals, with a I corresponding to imperceptible (instrumental) events, IV corresponding to moderate (felt by people awake), to XII for catastrophic (total destruction).

A detailed description of the Modified Mercalli Scale of Earthquake Intensity and its correspondence to the Richter Scale is given in Table 25.

Table 25 - Modified Mercalli Scale of Earthquake Intensity to the Richter Scale

Modified Mercalli Intensity Scale for Earthquakes	Scale Intensity Description of Effects	Corresponding Richter Scale Magnitude
I	Detected only on seismographs	< 3.5
II	Feeble; Some people feel it	3.5
III	Slightly felt by people resting; like a truck rumbling by	4.2
IV	Moderate - Felt by people walking	4.5
V	Slightly Strong - Sleepers awake; church bells ring	4.8
VI	Strong - Trees sway; suspended objects swing, objects fall off shelves	5.4
VII	Very Strong Mild Alarm; walls crack; plaster falls	6.1
VIII	Destructive - Moving cars uncontrollable; masonry fractures, poorly constructed buildings damaged	6.5
IX	Ruinous - Some houses collapse; ground cracks; pipes break open	6.9
X	Disastrous - Ground cracks profusely; many buildings destroyed; liquefaction and landslides widespread	7.3
XI	Very Disastrous - Most buildings and bridges collapse; roads, railways, pipes and cables destroyed; general triggering of other hazards	8.1
XII	Catastrophic - Total destruction; trees fall; ground rises and falls in waves	>8.1

Drought

A simple definition of a drought is a period of prolonged dryness. However, a drought can have a wide range of impacts that can affect a population regarding the resulting water shortage that affects some activity, group, or environmental sector. Drought should be considered relative to some long-term average condition of balance between precipitation and evapotranspiration (evaporation + transpiration) in a particular area, a condition often perceived as "normal". It is also related to the timing (e.g., principal season of occurrence, delays in the start of the rainy season, occurrence of rains in relation to principal crop growth stages) and the effectiveness (e.g., rainfall intensity, number of rainfall events) of the rains. Other climatic factors such as high temperature, high wind, and low relative humidity are often associated with it in many regions of the world and can significantly aggravate its severity.

Figure 10 - Drought – Lake Marion
Photo SCDNR

To better understand droughts, it can be useful to sub-classify them into the following groups:

- Agricultural Drought, defined by soil moisture deficiencies
- Hydrological Drought, defined by declining surface and groundwater supplies
- Meteorological Drought, defined by a lack of precipitation
- Hydrological Drought & Land Use, defined by a meteorological drought in one area that has hydrological drought impact in another area
- Socioeconomic Drought, defined as drought that impacts supply and demand of some economic activity

Meteorological Drought

Meteorological drought is defined usually based on the degree of dryness (in comparison to some "normal" or average amount) and the duration of the dry period. Definitions of meteorological drought must be considered as region specific since the atmospheric conditions that result in deficiencies of precipitation are highly variable from region to region. For example, some definitions of meteorological drought identify periods of drought based on the number of days with precipitation less than some specified threshold. This measure is only appropriate for regions characterized by a year-round precipitation regime such as a tropical rainforest, humid subtropical climate, or humid mid-latitude climate.

Agricultural Drought

Agricultural drought links various characteristics of meteorological (or hydrological) drought to agricultural impacts, focusing on precipitation shortages, differences between actual and potential evapotranspiration, soil water deficits, reduced ground water or reservoir levels, and so forth. Plant water demand depends on prevailing weather conditions, biological characteristics of the specific plant, its stage of growth, and the physical and biological properties of the soil. A good definition of agricultural drought should be able to account for the variable susceptibility of crops during different stages of crop development, from emergence to maturity. Deficient topsoil moisture at planting may hinder germination, leading to low plant

populations per hectare and a reduction of final yield. However, if topsoil moisture is sufficient for early growth requirements, deficiencies in subsoil moisture at this early stage may not affect final yield if subsoil moisture is replenished as the growing season progresses or if rainfall meets plant water needs.

Hydrological Drought

Hydrological drought is associated with the effects of periods of precipitation (including snowfall) shortfalls on surface or subsurface water supply (i.e., streamflow, reservoir and lake levels, ground water). The frequency and severity of hydrological drought is often defined on a watershed or river basin scale. Although all droughts originate with a deficiency of precipitation, hydrologists are more concerned with how this deficiency plays out through the hydrologic system. Hydrological droughts are usually out of phase with or lag the occurrence of meteorological and agricultural droughts. It takes longer for precipitation deficiencies to show up in components of the hydrological system such as soil moisture, streamflow, and ground water and reservoir levels. As a result, these impacts are out of phase with impacts in other economic sectors. For example, a precipitation deficiency may result in a rapid depletion of soil moisture that is almost immediately discernible to agriculturalists, but the impact of this deficiency on reservoir levels may not affect hydroelectric power production or recreational uses for many months. Also, water in hydrologic storage systems (e.g., reservoirs, rivers) is often used for multiple and competing purposes (e.g., flood control, irrigation, recreation, navigation, hydropower, wildlife habitat), further complicating the sequence and quantification of impacts. Competition for water in these storage systems escalates during drought and conflicts between water users increase significantly.

Hydrological Drought and Land Use

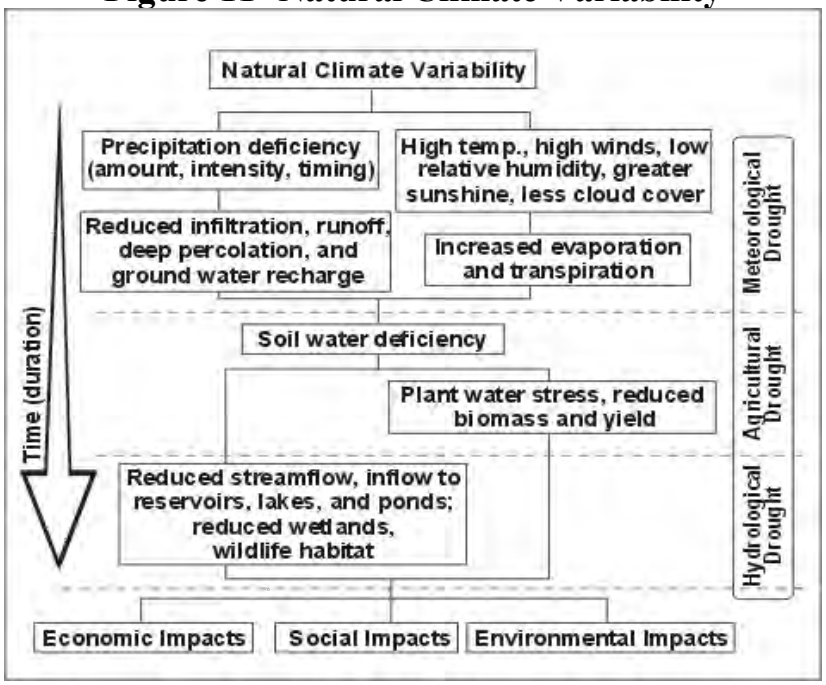
Although climate is a primary contributor to hydrological drought, other factors such as changes in land use (e.g., deforestation), land degradation, and the construction of dams all affect the hydrological characteristics of the basin. Because regions are interconnected by hydrologic systems, the impact of meteorological drought may extend well beyond the borders of the precipitation-deficient area. Land use change is one of the ways human actions alter the frequency of water shortage even when no change in the frequency of meteorological drought has been observed.

Socioeconomic Drought

Socioeconomic definitions of drought associate the supply and demand of some economic good with elements of meteorological, hydrological, and agricultural drought. It differs from the aforementioned types of drought because its occurrence depends on the time and space processes of supply and demand to identify or classify droughts. The supply of many economic goods, such as water, forage, food grains, fish, and hydroelectric power, depend on weather. Because of the natural variability of climate, water supply is ample in some years but unable to meet human and environmental needs in other years. Socioeconomic drought occurs when the demand for an economic good exceeds supply as a result of a weather-related shortfall in water supply.

Figure 11 on the next page shows how climatic factors interact with one another and contribute to drought conditions, which can impact social, environmental, and social conditions.

Figure 11- Natural Climate Variability



Source: The National Drought Mitigation Center

The most commonly used indicator of drought and drought severity is the Palmer Drought Severity Index (PDSI), which is published jointly by the National Oceanic and Atmospheric Administration (NOAA) and the US Department of Agriculture (USDA). The PDSI measures the difference between water supply (in terms of precipitation and stored soil moisture) and demand (the amount of water required to recharge soil and keep rivers, lakes, and reservoirs at normal levels). The result is a scale from +4 to -4, at 1.0 and 0.5 intervals. See Table 26 for a detailed description of the PDSI.

Table 26 - Palmer Drought Severity Index (PDSI)

Scale	Description
Above 4.0	Extremely Wet
3.0 to 3.99	Very Wet
2.0 to 2.99	Moderately Wet
1.0 to 1.99	Slightly Wet
0.5 to 0.99	Incipient Wet Spell
0.49 to -0.49	Near Normal Conditions
-0.5 to -0.99	Incipient Dry Spell
-1.0 to -1.99	Mild Drought
-2.0 to -2.99	Moderate Drought
-3.0 to -3.99	Severe Drought
-4.0 or less	Extreme Drought

Measuring Severity of Drought

Keetch-Byram Drought Index (KBDI) – Table 27 is a soil/duff drought index that ranges from 0 (no drought) to 800 (extreme drought) and is based on 8 inches of available moisture in the upper soil layers that can be used by vegetation for evapotranspiration. The index indicates deficit inches of available water in the soil. A KBDI reading of 450 means there is a deficit of 4.5 inches of ground water available to the vegetation. Factors in the index are maximum daily temperature, daily precipitation, antecedent precipitation, and annual precipitation.

Table 27 - Keetch-Byram Drought Index (KBDI)

Index	Description
0-150	The fuels and ground are quite moist. Drying is generally limited to the fine surface fuels and the organic layers retain sufficient moisture to resist burning. Most of the heavy fuels (100 and 1000 hour) are too wet to ignite. Typical of spring dormant season following winter precipitation.
150-300	Scattered parches of surface litter remain in damp areas following a fire, and the organic layer remains basically undisturbed. Both pine and hardwood stumps may ignite, but seldom burn below ground. Snags a major threat for potential fire escape. Spotting usually minimal. Large acreages (500+) ignited can create intense conditions. Fire behavior is predictable. Typical of late spring, early growing season.
300-500	Fire consumes most surface litter along with a significant loss in organic soil material. Site preparation burns expose mineral soil, producing areas causing erosion problems. 100 and 1000 hour fuels contribute to fire intensity. Stumps and snags ignite. Spotting occurs. Escaped fire is difficult to control. Fire behavior is still predictable. Increased mop-up and petrol activities are required. This is typical in the late spring, early growing season at a K/B level below 400 KBDI. Above 400 KBDI, typical of late summer, early fall.
500-700	All surface litter and most of the organic layer are consumed by fire leaving excessive site damage. 1000-hour fuels contribute readily to fire intensity. Spotting is difficult to control. Above 600 KBDI, fire suppression is a major problem. Expect fire escape the nest day. Summer site preparations should be canceled when the KBDI surpasses 550. Near 700, under story vegetation wilts and is consumed by fire. Fire behavior is predictable, but often unpredicted. Extensive mop-up to fire suppression. The levels above 600 are associated with severe drought
700 Plus	Expect the same as the previous levels, only worse! Extreme fire behavior. Delay burning until the K/B index falls below 500

Source: South Carolina Drought Response Unit of the Department of Natural Resources

Associated Risks for the Natural Hazards

The SHELDUS database maintained by ASU identified the associated risks for the natural hazards within each of the counties with the exception of wildfire -wildfire events were provided by the South Carolina Forestry Commission. The associated risks are listed in Tables 28 through 31 for each of the identified hazards within the jurisdiction by County.

Table 28 - Clarendon County Risk Hazards

Clarendon County Risks Hazards	Events	Years in Record	Return Period	Annual % Chance
Flooding	22	58	2.68	37.29
Hurricane or Tropical Storm or Coastal Storm	9	58	6.56	15.25
Tornado	12	58	4.92	20.34
Winter Storm/Freezing/ice/snow	34	58	1.74	57.62%
Dam Failure	---	---	---	---
Severe storm (thunderstorms)/wind	35	58	1.69	59.32%
Hail	22	58	2.68	37.29%
Lightning	21	58	2.81	35.59%
Wildfire	94	20	2.81	35.59%
Earthquake	1	58	59	1.694%
Drought	8	58	7.38	13.56%
Heat (Temperature Extremes)	---	---	---	---

Table 29 - Kershaw County Risk Hazards

Kershaw County Risk Hazards	Events	Years in Record	Return Period	Annual % Chance
Flooding	22	58	2.68	37.29%
Hurricane or Tropical Storm or Coastal Storm	9	58	6.56	15.25%
Tornado	12	58	4.92	20.34%
Winter Storm/Freezing/ice/snow	34	58	1.74	57.63%
Dam Failure	---	---	---	---
Severe storm (thunderstorms)/wind	75	58	0.79	127.12%
Hail	22	58	2.68	37.29%
Lightning	21	58	2.81	35.59%
Wildfire	21	58	2.81	35.59%
Earthquake	1	58	59	1.69%
Drought	8	58	7.38	13.56%
Heat (Temperature Extremes)	0	58	00	00%

Table 30 - Lee County Risk Hazards

Lee County Risk Hazards	Events	Years in Record	Return Period	Annual % Chance
Flooding	15	58	3.93	25.42%
Hurricane or Tropical Storm or Coastal Storm	8	58	7.38	13.56%
Tornado	6	58	9.83	10.17%
Winter Storm/Freezing/ice/snow	29	58	2.03	49.15%
Dam Failure	---	---	---	---
Severe storm (thunderstorms)/wind	70	58	0.84	118.64%
Hail	18	58	3.28	30.51%
Lightning	14	58	4.21	23.73%
Wildfire	2	50	29.5	3.39%
Earthquake	---	---	---	---
Drought	8	58	7.35	13.56%
Heat (Temperature Extremes)	7	58	8.43	11.86%

Table 31 - Sumter County Risk Hazards

Sumter County Risk Hazards	Events	Years in Record	Return Period	Annual % Chance
Flooding	216	58	2.81	35.59%
Hurricane or Tropical Storm or Coastal Storm	8	58	7.38	13.56%
Tornado	6	58	9.8	10.17%
Winter Storm/Freezing/ice/snow	28	58	2.11	47.46%
Dam Failure	---	---	---	---
Severe storm (thunderstorms)/wind	86	58	0.69	145.76%
Hail	23	58	2.57	38.98%
Lightning	25	58	2.36	42.37%
Wildfire	74	58	0.28	352.38%
Earthquake	---	---	---	---
Drought	8	58	7.38	13.56%
Heat (Temperature Extremes)	6	58	9.83	10.17%

Hazard likelihood, based on the Tables 28 through 31 will be classified as following within this inter-jurisdiction plan:

- Highly Likely – 85% or greater
- Likely – 35% - 84.99%
- Moderately Likely – 10% - 34.99%
- Not Likely – Less than 1% - 9.99%

A breakout of hazards by "Highly likely through Not Likely" by County is depicted in Table 32.

Note: The risks for Dam Failures are negligible for Lee and Sumter Counties; Heat hazards were negligible for Lee and Sumter Counties, which make these associated risks rated as "Not Likely".

Table 32 - Likelihood of Hazards by County

Likelihood	Hazard	County
Highly Likely	Severe Storm Wildfire	All Counties
Likely	Hail	Clarendon, Kershaw
	Flooding	Clarendon, Kershaw
	Winter Storm	All Counties
	Lightning	Clarendon, Kershaw
Moderately Likely	Flooding, Lightning, and Hail	Lee, Sumter
	Hurricane or Tropical Storm	All Counties
	Drought, Heat	All Counties
	Tornado	All Counties
Not Likely	Earthquake	All Counties
	Dam Failure	All Counties

Historical and Updated Flooding Occurrences

Listed below for the Jurisdiction area is the historical and updated flooding occurrences.

Flooding within the jurisdiction is rated as Likely in Clarendon and Kershaw Counties; Moderately Likely in Lee and Sumter Counties.

Even with the risk rating of Moderately Likely, there are some mitigation ideas suggested by the South Carolina Emergency Management Division to offset any occurrences with flooding. These ideas are listed below:

- Establish adequate building codes, i.e. strengthen structural codes to withstand water pressure or high velocity of flowing water; require proper anchorage of building to prevent flotation.
- Enforce appropriate zoning laws.
- Buyout and / or acquire homes, businesses and property in the floodplain to prevent future loses.
- Perform channel improvements, i.e., straighten undesirable bend ways; deepen and widen stream beds, etc.
- Explore watershed treatment ideas to render the soil more absorbent of excessive water.

Participating communities keep a paper copy of the FEMA Flood Insurance Rate Maps (FIRM) in the local floodplain manager's office.

According to the South Carolina Department of Natural Resource Flood Mitigation Program, participating National Flood Insurance Program (NFIP) Community Floodplain Manager Jurisdictional Contacts, as of December 1, 2019, are identified below:

Clarendon County

- County – Maria Rose, Planning Director

- Manning – Scott Tanner, City dministrator

Kershaw County
- County – Michael Conley, Planning and Zoning Director

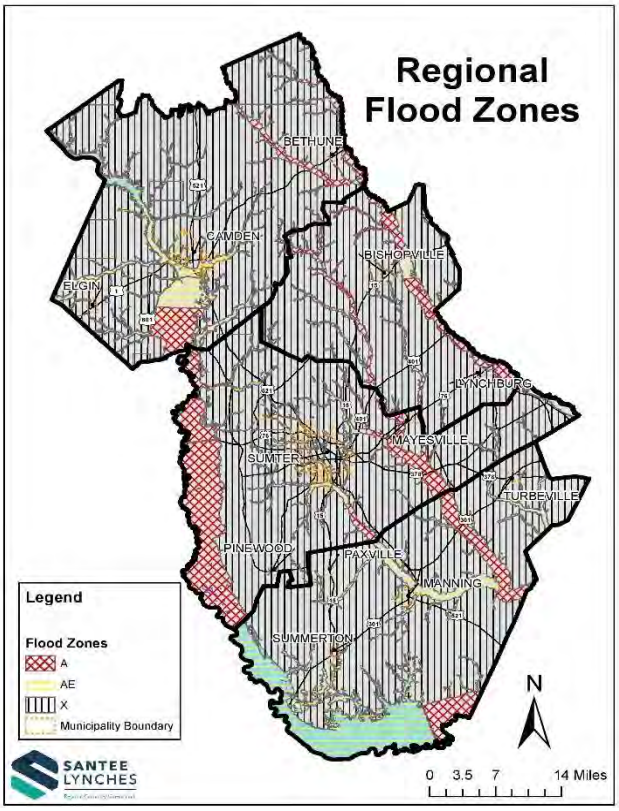
Lee County
- County, Bishopville, & Lynchburg – Arlene Samuel, County Building/Zoning Director

Sumter County
- County & Sumter City – George McGregor, Planning Director
- Mayesville – Theresa Castillo, Clerk/Treasurer
- Pinewood – Jennifer Russel, Clerk/Treasurer

Additionally, FEMA provides a way for individuals to view and order copies of the effective FIRM maps and other NFIP products through the Map Service Center. Additionally, an individual can also call the FEMA Map Information exchange, toll free at 1-877-FEMA MAP 1-877-336-2627.

To the right is the regional Digital FIRM Map. A Larger version of the Map 10 is in Appendix I.

Zone A identifies high-risk areas, there is at least a 1 in 4 chance of flooding during a 30-year mortgage. All home and business owners in these areas with mortgages from federally regulated or insured lenders are required to buy flood insurance. Zone X identifies moderate-to-low risk areas, the risk of being flooded is reduced but not completely removed. These areas submit over 20% of NFIP claims and receive one-third of disaster assistance for flooding. Flood insurance isn't federally required in



Map 16 - Regional Digital FIRM Map

moderate-to-low areas, but it is recommended for all property owners and renters. The Base Flood Elevation (BFE) - The elevation shown on the Digital FIRM for Zone AE indicates the water surface elevation resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.[4]

Clarendon County

Clarendon County has experienced moderate flood events in the past. This can be attributed to the low elevation of the topography, the presence of a lake, and a river basin that is in the center of the county. Most areas along these rivers determined to be in the 100-year floodplain are undeveloped or lie within forested areas. The exception to this is the area east of the City of Manning, which borders the Pocotaligo River.

[4] Source: National Flood Insurance Program (FloodSmart.Gov) - https://www.floodsmart.gov/floodsmart/pages/flooding_flood_risks/defining_flood_risks.jsp

There are no insured structures within the County that have been repetitively damaged by floods.

Table 33 identifies NFIP participants in Good Standing in the Clarendon County Jurisdiction.

Flood Occurrences from 2015 – April 2019
Since the last update of this jurisdictional plan the National Climatic Data Center has recorded five (5) flash floods which occurred and caused over $11 million in property damage. Flooding occurred due to unusually heavy rains which produced water one to two feet deep across many areas. Fortunately, there was no loss of life or injuries.
The Town of Turbeville does not have Special Flood Hazard Areas or locally identified flood prone areas within their jurisdictional boundaries.

Table 33 - Clarendon County NFIP Participants

Jurisdiction	FEMA Current Effective Map Date[5]	Community in the National Flood Program	Flood Mitigation Activities
Clarendon County	8/19/13	Yes	Continuing to control building in floodplain, maintaining flood ordinances
City of Manning	8/19/13	Yes	Continuing to control building in floodplain, maintaining flood ordinances
Town of Summerton	8/19/13	Yes	Continuing to control building in floodplain, maintaining flood ordinances
Town of Paxville	---	---	
Town of Turbeville	8/19/13	No	Continuing to control building in floodplain, maintaining flood ordinances

Kershaw County

Kershaw County has experienced moderate flood events in the past. This can be attributed to the low elevation of the topography, the presence of a lake, and a river basin that is in the center of the county. Most areas along these rivers determined to be in the 100-year floodplain are undeveloped or lie within forested areas. The exception to this is the area south of the City of Camden, where US 521 intersects with I-20. While in the proximity to low elevation flood-prone land, Kershaw has considerable commercial and industrial development in this section of the County.

Flood Occurrences from 2015 – April 2019
Since the update of this plan according to the SHELDUS database and the National Climatic Data Center there were two (2) occurrences of flooding within the County

- 2015 – over $20,000 in property damage, one death and two injuries

There are no insured structures within the County that have been repetitively damaged by floods.

[5] Source: FEMA -The National Flood Insurance Program Community Status Book website: http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book Date: Sept 24,2019

Table 34 identifies NFIP participants in Good Standing in the Kershaw County Jurisdiction

Multi-jurisdictional Occurrences:

Kershaw

The areas which are at the most risk due to floods are the wetlands in the Wateree River Watershed just south of Camden and the area around Bethune, which is part of the Lynches River Water Shed. Those facilities that are most at risk include the fire stations at Doby Mill, Antioch, Mt Pisgah, Beaver Creek, and Shepard. In addition, to these fire stations, the emergency shelter at Lugoff-Elgin High is also at risk as well. In terms of critical infrastructure, the following could be considered at risk: the electric power substation, west of the Wateree River; the sewer treatment plant for Kershaw County on the Wateree River; and the Water Treatment Plant in the vicinity of Lake Wateree.

Camden

The City of Camden is at a greater risk than most of the County due to its location next to the Wateree River and low elevation towards the western and southern parts of the city. Those critical facilities most at risk include: the Wateree River Wastewater Treatment Facility; the hospital, which is located near a tributary of the Wateree River; and the Emergency Shelter at Camden High School.

Elgin

Located west of the Wateree River, the only critical facilities that would be at risk due to flooding are the Blaney Fire Department located in the Town of Elgin and an electrical power substation.

Bethune

Located within the proximity to the Lynches River, the Town of Bethune is at a lower risk of flooding than either Camden or Elgin. The only facility that would be at a considerable level of risk is the Bethune Police Station

Table 34 - Kershaw County NFIP Participants

Jurisdiction	FEMA Current Effective Map Date	Community in the National Flood Program	Flood Mitigation Activities
Kershaw County	9/28/18	Yes	Continuing to control building in floodplain, maintaining flood ordinances
City of Camden	9/28/18	Yes	Continuing to control building in floodplain, maintaining flood ordinances
Town of Elgin	NSFHA – No Special Flood Hazard Area – All Zone C	Yes	Continuing to control building in floodplain, maintaining flood ordinances
Town of Bethune	12/19/06	Yes	Continuing to control building in floodplain, maintaining flood ordinances

Lee County

Lee County has experienced relatively few flood events in the past. However, it does have some flood prone areas, particularly around the Lynches and Black River Basins. As for the two population centers, Bishopville and Lynchburg, they are not at any significant risk for floods.

Since the update of this plan there have been no recorded floods in Lee County.

Table 35 identifies NFIP participants in Good Standing in the Lee County Jurisdiction.

Flood Occurrences from 2015 – April 2019
No recorded incidents.

There are no insured structures within the County that have been repetitively damaged by floods.

Multi-jurisdictional Occurrences:
Lee
In Lee County, the area's most prone to floods are those in the vicinity of the Lynches River, the Black River, and Scape Ore Swamp. Bishopville

City of Bishopville
The city is at risk of flood due to the tributaries of the Black River. The Mohawk residential neighborhood floods on a regular basis due to the inadequate drainage system. The City of Bishopville is within close proximity to a flood prone area, but the area within the jurisdiction is not at risk.

Lynchburg Although Lynchburg is close to the Lynches River, it is not at a significant risk for flooding.

Table 35 - Lee County NFIP Participants

Jurisdiction	FEMA Current Effective Map Date	Community in the National Flood Program	Flood Mitigation Activities
Lee County	11/19/08	Yes	Continuing to control building in floodplain, maintaining flood ordinances
City of Bishopville	11/19/08	Yes	Continuing to control building in floodplain, maintaining flood ordinances
Town of Lynchburg	11/19/08 (M) No elevation determined-all Zone A, C and X	Yes	Continuing to control building in floodplain, maintaining flood ordinances

Sumter County

Sumter County has experienced moderate flood events in the past. This can be attributed to the low elevation of the topography, the presence of a lake, and a river basin that is in the center of the county. Most areas along these rivers determined to be in the 100-year floodplain are undeveloped or lie within forested areas.

Table 36 identifies NFIP participants in Good Standing in the Sumter County Jurisdiction.

Flood Occurrences from 2015 – April 2019
Since the update of this plan according to the ASU Arizona Hazard events and losses database for the United States (SHELDUS) and the National Climatic Data Center there were three (3) recorded flood incidents which occurred causing over $42,000 in property damage.

There are no insured structures within the County that have been repetitively damaged by floods.
Multi-jurisdictional Occurrences:
Sumter County
The critical facilities for the County are those that are found within the vicinity of the Pocotaligo and Black Rivers.

City of Sumter
The City of Sumter is at a high to moderate risk for flooding due to its proximity to the Pocotaligo River. As such, most of its critical facilities are at risk, particularly the electric

power substations on Wedgefield Rd and Red Bay Rd, the wastewater treatment facility, and the water treatment facilities near the Pocotaligo River.

Pinewood

The Town of Pinewood is not at a significant level of risk for flooding.

Mayesville

The Town of Mayesville is not at a significant risk for flooding

Table 36 - Sumter County NFIP Participants

Jurisdiction	FEMA Current Effective Map Date	Community in the National Flood Program	Flood Mitigation Activities
Sumter County	9/28/18	Yes	Continuing to control building in floodplain through maintaining flood ordinances, subdivision regulations, and zoning ordinances
City of Sumter	9/28/18	Yes	Continuing to control building in floodplain through maintaining flood ordinances, subdivision regulations, and zoning ordinances
Town of Pinewood	2/16/07	Yes	Continuing to control building in floodplain through maintaining flood ordinances, and zoning ordinances
Town of Mayesville	2/16/07	Yes	Continuing to control building in floodplain through maintaining flood ordinances, and zoning ordinances

Historical and Updated Hurricane or Tropical Storm Occurrences:

Listed below are the historical and updated hurricane and tropical storm occurrences for the Jurisdiction area.

Hurricanes and Tropical Storms for the jurisdictional area are rated as Moderately Likely.

Figure 12 - Residents in Manning were victims of tree damage in the wake of Hurricane Hugo. Photo is undated..
DOUG GILMORE – The State

The last occurrence of any significant hurricane or tropical storm for the jurisdictional region was over 25 years ago. With the most significant event over 30 years ago (1989) when the Category 4 storm "Hugo" went inland into the jurisdictional area. The inland destruction of "Hugo" left an indelible imprint on the lives of the residents within the jurisdictional region.

Today, 30 years after the Hugo event residents don't hesitate to take appropriate preparatory actions which are identified in the South Carolina Hurricane guide when any Tropical Storm or Hurricane approaches the coastal area of South Carolina.

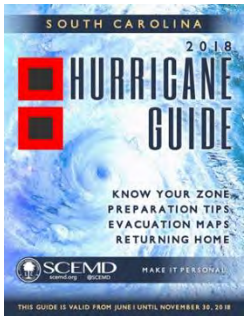


Figure 13 - SC Hurricane Guide 2018

Clarendon County

According to the ASU SHELDUS database there have been eight (8) hurricanes or

tropical storms that have passed over Clarendon County since 1960.

Hurricane and Tropical Storm occurrences from 2015 – April 2019
There have been no reported events.

Multi-jurisdictional Occurrences
Clarendon County:
Given their wide-ranging impact, hurricanes affect all parts of the county and put all its critical facilities at risk. Those that would need the most attention, due to their role in emergency services, would be fire/EMS stations and sheriff departments.

Manning:
In addition to the need to protect fire and police structures, the City of Manning also must consider mitigation measures critical infrastructure, such as water, sewer, and power.

Summerton:
In addition to the need to protect fire and police structures, the Town of Summerton also must consider mitigation measures for critical infrastructure, such as water, sewer, and power.

Turbeville:
In addition to the need to protect fire and police structures, the Town of Turbeville also must consider mitigation measures for critical infrastructure, such as water, sewer, and power.

Paxville:
The Town of Paxville's primary critical facility is Town Hall and fire station, which could sustain damage during the occurrence of a hurricane.

Kershaw County

According to the ASU SHELDUS database, eight (8) hurricanes and tropical storms have passed over Kershaw County since 1960.

Hurricane and Tropical Storm Occurrences from 2015 – April 2019
There were no reported events.

Multi-jurisdictional Occurrences:
Kershaw
Given their wide-ranging impact, hurricanes affect all parts of the county and put all its critical facilities at risk. Those that would need the most attention, due to their role in emergency services, would be fire/EMS stations and police stations.

Camden
In addition to the need to protect fire and police structures, the City of Camden also must consider mitigation measures for critical infrastructure, such as water, sewer, and power.

Elgin
In addition to the need to protect Town Hall, fire and police buildings, the Town of Elgin also must consider mitigation measures for critical infrastructure, such as power.

Bethune
In addition to the need to protect Town Hall, fire and police structures, the Town of Bethune also must consider mitigation measures for critical infrastructure, such as water and power.

Lee County

According to the ASU SHELDUS database there were eight (8) hurricanes or tropical storms that have passed over Lee County since 1960.

Hurricane and Tropical Storm Occurrences from 2015 – April 2019
There have been no reported events.

Multi-jurisdictional Occurrences:
Lee
Given their wide-ranging impact, hurricanes affect all parts of the county and put all its critical facilities at risk. Those that would need the most attention, due to their role in emergency services, would be fire/EMS stations and police stations.

Bishopville
In addition to the need to protect fire and police structures, the City of Bishopville also must consider mitigation measures for critical infrastructure, such as water, sewer, and power.

Lynchburg
In addition to the need to protect fire and police structures, the Town of Lynchburg also must consider mitigation measures for critical infrastructure, such as water, sewer, and power.

Sumter County

According to the ASU SHELDUS database and the National Climatic Data Center, eight (8) hurricanes have passed over Sumter County since 1960. During Hugo, the eye of the storm passed over an area between two of Sumter County's primary population centers.

Hurricane and Tropical Storm Occurrences from 2015 – April 2019
There have been no reported events.

Multi-jurisdictional Occurrences:
Sumter County
Given their wide-ranging impact, hurricanes affect all parts of the county and put all its critical facilities at risk. Those that would need the most attention, due to their role in emergency services, would be fire/EMS stations and police stations.

City of Sumter
In addition to the need to protect fire and police structures, the City of Sumter also must consider mitigation measures for emergency shelters, Tuomey Hospital, and critical infrastructure, such as water, sewer, and power.

Pinewood
In addition to the need to protect fire and police structures, the Town of Pinewood also must consider mitigation measures for critical infrastructure, such as water, sewer, and power.

Mayesville
The Town of Mayesville's primary critical facility is the fire station, which could sustain damage during the occurrence of a hurricane.

Historical and Updated Tornado Occurrences:

Tornados are considered Moderately Likely occurrences in the jurisdictional area.

Listed below for the Jurisdiction area is the historical and updated Tornado occurrences.

There were 50 confirmed tornado touchdown events in Santee-Lynches Region between 1960 and 2019, according to the ASU SHELDUS database these events resulted in 1 death and 65 injuries. Typically, South Carolina tornadoes are less severe than in other parts of the country.

The South Carolina Emergency Management Division has provided some possible mitigation ideas for the jurisdictional area to consider that may help offset extensive damage and or injuries due to Tornados. These ideas are listed below:

- Install tornado warning sirens in populated areas

- Anchor manufactured homes
- Bury utility lines or trim trees near above-ground lines
- Ensure community safe rooms at vulnerable public areas are always accessible by the public.

Clarendon County

According to the ASU SHELDUS database, there were six (6) confirmed tornado events in Clarendon County since 1960, which have resulted in one (1) death and twenty-seven (27) injuries. The strongest tornado ever recorded in Clarendon County is an F2, which occurred on August 28, 1988 and resulted in seriously injuring one person and killing another.

Tornado Occurrences from 2015 – April 2019

According to the National Climatic Data Center there was one Tornado on April 19, 2019. A tornado touched down near the shore of Lake Marion near M W Rickenbaker Rd then moved to the NE. The tornado moved across a cove on Lake Marion to Lesesne Dr, McFadden Ave, and Regal St where the tornado reached an intensity of EF-2.

Table 4-29 lists all the Tornados which have occurred in Clarendon County from 1960 – April 2019. There were twenty-eight (28) events that occurred in Clarendon County during this time period that caused $3,424,455 in damages with 26 injuries and 1 death.

Multi-jurisdictional Occurrences:

Clarendon County

Given their unpredictable nature, tornados can occur anywhere, but by using the historical data as a sort of barometer, then it is apparent that the central part of the county is most vulnerable. County assets in this area include the fire stations in Foreston and Alcolu, as well as the sheriff's department located southwest of Manning.

Manning

Manning is highly vulnerable being in an area that has experienced the most intense storm activity. Given the unpredictable nature of tornados all critical facilities are at risk.

Summerton

The Town of Summerton is a low risk jurisdiction and experiences an equal risk to the rest of the County outside the center of the County, which is at the greatest risk. Given the unpredictable nature of tornados all critical facilities are at risk.

Turbeville and Paxville

The Town of Turbeville and Paxville are considered at moderate risk as compared to the rest of the County. Given the unpredictable nature of tornados all critical facilities are at risk.

Table 37 - Tornadoes in Clarendon County 1960 - April 2019

Location	Date	Time	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Clarendon	7/15/1961	5:30 PM	F1	0	0	$25,000	$0
Clarendon	7/24/1962	3:00 PM	F1	0	0	$3,000	$0
Clarendon	9/19/1966	11:00 AM	-	0	0	$2,500	$0
Clarendon	8/08/1972	3:00 PM	F0	0	0	$25,000	$0
Clarendon	5/11/1973	9:00 PM	F1	0	0	$3,000	$2,827
Clarendon	2/24/1977	5:00 AM	F1	0	0	$25,000	$0
Clarendon	5/04/1978	4:50 PM	F2	0	1	$250,000	$9,628
Clarendon	7/23/1980	4:00 PM	F1	0	0	$25,000	$0
Clarendon	7/03/1981	6:43 PM	F0	0	0	$0	$0
Clarendon	8/28/1988	2:15 PM	F2	1	1	$2,500,000	$0
Clarendon	5/05/1991	9:30 PM	F0	0	0	$0	$0
Manning	6/27/1995	7:33 PM	F0	0	0	$20,000	$0
Summerton	11/2/1995	4:43 PM	-	0	0	$0	$0
Jordan	11/7/1995	4:25 PM	-	0	0	$0	$0
Bloomville	11/7/1995	4:30 PM	-	0	0	$0	$0
Bloomville	3/07/1996	12:31 PM	F0	0	0	$1,000	$0
Turbeville	4/22/1997	9:10 PM	F1	0	2	$0	$0
Manning	3/08/1998	2:18 PM	F0	0	0	$2,000	$0
Paxville	9/07/2004	8:48 AM	F0	0	0	$0	$0
Alcolu	9/27/2004	9:23 AM	F1	0	4	$0	$0
Manning	1/13/2006	9:35 PM	F1	0	18	$500,000	$0
Manning	4/26/2006	2:45 PM	F0	0	0	$0	$0
Manning	1/16/2006	1:19 AM	F1	0	0	$5000	$0
Foreston	3/15/2008	5:58 PM	EF1	0	0	$0	$0
Davis Station	3/28/2009	4:31 PM	EF1	0	0	$0	$0
Gable	4/16/2011	2:27 PM	EF0	0	0	$12,000	$0
Clarendon	4/16/2011	3:13 PM	EF1	0	0	$14,000	$0
Clarendon	4/19/2019	1:29 PM	EF2	0	0	$0	$0

Source: National Climatic Data Center

Kershaw County

There were twenty-two (23) events that occurred in Kershaw County during 1960 – April 2019 that produced $27,320,413 in damages and caused 35 injuries.

Tornado Occurrences from 2015 – April 2019

There were no tornado occurrences within the County.

Table 38 lists all tornado events reported for Kershaw County between 1960 and April 2019.

Multi-jurisdictional Occurrences:

Kershaw

Given their unpredictable nature, tornados can occur anywhere, but by using the historical data as a sort of barometer then it is apparent that the Cassatt area, between Camden and Bethune, is the most vulnerable. The only County asset at risk in this area is the Cassatt Fire Station.

Camden

According to the historical data, the City of Camden is not significantly at risk.

Elgin
According to the historical data, the Town of Elgin is not significantly at risk.

Bethune
According to the historical data, the Town of Bethune is not significantly at risk.

Table 38 - Tornados in Kershaw County 1960 - April 2019

Location	Date	Time	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Kershaw Co.	8/29/1964	5:00 PM	F1	0	0	$2,500	$0
Kershaw Co.	8/16/1965	3:40 PM	-	0	0	$0	$0
Kershaw Co.	4/07/1967	3:20 PM	F1	0	0	$2,500	$0
Kershaw Co.	4/18/1969	2:45 PM	F1	0	0	$25,000	$0
Kershaw Co.	4/18/1969	6:05 PM	F2	0	0	$250	$0
Kershaw Co.	5/04/1978	6:00 PM	F1	0	0	$2,500	$0
Kershaw Co.	3/06/1983	7:00 PM	F1	0	0	$30	$0
Kershaw Co.	3/28/1984	6:20 PM	F4	0	31	$25 mil	$2 mil
Kershaw Co.	2/16/1990	1:24 PM	F0	0	0	$2,500	$0
Kershaw Co.	8/16/1994	2:00 PM	F0	0	0	$0	$0
Camden	3/16/1996	8:38 PM	F0	0	0	$0	$0
Cassatt	5/29/1996	6:44 PM	F0	0	0	$0	$0
Camden	7/23/1997	11:48 PM	F2	0	1	$225,000	$0
Bethune	7/24/1997	00:20 AM	F1	0	0	$25,000	$0
Camden	9/07/2004	8:18 AM	F0	0	0	$0	$0
Cassatt	9/07/2004	8:35 AM	F1	0	0	$0	$0
Camden	9/07/2004	10:15 AM	F3	0	1	$0	$0
Lugoff	4/26/2006	2:23 PM	F0	0	0	$10,000	$0
Camden	4/26/2006	2:42 PM	F0	0	0	$0	$0
Liberty Hill	3/15/2008	10:20 AM	EF1	0	0	$0	$0
Lugoff	3/15/2008	10:30 AM	EF2	0	0	$0	$0
Elgin	3/15/2008	11:22 AM	EF2	0	2	$0	$0
Lugoff	3/15/2008	11:33 AM	EF0	0	0	$0	$0

Source: National Climatic Data Center

Lee County

There were ten (10) confirmed tornado events in Lee County since 1960, which have resulted in no deaths, eight (8) injuries and $97,714 in property and crop damage. The strongest tornado ever recorded in Lee County is an F2, which occurred on October 1, 1966, and injured eight (8) people.

Tornado Occurrences in Lee County from 2015 – April 2019

There were no tornado occurrences in this county.

Table 39 lists all tornado events reported for Lee County between 1960 and April 2019.

Multi-jurisdictional Occurrences:

Lee

Given their unpredictable nature, tornados can occur anywhere, but by using the historical data, as a sort of barometer then it is apparent that the City of Bishopville and the area just east of the City are the most vulnerable, except for an extremely rural section of the County in the southwest. According to the historical information, the critical facility most at risk is the emergency shelter at Lee Central High.

Bishopville

Bishopville is moderately vulnerable, being in an area that has experienced some storm

activity. Given the unpredictable nature of tornados all critical facilities are at risk.

Lynchburg

According to the historical data, Lynchburg is at low risk for tornados. However, given the unpredictable nature of tornados all critical facilities are at risk.

Table 39 - Tornadoes in Lee County 1960 - April 2019

Location	Date	Time	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Lee	2/09/1962	5:00 PM	F1	0	0	$25,000	0
Lee	10/1/1966	11:30 AM	F2	0	8	$25,000	$387
Lee	5/24/1973	4:00 PM	F1	0	0	$2,500	$2,827
Lee	5/20/1980	11:55 AM	F0	0	0	$25,000	0
Manville	9/07/2004	7:40 AM	F1	0	0	$0	0
Bishopville	9/07/2004	8:10 AM	F0	0	0	$0	0
Bishopville	9/27/2004	1:03 PM	F0	0	0	$0	0
St Charles	4/15/2007	7:50 AM	F1	0	0	$5,000	0
Ashwood	3/15/2008	5:52 PM	F1	0	0	$0	0
Woodrow	7/11/2010	6:39 PM	EF0	0	0	$12,000	0

Source: National Climatic Data Center

Sumter County

According to the ASU SHELDUS database and the National Climatic Data Center, there were twenty-three (23) confirmed tornado events in Sumter County since 1960 which caused $4,750,000 in property damage, $7,479 in crop damage along with 1 death and 8 injuries. The strongest tornado ever recorded in Sumter County was an EF3 which touched down in the Pinewood area on April 15, 2007. This tornado killed 1 person, injured 2, and damaged over 70 homes.

Tornado Occurrences from 2015 – April 2019

According to the National Climatic Data Center there were no tornado occurrences in this county.

Table 40 lists all tornado events reported for Sumter County between 1960 and April 2019.

Multi-jurisdictional Occurrences:

Sumter County

Given their unpredictable nature, tornados can occur anywhere, but by using the historical data as a sort of barometer, then it is apparent that the central part of the county, extending from Mayesville in the north down to the US 521 Corridor towards Clarendon County, is most vulnerable. County Assets in this area include the Dalzell Fire Station; the Oswego Fire Station; the Dubose Fire Station; the Graham Fire Station; the Cherryvale Fire Station; and the electric power facility on North Jefferson Rd.

City of Sumter

The City of Sumter is highly vulnerable being in an area that has experienced the most intense storm activity. Given the unpredictable nature of tornados all critical facilities are at risk.

Pinewood

According to the historical data, Pinewood is at a low-to-moderate risk as are the critical facilities in the town.

Mayesville

According to the historical data, Mayesville is at a significant level of risk as are the critical facilities in the town.

Table 40 - Tornadoes in Sumter County 1960 - April 2019

Location	Date	Time	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Sumter	7/25/1962	12:00 PM	F0	0	0	0	0
Sumter	9/29/1963	1:00 AM	F2	0	0	$25,000	0
Sumter	6/18/1964	5:00 PM	F1	0	0	$3,000	0
Sumter	5/15/1967	6:15 PM	F1	0	0	$25,000	0
Sumter	9/12/1971	2:30 PM	F1	0	0	$2,500	$310
Sumter	7/21/1979	7:30 PM	F0	0	0	0	$172
Sumter	11/29/1985	3:00 PM	F0	0	0	$250,000	$1,166
Sumter	9/22/1989	12:30 AM	F1	0	0	$2,500,000	0
Runnymede Area	5/19/1993	2:30 PM	F0	0	0	$5,000	0
Sumter	9/16/1996	5:16 PM	F2	0	0	$75,000	0
Pinewood	5/10/1998	4:28 PM	F0	0	0	$0	0
Rembert	6/6/1998	6:10 PM	F0	0	0	$2,000	0
Rembert	3/16/2000	6:32 PM	F0	0	0	$0	0
Sumter	9/7/2004	6:28 AM	F2	0	3	$1,700,000	0
Shaw AFB	9/7/2004	9:03 AM	F1	0	0	$0	0
Sumter	12/10/2004	5:30 AM	F0	0	0	$0	0
Pinewood	4/15/2007	7:20 AM	F3	1	5	$0*	$0*
Pinewood	11/14/2008	10:53 PM	F0	0	0	$10,000	$5,831
Dubose (area)	7/11/2010	6:45 PM	EF0	0	0	$4,000	0
Claremont	7/12/2010	3:35 AM	EF1	0	0	$80,000	0
Privateer	4/28/2011	6:50 AM	EF1	0	0	$48,000	0
Shiloh	4/28/2011	7:18 AM	EF0	0	0	$18,000	0
Pinewood	2/24/2012	1:51 PM	EF0	0	0	$10,000	0

Source: National Climatic Data Center * No data available

Historical and Updated Severe Winter Storms Occurrences

Winter Storms are considered Likely in all jurisdictional areas.

Although severe winter storms are typically associated with much colder climates, it is not uncommon for South Carolina to experience significant, even disastrous, winter weather events. Presidential disasters for winter storms were declared in South Carolina in January 2000, January 2003, February 2004, and the most recent and perhaps the worst winter storm in the State – February 2014 where "The governor's office estimates the state suffered $55 million in damages. … The *Federal* funds *were made* available to state and eligible local governments and some nonprofits in the following counties: Aiken, Allendale, Bamberg, Barnwell, Berkeley, Calhoun, Chesterfield, Clarendon, Colleton, Dillon, Dorchester, Edgefield, Florence, Georgetown, Hampton, Horry, Marion, Orangeburg, Saluda, Sumter, and

Williamsburg. [6] A total of 21 counties out of 46 counties in the State were listed as being severely impacted by the 2014 Winter Storms. The Presidential Emergency and Disaster Declaration announcements are in Appendix H.

The South Carolina Emergency Management Division has provided winter weather mitigation ideas for the inter-jurisdiction community and public to consider.

The one (1) idea for the communities is to consider is:

- Bury electrical lines where possible

Clarendon County

According to data acquired from the National Climatic Data Center, Clarendon County had five (5) ice or snow events between 1993 and 2001. However, in 2004 the County experienced a severe ice storm, which caused extensive damage and resulted in loss of power for several days.

Winter Storm and Ice Storm Occurrences from 2015 to April 2019

There were no occurrences of Winter Storms or Ice.

Winter Storms (Historical events 2010-14)

1. February 12, 2010 at 8:00 pm produced 5 – 10 inches of snow across the county; no injuries or death or reported property damage.
2. December 26, 2010 at 9:30 am produced snow depths of 1 to 2 inches across the far northern portion of the county with less than an inch elsewhere; no injuries or death or reported property damage.
3. January 10, 20111 at 7:00 am produced snow accumulations of 1 to 2 inches in the north portion of the county with less than an inch elsewhere. Freezing rain followed the snow with ice accumulations of 1/4 inch in the north to 1/2 inch in the south. Power outages also occurred. No deaths or injuries or reported property damage.
4. January 28, 2014 at 6:00 pm produced freezing rain, sleet, and snow across Clarendon County causing hazardous traveling conditions. Freezing rain accumulations were around 1/4 to 1/2 took down trees and powerlines causing some outages. Snow/sleet accumulations ranged from 1 to 2 inches across the county.

[6] Source: Columbia South Carolina WLTX News Station; website: http://www.wltx.com/story/news/local/2014/03/12/major-disaster-declaration-south-carolina/6329179/

Ice Storm (Historical events 2010-14)
According to the National Climatic Data Center there was one Ice Storm reported as a major ice storm. The Ice Storm occurred on February 12, 2014 at 8:00 am. The Ice Storm produced 3/4 to 1 inch of ice and around 1 inch of snow and sleet across Clarendon County taking down numerous trees and powerlines. Power outages were widespread across the county affecting most of the population. No deaths or injuries reported. According to the local Clarendon County Government, cleanup of the storm amounted over $600,000.[7]

Multi-jurisdictional Occurrences:
Clarendon
The various jurisdictions have assets that are vulnerable to this type of hazard.

Manning
The City of Manning has an electric power substation that would be susceptible to winter storms.

Summerton
The Town of Summerton has an electric power substation that would be susceptible to winter storms.

Turbeville
The Town of Turbeville does not have any assets that are at significant risk due to winter storms.

Paxville
The Town of Paxville does not have any assets that are at significant risk due to winter storms.

Kershaw County

Severe Winter Storms and Ice Storm Occurrences from 2015 to April 2019
According to the National Climatic Data Center there was one (1) Winter Storm, and no reported Ice Storms that occurred in Kershaw County; all storms reported no deaths or injuries.

Winter Storms
1. February 2, 2015 at 7:00 pm A winter storm spread snow and sleet across the northern Midlands and Pee Dee region. The snow only lasted a few hours before changing to rain which washed the snow away. Accumulations of 1 to 3 inches occurred in the Lancaster area with 1 to 2 inches elsewhere in the north Midlands and Chesterfield areas. Public reported around 1.5 inches of snow on the ground over northern portions of the county before the snow changed to rain. Up to an inch fell elsewhere before the snow changed to rain.

Ice Storm
(No reports)

Multi-jurisdictional Occurrences:
Kershaw
Given that severe winter storms tend to cover large areas, various jurisdictions have assets that are vulnerable to this type of hazard.

Camden
The City of Camden has three electric power substations that are susceptible to winter storms.
Elgin
The Town of Elgin has an electric power substation that would be susceptible to winter storms.
Bethune
The Town of Bethune has an electric power substation that would be susceptible to winter storms.

[7] Source: The ITEM Newspaper: http://www.theitem.com/stories/ice-storm-cleanup-costs-clarendon-600000,225764

Lee County

Severe Winter Storm and Ice Storm Occurrences from 2015 – April 2019

According to the National Climatic Data Center there were no reported Winter Storm or Ice Storm events.

Winter Storms (Historical events 2010-14)

1. February 12, 2010 at 8:00 pm produced 4-7 inches of snow across the county.
2. December 26, 2010 at 8:30 am produced snow depths of 1 to 2 inches across the county.
3. January 10, 2011 at 5:00 am produced snow accumulations of 2 to 6 inches with the heaviest amounts in the north portion of the county. Freezing rain followed the snow with ice accumulations of 1/4 inch. A few power outages were reported.
4. January 28, 2014 at 6:00 pm produced freezing rain, sleet, and snow across Lee County causing hazardous traveling conditions. Freezing rain accumulations were around 1/8 of an inch with snow/sleet accumulations from 1 to 3 inches across the county.
5. February 28, 2014 at 9:00 am, a major winter storm produced 1/8 to 1/4 inch of ice and 2 to 4 inches of snow and sleet across Lee County taking down some trees and power lines. A few power outages also occurred.

Ice Storm (Historical events 2010-14)

1. January 30, 2010 at 9:00 am produced 1/4 to 1/2 and inch of ice over northern Lee County and 1/4 inch of ice over the central and southern portions of the county. Many trees and power lines were taken down and there were many accidents.

Multi-jurisdictional Occurrences:

Lee

Given that severe winter storms tend to cover large areas the various jurisdictions have assets that are vulnerable to this type of hazard.

Bishopville

The City of Bishopville has an electric power substation that would be susceptible to winter storms.

Lynchburg

The Town of Lynchburg does not have any assets that are at significant risk due to winter storms.

Sumter County

Severe Winter Storm and Ice Storm Occurrences from 2015 – June 2019

According to the National Climatic Data Center there were no reported Winter Storm or Ice Storm events.

Winter Storms (Historical events 2010-14)

1. February 12, 2010 at 7:00 pm produced 5-7 inches of snow across the county.
2. December 26, 2010 at 8:30 am produced snow depths of 1 to 2 inches across the county.
3. January 10, 2011 at 6:00 am produced snow accumulations of 3 to 6 inches in the north portion of the county with 1 to 3 inches elsewhere. Freezing rain followed the snow with ice accumulations of 1/4 inch. A few power outages were reported.
4. January 28, 2014 at 5:00 pm produced freezing rain, sleet, and snow across Sumter County causing hazardous traveling conditions. Freezing rain accumulations were around 1/4 of an inch with snow/sleet accumulations from 1 to 3 inches across the county. There was one injury when a person slipped and fell from ice on the walkway.
5. February 12, 2014 at 8:00 am a major Winter Storm produced around 1/2 inch of ice and 1 to 3 inches of snow and sleet across Sumter County. Some trees and powerlines came down causing outages

in several areas.

Multi-jurisdictional Occurrences:

Sumter County

Given that severe winter storms tend to cover large areas the various jurisdictions have assets that are vulnerable to this type of hazard.

City of Sumter

The City of Sumter has electric power substations that would be susceptible to winter storms.

Pinewood

The Town of Pinewood has an electric power substation that would be susceptible to winter storms.

Mayesville

The Town of Mayesville does not have any assets that are at significant risk due to winter storms.

Historical and Updated Dam Failure Occurrence

The overall risk rated for the inter-jurisdictional region is Not Likely.

The Dams and Reservoirs Safety Program was established in 1977 with the passage of the S.C. Dams and Reservoirs Safety Act. Dam safety laws are found in South Carolina 1976 Code of Laws' Dams and Reservoirs Safety Act 49-11-110; last amended in 1994. Regulations are found in South Carolina Department of Health and Environmental Control Dams and Reservoirs Safety Act Regulations Section 72-1 through 72-9 Amended July 25,1997. [8]

Dams which are either 25 feet or more in height or impound (hold back) 50-acre feet or more are regulated by DHEC unless exempted by state law.[9]

Dams are also classified by size and hazard potential; the Hazard Classification is identified in Table 41.

Table 41- Dam Hazard Classifications

Hazard Classification Class	Hazard Potential
I - High Hazard	Dams located where failure will likely cause loss of life or serious damage
II - Significant Hazard	Dams located where failure will not likely cause loss of life but may damage property
III - Low Hazard	Dams located where failure may cause minimal property damage

[8] Source: South Carolina Department of Health and Environmental Control (DHEC) website: http://www.scdhec.gov/environment/WaterQuality/DamsReservoirs/LawsRegulations/

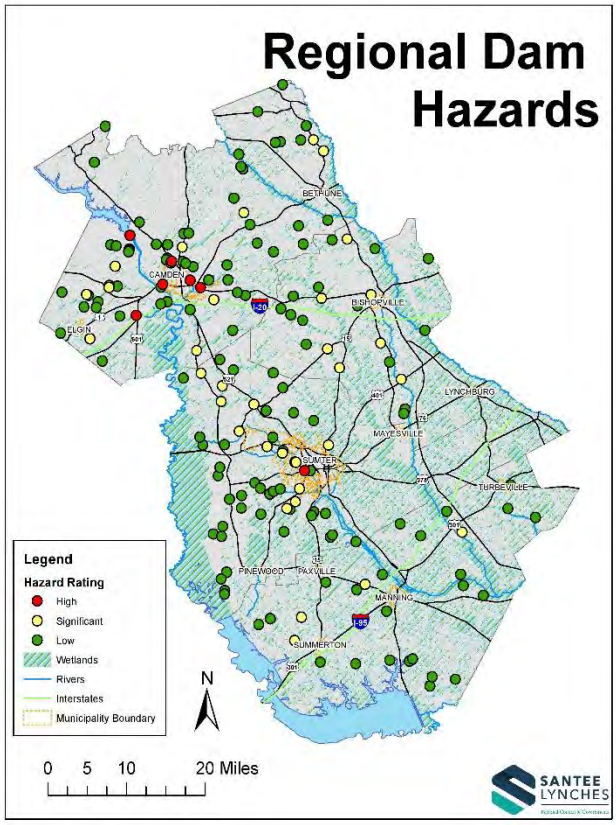
[9] Source: DHEC website: http://www.scdhec.gov/environment/WaterQuality/DamsReservoirs/DamsOverview/

Table 4- 33 Dam Hazard Classification

As of 2019, The Department of Health and Environmental Control (DHEC) oversees nearly 2300 dams across the state.[10] Indeed, South Carolina has many dams, ranging from large structures for power generation, recreation and water supply to smaller dams for industrial, agricultural or fishing purposes.

Moreover, dam owners work with state and local officials to prepare an Emergency Action Plan (EAP). An EAP identifies potential emergency conditions at a dam and specifies preplanned actions to be followed to help prevent loss of life and minimize property damage.[11]

To the right is a map depicts the hazard ranking of each monitored dam in the Santee-Lynches Region.



Map 17 - Region Dam Hazards

[10] Source: SC Department of Health and Environmental Control (DHEC)website: http://www. https://www.scdhec.gov/environment/water-quality/dams-reservoirs

[11] Source: ASDSO Dam Safety Fact Sheet – Performance Report for the State of South Carolina website: https:https://www.damsafety.org/dam-failures/.

Clarendon County

There is no record of dam failure in Clarendon County prior to 2003. However, during 2003 several dams failed and caused major flood damage to the Chickwood Mobile Home Park and establishments in the Manning area.

Clarendon County has a total of 28 Dams – 4 Class II and 24 Class III.

Dam Failure Occurrences from 2015 – June 2019

No reported Dam Failure occurrences.

Multi-jurisdictional Occurrences

Clarendon

Clarendon County has several dams within the vicinity of the various watersheds in the county. The area most at risk for dam failure is the center of the county, because of the Pocotaligo River. In addition, there are several dams around Lake Marion, the Black River, and Puddin Swamp.

Manning

The City of Manning is at most risk due to dam failure. Given the city's geographic location, any of its assets are at risk.

Summerton

The Town of Summerton is not at significant risk because the closest dams are located south and west, near Lake Marion.

Turbeville

The Town of Turbeville is not at significant risk because the closest dams are located southwest, near Pudding Swamp.

Paxville

Paxville is not at significant risk.

Kershaw County

Kershaw County has Wateree Lake Dam (Duke Progress) and 15 "millpond" type dams which could cause problems. There has been one failure in recorded history which was the Kendall Mill Pond Dam in the City of Camden. It failed in 1990, damaging businesses and taking four lives.

Kershaw County has 70 Dams – 6 Class I; 11 Class II; 53 Class III. Currently, there are also an additional 3 Class I Dams that are under permit with SCDHEC.

Dam failure Occurrences from 2015 – June 2019

There were no dam failure events reported.

Multi-jurisdictional Occurrences

Kershaw

Kershaw County has several dams within the vicinity of the various watersheds in the county. The area most at risk for dam failure is along the Wateree River. In addition, there are several dams around the Lynches River.

Camden

Because of the number of dams around the Wateree River and its tributary streams, the City of Camden is at significant risk, due to dam failure. As such, any of its assets are at risk.

Elgin

The Town of Elgin is not at risk, due to its location away from the Wateree River and other ponds in the area.

Bethune

Although the Town is located near the Lynches River, it is not at significant risk due to dam failure.

Lee County

There are few dams which could have an effect of property or population in Lee County.

Lee County has 21 Dams – 7 Class II; 14

Class III.

Dam Failure Occurrences from 2015 – June 2019
There were no dam failure events reported.

Multi-jurisdictional Occurrences:
Lee
Lee County has several small dams within the vicinity of the various watersheds in the county. The area most at risk for dam failure is the center of the county, because of the Black River and Lynches River.

Bishopville
The City of Bishopville is at a moderate level of risk. As such, any of the city's assets would not be at risk in the case of dam failures.

Lynchburg
Lynchburg is not at significant risk.

Sumter County
The Second Mill Dam has failed three times, causing flooding downstream. One home was destroyed.

Sumter County has 54 Dams – 1 Class I; 13 Class II; 40 Class III.

Dam Failure Occurrences from 2015 – June 2019
No recorded Dam Failure occurrences.

Multi-jurisdictional Occurrences
Sumter County
Sumter County has several dams within the vicinity of the various watersheds in the County. The area most at risk for dam failure is the center of the County, because of the Pocotaligo River.

City of Sumter
The City of Sumter is at the most risk due to dam failure. Given the city's geographic location, many of its assets are at risk.

Pinewood
The Town of Pinewood is not at significant risk because the closest dams are located southwest, near the Wateree River.

Mayesville
Although Mayesville is located near the Black River, there are no dams close to the town.

Historical and Updated Severe Storms, Wind Events, Hail, and Lightning Occurrences

Severe thunderstorms and the effects from those storms – wind, hail and lightning – are common in South Carolina, but only a small percentage of these actually cause damage.

Severe Storms (includes Wind Events) for all the counties is rated Highly Likely.

Hail is rated Likely in Clarendon and Kershaw Counties; Moderately Likely in Lee and Sumter Counties.

Lightning is rated as Likely in Clarendon and Kershaw Counties; Moderately Likely in Lee and Sumter Counties.

All the counties within the inter-jurisdictional region are certified as a Storm Ready Community.

A challenge for the municipalities and Shaw Air Force Base is to be designated as a "Storm Ready Community and Storm Ready Military Site respectively.

Specific mitigation ideas from the South Carolina Emergency Management Division for the inter-jurisdictional region to consider are as follows:

- Anchor manufactured homes

- Utilize special roofing shingles and building materials designed to interlock and resist uplift.
- Bury utility lines or trim trees near above-ground lines.

Regardless of the lightning risks within the inter-jurisdictional region, in 2019 lightning struck a popular Black River gathering spot in South Carolina, killing one, and injuring a dozen.

Clarendon County

According to the SHELDUS database, from 1960 to 2018 there were a total of 73 significant wind events in Clarendon County. These events caused $5,576,272 in damages, five (5) deaths, and four (4) injuries. (These events do not include tornadoes.)

In addition, there were 16 hail events recorded for Clarendon County during the same period that resulted in no deaths and one (1) injury. Crop damage estimates were nearly $500,000 while property damages were recorded at $330,000.

There were 16 lightning events recorded between 1960 and 2018 for Clarendon County that resulted in 2 deaths and $648,000 in property damage. Crop damages exceeded $280,000.

Severe Storms, Wind Events, Hail, and Lightning Occurrences from 2015 to April 2019

According to the National Climatic Data Center there were thirty-one (31) days that recorded significant wind events in Clarendon County. Totaling over $43,000 in property damage with no injuries or death. Additionally, two (2) hail events that resulted in minimal property damage with no injuries or death. Both events according to TORRO would have had an Intensity Category of "Severe" due to the Hail Diameter of one hailstorm at 1.00 inches and one hailstorm at 0.75 inches.

Fortunately, during this same period there were no reported lightning events.

Normally, these storms are random in nature and do not follow geographic patterns.

Multi-jurisdictional Occurrences:

Clarendon Severe weather events are not geographically specific and can occur anywhere in the County affecting any of the County's assets.

Manning Severe weather events are not geographically specific and can occur anywhere in the City affecting any of the City's assets. However, Manning does have an electrical power substation that is especially susceptible to lightning.

Summerton

Severe weather events are not geographically specific and can occur anywhere in the town affecting any of the town's assets. However, Summerton does have an electrical power substation that is especially susceptible to lightning.

Turbeville

Severe weather events are not geographically specific and can occur anywhere in the town affecting any of the town's assets.

Paxville

Severe weather events are not geographically specific and can occur anywhere in the town affecting any of the town's assets.

Kershaw County

According to the SHELDUS database, there were a total of 79 significant thunderstorm and wind events in Kershaw County during the period of 1960 to 2018. These storms caused $19.2 million in damages, 2 death,

and 33 injuries. (These events do not include tornadoes).

In addition, there were 22 hail events recorded for Kershaw County during the same period that resulted in no deaths and nineteen (19) injuries. These events caused $4,750,000 in property damage and nearly $3,000,000 in crop damage.

There were 21 lightning events recorded between 1960 and 2018 for Kershaw County that resulted in one (1) death and one (1) injury. Additionally, $1,200,000 in property damage and over $122,000 in crop damages were recorded.

Severe Storms, Wind Events, Hail, and Lightning Occurrences from 2015 to April 2019

According to the National Climatic Data Center there were no significant wind events in Kershaw County.

There were nine (9) days that recorded hail events that resulted in $3,000 in property damage and minimal crop damage. No injuries or deaths were reported. According to TORRO, six (6) of those days had an intensity category of "Severe" ranging in hail diameter sizes of 0.75 inches (4 storms), 1.00 inches (2 Storms), and two storms falling in the "Significant" category at 0.25 inches.

Normally, these storms are random in nature and do not follow geographic patterns.

Multi-jurisdictional Occurrences:

Kershaw

Severe weather events are not geographically specific and can occur anywhere in the County affecting any of the County's assets.

Camden

Severe weather events are not geographically specific and can occur anywhere in the City affecting any of the City's assets. However, Camden does have three electrical power substations that are especially susceptible to lightning.

Elgin

Severe weather events are not geographically specific and can occur anywhere in the town affecting any of the town's assets. However, Elgin does have an electrical power substation that is especially susceptible to lightning.

Bethune

Severe weather events are not geographically specific and can occur anywhere in the town affecting any of the town's assets. However, Bethune does have an electrical power substation that is especially susceptible to lightning.

Lee County

According to the SHELDUS database, there were a total of 69 significant wind events in Lee County during the period of 1960 to 2018. These storms caused over $17,800,000 in damages, one death, and 5 injuries. (These events do not include tornadoes).

In addition, there were 18 hail events recorded for Lee County during the same period that resulted in no deaths and one injury. Additionally, $361,000 in crop damage and $410,000 in property damage was recorded.

There were 14 lightning events recorded between 1960 and 2018 for Lee County that resulted in no deaths, one injury. Crop damages were recorded at $108,000, and $270,000 in property damage.

Severe Storms, Wind Events, Hail, and Lightning Occurrences from 2015 to April 2019

According to the National Climatic Data Center there were eighteen (18) days with significant wind events in Lee County that totaled $72,500 in property damage with no injuries or death.

Additionally, four (4) days with hail events that resulted in $1,000 or less in property and crop damage, with no injuries or death. According to TORRO, one (1) hailstorm had an intensity category of "Destructive" ranging in hail diameter sizes of 1.25 inches and 1.75. Two were "Severe" Hailstorms and one (1) was "Significant".

Fortunately, there were no reported lightning events. Moreover, to ensure injuries from lightning strikes are mitigated during recreational outing events portable lightning prediction sensors are utilized.

Normally, these storms are random in nature and do not follow geographic patterns.

Multi-jurisdictional Occurrences:

Lee

Severe weather events are not geographically specific and can occur anywhere in the County affecting any of the County's assets.

Bishopville

Severe weather events are not geographically specific and can occur anywhere in the City affecting any of the City's assets. However, Bishopville does have an electrical power substation that is especially susceptible to lightning.

Lynchburg

Severe weather events are not geographically specific and can occur anywhere in the town affecting any of the town's assets.

Sumter County

According to the SHELDUS database, there were a total of 90 significant wind events in Sumter County during the period of 1960-2018. These storms caused 4 deaths, 6 injuries, $5.2 million in property damages, and $1.2 million in crop damage. (These events do not include tornadoes).

In addition, there were 23 hail events recorded for Sumter County during the same period that resulted in no deaths or injuries. They did; however, cause $760,000 in property damage, and $545,000 in crop damage.

There were 25 instances recorded between 1960 and 2018 for Sumter County where lightning caused $2.4 million in property damage and $289,000 in crop damage.

Severe Storms, Wind Events, Hail, and Lightning Occurrences from 2015 to June 2019

According to the National Climatic Data Center there were forty-two (42) days with significant wind events in Sumter County that totaled $105,000 in property damage with no injuries or death.

Additionally, 11 (11) days with hail events that resulted in less than $1,000 in property and crop damage with no injuries or death. According to TORRO, two (2) of those hailstorms had an intensity category of "Destructive" ranging in hail diameter sizes of 1.25 inches (1 storm), 1.75 inches (1 storm).

Furthermore, there was one (1) reported lightning event that resulted in no property or crop damage, and no injuries or death. To mitigate injuries from lightning strikes, in September of 2014, the City of Sumter installed two (2) Thor Guard Lightning Prediction Systems – one at an Aquatics

Center and one at the Palmetto Tennis Center.

Normally, these storms are random in nature and do not follow geographic patterns.

Multi-jurisdictional Occurrences:

Sumter County

Severe weather events are not geographically specific and can occur anywhere in the County affecting any of the County's assets.

City of Sumter

Severe weather events are not geographically specific and can occur anywhere in the City affecting any of the City's assets. However, Sumter does have an electrical power substation that is especially susceptible to lightning.

Pinewood

Severe weather events are not geographically specific and can occur anywhere in the town affecting any of the town's assets. However, Pinewood does have an electrical power substation that is especially susceptible to lightning.

Mayesville

Severe weather events are not geographically specific and can occur anywhere in the town and affecting any of the town's assets.

Historical and Updated Wildfire Occurrences

Wildfire risk in the region is rated Highly Likely.

Since the risk of Wildfires are Highly Likely the South Carolina Emergency Management Division has provided several mitigation ideas for the counties and associated municipalities to consider:

- Establish local building codes or development ordinances to regulate construction in wooded areas.
- Use fire-resistant materials when building or renovating structures. Avoid using wooden shakes and shingles for roofing.
- Create a safety zone to separate homes from combustible vegetation. Prune all branches around residences to a height of 8 – 10 feet. Keep trees adjacent to building free of dead limbs, needles, and debris from rain gutters and keep fireplaces/chimneys clean and clear.
- Avoid open burning, especially during dryer seasons. *(see causes of wildfire chart below - Debris Burning ranked as the highest cause of wildfires)*
- Bury electrical lines.
- Practice safe landscaping techniques such as using fire-resistant plants and non-flammable design features.

Moreover, the counties and municipalities within the region should also consider becoming recognized as a Firewise Community. The Firewise Community program is a process that empowers neighbors to work together in reducing wildfire risk.

The South Carolina Forestry Commission is responsible for protecting 13,657,033 acres of forestland in South Carolina from wildfire. 101,320 acres of federal land protected under special contract, which includes such lands as the Carolina Sandhills National Wildlife Refuge and the Corps of Engineers land around such lakes as Lake Thurmond, Hartwell, and Russell are included in the total acreage the South Carolina Forestry Commission is within their responsible jurisdiction to protect. Also included is forestland protected by Mutual Aid, which is approximately 824,801 acres of additional federal land that includes lands such as the

Francis Marion and Sumter National Forests, National Park lands, and lands owned by US Fish and Wildlife Service.[12]

Within our region the South Carolina Forestry Commission is responsible to protect 1,244,353 acres, which represent about 9% of the total area protected. The acres per county are below:

- Clarendon County - 238,952 acres
- Kershaw County - 376,376 acres
- Lee County – 121,735
- Sumter County – 268,338 acres

Undoubtedly, wildfires are caused by both natural and manmade events.

The South Carolina Forestry Commission identified in Fiscal Year 2017 – 2018 the Fires by Cause as illustrated in their chart.

Figure 14 - South Carolina Forestry Commission – Fires by Cause

Fires by cause, FY2017-18				
Cause	Fires	Acres burned	Average acres per fire	Percent of total Fires FY2017-18
Lightning	21	193.2	9.2	1.30%
Campfire	18	154.2	8.6	1.11%
Smoking	29	71.5	2.5	1.79%
Debris burning	853	5,471.8	6.4	52.78%
Incendiary	266	2,141.8	8.1	16.46%
Equipment use	100	475.5	4.8	6.19%
Railroad	9	56.4	6.3	0.56%
Children	54	182.5	3.4	3.34%
Miscellaneous	147	999.4	6.8	9.10%
Fireworks	16	41.6	2.6	0.99%
Power line	59	473.3	8.0	3.65%
Structure	44	102.1	2.3	2.72%
Totals	1,616	10,363.3	6.4	100.00%

Clarendon County

The areas within the county that are at a greater risk of wildfires are those areas that have a higher density of vegetation and forests. Smaller county jurisdictions (Summerton, Paxville, and Turbeville) with proximity to high risk rural areas face a higher risk than the more urbanized jurisdiction of Manning. Though the outskirts of urban areas are at risk due to the proximity of forested and vegetated areas, the risk in the urban core is comparatively low.

Wildfire Occurrences from 1998 - 2019

According to the South Carolina Forestry Commission available fiscal year data 1998 - 2019 Clarendon County had 2123 wildfire events resulting in 15,988.2 acres of land burned by wildfire, for an average of 799.41 acres per Fiscal Year. This number is just over the projected 20-year average.

Without concerted mitigation efforts Clarendon County could expect to incur wildfires that consume over 1,000 acres of land per year.

Multi-jurisdictional Occurrences:

Clarendon

Wildfires are not geographically specific and can occur anywhere in the County affecting any of the county's assets. The unincorporated county is more vulnerable to wildfires than the municipalities, simply because there are more forested areas in the unincorporated county.

Manning

Wildfires are not geographically specific and can occur anywhere in the city that is forested or overgrown and can affect any of the city's adjoining or contiguous assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Summerton

Wildfires are not geographically specific and can occur anywhere in the town affecting the

[12] Source: South Carolina Forestry Commission 2019 20-year Estimate.

town's assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Turbeville
Wildfires are not geographically specific and can occur anywhere in the town that is forested or overgrown can affect any of the town's contiguous assets. The urban areas are more vulnerable to wildfires, simply because there is less vegetation.

Paxville
Wildfires are not geographically specific and can occur anywhere in the town affecting any of the town's assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Kershaw County

From 1998-2019, Kershaw County had 1,651 wildfire events resulting in 7,995.6 acres of land burned by wildfire, for an average of 399.78 acres per year Like other counties in the southeastern part of the state, Kershaw has experienced a large number of wildfires that can be attributed to a number of factors, ranging from climate to land use.

Wildfire Occurrences from 1998 - 2019
According to the South Carolina Forestry Commission available fiscal year data 2018 – 2019 Kershaw County had 30 wildfires that consumed 51.4 acres. This amounts to over 300 acres a year in reduction of the 20-year average, where 359 acres per year were projected.

Multi-jurisdictional Occurrences:
Kershaw
Wildfires are not geographically specific and can occur anywhere in the County affecting any of the County's assets. The unincorporated county is more vulnerable to wildfires than the municipalities, simply because there are more forested areas in the unincorporated county.

Camden
Wildfires are not geographically specific and can occur in any forested area in the city and could affect any of the city's adjoining assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Elgin
Wildfires are not geographically specific and can occur in any forested area in the town and could affect any of the town's adjoining assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Bethune
Wildfires are not geographically specific and can occur in any forested area in the town and could affect any of the town's adjoining assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Lee County

The areas within the county that are at a greater risk of wildfires are those areas that have a higher density of vegetation and forests. Smaller county jurisdictions (Lynchburg) with proximity to high risk rural areas face a higher risk than the more urbanized jurisdiction of Bishopville. Though the outskirts of urban areas are at risk due to the proximity of forested and vegetated areas, the risk in the urban core is comparatively low.

From 1998 - 2019, Lee County had 1,246 wildfire events resulting in 7,965.5 acres of land burned by wildfire, for an average of 398.3 acres per year.

Wildfire Occurrences from 1998 - 2019
According to the South Carolina Forestry Commission available fiscal year data 2018 – 2019 Lee County had 20 wildfires that consumed 39.4 acres. This amounts to 279.2 acres a year in reduction of the 20-year average, where 318.6 acres per year were projected.

Multi-jurisdictional Occurrences:
Lee
Wildfires are not geographically specific and can occur anywhere in the County affecting any of the County's assets. The unincorporated county is more vulnerable to wildfires than the municipalities, simply because there are more forested areas in the unincorporated county.

Bishopville
Wildfires are not geographically specific and can occur where there is a forested area in the city and can affect any of the city's adjoining assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Lynchburg
Wildfires are not geographically specific and can occur where there is a forested area in the town and can affect any of the town's adjoining assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Sumter County

The areas within the county that are at a greater risk of wildfires are those areas that have a higher density of vegetation and forests. The land cover shows forested and scrub/shrub areas, largely within the unincorporated county at risk from this hazard. Smaller county jurisdictions (Pinewood and Mayesville) with proximity to high risk rural areas face a higher risk than the more urbanized jurisdiction of Sumter.

From 1998-2019, Sumter County had 2,102 wildfire events resulting in 13,992.2 acres of land burned by wildfire, for an average of 699.6 acres per year.

Wildfire Occurrences from 1998 - 2019
According to the South Carolina Forestry Commission available fiscal year data 2018 – 2019 Sumter County had 31 wildfires that consumed 193.6 acres. This amounts to 421.7 acres a year in reduction of the 20-year average, where 615.3 acres per year were projected.

Multi-jurisdictional Occurrences:
Sumter County: Wildfires are not geographically specific and can occur anywhere in the County affecting any of the County's assets. The unincorporated county is more vulnerable to wildfires than the municipalities, simply because there are more forested areas in the unincorporated county.

City of Sumter: Wildfires are not geographically specific and can occur where there is a forested area in the city and can affect any of the city's adjoining assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Town of Pinewood:
Wildfires are not geographically specific and can occur where there is a forested area in the town and can affect any of the town's adjoining assets. The urban areas are less vulnerable to wildfires, simply because there is less vegetation.

Town of Mayesville:
Wildfires are not geographically specific and can occur where there is a forested area in the town and can affect any of the town's adjoining assets. The urban areas are less

vulnerable to wildfires, simply because there is less vegetation.

Historical and Updated Earthquake Occurrences

Earthquake risk in the region is rated Not Likely.

Earthquakes are relatively infrequent but not uncommon in South Carolina. From 1698 to 2002, 20 earthquakes occurred in South Carolina with a Richter Scale magnitude equal to or greater than 4. The most property damage in South Carolina ever attributed to an earthquake was caused by the August 31, 1886 Charleston, South Carolina shock. The quake left about 65 people dead in Charleston.

Regardless of the Not Likely risk associated with Earthquakes, the South Carolina Emergency Management Division has provided some mitigation ideas for jurisdictions to consider:

- Create and enforce effective building codes to reduce losses from hurricane force wind and storm surge.
- Anchor manufactured homes
- Trim back dead or weak branches from trees

Additionally, the South Carolina Emergency Management Division has made available their South Carolina Earthquake Guide.

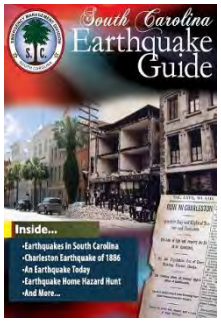
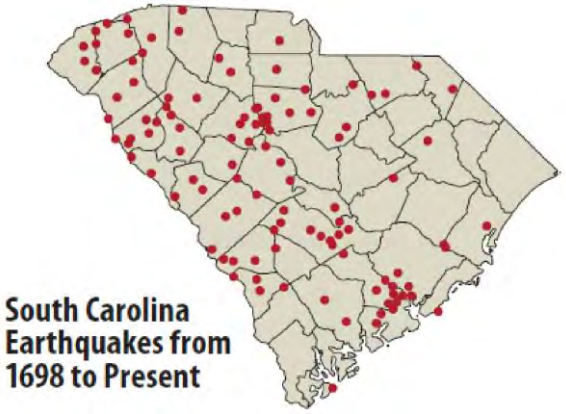


Figure 15 - South Carolina Earthquake Handbook

Basically, most of South Carolina's earthquakes occur in the Coastal Plain where the underlying rocks are very faulted or broken from the break-up of the plates. This translates to approximately 70% of all earthquakes in the state occurring in the Coastal Plain with most clustered around three areas of the State: Ravenel - Adams Run Hollywood, Middleton – Place - Summerville, and Bowman.

A map extracted from the South Carolina Earthquake guide depicting where the Earthquakes have occurred in South Carolina is provided.

Figure 16 - South Carolina Historic Earthquakes



Clarendon County

Clarendon County has very little history with earthquakes. There has been 1 historical epicenter recorded within Clarendon County between 1698 and 2009. It occurred on January 29, 1994, and it had a magnitude of 2.9.

Earthquake Occurrences since 2015 – April 2019

According to the South Carolina Department of Natural Resources there were no earthquakes in Clarendon County.

Multi-jurisdictional Occurrences:

Clarendon

Given that there has only been one earthquake in Clarendon County, the area where it occurred is the only that can be considered at risk. The assets in this area

include some dams for the Black River and the Sardinia Fire Station.

Manning
According to the historical data, Manning is at a minimum level of risk, so its assets are not particularly threatened.

Summerton
According to the historical data, Summerton is at a minimum level of risk, so its assets are not particularly threatened.

Turbeville
According to the historical data, Turbeville is at a minimum level of risk, so its assets are not particularly threatened.

Paxville
According to the historical data, Paxville is at a minimum level of risk, so its assets are not particularly threatened.

Kershaw County

Kershaw County has very little history with earthquakes. Historically, there have been two (3) historical epicenter recorded within Kershaw County between 1698 and 2011.

Earthquake Occurrences in since 2015 – April 2019
According to the South Carolina Department of Natural Resources there are no reported events.

A breakout of Earthquakes which have occurred in Kershaw County is provided. Moreover, the South Carolina Department of Natural Resources provided a map that depicts the "Pax Mountain" fault line which runs through Kershaw County

Multi-jurisdictional Occurrences:
Kershaw
The critical facilities that would be most at risk are the fire stations for Westville and Lugoff.

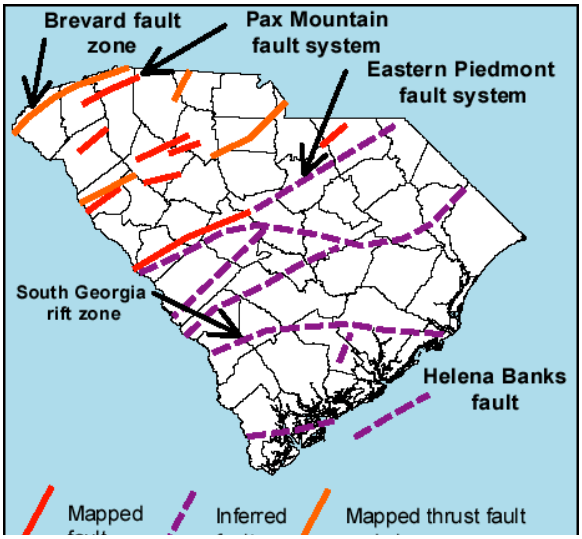


Figure 17 - South Carolina Fault Lines

Modified from Maybin and others (1997)

Camden
Critical infrastructure at risk includes police and fire stations, city hall, water and sewer lines and treatment facilities, and electric lines and substations.

Elgin
According to historic data, Town of Elgin is not at risk, due to earthquakes.

Bethune
According to historic data, the Town of Bethune is not at risk, due to earthquakes.

Table 42 - Kershaw Earthquakes

Earthquakes in Kershaw County	
4/11/1843	2.9 Magnitude
11/16/1975	2.8 Magnitude
6/24/2011	2.3 Magnitude

Lee County

Lee County has very little history with earthquakes.

Earthquake Occurrences in since 2015 – April 2019

According to the South Carolina Department of Natural Resources there were no earthquakes reported in Lee County.

Multi-jurisdictional Occurrences:

Lee

Given that there has only been one earthquake in Lee County. The assets which may be in of concern would be some dams for the Lynches River and the Turkey Creek Fire Station.

Bishopville

According to the historical data, Bishopville is at a minimum level of risk, so its assets are not particularly threatened.

Lynchburg

According to the historical data, Lynchburg is at a minimum level of risk, so its assets are not particularly threatened.

Sumter County

Sumter County has very little history with earthquakes.

Earthquake Occurrences from 2015 – April 2019

According to the South Carolina Department of Natural Resources there were no earthquakes reported in Sumter County.

Multi-jurisdictional Occurrences:

Sumter County

Given that there has only been one earthquake in Sumter County, the assets include several of the County's fire stations and emergency shelters.

City of Sumter

Those assets most at risk include the wastewater treatment plant on the Pocotaligo River, several water treatments plants, the hospital, emergency shelters, and emergency response facilities.

Town of Pinewood

According to the historical data, Pinewood is at a minimum level of risk, so its assets are not particularly threatened.

Town of Mayesville

According to the historical data, Mayesville is at a minimum level of risk, so its assets are not particularly threatened.

Historical and Updated Drought and Heat Occurrences:

Severe Droughts have been documented at intervals of roughly every thirty years, with some exceptions, since the early 19th Century. Documented severe droughts have occurred statewide in 1925, 1930-1935, 1950-1957, 1965–1970, 1980–1982, 1985–1988, and 1998. [13]

Since 2000, the longest duration of drought (D1-D4) in South Carolina lasted 156 weeks beginning on January 4, 2000 and ending on December 24, 2002. The most intense period of drought occurred the week of August 20, 2002 where D4 affected 50.71% of South Carolina land.

[13] Source: USGS – South Carolina Drought Watch, Publication: South Carolina Droughts are Floods, 1893-2002

Heat risk within the region is Moderately Likely in all counties.

Drought risk within the region is Not Likely.

According to the South Carolina Department of Natural Resources, the South Carolina State Climatology Office and the United States Drought Monitor the entire Region did not have any occurrences with extreme / exceptional drought from 2015 – to September 2019. However, the region had periods of dry spells that ranged from abnormally dry spells (D0) to severe drought spells (D2).

According to the National Climatic Data Center the region did not have any severe Heat occurrences during the same time period.

Listed below, within this category, are the Multi-jurisdictional occurrences by County.

Clarendon County

Multi-jurisdictional Occurrences:

Clarendon

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the County's critical facilities are not at risk due to drought.

Manning

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the city's critical facilities are not at risk due to drought.

Summerton / Turbeville / Paxville

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the town's critical facilities are not at risk due to drought.

Kershaw County

Multi-jurisdictional Occurrences:

Kershaw

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the County's critical facilities are not at risk due to drought.

Camden

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the city's critical facilities are not at risk due to drought.

Elgin and Bethune

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the town's critical facilities are not at risk due to drought.

Lee County

Multi-jurisdictional Occurrences:

Lee

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the County's critical facilities are not at risk due to drought.

Bishopville

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the city's critical facilities are not at risk due to drought.

Lynchburg

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the town's critical facilities are not at risk due to drought.

Sumter County

Multi-jurisdictional Occurrences:

Sumter County

Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the County's critical facilities are not at risk due to drought.

City of Sumter
Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the city's critical facilities are not at risk due to drought.

Town of Pinewood and Mayesville
Drought, by its definition, primarily affects agriculture, and, if severe enough, water supplies. As such, the town's critical facilities are not at risk due to drought.

Summary of Inter-jurisdiction Vulnerability

This section analyzed the hazard risks and the associated impacts of the hazards to the inter-jurisdictional region. The identified inter-jurisdictional hazards not only impact infrastructure, but people, economy, and the natural environment.

Hazard Identification

Nine (9) categories of hazards, to some degree or another, were identified. Those hazards are as follows:

- Flooding
- Hurricane or Tropical Storm
- Tornado
- Winter Storm / Freezing / Ice / Snow
- Dam Failure
- Severe Storm / Wind / Hail / Lightning
- Wildfire
- Earthquake
- Drought / Heat

The above hazards were rated from Highly Likely to Not Likely to occur within the jurisdictional region.

The old adage of addressing the "low lying fruit" applies to addressing immediate mitigation efforts based on the likelihood of hazards.

The inter-jurisdictional "low lying fruit" hazards that should have immediate attention are the following:

1. Severe Storm
2. Wildfire

Recommended mitigation efforts to address the above may indirectly address the other categories of hazards.

The plausible mitigation suggestions for the above three "low lying fruit" hazards were provided by the South Carolina Emergency Management Division.

1. Establish local building codes or development ordinances to regulate construction in wooded areas or hazard prone locations.
2. Create and enforce effective building codes.
3. Require a safety zone to separate homes from combustible vegetation
4. Restrict open burning especially during dryer seasons
5. Bury electrical lines on new development and during infrastructure upgrades
6. Trim trees near above-ground electrical lines
7. Require manufactured homes to be properly anchored
8. Ensure community evacuation facilities are accessible by the public

The above mitigation suggestions are a first start effort communities could take; also, within this section are additional suggestions that can be addressed.

As communities begin the process to update their comprehensive plans, the most logical course of action is to ensure appropriate mitigation measures are addressed, since the comprehensive plan is the primary feeder

document that influences other documents such as Zoning and land use development.

Economic Vulnerability

Industrial Parks and Business sectors are essential to the economic vitality of communities. If a hazard requires the businesses to close and have employees to be furloughed, the economic impact not only affects the lives of the employed citizens but the local economy. To understand the inter-jurisdictional impact, this section identified approximately 54,000 individuals are employed. If a hazard occurs and it requires the regional employers to shut down operations / businesses for one week the estimated economic impact, based on the lowest weekly earnings in the region, would be over $35 million dollars. This alone points toward the need to invest in appropriate mitigation efforts to minimize loss to the economy.

Population Vulnerability

This section highlights the population growth in the region as well as examining which areas are most vulnerable for the existing population. Each county has specific vulnerable populations and areas. The most prominent categories of the populations that have historically been identified as a driver of increasing social vulnerability are race, gender, unemployment, migrants, ethnicity, and rural special needs. Below are more specific breakouts of what conditions may cause social vulnerability during a hazard occurrence: (This is not a prioritized list)

a. Individuals possessing a mobility disability (i.e., visual, spinal cord injury, etc.) This category may include veterans from the current military actions in the Mid-East.
b. Seniors – especially frail seniors over 70 years of age. This population is projected to grow due to the aging "Baby Boomer" generation
c. Households without an automobile. Though this percentage may be less than 10 percent of the households in each county, this population should not be overlooked.
d. Low income individuals. This population may lack the financial assets to acquire the needed supplies to withstand a major emergency.
e. Individuals who cannot speak or read English very well. There are approximately 353,500 individuals in South Carolina, which equates to about 7.4 percent of the State population. Individuals with pets. During a hazard evacuation, these individuals will be prone to remain in their homes for fear of being separated from their pet or lack of care of their pets during the emergency.
f. Nursing homes or assisted living facilities house individuals who will need special assistance.
g. Hospital patients.
h. Homeless individuals
i. Youth and Children, especially those who's Guardian are Grandparents.

Critical Facilities Vulnerability

This section also identified, by county, the list of critical facilities in the inter-jurisdictional region that would require a return to operations within 72 hours following a disaster. The list included, but not limited to, the following categories of facilities:

a. Police Stations (most locations have mobile command units or other off-site locations
b. Hospitals / Medical Clinics
c. Emergency Shelters (these locations usually have backup generators and up to date with building codes)
d. Fire Stations
e. Dams

f. Communication Facilities (it has been proven that even when communication lines are down, if one has a mobile phone, texting still is able to be transmitted)
g. Schools
h. Residential Care Facilities
i. Daycare Centers
j. Transportation Infrastructure
k. Electric, Water, and Wastewater Utilities

Historical Extent of Hazards

Tables 43 and 44 on the following pages summarize the potential extent and frequency of Hazards within the inter-jurisdictional region.

Table 43 - Historical Frequency and Probability of Future Hazards

Hazard Type	Previous Incidents Based on Historical Events – 2010 - 2014		Comments	Probability
	Minimum	Maximum		
Severe Storm	2	34	Rated as Highly Likely in all Counties. All Counties are certified as a "Storm Ready Community". Over $3.8 million in property damage occurred due to the severe storms during the five-year period	Based on the events that occurred over the past five years it is likely to expect annually between 2 – 12 Severe Storms in the region.
Wildfire	350 acres	700 acres	Rated as Highly Likely in all Counties. According to the SC Forestry Commission over 41% of wildfires are attributed to debris burning. Local ordinances to restrict open burning and / or debris burning especially during extend dry periods may help reduce wildfires.	Wildfires will occur in the region and will destroy anywhere from 350 – 700 acres. Clarendon County historically may have the greatest risk.
Hail	6	8	Rated Likely in all Counties. Just over $100,000 in property and crop damage occurred in the region.	Based on the five-year event, the region can annually expect to have between 3 to 8 hailstorms
Tornado	0 Tornado events	1 Tornado Events	Rated from Moderately Likely to Likely in all Counties. Clarendon County had 1 tornado in April 19, 2019. No reported property or crop data was found.	It likely that there will be a Tornado in the region. Historically they have been rated an EF2- wind gusts between 11 – 135 miles per hour.
Winter Storm	1 Winter Storms	7 Winter Storms	Rated from Moderately Likely to Likely in all Counties except for Clarendon County which is rated as Not Likely.	Based on the events during the past 5 years, it is likely to expect a winter storm (ice or snow) annually
Lightning	0	2	Lightning is rated as Likely in Clarendon County and rated from Not Likely to Moderately Likely in all the other counties. Sumter County 1 lightning strikes which caused over $200 in property and crop damage and Kershaw County had 1 lightning strike that caused $503 in crop damage	Lightning is not a predictable event and historically has not been a recurring problem. With Severe Storms there may be lightning. We can expect annually between 1 – 2 Severe Storms in the region.

Hazard Type	Previous Incidents Based on Historical Events – 2010 - 2014		Comments	Probability
Flooding (typically flash flooding)	1 Flash Flood events	4 Flooding Events	Flooding is rated as "Moderately Likely" in Lee and Sumter Counties and "Likely" in Clarendon and Kershaw Counties. Property damage over a five-year period was just slightly over $1,173,000 which equates to approximately $234,600 annually.	Most of the flooding in the region will be from flash floods as a result of severe storms. Since we can expect annually between 1 – 13 severe storms in the region, flooding may be a natural result.
Hurricane or Tropical Storm	No events	No events	Rated as a "Moderately Likely" occurrence due to the frequency. The last event was Hurricane Hugo, which was a Category 4 in 1989. The storm traveled inland toward Columbia causing massive damage along its path	The best preparation for a Hurricane is to simply be prepared. The SCEMD puts out annually the Hurricane Guide which should provide vital information.
Earthquake	0	No Events	Rated as Not Likely in all Counties. About 70% of the earthquakes in South Carolina occur in the Coastal Plain. Earthquakes typically occur with little or no warning and there is no escape. Therefore, Preparedness is the key. SCEMD puts out the SC Earthquake Guide to provide what one should do in the event of an earthquake. There was one earthquake in the region which occurred in Camden – there was no damage.	According to SCEMD there are between ten to twenty earthquakes recorded annually in the State; two to five earthquakes are felt each year. These earthquakes tend to be less than Magnitude 3.0 on the magnitude scale and cause little damage. The best solution is to know what to do in the event of an earthquake.
Dam Failure	0	0	Rated as Not Likely in all Counties. No Dam Failures occurred during the past five years; the last major Dam Failure occurred in 1990 in Kershaw County.	As Technology improves Dam Failures decrease. Moreover, all Dam owners are required to work with state officials to develop an Emergency Action Plan in order to minimize any damage in the event of a Dam Failure.
Drought	D0	D2	Rated as Not Likely in all Counties. No events occurred.	Anticipate that there will be periods of incipient dry spells in the region.
Heat	0	0	Rated from Not Likely to Moderately Likely in all Counties. No severe heat occurrences happened in the region.	Sustained Heat is not likely unless accompanied by severe Drought.

Table 44 - Historical Extent of Hazards

Hazard Type	Extent (based on historical events)		Comments
	Minimum	Maximum	
Flooding	0 feet	4 feet	Historically there have been moderate flood events across the Santee-Lynches Regions. Sumter County historically has the occasion to experience more severe flooding, such as the incident which occurred on September 30, 2015 when the town of Mayesville experienced a flashflood event that caused $40,700 in property damages.
Hurricanes / Tropical Storms	Severe Storm	Category 4	The last occurrence of any significant hurricane or tropical storm for the jurisdictional region was over 25 years ago. With the most significant event which occurred in 1989 when the Category 4 storm "Hugo" went inland into the jurisdictional area. The inland destruction of "Hugo" left an indelible imprint on the lives of the residents within the jurisdictional region.
Tornados	F0 (EF0)	F4 (EF4)	The last occurrence of any significant tornadoes was in Clarendon County in 2019. The storm was recorded on April 19, 2019 however no property damage has been reported to date
Winter Storms ● Snow ● Ice	0 inches 0 inches	10 inches 1 inch	The worst case of winter storms occurred on February 12, 2014 in where Clarendon and Sumter Counties were included in the South Carolina Presidential Disaster area. It is not uncommon to have at least one winter storm annually. The combination of ice and snow presents the most challenge in the communities.
Dam Failure	0	1	The worst dam failure occurred in 1990 in Kershaw County when Kendall Mill Pond Dam in the City of Camden failed damaging businesses and taking four lives. Historically, Dam Failures in South Carolina is low and is a result of concerted effort to ensure all Dam owners work with state and local officials to prepare an Emergency Action Plan (EAP).
Wildfires	0 acres	1,000 + acres	There are numerous wildfires in the region. Due to various mitigation efforts, the acres lost to wildfires have reduced significantly in all the counties except for Clarendon County. Clarendon County still has an average yearly loss to wildfires of just under 700 acres.
Earthquakes	2.3M	4.0M	Research finds that there have still only been seven earthquakes in the region with the worst being recorded in Kershaw County on April 13, 1998 at 4.0M. Moreover, the most recent earthquake also occurred in Kershaw County on June 24, 2011 with a 2.3M. See the Modified Mercalli Intensity (MMI) Scale on page 46 for more information.

Hazard Type	Extent (based on historical events)		Comments
	Minimum	Maximum	
Severe Storms ● Wind ● Hail ● Lightning	37 Knots H.25 0	70 Knots H1.75 1	Normally, these storms are random in nature and do not follow geographic patterns. Therefore, hard to predict. There have been over 235 windstorms in the region since January 4, 2015. The highest recorded severe windstorm was clocked at 70 knots back on June 5, 2016 in Kershaw County and two on July 14, 2016 in Lee County which le o no recorded injuries or property damage respectively. There have been over 30 Hailstorms in the region since July 1/2016. The worst hailstorm, according to the NOAA, National Center for Environmental information, was a H1.75 and occurred in Lee County on March 21, 2017 and Sumter County on July 7, 2017. The hailstorm caused no reported property damage or crop damage. See the TORRO Hailstorm Intensity Index on page 43. Since 2015 there have only been 2 lightning strikes in the region. One recorded lightning occurred June 24, 2017 in Kershaw County and the other in Sumter County on August 12, 2018. The most severe damage from lightning strikes occurred in Sumter County on August 12, 2018 causing $500 in property damage and $100 in crop damage
Drought	Palmers 0 / D0	Palmers -5 / D4	According to the Drought Monitor, the Region has experienced periods of moderate drought, throughout the state, however the data is not specific to the Santee-Lynches region and the NOAA database shows no defined cases of Drought for the Santee-Lynches Region.

Natural Environment Vulnerability

Every hazard has an impact on our natural environment. Some impacts are normally classed as “Acts of God or Nature. With proper mitigation efforts within the region impacts from “Acts of God / Nature” as well as “Man Made” acts may be reduced thereby helping to preserve the natural environment for a future generation to enjoy.

The next section will zero in on the inter-jurisdiction mitigation strategy designed to help minimize or eliminate the impacts of the hazards associated with this region.

Introduction

This section includes a comprehensive inter-jurisdictional mitigation strategy – a blueprint – designed to reduce or eliminate possible losses from the identified hazards identified in Section 4. The Inter-jurisdiction Mitigation Strategy is composed of three (3) main elements: Goals, Objectives, and Action Plans.

- **Goals** are general guidelines that explain the desired outcomes of the natural disaster mitigation planning process. As such, they are to be considered broad policy statements representing long-term results and to address problems and situations identified through vulnerability and capability assessments.

- **Objectives**, on the other hand, describe strategies or implementation steps to attain the identified goals. Objectives are more specific statements than goals, and the steps that they describe are usually measurable with defined completion times.

- **Action Plans** provide more detailed descriptions of specific work tasks to help a county or municipality achieve the goals and objectives. These, in turn, can be further elaborated as specific projects envisioned by a local government that addresses specific needs or desired outcomes.

This Section satisfies the following FEMA requirements addressed in the FEMA 2013 Local Mitigation Planning Handbook:

- FEMA 44 CFR §201.6(c)(3)(i): The hazard mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
- FEMA 44 CFR §201.6(c)(3)(ii): The hazard mitigation strategy shall include a section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.
- FEMA 44 CFR §201.6(c)3(iii): The mitigation strategy shall include an action plan, describing how the actions identified will be prioritized, implemented, and administered by each local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.
- FEMA 44 CFR §201.6(c)(3)(iv): For multi-jurisdictional plans, there must be identifiable actions items specific to the jurisdiction requesting FEMA approval or credit of the plan.
- FEMA 44 CFR §201.6(c)(4)(ii): The plan shall include a process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvements, when appropriate.
- FEMA 44 CFR §201.6(d)(3): A local jurisdiction must review and revise its plan to reflect progress in local mitigation efforts.

Action Plan Update Process

For the 2020 update of the Hazard Mitigation Plan the inter-jurisdiction action plans have been updated to reflect the progress that has been made on the individual actions. Changes to priority, responsibility, or time frame are shown in red below each action. Also shown in red below each action is a brief description of any progress made on that action since the adoption of the previous plan in 2015. If no progress was made that too is noted along with an explanation.

In several instances, through the implementation of the plan, actions that had specific time frames for completion were discovered to require ongoing maintenance or attention. In these instances, the time frame has been changed to reflect that progress is always being made on these actions and they will never be completely fulfilled.

Through the planning process some new goals have been identified and appropriate actions have been noted. These are shown in blue and their progress will be noted in the next update of the Hazard Mitigation Plan.

Mitigation of Hazards

Actions were identified in order to mitigate the effects of one or more hazards. Each action makes note of the hazard(s) that it is intended to mitigate the effects of. The following abbreviations will be used to identify which hazard an action is intended to mitigate the effects of:

Table 45 - Hazard Abbreviations

Hazard	Abbreviation
Drought	D
Earthquakes	E
Floods	F
Hurricanes / Tropical Storms	H
Tornados	T
Dam Failures	DF
Severe Thunderstorms / Lightning / Hail	TS
Wildfires	WF
Winter Storms	WS

Priority of Projects

Based on the recommendations of the Hazard Mitigation Steering Committee, the following implementation schedule has been developed. Projects have been listed with the ranking assigned by the Steering Committee (H=High, M=Medium, L=Low).

Feasibility to implement the project is based on the results of the capability assessment.

- High priority project with high feasibility
- High priority projects with medium feasibility
- Medium priority projects with high feasibility
- Medium priority projects with medium feasibility
- Medium priority projects with low feasibility
- Low priority projects

Cost Benefit Review

The Hazard Mitigation Steering Committee ranked projects based on a cost-benefit review that showed which projects were most needed, which of these projects was the most likely to be accomplished, and which would most effectively address mitigation needs. In addition to reviewing potential monetary costs, the team considered the social impact of each potential project, the technical capabilities of the local government to carry through the project, impact on the environment, ability of the local government to maintain the project, and any political or legal effects of the decision. This cost-benefit review was the basis for each of the project feasibility rankings.

Responsible Agency

Effective implementation of the actions is vital to the success of the Hazard Mitigation Plan. The following tables for the counties and incorporated cities and township's lay out the implementation strategy, i.e. and who

is the responsible party for implementation of the strategy. The Hazard Mitigation Steering Committee has worked out this implementation strategy for each implementation action. The abbreviation or name of the following implementation agencies will be used in the action tables:

Table 46 - Agency Abbreviations

Agencies	Abbreviations
Council of Governments	COG
County Council and City Council	CC
Department of Health and Environmental Control	DHEC
Federal Emergency Management Agency	FEMA
County Disaster Preparedness Agency	DPA
Emergency Management Director	EMD
American Red Cross	ARC
SC Department of Social Services	DSS
Public Works Department	PW
Utilities Department	UD
Private Utility Provider	PUP
City Administrator	CiA
County Administrator	CoA
State Building Codes	SBC
South Carolina Department of Natural Resources	DNR
South Carolina Emergency Management Division	SCEMD

Timeframe

The recommended timeframe for the implementation of the specific action item is as follows:

Table 47 - Timeframe

Timeframe	Definition
On-going	**Daily / Monthly**
Immediate	**Within one (1) year or less**
Annual	**Part of an annual review process**
Short-Term	**1- 2 years – 2015-2017** **2-4 years – 2017-2019**
Long-Term	**6-8 years – 2021-2023** **8-10 years – 2023-2025**

In other instances, specific time frames (number of years to complete) are noted.

FEMA Hazard Mitigation Grant Programs

Current 2014 FEMA Hazard Mitigation Grants Programs can be found on the FEMA website or one can check out Appendix B.

Goals

Table 48 - Clarendon County Jurisdictional Area Goals

Goal #	Clarendon County	Manning	Paxville	Summerton	Turbeville
1	Ensure protection of critical facilities in the county.	Ensure the protection of critical facilities in the city.		Ensure protection of critical facilities in the town.	Same as Summerton
2	Increase public education and awareness of natural hazards.	Same	Same	Same	Same
3	Ensure that availability and operation of the county's infrastructure will not be significantly disrupted by a natural disaster.	Ensure that the availability and operation of the city's infrastructure will not be significantly disrupted by a natural disaster.		Ensure that availability and operation of town infrastructure will not be significantly disrupted by a natural disaster.	Same as Summerton
4	Reduce potential impact of natural disasters on new and existing development.	Same		Same	Same
5	Ensure that emergency shelters have adequate capacity and resources.	Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.		Same as Manning	Same as Clarendon County
6	Reduce impact of wildfires on homes, buildings, critical facilities, and infrastructure.	Reduce the impact of severe winds on houses, buildings, critical facilities, and infrastructure.		Same as Manning	Same as Clarendon County
7	Reduce impact of severe winds on houses, buildings, critical facilities, and infrastructure.	Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.		Same as Manning	Same as Clarendon County
8	Reduce impact of floods on homes, buildings, critical facilities, and infrastructure.	Ensure the protection and function of Communications.		Same as Manning	Same as Clarendon County
9	Ensure protection and function of Communications.	Facilitate the preparedness of Emergency Response.		Same as Manning	Same as Clarendon County
10	Facilitate preparedness of Emergency Response		Same as Clarendon Co.		Same as Clarendon County

Table 49 - Kershaw County Jurisdictional Area Goals

Goal #	Kershaw County	City of Camden	Town of Bethune	Town of Elgin
1	Ensure the protection of critical facilities in the county.	Ensure the protection of critical facilities in the city.		
2	Increase public education and awareness of natural hazards.	Same	Same	Same
3	Ensure that the availability and operation of the county's infrastructure will not be significantly disrupted by a natural disaster.	Ensure that the availability and operation of the city's infrastructure will not be significantly disrupted by a natural disaster.		
4	Reduce the potential impact of natural disasters on new and existing development	Same		
5	Ensure that emergency shelters have adequate capacity and resources.	Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.		
6	Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.	Reduce the impact of severe winds on houses, buildings, critical facilities, and infrastructure.		
7	Reduce the impact of severe winds on houses, buildings, critical facilities, and infrastructure.	Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.		
8	Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.	Ensure the protection and function of Communications.		
9	Ensure the protection and function of Communications.	Facilitate the preparedness of Emergency Response		
10	Facilitate the preparedness of Emergency Response.	-----	Same as County	Same as County

Table 50 - Lee County Jurisdictional Area Goals

Goal #	Lee County	City of Bishopville	Town of Lynchburg
1	Ensure the protection of critical facilities in the county.	Ensure the protection of critical facilities in the city.	
2	Increase public education and awareness of natural hazards.	Same	Same
3	Ensure that the availability and operation of the county's infrastructure will not be significantly disrupted by a natural disaster.	Ensure that the availability and operation of the city's infrastructure will not be significantly disrupted by a natural disaster.	
4	Reduce the potential impact of natural disasters on new and existing development.	Same	
5	Ensure that emergency shelters have adequate capacity and resources.	Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.	
6	Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.	Reduce the impact of severe winds on houses, buildings, critical facilities, and infrastructure.	
7	Reduce the impact of severe winds on houses, buildings, critical facilities, and infrastructure.	Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.	
8	Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.	Ensure the protection and function of Communications.	
9	Ensure the protection and function of Communications.	Facilitate the preparedness of Emergency Response.	
10	Facilitate the preparedness of Emergency Response.	-----	Same as County

Table 51 - Sumter County Jurisdictional Area Goals

Goal #	Sumter County	City of Sumter	Town of Mayesville	Town of Pinewood
1	Ensure the protection of critical facilities in the county.	Ensure the protection of critical facilities in the city.		
2	Increase public education and awareness of natural hazards.	Same	Same	Same
3	Ensure that the availability and operation of the county's infrastructure will not be significantly disrupted by a natural disaster.	Ensure that the availability and operation of the city's infrastructure will not be significantly disrupted by a natural disaster.		
4	Reduce the potential impact of natural disasters on new and existing development	Same		
5	Ensure that emergency shelters have adequate capacity and resources.	Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.		
6	Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.	Reduce the impact of severe winds on houses, buildings, critical facilities, and infrastructure.		
7	Reduce the impact of severe winds on houses, buildings, critical facilities, and infrastructure.	Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.		
8	Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.	Ensure the protection and function of Communications.		
9	Ensure the protection and function of Communications.	Facilitate the preparedness of Emergency Response		
10	Facilitate the preparedness of Emergency Response.	----	Same as County	Same as County
11	Construct a new Emergency Management Office & EOC	----		

Objectives

Table 52 - Clarendon County Jurisdictional Area Objectives

Goal #	Clarendon County Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the county and incorporated municipalities. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Ensure the availability of backup power through generators. b. Ensure that adequate and sufficient medical supplies and equipment are present. c. Utilize Census Block Group population counts to ensure that shelters are adequate in size to serve surrounding population.
6	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more rural areas of the County. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
7	Pursue community-oriented grants for structures
8	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reduce the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
9	a. Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
10	a. Enhance response capacity of the County fire, sheriff, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	City of Manning Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	a. Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster. b. Retrofit the police/fire departments to make them operational without electricity.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the city. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more forested or overgrown areas of the City. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
6	Pursue community-oriented grants for structures
7	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reducing the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas. e. Identify drainage problems to reduce urban flooding.
8	a. Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
9	a. Enhance response capacity of the City fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance. c. Finalize the 911 house numbering project.

Goal #	Town of Paxville Objectives
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
10	a. Enhance response capacity of the town fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	Town of Summerton Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the town. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more forested or overgrown areas of the town. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
6	Pursue community-oriented grants for structures
7	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reducing the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
8	*a.* Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
9	a. Enhance response capacity of the town fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	Town of Turbeville Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the town. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Ensure the availability of backup power through generators. b. Ensure that adequate and sufficient medical supplies and equipment are present.
6	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more rural areas of the town. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
7	Pursue community-oriented grants for structures.
8	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reduce the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
9	a. Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
10	a. Enhance response capacity of the Police Department. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Table 53 - Kershaw County Jurisdictional Area Objectives

Goal #	Kershaw County Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the county and incorporated municipalities. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Ensure the availability of backup power through generators. b. Ensure that adequate and sufficient medical supplies and equipment are present. c. Utilize Census Block Group population counts to ensure that shelters are adequate in size to serve surrounding population.
6	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more rural areas of the County. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
7	Pursue community-oriented grants for structures.
8	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reducing the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
9	*a.* Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
10	a. Enhance response capacity of the County fire, sheriff, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	City of Camden Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the city and incorporated municipalities. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more forested or overgrown areas of the City. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
6	Pursue community-oriented grants for structures.
7	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reducing the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
8	a. Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
9	a. Enhance response capacity of the City fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	Town of Bethune Objectives
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
10	a. Enhance response capacity of the town fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	Town of Elgin Objectives
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
10	a. Enhance response capacity of the town fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Table 54 - Lee County Jurisdictional Area Objectives

Goal #	Lee County Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the county and incorporated municipalities. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Ensure the availability of backup power through generators. b. Ensure that adequate and sufficient medical supplies and equipment are present. c. Utilize Census Block Group population counts to ensure that shelters are adequate in size to serve surrounding population.
6	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more rural areas of the County. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
7	Pursue community-oriented grants for structures.
8	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reducing the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
9	*a.* Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
10	a. Enhance response capacity of the County fire, sheriff, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	City of Bishopville Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the city and incorporated municipalities. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more forested or overgrown areas of the City. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
6	Pursue community-oriented grants for structures.
7	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reducing the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
8	a. Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
9	a. Enhance response capacity of the City fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	Town of Lynchburg Objectives
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
10	a. Enhance response capacity of the town fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Table 55 - Sumter County Jurisdictional Area

Goal #	Sumter County Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the county and incorporated municipalities. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Ensure the availability of backup power through generators. b. Ensure that adequate and sufficient medical supplies and equipment are present. c. Utilize Census Block Group population counts to ensure that shelters are adequate in size to serve surrounding population.
6	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more rural areas of the County. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
7	Pursue community-oriented grants for structures
8	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reducing the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
9	a. Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
10	a. Enhance response capacity of the County fire, sheriff, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.
11	a. Choose location and design of Emergency Management Office and EOC that meets safety and response requirements. b. Obtain funding for updated and functional Emergency Management Office and well equipped EOC.

Goal #	City of Sumter Objectives
1	a. Identify needed repairs and improvements to critical facility structures and equipment. b. Identify critical facilities that are at risk of being damaged or incapacitated due to a natural disaster.
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
3	Water, sewer, roads, power, and natural gas infrastructure must be assessed for their vulnerability and be inspected for their ability to maintain functionality during the occurrence of a natural disaster.
4	a. Through comprehensive plans, building codes, or zoning ordinances and similar local government initiatives should address natural hazard mitigation and strengthen present policies to further protect the city and incorporated municipalities. b. Address identified data limitations regarding lack of detailed information about development build-out potential in high hazard areas.
5	a. Address identified data limitations regarding lack of detailed information about vegetation types and individual structures located within the more forested or overgrown areas of the City. b. Develop a comprehensive approach to reducing the possibility of damage and loss of function due to the exposure of critical facilities and infrastructure to wildfire.
6	Pursue community-oriented grants for structures
7	a. Develop a comprehensive approach, through long-range planning, ICC Code revisions and zoning enforcement, to reducing the possibility of damage to structures. b. Protect existing structures and assets that are most vulnerable to the effects of flooding. c. Promote the continuing purchase of flood insurance by property owners in flood hazard areas. d. Address identified data limitations regarding lack of detailed information about individual structures located in the 100-year floodplain; flood probabilities other than the 100-year flood plain; and first floor elevations for priority areas.
8	a. Communication lines should be frequently inspected in order to determine vulnerability to natural hazards. b. Inadequate communication systems supporting emergency service operations will be retrofitted or relocated to withstand the impact of natural disasters.
9	a. Enhance response capacity of the City fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	Town of Mayesville Objectives
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
10	a. Enhance response capacity of the town. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Goal #	Town of Pinewood Objectives
2	a. Provide public education to increase awareness of hazards and publicize the effectiveness of mitigation by incorporating/developing web sites, pamphlets, radio, television, and print media. b. All interested individuals will be encouraged to participate in hazard mitigation planning and training activities. c. Educate the public about emergency shelters and evacuation procedures.
10	a. Enhance response capacity of the town fire, police, and emergency services personnel to at-risk populations. b. Obtain funding for new equipment and training in order to enhance response times and performance.

Action Plans

Clarendon County Action Plan

Note: Mitigation Actions and Goals for Turbeville and Paxville

The assessment of each local government's policies, programs, and ordinances in Clarendon County along with their technical/administrative and fiscal abilities indicate that Paxville does not have the capability to implement a comprehensive range of mitigation initiatives. Clarendon County has historically assisted this jurisdiction in the implementation of programs, policies and activities outside the scope of jurisdictional capabilities. Given these limitations Paxville requested that Clarendon County assist them in the implementation of mitigation activities. Action items for this jurisdiction are included with the action items for Clarendon County. Action items for Paxville are indicated by a (P) in the Clarendon County action item listing. *Clarendon County Goals #2 and #10 apply to Paxville.*

Goal #1: Ensure the protection of critical facilities in the county.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Facility Evaluation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	Building Grounds Supervisor	Local County Budget	1 Year
High	Status:	This action has been completed.	Building Grounds Supervisor		Complete
High D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	Building Grounds Supervisor	Local County Budget	3 Years
High	Status:	Although some major projects have not yet been completed due to lack of funding, Clarendon County does have a routine maintenance program for critical facilities.	Building Grounds Supervisor	Local County Budget	Ongoing/ 3 Years

High H, T, E, WS,	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	Building Grounds Supervisor	Local County Budget	Ongoing
High	Status:	All shelters have been retrofitted with transfer switches to ease their connection to portable back-up generators. Emergency Management Director coordinates with SC EMD to ensure that generators are available for some critical facilities in the event of a natural disaster.	Emergency Management Director	Local Budget	Partially complete
New Actions					
Med D, E, F, H, T, DF, TS, WF, WS	Continuity of Operations Planning	Ensure that essential functions of an organization, including government, can continue to operate during and after an emergency incident which may prevent access to normally operating systems, such as data or communication networks.	IT/Emergency Management	Local Budget	Ongoing

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information (P)	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Management	Local Budget	3 years
High	Status:	Clarendon County Emergency Management is continuously preparing and compiling educational materials to be used for educating the public on hazard mitigation topics.	Emergency Management Director	Local Budget	Completed/ Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness (P)	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Management	Public Service Announcements / Local Budget	3 Years
High	Status:	The Emergency Management Director along with the Fire Department and Law Enforcement is continuously speaking to schools, civic groups, senior groups, etc. regarding hazard mitigation issues.	Emergency Management Director	Staff Time	Ongoing

New Actions					
Medium D, E, F, H, T, DF, TS, WF, WS	(CERT)	Continue to recruit new CERT Team members who will be trained and equipped to respond in the event emergency services are unable to meet all the immediate needs of the community following a major disaster.	Emergency Management	Staff Time	On-going

Goal #3: Ensure that the county's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High H, T, WS, TS	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Utility Provider Budget	Ongoing
High	Status:	This is an ongoing process conducted by the individual utility providers.	Provider	Utility Provider Budget	Ongoing
Low D, E, F, H, T, DF, TS, WF, WS	Models and Database	The County and municipalities should develop geographically accurate models and databases of their infrastructure systems.	Emergency Management	Local Budget	5 Years
Low	Status:	The County has recently acquired a water/wastewater system and is in the process of developing GIS databases with this information.	Water/Sewer Department	Local Budget	2 Years

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium F, DF, WF, E	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	Planning & Zoning	Major revisions to be incorporated in required update of plan	Ongoing
Medium	Status:	Clarendon County Planning and Zoning has updated Comprehensive Plan and has incorporated hazard mitigation concerns.	Planning & Zoning	Plan updated	Ongoing
Medium F, DF	Flood Control Projects	Implement flood control projects for areas such as farm drainage, bridge improvements, and repairing dams that are prone to failure.	Planning & Zoning	Planning and Zoning Staff	Ongoing
Medium	Status:	Planning and Zoning has taken a more proactive approach in considering these issues when reviewing new development plans. In one instance a landowner was required to re-engineer an existing dam to mitigate the risk of failure and flooding.	Planning & Zoning	Planning and Zoning Staff	Ongoing

New Actions					
Med D, E, F, H, T, DF, TS, WF, WS	Post Disaster Recovery Ordinance	Develop a post disaster recovery ordinance which regulates repair activity. The ordinance prepares the community to respond to a disaster in orderly fashion by requiring citizens to (1) obtain permits for repairs (2) refrain from making repairs (3) make repairs using standard methods.	Planning & Zoning	Planning and Zoning Staff and County Government	5 Years

Goal # 5: Ensure that emergency shelters have adequate capacity and resources.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Low D, E, F, H, T, DF, TS, WF, WS	Shelter Audit	Perform an audit of shelters to determine which of these structures are better-suited and equipped to serve at-risk populations. In addition, the audit should also determine what equipment is needed to meet these tasks.	American Red Cross	Staff	1 Year
Low	Status:	This process is conducted annually with the assistance of the American Red Cross and SC EMD.	ARC/ EMD/ SC EMD	Staff	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Backup Power	Make sure shelters have an adequate back up power supply by furnishing them with generators.	County Administrator	Local Budget	Ongoing
Medium	Status:	The Emergency Management Director coordinates with SC EMD to ensure that generators are available for shelters in the event of a natural disaster. As funds become available purchasing on-site generators for shelters would dramatically improve the efficacy of these shelters.	Emergency Management Director	Local Budget	3 Years

Goal # 6: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Low WF	Inventory Vulnerable Area to Wildfires	Inventory existing data concerning land cover, land use, and future land use and develop GIS databases to determine areas that are vulnerable to wildfire.	Fire Department	Staff / Local Budget	10 Years
Low	Status:	Although an actual inventory has not been conducted, Clarendon County has new aerial photography that will better enable it to conduct an inventory when staff is available.	Fire Department	Aerial Photography / Staff /Local Budget	10 Years
Low WF	Evaluate Areas	Utilize GIS analysis to identify structures (homes and other buildings) that are in areas susceptible to wildfire.	Fire Department	Staff / Local Budget	10 Years

Low	Status:	Although an actual inventory has not been conducted, Clarendon County has new aerial photography that will better enable it to conduct an inventory when staff is available.	Fire Department	Aerial Photography / Staff / Local Budget	10 Years

Goal # 7: Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High T	Safe Rooms	Require new critical facilities to include tornado "safe rooms".	Building & Grounds Supervisor	Local Budget / FEMA Grant(s)	Ongoing
High	Status:	Clarendon County has not built any new facilities so has not had the opportunity to incorporate safe rooms. As opportunities present themselves and funds are made available, they may be incorporated into future plans.	Building & Grounds Supervisor	Local Budget / FEMA or other Grant Opportunities	Ongoing
Medium H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	Building & Grounds Supervisor	Local Budget / Manpower	1 Year
Medium	Status:	As part of an ongoing process as risks to critical facilities and infrastructure are identified they are dealt with.	Building & Grounds Supervisor	Local Budget / Manpower	Ongoing

Goal # 8: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium F	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch and canal system maintenance program for storm water management.	Public Works	Budget / Manpower	5 Years
Medium	Status:	Although Clarendon County maintains its drainage ditches on an as needed basis it has ceased taking over for storm water systems from developers due to lack of funding.	Public Works	Budget / Manpower	Ongoing
Low F	Update Flood Maps	Encourage FEMA to update flood maps.	Planning and Zoning	County Administrator	Complete
High	Status:	Clarendon County has updated Flood Maps effects August 19, 2013.	Planning and Zoning	County Administrator	Complete
		New Actions			
Low F	Update Flood Maps	Upgrade FEMA maps locally to reflect data not captured by FEMA maps. Upgrading maps provides a more accurate depiction of risks to the community.	Flood Plain Coordinator	Local Budget / Staff	Ongoing

Goal # 9: Ensure the protection and function of Communications					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High H, T, TS	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Utility Provider Budget	Ongoing
High	Status:	This is an ongoing process conducted by the individual utility providers.	Provider	Utility Provider Budget	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	County EM Director	Local Budget	Completed
High	Status:	Mobile Dispatch Unit has been acquired but still needs to be retrofitted.	Emergency Management Director	Local Budget	1 Years
High D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communicatio n System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	Utility and Communication Provider Budgets	Ongoing
High	Status:	EMS and the Fire Department have upgraded to 800 MHz radios. Clarendon County Dispatch has upgraded to Computer Aided Dispatch to improve emergency response. Additional funding would allow for the purchase of additional radios.	Emergency Management Director/ Provider	Local Budget	3 Years
New Actions					
High D, E, F, H, T, DF, TS, WF, WS	Mutual Aid Agreement for 911	Annually renew mutual aid agreement with adjoining county to provide 911 backup communications in the event central dispatch is rendered inoperable by a disaster.	County EM Director	Staff	Ongoing

Goal #10: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation (P)	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Management	Staff	1 Year

Medium	Status:	This is conducted annually as part of the Emergency Operations Procedure review.	Emergency Management Director	Staff	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	Emergency Management	Local Budget	Ongoing
Medium	Status:	Clarendon County Fire Department has purchased infrared goggles that can assist in the detection of hot spots and prevent wildfires. Personnel have also undergone Haz-Mat training. Specialized training is always useful and is conducted when funds and staff time are available.	Emergency Management Director/ Other Departments	Local Funds	Ongoing
New Actions					
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Personnel	Emergency response personnel need to be trained and plan for various contingencies and response activities. Conduct functional and full-scale exercises to test validity of plans.	Emergency Management	Local Funds and Staff Schedules	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Site Emergency Plans	Facilities such as schools, factories, office buildings, hospitals, correctional facilities, stadiums, recreation areas, and other similar facilities should develop and test site emergency plans.	All	Staffs of the various facilities	Ongoing

City of Manning Action Plan

Goal #1: Ensure the protection of critical facilities in the city.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High H, T, WS, TS	Facility Evaluation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	Public Works/ Fire Dept./ Electric Company	Local Budget	Within a year (2006)
High	Status:	The audit has been completed.			Completed
Medium D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits in order for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	Administrative Departments	Local Budget	2007
Medium	Status:	A new roof was put on the City's Judicial Building. The Public Works Department was moved to a new facility giving them additional space and capabilities. As additional problems are identified they will be dealt with as part of an ongoing process.	City Administrator/ Public Works	Local Budget	On-going
Low H, T, WS, TS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	Administrative Departments	Local Budget	2006-2010
Low	Status:	Two generators have been obtained for the Public Safety Building. Three mobile generators have been obtained for the Public Works Department. As additional funds become available on-site generators could be added to some critical facilities that are especially vulnerable.	City Administrator/ Public Works	Local Budget	Partially Complete/3 Years

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	COG	Staff	2006-2008
Medium	Status:	City police and fire personnel make use of materials provided by Clarendon County, SCEMD, and FEMA to disseminate to the public.	County Emergency Manager/ SCEMD/ FEMA	Staff	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	SCEMD/ FEMA/ ARC	Staff / Use of available public service announcements and free advertisements in paper and local facilities	Ongoing
High	Status:	City police and fire personnel regularly speak to schools, civic groups, etc. regarding hazard mitigation issues.	City Fire/ Police Departments	Staff	Ongoing

Goal #3: Ensure that the city's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High H, T, WS, TS, E	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Utility Provider Budget	Ongoing
High	Status:	This is part of an ongoing process that is conducted by the individual utility providers.	Provider	Utility Provider Budget	Ongoing
Low F, H, T, WS, TS, E	Replace or Retrofit Outdated Structures	Any antiquated structures that are deemed vulnerable should be replaced or retrofitted.	SBC	Local Budget	2006-2008
Low	Status:	The city recently relocated the Public Works Department to a new facility with additional space. The city is also in the process of relocating town Hall to a renovated facility that is more secure and has better access to other town and county facilities. As funds become available additional work will be done to the city's fire station.	Town Administrator	Local Budget	Complete/1 Year

High F, H, WS, DF, WF, E, D	Models and Database	The County and municipalities should develop geographically accurate models and databases of their infrastructure systems.	UD	Local Budget	2004-2006
High	Status:	The city recently purchased the equipment and software necessary to develop GIS capabilities. This is the first step towards completing this action.	Town Administrator	Local Budget	1 Year
Medium F, H, T, WS, TS, E	Retrofit Critical Facilities	Retrofit the City fire/police departments to remain operational without electricity.	City Administrator	Local Budget	2006-2007
	Status:	Two generators have been obtained for the Public Safety Building.	City Administrator	Local Budget	Complete

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium F, DF, E	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	CC	Revisions incorporated when major plan is due for update	Ongoing
	Status:	Comprehensive Plan will be updated to include natural disaster mitigation.	Zoning Administrator	Revisions incorporated when major plan is due for update	2010
Low D, E, F, H, T, DF, TS, WF, WS	Property Protection Measures	Incorporate retrofitting incentives by establishing a program of technical assistance and financial incentives to encourage property protections measures on private commercial property.	SBC/ SCEMD	Local Budget	1-2 Years
Low	Status:	No progress has been made due to a lack of funds.	SBC/ SCEMD	Local Budget	3 Years
High F	Flood Control Projects	Implement flood control projects for areas such as farm drainage, bridge improvements, and repairing dams that are prone to failure.	CIA/ PW		Immediate 2-4 Years
High	Status:	This item should be deleted because the city does not have any farm drainage, bridges, or dams.		Not Applicable	Delete

Goal # 5: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High WF, D	Inventory Vulnerable	Inventory existing data concerning land cover, land use, and future land use and develop GIS databases to determine areas that are vulnerable to wildfire.	COG	Municipal Budget Allocation	1-2 Years

	Area to Wildfires				
High	Status:	The city recently purchased the equipment and software necessary to develop GIS capabilities. This is the first step towards completing this action. Additionally, Clarendon County recently acquired new aerial photography which will be of use in conducting this inventory.	Town Administrator/ Public Works	Local Budget / Aerial Photography	2 Years
Medium WF, D	Evaluate Areas Susceptible to Wildfires	Utilize GIS analysis to identify structures (homes and other buildings) that are in areas susceptible to wildfire.	CIA	Local Budget	2-4 Years
Medium	Status:	The city recently purchased the equipment and software necessary to develop GIS capabilities. This is the first step towards completing this action. Additionally, Clarendon County recently acquired new aerial photography which will be of use in conducting this inventory.	Town Administrator/ Public Works	Local Budget / Aerial Photography	2 Years
Low WF, D	Vegetation Management	Remove and clear vegetation, especially underbrush, in forested areas that have historically been prone to wildfires.	CC	Local Budget	Ongoing
Low	Status:	The city has not identified any areas that are at risk. If areas are identified in the future this action will be addressed.	Public Works	Local Budget / Manpower	Ongoing

Goal # 6: Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High H, T	Safe Rooms	Require new critical facilities to include tornado “safe rooms”.	ECBC	Local Budget	Ongoing
High	Status:	A lack of funds has prevented the city from adding safe rooms to new critical facilities.	Town Administrator	Local Budget	Ongoing
Medium H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	Tree Board	Local Budget	1 Year

Medium	Status:	The City of Manning Tree Board assesses the vegetation in the City and makes recommendations to the Public Works Department for pruning and removal.	Tree Board	Local Budget	Ongoing
High H, T, WS, TS	Emergency Tree Removal	Update the City tree inventory and seek funds to replace hazardous or damaged trees.	Public Works Dept.	Local Budget / Palmetto Pride Tree Grant	Ongoing
High	Status:	The City of Manning Tree Board assesses the vegetation in the City and makes recommendations to the Public Works Department for pruning and removal. The City applies for the Palmetto Pride Tree grant each year and uses these trees to replace damaged or diseased trees.	City Administrator	Local Budget / Palmetto Pride Tree Grant	Ongoing
High F, H, T, WS, DF, T, WF, E	Emergency Debris Removal	Remove debris from major arterials to facilitate the movement of emergency vehicles	Public Works Dept.	Local Budget / Manpower	Ongoing
High	Status:	Clarendon County has a debris removal plan in place that includes the City of Manning.	Clarendon County Emergency Manager	Local Budget / Manpower	Annual

Goal # 7: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Low F	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch and canal system maintenance program for storm water management.	Public Works	Local Budget	2006-2007
Low	Status:	The City works with SCDOT to maintain and clear drainage ditches within the City. As a result, the city has no need for a formal maintenance program.	SCDOT/Public Works Dept.	Local Budget / Local staff and SCDOT staff	Ongoing
Medium F, DF	Flood Threat Recognition System	Determine the possibility of a flood threat recognition system that utilizes rain and stream gauges, along with a central gauge, to monitor and predict the occurrences of floods and flash floods.	SCDNR	Local Budget / Staff	2006-2008
Medium	Status:	No progress has been made due to a lack of staff availability.	SCDNR	Local Budget / Staff	3 Years
Medium F	Update Flood Maps	Encourage FEMA to update flood maps.	SCEMD	Staff	2004-2006
High	Status:	The city is currently still using FEMA maps from 1991. Since new maps are now available this should be a high priority.	SCEMD/ Zoning Administrator	Staff	Immediate
High F	Back-flow Prevention	Install back-flow prevention valves in sewer pipes.	Public Works Department	Local Budget	Ongoing

High	Status:	The City has a back-flow prevention program for irrigation and commercial meters and requires yearly inspection of those meters.	Public Works	Local Budget / Manpower	Ongoing
High F	Drainage Study-Phase I	Identify drainage ditches and direction of flow and have a corrective plan in actions.	City Administrator or Public Works Dept.	Local Budget / Staff	2005-2006
High	Status:	A Drainage Ditch Clearing and Restoration Plan was completed in September of 2005. The City has been seeking grant funding for this project and has received money through the CDBG program to pipe two open ditches near Dickson Street.	City Administrator or Public Works Dept.	Community Development Block Grant (CDBG) Funding / Local Funds	Complete
High F	Drainage Study- Phase II	Clear drainage ditches of obstructions.	Public Works	Manpower / Local Budget	2006-2007
High	Status:	The City works with SCDOT to maintain and clear drainage ditches within the City.	SCDOT/Public Works Dept.	Manpower – municipal / SCDOT and local budget	Ongoing
High F	Sewer Line Inspections	Inspect sewer lines/wastewater lines to reduce the inflow and infiltration of water.	Utility Dept.	Budge / Manpower	Ongoing
High	Status:	The City has raised several manholes to prevent inflow during wet times and continues to repair leaking wastewater lines. The City is aggressive in preventing inflow and infiltration into its sewer lines.	Public Works	Budget / Manpower	Ongoing

Goal # 8: Ensure the protection and function of Communications					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium H, T, WS, TS, E	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Utility Provider Budget	Ongoing
Medium	Status:	This is part of an ongoing process that is undertaken by the individual providers.	Provider	Utility Provider Budget	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	City EM Director	Local Budget	Ongoing
High	Status:	Dispatching is provided by Clarendon County.	County Emergency Management Director	County Agreement to provide service	3 Years

Medium D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communication System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	Utility / Communication Provider Budgets	Immediate
Medium	Status:	As the city hall and fire station are renovated and relocated additional funds could be used to improve the communication capabilities of these facilities. The fire station is in the process of installing HAM radio to serve as a back-up communication network in the event of a catastrophic disaster.	Town Administrator/ Fire Chief	Local Budget	1 Year

Goal # 8: Ensure the protection and function of Communications					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Acquire Communication Equipment	Acquire 800 MHz radios for the City Administrator and Department Heads.	County Emergency Management Director	Local Budget	Immediate
Medium	Status:	The city has purchased 800 MHz radios for critical personnel. Purchasing additional 800 MHz radios if funds become available would allow that city to stay in contact with a greater number of personnel in the event of a disaster and further improve the city's response.	Town Administrator	Local Budget	Complete/3 Years

Goal #9: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Low D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	COG	Local Municipal Funds	Annually
Low	Status:	Part of an annual process undertaken by Clarendon County Emergency Management in cooperation with SCEMD and the American Red Cross.	Clarendon County Emergency Manager/ SCEMD/ ARC	EMD / SCEMD / ARC staff time	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	DPP	Local Budget	

Medium	Status:	The city has purchased a first responder truck that is equipped to respond to natural disasters. As additional funds are identified the response of the city can be further improved with the purchase of additional equipment.	Town Administrator/ Fire & Police Chief	Local Funds	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparedness	Encourage property owners to clearly display street address number on their building/structure.	Fire and Police Department	Public Service Announcements and flyers	2006-2007
High	Status:	This is an ongoing effort as new businesses and residences are located in the city limits.	Zoning Administrator	Public Service Announcements and flyers	Ongoing

Goal #10: Reduce the impact of severe weather storms on homes, buildings, critical facilities, and infrastructure					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities in felled by wind/ice/snow.	Public Works	Local Budget / Manpower	Ongoing
Medium	Status:	The City of Manning Tree Board assesses the vegetation in the City and makes recommendations to the Public Works Department for pruning and removal.	Public Works	Local Budget / Manpower	Ongoing

Town of Paxville Action Plan

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Management	Staff and Local Budget	3 years
High	Status:	Clarendon County Emergency Management is continuously preparing and compiling educational materials to be used for educating the public on hazard mitigation topics.	Emergency Management Director	Staff and Local Budget	Completed/ Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Management	Staff / Local Budget & Public Service Announcements / flyers / bulletins in general use facilities	3 Years
High	Status:	The Emergency Management Director along with the Fire Department and Law Enforcement is continuously speaking to schools, civic groups, senior groups, etc. regarding hazard mitigation issues.	Emergency Management Director	Staff	Ongoing

Goal #10: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Management	Staff	1 Year
Medium	Status:	This is conducted annually as part of the Emergency Operations Procedure review.	Emergency Management Director	Staff	Annual
New Action					
Medium H, T, WS, E	Improve Shelter System Within Town Limits	Perform necessary retrofits and renovations to the existing town hall to allow it to be used as an official emergency shelter.	Mayor/ARC	Local Budget	5 Years

Town of Summerton Action Plan

Goal #1: Ensure the protection of critical facilities in the town.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Facility Evaluation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	Building Grounds Supervisor	Local Budget / Manpower	1 Year
High	Status:	This has not been done due to time and funding constraints.	Building Grounds Supervisor	Local Budget / Manpower	1 Year
High D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits in order for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	Building Grounds Supervisor	Local Budget	3 Years
High	Status:	As items are found they will be corrected and if funding is an issue, they will be addressed in the next budget.	Building Grounds Supervisor	Local Budget	3 Years
High H, T, WS, TS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	Building Grounds Supervisor	Local Budget	Ongoing
High	Status:	Sites have been identified and as funding becomes available, we will start on a priority listing	Building Grounds Supervisor	Local Budget	Ongoing

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Management	Staff	3 years
High	Status:	As time allows staff will prepare info for newsletters and the website.	EMT	Staff	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Management	Staff and the use of Local Public Service Announcements / flyers / bulletins in common use facilities	3 Years
High	Status:	We are in the midst of setting up a website and distributing a newsletter that will include useful information on natural hazards response.	EMT	Staff / Social Media / mail outs / flyers / bulletins in facilities	Ongoing

Goal #3: Ensure that the town's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High H, T, WS, TS	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Utility Provider Budget	Ongoing
High	Status:	This is an ongoing process conducted by the different providers	Provider	Utility Provider Budget	Ongoing
Low F, H, WS	Models and Database	The County and municipalities should develop geographically accurate models and databases of their infrastructure systems.	Emergency Management	Local Budget and Manpower	5 Years
Low	Status:	Summerton has an up-to-date accurate map of the infrastructure and the database is being developed.	Emergency Management	Local Budget / Manpower	2 years

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium F, H, T, E, D	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	Planning & Zoning	Update will be incorporated in major update of plan	Ongoing
Medium	Status:	Comprehensive plan updated 01-07; Zoning & Land Development Plans will include mitigation provisions.	Planning & Zoning	Update to be incorporated in update of plan(s)	Ongoing
Medium F	Flood Control Projects	Implement flood control projects for areas such as farm drainage, bridge improvements, and repairing dams that are prone to failure.	Planning & Zoning	Local Budget / Staff	Ongoing
Medium	Status:	Summerton has been working with DNR to strengthen our Flood Mitigation Program.	Planning & Zoning	Staff	Ongoing

Goal # 5: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Low WF, D	Inventory Vulnerable Area to Wildfires	Inventory existing data concerning land cover, land use, and future land use and develop GIS databases to determine areas that are vulnerable to wildfire.	Fire Department	Local Budget / Staff	10 Years
Low	Status:	Although an actual inventory has not been conducted, Clarendon County has new aerial photography that will better enable it to conduct an inventory when staff is available.	Fire Department	Aerial Photography, Staff, and Local Budget	10 Years
Low WF, D	Evaluate Areas	Utilize GIS analysis to identify structures (homes and other buildings) that are in areas susceptible to wildfire.	Fire Department	Local Budget and staff	10 Years
Low	Status:	Although an actual inventory has not been conducted, Clarendon County has new aerial photography that will better enable it to conduct an inventory when staff is available.	Fire Department	Aerial Photography, Staff, and Local Budget	10 Years

Goal # 6: Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	Building & Grounds Supervisor	Staff / Local Budget	1 Year
Medium	Status:	Summerton has an ongoing management program to ensure that facilities are protected as much as possible from vegetation incidents.	Building & Grounds Supervisor	Staff / Local Budget	1 Year

Goal # 7: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium F	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch and canal system maintenance program for storm water management.	Public Works	Staff	5 Years
Medium	Status:	We are working with the State to help maintain drain age ditches.	Public Works	Staff / municipal – State agreement	4 Years
Low F	Update Flood Maps	Encourage FEMA to update flood maps.	Planning and Zoning	Staff	Ongoing
Low	Status:	We have been working with FEMA and SC DNR to update flood maps.	Planning and Zoning	Staff	Ongoing
Medium F	Back-flow Prevention	Install back-flow prevention valves in sewer pipes.	Public Works	Local Budget	Ongoing (as needed)
Medium	Status:	Ongoing as needed and funding is in place.	Public Works	Local Budget	Ongoing

Goal # 8: Ensure the protection and function of Communications					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High H, T, WS, TS	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Local Provider Budget	Ongoing
High	Status:	This is an ongoing process conducted by the different providers.	Provider	Local Provider Budget	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	County EM Director	Local Budget	5 Years

High	Status:	Lack of funds has not made this possible.	County EM Director	Local Budget / or another possible grant opportunity	5 Years
High D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communication System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	Local Budget	Ongoing
High	Status:	Clarendon County provides all emergency communications.	Provider	Local Budget	Ongoing

Goal #9: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Management	Staff	1 Year
Medium	Status:	This is done on an annual basis.	Emergency Management	Staff	1 Year
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	Emergency Management	Local Budget	Ongoing
Medium	Status:	As funds become available this is done to help ensure our readiness to events.	Emergency Management	Local Budget	Ongoing

Town of Turbeville Action Plan

Goal #1: Ensure the protection of critical facilities in the town.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
High D, E, F, H, T, DF, TS, WF, WS	Facility Evaluation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	Town Administrator/ Public Works	Staff / Local Budget	1 Year
High D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	Town Administrator/ Public Works	Local Budget	3 Years
High H, T, WS, TS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	Town Administrator/ Public Works	Local Budget	Ongoing
Med D, E, F, H, T, DF, TS, WF, WS	Continuity of Operations Planning	Ensure that essential functions of an organization, including government, can continue to operate during and after an emergency incident which may prevent access to normally operating systems, such as data or communication networks.	Town Administrator	Staff / Local Budget	Ongoing

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Management	Staff and the use of Local Public Service Announcements / flyers / bulletins in common use facilities	3 years
High	Status:	Turbeville is continuously preparing and compiling educational materials to be used for educating the public on hazard mitigation topics.	Town Administrator/ County	Staff and the use of Local Public Service Announcements / flyers /	Completed/ Ongoing

			Emergency Management Director	bulletins in common use facilities	
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Management	Staff and the use of Local Public Service Announcements / flyers / bulletins in common use facilities	3 Years
High	Status:	Turbeville officials are continuously speaking to schools, civic groups, senior groups, etc. regarding hazard mitigation issues.	Town Administrator/ County Emergency Management Director	Staff	Ongoing

Goal #3: Ensure that the town's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
High H, T, WS, TS, E	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Budget	Ongoing

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
Medium F, H, T, DF, WF, E, D	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	Town Administrator	Update done when major update to plan is needed	Ongoing

Goal # 5: Ensure that emergency shelters have adequate capacity and resources.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
Medium F, H, T, E	Backup Power	Secure funding for the purchase of an on-site back-up generator for the shelter at East Clarendon High School.	Town Administrator/ County Emergency Management Director	Investigate various State / Federal grants	3 years

Goal # 6: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
Low WF	Vegetation Management	Remove and clear vegetation, especially underbrush, in areas identified to be vulnerable to wildfires.	Public Works Director	Manpower and Local Budget	Ongoing

Goal # 7: Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
Medium H, T, WS, TS, E	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	Public Works	Manpower and Local Budget	Ongoing

Goal # 8: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
Medium F	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch maintenance program for storm water management.	Public Works	Staff	Ongoing

Goal # 9: Ensure the protection and function of Communications					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
High H, T, WS, TS	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Budget	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Creation of a secure EOC in Town Hall	Create a functional Emergency Operations Center within Town Hall.	Town Administrator	Local Budget	2 Years
High D, E, F, H, T, DF, TS, WF, WS	Back-up EOC capabilities	Develop capabilities to operate an emergency back-up EOC at an off-site location.	Town Administrator/ Law Enforcement	Manpower / Local Budget	2 Years
Medium D, E, F, H, T, DF, TS, WF, WS	Pre-development of off-site EOC	Plan, design, and initiate the search for funds to develop an off-site Emergency Operations Center.	Town Administrator	Investigate State / Federal Grants	5 Years

Goal #10: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Town Administrator/ Emergency Management Director	Staff	1 Year
High	Status:	While a formal evaluation has not been conducted, the addition of a full-time Town Administrator will allow this evaluation to take place in the near future. Going forward this should be an annual activity.	Town Administrator/ Police Chief	Staff / Budget	Annual
New Actions					
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	Town Administrator/ Town Council	Local Budget	Ongoing

Kershaw County Action Plan

Note: Mitigation Actions and Goals for Bethune

The assessment of each local government's policies, programs, and ordinances in Kershaw County, along with their technical/administrative and fiscal abilities indicate that Bethune does not have the capability to implement a comprehensive range of mitigation initiatives. Kershaw County has historically assisted this jurisdiction in the implementation of programs, policies and activities outside the scope of jurisdictional capabilities. Given these limitations Bethune requested that Kershaw County assist them in the implementation of mitigation activities. Action items for those jurisdictions are included with the action items for Kershaw County. Action items for Bethune are indicated by B in the Kershaw County action item listing. Kershaw County Goals #2 and #10 apply to Bethune.

Goal #1: Ensure the protection of critical facilities in the county.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Facility Evacuation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	Responsible Agency	Local Budget and Manpower	Ongoing
Medium	Status:	No progress has been made on this action due to a lack of funding and staff availability.	Responsible Agency	Local Budget and Manpower	Ongoing
Medium D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	Responsible Agency	Local Budget and Manpower	Ongoing
Medium	Status:	No audit has been completed so no action has been taken on this item. Kershaw County has adopted the International Building Code for 2009 so when progress can be made on this action the most recent building codes will be used as the standard for making repairs.	Responsible Agency	Local Budget and Manpower	Ongoing

High H, T, WS, TS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	Emergency Management Director	General Fund	immediate
High	Status:	Progress has been made to the completion of this goal with the purchase of generators for critical facilities. Additional generators need to be added as funds become available.	Emergency Management Director (EMD)	Hazard Mitigation Grant Program	Ongoing – as funding is available

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness Information (B) (E)	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Management Director County administrator	Staff / Local Budget	Immediate
High	Status:	This action was completed through Kershaw County's Local Emergency Planning Committee Meeting (LEPC). Brochures were distributed at Fire Fest, LEPC, schools, nursing homes, and civic groups.	Emergency Management Director County administrator	Staff	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness (B) (E)	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Management Director County administrator	Staff / Public Service Announcements / flyers / newsletters / etc.	Immediate
High	Status:	In addition to the activities mentioned above, presentations were made to senior groups. Information is also available via the Kershaw County website.	Emergency Management Director County administrator	Staff / Social Media / Community Presentations	Ongoing
New Actions					
Medium D, E, F, H, T, DF, TS, WF, WS	Encourage Participation in LEPC	Encourage local businesses and industry, particularly intensive agricultural operations, to become more involved in the Local Emergency Planning Committee.	Emergency Management Director	Work with Economic Development / Chamber of Commerce	Ongoing

Goal #3: Ensure that the county's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium H, T, WS, TS, E	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Utility Provider Budget	Long-Term
Medium	Status:	This is an ongoing process done by the individual utility providers.	Provider	Utility Provider Budget	Ongoing
High F, H, T, WF, E	Replace or Retrofit Outdated Structures	Any antiquated structures that are deemed vulnerable should be replaced or retrofitted.	Provider	Utility Provider Budget	Long-Term
High	Status:	This is an ongoing process done by the individual utility providers.	Provider	Utility Provider Budget	Ongoing
High F, H, WS, E	Models and Database	The County and municipalities should develop geographically accurate models and databases of their infrastructure systems.	Depends/ Sewer	Staff / Budget	Short-Term
High	Status:	The County is involved in an ongoing process to update this information as funding and staff time becomes available.	Responsible Department	Staff / Budget	Ongoing

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High F, H, T, DF, WF, E, D	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	County Administrator	Update when plan is due for major revision	Long-Term
High	Status:	Kershaw County has adopted the 2015 International Building Code, Vision Kershaw 2010 in March of 2016, an updated Comprehensive Plan on March 27, 2018, and an updated Unified Code of Zoning and Land Development Regulations on October 26, 2016. All these documents address policies and regulations that both foster and require hazard mitigation related issues to be addressed.	Planning and Zoning Department	Municipal adoption of the Unified Code of Zoning & Land Development Regulations.	Ongoing

Low F, H, DF, WF, E, D	Property Protection Measures	Incorporate retrofitting incentives by establishing a program of technical assistance and financial incentives to encourage property protection measures on private commercial property.	Planning and Zoning Department	Local Budget	Long-Term
Low	Status:	No action has been taken on this item due to a lack of funding. As funds become available action may be taken.	Planning and Zoning Department	Local Budget	Long-Term
High F	Flood Control Projects	Implement flood control projects for areas such as farm drainage, bridge improvements, and repairing dams that are prone to failure.	Depends	Budget	Long-Term
High	Status:	No action has been taken on this item due to a lack of funding. As funds become available action may be taken.	Responsible Department	Budget	3 years

Goal # 5: Ensure that emergency shelters have adequate capacity and resources.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Shelter Audit	Perform an audit of shelters to determine which of these structures are better-suited and equipped to serve at-risk populations. In addition, the audit should also determine what equipment is needed to meet these tasks.	American Red Cross	Staff	Short-Term
Medium	Status:	This is part of an annual process undertaken by EMD and the American Red Cross with the assistance of SC EMD. These three organizations work together to develop a memorandum of understanding regarding the adequacy of the Kershaw County emergency shelter system.	American Red Cross	MOA / Staff of ARC, SCEMD and local EMD	Ongoing
Medium D, E, F, H, T, DF, TS, WF, WS	Special Needs Population Survey	Use demographic data to determine the location of at-risk populations and develop plans to provide transportation in order to evacuate them to shelters that can provide medical care and meet any special needs that they may have.	SLRCOG	Staff / municipal funding	Long-Term
Medium	Status:	No action has been taken on this item due to a lack of funding. As funds become available action may be taken.	SLRCOG	Staff / municipal funding	3 years
High F, H, WS, E	Backup Power	Make sure shelters have an adequate back up power supply by furnishing them with generators.	American Red Cross	Hazard Mitigation Grant Program	Short-Term

High	Status:	All shelters have been provided access to back-up power via generators. Generators are maintained as part of an ongoing process.	American Red Cross	Hazard Mitigation Grant Program	Completed/Ongoing

Goal # 6: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium WF	Inventory Vulnerable Area to Wildfires	Inventory existing data concerning land cover, land use, and future land use and develop GIS databases to determine areas that are vulnerable to wildfire.	Forestry	Planning / GIS	Complete
Medium	Status:	Although the specific actions were completed prior the approval of the previous plan, the information is constantly being updated through the Fire Smart Program.	Forestry	Fire Smart Program	Complete/Ongoing
Medium WF	Evaluate Areas Susceptible to wildfires	Utilize GIS analysis to identify structures (homes and other buildings) that are in areas susceptible to wildfire.	Forestry	Planning / GIS	Complete
Medium	Status:	Although the specific actions were completed prior the approval of the previous plan, the information is constantly being updated through the Fire Smart Program.	Forestry	Fire Smart Program	Complete/Ongoing
Medium WF	Vegetation Management	Remove and clear vegetation, especially underbrush, in rural areas that have historically been prone to wildfires.		Budget / Manpower	Ongoing
Medium	Status:	This is an ongoing process that is part of Kershaw County's prescribed burning program in rural areas.	Forestry	Budget / Manpower	Ongoing

Goal # 7: Reduce the impact of severe winds on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Low H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	Depends?	Budget / Manpower	Ongoing

Low	Status:	This is an ongoing process that is undertaken as risks are identified.	Responsible Party	Budget / Manpower	Ongoing
High H, T, TS	Codes	Enhance the County codes by improving the resistance of manufactured home against high winds.	Planning & Zoning	Planning Department Staff	Short-Term
High	Status:	On an ongoing basis, the county adopts updated versions of the International Building Code (IBC). The county is currently enforcing the 2015 IBC. Combining the IBC with stricter underpinning regulations adopted in 2010, the county has improved the resistance of manufactured homes against high winds.	Planning & Zoning	Planning Department Staff	Completed/Ongoing

Goal # 8: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium F	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch and canal system maintenance program for storm water management.	SCDOT, City & County Council	Budget / Manpower	Ongoing
Medium	Status:	A storm water drainage program has been implemented in the Town of Elgin and will be implemented in other areas based upon population growth. Updates of the Kershaw County Zoning Ordinance are underway and take into account Storm Water Drainage.	SCDOT, City & County Council	Budget / Manpower	Ongoing
High F	Update Flood Maps	Encourage FEMA to update flood maps.	Assessor	Staff	Ongoing
High	Status:	Kershaw County uses up to date FEMA flood data.	Assessor	Staff	Complete
Medium F	Back Flow Prevention	Install back-flow prevention valves in sewer pipes.	Citizens	Budget	Ongoing
Medium	Status:	Back-flow prevention valves are added to existing systems whenever funding is available.	Provider	Budget	Ongoing

Goal # 9: Ensure the protection and function of Communications					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium H, T, WS, TS	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Utility Provider Budget	Short-Term
Medium	Status:	Kershaw County is currently working with utility providers to place utility lines below ground to make them less susceptible to natural disasters.	Kershaw County/Provider	Utility Provider Budget	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	County E911 Director	Budget / Grants	Immediate
High	Status:	Purchase a command post that is more up to date with the latest technology and is capable of handling major incidents such as hazardous material incidents, active shoot events, or other incidents that may require a large number of responders. This unit should also be able to handle the workload of the 911 call center in the event of failure of the main 911 call center.	County E911 Director	Budget / Grants	Immediate
Medium D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communication System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	Firefighter Safer Grant	Long-Term
Medium	Status:	Kershaw County has applied for grants to purchase 800 MHz radios and add 800 MHz towers for improved communication during natural disasters.	EMD	Firefighter Safer Grants	Nearing completion

Goal #10: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation (B) (E)	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Management Director	Staff	Immediate
Medium	Status:	This process takes place annually as part of the County's Emergency Operations Plan review.	EMD	Staff	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment (B) (E)	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	Emergency Management Director	Safer Grants	Short-Term
Medium	Status:	Kershaw County has purchased 800 MHz radios for enhanced communication during natural disasters. Additionally, the County used Homeland Security Grant Funds to purchase a trailer and equipment including air packs, decontamination equipment, four-wheelers, wind gauges, and chemical response books. All fire department personnel were trained in the use of this new equipment. The county conducts annual exercises each year to maintain readiness. Additional funding is necessary to further enhance communication to desired levels	EMD	Homeland Security Grant Fund & Safer Grants	Ongoing

City of Camden Action Plan

Goal #1: Ensure the protection of critical facilities in the city.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Facility Evaluation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	City Manager	General Fund	Ongoing
High	Status:	This is part of an ongoing process undertaken by the city manager and city maintenance staff.	City Manager	General Fund	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	City Manager	General Fund	Ongoing
High	Status:	This is part of an ongoing process undertaken by the city manager and city maintenance staff.	City Manager	General Fund	Ongoing
High H, T, WS, TS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	City Manager	Utility Fund / Hazard Mitigation Grant Program	Ongoing
High	Status:	The Haier lift station is the last critical facility to need a backup generator.	City Manager	Hazard Mitigation Grant Program	Ongoing

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to municipal and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	City Manager	General Fund	Ongoing
High	Status:	This is part of an ongoing process. The city regularly posts information regarding hazards on its website and makes information available through its water department.	City Manager	General Fund	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	City Manager	General Fund.	Ongoing
High	Status:	This is part of an ongoing process. Staff regularly speak to schools, civic groups, etc. regarding hazards that its citizens are susceptible too.	City Manager	General Fund	Ongoing

Goal #3: Ensure that the city's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High F, H, T, WS, TS, E	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider/ Utility Department	Utility Fund	Immediate
High	Status:	The City of Camden provides electricity to a large portion of Kershaw and some of Lee County. As the provider they regularly inspect all lines and trim vegetation to reduce the impact of disasters on this infrastructure.	City of Camden/Other Provider	Utility Fund	Ongoing
High F, H, T, WS, WF, E	Replace or Retrofit Outdated Structures	Any antiquated structures that are deemed vulnerable should be replaced or retrofitted.	Utilities Department	Utility Fund	Immediate

High	Status:	The City has relocated 10.76 miles of utility lines underground since 2015.	Utilities Department	Utility Fund	Ongoing
High F, H, WS, WF, E	Models and Database	The City should develop geographically accurate models and databases of their infrastructure systems.	Utilities Department	Utility Fund	Immediate
High	Status:	This action has been completed.	Utilities Department	Utility Fund	Complete

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High F, H, DF, WF, E, D	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	Zoning Administrator	General Fund	Complete/Ongoing
High	Status:	The City has adopted the 2015 International Building Code which contains provisions that will reduce the impact of disasters on new buildings. As ordinances are updated, they regularly consider disaster mitigation issues.	Planning Director/Building Official	General Fund	Complete / Ongoing
High F, H, DF, E, D	Property Protection Measures	Incorporate retrofitting incentives by establishing a program of technical assistance and financial incentives to encourage property protection measures on private commercial property.	SBC	General Fund	Immediate
High	Status:	No progress has been made due to lack of funding.	SBC	General Fund	2 Years
High F	Flood Control Projects	Implement flood control projects for areas by clearing drainage ditches and canals and repairing dams that are prone to failure.	Public Works and Property Owners	Utility Fund	Immediate
High	Status:	The primary risk for Camden is the Wateree Dam which has a low risk of failure but is inspected annually. The City regularly maintains drainage ditches regularly but not as part of a formal plan.	Public Works/Duke Energy	Utility Fund	Annual/Complete/Ongoing

Goal #5: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
High WF	Inventory Vulnerable Area to Wildfires	Inventory existing data concerning land cover, land use, and future land use and develop GIS databases to determine areas that are vulnerable to wildfire.	Camden Fire Department	General Fund	1-2 Years
High	Status:	No progress has been made due to a lack of funding.	Camden Fire Department	General Fund	1-2 Years
High WF	Evaluate Areas Susceptible to Wildfires	Utilize GIS analysis to identify structures (homes and other buildings) that are in areas susceptible to wildfire.	Camden Fire Department	General Fund	1-2 Years
High	Status:	No progress has been made due to a lack of funding.	Camden Fire Department	General Fund	1-2 Years
High WF	Vegetation Management	Remove and clear vegetation, especially underbrush, in rural areas that have historically been prone to wildfires.	Camden Fire Department	General Fund	1-2 Years
High	Status:	No progress has been made due to a lack of funding.	Camden Fire Department	General Fund	1-2 Years

Goal #6: Reduce the impact of severe winds on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Low H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	Public Works & Facilities Department	Utility Fund	2-4 Years
Low	Status:	This is part of an ongoing process. Risks are dealt with as they are identified. Additional funding would allow for a more proactive approach.	Public Works & Facilities Department	Utility Fund	Ongoing

Goal #7: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure due to flood.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/ Completion Status**
Medium F	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch and canal system maintenance program for storm water management.	Public Works	Utility Fund	1-2 Years

Medium	Status:	Although the City performs regular maintenance on its drainage ditches it is not done as part of a formal plan. Additional funding and staff time would be necessary for the development of such a plan.	Public Works	Utility Fund	1-2 Years
Medium F, DF	Flood Threat Recognition System	Determine the possibility of a flood threat recognition system that utilizes rain and stream gages, along with a central gage, to monitor and predict the occurrences of floods and flash floods.	Public Works	Utility Fund	1-2 Years
Medium	Status:	No progress has been made on this action due to a lack of funds and staff availability.	Public Works	Utility Fund	1-2 Years
Medium F	Update Flood Maps	Encourage FEMA to update flood maps.	CiA City Manager	FEMA / SCDNR	1-2 Years
Medium F	Back Flow Prevention	Install back-flow prevention valves in sewer pipes.	Utilities Department	Utility Fund	1-2 Years
Medium	Status:	No progress has been made on this action due to a lack of funds.	Utilities Department	Utility Fund	1-2 Years

Goal #8: Ensure the protection and function of Communications.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium H, T, WS, TS, E	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Utility Fund	1-2 Years
Medium	Status:	This is part of an ongoing process that is undertaken by the individual providers.	Provider	Utility Fund	Ongoing
Medium D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	City EM Director	General Fund	1-2 Years
Medium	Status:	A mobile command vehicle was purchased in 2005 with a Homeland Security Grant. It has communication capabilities that will enhance the City's response to hazards.	City EM Director	General Fund	Complete
Medium D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communication System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	General Fund	1-2 Years

Medium	Status:	All radio systems have been upgraded to the 800 MHz system.	Police, Fire, and Public Works	General Fund	Complete

Goal #9: Facilitate the preparedness of Emergency Response.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	City Manager	General Fund	1-2 Years
High	Status:	This is done as part of the annual Emergency Operations Plan review.	City Manager	General Fund	Annual
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	City Manager	General Fund	1-2 Years
High	Status:	The Fire Department has purchased additional sets of bunker gear, so each firefighter has two sets of gear. Other equipment purchases will be made as funding becomes available.	City Manager	General Fund	1 – 2 Years

Town of Bethune Action Plan

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness Information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Management Director County administrator	Staff / Public Service Announcements / flyers / newsletters / etc.	2004
High	Status:	This action was completed through Kershaw County's Local Emergency Planning Committee Meeting (LEPC). Brochures were distributed at Fire Fest, LEPC, schools, nursing homes, and civic groups.	Emergency Management Director County administrator	Staff – Kershaw County Local Emergency Planning Committee	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Management Director County administrator	Staff / Public Service Announcements / flyers / newsletters / etc.	Immediate
High	Status:	In addition to the activities mentioned above, presentations were made to senior groups. Information is also available via the Kershaw County website.	Emergency Management Director County administrator	Staff / Social Media	Ongoing

Goal #10: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Management Director	Staff	Immediate
Medium	Status:	This process takes place annually as part of the County's Emergency Operations Plan review.	EMD	Staff	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	Emergency Management Director	Safer Grant	Short-Term

Medium	Status:	Kershaw County has purchased 800 MHz radios for enhanced communication during natural disasters. Additionally, the County used Homeland Security Grant Funds to purchase a trailer and equipment including air packs, decontamination equipment, four-wheelers, wind gauges, and chemical response books. All fire department personnel were trained in the use of this new equipment. The county conducts annual exercises each year to maintain readiness. Additional funding is necessary to further enhance communication to desired levels.	EMD	Safer Grants	Ongoing

Town of Elgin Action Plan

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness Information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Management Director County administrator	Staff / Public Service Announcements / flyers / newsletters / etc.	2004
High	Status:	This action was completed through Kershaw County's Local Emergency Planning Committee Meeting (LEPC). Brochures were distributed at Fire Fest, LEPC, schools, nursing homes, and civic groups.	Emergency Management Director County administrator	Staff – Kershaw County Local Emergency Planning Committee	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Management Director County administrator	Staff / Public Service Announcements / flyers / newsletters / etc.	Immediate
High	Status:	In addition to the activities mentioned above, presentations were made to senior groups. Information is also available via the Kershaw County website.	Emergency Management Director County administrator	Staff / Social Media / Community Organizations	Ongoing

Goal #10: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action/Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Management Director	Staff	Immediate
Medium	Status:	This process takes place annually as part of the County's Emergency Operations Plan review.	EMD	Staff	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	Emergency Management Director	Safer Grant	Short-Term

Medium	Status:	Kershaw County has purchased 800 MHz radios for enhanced communication during natural disasters. Additionally, the County used Homeland Security Grant Funds to purchase a trailer and equipment including air packs, decontamination equipment, four-wheelers, wind gauges, and chemical response books. All fire department personnel were trained in the use of this new equipment. The county conducts annual exercises each year to maintain readiness. Additional funding is necessary to further enhance communication to desired levels.	EMD	Safer Grant	Ongoing

Lee County Action Plan

Note: Mitigation Actions and Goals for Lynchburg

The assessment of each local government's policies, programs, and ordinances in Lee County along with their technical/administrative and fiscal abilities indicate that Lynchburg does not have the capability to implement a comprehensive range of mitigation initiatives. Lee County has historically assisted these jurisdictions in the implementation of programs, policies and activities outside the scope of jurisdictional capabilities. Given these limitations Lynchburg requested that Lee County assist them in the implementation of mitigation activities. Action items for those jurisdictions are items for those jurisdictions are included with the action items for Lee County. Action items for Lynchburg are indicated by T or P in the Lee County action item listing. Lee County Goals #2 and #10 apply to Lynchburg.

Goal #1: Ensure the protection of critical facilities in the county.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Facility Evacuation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	EMD	Staff	6 Months
High	Status:	Critical facilities were audited as part of the update to this plan. New facilities added include schools and a new fire station. Critical facility's exposure to natural hazards and loss of power is audited annually with the cooperation of South Carolina Emergency Management Division and the American Red Cross.	EMD	Staff / ARC / SCEMD	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	Affected Agencies	Budget	Ongoing
Medium	Status:	Repairs to critical facilities are typically done on an as-needed basis. Some retrofitting for back-up power was completed and it noted below.	EMD, Public Works Dept.	Budget	Ongoing

Medium H, T, WS, TS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	Affected Agencies	Budget	Ongoing
Medium	Status:	All emergency shelters were retrofitted with transfer switches to allow them to be easily connected to portable generators. A portable generator was purchased by Lee County. Generators were added to critical pump stations and wells by the Lee County Public Works Department. As funding becomes available, more critical facilities will be updated with emergency backup generators or transfer switches.	EMD/Public Works Dept.	Budget	Partially completed

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information (L)	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	EMD	Staff / Public Service Announcements / flyers / newsletters / etc.	Ongoing
High	Status:	The Lee County Emergency Management Director, as part of an ongoing process, regularly publishes information in the local newspaper regarding disaster preparedness. Information regarding hurricanes is disseminated during the onset of the Atlantic Hurricane Season. The creation of more detailed materials is hampered by lack of funding and staff availability.	EMD	Staff / Budget / Local media	Completed and Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness (L)	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	EMD	Staff / Public Service Announcements / flyers / newsletters / etc.	Ongoing

High	Status:	The Lee County Emergency Management Director, as part of an ongoing process, utilizes Fire Dept. personnel as well as community volunteers to speak in local schools, churches, and civic organizations regarding disaster preparedness. This process is ongoing but is hampered by a general lack of staff availability.	EMD	Staff / Volunteers / Community Outreach	Partially Completed and Ongoing

Goal #3: Ensure that the county's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High H, T, WS, TS, E	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Utility Provider Budget	Ongoing
High	Status:	Lines are inspected by the appropriate utility provider on an ongoing basis. Water/Sewer Infrastructure has been upgraded with back-up generators at critical sites. As funding becomes available more Water/Sewer facilities will be retrofitted with back-up power.	Provider	Budget	Ongoing

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High F, H, DF, WF, E, D	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	Planning & Zoning	Update done during revision or update to planning documents	Continuous Update
High	Status:	The Lee County Comprehensive Plan and the Lee County Zoning Ordinance are currently in the process of being revised. Pertinent aspects of the Lee County Hazard Mitigation Plan are being utilized as part of this process.	Planning & Zoning	Update being scheduled to be placed in appropriate planning documents	Continuous Update
High F, H, DF, WF, E, D	Property Protection Measures	Incorporate retrofitting incentives by establishing a program of technical assistance and financial incentives to encourage property protection measures on private commercial property.	Economic Development	Budget	Update as needed
High	Status:	A lack of funding has prevented the establishment of a program of this nature. The probability of funds becoming available under this plan is not great.	Economic Development	Budget	Deferred

Goal # 5: Ensure that emergency shelters have adequate capacity and resources.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Shelter Audit	Perform an audit of shelters to determine which of these structures are better-suited and equipped to serve at-risk populations. In addition, the audit should also determine what equipment is needed to meet these tasks.	ARC	Staff	Annually
Medium	Status:	This is part of an annual process undertaken by EMD and the American Red Cross with the assistance of SC EMD. These three organizations work together to develop a memorandum of understanding (MOU) regarding the adequacy of the Lee County emergency shelter system.	ARC/ EMD/ SC EMD	Staff – ARC, SCEMD, and EMD; plus, MOU	Annually
Medium D, E, F, H, T, DF, TS, WF, WS	Special Needs Population Survey	Use demographic data to determine the location of at-risk populations and develop plans to provide transportation in order to evacuate them to shelters that can provide medical care and meet any special needs that they may have.	EMD	Staff	Annually
Medium	Status:	This is done as part of the annual review of the Lee County Emergency Operations Plan.	EMD	Staff	Annually
High F, H, T, WS, E	Backup Power	Make sure shelters have an adequate back up power supply by furnishing them with generators.	Provider	Budget	Ongoing
High	Status:	All emergency shelters were retrofitted with transfer switches to allow them to be easily connected to portable generators. A portable generator was purchased by Lee County. Ideally, all shelters would be equipped with their own back-up generators; however, lack of funding makes this unlikely under this plan.	EMD	Budget	Partially Completed

Goal # 6: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium WF	Inventory Vulnerable Area to Wildfires	Inventory existing data concerning land cover, land use, and future land use and develop GIS databases to determine critical facilities that are vulnerable to wildfire.	COG/ EMD	Staff / Budget	2008
Medium	Status:	New aerial photography was taken in 2007 and incorporated into Lee County's GIS database. A lack of funding and staff time has prevented the analysis of this data regarding the vulnerability of critical facilities to wildfire. With the data now available, it will be possible to address this action under the current plan.	EMD	Staff / Budget	Incomplete/ 2011

Goal # 7: Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.		Budget / Manpower	
Medium	Status:	This is an ongoing process as risks to critical facilities are identified. Funding allows for progress on this goal for minor risks such as overhanging limbs but does not allow for large scale projects.	EMD	Budget / Manpower	Ongoing

Goal # 8: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium F, DF	Flood Threat Recognition System	Determine the possibility of a flood threat recognition system that utilizes rain and stream gages, along with a central gage, to monitor and predict the occurrences of floods and flash floods.	NOAA Weather	Budget	Long-Term
Medium	Status:	No action has been taken towards this action due to a lack of funding.	NOAA Weather	Budget	Long-Term
High F	Update Flood Maps	Encourage FEMA to update flood maps.	FEMA	Staff	Ongoing

High	Status:	This action was completed in 2009. Data from these maps has been incorporated into Lee County's GIS database in order to be of better use.	FEMA	Staff	Complete
Medium F	Back Flow Prevention	Install back-flow prevention valves in sewer pipes.	City Water Department	Budget / Manpower	Ongoing
	Status:	This action was determined to no longer be necessary. The back-flow prevention valves that were installed as a result of the recommendations of the previous plan created more risk than they did away with.		Not Applicable	Deleted
Low F	Storm Water Management	Implement the mandatory storm water utility/tax.	City Government	Municipal Government	2008
Low	Status:	It is unlikely that any action will be taken on this item under the current plan due to political considerations.		Not Applicable	Deleted

Goal # 9: Ensure the protection and function of Communications					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Budget / Manpower	Ongoing
High	Status:	This is an ongoing process undertaken by the individual utility providers in the area.	Provider	Budget / Manpower	Ongoing
Medium D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	County EM Director	Budget	2009
Medium	Status:	This goal has been met, not through the creation of a mobile dispatch unity, but using a Network Control Modem that creates redundancy between surrounding counties and a centrally located dispatch located in a secure facility in Horry County. This system is tested annually to ensure it is working properly.	EMD	Network Control Modem / Staff	Complete
Medium D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communication System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	Budget	Ongoing

Medium	Status:	Progress has been made on this action through the purchase of 800 MHz radios and the creation of a Mobile Command Center. Additional funding would allow for the purchase of additional 800MHz radios to allow for additional critical personnel to be "in the loop" during a natural disaster.	EMD	Budget	Partially Completed/ 2011

Goal #10: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	EOC	Staff	Ongoing
High	Status:	This plan is updated annually with the assistance of SC EMD.	EMD/ SC EMD	Staff to include SCEMD	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	EOC	Budget	Ongoing
High	Status:	The Lee County Fire Department has purchased Thermal Imaging Cameras. The EMD has also created Community Emergency Response Teams to help improve community awareness and response times to natural and man-made disasters.	EMD/ LCFD	Budget / Staff / Community Emergency Response Team	Ongoing

City of Bishopville Action Plan

Goal #1: Ensure the protection of critical facilities in the county.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Facility Evacuation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by audit.	Department Heads	Staff	6 Months
High	Status:	Critical facilities were audited as part of the update to this plan. New facilities added include schools and a new fire station. Critical facility's exposure to natural hazards and loss of power is audited annually with the cooperation of South Carolina EMD and the American Red Cross.	EMD	Staff / ARC / SCEMD	Incomplete
Medium D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	Affected Departments	Budget	Ongoing
Medium	Status:	Shelters have had transfer switches installed for quick connection to generators in accordance with EMD recommendations. A portable generator was purchased for use as needed in the event of a disaster. Generators were added to Water/sewer facilities as needed.	EMD, Public Works Dept.	Budget	Partially completed
High F, H, WS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	Affected Departments	Budget	Ongoing
Medium	Status:	All emergency shelters were retrofitted with transfer switches to allow them to be easily connected to portable generators. A portable generator was purchased by Lee County. Generators were added to critical pump stations and wells by the Lee County Public Works Department. As funding becomes available, more critical facilities will be updated with emergency backup generators or transfer switches.	EMD/Public Works Dept.	Budget	Partially completed

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Lee County Emergency Operations Center	Staff / Public Service Announcements / Social Media / flyers / newsletters / etc.	Ongoing
High	Status:	The Lee County Emergency Management Director, as part of an ongoing process, regularly publishes information in the local newspaper regarding disaster preparedness. Information regarding hurricanes is disseminated during the onset of the Atlantic Hurricane Season. The creation of more detailed materials is hampered by lack of funding and staff availability.	EMD	Staff / Budget / Local Media	Completed and Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Lee County Emergency Operations Center	Staff / Public Service Announcements / Social Media / flyers / newsletters / etc.	Ongoing
High	Status:	The Lee County Emergency Management Director, as part of an ongoing process, utilizes Fire Dept. personnel as well as community volunteers to speak in local schools, churches, and civic organizations regarding disaster preparedness. This process is ongoing but is hampered by a general lack of staff availability.	EMD	Staff / Budget / Local Media	Partially Completed and Ongoing

Goal #3: Ensure that the county's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High F, H, T, WS, DF, TS, WF, E	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Utility Provider Budget	Ongoing
High	Status:	Lines are inspected by the appropriate utility provider on an ongoing basis. Water/Sewer Infrastructure has been upgraded with back-up generators at critical sites. As funding becomes available more Water/Sewer facilities will be retrofitted with back-up power.	Provider	Utility Provider Budget	Ongoing

Medium F, H, T, WS, DF, TS, WF, E	Replace or Retrofit Outdated Structures	Any antiquated structures that are deemed vulnerable should be replaced or retrofitted.	Affected Department	Budget	Ongoing
Medium	Status:	No significant progress has been made due to lack of funds.	Affected Department	Budget	Ongoing

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High F, H, DF, WF, E, D	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	Planning & Zoning	Updates to occur during update / revision of appropriate planning documents	Continuous Update
High	Status:	The Lee County Comprehensive Plan and the Lee County Zoning Ordinance are currently in the process of being revised. Pertinent aspects of the Lee County Hazard Mitigation Plan are being utilized as part of this process.	Planning & Zoning	Updates are planned for the upcoming updates to planning documents	Continuous Update
High F, H, DF, WF, E, D	Property Protection Measures	Incorporate retrofitting incentives by establishing a program of technical assistance and financial incentives to encourage property protection measures on private commercial property.	Economic Development	Budget	Update as needed
High	Status:	A lack of funding has prevented the establishment of a program of this nature. The probability of funds becoming available under this plan is not great.	Economic Development	Budget	Deferred
Medium F	Flood Control Projects	Implement flood control projects for areas of the city by cleaning drainage ditches that are prone to failure.	Street/Public Works Department	Budget / Manpower	2008
Medium	Status:	The City undertook the Wilson St. Flood Control Project in 2009. They improved drainage in an area to correct a flood issue that frequently caused the flooding of over 10 acres and 20 homes.	Street/Public Works Department	Budget / Manpower	Ongoing

Goal # 5: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium WF	Inventory Vulnerable Area to Wildfires	Inventory existing data concerning land cover, land use, and future land use and develop GIS databases to determine critical facilities that are vulnerable to wildfire.	COG/ Lee County Emergency Operations	Budget / Staff	2007
Medium	Status:	New aerial photography was taken in 2007 and incorporated into Lee County's GIS database. A lack of funding and staff time has prevented the analysis of this data regarding the vulnerability of critical facilities to wildfire. With the data now available, it will be possible to address this action under the current plan.	EMD	Budget / Staff/ Aerial Photography	Incomplete/ 2011

Goal # 6: Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	Fire Department	Budget / Manpower	2007
Medium	Status:	This is an ongoing process as risks to critical facilities are identified. Funding allows for progress on this goal for minor risks such as overhanging limbs but does not allow for large scale projects.	EMD	Budget / Manpower	Ongoing

Goal # 7: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium F, DF	Flood Threat Recognition System	Determine the possibility of a flood threat recognition system that utilizes rain and stream gages, along with a central gage, to monitor and predict the occurrences of floods and flash floods.	NOAA Weather	Budget	Long-Term
Medium	Status:	No action has been taken towards this action due to a lack of funding.	NOAA Weather	Budget	Long-Term
High F	Update Flood Maps	Encourage FEMA to update flood maps.	FEMA	Staff	Ongoing
High	Status:	This action was completed in 2009. Data from these maps has been incorporated into Lee County's GIS database in order to be of better use.	FEMA	Staff	Complete

Medium F	Back Flow Prevention	Install back-flow prevention valves in sewer pipes.	City Water Department	Budget	Ongoing
Medium	Status:	This action was determined to no longer be necessary. The back-flow prevention valves that were installed as a result of the recommendations of the previous plan created more risk than they did away with.		Not Applicable	Deleted
Medium F	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch and canal system maintenance program for storm water management.	Street Department	Budget	Ongoing
Medium	Status:	Drainage ditches are maintained as part of an ongoing process although a lack of staff availability has not made the development of a formal plan possible.	Street/Public Works Department	Budget / Manpower	Ongoing/2 Years

Goal # 8: Ensure the protection and function of Communications					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High H, T, WS, TS, E	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Utility Provider Budget	Ongoing
High	Status:	This is an ongoing process undertaken by the individual utility providers in the area.	Provider	Utility Provider Budget	Ongoing
Medium D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	Lee County Emergency Operations Center	Budget	2009
Medium	Status:	This goal has been met, not through the creation of a mobile dispatch unity, but using a Network Control Modem that creates redundancy between surrounding counties and a centrally located dispatch located in a secure facility in Horry County. This system is tested annually to ensure it is working properly.	EMD	Budget / Network Control Modem	Complete
Medium D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communication System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	Budget	Ongoing

Medium	Status:	Progress has been made on this action through the purchase of 800 MHz radios and the creation of a Mobile Command Center. Additional funding would allow for the purchase of additional 800MHz radios to allow for additional critical personnel to be "in the loop" during a natural disaster.	EMD	Budget	Partially Completed/ 2011

Goal #9: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Lee County Emergency Operations Center	Staff	Ongoing
High	Status:	This plan is updated annually with the assistance of SC EMD.	EMD/ SC EMD	Staff – EMD & SCEMD	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	Lee County Emergency Operations Center	Budget	Ongoing
High	Status:	The Lee County Fire Department has purchased Thermal Imaging Cameras. The EMD has also created Community Emergency Response Teams to help improve community awareness and response times to natural and man-made disasters.	EMD/ LCFD	Budget / Community Emergency Response Teams	Ongoing

Town of Lynchburg Action Plan

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	EMD	Staff / Public Service Announcements / social media / flyers / newsletters / etc.	Ongoing
High	Status:	The Lee County Emergency Management Director, as part of an ongoing process, regularly publishes information in the local newspaper regarding disaster preparedness. Information regarding hurricanes is disseminated during the onset of the Atlantic Hurricane Season. The creation of more detailed materials is hampered by lack of funding and staff availability.	EMD	Staff / Budget / Local Media	Completed and Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	EMD	Staff / Public Service Announcements / social media / flyers / newsletters / etc.	Ongoing
High	Status:	The Lee County Emergency Management Director, as part of an ongoing process, utilizes Fire Dept. personnel as well as community volunteers to speak in local schools, churches, and civic organizations regarding disaster preparedness. This process is ongoing but is hampered by a general lack of staff availability.	EMD	Staff / Volunteers / Budget	Partially Completed and Ongoing

Goal #10: Facilitate the preparedness of Emergency Response					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	EOC	Staff	Ongoing
High	Status:	This plan is updated annually with the assistance of SC EMD.	EMD/ SC EMD	Staff – EMD and SCEMD	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	EOC	Budget	Ongoing
High	Status:	The Lee County Fire Department has purchased Thermal Imaging Cameras. The EMD has also created Community Emergency Response Teams to help improve community awareness and response times to natural and man-made disasters.	EMD/ LCFD	Budget / Community Emergency Response Teams	Ongoing
Goal # 10: New Actions					
High F, H, T, WS, DF, E	Maintain Shelter Adequacy	Ensure that the retirement of public facilities like old school buildings does not negatively impact the adequacy of the shelter system in the town.	Lee County Emergency Management/ School District/ American Red Cross	Budget / Staff	Immediate

Sumter County Action Plan

Note: Mitigation Actions and Goals for Mayesville and Pinewood

The assessment of each local government's policies, programs, and ordinances in Sumter County along with their technical/administrative and fiscal abilities indicate that Pinewood and Mayesville do not have the capability to implement a comprehensive range of mitigation initiatives. Sumter County has historically assisted these jurisdictions in the implementation of programs, policies and activities outside the scope of jurisdictional capabilities. Given these limitations Mayesville and Pinewood requested that Sumter County assist them in the implementation of mitigation activities. Action items for those jurisdictions are included with the action items for Sumter County. Action items for Mayesville and Pinewood and indicated by M or P in the Sumter County action item listing. Sumter County Goals #2 and #10 apply to Pinewood and Mayesville.

Goal #1: Ensure the protection of critical facilities in the county.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Facility Evaluation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	Emergency Manager	Staff	12 Months
High	Status:	A partial audit was conducted, primarily of fire stations, in preparation for the investment of funds generated through the "Pennies for Progress" sales tax. Additionally, shelters are evaluated annually with the cooperation of the American Red Cross.	County Administrator & City Manager	Staff & ARC	Partially complete/ 1 year

Medium D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	County Administrator & City Manager	Budget	1-2 Years
Medium	Status:	Funds generated through the "Pennies for Progress" sales tax were used, in part, to update facilities in critical facilities; primarily fire stations. When a more detailed and comprehensive audit has been completed a determination can be made as to the best way to fund additional repairs.	County Administrator & City Manager	Budget / Capital Sales Tax initiative – "Penny for Progress"	2 years
Low F, H, T, WS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	Emergency Manager	Budget	Within 5 Years
Low	Status:	Significant progress was made with the acquisition of on-site stand-by generators for EMS Headquarters, Sumter County IT, and the Sheriff's Department Annex. The on-site generator at Tuomey Regional Healthcare System was recently upgraded and a portable generator purchased to provide power to the patient rehab center. As funds become available additional generators will be added to critical facilities.	Emergency Manager/ Responsible Agency	Budget	3 years

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information (M) (P)	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Manager	Staff / Public Service Announcements / social media / flyers / newsletters / etc.	12 Months
Medium	Status:	Information from the American Red Cross, FEMA, and SC EMD is generally used for educational purposes. Compiling this information is the responsibility of the Emergency Management Agency and is part of an ongoing process.	Emergency Manager	Staff / Public Service Announcements / social media / flyers / newsletters / etc.	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness (M) (P)	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Manager	Staff / Public Service Announcements / social media / flyers / newsletters / etc.	12 Months
	Status:	This is an ongoing process that is shared between Emergency Management, the Fire Department, and law enforcement. Personnel regularly speak to schools, civic groups, senior groups, etc. In addition, Emergency Management operates a booth at the Sumter County Fair annually.		Staff – EMD – Law Enforcement – Fire Department;	

Goal #3: Ensure that the county's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High F, H, T, WS, TS, E	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Utility Provider Budget	12 Months
High	Status:	This is part of an ongoing process performed by the individual utility providers.	Provider	Utility Provider Budget	Ongoing
Low F, H, T, WS, DF, WF, E	Replace or Retrofit Outdated Structures	Any antiquated structures that are deemed vulnerable should be replaced or retrofitted.	Emergency Manager & Public Works	Budget	3 Years
Low	Status:	No antiquated structures have been replaced or significantly retrofitted due to a lack of funds.	Emergency Manager & Public Works	Budget	3 Years
Medium F, H, WS, E	Models and Database	The County and municipalities should develop geographically accurate models and databases of their infrastructure systems.	IT Department	Staff / Budget	3 Years
Medium	Status:	This data now exists for most of the County's infrastructure although it is an ongoing process to ensure that it remains up to date.	IT Department with another applicable department help	Manpower / Budget	Ongoing

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High F, H, DF, WF, E, D	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	Planning Department	Updates done during revision or update to planning documents	24 Months
High	Status:	Plans are updated as part of an ongoing process and consider hazard mitigation concepts. Specifically, the Emergency Management Agency completed a Debris Management Plan is 2008 and annually updates its Hurricane Plan.	Planning Department/ Emergency Management	Updates done during revision or update to planning documents	Ongoing/ Annual

Goal # 5: Ensure that emergency shelters have adequate capacity and resources					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Shelter Audit	Perform an audit of shelters to determine which of these structures are better-suited and equipped to serve at-risk populations. In addition, the audit should also determine what equipment is needed to meet these tasks.	Emergency Manager	Budget / Manpower	Ongoing
High	Status:	The Emergency Management Agency works with the American Red Cross annually to ensure the adequacy of the Sumter County Shelter System. In response to the current trend of churches opening their doors during natural disasters, an effort in being undertaken to ensure that these facilities have the necessary equipment in place to meet this need.	Emergency Manager/ ARC	Budget / Manpower – EMD and ARC	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Special Needs Population Survey	Use demographic data to determine the location of at-risk populations and develop plans to provide transportation in order to evacuate them to shelters that can provide medical care and meet any special needs that they may have.	Emergency Manager	Staff	Ongoing
Medium	Status:	Although a survey has not been conducted to specifically meet this goal it is considered during the annual audit of the shelter system. Additional funding and staff availability would be necessary to specifically address this action.	Emergency Manager/ ARC	Staff / Budget	Annual/
Low F, H, T, WS, E	Backup Power	Make sure shelters have an adequate back up power supply by furnishing them with generators.	Emergency Manger	Budget	Ongoing
Low	Status:	The mandatory shelter at Sumter High School has been equipped with an on-site back-up generator. Additional portable generators have been purchased for use at other shelters. Additional funding could be utilized to provide portable generators for all shelters in the county.	Emergency Manager	Budget	3 years

Low D, E, F, H, T, DF, TS, WF, WS	Medical and Health Facilities	Public and private medical and health care facilities will be retrofitted or relocated to withstand natural disasters.	Emergency Manager	Budget	5 Years
Low	Status:	The on-site generator at Prisma Health Tuomey Healthcare System was recently upgraded and a portable generator purchased to provide power to the patient rehab center. Public health care facilities could be improved with the availability of additional funding.	Emergency Manager/ Responsible Organization	Budget	3 years

Goal # 6: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium WF	Evaluate Areas Susceptible to Wildfires	Utilize GIS analysis to identify structures (homes and other buildings) that are in areas susceptible to wildfire.	Emergency Manager	Staff	5 Years
Medium	Status:	Lack of staff availability has prevented a specific effort to analyze GIS data to identify areas susceptible to wildfire although the county's advanced GIS capabilities will ease this process when staff is available.	IT Department/ Emergency Manager	Manpower / Budget	5 years

Goal # 7: Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	Emergency Manager/ Public Works	Budget / Manpower	12 Months
High	Status:	As part of this ongoing process risks such as overhanging limbs, dead trees, etc. are dealt with as they arise. Sumter County brought in an outside contractor in 2009 to trim trees around power lines and electrical facilities to reduce the impact of wind on the electrical grid.	Emergency Manager/ Public Works/ Providers	Budget /Contract / Manpower	Ongoing

Goal # 8: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High F, DF	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch and canal system maintenance program for storm water management.	Public Works	Budget	Ongoing
High	Status:	The county has received a grant to conduct a watershed study to improve its storm water management system. As part of the effort to improve the county's storm water management capabilities the Turkey Creek drainage canal was recently refurbished.	Public Works	Grant	1 year
High F	Update Flood Maps	Encourage FEMA to update flood maps.	Planning	Staff	Ongoing
High	Status:	The county now uses up-to-date FEMA flood maps, dated February 16, 2007. These maps are accessible to departments and citizens through the County and City's GIS as well as the paper map repository in the Planning Department.	Planning	Staff	Complete
High F	Back Flow Prevention	Install back-flow prevention valves in sewer pipes.	Public Works	Budget	Ongoing
High	Status:	This is part of an ongoing process conducted by the individual providers. All providers have aggressive programs in place to keep lines free from vegetation. The lines are inspected regularly, and maintenance is ongoing to ensure all lines are functioning at top capacity in order to minimize system problems during a storm or flood event.	Public Works	Budget / Manpower	Ongoing
High F	Storm Water Management	Implement the mandatory storm water utility/tax.	Public Works	Local Municipal Government	Ongoing
Low	Status:	There is a new implementation study and plan for the storm water utility/tax being developed with a Consultant and is under review by the City & County Public Works Departments in preparation for being sent to the	Public Works	Consultant / Local Municipal Government	Ongoing

		respective public bodies for adoption and implementation.			
Goal Number 8 New Actions					
Med F, D	Storm Water Management	Pilot mitigation projects for storm water ponds and wetlands at public parks and a public golf course to determine better ways to manage and protect natural storm water treatment and water quality management.	Planning & Public Works	Budget / Manpower	Ongoing
High F, D	Data limitations, amended strategies to address issues	Fold information gleaned through the Comprehensive Plan update, the Hazard Mitigation Plan update, and the County-wide Watershed Study into a comprehensive floodplain management plan.	Planning	Staff	2 years
Goal Number 8 New Actions					
High F	Data limitations	Identify through GIS overlays areas coupled with building permit files where development has impacted floodplains and critical areas and address future impacts through the comprehensive floodplain management plan.	Planning	Manpower / Budget	2 years
Med F	Data limitations	Track local flooding events through citizen participation and gathering information through coordination with Public Safety department and Public Works departments, coupled with data from federal sources (USGS, NOAA, etc.).	Planning	Staff	2 years

Goal # 9: Ensure the protection and function of Communications.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High H, T, WS, TS, E	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Budget	Ongoing
High	Status:	This is part of an ongoing process conducted by the individual providers. All providers have aggressive programs	Provider	Budget / Manpower	Ongoing

		in place to keep lines free from vegetation.			
Low D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	County EM Director	Budget	Ongoing
Low	Status:	The Sumter County Sheriff's Department has acquired a FEMA trailer as a Mobile Command Unit.	Emergency Manager	FEMA	Complete
Low D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communication System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	Budget	Ongoing
Low	Status:	A back-up dispatch center has been relocated to an improved site that has more space and it more functional. Additionally, the Sumter County Emergency Operations Center (EOC) was equipped with wireless internet capability so that all critical personnel can have access to the internet if the EOC is activated. Further funding could be utilized to provide additional personnel with access to 800 MHz radios.	Emergency Manager	Budget	Complete/2 years

Goal #10: Facilitate the preparedness of Emergency Response.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation (M) (P)	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Manager	Staff	Ongoing
High	Status:	The Sumter County Emergency Operation Plan is updated annually.	Emergency Manager	Staff	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	Emergency Manager	Budget	Ongoing

Medium	Status:	Sumter County recently updated its GIS system with the purchase of a new server. This will allow remote users to be deployed better enabling individuals "in the field" to gain access to critical infrastructure data Sumter County has acquired several fire trucks, ambulances, and a rescue truck to improve the response to disasters. Regular training occurs on specialized equipment for both departments along with Emergency Management. Additionally, Emergency Management provides quarterly training on Web EOC. Maintaining readiness through proper training is an ongoing process.	Emergency Manager/ Appropriate Department	Budget / On-line Web training	Ongoing
Goal #11: Improve the continuity of operations capabilities for the Emergency Management Agency and the Emergency Operations Center.					
Priority/Identified Hazard(s)	**Name**	**Action**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe**
High D, E, F, H, T, DF, TS, WF, WS	New EMO/EOC pre-development	Choose the location and design of a new Emergency Management Office and Emergency Operations Center.	County Administrator/Emergency Manager	Staff	Immediate
High D, E, F, H, T, DF, TS, WF, WS	New EMO/EOC Development	Locate funding for an updated & functional Emergency Management Office and a well-equipped Emergency Operations Center.	County Administrator/Emergency Manager	Budget	3 Years

City of Sumter Action Plan

Goal #1: Ensure the protection of critical facilities in the county.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Facility Evaluation	Prepare facility audits by evaluating all critical facilities exposure to damage from natural hazards and power losses from downed power lines. Include a review of insurance coverage and identify where more information can be found on the property protection measures recommended by the audit.	Emergency Manager	Staff	12 Months
High	Status:	The Safety Committee Members, along with the Safety Officer, conduct an inspection on each facility on a bi-annual basis to ensure the safety of the workers who work in each facility. No formal audit for natural hazards has been conducted due to the constant upgrading to each facility. Additional items are being added to the bi-annual audit checklist to address facility exposure to damage from natural hazards and power losses from downed power lines.	City Risk Manager/ County Emergency Manager/ City Insurance Agency	Staff	Ongoing
Medium D, E, F, H, T, DF, TS, WF, WS	Repair Facilities	Make repairs found listed in the audits for the facility to remain operational in case a natural disaster occurs. Items to consider include replacing roofs, installing storm windows and hurricane shutters, improved electrical systems, and ensuring the structures meet the required building codes.	City Manager	Budget	1-2 Years
Medium	Status:	The City has on-going improvements to each facility to ensure that facilities remain operational during storms. items identified in safety audits are addressed by the City Construction Department or outside contacts when appropriate.	City Risk Manager	Budget	Ongoing
Low F, H, T, WS, E	Backup Power for Critical Facilities	All critical facilities should have a proper backup power supply in order to make sure that if power lines are downed, they can remain functional. Therefore, it is essential that critical facilities should be equipped with backup generators.	EM	Budget	Within 5 Years
Low	Status:	All critical facilities that require a generator are outfitted with the fully functioning power	City Risk Manager	Budget	3 Years

		generators. Generators are checked on an on-going basis to ensure that they are operational. Additional sites are being identified for backup power needs for placement of generators as funds become available.			

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	EM	Staff / Public Service Announcements / flyers / newsletters / etc.	12 Months
Medium	Status:	Information from the American Red Cross, FEMA, and SC EMD is generally used for educational purposes. Compiling this information is the responsibility of the Emergency Management Agency and is part of an ongoing process. This information is disseminated to the City and used for educational/outreach activities on an as-requested basis from the public to include the Sumter County Fair, school programs, local church groups, community meeting, etc. Additionally, the City of Sumter/Sumter Police Department use social media (Facebook, Twitter, and Instagram) as a platform to push out the most up to date information during pre-disaster preparation, during active operations, and post-disaster to keep the public informed about necessary information related to the particular event.	County Emergency Manager	Staff / Public Service Announcements / flyers / newsletters / etc.	Ongoing
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	EM	Staff / Public Service Announcements / flyers / newsletters / etc.	12 Months

High	Status:	The City's Safety Officer hosts an annual "Safety Day" along with the Sumter Fire Department. During this day the safety officer engages with the public at Swan Lake. This event is used to hand out the annual hurricane guide and to talk about the dangers of hurricane season. The last Safety Day was on June 27, 2019. Each year the Planning Department Floodplain Coordinator mails notices to the owners' properties within the designated Special Flood Hazard Area (floodplain) and provides information related to the National Flood Insurance Program as well as information flood hazard mitigation. The Floodplain Coordinator also contacts local insurance companies and realtors on an annual basis to provide up to date contact information for floodplain management questions. Any citizen or agency may request a floodplain determination letter from the Floodplain Coordinate free of charge for their personal records.	City Safety Officer/Planning Department Floodplain Coordinator	Staff / Public Service Announcements / flyers / newsletters / etc.	Ongoing

Goal #3: Ensure that the county's infrastructure will not be significantly disrupted by a natural disaster.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High F, H, T, WS, DF, WF, E	Inspection of Lines	Utility lines and structures need to be inspected for their ability to withstand a natural hazard.	Provider	Utility Provider Budget	12 Months
High	Status:	Individual utility providers are responsible for ongoing inspections/repairs of lines. The city manages a network of sanitary sewers, storm sewers, and potable water. The inspection of these lines is ongoing.	Provider	Utility Provider Budget	Ongoing
Low F, H, T, WS, DF, WF, E	Replace or Retrofit Outdated Structures	Any antiquated structures that are deemed vulnerable should be replaced or retrofitted.	EM & Public Works	Budget	3 Years
Low	Status:	As older sanitary sewer and water lines are damaged, they are replaced. The City is reviewing the stormwater management network to determine where changes or upgrades are appropriate to mitigate impacts to private	City Risk Manager & Public Services	Budget	3 Years

		property and the transportation network. As funds become available projects are undertaken.			
Medium F, H, E	Models and Database	The County and municipalities should develop geographically accurate models and databases of their infrastructure systems.	IT Department	Budget / Manpower	3 Years
Medium	Status:	The City Public Services have mapped sanitary sewer and potable water infrastructure in GIS with associated databases. These databases are updated as new development is accepted by the City of Sumter, and when maintenance is undertaken on the infrastructure network.	City Public Services	Budget / Manpower	Ongoing

Goal #4: Reduce the impact of natural disasters on new and existing developments.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium F, H, DF, E, D	Update Plans, Codes, and Ordinances	When comprehensive plans, land use plans, zoning, and subdivision ordinances are up for revision, they should include natural disaster mitigation provisions.	Planning Department	Updates done during revision or update to the appropriate planning documents	2-4 Years
Medium	Status:	The 2030 Comprehensive Land Use Plan, adopted in 2009, includes a Green Infrastructure Element that addresses wetlands development; streams, rivers, lakes, ponds, and drainage corridors, as well as surface and groundwater. The Plan encourages a conservation design approach to development that preserve environmentally sensitive areas such as mapped special flood hazard areas. The recommendations are being brought forward into the 2040 Plan Update as well and continue to be encouraged at the policy level. In September 2018, an updated Flood Damage Prevention Ordinance was adopted by Council that implements development requirements in the Special Flood Hazard Area based upon the South Carolina State Model Ordinance that goes a step above the National Flood Insurance Program (NFIP) minimum standards for development. The current Zoning and Development Standards Ordinance was adopted in 1999, future revisions	Planning Department/ Emergency Management	Updates done during revision or update to the appropriate planning documents	Ongoing/ Annual

		or rewrites to the Ordinance should include creation of development standards that are supported by comprehensive Plan Policies related development in environmentally sensitive areas. To date funding has not been identified for a complete rewrite or comprehensive update to the Zoning & Development Standards Ordinance.			
Low F, H, DF, E, D	Property Protection Measures	Incorporate retrofitting incentives by establishing a program of technical assistance and financial incentives to encourage property protection measures on private commercial property.	City Council	Budget	Ongoing
Low	Status:	Floodplain management/planning staff, in conjunction with building department personnel, work with developers/builders to identify and mitigate potential impacts from natural hazards such as flooding. To date no financial incentives or development incentives have been created to assist in retrofitting buildings or implementing property protection measures on private commercial property.	City Council/ Planning Department	Budget / Investigate grant opportunity	1 Year
Low F, DF	Flood Control Projects	Implement flood control projects for areas such as farm drainage, bridge improvements, and repairing dams that are prone to failure.	Public Works	Manpower / Budget	Ongoing
Low	Status:	The community has been in an active recovery effort since the October 2015 Flood. Several dams in the community (city and county) were impacted resulting in either partial or total failure of the structures. The State of South Carolina DHIC Safety Office has worked closely with identified public and private dam owners to evaluate current dam safety and to reclassify dams when necessary. No dam repairs have taken place without appropriate review and approval by the state and accompanying floodplain development permits where necessary. The publicly owned Second Mill Pond Dam has recently been repaired and reclassified as a high-hazard dam. This repair project installed a new emergency spillway and remotely controlled flood gates for management of flood waters. Swan Lake Dam was repaired shortly after the 2015 flood. As of the writing of	Public Services	Manpower / Budget	Ongoing

		this report, the City of Sumter is working through the regulatory process of repairing the Booths Farm Dam. Other dams damaged in the 2015 Flood are privately owned. Boyles's Pond, a privately-owned dam, is currently working with civil engineers to develop a repair plan for permitting.			

Goal # 5: Reduce the impact of wildfires on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High WF	Evaluate Areas Susceptible to Wildfires	Utilize GIS analysis to identify structures (homes and other buildings) that are in areas susceptible to wildfire.	EM & Planning Department	Staff	Ongoing
High	Status:	The City is not as prone to the threat of wildfires as the County is, however; the Sumter Fire Department has recently purchased several new "brush trucks' to aid in a wildfire fighting. All City and County Fire Stations are equipped with brush trucks. These trucks are 4-wheel drive with off-road capability. Any time a brush truck is deployed, a fire truck accompanies the brush truck to provide extra water support. Brush trucks are most active from spring into the fall and during periods of drought. To date a formal GIS analysis has not been undertaken, however: a comprehensive building footprint layer now exists in the Sumter County GIS which can be used in conjunction with other available data sources related to tree coverage, farmland, and other environmental conditions (i.e. drought, etc.), in addition to call response logs from the Fire Department in order to complete an evaluation. completion of this project is currently limited by availability of personnel to undertake the analysis.	City Risk Manager & Planning Department	Budget / Manpower	Ongoing

Goal # 6: Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High H, T, WS, TS	Vegetation Management	Inspect and manage vegetation that could damage critical facilities if felled by wind.	EM & Public Works	Budget / Manpower	12 Months
High	Status:	This is part of an ongoing process. The City is constantly engaged in tree removal operations along road right of ways and adjacent to community facilities.	City Risk Manager & Public Services	Budget / Manpower	Ongoing

Goal # 7: Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High F	Drainage Ditch Maintenance	Implement a formal and regular drainage ditch and canal system maintenance program for storm water management.	Public Works	Manpower	Ongoing
High	Status:	Although there is no written program, the City contracts out annual ditch maintenance. The yearly work covers 9 to 10 miles of maintenance on drainage ditches. These ditches are mapped and incorporated into the City of Sumter GIS. This process should be formalized with a written program. This is currently limited by the availability of staff to undertake programmatic documentation.	Public Services	Manpower	Ongoing
High F	Flood Threat Recognition Program	Determine the possibility of a flood threat recognition system that utilizes rain and stream gauges, along with a central gauge, to monitor and predict the occurrences of floods and flash floods.	Public Works	Budget	Ongoing
High	Status:	No progress has been made on this action item at the local level.	Public Services/ Planning Department	Staff / Budget	2 years
High F	Update Flood Maps	Encourage FEMA to update flood maps.	Public Works	Staff	Ongoing
High	Status:	FEMA has transitioned floodplain mapping from a county-wide basis to using major watersheds for map updates. The City and County adopted new FIRM Panels for the Wateree Watershed on September 28, 2018. The next major watershed within both jurisdictions to be updated will be the Black Watershed. The Black Watershed	Planning	Staff	Complete

		encompasses a bulk of the population and development within the City and County. The Discovery Process began in the spring of 2017. Preliminary maps for the Black Watershed are anticipated within the next 12 months. Floodplain management staff will coordinate with local surveyors and engineers to thoroughly review the maps for anomalies and transmit comments/requests for corrections within the allotted timeframe.			
High F	Back Flow Prevention	Install back-flow prevention valves in sewer pipes.	Public Works	Budget	Ongoing
High	Status:	To date, the City has not installed back-flow prevention valves in sewer pipes.	Public Works	Budget / Manpower	Ongoing
High F	Storm Water Management	Implement the mandatory storm water utility/tax.	Public Works	Local Municipal Government	Ongoing
Low	Status:	The City obtained coverage under the State of South Carolina National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from regulated Small MS4s on September 24, 2007. This permit issued by SCDHEC requires the City, which has been designated a Small Municipal Separate Storm Sewer System (MS4) based on its population, to develop, implement, and enforce a stormwater management program designed to reduce the amount of pollutants discharging from the MS4. This is in order to protect and improve water quality in our rivers and streams. The permit requires this goal be achieved through the implementation of six Minimum Control Measures: 1) Public Education and Outreach; (2) Public Involvement and Participation; (3) Illicit Discharge Detection and Elimination; (4) Construction Site Storm Water Runoff Control; (5) post-Construction Stormwater Management in New Development and Redevelopment; and (6) Pollution Prevention/Good Housekeeping for Municipal Operations. In July 2011, the city passed the Stormwater Utility Ordinance to assist in funding the city's MS4 program. The stormwater user fees are	Public Works	Local Municipal Government / Consultant	Ongoing

		based on actual impervious cover on each parcel of land within the city limits. The amount of impervious cover on each parcel will be the basis for determining its contribution to the city's stormwater system and associated fees.			
Goal # 7: New Actions					
Med F	Storm Water Management	Pilot mitigation projects for storm water ponds and wetlands at public parks and a public golf course to determine better ways to manage and protect natural storm water treatment and water quality management.	Planning & Public Works	Budget	Ongoing
Med	Status	No pilot mitigation projects have been undertaken in the last calendar year. In 2013 an EPA 319 Grant was used to develop a plan for the Turkey Creek corridor in the city and county to address water quality issues using best management practices. This plan will be used to pursue future funding when it becomes available. In addition, within the last year the City has acquired flood damaged properties within the creek's riparian using HMGP funds within the Turkey Creek corridor to return to open space within the creek's riparian zone.	Planning & Public Works	Budget	Ongoing
High F	Data limitations, amended strategies to address issues	Fold information gleaned through the Comprehensive Plan update, the Hazard Mitigation Plan update, and the County-wide Watershed Study into a comprehensive floodplain management plan.	Planning	Staff	2 years
High	Status	To date a Floodplain Management Plan has not been developed.	Planning	Staff	
High F	Data limitations	Identify through GIS overlays areas coupled with building permit files where development has impacted floodplains and critical areas and address future impacts through the comprehensive floodplain management plan.	Planning	Manpower / Budget	2 years
High	Status	Data now exists from the October 2015 Flood that will assist in identifying areas outside of the mapped Special Flood Hazard Area for inclusion in a future Floodplain Management Plan	Planning	Manpower/Budget	

Med F	Data limitations	Track local flooding events through citizen participation and gathering information through coordination with Public Safety department and Public Works departments, coupled with data from federal sources (USGS, NOAA, etc.)	Planning	Manpower / Budget	2 years
Med	Status	No formalized process has been established for tracking localized flooding events. Citizens may report localized flooding to City Public Services, the Stormwater Utility, and the nonemergency Police line. Additionally, the E-911 system has implemented a code in the tracking system that identifies whether or not the call was prompted by a weather-related event. However, no single clearinghouse has been established to formally track these events.	Planning	Manpower/Budget	

Goal # 8: Ensure the protection and function of Communications.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High H, T, WS, TS	Inspection of Lines	An inspection of communication lines in order to determine what needs to be replaced, and to ensure that they are clear from tree limbs and other obstructions.	Provider	Utility Provider Budget	Ongoing
High	Status:	This is part of an ongoing process undertaken by individual providers.	Provider	Utility Provider Budget	Ongoing
Low D, E, F, H, T, DF, TS, WF, WS	Creation of Mobile Dispatch Unit	Create a mobile dispatch unit to ensure that communications are not lost as a result of a natural disaster.	City EM Director	Budget	Ongoing
High	Status:	The Sumter Police Department has a mobile command trailer, however; there is no mobile E-911 Dispatch Unit. The existing E-911 system is a modular lap-top based system that can be relocated with dispatchers to anywhere so long as there is a connection to communication services.	City Risk Manager	Budget / Investigate grant opportunity	3 Years
Low D, E, F, H, T, DF, TS, WF, WS	Retrofit and Relocate Communication System	Utility and communication systems supporting emergency services operations will be retrofitted or relocated to withstand the impact of a natural disaster.	Provider	Budget	Ongoing
Low	Status:	The new Sumter Police Department was designed specifically to withstand hurricane force winds to allow E-911 operations to	Provider	Budget	Ongoing/3 Years

		continue to work during a natural disaster. There is also an alternate location for E-911 operators to relocate to should the building be compromised.			

Goal #9: Facilitate the preparedness of Emergency Response.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	EM	Staff	Ongoing
High	Status:	The Emergency Operations Plan is updated yearly, and each respective department continues to review policies and standard operating procedures from lessons learned from past disasters. In addition to the Emergency Operations Plan, the City has implemented separate Inclement Weather Plans for the Public Services Complex and the newly constructed Utility Billing facility.	Emergency Manager	Staff	Annual
Medium D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Equipment	Purchase any necessary equipment that is critical for the response to natural disasters and to ensure that personnel have adequate and up-to date training and the use of specific equipment.	EM	Budget	Ongoing
Medium	Status:	As part of OSHA mandated training, the City conducts a multitude of safety trainings. This includes training for operations of equipment, proper Personal Protective Equipment wear and usage, and emergency action plans. The City also continually evaluates existing equipment necessary for daily operations/disaster preparedness. When equipment needs are identified they are addressed in a timely manner.	Emergency Manager/ Appropriate Department	Budget	Ongoing

Town of Mayesville Action Plan

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Manager	Staff / Public Service Announcements / flyers / newsletters / etc.	12 Months
High	Status:	Information from the American Red Cross, FEMA, and SC EMD is generally used for educational purposes. Compiling this information is the responsibility of the Emergency Management Agency and is part of an ongoing process.	Emergency Manager	Staff	Ongoing
Medium D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Manager	Staff / Public Service Announcements / flyers / newsletters / etc.	12 Months
Medium	Status:	This is an ongoing process that is shared between Emergency Management, the Fire Department, and law enforcement. Personnel regularly speak to schools, civic groups, senior groups, etc. In addition, Emergency Management operates a booth at the Sumter County Fair annually.	Emergency Manager	Staff	Ongoing

Goal #10: Facilitate the preparedness of Emergency Response.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Manager	Staff	Ongoing
High	Status:	The Sumter County Emergency Operation Plan is updated annually.	Emergency Manager	Staff	Annual

Town of Pinewood Action Plan

Goal #2: Increase public education and awareness of natural hazards.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness information	Prepare background information, articles and other explanations of hazard mitigation topics and provide them to County, municipal, and private offices for use in presentations, newsletter articles, websites, brochures, and other outreach projects.	Emergency Manager	Staff / Public Service Announcements / flyers / newsletters / etc.	12 Months
High	Status:	Information from the American Red Cross, FEMA, and SC EMD is generally used for educational purposes. Compiling this information is the responsibility of the Emergency Management Agency and is part of an ongoing process.	Emergency Manager	Staff	Ongoing
Medium D, E, F, H, T, DF, TS, WF, WS	Public Education and Awareness	Prepare and disseminate outreach projects based on any prepared material concerning hazard mitigation. These projects should be publicized by the utilization of newsletters, news releases, directed mailings, handouts, websites, radio, and television.	Emergency Manager	Staff / Public Service Announcements / flyers / newsletters / etc.	12 Months
Medium	Status:	This is an ongoing process that is shared between Emergency Management, the Fire Department, and law enforcement. Personnel regularly speak to schools, civic groups, senior groups, etc. In addition, Emergency Management operates a booth at the Sumter County Fair annually.	Emergency Manager	Staff	Ongoing

Goal #10: Facilitate the preparedness of Emergency Response.					
Priority/Identified Hazard(s)	**Name**	**Action /Progress**	**Responsible Agency**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	Emergency Response Preparation Evaluation	Conduct a review of emergency response plans and programs to identify where additional activities are needed to respond to natural hazards.	Emergency Manager	Staff	Ongoing
High	Status:	The Sumter County Emergency Operation Plan is updated annually.	Emergency Manager	Staff	Annual

Regional Planning Action Plan

Goal #1: Ensure the protection of critical facilities.				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	1	Assist the smaller towns in the region in formulizing the necessary Intergovernmental Agreements and Memorandums of Understanding to allow the county to perform hazard mitigation planning, response, and recovery activities within their town limits.	Local Funds	6 Months
High	Status:	Towns in the region have Mutual Aid agreements with their respective counties.	Local Funds	Complete

Goal #2 Increase public education and awareness of natural hazards.				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	2	In conjunction with the Santee-Lynches Wateree Regional Transit Authority develop a master plan for emergency evacuation of special needs population.	SCDOT Planning Funds	2005-2007
High	Status:	The SWRTA works annually with ARC and SCEMD to evaluate this plan.	SWRTA Administrative Funds	Complete

Goal #3 Ensure infrastructure will not be significantly disrupted by a natural disaster.				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	3	Continue to provide staff support to the Planning & Steering Committee as they refine and update the Santee-Lynches Hazard Mitigation Plan.	County Government Funding	Ongoing
High	Status:	This is done on an as-needed basis.	County Government Funding	Ongoing

Goal #4 Reduce the impact of natural disasters on new and existing development.				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High D, E, F, H, T, DF, TS, WF, WS	4	Apply for FEMA & SCEMD funds to update the Santee-Lynches Hazard Mitigation Plan.	FEMA Grant Funds	2005 - 2008
High	Status:	When the plan is due to be updated grant funding will once again be applied for.	FEMA Grant Funds	2017 - 2018

Goal #5 Ensure that emergency shelters have adequate capacity and resources.				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	5	Continue to work with local governments in the region as they update the HMP; conduct the public meetings and adopt resolutions approving the portion of the Hazard Mitigation Plan.	County Government Funds	Ongoing
Medium	Status:	Once approved by FEMA the SLRCOG will take the updated plan to the individual jurisdictions in order to have them adopted. Additional work should be done throughout the next 5 years to keep the plan up to date.	County Government Funds	Ongoing

Goal #6 Reduce the impact of wildfires on homes, building, critical facilities, and infrastructure.				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	6	Provide ongoing GIS support to local governments in mapping, land use, land cover, and hazard events, and updating hazards event maps.	Municipal / County Funds	Ongoing
Medium	Status:	Support is provided on an as-needed basis.	Municipal / County Funds	Ongoing

Goal #7 Reduce the impact of severe wind on homes, buildings, critical facilities, and infrastructure.				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	7	Continue to provide census and other related data on special needs population.	Local Funds	Ongoing
Medium	Status:	This information is continually compiled and analyzed by SLRCOG staff	Local Funds	Ongoing

Goal #8 Reduce the impact of floods on homes, buildings, critical facilities, and infrastructure.				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
Medium D, E, F, H, T, DF, TS, WF, WS	8	Provide technical assistance to local governments as they update and revise comprehensive plans, land use plans, zoning ordinance, and subdivision regulations to include natural disaster mitigation measures.	Local and County and Municipal Fund Allocations	Ongoing
Medium	Status:	Additional assistance should be provided to keep the plan updated throughout the next 5 years.	Local and County and Municipal Fund Allocations	Ongoing
Regional Planning Goal: Ensure that each jurisdiction receives FEMA approval for an Updated Hazard Mitigation Plan				
Priority	**Goal / Status**	**Action/Progress**	**Funding Mechanisms and Other Resources**	**Timeframe/Completion Status**
High		Coordinate with FEMA to ensure that each jurisdiction's Updated Plan is approved.	County Government Funds	Immediate upon FEMA's approval of plan

[redacted]

This section briefly describes how this inter-jurisdiction Hazard Mitigation Plan will be maintained, monitored, evaluated and updated to reflect new or revised actions to help minimize damage to property or loss of life during a natural hazard.

This section complies with FEMA provisions as outlined in FEMA's Local Mitigation Planning Handbook, March 2013.

- FEMA 44 CFR §201.6(c)(4)(i): The plan maintenance process shall include a section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.
- FEMA 44 CFR §201.6(c)(4)(iii): The plan maintenance process shall include a discussion on how the community will continue public participation in the plan maintenance process.

Monitoring of Inter-jurisdiction Mitigation Actions

The SLRCOG will serve as the lead agency for coordinating actions to monitor, evaluate and update this plan. The SLRCOG staff will work with the Planning and Steering Committees to accomplish the following tasks:

- Collect reports from Steering Committee members.
- Maintain and update the Action Plans.
- Organize two (2) meetings a year during the Months of May and October. The meetings will discuss relevant hazard mitigation efforts, updates, and discussion of how mitigation efforts are being implemented within other planning documents and / or ordinances, plus discussion on grant opportunities. The meetings can consist of any one of the following:
  - ❖ On site with availability of telephone call in.
  - ❖ Webinar
  - ❖ Conference Call
  - ❖ E-mail correspondence
- Conduct ongoing communication and coordination with the Planning Committee.
- Coordinate, compile, and distribute pertinent hazard mitigation news / updates.
- Convene a meeting of the Planning and Steering Committees following a major natural disaster.

Inter-jurisdiction Mitigation Action Next Steps

The SLRCOG along with the Planning and Steering Committees will evaluate the feasibility of establishing inter-jurisdictional actions that will address the following additional categories of potential risk:

1. **Climate Change**: The impact climate change may cause on the current characteristics of identified hazards listed in this plan.
2. **Technological Hazards and Human-Caused Threats**:
   It may be necessary to identify specific corridors within the jurisdiction that may be prone to accidents or failure of systems and structures that can cause possible catastrophic damage or loss of life due to such actions like a hazardous materials spill / leak. Furthermore, with a major U.S. Military installation within the jurisdiction it may be prudent to evaluate human-caused incidents of intentional actions of an adversary to inhibit or cause a major shutdown of military operations which may indirectly impact the theater of operations, as well as national security.

Evaluation of the Inter-jurisdiction – Santee-Lynches Hazard Mitigation Plan

The SLRCOG staff along with the Planning and Steering Committees will annually, at the October meeting, determine how effective the action plans are being accomplished and what other local municipal ordinance, planning document and / or policy were updated with mitigation actions from this document. Moreover, this meeting will also be the avenue to evaluate which actions must be modified, closed out, or updated.

The following baseline criteria will help ensure the inter-jurisdictional evaluation process stays on course:

- What inter-jurisdictional ordinances, planning documents and or policy procedures have complimented and supported the mitigation strategies identified within the Action Plans?
- What inter-jurisdictional municipal / local government / military installation changes in policy procedures may indirectly or directly impact the accomplishment of the goals, objectives and mitigation actions identified within this document?
- What mitigation actions have proven effective and which mitigation actions need to be updated?
- What mitigation actions are not able to be accomplished due to the lack of funding opportunities?
- What mitigation action and or priority may be impacted by a modified land use plan and or planned industrial / commercial / residential development?
- Are the goals, objectives, and mitigation actions identified within this document consistent with any changes to state or federal regulations or policies?
- Are there any new evidence or data that may influence the Risk Assessment of the hazards listed within this plan?

Continued Public Involvement

Annually, a notice will be placed in either the local paper and / or on the County Government Meeting Agenda requesting the public to evaluate the goals, objectives, and actions plans.

Furthermore, the general public will have an open opportunity to provide comments on this document at any time by submitting written comments to the SLRCOG by mail or FAX.

- Mail: 2525 Corporate Way Sumter, South Carolina 29154
- FAX: 803-773-9903.

Update of the Inter-jurisdiction – Santee-Lynches Hazard Mitigation Plan

Based on the actions identified above, this document will be updated on a recurring basis with updates and comments on this plan being placed in Appendix K. This will ensure the process of updating this plan in accordance with FEMA requirements of a five years planning cycle will be accomplished in a timely manner. Table 6-1 provides a synopsis of how this plan will be monitored, evaluated and updated for the inter-jurisdictional region.

Table 6 - 1 Plan Update Schedule

Time Frame	Participants	Outcomes
May 2020, 2021, 2022, 2023,	Planning & Steering Committees	Monitor / Evaluate / Update Action Plan
Annually	General Public	Public Comments
October 2020, 2021, 2022, 2023	Planning & Steering Committees	Goals, objectives, action plans effectiveness and / or reevaluation of goals, objectives and action plans. Evaluate or update hazard risks.
January 2022	Planning Committee	Proceed to obtain grant funding.
January 2024	Planning & Steering Committee	Begin the process of preparing the Inter-jurisdiction Hazard Mitigation Plan for the 5-year update cycle IAW FEMA requirements
October 2024	Planning & Steering Committee a	Submit Updated 2025 – 2030 plan out for Public Comment
December 2024	Planning & Steering Committees	Submit Updated 2020 – 2025 plan to FEMA for final approval
June 2025	Inter-jurisdictional municipalities and local governments	Adopt the FEMA-approved Updated 2025 – 2030 Santee-Lynches Hazard Mitigation Plan

Appendix A - References

References and Resources

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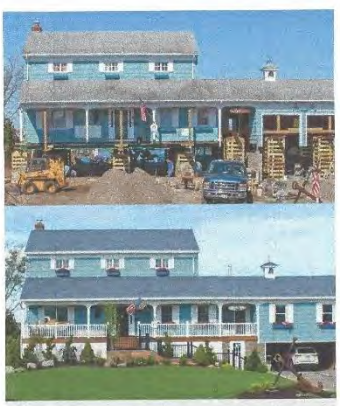
41. United States Geological Survey: http://www.usgs.gov/
42. U.S. Geological Survey – South Carolina Drought Watch: http://sc.water.usgs.gov/drought/

Appendix B – FEMA Hazard Mitigation Grant Programs

Federal Funding Sources for Mitigation

In order to obtain the most up-to-date information on FEMA Hazard Mitigation Assistance Program it is best to consult the FEMA website: http://www.fema.gov/hazard-mitigation-grant-program

Below is a FEMA Brochure that is found on the above website. The brochure was pulled down in 2019.



Who is eligible to apply?

- States, territories, federally-recognized tribes, and local governments
- Certain private nonprofit organizations and institutions

Additional Grant Programs

FEMA has two additional Hazard Mitigation Assistance (HMA) grant programs which provide funding for similar activities on an annual basis, regardless of disaster activity:

- Pre-Disaster Mitigation
- Flood Mitigation Assistance

Projects may also be eligible for assistance under these programs.

Resources for More Information

For more information about HMGP, visit https://www.fema.gov/hazard-mitigation-grant-program

OR SCAN HERE

For specific criteria for each HMA program, visit http://www.fema.gov/hazard-mitigation-assistance

To find your State Hazard Mitigation Officer, visit http://www.fema.gov/state-hazard-mitigation-officers

To plan, prepare, and mitigate a disaster, visit http://www.fema.gov/plan-prepare-mitigate

Learn more about flood risks and flood insurance at http://www.floodsmart.gov/floodsmart

To register for disaster assistance call 1-800-621-FEMA (3362) or visit http://www.disasterassistance.gov

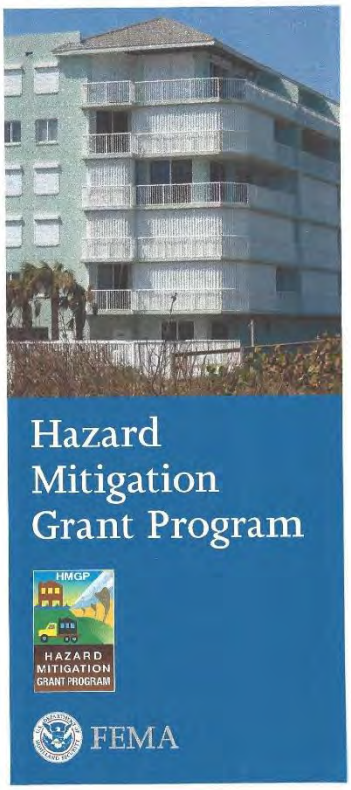
HMA Helpline: 1-866-222-3580

FEMA eGrants Helpdesk: 1-855-228-3362

Benefit-Cost Analysis Helpline: BCHelpline@fema.dhs.gov

For HMA independent study and classroom training courses, visit http://training.fema.gov

For information about the HMA programs, contact your community officials.



Hazard Mitigation Grant Program

HMGP

HAZARD MITIGATION GRANT PROGRAM

FEMA

Hazard Mitigation Grant Program (HMGP)

What is the purpose of the HMGP?

The HMGP assists States, territories, federally-recognized tribes, and local communities by:

- Significantly reducing or permanently eliminating future risk to lives and property from natural hazards
- Providing funds to implement projects in accordance with priorities identified in State, tribal, or local hazard mitigation plans
- Enabling mitigation measures to be implemented during the recovery following a major disaster declaration

How is HMGP funding determined following a major disaster?

Federal funding under the HMGP is available if requested by the Governor. HMGP funding is allocated using a "sliding scale" formula based on the percentage of funds spent on Public and Individual Assistance for each Presidentially declared disaster.

Federal law requires States, territories, federally-recognized tribes and local jurisdictions to have a mitigation plan prior to receipt of HMGP funds. The plan identifies hazards, assesses community needs, and describes a community-wide strategy for reducing risks associated with natural disasters.

For States/territories/federally-recognized tribes with a FEMA-approved Standard State or Tribal Mitigation Plan, the formula provides for up to 15% of the first $2 billion of estimated aggregate amounts of disaster assistance, up to 10% for amounts between $2 billion and $10 billion, and 7.5% for amounts between $10 billion and $35.333 billion.

For States/territories with a FEMA-approved Enhanced Mitigation Plan, up to 20% of the total of Public and Individual Assistance funds authorized for the disaster (up to $35.333 billion of such assistance) are available.

What types of projects can be funded?

The HMGP can be used to fund projects to protect either public or private property, as long as the project fits within State/territorial/federally-recognized tribal, and local government mitigation strategies to address areas of risk and complies with HMGP guidelines.

Eligible Activities
Mitigation Projects
Property Acquisition and Structure Demolition
Property Acquisition and Structure Relocation
Structure Elevation
Mitigation Reconstruction
Dry Floodproofing of Historic Residential Structures
Dry Floodproofing of Non-Residential Structures
Generators
Localized Flood Risk Reduction Projects
Non-Localized Flood Risk Reduction Projects
Structural Retrofitting of Existing Buildings
Non-Structural Retrofitting of Existing Buildings and Facilities
Safe Room Construction
Wind Retrofit for One- and Two-Family Residences
Infrastructure Retrofit
Soil Stabilization
Wildfire Mitigation
Post-Disaster Code Enforcement
Advance Assistance
5 Percent Initiative Projects*
Miscellaneous/Other**
Hazard Mitigation Planning
Planning-Related Activities
Management Costs

* FEMA allows increasing the 5% initiative amount up to 10% for a Presidential major disaster declaration under HMGP. The additional 5% initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted or an improved Building Code Effectiveness Grading Schedule is required.

** Miscellaneous/Other indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.

How much will FEMA pay for a project under the HMGP?

Typically projects are funded by a combination of Federal and non-Federal funds. HMGP funds may be used to pay up to 75% of the eligible costs. The non-Federal match does not need to be cash; in-kind services or materials may be used.

What are the roles of local communities, federally-recognized tribes, territories, States, and FEMA?

During the recovery phase of a disaster, local jurisdictions select projects that could reduce property damage from future disasters, and submit applications to the State, territory, or federally-recognized tribe. Certain nonprofit organizations may also apply.

The States, territories, and federally-recognized tribes administer the HMGP by establishing their mitigation priorities, facilitating the development of applications, and submitting applications to FEMA based on funding criteria and available funding. They also manage the projects, monitor progress, and evaluate the effectiveness of projects implemented.

FEMA conducts a final eligibility review to ensure compliance with Federal regulations. HMGP projects must comply with Federal environmental laws and regulations, be cost-effective, and be technically feasible.

What are the roles of property and business owners?

Individuals, property and business owners may not apply directly to the State, territory, or FEMA, but eligible local governments or private nonprofit organizations may apply on their behalf.

FEMA encourages property and business owners interested in implementing mitigation activities to contact their local community planning, emergency management, or hazard mitigation office for more information.

Appendix C – Committees

Santee-Lynches Regional Hazard Mitigation Planning Committee			
Full Name	**Agency**	**Job Title**	**E-mail / Contact Information**
Erik D. Hayes	Sumter County Emergency Management	Director	ehayes@sumtercountysc.org
Mike Bedenbaugh	Lee County	Emergency Manager	leees5@sc.rr.com
Eugene Faulkenberry	Kershaw County Emergency Management Division (EMD)	Director	gene.faulkenberry@kershaw.sc.gov
Christy Denkins	Kershaw County EMD	EMD Assistant	christy.denkins@kershaw.sc.gov
Anthony Mack	Clarendon County	Clarendon County Emergency Manager	emergencyservices@clarendoncountygov.org
Helen Roodman	Sumter – City – County Planning Department	Senior Planner	hroodman@sumter-sc.com
Bethany Morton	SC – Emergency Management Division	Regional Emergency Manager	bmorton@emd.sc.gov
Jim Grant	SC – Emergency Management Division	Regional Emergency Manager	jgrant@emd.sc.gov
Lindsey McCoy	SC – Emergency Management Division	Regional Emergency Coordinator	
Dennis Cyphers	SLRCOG	Chief, Government Services	dcyphers@slcog.org
Jake Whitmire	SLRCOG	Regional Planner	jwhitmire@slcog.org
Ex-Officio Planning Committee Members			
	South Carolina Department of Health and Environmental Control – Bureau of Water / DAMS		Bill Chaplin - 803 898-3532 John Poole - 803-898-4212
	South Carolina Forestry Commission		803-896-8800
	South Carolina Department of Natural Resources – Flood Mitigation Program		803-734-4307
	Hazard and Vulnerability Research Institute		Susan Cutter, Director: 803-777-1590 Dr. Christopher T. Emrich, Associate Director (803) 777-1591

Clarendon County Hazard Mitigation Steering Committee			
Full Name	**Company**	**Job Title**	**E-mail**
Dwight Stewart	Clarendon County Council	Chairman	dwightstewart@dstewart.com
Mac Bagnal Jr	Town of Summerton	Mayor	mbagnal@sca.org
Bucky Brailsford	Town of Summerton	Director of Public Works	publicworksdirector@townofsummerton.com
Wade McLeod	Town of Paxville	Mayor	lwademcleod@yahoo.com
Dwayne Howell	Town of Turbeville	Mayor	tbvlmayor@ftc-i.net
Ray Morris	Town of Turbeville	Administrator	Townhall2@ftc-i.net
Ellis Evans	Town of Turbeville	Public Works Director	turbevilledw@ftc-i.net
Julia Nelson	City of Manning	Mayor	juliadeltalady@yahoo.com
Scott Tanner	City of Manning	Administrator	administrator@cityofmanning.org
Rubin Hardy	City of Manning	Director of Public Works	rhardy50@yahoo.com
Billy Timmons	Clarendon County	Director, Water & Sewer Dept.	btimmons@clarendoncountygov.org
Vickie Williams	Clarendon County	Grants Coordinator	grants@clarendoncountygov.org
David Epperson	Clarendon County	County Administrator	depperson@clarendoncountygov.org
Anthony Mack	Clarendon County	Emergency Manager	emergencyservices@clarendoncountygov.org
Maria Rose	Clarendon County Planning Commission	Planning Director	clarendonplanning@clarendoncountygov.org

Kershaw County Mitigation Steering Committee			
Full Name	**Company**	**Job Title**	**E-mail**
Joey Adams-Raczkowski	Kershaw County	Planning Manager	Joseph.raczkowski@kershaw.sc.gov
Charles McCoy	Town of Bethune	Mayor	
Christy Denkins	Kershaw County	EM Coordinator	christy.denkins@kershaw.sc.gov
Eugene Faulkenberry	Kershaw County Emergency Preparedness Agency	Director	gene.faulkenberry@kershaw.sc.gov
Alfred Mae Drakeford	City of Camden	Mayor	
Nick Anderson	Kershaw County	Public Works Director	nick.anderson@kershaw.sc.gov
Melissa Emmons	Town of Elgin	Mayor	elgintownof@bellsouth.net
Michael Conley	Kershaw County	Planning Director	Michael.conley@kershaw.sc.gov
Derrick Mims	Kershaw County DHEC	Director	agencydirector@dhec.sc.gov
Joe Floyd	Camden Police Department	Chief	j.floyd@camden.sc.ord
Bethany Morton	SCEMD	Regional Emergency Manager	bmorton@emd.sc.gov
Shawn Putman	City of Camden	Planning Director	putnam@camdensc.org
Keith Ray	Kershaw County Fire Department	Chief	Keith.ray@kershaw.sc.gov

Lee County Hazard Mitigation Steering Committee			
Full Name	**Company**	**Job Title**	**E-Mail**
Alan Watkins	Lee County	Administrator	awatkins@leecountysc.org
Tim DuBose	EMS	Director	tdubose@leecountyems.org
Arlene Samuel	Lee County	Planning Director	asamuel@leecountysc.org
Jason Prater	Lee County	Public Works Director	leecopubwks@ftc-i.net
Mike Bedenbaugh	Lee County	Fire Chief and EMD Director	mbendenbaugh@leecountysc.org
Jason Prater	Lee County	Public Works Director	leecopubwks@ftc-i.net
Grady Brown	City of Bishopville	Mayor	
Hanna Parler	City of Bishopville	Zoning Director	hparler@cityofbishopvillesc.com
Freddy DuBose	City of Bishopville	Water and Sewer Director	fdubosebish@yahoo.com
Andre Laws	Town of Lynchburg	Mayor	lynchburg@ftc-i.net
Marian McClam	Town of Lynchburg	Council Members	lynchburg@ftc-i.net
Dwayne Huggins	Lee County	Public Safety	dhuggins@leecountysc.org

Sumter County Mitigation Steering Committee			
Full Name	**Agency**	**Job Title**	**E-mail**
Erik D. Hayes	Sumter County Emergency Management	Director	ehayes@sumtercountysc.org
Donna I Dew	Sumter County Emergency Management Agency		ddew@sumtercountysc.org
Helen Roodman	City/County Planning	Administrator	hroodman@sumtercountysc.gov
George McGregor	Sumter City/County Planning Commission	Planning Director	gmcgregor@sumter-sc.gov
Jereleen Miller	Town of Mayesville	Mayor	jereleen@gmail.com
Eddie Newman	Sumter County	Public Works	enewman@sumtercountysc.org
Gary Mixon	Sumter County	Administrator	gmixon@sumtercountysc.org
Jack Spann	Town of Pinewood	Mayor	jackque1f84@live.com
Preston McClun	Sumter Planning Commission		pmcclun@sumtersc.gov
Alfred Conyers	Sumter County Stormwater	County Engineer	aconyers@sumtercountysc.gov

SCDOT County Resident Maintenance Engineers

Clarendon County Resident Maintenance Engineer
Post Office Box 26
Manning, South Carolina 29102
Tel: 803.435.4431
Fax: 803.435.0581

Kershaw County Resident Maintenance Engineer
Post Office Box 509
Camden, South Carolina 29020
Tel: 803.432.4358
Fax: 803.424.0028

Lee County Resident Maintenance Engineer
Post Office Box 319
Bishopville, South Carolina 29010
Tel: 803.484.6236
Fax: 803.484.4263

Sumter County Resident Maintenance Engineer
Post Office Box 417
Sumter, South Carolina 29151
Tel: 803.778.5466
Fax: 803.778.0923

SCDOT District Engineers

District 1
1400 Shop Road
Columbia, South Carolina 29201
Tel: 803.737.6660

District 17
US Route 178
East Bowman Road
Orangeburg, South Carolina 29115
Tel: 803.531.6850

Appendix D - Definitions

DEFINITION OF KEY TERMS AND CONCEPTS

A-Zone	The special flood hazard area shown on the flood insurance rate map (FIRM) for a community. The Santee-Lynches Region has two types of A zones on the Q3 FIRMs: **A Zone unnumbered:** No base flood elevation (BFE) data is provided on the FIRM for this zone. **AE Zone:** Base flood elevations (BFE) are provided on the FIRM for these zones.
Asset	Any manmade or natural feature that has value, including, but not limited to people; buildings; infrastructure like bridges, roads, and sewer and water systems; lifelines like electricity and communication resources; or environmental, cultural, or recreational features like parks, dunes, wetlands, or landmarks.
Base flood	This is also known as the 100-year flood. This is the flood
BFE	Base flood elevation. This is the elevation of the crest of the 100-year flood (aka base flood).
Bond Fund	Revenue obtained through a government issuance of a bond security, generally designated for a specific purpose such as capital improvements.
Community Rating System (CRS)	CRS is a program that provides incentives for National Flood Insurance Program communities to complete activities that reduce flood hazard risk. When the community completes specified activities, the insurance premiums of the policyholders in those communities are reduced.
Critical Facility	Structures meeting one or more of the following criteria: Structures or facilities that produce, store, or use highly flammable, explosive, volatile, toxic and/or water reactive materials. Hospitals, nursing homes, and housing which is likely to contain occupants who may not be sufficiently mobile to avoid injury or death as a result of a flood or other hazard event. Fire stations, police stations, storage facilities for vehicles/equipment needed after a hazard event, and emergency operation centers.

	Public and private utility facilities which are vital to maintaining or restoring normal services to damaged areas after a hazard event.
Critical facilities / infrastructure	Perform emergency services or functions necessary for community survivability or continuation of government services and must remain operational or return to operation within 72 hours following a disaster.
Disaster Mitigation Act of 2000 (DMA 2000)	DMA 2000 (Public Law 106-390) is the latest legislation to improve the planning process. It was signed into law on October 10, 2000. This new legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur.
Flood Depth	Height of the flood water surface above the ground.
Flood Hazard Area	The area shown to be inundated by a flood of a given magnitude on a map.
Flood Insurance Rate Map (FIRM)	Map of a community, prepared by FEMA, shows both the special flood hazard areas and the risk premium zones applicable to the community under the National Flood Insurance Program.
Flood Zone	A geographical area shown on a FIRM that reflects the severity or type of flooding in the area.
Floodplain	Any land area, including watercourse, susceptible to partial or complete inundation by water from any source.
Grant Fund	Revenues obtained through intergovernmental aid or through philanthropic associates targeted for a specific project or purpose, generally requiring the provision of some matching funds by the recipient.
Hazard	A source of potential danger or adverse condition.
Hazard Event	A specific occurrence of a particular type of hazard.
Hazard Identification	The process of identifying hazards that threaten an area.
Hazard Mitigation	Sustained actions taken to reduce or eliminate long-term risk from hazards and their effects.

Magnitude	A measure of the strength of a hazard event. The magnitude (also referred to as severity) of a given hazard event is usually determined using technical measures specific to the hazard.
Regulatory Power	Local jurisdictions have the authority to regulate certain activities in their jurisdiction. With respect to mitigation planning, the focus is on such things as regulating land use development and construction through zoning, subdivision regulations, design standards, and floodplain regulations.
Repetitive Loss Property	A property for which a minimum of $1,000 has been paid by the National Flood Insurance Program for flood damages on at least two occasions within any 10-year period since 1978.
Richter Scale	A mathematical formula used for measuring trace needle displacements on a seismogram associated with an earthquake (Source: Earthquake Education Center and South Carolina EPD, 1998). The larger magnitude of an earthquake on the Richter Scale, the more severe the earthquake and the more likely the earthquake is to produce structural or infrastructure damage
Risk	The estimated impact that a hazard would have on people, services, facilities, and structures in a community; the likelihood of a hazard event resulting in an adverse condition that cause injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage above a particular threshold due to a specific type of hazard event. It also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.
Santee Lynches Region	The areas of the twelve municipalities and the unincorporated areas of Clarendon, Kershaw, Lee, and Sumter Counties.
Scale	A proportion used in determining a dimensional relationship; the ratio of the distance between two points on a map and the actual distance between the two points on the earth's surface.
Stafford Act	The Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-107 was signed into law November 23, 1988 and amended the Disaster Relief Act of 1974, PL 93-288. The Stafford Act is the statutory authority for most federal disaster response activities, especially as they pertain to FEMA and its programs.
State Hazard Mitigation Officer (SHMO)	The representative of state government who is the primary point of contact with FEMA, other state and federal agencies, and local units of government in

	the planning and implementation of pre- and post-disaster mitigation activities.
Substantial Damage	Damage of any origin sustained by a structure in a Special Flood Hazard Area whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage.
Vulnerability	The potential for loss of property or life from natural or technological hazards. In hazards assessment, both physical and social vulnerability are considered. Assessments of physical vulnerability usually involve the determination of the occurrence probability of a given hazard event and the delineation of areas likely to be adversely affected. Social vulnerability refers to those groups of people who may be differentially vulnerable due to disabilities, income, or other constraining characteristics. Assessing social vulnerability requires you to identify those groups and the spaces they occupy.
Vulnerability Assessment	The extent of injury and damage that may result from a hazard event of a given intensity in a given area. The vulnerability assessment should address impacts of hazard events on the existing and future built environment.

Appendix E – Planning Meetings

SANTEE LYNCHES
Regional Council of Governments

Copy of the Type of E-Mail Notification Sent Out to Planning and Steering Committees

Jake Whitmire

From: Dennis Cyphers
Sent: Thursday, December 19, 2019 4:12 PM
To: Jake Whitmire
Subject: hmp email

To: Maria Rose <mariarose@clarendoncountygov.org>; Bucky Brailsford <publicworksdirector@townofsummerton.com>; Thomas Harvin <tlharvin@clarendoncountygov.org>; Donna Busby <dbusby@clarendoncountygov.org>; Scott Tanner <stanner@cityofmanning.org>; 'Dwayne Howell' <tbvlmayor@ftc-i.net>; tbvlclerk@ftc-i.net; Billy Timmons <btimmons@clarendoncountygov.org>; Ellis Evans <turbevilledpw@ftc-i.net>; Michael Johnson (mjohnson@clarendonfire.com) <mjohnson@clarendonfire.com>; Mitchell McElveen <manningfirechief@sc.rr.com>; kgrice@manningpolice.com
Cc: Yan Duan <yduan@slcog.org>
Subject: Hazard Mitigation Plan

Greetings:

Santee Lynches COG is currently in the process of updating our hazard mitigation plan for 2020-2025. Our plan is updated every five years. Our current plan expires June 2020. We have had two stakeholder meetings to discuss the process of updating the plan.

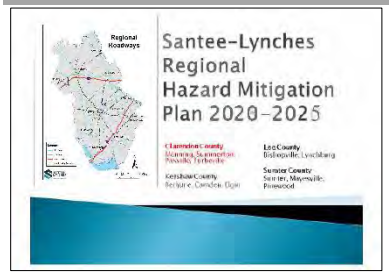
Please take a look at your jurisdictional or departmental mitigation goals and action plans. Please update your goals and objectives according to the things you all have been able to accomplish over the past five years and whatever goals you hope to achieve over the next five years. Please send your updates back to me for consolidation by October 18th, 2019. I will consolidate the changes and send them to SLCOG for inclusion into the 2020-2025 update.

Dennis Cyphers
Chief, Government Services
Santee-Lynches Regional Council of Governments
Phone: 803-774-1377

SANTEE LYNCHES

1

Copy of Abbreviated Slides presented to each respective County in the Jurisdiction



Why are we here?

- Local Hazard Mitigation Plans must be updated at least once every five years in order to continue to be eligible for FEMA hazard mitigation project grant funding.
- Last update was completed for 2010-2015

- Each required Element must have *current information. Planning* and public participation completed before will not meet the requirements for the five-year update.
- If the update does not include major disaster declarations since the previous plan was written, FEMA will not approve the update.

Sequence of events

- Steering committee meets to discuss, review, and amend plan
- Changes incorporated into local plan document
- Public meeting held for input
- Steering committee considers input
- Document submitted to SC EMD for review
- Document submitted to FEMA for review
- Plan approved by resolution from each entity (to include second public meeting)

Other tips and tricks

- Hazard types addressed – for each hazard type, there must be a hazard analysis and at least two potential mitigation actions per jurisdiction
- Hazard maps – not required but recommended
- NFIP and repetitive losses
- Mitigation action plan (distributed for revisions)

Review each area's goals, objectives, and mitigation strategies

Other tips and tricks

- This is not a new plan!
- Use FEMA's language
- Public meetings (DOCUMENTATION)
- Multi-jurisdictional plan requirements:

FEMA highly recommends that local plans be multi-jurisdictional. A single county mitigation plan does not cover its municipalities or make them eligible if there is a presidential disaster declaration. Only those who participated and formally adopted the plan will be eligible.

Planning and Steering Meeting Sign in Sheets

Santee-Lynches Regional HMP 2020-2025 Meeting

Friday, July 26th, 2019
11:00 AM-12:30 PM

	Name	Signature	Organization	Role
1	Christy Denkins	Christy Denkins	Kershaw Co	EM Coordinator
2	Erik Hayes	Erik Hayes	Sumter CO	EM Director
3	Gene Faulkenberry	Gene Faulkenberry	Horry Co	EM Director
4	Anthony Mack	Anthony Mack	Clarendon Co	EM Director
5	Lindsey McCoy	Lindsey McCoy	SCEMD	HM Planner
6	Chris McKinney	Chris McKinney	SLRCOG	E.D
7	Mike Bedenbaugh	Mike Bedenbaugh	Lee Co	EM Director
8				
9				
10				
11				

Santee-Lynches Regional Council of Governments

SANTEE LYNCHES
Regional Council of Governments

Santee-Lynches Regional HMP 2020-2025 Meeting

Thursday, August 29th, 2019
3:00 AM-4:00 PM

	Name	Signature	Organization	Role
1	Daniel Wallace	Daniel Wallace	Annex	Assessor
2	Janae Stowe	Janae Stowe	Santee Lynches	HHS Manager
3	Yan Duan	Yan Duan	Santee Lynches	Planning
4				
5				
6				
7				
8				
9				
10				
11				

Santee-Lynches Regional Hazard Mitigation Plan EM Directors Meeting
Tuesday, 10.1.2019 10:00-11:30 a.m.
Santee-Lynches Regional Council of Governments

Name	Agency	Phone	Email	Sign
Anthony Make	Clarendon County	803.435.9310	emergencyservices@clarendoncountygov.org	
Gene Faulkenberry	Kershaw County	803.425.1522	Gene.faulkenberry@kershaw.sc.gov	
Christy Denkins	Kershaw County	803.425.1522	christy.denkins@kershaw.sc.gov	
Mike Bedenbaugh	Lee County	803.428.8920	mbedenbaugh@leecountysc.org	
Erik Hayes	Sumter County	803.436.2158	ehayes@sumtercountysc.org	
Deanna Coffey	SCEMD	803 429 0620	dcoffey@scemd.sc.gov	

Lindsey McCoy SCEMD — Conference Call

SANTEE LYNCHES
Regional Council of Governments

Sign in

Clarendon County Hazard Mitigation Plan 2020-2025
First Stakeholder Meeting
Monday, 9.23th 2:00-3:30
Clarendon County Council Chamber

Name	Title	Address	Phone Number	Email Address	Sign in
Anthony Mack	Emergency Manager	411 Sunset Drive Manning, SC 29102	803.435-9310	emergencyservices@clarendoncounty gov.org	Anthony Mack
Maria Rose	Clarendon County Planning Director	411 Sunset Drive Manning, SC 29102	803.435.8672	mariarose@clarendoncountygov.org	M Rose
Mary Adger	City of Manning Zoning Administrator	Post Office Box 546 Manning, SC 29102	803.435.8477	manningadministrator@sc.rr.com	
Bucky Brailsford	Town of Summerton Public Works Director/Zoning Administrator	10 Main Street Summerton, SC 29148	803.485.2525	publicworksdirector@townofsummerto n.com	Bucky Brailsford
Ray Morris	Town of Turbeville Zoning Administrator	Post Office Box 70 Turbeville, SC 29162	843.659.2781	townhall2@ftc-i.net	
David Epperson	Clarendon County Administrator	411 Sunset Drive Manning, SC 29102	803.435.0135 803.435.8424 (c)	depperson@clarendoncountygov.org	
Scott Tanner	City of Manning Administrator	Post Office Box 546 Manning, SC 29102	803.435.8477 803.825.9008 (c)	stanner@cityofmanning.org	
Julia Nelson	City of Manning Mayor	1051 Longleaf Drive Manning, SC 29102	803.774.3500 803.464.1224 (c)	mayorjulianelson@gmail.com	
Wade McLeod	Town of Paxville Mayor	Post Office Box 1306 Manning, SC 29102	803.468.2443 (c)	lwademcleod@yahoo.com	

Mac Bagnal, Jr.	Town of Summerton Mayor	Post Office Box 1279 Summerton, SC 29148	803.488.8784	mbagnal@scwa.org	
Dwayne Howell	Town of Turbeville Mayor	Post Office Box 70 Turbeville, SC 29162	843.659.8951	tbvlmayor@ftc-i.net tbvlclerk@ftc-i.net	
Ron Boring	McLeod Health Clarendon Chief Operating Officer	10 Hospital Street Manning, SC 29102			
Timothy Hillard	Clarendon County Public Works	411 Sunset Drive Manning, SC 29102	803.435.4597	dbusby@clarendoncountygov.org	
Rubin Hardy	City of Manning Public Works Director	Post Office Box 546 Manning, SC 29102	803.435.8477 Ext. 5170		
Billy Timmons	Clarendon County ENGINEER Water and Sewer	411 Sunset Drive Manning, SC 29102	803.433.3254 3256	btimmons@clarendoncountygov.org	Billy Timmons
	City of Manning Utility Department	Post Office Box 546 Manning, SC 29102	803.435.8477 Ext. 5112		
Ellis Evans	Town of Turbeville Public Works Director	Post Office Box 70 Turbeville, SC 29162	843.659.2781	turbevilledpw@ftc-i.net	
Michael Richardson	Santee Electric Cooperative	3191 Highway 260 Manning, SC 29102	803.473.4036		
Barbara Champagne	Clarendon School District 1 Superintendent	Post Office Box 38 Summerton, SC 29148	803.485.2325 Ext 104	bchampagne@clar1.k12.sc.us	
Dr. Shawn Johnson	Clarendon School District 2 Superintendent	15 Major Drive Manning, SC 29102	803.435.4435	sjohnson@csd2.org	
Dr. Connie Dennis	Clarendon School District 3 Superintendent	Post Office Drawer 270 Turbeville, SC 29162	843.659.2188	Connie.dennis@clarendon3.org	

Michael Johnson	Clarendon County Fire Chief	Post Office Box 1330 Manning, SC	803.435.4075	mjohnson@clarendonfire.com	
Mitchell McElveen	City of Manning Fire Chief	Post Office Box 546 Manning, SC 29102	803.435.4144	manningfirechief@sc.rr.com	
Tim Baxley	Clarendon County Sheriff	Post Office Box 1289 Manning, SC 29102	803.435.4414	tbaxley@clarendoncountygov.org	
Keith Grice	City of Manning Police Chief	Post Office Box 546 Manning, SC 29102	803.435.8859	kgrice@manningpolice.com	
Ray Perdue	Town of Summerton Police Chief	#2 S. Canty Street Summerton, SC 29148	803.485.4385	policeclerk@townofsummerton.com	
David Jones	Town of Turbeville Police Chief	1400 Main Street Turbeville, SC 29162	843.659.2000	turbevillepd@ftc-i.net	

Name	Agency	Title	Address	Phone	Email	Sign
Thom E Barrineau	Clarendon County EM	Assistant EM	219 Commerce Manning, SC 29102	803-435-9310	tbarrineau@clarendoncountygov.org	
Allen Lee	Clarendon County EM	911 address tech	219 Commerce St.	803-435-9310	alee@ClarendonCountyGov.org	

SANTEE LYNCHES
Regional Council of Governments

Sign in

Kershaw County Hazard Mitigation Plan 2020-2025 First Stakeholders Meeting
Thursday, September 12th, 2019
Kershaw County Council Chambers

Kershaw County

Name	Agency	Title	Address	Phone	Email	Sign
Gene Faulkenberry	Kershaw County Emergency Management	Emergency Management Director	Department of Safety and Emergency Services 515 Walnut Street, Camden, S.C. 29020	803-425-1522	Gene.faulkenberry@kershaw.sc.gov	
Christy Denkins	Kershaw County Emergency Management	Emergency Management Coordinator	Department of Safety and Emergency Services 515 Walnut Street, Camden, S.C. 29020	803-425-1522/Fax 803-424-4018	christy.denkins@kershaw.sc.gov	Christy Denkins

1

Name	Agency	Title	Address	Phone	Email	Sign
Gene Faulkenberry	Kershaw Co	Director	515 Walnut Street	803-425-1522	gene.faulkenberry@kershaw.sc.gov	Gene Faulkenberry
Shawn Putnam	Camden	City Planner	PO Box 7002	432-2421	putnam@camdensc.org	Shawn Putnam
Joe Floyd	Camden Police Dept.	Chief	816 W. DeKalb ST.	803-579-1782	JFloyd@CAMDEN SC.ORG	Joe Floyd
Penny Lloyd	Camden P.D	Lieut.	816 W. DeKalb	7290648	plloyd@camdensc.org	Penny Lloyd
Herbie Frasier	" "	" "	" "	5721772	hfrasier@camdensc.org	Herbie Frasier
Keith Ray	KCFS	Chief of Fire	515 Walnut St Camden	803-425 1522	Keith.ray@kershaw.sc.gov	Keith Ray
Phil Elliott	Camden Fire	Deputy Chief			pelliott@camdensc.org	Phil Elliott
JEFFREY CHAFFINS	CAMDEN PD	SGT	816 W DEKALB ST CAMDEN	803-425-6025	jchaffins@camdensc.org	JEFFREY CHAFFINS
Michael Conley	Kershaw County P&Z	Director	515 Walnut Camden SC 29020	803-425-7533	richard.conley@kershaw.sc.gov	Michael Conley

Monday, 2:00 - 3:30 Kershaw County Council chambers 9.16.2019

Name	Agency	Title	Address	Phone	Email	Sign
Joey Adams-Raczkowski	Kershaw County	Planning Manager	515 Walnut St.		Joseph.raczkowski@kershaw.sc.gov	

SANTEE LYNCHES
Regional Council of Governments

9.18.2019 10:00–10:30

Lee County

Name	Department	Email	Phone	Note
Mike L Bedenbaugh	Lee County Fire Department Chief	mbedenbaugh@leecountysc.org	803 428 8920	Mike L Bedenbaugh
Tim DuBose	EMS director	tdubose@leecountyems.org		
Arlene Samuel	Planning Director	asamuel@leecountysc.org		
Hanna Parler	Planning and Zoning	hparler@cityofbishopvillesc.com		
Alan Watkins	City and County Administrators	awatkins@leecountysc.org		
Julie Atkinson	Assist Administrator	JStokes@leecountysc.org		
Travis Windham	Chairman of County Council	windhamins@ftc-i.net		
Grady Brown	Mayors Bishopville			
Andre Laws	Town of Lynchburg Mayor	lynchburg@ftc-i.net		

Dwayne Huggins	Public Safety Directors	dhuggins@leecountysc.org		
Freddy DuBose	Water/Sewer System Managers			
Freddy DuBose	City of Bishopville Water and Sewer	fdubosebish@yahoo.com		
	Town of Lynchburg Water and Sewer			
	Electricity Providers Duke City of Camden Pee Dee Electric Black River Electric			
Darren Wilson	School District Representatives	wilsondar@lee.k12.sc.us		
Brandon Holloman	Fire Marshal	bholloman@leecountysc.org	803-428-8193 484-5274	
Danny Simon	Sherriff's Office	dsimon@leecountysc.org		
Calvin Collins	City of Bishopville Police Chief	ccollins@bishopvillepd.org		

Lee County Hazard Mitigation Plan Stakeholder Meeting
9.26.2019 10:00-11:30
Lee City County Complex

Name	Agency	Phone	Email	Sign
mike Bedenbaugh	Lee Co EMD	803 428 8920	Leee55 @ SCRR.com	mike Bedenbaugh
JASON PRATER	LEE County Public Works	803 484-6196	leecopubwks@ftc-i.net LEECOpubwks@ftc-i.net	[signature]
Tim Chavon	Lee County Sheriff Office	803-484-5353 Cell 803-428-7148	TChavon@Leeso.org Tchavon@Leeso.org	[signature]
John Couser	City of Bishopville	803-484-5948 803-428-8042cell	JCouser@cityofbishopvillesc.com jcouser@cityofbishopvillesc	[signature]
ALAN WATkins	Lee County Admin.	803-484-5341 ext. 321	awatkins@leecountysc.org	[signature]
Jeffrey Wilkes	SCDOT	803-484-6236	wilkesjt@scdot.org	[signature]
Chad McInville	Bishopville Pd.	843-307-8653	mmcinville@ mmcinville@bishopvillepd.org	[signature]
Daniel Simon	Lee County Sheriff's Office	(803) 428-7149	dsimon@leecountysc.org	[signature]

dsimon@leecountysc.org

SANTEE LYNCHES
Regional Council of Governments

Sign in

Sumter County Hazard Mitigation Plan 2020-2025

First Stakeholder Meeting

9.19.2019 10:00-11:00 and 2:00-3:30

Sumter County Old Courthouse Room 301

Name	Department	Email	Phone	Sign
Erik Hayes	Sumter County Emergency Management	ehayes@sumtercountysc.org	803-436-2158 803-983-8137	
Robert Hingst	Sumter County Emergency Management	rhingst@sumtercountysc.org		
Kent Hall	Sumter County Emergency Management	kehall@sumtercountysc.org		
Gary Mixon	County Administrator	gmixon@sumtercountysc.org		
Dennis	Administration	adennis@sumtercountysc.org		
Terrance Colclough	Administration	tcolclough@sumtercountysc.org		

Name	Department	Email	Phone	Sign
Goliath Brunson	Public Service	gbrunson@sumtersc.gov		
Alfred Conyers	Sumter Storm Water	aconyers@sumtercountysc.org		
Mark Partin	Organizational improvement director	mpartin@sumtersc.gov	Office: 803-436-2662 Cell: 803-305-5058	
James Moye	Black River Electric Cooperative, Inc.	james.moye@blackriver.coop	803-469-8060 Front Desk 803-905-3343 Office 803-491-4554 Cell	
Karl Ford	Fire Department Chief	kford@sumtersc.gov		
Brian Christmas	Fire Department	bchristmas@sumtersc.gov	803-968-4714	

Name	Department	Email	Phone	Sign
Sheriff Anthony	Sherriff's Departments			
Russell Roark	Police Departments Chief	rroark@sumtersc.gov		
Jeffery Jackson	Police Departments Chief	jjackson@sumtersc.gov		
Dennis Powell	Sumter County Facility Manager	dpowell@sumtercountysc.org		
Robert Baker	Coroner	rbaker@sumtercountysc.org		
Helen Roodman	Sumter Planning Dept.	hroodman@sumtersc.gov	(803)774-1636	
Preston McClun	Sumter Planning Dept.	pmcclun@sumtersc.gov	803-774-1619	

Sumter Hazard Mitigation Plan Stakeholder Meeting
9.19.2019 10:00-11:30 or 2:00-3:30
Sumter County Old Courthouse Room 301

Name	Agency	Phone	Email	Sign
ERNIE DOLLARD	Sumter Fire Dept	803-436-2600	edollard edollard@sumtersc.gov	
JACK SPANN	Mayor Town of Pinewood	803-494-7674	jackgue1f85@live.com jackgue1f85@live.com	
~~Mark Patton~~				
Donna Dew	Sumter EMD	803-436-2158	ddew@sumtercountysc.org	Donna Dew
Randy Wright	Public Works	803-436-2241	rwright rwright@sumtercountysc.org	
GARY Fowler	Sumter Police	803-491-8224	gfowler gfowler@sumtersc.gov	
Alfred Conyers	Sumter County Storm Water	803-774-3855	Aconyers @sumtercountysc.org Aconyers	
Will Richardson	Sumter City	803-840-9249	WRichardson WRichardson@sumtersc.gov	

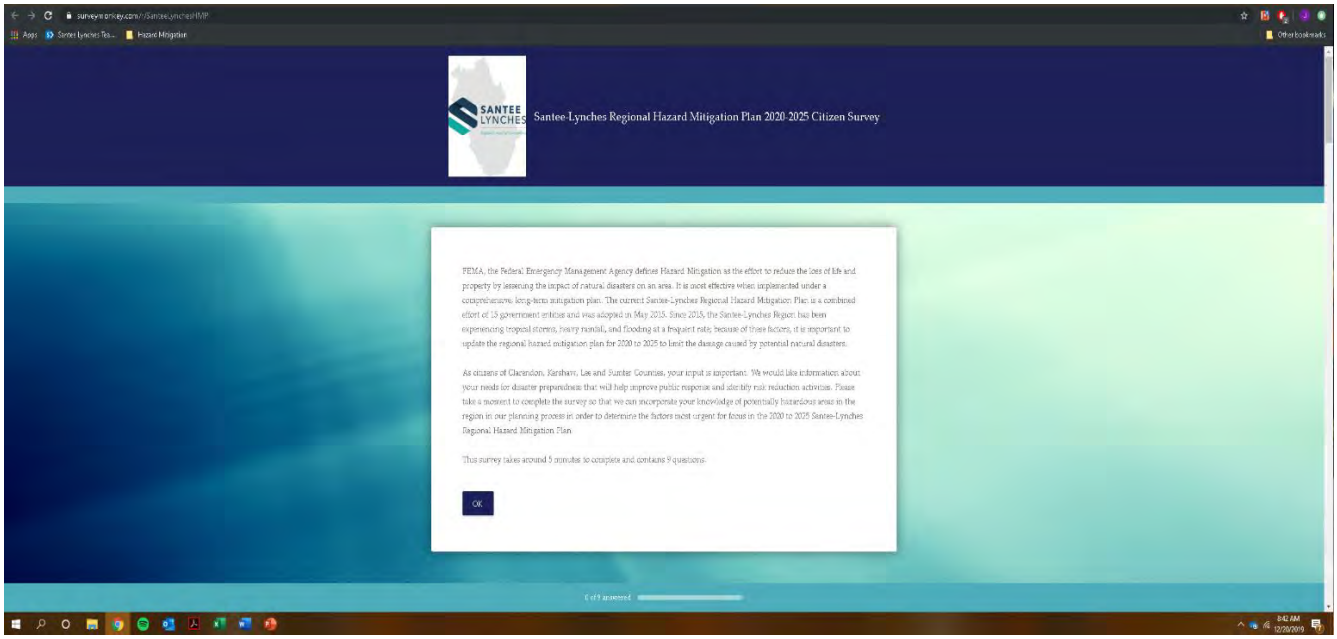
SANTEE LYNCHES
Regional Council of Governments

Sumter Hazard Mitigation Plan Stakeholder Meeting
9.19.2019 10:00-11:30 or 2:00-3:30
Sumter County Old Courthouse Room 301

Name	Agency	Phone	Email	Sign
Eric Hayes	Sumter EMD	803 436-2158	ehayes ehayes@sumtercountysc.org	
Helen Koodman	Sumter City-County Planning	(803)774-1636	hroodman@sumtersc.gov hroodman	
Preston Mcllun	Sumter City - County Planning	803 - 774-1619	pmcclun@sumtersc.gov pmcclun	

Appendix F – Public Participation

Screen Shot of Santee-Lynches Regional Council of Governments Website announcing 2019 Public comment period, which included a method to receive Public Comments on the Hazard Mitigation Plan via survey Form.



Posted notification announcing request for public comments – August 2019.
Printed and online posted Ads announcing request for Public Comments; plus, announcement for FINAL Public Comments before Final Submission to FEMA.

Clarendon County

Please join us in the process of making a great plan for the next 5 years

1 ***As citizens in Clarendon County, your input is important. We would like information about your needs and current situations for disaster preparedness that will help improve public response and identify risk reduction activities.***

SANTEE LYNCHES
Please Scan Me to Complete a Citizen Survey
Your Input Helps Hazard Mitigation Projects for Your Communities

Hold your phone camera over the QR code on the left for a survey

2 ***Please take a moment to view and map flooding areas so that we can incorporate your data of potentially hazardous areas/locations in your community to better allocate resources for the most urgent focus.***

Hold your phone camera over the QR code on the right for flood mapping

SANTEE LYNCHES
Please Scan Me to Map and View Flooding Areas
Your Input Helps Hazard Mitigation Projects for Your Communities

The Santee-Lynches Regional Council of Governments and its partners want your input on Hazard Mitigation ideas in Clarendon County. We invite you to learn about the Regional Hazard Mitigaiton Plan and help us improve Hazard Mitigation Strategies in the Santee-Lynches Region.

Have a plan. Make it personal. SCEMD scemd.org @SCEMD

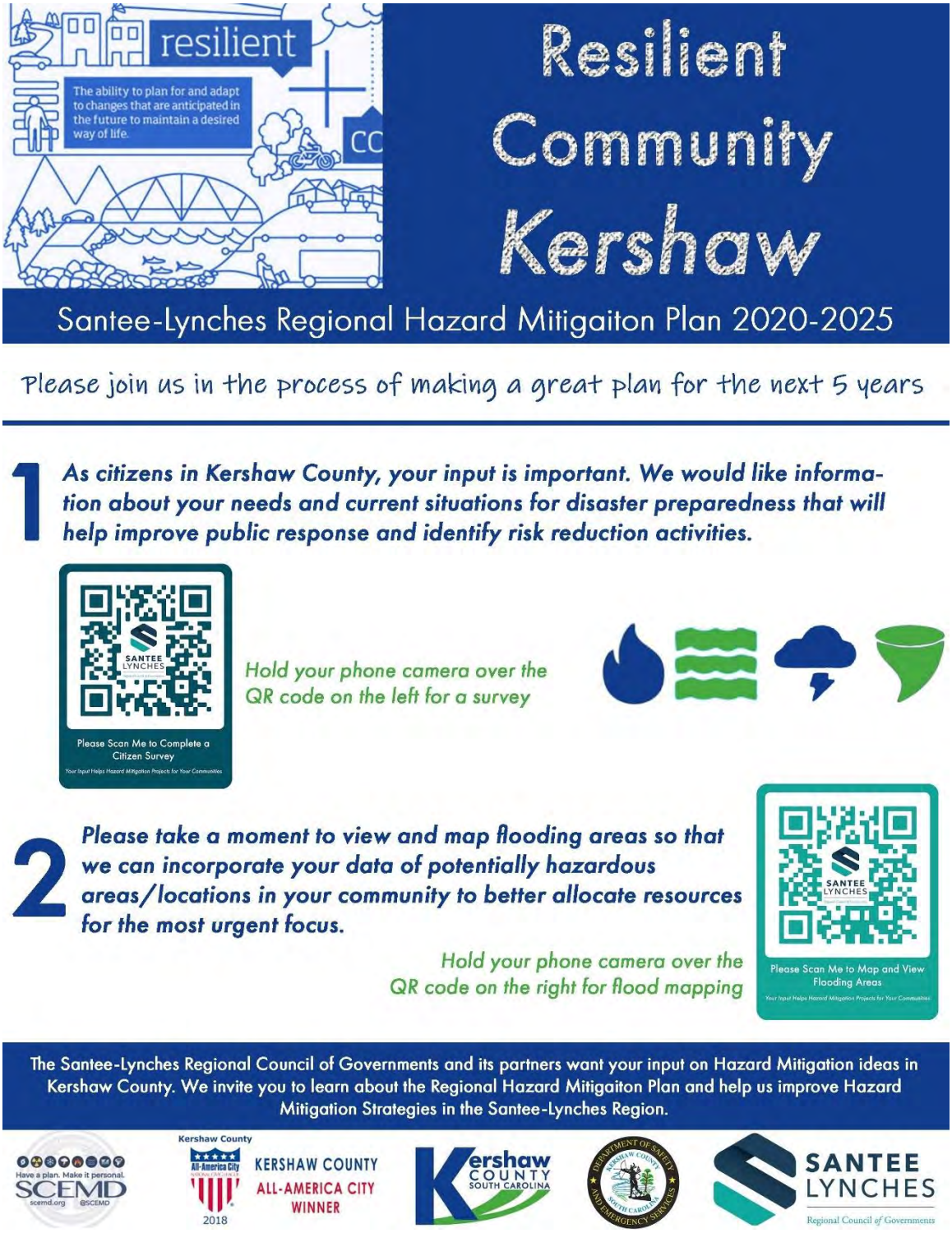
COUNTY OF CLARENDON

SANTEE LYNCHES Regional Council of Governments

Lee County


resilient
The ability to plan for and adapt to changes that are anticipated in the future to maintain a desired way of life.
Resilient Community
Lee County
Santee-Lynches Regional Hazard Mitigaiton Plan 2020-2025
Please join us in the process of making a great plan for the next 5 years
1
As citizens in Lee County, your input is important. We would like information about your needs and current situations for disaster preparedness that will help improve public response and identify risk reduction activities.
Please Scan Me to Complete a Citizen Survey
Hold your phone camera over the QR code on the left for a survey
2
Please take a moment to view and map flooding areas so that we can incorporate your data of potentially hazardous areas/locations in your community to better allocate resources for the most urgent focus.
Please Scan Me to Map and View Flooding Areas
Hold your phone camera over the QR code on the right for flood mapping
The Santee-Lynches Regional Council of Governments and its partners want your input on Hazard Mitigation ideas in Lee County. We invite you to learn about the Regional Hazard Mitigaiton Plan and help us improve Hazard Mitigation Strategies in the Santee-Lynches Region.
Have a plan. Make it personal.
SCEMD
scemd.org
@SCEMD
Lee COUNTY SOUTH CAROLINA
SANTEE LYNCHES
Regional Council of Governments

Kershaw County



Sumter County

Please join us in the process of making a great plan for the next 5 years

1 ***As citizens in Sumter County, your input is important. We would like information about your needs and current situations for disaster preparedness that will help improve public response and identify risk reduction activities.***

Please Scan Me to Complete a Citizen Survey

Hold your phone camera over the QR code on the left for a survey

2 ***Please take a moment to view and map flooding areas so that we can incorporate your data of potentially hazardous areas/locations in your community to better allocate resources for the most urgent focus.***

Hold your phone camera over the QR code on the right for flood mapping

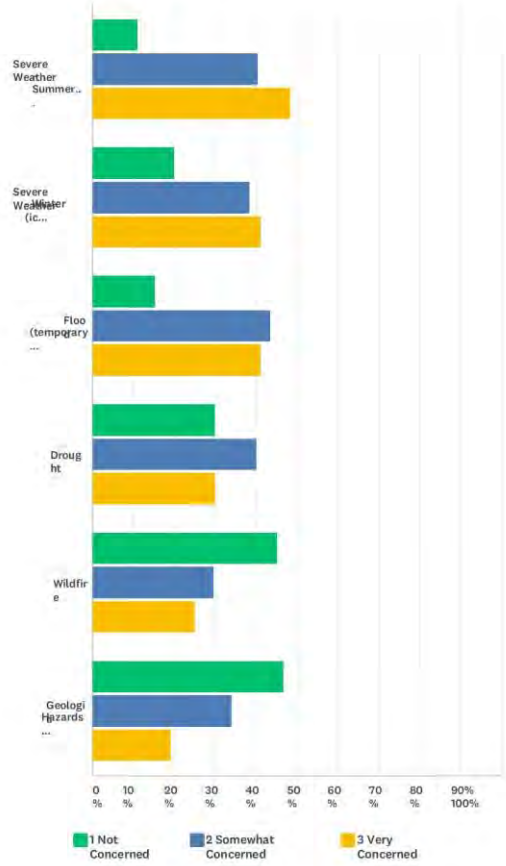
Please Scan Me to Map and View Flooding Areas

The Santee-Lynches Regional Council of Governments and its partners want your input on Hazard Mitigation ideas in Sumter County. We invite you to learn about the Regional Hazard Mitigaiton Plan and help us improve Hazard Mitigation Strategies in the Santee-Lynches Region.

Public Comment Responses

Q1 Please rank the following natural hazards based on your perceived threat level to your community. (3=Very Concerned; 1=Not Concerned)

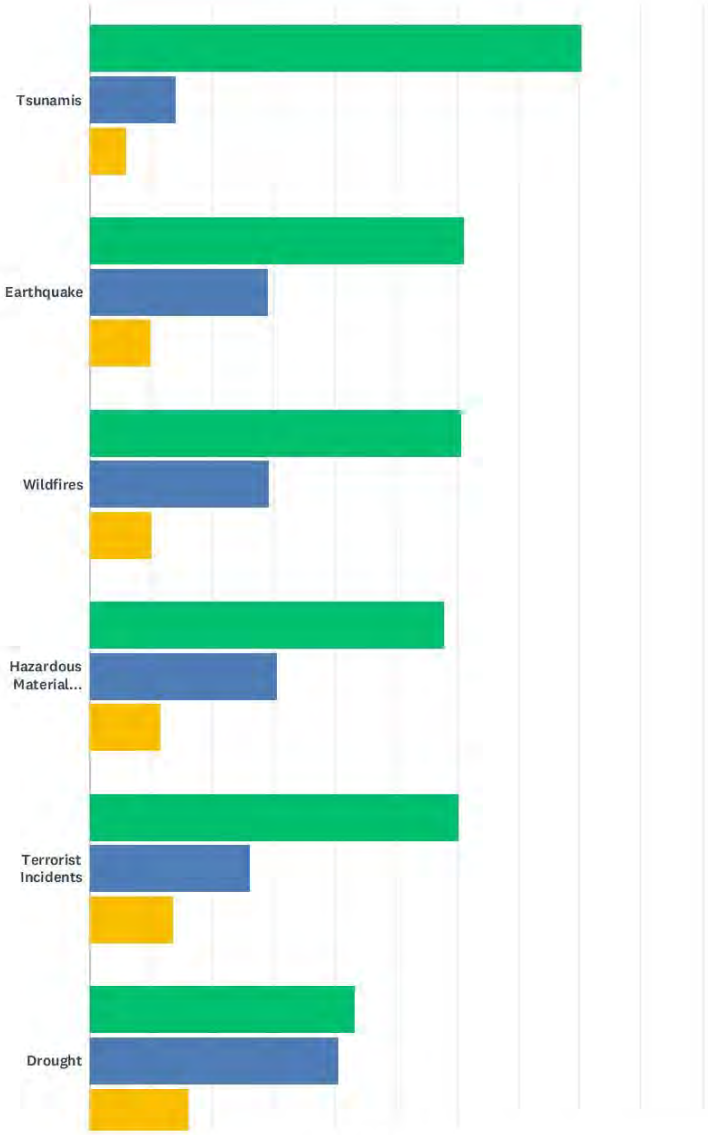
Answered: 192 Skipped: 0



	1 NOT CONCERNED	2 SOMEWHAT CONCERNED	3 VERY CONCERNED	TOTAL	WEIGHTED AVERAGE
Severe Weather - Summer (thunderstorms, high winds hail, lightning)	11.17% 21	40.43% 76	48.40% 91	188	2.37
Severe Weather - Winter (ice storms, snow storms, blizzards)	20.11% 37	38.59% 71	41.30% 76	184	2.21
Flood (temporary inundation including dam failure, riverine flooding, coastal storm surge, local drainage & high groundwater levels)	15.29% 26	43.53% 74	41.18% 70	170	2.26
Drought	29.89% 55	40.22% 74	29.89% 55	184	2.00
Wildfire	45.25% 81	29.61% 53	25.14% 45	179	1.80
Geologic Hazards (landslide, subsidence, earthquake, sinkhole)	46.70% 85	34.07% 62	19.23% 35	182	1.73

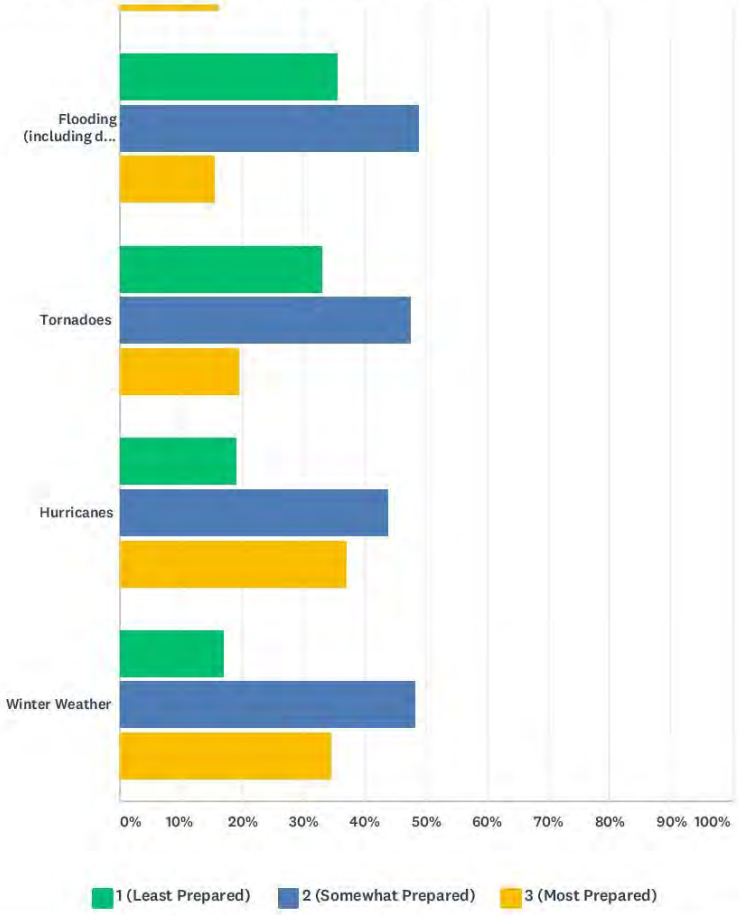
Q2 On a scale of 1-3, how prepared (survival kit, evacuation plan, awareness, etc.) are you for the following situations if they were to occur? (1 =Least Prepared, 3= Most Prepared)

Answered: 188 Skipped: 4



1 / 3

Santee-Lynches Regional Hazard Mitigation Plan 2020-2025 Citizen Survey SurveyMonkey

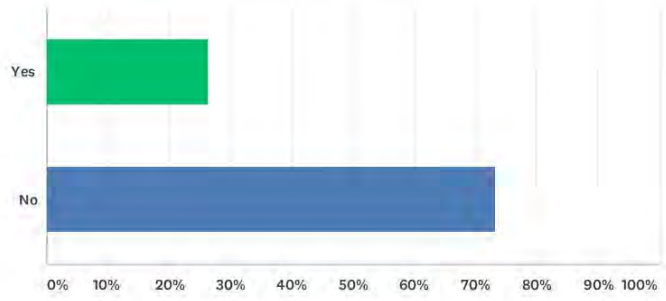


	1 (LEAST PREPARED)	2 (SOMEWHAT PREPARED)	3 (MOST PREPARED)	TOTAL	WEIGHTED AVERAGE
Tsunamis	80.23% 138	13.95% 24	5.81% 10	172	1.26
Earthquake	60.99% 111	29.12% 53	9.89% 18	182	1.49
Wildfires	60.67% 108	29.21% 52	10.11% 18	178	1.49
Hazardous Material Incidents	57.92% 106	30.60% 56	11.48% 21	183	1.54
Terrorist Incidents	60.23% 106	26.14% 46	13.64% 24	176	1.53
Drought	43.33% 78	40.56% 73	16.11% 29	180	1.73

Flooding (including dam failure)	35.56% 64	48.89% 88	15.56% 28	180	1.80
Tornadoes	32.96% 59	47.49% 85	19.55% 35	179	1.87
Hurricanes	19.02% 35	44.02% 81	36.96% 68	184	2.18
Winter Weather	17.03% 31	48.35% 88	34.62% 63	182	2.18

Q3 Have you taken action to make your home or neighborhood more resistant to flooding or other natural hazards? (if Yes, please explain in comments)

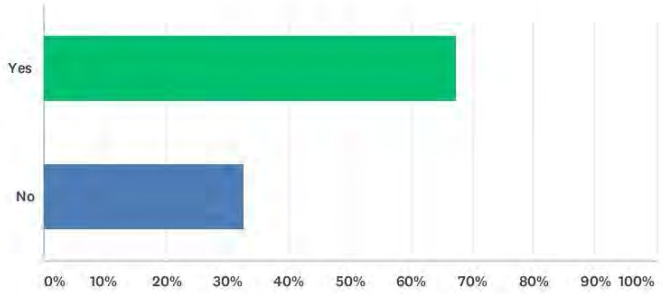
Answered: 186 Skipped: 6



ANSWER CHOICES	RESPONSES	
Yes	26.34%	49
No	73.12%	136
TOTAL		186

Q4 Will you seek public shelter for potential disasters?

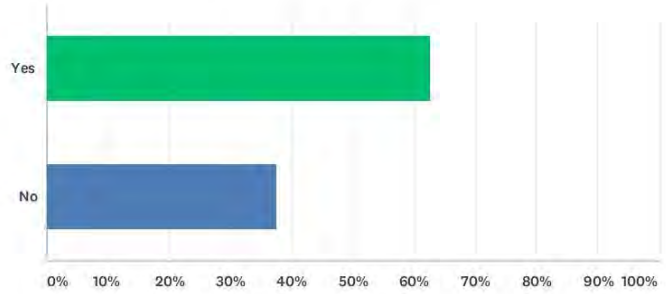
Answered: 187 Skipped: 5



ANSWER CHOICES	RESPONSES	
Yes	67.38%	126
No	32.62%	61
TOTAL		187

Q5 Do you know where is your nearest public shelter?

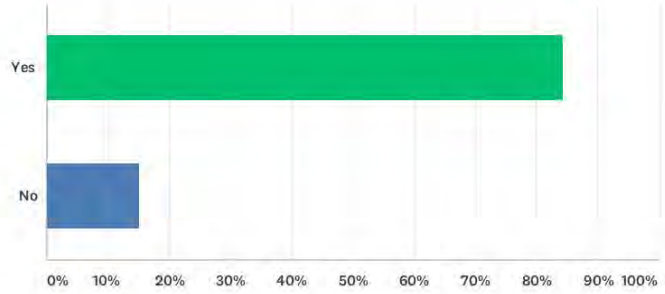
Answered: 187 Skipped: 5



ANSWER CHOICES	RESPONSES	
Yes	62.57%	117
No	37.43%	70
TOTAL		187

Q6 Do you feel emergency service (fire, ambulance, police, hospital,) are adequately prepared to deal with a natural disaster in your municipality?

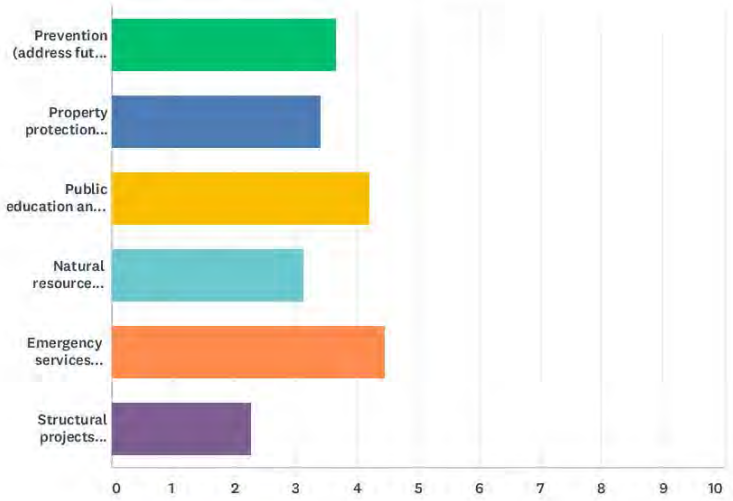
Answered: 185 Skipped: 7



ANSWER CHOICES	RESPONSES	
Yes	84.32%	156
No	15.14%	28
TOTAL		185

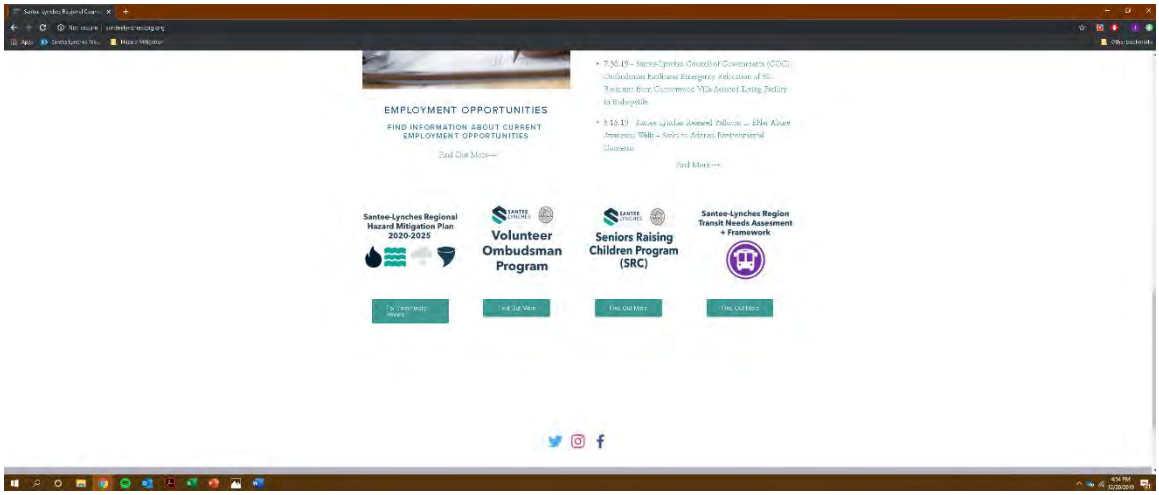
Q7 Please rank and parenthesize 1-6 to the following hazard mitigation resources which you believe are most important for local government to address in your community in the near future. (1 being most important and 6 being least important.)

Answered: 102 Skipped: 90



	1	2	3	4	5	6	TOTAL	SCORE
Prevention (address future development)	21.43% 21	17.35% 17	16.33% 16	9.18% 9	22.45% 22	13.27% 13	98	3.66
Property protection (modify existing buildings)	8.25% 8	14.43% 14	25.77% 25	24.74% 24	15.46% 15	11.34% 11	97	3.41
Public education and awareness (promote individual actions)	25.51% 25	24.49% 24	21.43% 21	12.24% 12	7.14% 7	9.18% 9	98	4.21
Natural resource protection (improve environmental quality)	9.18% 9	10.20% 10	18.37% 18	26.53% 26	19.39% 19	16.33% 16	98	3.14
Emergency services protection (ensure continuity)	32.35% 33	28.43% 29	9.80% 10	12.75% 13	15.69% 16	0.98% 1	102	4.46
Structural projects (construction to control hazards)	5.94% 6	4.95% 5	9.90% 10	13.86% 14	19.80% 20	45.54% 46	101	2.27

Final Request for Public Comments
December 20 – 23 2019
Santee-Lynches COG Website



A. Participation Confirmation (Clarendon County)

Technical Assistance Agreement

BETWEEN
SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS
AND
CLARENDON COUNTY, SOUTH CAROLINA

THIS AGREEMENT, entered into this 9 day of April, 2019 by and between CLARENDON COUNTY, SOUTH CAROLINA (hereinafter referred to as the COUNTY) and the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS (hereinafter referred to as SLRCOG) witness that;

WHEREAS, the COUNTY desires to engage the SLRCOG to render certain professional and technical planning services as hereafter described;

NOW THEREFORE, the parties hereto mutually agree as follows:

EMPLOYMENT OF THE SLRCOG:

The COUNTY hereby agrees to employ the SLRCOG, and the SLRCOG agrees to perform the services as herein set forth.

SCOPE OF SERVICES:

SLRCOG shall do, perform, and carry out in a satisfactory manner the following services:

A. Conduct an inventory of existing assets, demographic analysis, model vulnerability, and identify possible mitigation policies and projects for implementation.
B. Draft a Regional Hazard Mitigation Plan to meet the requirements of the Stafford Act and Title 44 Code of Federal Regulations (CFR) §201.6.1[1]
C. Advise staff and County Council as needed on matters related to development of the Hazard Mitigation Plan;
D. Provide outlets for public feedback on hazard mitigation plan activities;
E. Work with County Council and staff to identify and pursue opportunities for supplemental funding and assistance to achieve strategic goals;
F. Provide regular updates on progress towards achieving short, medium and long-term objectives.

TIME OF PERFORMANCE:

[1] Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. 5165, and the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4001 et seq., 44 Code of Federal Regulations (CFR) Part 201.

The services of SLRCOG shall commence upon the execution of this contract, and shall be undertaken in such a sequence as to assure their execution through September 30, 2020.

METHOD OF PAYMENT:

TERMINATION OF CONTRACT:

It is understood by both parties that this Contract can be terminated by either party upon a thirty-day written notice to the Chief Executive Officer of either party. In the event of such termination, all finished or unfinished documents prepared by SLRCOG under this contract shall, at the COUNTY's option, become the property of the COUNTY, and SLRCOG shall be entitled to receive just and equitable compensation for any work satisfactorily completed.

IN WITNESS WHEREOF, CLARENDON COUNTY, SC and the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS executes this agreement as of date written above.

ATTESTED:

CLARENDON COUNTY
SOUTH CAROLINA

BY: _____
David Epperson
County Administrator

Date: 4/9/19

SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS

BY: _____
Christopher H. McKinney
Executive Director

Date: 4/24/19

B. Participation Confirmation (Kershaw County)

Technical Assistance Agreement

BETWEEN
SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS
AND
KERSHAW COUNTY, SOUTH CAROLINA

THIS AGREEMENT, entered into this 24th day of April, 2019 by and between KERSHAW COUNTY, SOUTH CAROLINA (hereinafter referred to as the COUNTY) and the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS (hereinafter referred to as SLRCOG) witness that;

WHEREAS, the COUNTY desires to engage the SLRCOG to render certain professional and technical planning services as hereafter described;

NOW THEREFORE, the parties hereto mutually agree as follows:

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F. Provide regular updates on progress towards achieving short, medium and long-term objectives.

TIME OF PERFORMANCE:

[1] Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. 5165, and the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4001 et seq., 44 Code of Federal Regulations (CFR) Part 201.

The services of SLRCOG shall commence upon the execution of this contract, and shall be undertaken in such a sequence as to assure their execution through September 30, 2020.

METHOD OF PAYMENT:

TERMINATION OF CONTRACT:

It is understood by both parties that this Contract can be terminated by either party upon a thirty-day written notice to the Chief Executive Officer of either party. In the event of such termination, all finished or unfinished documents prepared by SLRCOG under this contract shall, at the COUNTY's option, become the property of the COUNTY, and SLRCOG shall be entitled to receive just and equitable compensation for any work satisfactorily completed.

IN WITNESS WHEREOF, KERSHAW COUNTY, SC and the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS executes this agreement as of date written above.

ATTESTED:

KERSHAW COUNTY SOUTH CAROLINA	SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS
BY: Vic Carpenter	BY:
Vic Carpenter County Administrator	Christopher H. McKinney Executive Director
Date: 4-4-19	Date: 4/24/19

C. Participation Confirmation (Lee County)

SANTEE LYNCHES

JUN 17 2019

TECHNICAL ASSISTANCE AGREEMENT – LEE COUNTY (Hazard Mitigation)

Technical Assistance Agreement

BETWEEN
SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS
AND
LEE COUNTY, SOUTH CAROLINA

THIS AGREEMENT, entered into this 11th day of June, 2019 by and between LEE COUNTY, SOUTH CAROLINA (hereinafter referred to as the COUNTY) and the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS (hereinafter referred to as SLRCOG) witness that;

WHEREAS, the COUNTY desires to engage the SLRCOG to render certain professional and technical planning services as hereafter described;

NOW THEREFORE, the parties hereto mutually agree as follows:

EMPLOYMENT OF THE SLRCOG:

The COUNTY hereby agrees to employ the SLRCOG, and the SLRCOG agrees to perform the services as herein set forth.

SCOPE OF SERVICES:

SLRCOG shall do, perform, and carry out in a satisfactory manner the following services:

A. Conduct an inventory of existing assets, demographic analysis, model vulnerability, and identify possible mitigation policies and projects for implementation.
B. Draft a Regional Hazard Mitigation Plan to meet the requirements of the Stafford Act and Title 44 Code of Federal Regulations (CFR) §201.6.1[1]
C. Advise staff and County Council as needed on matters related to development of the Hazard Mitigation Plan;
D. Provide outlets for public feedback on hazard mitigation plan activities;
E. Work with County Council and staff to identify and pursue opportunities for supplemental funding and assistance to achieve strategic goals;
F. Provide regular updates on progress towards achieving short, medium and long-term objectives.

TIME OF PERFORMANCE:

[1] Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. 5165, and the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4001 et seq., 44 Code of Federal Regulations (CFR) Part 201.

1

The services of SLRCOG shall commence upon the execution of this contract, and shall be undertaken in such a sequence as to assure their execution through September 30, 2020.

METHOD OF PAYMENT:

TERMINATION OF CONTRACT:

It is understood by both parties that this Contract can be terminated by either party upon a thirty-day written notice to the Chief Executive Officer of either party. In the event of such termination, all finished or unfinished documents prepared by SLRCOG under this contract shall, at the COUNTY's option, become the property of the COUNTY, and SLRCOG shall be entitled to receive just and equitable compensation for any work satisfactorily completed.

IN WITNESS WHEREOF, LEE COUNTY, SC and the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS executes this agreement as of date written above.

ATTESTED:

LEE COUNTY SOUTH CAROLINA	SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS
BY: _____	BY: _____
Alan Watkins County Administrator	Christopher H. McKinney Executive Director
Date: 6-12-19	Date: 6/19/19

D. Participation Confirmation (Sumter County)

Technical Assistance Agreement

BETWEEN
SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS
AND
SUMTER COUNTY, SOUTH CAROLINA

THIS AGREEMENT, entered into this 4 day of April, 2019 by and between SUMTER COUNTY, SOUTH CAROLINA (hereinafter referred to as the COUNTY) and the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS (hereinafter referred to as SLRCOG) witness that;

WHEREAS, the COUNTY desires to engage the SLRCOG to render certain professional and technical planning services as hereafter described;

NOW THEREFORE, the parties hereto mutually agree as follows:

EMPLOYMENT OF THE SLRCOG:

The COUNTY hereby agrees to employ the SLRCOG, and the SLRCOG agrees to perform the services as herein set forth.

SCOPE OF SERVICES:

SLRCOG shall do, perform, and carry out in a satisfactory manner the following services:

A. Conduct an inventory of existing assets, demographic analysis, model vulnerability, and identify possible mitigation policies and projects for implementation.
B. Draft a Regional Hazard Mitigation Plan to meet the requirements of the Stafford Act and Title 44 Code of Federal Regulations (CFR) §201.6.1[1]
C. Advise staff and County Council as needed on matters related to development of the Hazard Mitigation Plan;
D. Provide outlets for public feedback on hazard mitigation plan activities;
E. Work with County Council and staff to identify and pursue opportunities for supplemental funding and assistance to achieve strategic goals;
F. Provide regular updates on progress towards achieving short, medium and long-term objectives.

TIME OF PERFORMANCE:

[1] Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. 5165, and the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4001 et seq., 44 Code of Federal Regulations (CFR) Part 201.

The services of SLRCOG shall commence upon the execution of this contract, and shall be undertaken in such a sequence as to assure their execution through September 30, 2020.

METHOD OF PAYMENT:

TERMINATION OF CONTRACT:

It is understood by both parties that this Contract can be terminated by either party upon a thirty-day written notice to the Chief Executive Officer of either party. In the event of such termination, all finished or unfinished documents prepared by SLRCOG under this contract shall, at the COUNTY's option, become the property of the COUNTY, and SLRCOG shall be entitled to receive just and equitable compensation for any work satisfactorily completed.

IN WITNESS WHEREOF, SUMTER COUNTY, SC and the SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS executes this agreement as of date written above.

ATTESTED:

SUMTER COUNTY SOUTH CAROLINA	SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS
BY: _____	BY: _____
Gary Mixon County Administrator	Christopher H. McKinney Executive Director
Date: April 4, 2019	Date: 4/24/19

E. Regional Participation Confirmation (Technical Assistance Agreement)

EXHIBIT A
Technical Assistance Proposal

FY2020-2024 Regional Hazard Mitigation Plan for the Santee-Lynches Region

BACKGROUND

At just over 2,400 square miles, the Santee-Lynches Region of South Carolina is slightly larger than the state of Delaware, with a total population of approximately 223,000. The region's four counties (Clarendon, Kershaw, Lee, and Sumter), are generally rural and have long been known for agricultural productivity. The principal urbanized areas in the region are the Cities of Sumter, Camden, Bishopville and Manning.

The region has suffered a number of significant natural disasters in the past 5 years, including presidentially declared major disasters in February 2014 (Ice Storm Pax), October 2015 (Severe Flooding), October 2016 (Hurricane Matthew), and September 2017 (Hurricane Irma).

In the face of frequent natural disasters, it is essential that local governments in the region continue to collaborate on essential services to build upon and reinforce the built and natural environments, as well as protect the lives and property of the region's residents. To help the Santee-Lynches region's units of local government and their emergency management personnel better understand needs and align resources to meet needs, the Santee-Lynches Regional Council of Governments (Santee-Lynches) proposes to develop a comprehensive Hazard Mitigation Plan.

SCOPE OF SERVICES

Santee-Lynches proposes to conduct a Hazard Mitigation Planning effort for the four-county region, as required by the South Carolina Emergency Management Division (SCEMD) and Federal Emergency Management Agency (FEMA).

To do this, our team will conduct an inventory of existing assets, demographic analysis, model vulnerability, and identify possible mitigation policies and projects for implementation.

The completed Regional Hazard Mitigation Plan will meet the requirements of the Stafford Act and Title 44 Code of Federal Regulations (CFR) §201.6.[1]

PLAN OF WORK

The following is a brief outline of the services that provided as part of this planning process.

[1] Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. 5165, and the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4001 et seq., 44 Code of Federal Regulations (CFR) Part 201.

SANTEE LYNCHES

EXHIBIT A
Technical Assistance Proposal

Phase I: Hazard Identification and Identification of Local Emergency Management Assets

We will develop an inventory of natural hazards that have impacted the region historically. For this plan, the risk assessment will assess each community's risks related to natural and some man-made hazards. The natural hazards categories, consistent with the State Hazard Mitigation Plan include, but are not limited to flood, wind, fire, geologic, and other natural hazards. Consideration may also be given to man-made hazards such as chemical spills or fires.

Examples of data Santee-Lynches will collect from federal, state, and local sources, includes:

- Critical Facilities
- Evacuation Routes
- Land uses and structures
- Emergency Management Agency capital assets, funding, and personnel
- Demographic and Population Data
- Historical data on hazards impacting the region
- Data on repetitive flood loss and substantial damage structures

Phase II: Hazard Vulnerability/Risk Analysis

Using existing long-range plans as well as geospatial mapping software and U.S. Census data, we will review development patterns, vulnerable populations, and geographic needs by demographic groups to provide a greater understanding of where needs are located.

Phase III: Outreach and Public/Stakeholder Engagement

As part of the public involvement process, each participating jurisdiction will appoint a Local Planning Committee. Members will include a cross-section of the community, such as residents, government officials, community leaders, and business owners. Supported by Santee-Lynches staff, the Committees will:

- Hold public hearings and workshops during the plan development period.
- Solicit input from citizens and professionals with knowledge of applicable hazards.
- Solicit input regarding the feasibility of potential mitigation measures for each hazard and the prioritization of mitigation projects.
- Review the final draft of the plan and the plan's goals and proposed mitigation projects.
- Be involved in the implementation as well as the updating of the plan's goals and proposed mitigation projects.

Phase V: Mitigation Strategy and Project Identification and Analysis

SANTEE LYNCHES

EXHIBIT A
Technical Assistance Proposal

The mitigation strategy serves as the long-term blueprint for reducing potential losses identified in the risk assessment. The mitigation strategy includes goals, objectives, and prioritized hazard mitigation actions.

To prioritize potential hazard mitigation projects for the region, we will develop a project matrix scored on scalability, level of investment, barriers (legal, institutional, financial), and timeframe. This matrix will be used to help identify potential mitigation efforts to address the needs identified through the planning process.

Phase VI: Plan Approval and Adoption

Adoption by local governing bodies demonstrates the jurisdiction's commitment to fulfilling the hazard mitigation goals and actions outlined in the plan. Updated plans also are adopted anew to demonstrate community recognition of the current planning process, changes that have occurred within the previous five years, and validate community priorities for hazard mitigation actions. Upon completion of the plan, we will work with the sixteen (16) units of local government in the Santee-Lynches region to encourage plan adoption.

The adopted plan will be submitted to the South Carolina Emergency Management Division (SCEMD) on or before the termination date for initial review and forwarding to FEMA for final review and approval.

TIMELINE

The project is proposed to start May 1, 2019, with estimated project completion on or before June 30, 2020.

TOTAL BUDGET

Cost Category	Amount
Personnel Hours	$28,100.30
Mileage and Travel	$1,155.00
Advertising and Outreach	$2,750.00
Supplies/Materials	$1,350.00
Total	**$ 33,355.30**

**Total project cost to be divided among the four (4) Counties participating in this project in the amounts outlined in each County's technical assistance agreement*

Appendix G - Dams in the Region

Source: South Carolina Department of Health and Environmental Control - Dams and Reservoirs Safety

Clarendon County Dams

CLARENDON COUNTY DAMS

RECORD ID	DAM NAME	COUNTY	YEAR COMPLETED	NID HEIGHT	MAX STORAGE	HAZARD
70529	O E ROSE DAM	CLARENDON	1900	15	719	S
70530	COLA PLANTATION DAM	CLARENDON	1960	15	207	S
70531	H FOX TINDAL DAM	CLARENDON	1960	18	276	L
70532	RAWLINSON/STUCKEY DAM	CLARENDON	1955	15	91	L
70533	CYPRESS LAKE DAM	CLARENDON	1900	10	167	L
70534	FRANCES COKER DAM	CLARENDON	1850	9	200	L
70535	STUKES/BRIGGS DAM	CLARENDON	1960	17	148	S
70536	LEE BUSINESS PARTNERSHIP DAM 2	CLARENDON	1949	17	92	L
70537	LEE BUSINESS PARTNERSHIP DAM 1	CLARENDON	1949	16	90	L
70538	LAKEWOOD PARK DAM	CLARENDON	1965	18	193	L
70539	WYBOO PLANTATION DAM	CLARENDON	1960	15	383	L
70540	LAKEWOOD POND DAM	CLARENDON	1955	7	144	L
70542	EUGENE POOLE DAM	CLARENDON	1965	28	336	L
71418	EDNA WARD POND DAM	CLARENDON	1955	10	57	S
71419	SHAW POND DAM	CLARENDON	1965	9	59	L
71420	RIGGS POND DAM	CLARENDON	1932	14	52	L
71421	LEES NO3 POND DAM	CLARENDON	1949	7	75	L
71422	WARDS PASTURE POND DAM	CLARENDON	1970	8	54	L
71423	SUMMERTON WATER TR DAM	CLARENDON	1975	11	198	L
71424	GEORGE TINDAL POND DAM	CLARENDON	1960	18	54	L
71425	PLOWDEN POND DAM	CLARENDON	1955	13	91	L
71426	BERRY POND DAM	CLARENDON	1955	12	96	L
71427	HARVIN POND DAM	CLARENDON	1946	16	76	L
71428	W J JACKSON POND DAM	CLARENDON	1974	12	57	L
71429	ALDERMAN POND DAM	CLARENDON	1950	19	58	L
71430	BUDDIN POND DAM	CLARENDON	1960	10	50	L
71431	MCFADDIN POND DAM	CLARENDON	1955	14	61	L
71432	CUTTINO POND DAM	CLARENDON	1960	11	74	L

Kershaw County Dams

KERSHAW COUNTY DAMS

RECORD ID	DAM NAME	COUNTY	YEAR COMPLETED	NID HEIGHT	MAX STORAGE	HAZARD
70302	RALEY MILLPOND DAM	KERSHAW	1901	24	520	L
70303	ADAMS MILLPOND DAM	KERSHAW	1890	13	896	L
70304	COLONIAL LAKE DAM	KERSHAW	1873	17	680	S
70305	KENDALL LAKE DAM	KERSHAW	1900	18	710	H
70306	HERMITAGE MILL POND DAM	KERSHAW	1935	16	5790	H
70307	BOYKIN MILLPOND DAM	KERSHAW	1880	12	960	S
70308	HOUGH MILLPOND DAM	KERSHAW	1935	12	72	S
70309	HORTONS POND DAM	KERSHAW	1960	12	86	S
70310	LEEWELYN MILLPOND DAM	KERSHAW	1900	15	185	L
70311	LAKE ELLIOTT DAM	KERSHAW	1965	19	216	S
70312	PALMETTO ST CONST DAM 1	KERSHAW	1970	12	250	L
70313	VAUGHN POND DAM	KERSHAW		18	400	L
70314	LAKE SHAMOKIN DAM	KERSHAW	1865	10	58	L
70315	WHITEHEAD BROTHERS DAM	KERSHAW	1960	20	86	L
70316	MACDONALD WILLETTS DAM	KERSHAW	1969	14	147	H
70317	CITY OF CAMDEN DAM	KERSHAW	1963	19	79	L
70318	COOL SPRINGS LAKE DAM	KERSHAW	1973	22	153	L
70319	PALMETTO ST CONST DAM 2	KERSHAW	1970	10	52	L
70320	TOWN AND COUNTRY DAM	KERSHAW	1965	19	154	L
70321	CATAWBA TIMBER CO DAM	KERSHAW	1955	12	63	L
70322	OSBOURNE/HUDSON DAM	KERSHAW	1965	15	51	L
70323	ELOISE WATSON DAM	KERSHAW	1960	26	173	S
70324	BAGNAL BUILDERS DAM	KERSHAW	1950	19	80	L
70325	J R POWELL DAM	KERSHAW	1955	14	74	L
70326	WATEREE	KERSHAW	1919	92	262394	H
70327	WILSON DAM	KERSHAW	1973	21	112	L
70328	DON TAYLOR DAM	KERSHAW	1972	19	167	L
70329	RATLIFF MILLPOND DAM	KERSHAW	1873	16	60	L
70330	FREDERICKSBURG LAKE DAM	KERSHAW	1975	14	187	H
71025	UPPER SUNNY HILL POND DAM	KERSHAW	1969	19	174	H
71026	SUNNYHILL LOWER DAM	KERSHAW	1969	6	51	S
71027	MCGUIRTS HOUSE POND DAM 1	KERSHAW	1953	10	62	L
71028	MCGUIRTS HOUSE POND DAM 2	KERSHAW	1957	13	63	L
71029	WOODSTOCK ASSOC DAM	KERSHAW	1976	15	80	L
71030	HILTON HOUSE POND DAM	KERSHAW	1953	24	81	L
71031	BOWERS POND DAM	KERSHAW	1969	24	94	L
71032	MCGUIRTS FLINT HL POND DAM	KERSHAW	1955	18	51	L
71033	GRAHAM POND DAM	KERSHAW	1970	16	69	L
71034	NICHOLSON/BOYLE DAM	KERSHAW	1974	13	112	L
71035	MULBERRY HOUSE POND DAM	KERSHAW	1895	8	72	L
71036	GOGO POND DAM	KERSHAW	1955	9	54	L
71037	DEW FRESH POND 1 DAM	KERSHAW	1973	20	110	L
71038	SIDNEY HORTON POND DAM	KERSHAW	1960	19	54	L
71039	DEW FRESH POND 2 DAM	KERSHAW	1976	12	116	L

Kershaw County DAMS (continued)

KERSHAW COUNTY DAMS (CONTINUED)

RECORD ID	DAM NAME	COUNTY	YEAR COMPLETED	NID HEIGHT	MAX STORAGE	HAZARD
71040	WILLIAM HOLLY POND DAM	KERSHAW	1960	19	55	L
71041	EUBANKS POND DAM	KERSHAW	1955	27	49	L
71042	LTL LEWIS BARFIELD MLPND	KERSHAW	1930	18	65	L
71043	R W COKERS POND DAM	KERSHAW	1963	12	56	L
71044	WIEDEMAN POND DAM	KERSHAW	1963	25	65	L
71045	CRANSHAW POND DAM	KERSHAW	1953	20	55	L
71046	BOWEN'S POND DAM	KERSHAW	1955	27	110	S
71047	BOWEN POND DAM	KERSHAW	1953	37	84	L
71048	COOK POND DAM	KERSHAW	1963	12	53	S
71049	GEORGE WEST POND DAM	KERSHAW	1967	25	88	L
71050	BARFIELD POND DAM	KERSHAW	1963	13	69	S
71051	A P BOWDEN POND DAM 1	KERSHAW	1975	50	111	L
71052	A P BOWDEN POND DAM 2	KERSHAW	1975	28	76	L
71053	A P BOWDEN POND DAM 3	KERSHAW	1975	29	26	L
71054	SINCLAIR POND DAM	KERSHAW	1960	13	51	L
71055	TIDWELLS POND DAM	KERSHAW	1965	13	51	L
71056	STOKES POND DAM	KERSHAW	1973	34	63	L
71057	RALPH SMITH POND DAM	KERSHAW	1960	33	25	L
71794	DAVIDSON DAM	KERSHAW		13	72	L
71795	RUDOLPH WEST DAM	KERSHAW		15	50	L
71888	GRAVES SKI POND DAM	KERSHAW	1990	14	234	S
71911	ANDREW BOWDEN DAM	KERSHAW	1990	31	84	L
72181	BUTTERNUT TREE FARM DAM	KERSHAW		19	300	L
72195	STOKES FARM DAM	KERSHAW		17	150	L
72211	OLIVER POND DAM D-2529	KERSHAW	1975	28	97	L
72229	STONEBORO PLANTATION DAM	KERSHAW		28	250	L

Lee County Dams

LEE COUNTY DAMS

RECORD ID	DAM NAME	COUNTY	YEAR COMPLETED	NID HEIGHT	MAX STORAGE	HAZARD
70331	JOHN C SMITH DAM	LEE	1965	11	225	L
70332	H B TURNER DAM	LEE	1948	14	81	L
70333	ROSALIE SENTER DAM	LEE	1952	12	90	L
70334	HARVEY SHAW DAM	LEE	1950	10	78	S
70335	C S NEWSON DAM	LEE	1850	8	145	L
70336	W L CLYBURN DAM	LEE	1930	10	312	S
70337	LAKE ASHWOOD DAM	LEE	1933	15	333	S
70338	MCGIRT'S MILLPOND DAM	LEE	1900	10	272	S
70339	CEDAR CREEK MILLPOND DAM	LEE	1964	15	162	S
70340	HANCOCK POND DAM	LEE	1955	8	54	L
70341	MCLEODS POND DAM	LEE	1955	11	97	L
70342	MARY LEE ELMORE DAM	LEE	1953	10	52	L
71058	MATTIE J'S POND DAM	LEE	1931	17	164	S
71059	PLAYERS POND DAM	LEE	1955	13	109	L
71060	HANCOCKS POND DAM	LEE	1830	10	63	L
71061	SINGLETARY MILLPOND	LEE	1898	13	93	L
71062	MCLEODS UPPER POND DAM	LEE	1970	9	185	L
71063	COPELAND POND DAM	LEE	1959	12	81	L
71064	CORBITTS MILLPOND DAM	LEE	1896	8	63	L
71065	WINDI KNOLL LAKE DAM	LEE	1955	19	78	L
71177	DENNY POND DAM	LEE	1957	12	65	S

Sumter County Dams

SUMTER COUNTY DAMS

RECORD ID	DAM NAME	COUNTY	YEAR COMPLETED	NID HEIGHT	MAX STORAGE	HAZARD
70967	WHITE OAK SLASH LAKE DAM	SUMTER	1950	13	432	L
70968	HARVIN'S POND DAM	SUMTER	1955	13	900	S
70969	MCLEODS POND DAM	SUMTER	1960	9	54	L
70970	NORSWORTHY POND DAM	SUMTER	1974	25	62	L
70971	ELLERBEES MILLPOND DAM	SUMTER	1830	5	151	S
70972	DINKINS MILLPOND DAM	SUMTER	1800	14	600	S
70973	BARNETTS POND DAM	SUMTER	1955	16	93	L
70974	LAKE VIEW POND DAM	SUMTER	1970	21	70	S
70975	ROSS'S POND DAM	SUMTER	1965	8	73	L
70976	ARDIS POND DAM	SUMTER	1800	11	135	L
70977	HILL POND DAM	SUMTER	1955	10	119	L
70978	OAKLAND POND DAM	SUMTER	1975	26	55	S
70979	GILLESPIE POND DAM	SUMTER	1960	20	55	L
70980	MIKELL POND DAM	SUMTER	1965	18	418	L
70981	BOOTHS POND DAM	SUMTER	1900	18	297	L
70982	FRIERSON POND DAM	SUMTER	1930	8	74	S
70983	SAWMILL POND DAM	SUMTER	1800	11	135	L
70984	DUBOSE POND DAM	SUMTER	1955	10	66	S
70985	LORING MILLPOND DAM	SUMTER	1800	10	168	S
70986	UPPER DEERFIELD LAKE DAM	SUMTER	1960	11	68	S
70987	LOWER DEERFIELD LAKE DAM	SUMTER	1960	14	63	S
70988	SECOND MILLPOND DAM	SUMTER	1900	13	832	H
70989	SWAN LAKE DAM	SUMTER	1800	12	73	L
70990	GULLEDGE POND DAM	SUMTER	1960	12	65	L
70991	BURNT GIN LAKE DAM	SUMTER	1930	15	99	L
70992	WEST LAKE DAM	SUMTER	1970	11	84	L
70993	MCRAE'S MILL POND DAM	SUMTER	1908	10	322	L
70994	MONTAGUES POND DAM	SUMTER	1955	13	71	L
70995	BOYLE POND DAM	SUMTER	1957	15	1240	L
70996	BURNS POND DAM	SUMTER	1965	15	55	L
70997	MATHIS POND DAM	SUMTER	1930	12	50	S
70998	ELLIOTT'S LAKE DAM	SUMTER	1930	17	230	L
70999	CAIN POND DAM	SUMTER	1930	12	62	L
71000	CAINS MILLPOND DAM	SUMTER	1850	9	550	S
71001	KORN POND DAM	SUMTER	1960	14	100	L
71002	SHULER POND DAM	SUMTER	1955	11	102	S
71003	DESCHAMPS BIG POND DAM	SUMTER	1950	12	462	L
71004	DESCHAMPS MIDDLE POND DAM	SUMTER	1950	8	83	L
71005	MCLAURIN POND DAM	SUMTER	1965	16	125	L
71006	CAMPBELL POND DAM	SUMTER	1930	20	165	L
71007	POINSETT STATE PARK LAKE DAM	SUMTER	1841	16	83	L
71008	JONES POND DAM	SUMTER	1960	13	68	L
71009	IDLEWILD POND DAM	SUMTER	1930	12	52	L
71010	DOGWOOD LAKE DAM	SUMTER	1850	10	128	L

Sumter County DAMS (continued)

SUMTER COUNTY DAMS (CONTINUED)

RECORD ID	DAM NAME	COUNTY	YEAR COMPLETED	NID HEIGHT	MAX STORAGE	HAZARD
71011	MILL CREEK POND PARK DAM	SUMTER	1930	15	67	L
71012	CULP POND DAM	SUMTER	1971	17	60	L
71013	TOUCHBERRY LOWER POND DAM	SUMTER	1958	17	115	L
71879	W AND W FARMS DAM	SUMTER	1989	15	60	L
71880	CHRISTMAS MILL LAKE DAM	SUMTER		12	65	L
72068	MINE HILLS DAM	SUMTER	1994	20	91	L
72104	K B SIMMONS DAM	SUMTER		22	150	L
72153	THOMAS J HOLBROOK DAM	SUMTER	2000	15	300	L
72173	JAMES HUGH RYAN POND DAM	SUMTER		30	250	L
72215	BROGDON FAMILY POND	SUMTER		22	53	L

Appendix H – Presidential Emergency and Disaster Declarations

President Obama Signs South Carolina Emergency Declaration

Release date: October 6, 2016
Release Number: HQ-16-075
WASHINGTON, D.C. -- The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) announced that federal emergency aid has been made available to the State of South Carolina to supplement state, tribal, and local response efforts in the areas affected by Hurricane Matthew beginning on October 4, 2016 and continuing.

The President's action authorizes FEMA to coordinate all disaster relief efforts that have the purpose of alleviating the hardship and suffering caused by the emergency on the local population, and to provide appropriate assistance for required emergency measures, authorized under Title V of the Stafford Act, to save lives and to protect property and public health and safety, and to lessen or avert the threat of a catastrophe in all 46 South Carolina counties and the Catawba Indian Nation.

Specifically, FEMA is authorized to provide emergency protective measures (Category B), limited to direct federal assistance, under the Public Assistance program at 75 percent federal funding.

W. Michael Moore has been named as the Federal Coordinating Officer for federal response operations in the affected area.

President Trump Signs South Carolina Emergency Declaration

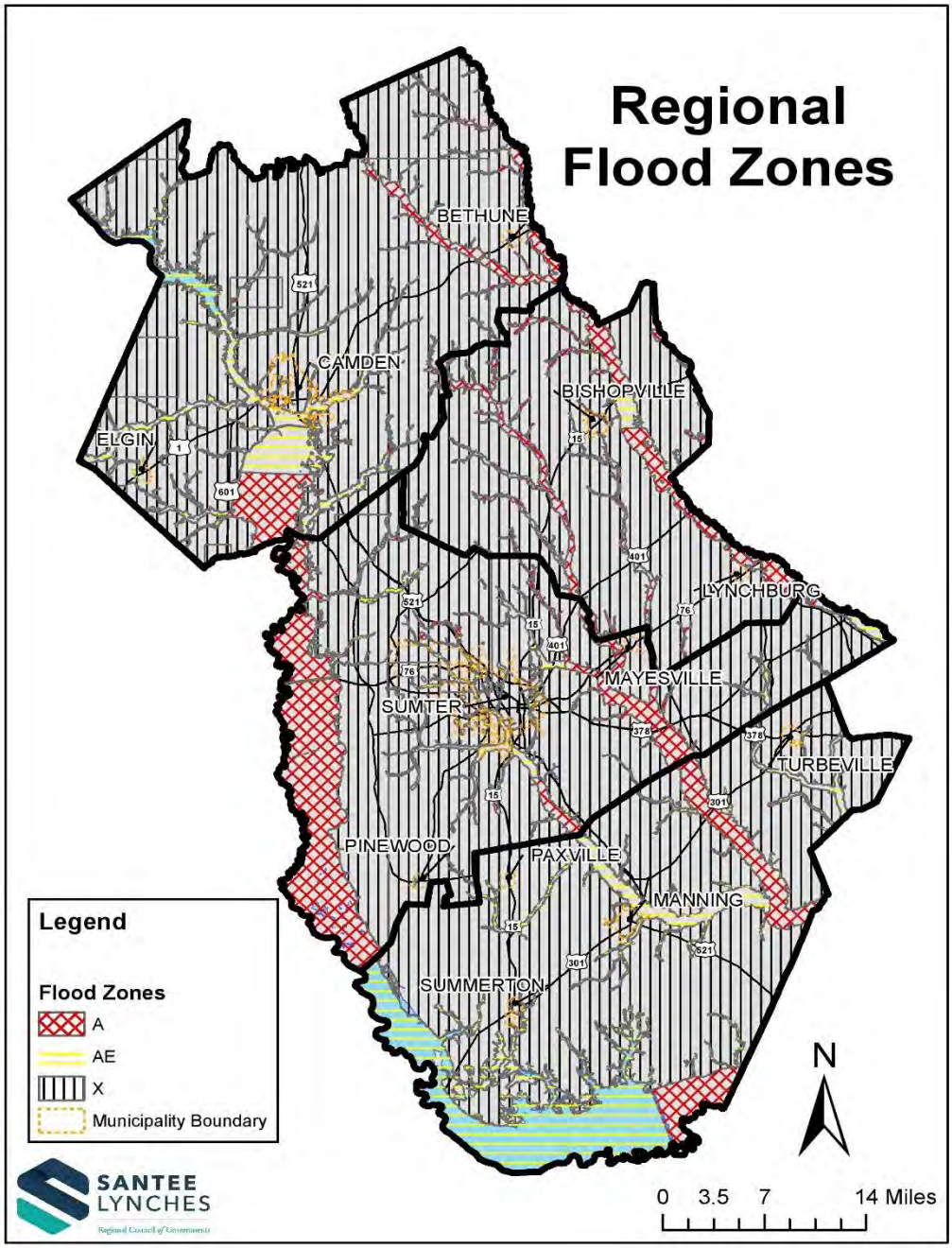
Release date: September 30, 2019
Release Number: HQ-19-122
WASHINGTON – FEMA announced that federal disaster assistance has been made available to the state of South Carolina to supplement state and local recovery efforts in the areas affected by Hurricane Dorian beginning on August 31 to September 6, 2019.

Federal funding is available to the state, eligible local governments and certain private nonprofit organizations on a cost-sharing basis for emergency work and the repair or replacement of facilities damaged by these severe storms and flooding in Beaufort, Berkeley, Charleston, Colleton, Dillon, Dorchester, Georgetown, Horry, Jasper, Marion, and Williamsburg counties.

Federal funding is also available on a cost-sharing basis for hazard mitigation measures statewide.

Allan Jarvis has been named as the Federal Coordinating Officer for federal recovery operations in the affected area. Jarvis said additional designations may be made at a later date if warranted by the results of further damage assessments

Appendix I – Digital FIRM Map of Region


Regional Flood Zones
BETHUNE
CAMDEN
BISHOPVILLE
ELGIN
LYNCHBURG
MAYESVILLE
SUMTER
TURBEVILLE
PINEWOOD
PAXVILLE
MANNING
SUMMERTON
Legend
Flood Zones
A
AE
X
Municipality Boundary
SANTEE LYNCHES
Regional Council of Governments
N
0 3.5 7 14 Miles

Appendix J – Adopting Resolutions

****Resolutions to be added after plan is adopted by individual jurisdictions**

Clarendon County – Adopting Resolution – Pending

STATE OF SOUTH CAROLINA)
)
COUNTY OF CLARENDON)

RESOLUTION 2020-06
(Hazard Mitigation Plan Update)

WHEREAS, Clarendon County Council 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, Clarendon County Council participated jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a Hazard Mitigation Plan; and,

WHEREAS, Clarendon County Council is aware that revising and updating the Plan is critical for active and effective hazard mitigation, and that Clarendon County Council will monitor and record hazard-related data and events that can be used to update the Hazard Mitigation Plan, and,

NOW, THEREFORE, BE IT RESOLVED, that the Clarendon County Council hereby accepts and approves the Clarendon County Hazard Mitigation Plan Update 2020-2025 and its designated portion in its entirety as its official Plan and will undertake annual recording of its hazard events, their impact duration and costs.

BE IT FURTHER RESOLVED, that the Clarendon County Council accepts the Updated Hazard Mitigation Plan from the Hazard Mitigation Steering Committee, and the submission on behalf of the participating counties and municipalities of the adopted Hazard Plan to the State Emergency Management Division and to the Federal Emergency Management Agency officials for formal review and approval.

ADOPTED this **8th** day of **June**, 2020.

CLARENDON COUNTY COUNCIL OFFICIAL SEAL STATE OF S.C.

ATTEST:

Dorothy M. Levy
Clerk to County Council

Dwight L. Stewart, Jr., Chairman
Clarendon County Council

City of Manning – Adopting Resolution – Pending

Town of Summerton – Adopting Resolution – Pending

Town of Paxville – Adopting Resolution – Pending

Town of Turbeville – Adopting Resolution – Pending

Kershaw County – Adopting Resolution – Approved

STATE OF SOUTH CAROLINA)
) RESOLUTION NO. 158.2020
COUNTY OF KERSHAW)

A RESOLUTION CALLING FOR THE ADOPTION OF THE UPDATED HAZARD MITIGATION PLAN FOR THE SANTEE-LYNCHES REGION OF SOUTH CAROLINA

WHEREAS, Kershaw County has experienced the effects of natural hazard events; and,

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm and damage to people and property; and,

WHEREAS, Kershaw County participated jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a hazard mitigation plan; and,

WHEREAS, the Hazard Mitigation Plan for the Santee-Lynches Region has been widely circulated for review by residents, business organizations / professional organizations, regional, and local government agencies and has been supported by those reviewers; and,

NOW, THEREFORE, BE IT RESOLVED, the Santee-Lynches Hazard Mitigation Plan is hereby adopted as an official plan of Kershaw County; and

Kershaw County will continue to monitor review, maintain and periodically report on the progress towards achieving the Action Plan Goals; and will submit appropriate revisions, updates and hazard occurrences as stipulated in the plan.

This Resolution becomes effective as of the 9th day of June, 2020.

Kershaw County Council

ATTEST:

Merri M. Seigler
Clerk to Council

Town of Bethune – Adopting Resolution – Pending

City of Camden – Adopting Resolution – Approved

#2020-017

Hazard Mitigation Plan Adoption Resolution

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

Whereas, the City of Camden 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, the City of Camden participated jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a hazard mitigation plan; and

Whereas, the City of Camden is aware that revising and updating the plan is critical for active and effective hazard mitigation and that the City of Camden will monitor and record hazard related data and events that can be used to update the all hazards mitigation plan; and

Now, therefore, be it resolved, The Santee-Lynches Hazard Mitigation Plan is hereby adopted as an official plan of the City of Camden, and;

The City of Camden will continue to review and periodically report on the progress towards achieving the Action Plan Goals, a will submit appropriate revisions, updates and hazard occurrences as stipulated in the plan.

This resolution becomes effective as of the 23 day of June, 2020

CITY OF CAMDEN, SOUTH CAROLINA

Alfred Mae Drakeford

Mayor Alfred Mae Drakeford

(SEAL)

Attest:

Brenda Davis

City Clerk Brenda Davis

Town of Elgin – Adopting Resolution – Pending

Lee County – Adopting Resolution – Approved

HAZARD MITIGATION PLAN ADOPTION RESOLUTION

RESOLUTION ADOPTING THE LEE COUNTY

HAZARD MITIGATION PLAN UPDATE 2020-2025

WHEREAS, Lee County Council 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, Lee County and the Towns of Bishopville and Lynchburg participated jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a hazard mitigation plan; and

WHEREAS, Lee County and the Towns of Bishopville and Lynchburg are aware that revising and updating the plan is critical for active and effective hazard mitigation and that Lee County will monitor and record hazard related data and events that can be used to update the all hazards mitigation plan; and

NOW, THEREFORE, BE IT RESOLVED that Lee County Council hereby accepts and approves the Lee County Hazard Mitigation Plan Update 2020-2025 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, Lee County Council accepts the updated Hazard Mitigation Plan from the Hazard Mitigation Steering Committee, and the submission on behalf of the participating counties and municipalities of the adopted Hazard Plan to the State Emergency Management Division and to the Federal Emergency Management Agency officials for formal review and approval.

DONE AND APPROVED BY COUNCIL ON 9TH DAY OF JUNE, 2020.

Certifying Official

R. T. W

R. TRAVIS WINDHAM, CHAIRMAN
LEE COUNTY COUNCIL

City of Bishopville – Adopting Resolution – Pending

Town of Lynchburg – Adopting Resolution – Pending

Sumter County – Adopting Resolution – Approved

R-20-03

Hazard Mitigation Plan Adoption Resolution

Resolution Adopting the Sumter County, South Carolina Hazard Mitigation Plan Update 2020-2025

Whereas, Sumter County 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, Sumter County Government participated jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a hazard mitigation plan; and

Whereas, Sumter County Government is aware that revising and updating the plan is critical for active and effective hazard mitigation and that Sumter County Government will monitor and record hazard related data and events that can be used to update the all hazards mitigation plan; and

Now, therefore, be it resolved, that the Sumter County Government hereby accepts and approves the Sumter County Hazard Mitigation Plan Update 2020-2025 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 Sumter County 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: May 26, 2020)

Certifying Official:
(James J. McCain, Jr.)
Type Name and Signature of Chief Administrative or Elected Officials

Attest:
Mary W. Blanding
Clerk to Sumter County Council, Mary W. Blanding

City of Sumter – Adopting Resolution – Approved

RESOLUTION NO. 798

Adopting the Updated Hazard Mitigation Plan for the Santee-Lynches Region of South Carolina for 2020 to 2025

WHEREAS, the City of Sumter has experienced the effects of natural hazard events; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm and damage to people and property; and

WHEREAS, the City of Sumter participated jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a hazard mitigation plan; and

WHEREAS, the Hazard Mitigation Plan for the Santee-Lynches Region has been widely circulated for review by residents, business organizations/professional organizations, regional and local government agencies, and has been supported by those reviewers.

NOW, THEREFORE, BE IT RESOLVED, that the Santee-Lynches Hazard Mitigation Plan is hereby adopted as an official plan of the City of Sumter, and the City of Sumter will continue to monitor, review, maintain and periodically report on the progress towards achieving the Action Plan Goals, and will submit appropriate revisions, updates and hazard occurrences as stipulated in the Plan.

This Resolution shall become effective as of the 16th day of June 2020.

City of Sumter – Adopting Resolution Con't – Approved

Resolution No. 798
Page 2

ADOPTED THIS 16TH DAY OF JUNE 2020, BY SUMTER CITY COUNCIL.

CITY OF SUMTER, SOUTH CAROLINA

Joseph T. McElveen, Jr., Mayor

Thomas J. Lowery, Mayor Pro Tem

Ione J. Dwyer, Councilwoman

Calvin K. Hastie, Sr., Councilman

David P. Merchant, Councilman

Steven H. Corley, Councilman

Colin C. Davis, Councilman

ATTEST:

Linda D. Hammett, City Clerk

SANTEE LYNCHES
Regional Council of Governments

Town of Mayesville – Adopting Resolution – Approved

Resolution
Calling for the adoption of the updated hazard mitigation Plan for the Santee-Lynches region of South Carolina

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

Whereas, The Town of Mayesville participation jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a hazard mitigation plan; and

Whereas, the Hazard Mitigation Plan for the Santee- Lynches Region has been widely circulated for review by residents, business organizations/ professional organizations, regional and local government agencies and has been supported by those reviewers; and

Now, Therefore be it resolved: The Santee-Lynches hazard Mitigation Plan is hereby adopted as an official plan of The Town of Mayesville, and

The Town of Mayesville will continue to monitor, review, maintain and periodically report on the progress towards achieving the Action Plan Goals; and will submit appropriate revisions, updates and hazard occurances as stipulated in the plan.

This Resolution becomes effective as of the 9th day of June, 2020.

Jereleen Hollimon Miller, Mayor

ATTEST:

Robert L. Harrell, Clerk

Town of Pinewood – Adopting Resolution – Approved

RESOLUTION

CALLING FOR THE ADOPTION OF THE UPDATED HAZARD MITIGATION PLAN FOR THE SANTEE-LYNCHES REGION OF SOUTH CARALIONA.

WHEREAS, (The Town of Pinewood) has experienced the effects of natural hazard events; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm and damage to people and property; and

WHEREAS, (The Town of Pinewood) participated jointly in the planning process with the other units of government in the Santee-Lynches Region to prepare a hazard mitigation plan; and

WHEREAS, the Hazard Mitigation Plan for the Santee-Lynches Region has been widely circulated for review by residents, business organizations / professional organizations, regional, and local government agencies and has been supported by those reviewers; and

NOW, THEREFORE Be It Resolved: The Santee-Lynches Hazard Mitigation Plan is hereby adopted as an official plan of (The Town of Pinewood), and

This Resolution becomes effective as of the 9 day of June 2020.

JACKIE K. SPANN
Mayor

Leon B. Howze
Betty Jones
Brenda Whitley

ATTEST:

Felicia B. Lester
FELICIA B. LESTER, Clerk

Appendix K – Plan Updates and Comments

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Santee-Lynches Hazard Mitigation Plan

2020 – 2025

Clarendon County
City of Manning
Town of Summerton
Town of Paxville
Town of Turbeville

Kershaw County
City of Camden
Town of Bethune
Town of Elgin

Lee County
City of Bishopville
Town of Lynchburg

Sumter County
City of Sumter
Town of Mayesville
Town of Pinewood

SANTEE-LYNCHES REGIONAL COUNCIL OF GOVERNMENTS

Post Office Box 1837
Sumter South Carolina 29151