Saluda County Natural Hazard Mitigation Plan

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Record of Changes

Rev.	Date	Page	Change
0	6/15/15	All	Adoption of New Plan
1	11/24/15	35-39	Update Progress of Saluda County Mitigation Actions
1	11/24/15	39	Add Mitigation Actions for Saluda County
1	11/24/15	54, 67-69	Addition of 2015 Annual Hazard Mitigation Planning Committee Agenda, Minutes, and Sign-in Sheet
1	11/24/15	16	Addition of October 2015 flood as notable historical occurrence
1	11/24/15	49	Addition of DR-4241
2	8/7/19	48-52	Update Historical Events and Addition of DR-4346
2	8/14/19	23-24	Update HVA
2	10/10/19	Various	Update all Maps

I. Introduction

A. Background

The Disaster Mitigation Act of 2000, an amendment of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288) of 1988, set forth the mission to establish a national disaster hazard mitigation program to:

(1) *Reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters; and*
(2) *Provide a source of pre-disaster hazard mitigation funding that will assist States and local governments (including Indian tribes) in implementing effective hazard mitigation measures that are designed to ensure the continued functionality of critical services and facilities after a natural disaster*[1].

The Act also outlines the mandate that local governments shall develop and maintain a plan that shall:

(1) *Describe actions to mitigate hazards, risks, and vulnerabilities identified under the plan; and*
(2) *Establish a strategy to implement those actions*[2].

On April 18, 2001, the Saluda County Council passed a resolution creating the Saluda County Preparedness Agency (later renamed the Saluda County Emergency Management Division), whose director is charged with the development and maintenance of all emergency plans for Saluda County, including this Natural Hazard Mitigation Plan. As Saluda County shares many of the same goals and needs as the municipalities within the County and, as such, maintains a close relationship with these municipalities, it was decided early in the mitigation planning process that a single, multi-jurisdictional plan was the most appropriate course of action for all parties involved.

As the hazard mitigation planning committee began to review the 2010 plan in preparation for the 2015 planning cycle, it was determined that a new plan would be more appropriate than an update to the previous plan, as the previous plan did not appropriately reflect the mitigation strategy and goals of the jurisdictions, and was not well aligned with other Saluda County and municipal plans. This plan was updated in late 2019 for the 2020 planning cycle.

In accordance with the Disaster Mitigation Act of 2000 and the Saluda County Resolution dated April 18, 2001, Saluda County has updated the Saluda County Natural Hazard Mitigation Plan, replacing the previous plan originally adopted in 2015 to meet all federal guidelines set forth for mitigation planning, risk assessment, and grant program management.

B. Mission/Purpose

This plan outlines Saluda County's strategy for all natural hazard mitigation goals, actions, and initiatives. The Saluda County Natural Hazard Mitigation Plan is the result of the systematic evaluation of the nature and extent of vulnerability to the effects of natural hazards present in Saluda County and includes the actions needed to minimize future vulnerability to those hazards. It sets forth the policies, procedures, and philosophies that are used to establish and implement hazard mitigation activities within the county. Effective and consistent implementation of this plan is crucial to the hazard mitigation program and the county's efforts to reduce or eliminate the threat of future disasters. This plan incorporates all changes associated with the implementation of the Federal/State hazard mitigation program, including the applicable sections of the Disaster Mitigation Act of 2000. Overall administration of the hazard mitigation program shall be the responsibility of the Saluda County Emergency Management Division and participating municipalities.

II. Planning Process

A. Overview of Hazard Mitigation Planning

Mitigation planning is a critical component for a successful emergency management program. A comprehensive mitigation plan forms the foundation for a community's long-term strategy to reduce disaster losses, protect lives and property, and break the repetitive cycle of disaster damages, injuries, and loss of life. A core assumption of hazard mitigation is that a pre-disaster investment can significantly reduce the demand for post-disaster assistance. Further, the adoption of mitigation actions enables local residents, businesses, and industries to more quickly recover from a disaster, getting the economy back on track sooner and with less interruption. Mitigation planning is an integral step to becoming a less vulnerable, more resilient county, capable of fully recovering after a natural hazard event.

The benefits of mitigation planning go beyond reducing hazard vulnerability. Measures such as the acquisition or regulation of land in known hazard areas can help achieve multiple community goals, such as preserving open space, maintaining environmental health, and enhancing recreational opportunities. It creates a framework for risk-based decision making that will continue to not only protect the current infrastructure and populations, but prevent future generations and development from being significantly impacted by natural hazards. We cannot control nature, but we can control how we grow physically, economically, and socially in the future.

Updates to the Saluda County Natural Hazard Mitigation Plan began in late 2015 with a review of the 2015 plan by the Hazard Mitigation Committee. The plan was updated to include two federally declared disasters and updated mitigation actions. In the summer of 2019, the formal update process began for the 2020 plan update cycle. The Hazard Vulnerability Analysis, Risk

Assessment, and Capabilities Assessment were updated to reflect the incorporation of new data and changes in capabilities. Mitigation actions were updated to reflect progress and new ideas.

During the planning process, the hazard mitigation planning committee reviewed and incorporated existing plans, studies, reports, and technical information into this plan, to include Saluda County and Town of Saluda's Comprehensive Plans, the South Carolina Hazard Mitigation Plan, and data and analysis from the University of South Carolina's Hazard Vulnerability Institute and the National Oceanic and Atmospheric Administration's National Climatic Data Center.

The planning process utilized in the update of this plan is outlined below:

1. Continue the hazard mitigation planning committee
2. Update risk assessment
3. Update capabilities assessment
4. Update natural hazard mitigation action plan
5. Adopt and implement plan

B. Hazard Mitigation Planning Committee

As part of the development of this new plan, the planning committee membership was developed to include representatives from each jurisdiction represented in the plan. Current committee membership is reflected in **Table 1**.

Table 1 - Hazard Mitigation Planning Committee Membership

Name	Organization
Joshua Morton	Saluda County EMD Director*
Sandra Padget	Saluda County Director
Kes Holmes	Police Chief, Town of Saluda
Gerry Grenier	Police Chief, Town of Ridge Spring
Larry Lange	Mayor, Town of Ward
Jill Warren	Saluda County EMD Assistant Director

**Serves as chair of the committee*

C. Coordination with neighboring communities and local and regional agencies

Since the development of the first Saluda County Hazard Mitigation Plan, Saluda County has coordinated the development of the plan with the South Carolina Emergency Management Division, the South Carolina Department of Natural Resources, the University of South Carolina's Hazard and Vulnerability Research Institute, the Town of Saluda, the Town of Ridge Spring, the Town of Ward, and the Saluda County Water and Sewer Authority.

D. Public Involvement

Throughout the planning process, the public has been invited to participate in the development of this plan, in accordance with 44 CFR 201.6 (b)[3]. Public notices, placed in the Saluda Standard-Sentinel and the Greenwood Index-Journal, as well as on the Saluda County website, can be found in **Appendix** 6**: Public** Notices. On October 30, 2019 a draft copy of the plan was placed on the Saluda County website for public review and comment. Additionally, a public hearing was held on November 11, 2019. An additional public hearing will be held at the time of plan adoption.

E. Plan Adoption

Saluda County, the Town of Ridge Spring, and the Town of Saluda will formally adopt the 2020 Saluda County Hazard Mitigation Plan upon SCEMD and FEMA review and upon receipt of approval pending adoption (APA) status. These three jurisdictions will formally adopt the Saluda County Hazard Mitigation Plan in public meetings. Upon adoption, a copy of the resolutions will be placed in **Appendix 1: Adoption Resolutions**. A sample resolution is currently included in this appendix. Because the Town of Ward has no paid staff members, and does not have the ability to fund mitigation projects, the Town will not formally adopt the plan, and will rely on Saluda County to assist in addressing needs related to hazard mitigation. However, the Town of Ward has been a key participant in the planning process and has been fully integrated into the plan.

III. County and Municipal Profiles

A. Saluda County

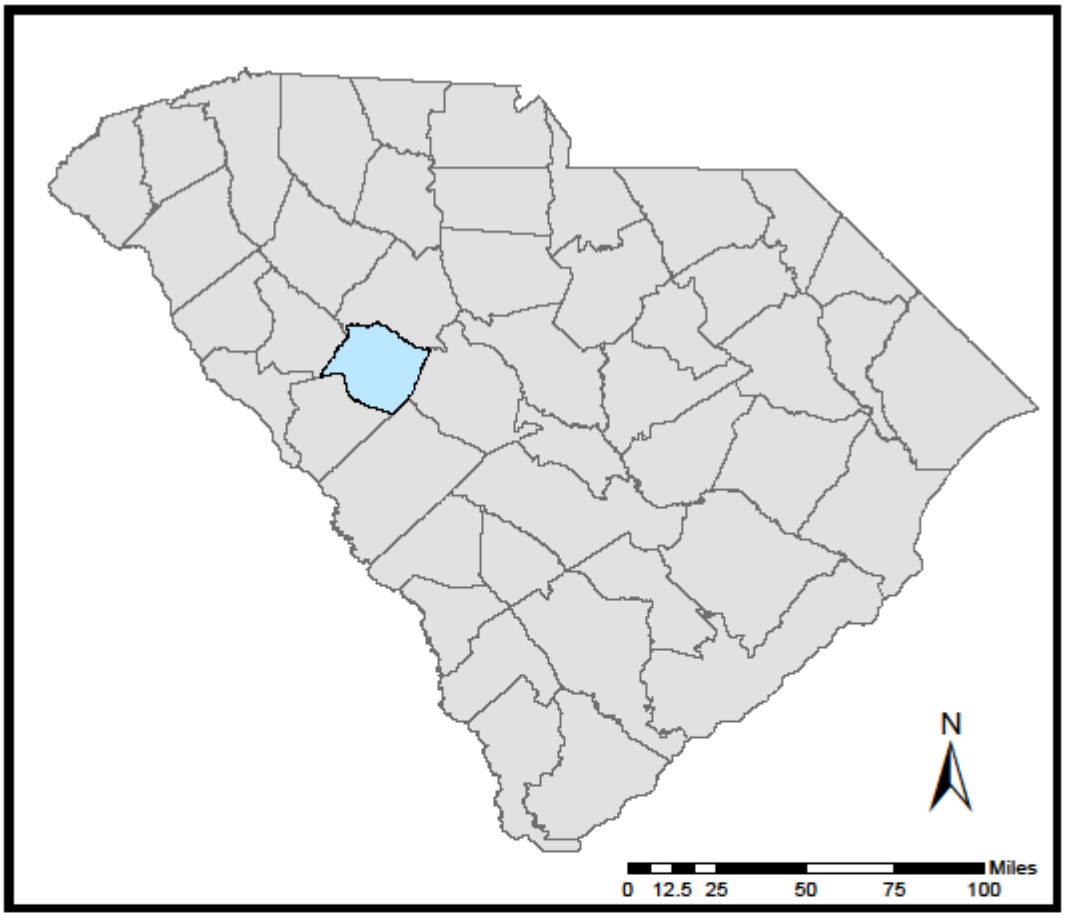
Saluda County is located near the geographic center of South Carolina. The county is bordered on the north by Newberry County and the Saluda River, on the east by Lexington County, to the south by Edgefield and Aiken Counties, and to the west by Greenwood County. The total land area in Saluda County is approximately 453 square miles. **Map 1** illustrates the location of Saluda County within the State of South Carolina.

The population of Saluda County based on the 2010 Census was 19,875, showing an increase of 694 over the preceding decade[4]. **Map 2** illustrates how this population is distributed throughout Saluda County. There has been no significant development in Saluda County since the previous plan was published.

The County contains three incorporated municipalities: **Saluda (county seat), Ridge Spring,** and **Ward**. Saluda County also contains the following unincorporated communities: Amick Grove, Delmar, Hollywood, Mayson, Merchant, Mount Willing, Owdoms, Richland Springs, and the Circle. Additionally, small portions of the incorporated towns of Batesburg-Leesville (Lexington County) and Monetta (Aiken County) also lie within Saluda County. **Map 3** illustrates the location of incorporated municipalities within Saluda County. There has been no significant development in any of these jurisdictions since the previous plan was published.

Map 1 - Location of Saluda County within South Carolina

Location of Saluda County Within South Carolina



Saluda County
Emergency Management Division

Date: 10/9/2019

Legend
Saluda County

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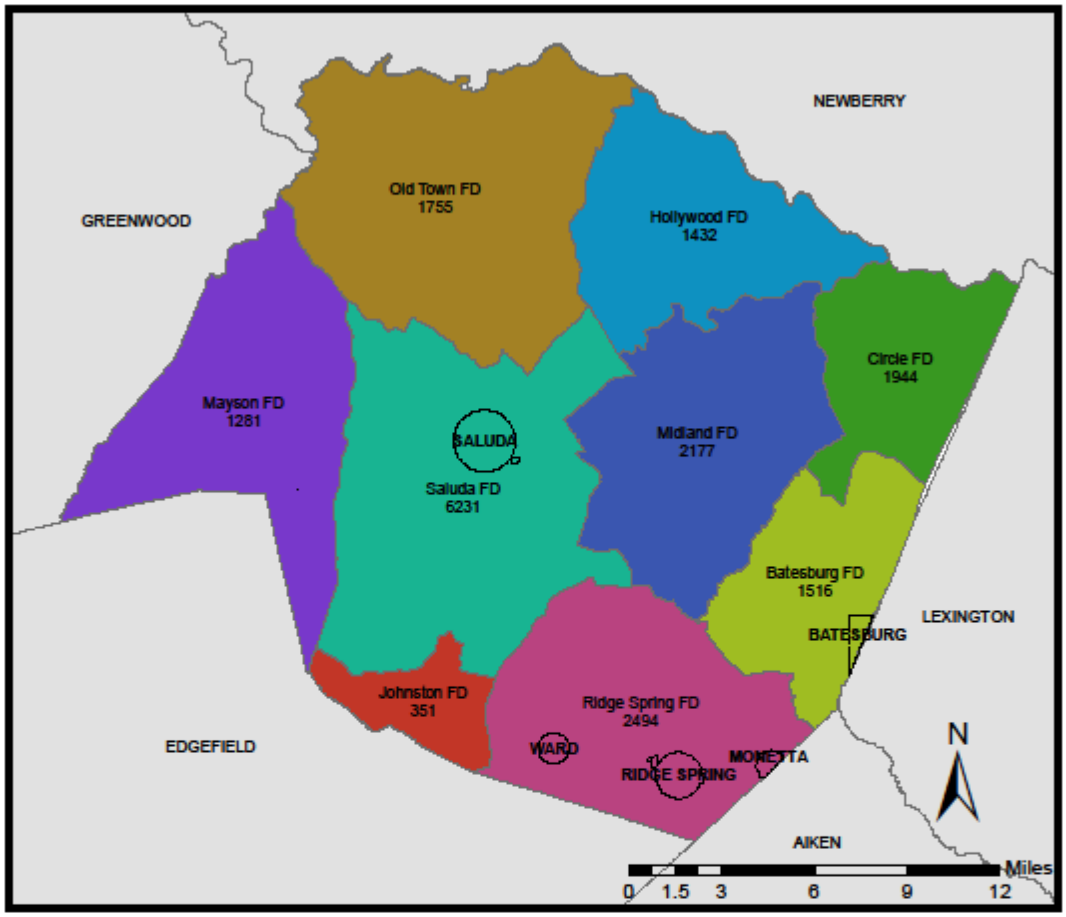
Map 2 - Saluda County Population Distribution by Fire Service Coverage Area

Population Distribution by Fire Service Coverage Area



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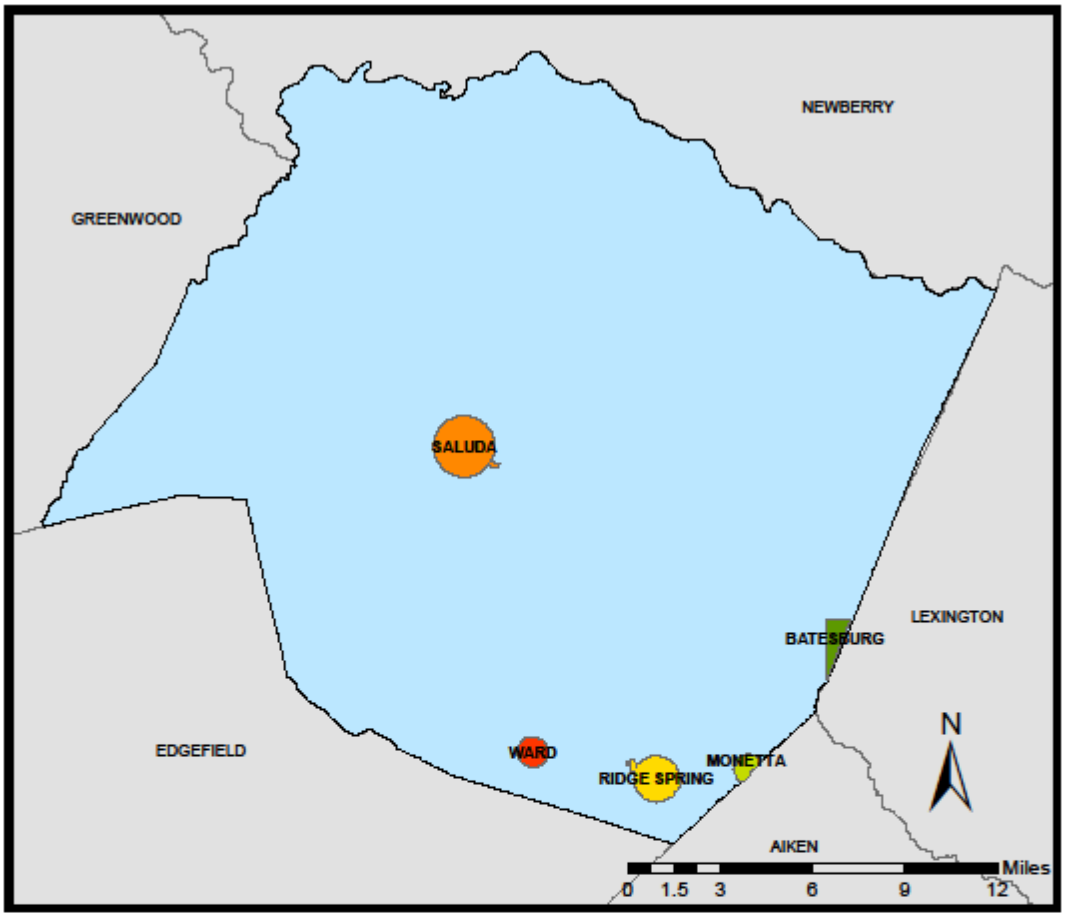
Map 3 - Location of Municipalities Within Saluda County

Location of Municipalities Within Saluda County



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Legend

BATESBURG | RIDGE SPRING | WARD
MONETTA | SALUDA

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B. Town of Saluda

The Town of Saluda is located near the geographic center of Saluda County and serves as the county seat. Saluda is the largest municipality in Saluda County, and is surrounded by unincorporated and largely undeveloped areas. The total land area of the Town of Saluda is approximately 3.24 square miles. The population of the town based on the 2010 Census was 3,565, marking an increase of 499 over the preceding decade[5].

C. Town of Ridge Spring

The Town of Ridge Spring is located along the southern border of Saluda County. The total land area of the town is approximately 1 square mile, and is surrounded primarily by agricultural or undeveloped land. The population of the town based on the 2010 Census was 737, marking a decrease of 86 over the preceding decade[6].

D. Town of Ward

The Town of Ward is located along the southwestern border of Saluda County. The total land area of the town is approximately 0.5 square miles, and is surrounded primarily by agricultural or undeveloped land. The population of the town based on the 2010 census was 91, marking a decrease of 19 over the preceding decade[7].

IV. Hazard Identification and Risk Assessment

A. Introduction

Saluda County, like all jurisdictions, is vulnerable to a wide range of natural hazards. The purpose of this risk assessment is to analyze the major hazards that affect Saluda County. Some hazards impact the County more so than others. A complete analysis has been performed for those natural hazards that are most likely to cause adverse impacts to people and property within the borders of Saluda County and municipalities.

For the majority of the analyses, the best available data was collected through 2017. Data for the risk assessment was derived primarily from the Spatial Hazard Events and Loss Database for the United States (SHELDUS) and the Storm Events Database from the National Climatic Data Center (NCDC), as well as from a variety of other sources and from state and local agencies. From these data sources, the historical hazard frequency of occurrence (risk) and losses are examined.

Each natural hazard type is given a section of its own providing a brief overview of the hazard and the maximum probable extent, as well as notable historical occurrences, if applicable. Lastly, a section on all-hazard vulnerability that examines historical frequency, risk, and losses is included.

Additional information regarding historical occurrences utilized in the hazard vulnerability analysis can be found in **Appendix 3: Historical Events.**

B. Social Vulnerability

Social vulnerability is considered in this document to analyze the underlying characteristics of the population that either attenuate or exacerbate the effects of hazard events. The Social Vulnerability Index (SoVI) "measures the social vulnerability of U.S. counties to environmental hazards." "The index synthesizes 30 socioeconomic variables, which the research literature suggests contribute to reduction in a community's ability to prepare for, respond to, and recover from hazards."[8] Key social indicators that consistently appear in the literature as influencing pre-impact preparedness and post-event response and recovery include attributes such as socioeconomic status (wealth, education, occupation), age (elderly populations and young children are more vulnerable); gender; race and ethnicity; employment and employment sector; and special needs populations. However, it is not just the proportion of residents in these broad categories that is important, but instead how race, socioeconomic status, and gender interact to produce socially vulnerable populations.

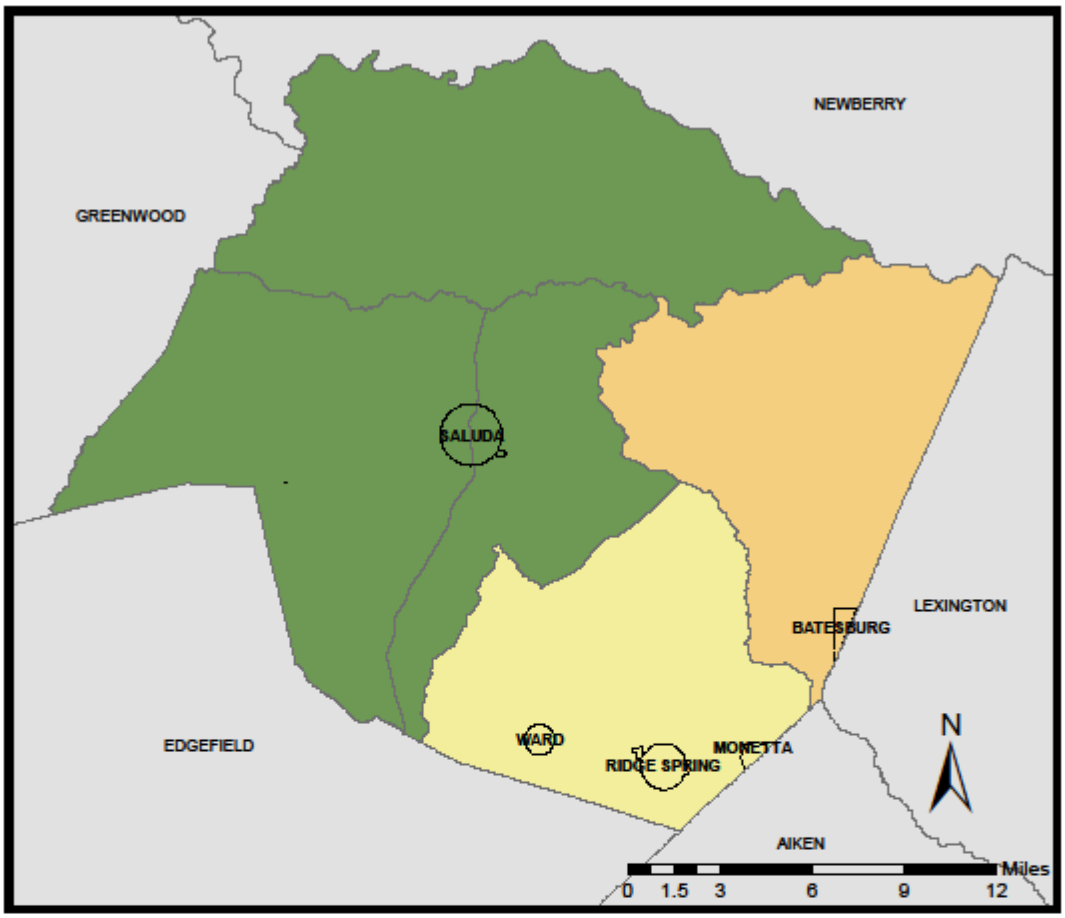
SoVI synthesizes these socioeconomic variables into multiple dimensions and sums the values to produce the overall score for the particular spatial unit (e.g. county, census tract) of interest. The resulting data allows emergency planners to begin to understand, at sub-county levels, the characteristics of the population and how these are increasing or decreasing vulnerability, in order to better identify where resources and attention should be directed for planning and mitigation[9].

Based on the SoVI methodology and data from years 2010-2014, Saluda County has a social vulnerability score of 0.129999995, ranking 16th out of the 46 South Carolina Counties and with a national percentile of 52.3%, meaning that Saluda County has a very average social vulnerability[8].

Within Saluda County, Social vulnerability varies from a medium vulnerability on the eastern border of the county to a high vulnerability in the central and western areas of the county. **Map 4** illustrates the social vulnerability of Saluda County.

Map 4 - Saluda County Social Vulnerability 2010-2014

Saluda County Social Vulnerability 2010-2014



Data Source: University of South Carolina Hazards and Vulnerability Research Institute

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Legend

High	Medium Low
Medium High	Low
Medium	

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C. Specific Hazards

i. Drought

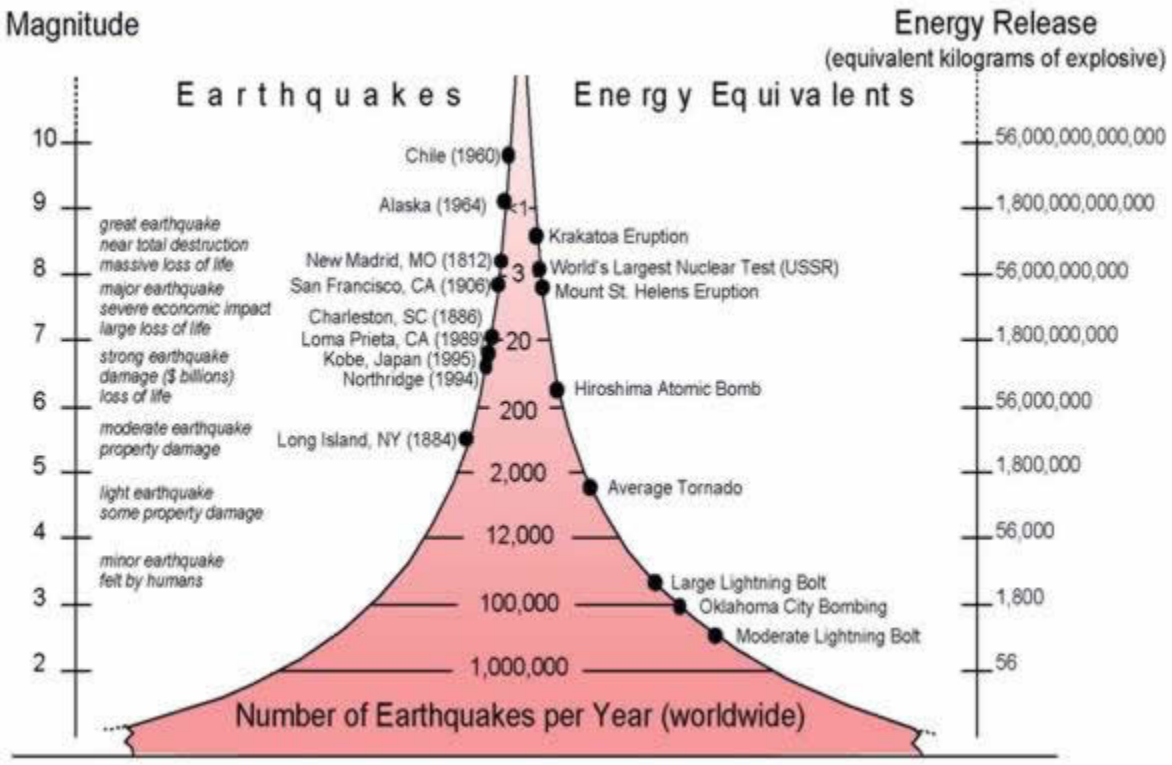
Periodic droughts are documented throughout Saluda County's historical climate record. Drought can be measured by departures of precipitation from a long-term average over an extended time. Due to the largely agricultural nature of Saluda County, drought conditions have the potential to have a significantly negative impact on the County's economy. There are 8 loss-causing drought events on record for Saluda County between 1960 and 2017, resulting in crop damages of $10,258,832.50 and property damages of $5,208,267.85[10]. In 2011, Saluda County experienced extreme drought (-4.0 and below on the Palmer Drought Severity Index) in the months of January, February, August, September, October, and December[11].

ii. Earthquake

An earthquake is ground shaking caused by a sudden movement of rock in the Earth's crust. Such movements occur along faults, which are thin zones of crushed rock separating blocks of crust. When one block suddenly slips and moves relative to the other along a fault, the energy released creates vibrations called seismic waves that radiate up through the crust to the Earth's surface, causing the ground to shake[12].

According to the United States Geological Survey, the magnitude of an earthquake is determined from the logarithm of the amplitude of waves recorded by seismographs. Adjustments are included for the variation in the distance between the various seismographs and the epicenter of the earthquakes. On the Richter Scale, magnitude is expressed in whole numbers and decimal fractions. For example, a magnitude 5.3 might be computed for a moderate earthquake, and a strong earthquake might be rated as magnitude 6.3. Because of the logarithmic basis of the scale, each whole number increase in magnitude represents a tenfold increase in measured amplitude; as an estimate of energy, each whole number step in the magnitude scale corresponds to the release of about 31 times more energy than the amount associated with the preceding whole number value[13]. **Figure 1** illustrates the energy equivalents of various magnitudes.

The only major recorded earthquake to be felt in Saluda County was the Charleston Earthquake of 1886 (estimated magnitude of 7.3). Saluda County is located in a medium risk earthquake zone, and has experienced a few minor earthquakes. Earthquake events in the vicinity of Saluda County can be found on **Map 5**.



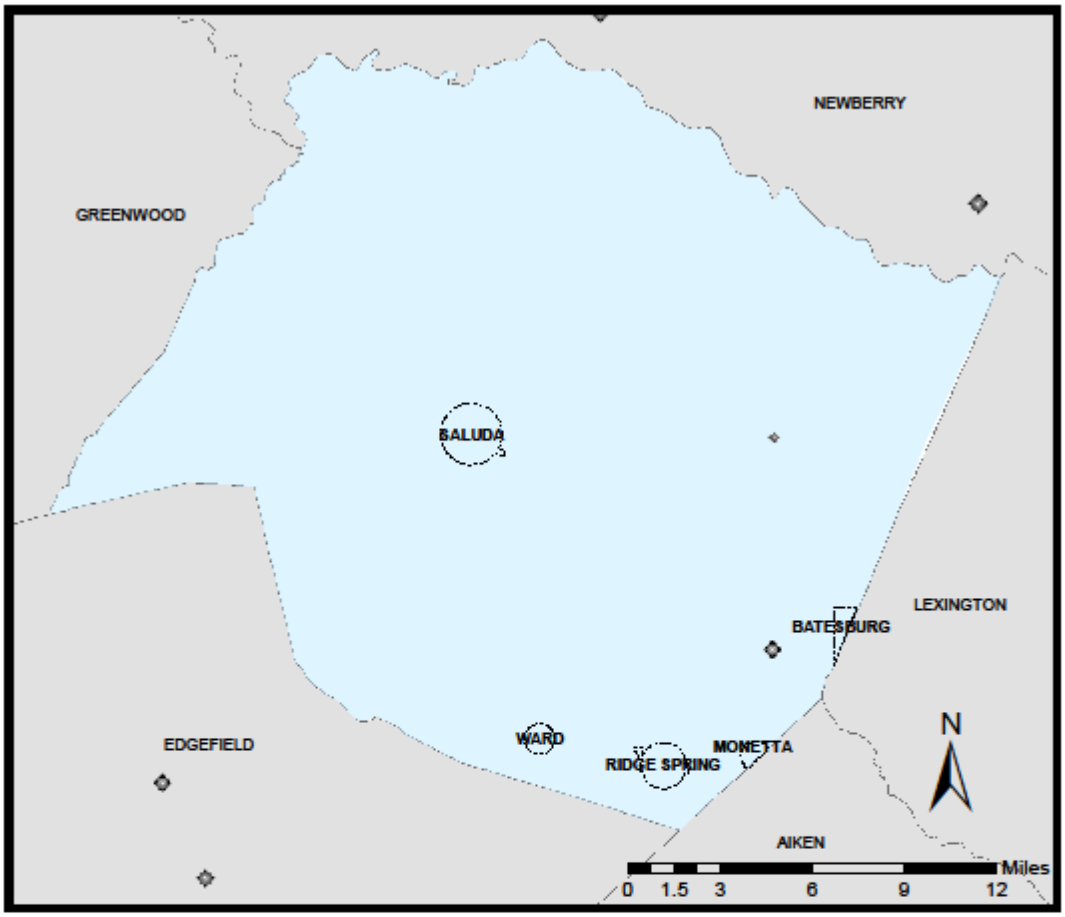
**Magnitude measured based on the Richter Scale*

Source: http://www.geology.ar.gov/geohazards/eq_geninfo.htm

Figure 1 - Earthquake Energy Equivalents

Map 5- Earthquake Events in the Vicinity of Saluda County

Earthquake Events in the Vicinity of Saluda County



Data Source: University of South Carolina Hazards and Vulnerability Research Institute

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<1	3.1 - 4
1 - 2	>4
2.1 - 3	

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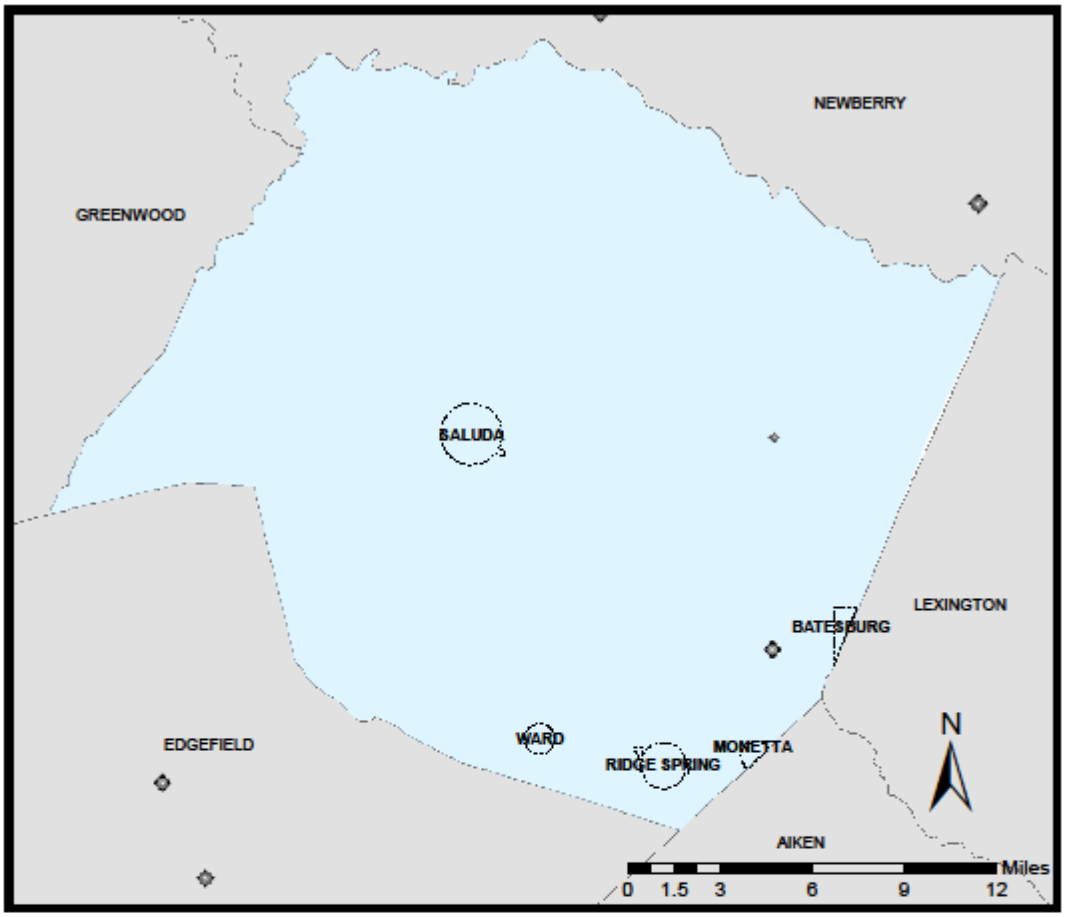
Map 6 - Saluda County Earthquake Frequency

Earthquake Events in the Vicinity of Saluda County



Data Source: University of South Carolina Hazards and Vulnerability Research Institute

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<1	3.1 - 4
1 - 2	>4
2.1 - 3	

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iii. Flooding

Flooding is defined by the NFIP as a general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties or the collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood as defined above[14].

Saluda County has streams that are subject to flooding during periods of heavy rainfall. The majority of these streams, however, have sufficient depth to their banks to prevent flooding that will endanger human lives or real property. The Saluda River, which marks the northern boundary of Saluda County, and Lake Murray have no significant history of flooding.

According to the National Climatic Data Center, since 1960, the largest recorded flooding event in Saluda County was on September 3, 2000. During this event, six inches of water were recorded in Ridge Spring, closing some roads and washing over creek beds[15].

Identification of floodplain areas within the county and the incorporated municipalities was based on the most recent Flood Insurance Rate Maps (FIRM) produced by FEMA. These maps display the locations of all major bodies of water within the county and delineate the 100-year floodplain boundaries. Based on these maps, 100-year floodplains exist only in the unincorporated areas of Saluda County and within the municipal limits of the Town of Saluda. However, while the other municipalities do not have mapped floodplains, they are not immune to flooding. According to the Saluda County Comprehensive Plan, nuisance flooding impacts many roads throughout the county and all municipalities due to poorly designed and maintained drainage systems.

Notable Historical Occurrences:

October 3, 2015: Beginning on October 3, 2015, Saluda County and other areas of South Carolina experienced a significant rainfall event that resulted in both flash and riverine flooding. Saluda County was declared for public assistance under federal disaster DR-4241 due primarily to significant loss of county roads during the event.

National Flood Insurance Program (NFIP)

In 1968, Congress created the NFIP to help provide a means for property owners to financially protect themselves. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the NFIP. Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding[16]. These ordinances are designed to guide development away from high-flood risk areas and to minimize the

impact of structures building is special flood hazard areas by requiring that they do not obstruct the natural flow of floodwaters.

Participation

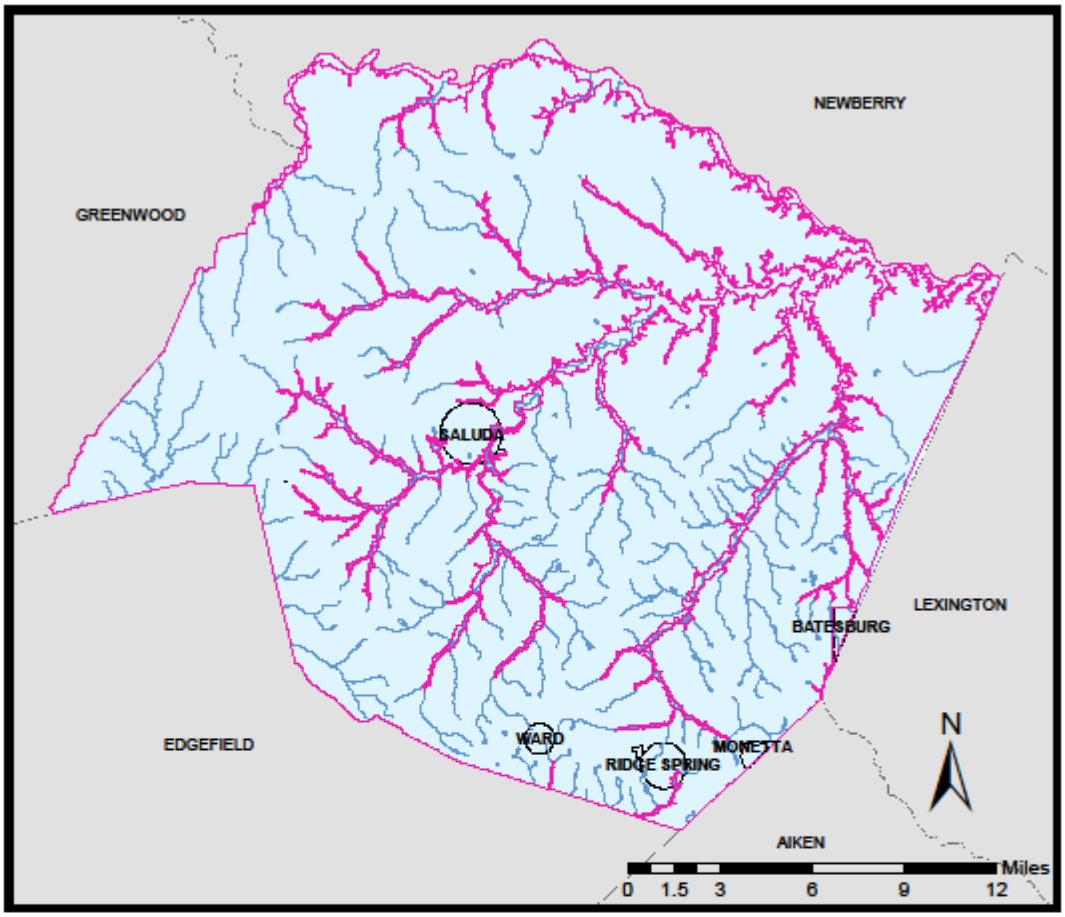
Both Saluda County and the Town of Saluda are active participants in the NFIP, and have continued compliance with NFIP requirements and objectives. These jurisdictions continue to manage construction and development within floodplain areas. The towns of Ridge Spring and Ward have no mapped special flood hazard areas and, therefore, are not participants in the NFIP.

Repetitive Loss

There are no documented repetitive loss properties within the boundaries of Saluda County.

Map 7 - Saluda County 100 - Year Flood Probability

Saluda County 100 Year Flood Probability



Data Source: Federal Emergency Management Agency Digital Flood Insurance Maps

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Legend

- Flood Hazard
- Streams

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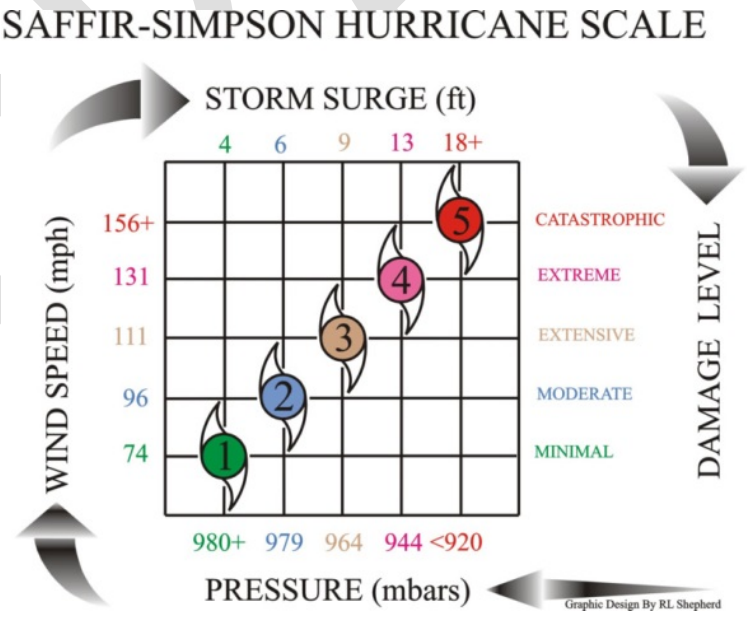
iv. Hail

Hail can occur year-round and can happen anywhere because it derives from severe thunderstorms[17]. Hail is a form of precipitation consisting of ice pellets that form when updrafts of thunderstorms carry water droplets to the freezing level of the atmosphere[18]. Hail can vary greatly in size, with larger sizes having the capability of causing property damage and injury or even death to both livestock and humans.

The largest hail event that has occurred in Saluda County was on April 24, 1999. A supercell thunderstorm moved south east through Saluda county and produced baseball size hail (upwards of 2.75") along its entire path. Damage was done to homes, buildings, farm equipment, vehicles, and crops. The damage path was about three miles wide. Two people were injured by the hail when they were caught outside in the middle of plowing their fields[19].

v. Hurricane/Tropical Storm

While Saluda County is considered an inland county and, as a result, is less susceptible to tropical systems than counties located closer to the South Carolina coast, the County can be, and in fact has been on numerous occasions, impacted by these storm systems. The worst-case scenario for Saluda County with regards to a tropical system would be for a large, strong hurricane (Category 4 or 5) to make landfall along the southern border of South Carolina and maintain strength while moving inland quickly. Fortunately, most of the storms that have impacted Saluda County have approached from the southeast and have weakened considerably prior to impacting the County.



Source: http://www.boqueteweather.com/saffir_simpson_hurricane_scale.htm

Figure 2 - Saffir-Simpson Scale

vi. Severe Thunderstorms and Lightning

A thunderstorm is a rainstorm event during which thunder is heard, which is audible due to lightning causing the air to heat and expand rapidly. Therefore, all thunderstorms have lightning[20].

A thunderstorm is classified as severe when at least one of the following occurs: wind speeds exceed 58 miles per hour, tornadoes spawn, or when hail exceeds 1.00 inches in diameter[21]. In the United States, about 10% of yearly thunderstorm events are classified as severe.

Lightning can cause injury and death. If thunder can be heard, lightning is present, and the best way to protect against lightning is to avoid it. The National Weather Service advises people to find an enclosed building to shelter in, while staying away from electronics, showers, sinks, and bathtubs. Fully enclosed automobiles are relatively safe because, if struck, the electricity will flow around the outside of the car.

The strongest recorded thunderstorm to strike Saluda County occurred on July 31, 2011, producing heavy rains and wind damage. Winds were recorded at greater than 70 knots[22].

vii. Tornado

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. Tornadoes may form at any time of the year. However, the peak time of year for these events occurs in the spring and early summer months of March through June, particularly during late afternoon and early evening. Tornados are measured using the Enhanced Fujita Scale (EF), which replaced the Fujita Scale in 2007. **Figure 3** illustrates the types of damage expected based on the EF rating. **Map 8** shows recorded tornado events within Saluda County from 1960 to 2012.

Notable Historical Occurrences

March 13, 1955: A category F2 tornado killed two and injured 10, causing approximately $250,000 in property damage.

November 22, 1992: Saluda County was impacted by two tornadoes, registering F2 and F3 respectively. One person was killed and 9 others were injured[23].

May 7, 1998: The Town of Ward was impacted by an F1 tornado, causing approximately $50,000 in property damage. No injuries or deaths were reported[23].

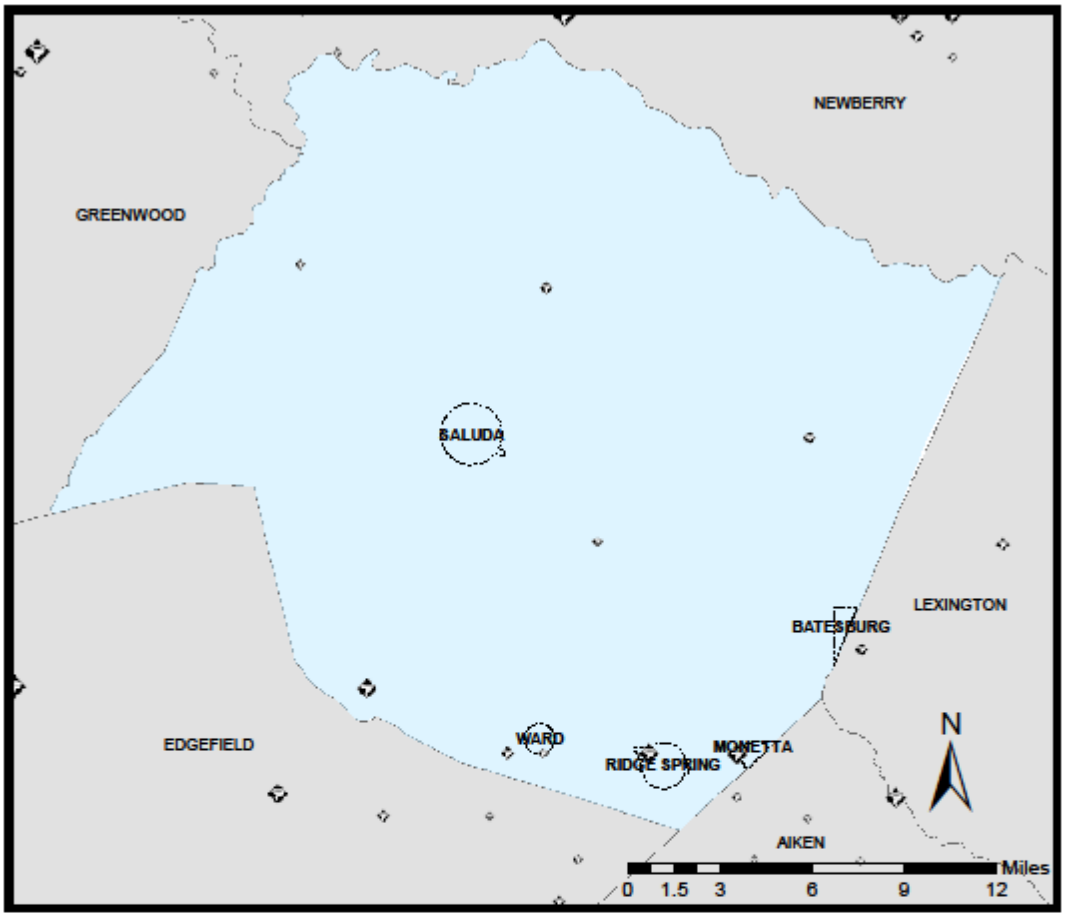
EF Rating	Wind Speeds	Expected Damage		
EF-0	65-85 mph	'Minor' damage: shingles blown off or parts of a roof peeled off, damage to gutters/siding, branches broken off trees, shallow rooted trees toppled.		
EF-1	86-110 mph	'Moderate' damage: more significant roof damage, windows broken, exterior doors damaged or lost, mobile homes overturned or badly damaged.		
EF-2	111-135 mph	'Considerable' damage: roofs torn off well constructed homes, homes shifted off their foundation, mobile homes completely destroyed, large trees snapped or uprooted, cars can be tossed.		
EF-3	136-165 mph	'Severe' damage: entire stories of well constructed homes destroyed, significant damage done to large buildings, homes with weak foundations can be blown away, trees begin to lose their bark.		
EF-4	166-200 mph	'Extreme' damage: Well constructed homes are leveled, cars are thrown significant distances, top story exterior walls of masonry buildings would likely collapse.		
EF-5	> 200 mph	'Massive/incredible' damage: Well constructed homes are swept away, steel-reinforced concrete structures are critically damaged, high-rise buildings sustain severe structural damage, trees are usually completely debarked, stripped of branches and snapped.		

Source: http://www.srh.noaa.gov/images/ohx/EF-Ratings.png

Figure 3 - Enhanced Fujita Scale and Expected Damages

Map 8 - Saluda County Tornado Events 1960-2016

Saluda County Tornado Events 1960-2016



Data Source: University of South Carolina Hazards and Vulnerability Research Institute

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Legend

EF-0
EF-1
EF-2
EF-3
EF-4

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viii. Wildfire

Wildfires are defined by the South Carolina Forestry Commission as any type of forest, grass, brush, or outdoor fire that is not controlled or managed[24]. In Saluda County, approximately 30 such fires occur each year, accounting for an average of 140 acres burned annually. Fire danger season is highest in late winter and early spring, due to dead or dormant vegetation increasing fuel supply.

It should be noted, however, that while approximately 30 wildfires occur each year, the majority of these fires are small and do not cause any significant property damage. As a result, the risk for wildfire in Saluda County is relatively low.

ix. Winter Weather

Winter storms and winter weather kill dozens of Americans each year, creating a variety of hazards including cold exposure, vehicle accidents, the improper use of heating devices, and other winter weather related incidents. Hazards associated with winter weather also include strong winds, extreme cold, flooding, heavy snow, and ice storms. Additional concerns related to winter weather include electrical and communications outages[25].

Notable Historical Occurrences

January 22-29, 2000: Heavy snowfall reported throughout the County. School and governmental facilities were forced to close. Saluda County was included in Major Disaster Declaration DR-1313[26].

January 26-30, 2004: A severe ice storm resulted in road and business closures. School and governmental facilities were forced to close. Saluda County was included in Major Disaster Declaration DR-1509[26].

February 10-14, 2014: A severe ice storm resulted in road and business closures. School and governmental facilities were forced to close. This storm produced ¼ inch of ice and 2-4 inches of snow across the county. Saluda County was included in Major Disaster Declaration DR-4166[26].

D. All-Hazard Vulnerability

While nearly all hazards can theoretically occur within the jurisdictions included in this plan, it is vital to identify those hazards that are (1) most likely to occur and (2) most likely to cause significant loss. In order to identify these hazards, the Hazard Mitigation Planning Committee analyzed data on loss-causing events from 1960 through 2017. After compiling this data, it was determined that a simple formula could be created in order to rank these hazards. Each hazard type was assigned two scores. The first is a probability score based on the future probability (% chance per year) of an incident occurring. The hazards were ranked in order from 2-10 (as there

were nine identified hazards included in the analysis), with the most likely event to occur (Severe Thunderstorm) receiving a score of 10, and the least likely to occur (Earthquake) receiving a score of 2. The second score is based on annualized losses. Again, hazards were ranked from 2-10, with the highest annualized losses (Winter Storm) receiving a score of 10, and the lowest annualized losses (Earthquake) receiving a score of 2. To determine an overall hazard score, and the overall hazard rankings, the probability score and annualized loss score were combined to determine an overall hazard score, which was then used to rank the hazards.

Table 2 includes data relevant to loss-causing events from 1960 through 2017, and illustrates both the probability of occurrence and the anticipated losses for included hazard types. The rightmost three columns indicate the probability, annualized loss, and overall hazard scores for each identified hazard.

Table 2 - Natural Hazard Vulnerability Analysis

Hazard	Historical Events (1960-2017)								Recent Events (2013-2017)					Hazard Score		
	Future Probability (%chance per year)	Frequency Interval	Annualized Losses	No. of Loss-Causing Events	Recorded Property Damage	Recorded Crop Damage	Deaths	Injuries	No. of Loss-Causing Events	Recorded Property Damage	Recorded Crop Damage	Deaths	Injuries	Probability Score	Annualized Loss Score	Overall Hazard Score
Winter Storm	49.12%	2.04	$341,279.75	28	$2,941,914.17	$16,511,031.30	2	1	1	$ 6,321.80	$ -	0	0	9	10	19
Severe Thunderstorm/ Lightning/Wind	142.11%	0.70	$ 61,730.90	81	$1,479,566.00	$2,039,095.31	2	15	7	$ 67,056.89	$ -	0	0	10	7	17
Hail	31.58%	3.17	$111,246.39	18	$3,131,782.12	$3,209,261.90	0	2	2	$ 25,357.23	$ 100.00	0	0	8	8	16
Drought	14.04%	7.13	$271,352.64	8	$5,208,267.85	$10,258,832.50	0	0	0	$ -	$ -	0	0	6	9	15
Flood	22.81%	4.38	$ 19,696.59	13	$169,374.82	$953,330.79	0	0	3	$ 38,029.45	$ 200.00	0	0	7	4	11
Tornado	7.02%	14.25	$ 32,250.02	4	$1,171,555.66	$666,695.45	2	13	0	$ -	$ -	0	0	4	6	10
Hurricane/Tropical Storm	8.77%	11.40	$ 19,885.79	5	$1,113,747.32	$ 19,742.71	0	0	0	$ -	$ -	0	0	5	5	10
Wildfire	3.51%	28.50	$ 6,777.18	2	$109,129.20	$277,170.24	0	0	0	$ -	$ -	0	0	3	3	6
Earthquake	0.00%		$ -	0			0	0	0	$ -	$ -	0	0	2	2	4

Data Source: SHELDUSv17

Table 4 illustrates both place vulnerability (hazard location) and the maximum probable extent for each hazard type addressed in the natural hazard vulnerability analysis. With regards to maximum probable extent, guidance from worksheet 5.1 of the Local Mitigation Planning Handbook[27] was utilized to assign each hazard a maximum probable extent for each jurisdiction as follows (numbers in parenthesis are utilized in **Table 4** to symbolize the maximum probable extent):

No Threat (0): The jurisdiction is not susceptible to the listed hazard.

Weak (1): Limited classification on scientific scale, slow speed of onset or short duration of event, resulting in little to no damage.

Moderate (2): Moderate classification on scientific scale, moderate speed of onset or moderate duration of event, resulting in some damage and loss of services for days.

Severe (3): Severe classification on scientific scale, fast speed of onset or long duration of event, resulting in devastating damage and loss of services for weeks or months.

Extreme (4): Extreme classification on scientific scale, immediate onset or extended duration of event, resulting in catastrophic damage and uninhabitable conditions.

Table 3 - Scientific Scales for Calculating Maximum Probable Extent

Hazard	Scale/Index	Weak	Moderate	Severe	Extreme
Drought	Palmer Drought Severity Index	-1.99 to +1.99	-2.00 to -2.99	-3.00 to -3.99	-4.00 and below
Earthquake	Modified Mercalli Scale	I to IV	V to VII	VII	IX to XII
	Richter Magnitude	2, 3	4, 5	6	7, 8
Hurricane Wind	Saffir-Simpson Hurricane Wind Scale	1	2	3	4, 5
Tornado	Fujita Tornado Damage Scale	F0	F1, F2	F3	F4, F5

Source: Local Mitigation Planning Handbook (Page A-30)

Table 4 - Natural Hazard Place Vulnerability and Maximum Probable Extent

Jurisdiction	Winter Storm	Severe Thunderstorm/ Lightning/ Wind	Hail	Drought	Flood	Tornado	Hurricane/ Tropical Storm	Wildfire	Earthquake
Saluda County	3	2	2	4	3	3	3	4	2
Town of Saluda	3	2	2	4	3	3	3	4	2
Town of Ridge Spring	3	2	2	4	2*	3	3	4	2
Town of Ward	3	2	2	4	2*	3	3	4	2

**While neither the Town of Ridge Spring nor the Town of Ward have mapped floodplains, both towns are susceptible to localized flooding issues from time to time during periods of heavy rainfall.*

V. Capabilities Assessment

The purpose of this section of the plan is to examine current mitigation capabilities within Saluda County and the municipalities. Local mitigation capabilities are existing authorities, policies, programs, and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities[27]. The four areas which will be addressed in this assessment are: (A) Planning and Regulatory; (B) Administrative and Staffing; (C) Financial; and (D) Education and Outreach.

A. Planning and Regulatory

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impact of hazards. **Table 5** indicates existing planning mechanisms in the four jurisdictions represented by this plan.

Table 5 - Existing Planning Mechanisms

Jurisdiction	Comprehensive Plan	Capital Improvement Plan	Building Codes	Flood Hazard Ordinance	Zoning Ordinance	Emergency Operations Plan
Saluda County	Yes	No	Yes	Yes	No	Yes
Town of Saluda	Yes	No	Yes	Yes	Yes	No*
Town of Ridge Spring	No	No	No*	No	No	No*
Town of Ward	No	No	No	No	No	No*

**Covered by Saluda County's plan, code, or ordinance.*

Comprehensive Plan

Comprehensive planning is the process of planning a future community, or the guidance and shaping of the expansion of a current community, in an organized manner and with an organized layout, taking into account such considerations as convenience for its inhabitants, environmental conditions, social requirements, recreational facilities, aesthetic design, and economic feasibility. Such planning includes a study of present requirements and conditions as well as projections for the future, and often includes proposals for implementing the plan[28]. Both Saluda County and the Town of Saluda have adopted comprehensive plans. Comprehensive plans are an essential part of hazard mitigation, as they can be utilized to ensure that various hazards are considered as future development is planned, ensuring that development is not centered in high hazard zones, such as floodplains, and that essential and emergency services are made available in areas where development is to occur.

Capital Improvement Plan

According to the National Capital Planning Commission, capital improvement plans provide a link between the visions articulated by comprehensive plans and annual capital expenditure

budgets[29]. From a hazard mitigation standpoint, capital improvement plans provide an opportunity for jurisdictions to layout potential facilities, infrastructure, and other improvements that could have a significant impact on the community's ability to avoid or recover from a variety of hazards. This plan also incorporates future upgrades, improvements, and replacement of current facilities and infrastructure. The capital improvement planning process has an impact on the hazard mitigation planning process by identifying shortfalls in current facilities and infrastructure, as well as identifying facilities and infrastructure that could be beneficial during a disaster situation. Currently, none of the jurisdictions covered by this plan have a capital improvement plan. As such, this has been identified as a future action in the mitigation action plan.

Building Codes

Building codes are perhaps one of the greatest tools local government has with regards to hazard mitigation. Building codes are defined as the minimum legal requirements established or adopted by a government to ensure the structural safety of buildings[30]. Through the adoption and enforcement of building codes, local governments can ensure that structures are built to withstand various hazards that threaten the community. Currently, the 2018 edition of the International Building Code (IBC) has been adopted by both Saluda County and the Town of Saluda. The Town of Ridge Spring has adopted the 2018 edition, but contracts with Saluda County for building code enforcement.

Flood Hazard Ordinance

Floodplains are an important asset to any community, providing vital natural functions such as temporary storage of floodwaters, moderation of peak flood flows, maintenance of water quality, and groundwater recharge, among many others. It is essential, however to manage development within the floodplains to ensure the protection of people, property, and infrastructure, and to minimize the expenditure of public money for costly flood control projects and rescue and relief efforts associated with flooding[31]. Flood hazard ordinances are utilized at the local level to reduce losses associated with development within floodplain areas. Currently, both Saluda County and the Town of Saluda have flood hazard ordinances, as both have mapped floodplains.

Zoning Ordinance

Zoning is defined as legislative action, usually on the municipal level, which separates or divides municipalities into districts for the purpose of regulating, controlling, or in some way limiting the use of private property, and the construction and/or structural nature of buildings erected within the zones or districts established[32]. Zoning ordinances are utilized for hazard mitigation purposes in much the same way as the comprehensive plan, except that, unlike the comprehensive plan, zoning ordinances are legally enforceable laws adopted by the jurisdiction. Currently, the Town of Saluda has enacted a zoning ordinance.

Emergency Operations Plan

The Emergency Operations Plan serves as the basic blueprint for responding to emergencies. This plan describes how people and property will be protected; details who is responsible for carrying out specific actions; identifies the personnel, equipment, facilities, supplies, and other resources available; and outlines how all actions will be coordinated[33]. The Emergency Operations Plan is utilized in the hazard mitigation planning process to help identify response capabilities for each hazard identified. Inversely, the Natural Hazard Mitigation Plan is utilized in the emergency operations planning process to help identify hazards most likely to affect the community, as well as potential response capability shortfalls.

B. Administrative and Staffing

The jurisdictions covered under this plan have limited administrative and staffing capabilities for carrying out hazard mitigation policies and projects. This is largely due to the size of these jurisdictions and overall staffing shortages within local government.

The following tables demonstrate the administrative and staffing capabilities of each jurisdiction included in this plan:

Table 6 - Administrative Capabilities

Jurisdiction	Legislative Council	Planning Commission	Mitigation Planning Committee	Mutual Aid Agreements
Saluda County	Yes	Yes	Yes*	Yes
Town of Saluda	Yes	Yes	Yes*	Yes
Town of Ridge Spring	Yes	No	Yes*	Yes
Town of Ward	Yes	No	Yes*	No

**All Jurisdictions are represented on the Saluda County Hazard Mitigation Planning Committee*

Table 7 - Staffing Capabilities

Jurisdiction	Emergency Manager	Building Codes Official	Floodplain Administrator	Community Planner	Civil Engineer	GIS Coordinator	Roads/ Streets Superintendent	Grant Writer
Saluda County	FT	FT	FT	No	No	FT	FT	FT
Town of Saluda	No[1]	PT	FT	FT[2]	No	No[1]	FT	FT[2]
Town of Ridge Spring	No[1]	No[1]	N/A	No	No	No[1]	No	No
Town of Ward	No[1]	No	N/A	No	No	No[1]	No	No

FT denotes full-time position, PT denotes part-time position
[1]Indicates that municipality relies on Saluda County for this service
[2]Indicates that the Town Administrator serves in this function

C. Financial

The ability to take mitigation actions in any jurisdiction is closely related to the amount of money available to implement policies and projects, as well as the amount of money necessary to take a specific mitigation action. The costs associated with various mitigation actions varies greatly, and funding eligibility from various sources can vary based on many factors, including jurisdiction size, median household income, and project to be completed.

As Saluda County has largely an agriculturally-based economy and has a relatively small tax base, local governmental funding for hazard mitigation projects at both the county and municipal level is extremely limited. As such, Saluda County and all municipalities must rely on other funding mechanisms to complete hazard mitigation projects. **Table 8** includes a list of potential funding sources for hazard mitigation activities, and denotes each jurisdiction's eligibility for these sources.

Table 8 - Potential Funding Source Eligibility

Potential Funding Source	Jurisdiction Eligibility		
	Saluda County	Town of Saluda	Town of Ridge Spring
Capital Improvement Project Funding	Yes	Yes	Yes
Authority to levy taxes for specific purposes	Yes	Yes	Yes
Incur debt through general obligations bonds and/or special tax bonds	Yes	Yes	Yes
Community Development Block Grant (CDBG)	No	Yes	Yes
Hazard Mitigation Grant Program (HMGP)	Yes	Yes	Yes
Pre-Disaster Mitigation Program (PDM)	Yes	Yes	Yes

D. Education and Outreach

Education and community outreach are perhaps the most readily accessible capabilities within Saluda County and, as such, many of the activities included in the mitigation action plan are centered on utilizing these capabilities.

VI. Hazard Mitigation Strategy

A. Hazard Mitigation Goals

Mitigation goals are general guidelines that explain what a community wants to achieve, typically in broad policy-type statements that are long term, representing visions for reducing or avoiding losses from identified hazards[27]. After reviewing goals published in the previous plan, the planning committee has developed a new set of goals that better reflects the intent of the mitigation program for all jurisdictions moving forward. None of the previous goals were carried over into this plan.

The planning committee has developed the following goals for mitigation planning for all jurisdictions:

Goal #1: Implement policies and projects designed to reduce or eliminate the impacts of hazards on people and property.

Goal #2: Implement policies and projects designed to reduce or eliminate disruptions to the functioning of the community's infrastructure.

Goal #3: Enhance training, education, and outreach efforts focusing on the effects of hazards, the importance of mitigation, and ways to increase resiliency.

Goal #4: Collect and utilize data, including conducting necessary studies and analyses, to improve policymaking and identify appropriate mitigation projects.

B. Evaluating and Prioritizing Mitigation Actions

Mitigation actions are defined as specific actions, projects, activities, or processes taken to reduce or eliminate long-term risk to people and property from hazards and their impacts[27]. The implementation of mitigation actions helps the community achieve the mission and goals established in this plan.

In order to identify potential mitigation actions, the hazard mitigation planning committee reviewed both the risk and capabilities assessments developed during the planning process. Potential actions were then developed based on brain storming sessions, a review of mitigation actions from the previous plan and mitigation plans from other jurisdictions, and a review of potential mitigation ideas published by FEMA[34]. The majority of the actions included are new to this plan, based on the new goals and strategies developed by the committee. There was no significant progress made on existing mitigation actions carried over from the previous plan.

After developing a list of potential mitigation actions for each jurisdiction, the committee evaluated and prioritized the most suitable mitigation actions for each jurisdiction. This evaluation was based on a variety of factors, including benefit-cost analysis and criteria outlined on worksheet 6.1 of the Local Mitigation Planning Handbook[27]. Not all identified potential actions are included in the final action plan because of technical feasibility, political acceptance, lack of funding, or other constraints.

The actions that have been included in the mitigation action plan have been prioritized by the Hazard Mitigation Planning Committee using the following process:

1. Analyze each item to determine which goal(s) the item addressed.
2. Analyze the number and types of hazards addressed by the action item, with priority given to items addressing multiple hazards and hazards with high overall hazard scores, as defined in the hazard vulnerability analysis.
3. Using estimated costs and required resources, conduct a benefit cost-analysis for each action item.
4. Assign each action item a priority of *High, Medium,* or *Low* as defined:

- ***High Priority (HP)*** – Actions associated with hazards that impact the community on an annual or nearly annual basis and generate impacts to critical facilities and/or people, and/or having a high benefit-cost ratio.

- ***Medium Priority (MP)*** – Actions associated with hazards that impact the community less frequently and do not typically generate impacts to critical facilities and/or people, and/or having a moderate benefit-cost ratio.

- ***Low Priority (LP)*** – Actions associated with hazards that rarely impact the community and have rarely generated documented impacts to critical facilities and/or people, and/or having a low benefit-cost ratio.

C. Mitigation Action Plan Implementation

The mitigation action plan identifies mitigation action items developed by the Hazard Mitigation Planning Committee with input from both internal and external agencies, as well as the public.

Responsible Organization

In order to clearly describe how actions will be implemented and administered, at a minimum, a specific agency, department, or position must be assigned to the action. As part of the Mitigation Action Plan, the Hazard Mitigation Planning Committee has identified a responsible organization for each action item. Some action items have multiple agencies listed as certain action items may require a substantial amount of coordination between multiple organizations.

Timeframes

The Hazard Mitigation Planning Committee has assigned a timeframe for each action item, based primarily on technical and economic feasibility. Each action item has been assigned a timeframe of *Short Term, Medium Term, Long Term, Ongoing,* or *Completed* as defined below:

- ***Short Term (ST)*** – Actions intended to be implemented within one to two years.
- ***Medium Term (MT) –*** Actions intended to be implemented within three to five years.
- ***Long Term (LT)*** – Actions that will require more than five years to implement.
- ***Ongoing (O)*** – Actions that have already begun implementation but have no definite ending.
- ***Completed (C)*** – Actions that have been completed.

Potential Funding Sources

While some hazard mitigation action items can be completed with minimal funding, the implementation of others may be dependent on funding from programs outside the jurisdiction. Keeping this in mind, the Hazard Mitigation Planning Committee has identified potential funding sources for each mitigation action item. In addition to local and state funding, the following programs have been identified as potential funding sources for hazard mitigation action items:

- FEMA Hazard Mitigation Grant Program (HMGP)
- FEMA Pre-Disaster Mitigation Grants (PDM)
- Flood Mitigation Assistance Program (FMA)
- DHS State Homeland Security Program Grant (SHSP)
- Local Emergency Management Performance Grant (LEMPG)
- CDC Hospital Preparedness Program (HPP)
- FEMA Fire Prevention and Safety Grant Program (FP&S)
- Community Development Block Grant (CDBG)
- National Oceanic and Atmospheric Administration (NOAA)

VII. Monitoring, Evaluating, and Updating the Plan

A. Monitoring and Evaluation

Monitoring of this plan is required to ensure that the goals of Saluda County are kept current, to include monitoring which mitigation efforts are being carried out and ensuring that the plan remains in compliance with local, state, and federal requirements. The Saluda County Emergency Management Division staff is responsible for monitoring the implementation of this plan. An annual review will be conducted by the Hazard Mitigation Planning Committee to evaluate and monitor the implementation of the plan and to ensure that the goals set forth in this plan are being achieved.

B. Plan Maintenance Cycle

As required by 44 CFR Part 201, this plan will be updated at least every five (5) years[35]. For future updates, the Saluda County Emergency Management Division, with the coordination of the Hazard Mitigation Planning Committee will continue to review the plan on an annual basis and make modifications when deemed necessary. The Hazard Mitigation Planning Committee will also evaluate the nature and magnitude of hazard events and/or community development that has changed since the plan's implementation. Additionally, the plan will remain available for public comment on the Saluda County website, and all Hazard Mitigation Planning Committee meetings will be open to the public.

Table 9 outlines the actions to be taken in each year of the plan update cycle.

Table 9 - Plan Update Cycle

Year	Review Plan	Review and Update Mitigation Actions	Update Risk Assessment	Update Capabilities Assessment	Conduct and Submit Formal Plan Update
1	X	X			
2	X	X			
3	X	X	X		
4	X	X		X	
5	X	X			X

Saluda County Mitigation Action Plan

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
1	Identify facilities for emergency sheltering of citizens during and following natural disasters.	Tornados, Winter Weather, Flooding, Hurricanes and Tropical Storms, Wildfire	HP O	Local and State Funding	Saluda County EMD, American Red Cross	American Red Cross working with various facilities across the county.
1	Retrofit shelter facilities to include backup power and communication systems.	Winter Weather, Hurricanes and Tropical Storms	HP MT	HMGP, PDM, SHSP, HPP, Local and State Funding	Saluda County EMD, Saluda County Council, Saluda County School District, Facility Owners	Seeking funding for additional retrofits.
1	Implement and enforce building and zoning codes to ensure that no new structures are built within the floodplains.	Flooding	HP O	Local and State Funding	Saluda County Building Codes	Successfully implemented. Currently maintaining.
1	Expand fire hydrant coverage into currently un-serviced areas of the county and municipalities.	Wildfire	MP O	AFG, CDBG, Local and State Funding	Saluda County Water and Sewer Authority, Saluda CPW, Ridge Spring Public Works	Ongoing. Seeking additional funding.
1	Continue the installation of "dry" hydrants in the rural portions of Saluda County.	Wildfire	MP O	AFG, Local and State Funding	Saluda County Fire Service, Private Property Owners	Currently identifying additional sites for dry hydrants.
1	Adopt and enforce updated building code provisions to reduce earthquake damage risk.	Earthquake	LP O	Local and State Funding	Saluda County Building Codes	County has adopted most current codes and is enforcing.

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
1	Plan for and install an outdoor emergency siren warning system throughout the county.	Tornado	MP C	NOAA	Saluda County EMD	9 sirens installed throughout the county in September 2009. Will be removed in future plan update due to completion
2	Install and maintain a UPS system and generator for the county's computer systems.	Severe Thunderstorms and Lightning, Winter Weather, Hurricane/ Tropical Storm	HP C	HMGP, PDM, SHSP, Local and State Funding	Saluda County Information Technology	The County currently has a UPS system on all systems. Generator installed in 2016.
1, 2	Develop new and/or upgrade existing water delivery systems to eliminate breaks and leaks.	Drought, Wildfire	LP O	CDBG, Local and State Funding	Saluda County Water and Sewer Authority, Saluda CPW, Ridge Spring Public Works	New water treatment plant opened in 2019.
1, 2	Develop a capital improvement plan, highlighting capital improvements that will help mitigate future disasters.	Winter Weather, Severe Thunderstorms and Lightning, Hail, Flood, Tornado, Hurricane/ Tropical Storm, Wildfire, Earthquake	MP O	Local and State Funding	Saluda County Council	Developed as part of the Saluda County Comprehensive Plan. Plan will be updated as needed.

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
1, 2	Provide emergency power supply to all existing critical facilities.	Winter Weather, Severe Thunderstorms and Lightning, Hurricane/ Tropical Storms, Earthquake, Tornado	HP O	HMGP, PDM, SHSP, HPP, Local and State Funding	Saluda County EMD, Saluda County Council	The county has currently installed generators at the county EOC, Dispatch Center, Communications Tower, Jail, and Coroner's Holding Facility. Generator added at courthouse in 2016.
1, 2	Identify critical road drainage concerns throughout the county. Inspect and improve or retrofit road drainage systems.	Flooding	MP O	HMGP, PDM, Local and State Funding	Saluda County Roads and Bridges, SC DOT	Currently working to increase size of drainage pipes under county roads as needed.
3	Conduct annual fire safety programs for children, with an emphasis on fire prevention for both structural and wildfires.	Wildfire	MP O	FP&S, Local and State Funding	Saluda County Fire Service	An annual fire safety camp is held at the Hollywood Fire Department. Saluda County Fire Service also conducts programs in conjunction with Saluda County Schools.
3	Collect educational materials on individual and family preparedness/ mitigation measures for property owners, and display at public facilities, including libraries and county and municipal government offices.	Severe Thunderstorms and Lightning, Winter Weather, Flooding, Hurricane/ Tropical Storm, Tornado, Wildfire Earthquake	HP O	LEMPG, FP&S, Local and State Funding Sources	Saluda County EMD	Display locations have been identified in multiple county facilities and are utilized to distribute these materials.

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
3	Educate children about the dangers associated with natural hazards and how to take safety precautions.	Severe Thunderstorms and Lightning, Winter Weather, Hail, Flooding, Hurricane/ Tropical Storm, Tornado, Wildfire, Earthquake	HP O	LEMPG, Local and State Funding	Saluda County EMD	Annual programs are conducted in conjunction with Saluda County Schools.
3	Incorporate and promote social media to engage the public before, during, and after disasters.	Severe Thunderstorms and Lightning, Winter Weather, Hail, Flooding, Hurricane/ Tropical Storm, Tornado, Wildfire, Earthquake	HP O	Local and State Funding	Saluda County EMD	Saluda County EMD has successfully incorporated social media to engage the public through both Facebook and Twitter.
1, 3	Encourage agricultural interests to obtain crop insurance to cover potential losses due to drought.	Drought, Flood	MP O	Local and State Funding	Saluda County Economic Development, Clemson Extension	No significant progress reported.
4	Expand the current Geographic Information System (GIS) to incorporate current cadastral (building/parcel) data for purposes of conducting more detailed hazard risk assessments and for tracking land use patterns.	Flooding, Wildfire	MP O	Local and State Funding	Saluda County GIS	GIS has added parcel data and is working to keep this data current.

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
4	Expand the current Geographic Information System (GIS) to incorporate hazard related layers for the purpose of conducting more detailed hazard risk assessments.	Flooding, Tornado, Wildfire, Earthquake, Hurricane/ Tropical Storm	MP O	Local and State Funding	Saluda County GIS	Hazard layers have been added to the GIS database. GIS is working with Saluda County EMD to keep this data current.
4	Conduct Mitigation Public Opinion Surveys to determine personal preparedness and knowledge levels about hazard mitigation and garner public input for future updates to this plan.	Severe Thunderstorms and Lightning, Hail, Flooding, Drought, Hurricane/ Tropical Storm, Tornado, Wildfire, Earthquake	HP ST	LEMPG, Local and State Funding	Saluda County EMD	No significant progress reported.
2, 3	Educate and encourage citizens to take measures to conserve water.	Drought	MP O	Local and State Funding	Saluda County Water and Sewer Authority, Saluda CPW, Ridge Spring Public Works	This has been successfully implemented and is ongoing.
1, 2	Implement an inspection program for all high hazard and significant hazard dams located within Saluda County	Flooding	MP O	HMGP, PDM, Local and State Funding, Private Funding	SCDHEC, Dam Owners	New Action added November, 2015. SCDHEC is working with dam owners.
1, 2	Ensure that all dams located within Saluda County are regularly and properly maintained and repaired as necessary	Flooding	MP O	HMGP, PDM, Private Funding	SCDHEC, Dam Owners	New Action added November, 2015

Town of Saluda Mitigation Action Plan

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
1	Identify facilities for emergency sheltering of citizens during and following natural disasters.	Tornados, Winter Weather, Flooding, Hurricanes and Tropical Storms, Wildfire	HP O	Local and State Funding	Saluda County EMD, American Red Cross	Ongoing
1	Acquire and demolish vacant facilities that have not been maintained.	Winter Weather, Hurricane/ Tropical Storm, Earthquake, Tornado, Wildfire	HP O	HMGP, PDM, SHSP, HPP, Local and State Funding	Town of Saluda, Saluda County Government, Grant Funding	Have acquired and demolished approximately 10 structures.
1	Hire a part time fire marshal that will inspect all existing commercial and or rental properties	Severe Wind or Tornados , Winter Weather, Hurricane/ Tropical Storm, Earthquake	HP ST	AFG, CDBG, Local and State Funding	Town of Saluda	No significant progress made.
1, 2	Develop a capital improvement plan, highlighting capital improvements that will drive future development and help mitigate future disasters.	Winter Weather, Severe Thunderstorms and Lightning, Hail, Flood, Tornado, Hurricane/ Tropical Storm, Wildfire, Earthquake	MP MT	CDBG, Local and State Funding	Town of Saluda	No significant progress made.
1, 2	Bury utility lines within the town limits	Severe Thunderstorms and Lightning, Winter Weather, Hurricane/ Tropical Storm, Earthquake, Tornado	MP LT	Dominion Energy	Dominion Energy	No significant progress made.

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
1, 2	Provide emergency power supply to all existing critical facilities.	Severe Thunderstorms and Lightning, Winter Weather, Hurricane/ Tropical Storm, Earthquake, Tornado	HP O	AFG, CDBG, Local and State Funding	Town of Saluda	Install solar panels on town hall.
1	Retrofit shelter facilities to include backup power and communication systems.	Winter Weather, Hurricanes and Tropical Storms	HP MT	HMGP, PDM, SHSP, HPP, Local and State Funding	Town of Saluda, Saluda County EMD, Facility Owners	No significant progress made.
1	Adopt and enforce updated building code provisions to reduce earthquake damage risk.	Earthquake	LP O	Local and State Funding	Town of Saluda Building Codes	Ongoing.
1, 2	Develop new and/or upgrade existing water delivery systems to eliminate breaks and leaks.	Drought, Wildfire	LP O	CDBG, Local and State Funding	Saluda CPW	
2, 3	Educate and encourage citizens to take measures to conserve water.	Drought	MP O	Local and State Funding	Saluda CPW	
1, 2	Identify critical road drainage concerns throughout the town. Inspect and improve or retrofit road drainage systems.	Flooding	MP O	HMGP, PDM, Local and State Funding	Saluda County Roads and Bridges, SC DOT, Town of Saluda Streets and Sanitation	
1	Implement and enforce building and zoning codes to ensure that no new structures are built within the floodplains.	Flooding	HP O	Local and State Funding	Town of Saluda Building Codes	

Town of Ridge Spring Mitigation Action Plan

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
1	Identify facilities for emergency sheltering of citizens during and following natural disasters.	Tornados, Winter Weather, Flooding, Hurricanes and Tropical Storms, Wildfire	HP O	Local and State Funding	Saluda County EMD, American Red Cross	Ongoing
1	Retrofit shelter facilities to include backup power and communication systems.	Winter Weather, Hurricanes and Tropical Storms	HP MT	HMGP, PDM, SHSP, HPP, Local and State Funding	Town of Ridge Spring, Saluda County EMD, Facility Owners	Ongoing
1	Expand fire hydrant coverage into currently un-serviced areas of the county and municipalities.	Wildfire	MP O	AFG, CDBG, Local and State Funding	Ridge Spring Public Works	Ongoing
1	Adopt and enforce updated building code provisions to reduce earthquake damage risk.	Earthquake	LP O	Local and State Funding	Saluda County (Safebuilt)	Ongoing
2	Install and maintain additional telephone lines at the Ridge Spring Fire Department, which will serve as the backup facility for the Ridge Spring Town Hall	Severe Thunderstorms and Lightning, Winter Weather, Hurricane/ Tropical Storm, Earthquake	HP ST	Local Funding	Ridge Spring Fire Department	Ongoing
1, 2	Develop new and/or upgrade existing water delivery systems to eliminate breaks and leaks.	Drought, Wildfire	LP O	CDBG, Local and State Funding	Ridge Spring Public Works	Ongoing

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
1, 2	Develop a capital improvement plan, highlighting capital improvements that will help mitigate future disasters.	Winter Weather, Severe Thunderstorms and Lightning, Hail, Flood, Tornado, Hurricane/ Tropical Storm, Wildfire, Earthquake	MP MT	Local and State Funding	Ridge Spring Town Council	Ongoing
1, 2	Provide emergency power supply to all existing critical facilities.	Winter Weather, Severe Thunderstorms and Lightning, Hurricane/ Tropical Storm, Earthquake, Tornado	HP O	HMGP, PDM, SHSP, HPP, Local and State Funding	Town of Ridge Spring	Installed generator at Ridge Spring Fire Department.
1, 2	Identify critical road drainage concerns throughout the town. Inspect and improve or retrofit road drainage systems.	Flooding	MP O	HMGP, PDM, Local and State Funding	Saluda County Roads and Bridges, SC DOT	Ongoing
3	Conduct annual fire safety programs for children, with an emphasis on fire prevention for both structural and wildfires.	Wildfire	MP O	FP&S, Local and State Funding	Saluda County Fire Service	Ongoing
3	Collect educational materials on individual and family preparedness/ mitigation measures for property owners, and display at public facilities, including libraries and county and municipal government offices.	Severe Thunderstorms and Lightning, Winter Weather, Flooding, Hurricane/ Tropical Storm, Tornado, Wildfire Earthquake	HP O	LEMPG, FP&S, Local and State Funding Sources	Saluda County EMD	Ongoing

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority and Timeframe	Potential/ Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
3	Educate children about the dangers associated with natural hazards and how to take safety precautions.	Severe Thunderstorms and Lightning, Winter Weather, Hail, Flooding, Hurricane/ Tropical Storm, Tornado, Wildfire, Earthquake	HP O	LEMPG, Local and State Funding	Saluda County EMD	Ongoing
3	Incorporate and promote social media to engage the public before, during, and after disasters.	Severe Thunderstorms and Lightning, Winter Weather, Hail, Flooding, Hurricane/ Tropical Storm, Tornado, Wildfire, Earthquake	HP O	Local and State Funding	Town of Ridge Spring, Saluda County EMD	Ongoing
1, 3	Encourage agricultural interests to obtain crop insurance to cover potential losses due to drought.	Drought	MP O	Local and State Funding	Saluda County Economic Development, Clemson Extension	Ongoing
2, 3	Educate and encourage citizens to take measures to conserve water.	Drought	MP O	Local and State Funding	Ridge Spring Public Works	Ongoing

Appendix 1: Adoption Resolutions

Sample Adoption Resolution

WHEREAS, The County of Saluda 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 natural hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, the County of Saluda participated jointly in the planning process with the other local units of government within the County to prepare a Natural Hazard Mitigation Plan;

NOW, THEREFORE BE IT RESOLVED, that the Saluda County Council hereby adopts the Saluda County Natural Hazard Mitigation Plan as an official plan; and

BE IT FURTHER RESOLVED, that Saluda County will submit on behalf of the participating municipalities the adopted Natural Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

Appendix 2: Declared Disasters

Year	Date	Declaration	Disaster
2017	10/16	DR-4346	South Carolina Hurricane Irma
2015	10/3	DR-4241	South Carolina Severe Storms and Flooding
2014	3/12	DR-4166	South Carolina Severe Winter Storm
2014	2/12	EM-3369	South Carolina Severe Winter Storm
2005	9/10	EM-3233	South Carolina Hurricane Katrina Evacuation
2004	2/13	DR-1509	South Carolina Severe Ice Storm
2000	1/31	DR-1313	South Carolina Winter Storms
1977	8/4	EM-3047	South Carolina Drought

Source: www.FEMA.gov

Appendix 3: Historical Events

Included in this appendix are the historical events utilized for conducting the Hazard Vulnerability Analysis. For purposes of this analysis, lightning and wind events were combined with severe thunderstorm, as these events have similar effects and often accompany one another.

HAZARD TYPE	YEAR	PROPERTY DAMAGE	CROP DAMAGE	FATALITIES	INJURIES
Coastal	1983	$6,805.31	$680.53	0	0
Drought	1977	$2,237.00	$223,698.69	0	0
Drought	1978	$249.51	$6,237.51	0	0
Drought	1984	$0.00	$2,609.47	0	0
Drought	1986	$249,848.59	$2,501,251.36	0	0
Drought	1988	$2,547.04	$30,602.62	0	0
Drought	1993	$4,953,385.71	$4,953,385.71	0	0
Drought	1994	$0.00	$1,829,438.70	0	0
Drought	1995	$0.00	$711,608.44	0	0
Flooding	1964	$874.62	$874.62	0	0
Flooding	1966	$8,368.01	$8,368.01	0	0
Flooding	1973	$11,433.67	$484,352.83	0	0
Flooding	1975	$2,841.71	$32,448.52	0	0
Flooding	1976	$47,649.02	$47,649.02	0	0
Flooding	1978	$24,949.98	$2.09	0	0
Flooding	1980	$4,935.51	$3,454.87	0	0
Flooding	1983	$8,410.66	$696.59	0	0
Flooding	1984	$3,119.36	$17.40	0	0.02333
Flooding	1993	$18,762.83	$375,266.84	0	0
Flooding	2015	$2,104.77	$0.00	0	0
Flooding	2016	$35,724.68	$0.00	0	0
Flooding	2017	$200.00	$200.00	0	0
Hail	1960	$601.93	$0.00	0	0
Hail	1962	$825.94	$0.00	0	0
Hail	1963	$0.00	$88,602.27	0	0
Hail	1965	$573.83	$28.69	0	0
Hail	1973	$351.99	$398.81	0	0.03667
Hail	1974	$2,494.24	$2,494.24	0	0
Hail	1975	$4,638.63	$24,287.71	0	0.1
Hail	1977	$149.14	$1,491.33	0	0.00667
Hail	1982	$78,823.80	$78,931.50	0	0.05
Hail	1984	$866.71	$279.59	0	0
Hail	1985	$3,079.39	$736.66	0	0
Hail	1988	$10.54	$0.00	0	0
Hail	1993	$4,315.45	$0.00	0	0
Hail	1999	$2,994,393.65	$2,994,393.65	0	2
Hail	2011	$4,435.57	$6,653.35	0	0

HAZARD TYPE	YEAR	PROPERTY DAMAGE	CROP DAMAGE	FATALITIES	INJURIES
Hail	2012	$10,864.10	$10,864.10	0	0
Hail	2015	$25,257.23	$0.00	0	0
Hail	2017	$100.00	$100.00	0	0
Heat	1976	$476.51	$4,764.92	0	0
Heat	1977	$2,237.00	$223,698.69	0	0
Heat	1978	$207.93	$2,079.17	0	0
Heat	1985	$0.00	$251,972.87	0	0
Heat	1993	$4,953,385.71	$6,829,668.17	0	0
Hurricane/Tropical Storm	1964	$9,620.55	$9,620.55	0	0
Hurricane/Tropical Storm	1968	$779.12	$77.91	0	0
Hurricane/Tropical Storm	1972	$648.65	$6,486.21	0	0
Hurricane/Tropical Storm	1979	$746,894.79	$0.00	0	0
Hurricane/Tropical Storm	1995	$355,804.21	$3,558.04	0	0
Lightning	1965	$1,147.65	$28.69	0	0
Lightning	1972	$0.00	$0.00	0	0.5
Lightning	1973	$450.82	$408.70	0	0.03667
Lightning	1974	$8,896.55	$2,343.74	0	0.075
Lightning	1975	$9,854.18	$24,333.25	0	0.11667
Lightning	1976	$3,044.25	$30.45	0	0
Lightning	1977	$2,386.14	$1,513.70	0	0.00667
Lightning	1982	$78,811.84	$78,811.84	0	0.05
Lightning	1983	$3,149.89	$13.61	0	0
Lightning	1984	$2,032.08	$65.24	0	0
Lightning	1988	$105,423.92	$0.00	0	0
Severe Storm/Thunder Storm	1961	$595.89	$0.00	0	0
Severe Storm/Thunder Storm	1964	$103,551.46	$112,297.39	0.02	0
Severe Storm/Thunder Storm	1965	$286.91	$86,070.77	0	0
Severe Storm/Thunder Storm	1966	$418.42	$0.00	0	0
Severe Storm/Thunder Storm	1967	$81,174.53	$811.78	0	0
Severe Storm/Thunder Storm	1968	$55,996.99	$5.59	0	0
Severe Storm/Thunder Storm	1971	$22,649.38	$22,314.64	0	0
Severe Storm/Thunder Storm	1972	$0.00	$0.00	0	0.5
Severe Storm/Thunder Storm	1973	$5,426.12	$484,356.59	0	0
Severe Storm/Thunder Storm	1974	$194.59	$0.00	0	0
Severe Storm/Thunder Storm	1975	$5,413.24	$32,472.27	0	0.01667
Severe Storm/Thunder Storm	1977	$290.82	$22.37	0	0
Severe Storm/Thunder Storm	1982	$78,823.80	$78,931.50	0	0.05
Severe Storm/Thunder Storm	1983	$13,126.39	$921.34	0	0
Severe Storm/Thunder Storm	1984	$3,771.73	$82.64	0	0.02333
Severe Storm/Thunder Storm	1985	$629.94	$0.63	0	0
Severe Storm/Thunder Storm	1988	$527.12	$0.00	0	0
Severe Storm/Thunder Storm	1989	$10,560.67	$0.00	0	0
Severe Storm/Thunder Storm	1995	$40,917.49	$0.00	0	0
Severe Storm/Thunder Storm	2002	$4,159.53	$0.00	0	0

HAZARD TYPE	YEAR	PROPERTY DAMAGE	CROP DAMAGE	FATALITIES	INJURIES
Severe Storm/Thunder Storm	2003	$1,355.62	$0.00	0	0
Severe Storm/Thunder Storm	2006	$6,495.65	$0.00	0	0
Severe Storm/Thunder Storm	2007	$3,007.51	$0.00	0	0
Severe Storm/Thunder Storm	2008	$0.00	$115.85	0	0
Severe Storm/Thunder Storm	2009	$581.33	$11,626.57	0	0
Severe Storm/Thunder Storm	2010	$49,187.45	$1,143.90	0	0
Severe Storm/Thunder Storm	2011	$171,323.79	$0.00	0	0
Severe Storm/Thunder Storm	2012	$35,308.30	$0.00	0	0
Severe Storm/Thunder Storm	2013	$6,959.72	$0.00	0	0
Severe Storm/Thunder Storm	2014	$7,375.44	$0.00	0	0
Severe Storm/Thunder Storm	2015	$16,048.86	$0.00	0	0
Tornado	1955	$428,347.02	0	2	10
Tornado	1992	$666,695.45	$666,695.45	0	2.25
Tornado	1998	$76,513.19	$0.00	0	0
Tornado	2004	$0.00	$0.00	0	1
Wildfire	1966	$83,679.92	$0.00	0	0
Wildfire	1985	$25,449.28	$277,170.24	0	0
Wind	1960	$601.93	$0.00	0	0
Wind	1961	$2,409.49	$0.00	0	0
Wind	1962	$825.94	$0.00	0	0
Wind	1964	$874.62	$0.00	0	0.02
Wind	1965	$573.83	$28.69	0	0
Wind	1966	$418.42	$0.00	0	0
Wind	1969	$6,796.54	$6.80	0.02	0.04
Wind	1971	$22,649.38	$22,314.64	0	0
Wind	1973	$1,271.79	$356.68	0	0.03667
Wind	1974	$10,840.68	$2,830.24	0	0.075
Wind	1975	$9,729.91	$24,336.66	0	0.11667
Wind	1976	$3,044.25	$30.45	0	0
Wind	1977	$3,124.38	$1,625.55	0	0.00667
Wind	1978	$20,791.64	$2.09	0	0
Wind	1980	$4,935.63	$164.53	0.04	0
Wind	1981	$2,982.66	$2.99	0	0
Wind	1982	$78,823.80	$78,931.50	0	0.05
Wind	1983	$18,017.73	$952.37	0	0
Wind	1984	$2,867.32	$323.09	0	0.02333
Wind	1985	$2,469.35	$126.62	0	0
Wind	1986	$11,379.24	$0.00	0	0
Wind	1988	$890.12	$0.00	0	0
Wind	1989	$12,747.15	$2.19	0	0
Wind	1993	$4,890.84	$0.00	0	0
Wind	1995	$49,100.99	$0.00	0	0
Wind	2002	$4,159.53	$0.00	0	0
Wind	2003	$1,355.62	$0.00	0	0

HAZARD TYPE	YEAR	PROPERTY DAMAGE	CROP DAMAGE	FATALITIES	INJURIES
Wind	2006	$6,495.65	$0.00	0	0
Wind	2007	$3,007.51	$0.00	0	0
Wind	2008	$115,438.32	$11,701.06	0	0
Wind	2009	$23,866.77	$11,626.57	0	0
Wind	2010	$49,187.45	$1,143.90	0	0
Wind	2011	$171,323.79	$0.00	0	0
Wind	2012	$35,308.30	$0.00	0	0
Wind	2013	$6,959.72	$0.00	0	0
Wind	2014	$12,643.60	$0.00	0	0
Wind	2015	$16,048.86	$0.00	0	0
Wind	2016	$1,020.71	$0.00	0	0
Winter Weather	1960	$12,038.26	$0.00	0	0
Winter Weather	1961	$9,974.48	$906.80	0	0
Winter Weather	1963	$88,602.27	$8,860.25	0	0.57
Winter Weather	1964	$0.00	$874,589.71	0	0
Winter Weather	1966	$126,715.19	$83,679.92	0.18	0
Winter Weather	1968	$55,996.99	$5.59	0	0
Winter Weather	1969	$79,100.16	$7,230,367.76	0.02	0.04
Winter Weather	1970	$705.81	$14.02	0	0
Winter Weather	1971	$22,314.64	$22,314.64	0	0
Winter Weather	1972	$0.00	$339,050.92	0	0
Winter Weather	1973	$671,700.68	$611,247.62	0.2	0
Winter Weather	1974	$6,486.52	$0.00	0	0
Winter Weather	1975	$0.00	$5,039.47	0	0
Winter Weather	1977	$894.84	$894.84	0	0
Winter Weather	1979	$609,964.23	$946.09	0	0
Winter Weather	1980	$36,262.42	$3,619.39	0	0
Winter Weather	1982	$7,707.10	$3,512,718.47	0	0.09
Winter Weather	1983	$32,801.55	$2,749,638.62	0.63	0
Winter Weather	1984	$4,286.96	$428.69	0	0
Winter Weather	1985	$26,079.22	$5,065.31	0.33	0
Winter Weather	1986	$2,473.76	$4,972.26	0	0
Winter Weather	1987	$5,568.08	$3,610.49	0	0
Winter Weather	1988	$23,147.44	$55.50	0	0
Winter Weather	1989	$35,418.34	$0.00	0	0
Winter Weather	1990	$0.00	$207,439.03	0	0
Winter Weather	1992	$31,747.40	$783,916.62	0	0
Winter Weather	1993	$61,649.29	$61,649.29	0	0
Winter Weather	2014	$6,321.80	$0.00	0	0
TOTAL		**$19,486,156.14**	**$40,304,158.83**	**3.44**	**17.91**

Data Source: University of South Carolina Hazards and Vulnerability Research Institute

Appendix 4: Planning Committee Agendas, Minutes and Sign-In Sheets

For the purposes of developing this new plan, the Saluda County Hazard Mitigation Planning Committee held meetings as indicated in the below table. Meeting agendas, minutes, and sign-in sheets for each of these meetings can be found on the following pages.

Date	Time	Location
November 24, 2015	10:00 AM	Saluda County EOC
May 1, 2019	10:00 AM	Saluda County EOC
September 18, 2019	10:00 AM	Saluda County EOC
October 30, 2019	10:00 AM	Saluda County EOC

Saluda County Emergency Management Division

Hazard Mitigation Planning Committee

Agenda

November 24, 2015

11:00 AM

Saluda County Emergency Operations Center

- Welcome and Introductions
- Review of 2015 Plan
- Update Mitigation Actions
- Adjourn

Saluda County Hazard Mitigation Planning Committee

November 24, 2015
Saluda County Emergency Operations Center
Meeting Minutes

The meeting was called to order at 11:07 am by Saluda County Emergency Management Director Josh Morton.

Committee members and guests introduced themselves to open the meeting.

Since the last meeting of the committee, the 2015 Saluda County Natural Hazard Mitigation Plan was submitted to FEMA, received approval, and was adopted by all three jurisdictions. Only minor revisions were made since the September 2014 meeting. These revisions were made due to FEMA asking for specific wording in the plan in order to approve it.

The 2015 plan was developed on a compressed time schedule. Beginning with the 2020 planning cycle, plan updates will occur on an annual basis with specific aspects of the plan updated each year. Years one and two of the plan review cycle will focus primarily on reviewing and updating mitigation actions, with other parts of the plan being updated beginning in year three. While Saluda County will submit an updated plan to the South Carolina Emergency Management Division and FEMA annually, the plan will not need to undergo the formal FEMA review process and adoption again until 2020.

Andrew Phillips with The South Carolina Emergency Management Division informed the committee that the Saluda County plan was well received by both SCEMD and FEMA and has been used as a model plan by other jurisdictions within our state as a great example of how hazard mitigation plans should be written.

A review was conducted of all Saluda County Mitigation Actions. Neither municipality was present at the meeting, so their mitigation actions were not reviewed by the committee.

Saluda County Emergency Management Director Josh Morton presented two new mitigation actions that were identified as a result of the recent flooding event that impacted Saluda County. Both items were related to high and significant impact dams within Saluda County. These actions were accepted by the committee and added to the plan.

A brief discussion was held regarding the potential of applying for mitigation grants in relation to privately owned dams. It was noted that if grants were applied for in relation to privately owned dams, Saluda County would have to apply on behalf of the dam owner. However, the owner would be held responsible for the matching funds.

The meeting was adjourned at 11:37 am

Hazard Mitigation Planning Committee Meeting
November 24, 2015
11:00 AM
Saluda County Emergency Operations Center

	Printed Name	Signature	Phone #	Email Address
1.	Bethany Morton	Bethany Morton	803-800-2583	bmorton@emd.sc.gov
2.	Donald Hancock	Donald Hancock	864 344 0844	d.hancock@saludacounty.sc.gov
3.	Gary W. Threatt II	Gary W. Threatt	864.445.1849	g.threatt@saludacounty.sc.gov
4.	PAT PATTERSON	Pat Patterson	803 380 5850	ppatterson@emd.sc.gov
5.	Andrew Phillips	Andrew Phillips	803-728-5332	aphillips@emd.sc.gov
6.	Joshua Morton	J. Morton	864-992-4491	j.morton@saluda.county.sc.gov
7.	Ruby Butler	Ruby Butler	864-445-2529	r.butler@saludacounty.sc.gov
8.	Sandra Padgett	Sandra Padgett	364-445 4500 x2208	Spadgett@saludacounty.sc.gov
9.				
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20.				

Saluda County Emergency Management Division

Hazard Mitigation Planning Committee

Agenda

September 18, 2019

10:00 AM

Saluda County Emergency Operations Center

- Welcome and Introductions
- Overview of Hazard Mitigation Planning
- Timeline for 2020 Plan
- Review of 2014 Plan
- Discussion of 2020 Plan
- Hazard Mitigation Goals for 2020 Plan
- Mitigation Actions for 2020 Plan
- Next Steps
- Adjourn

****Next Committee Meeting will be held on October 30, 2019 at 10:00 AM at the Saluda County Emergency Operations Center****

Saluda County Hazard Mitigation Planning Committee

September 18, 2019
Saluda County Emergency Operations Center
Meeting Minutes

The meeting was called to order at 10:07 am by Saluda County Emergency Management Director Josh Morton. Director Morton welcomed everyone to the meeting and all attendees introduced themselves.

Director Morton gave a brief overview of the federal requirements for mitigation planning and an overview of the timeline for the 2020 plan update. The current plan expires August 10th, 2020. Due to the six month review period, the plan update will be due to SCEMD no later than February 10th, 2020. However, Saluda County is well ahead of schedule and will likely have the draft plan submitted to SCEMD by the end of 2019. Currently, Saluda County EMD plans to have the first public hearing at the November 11th, 2019 Saluda County Council Meeting.

Director Morton gave a brief history of mitigation planning in Saluda County, with an emphasis on the complete rewrite of the plan that was conducted in 2014-2015.

Director Morton stated that emergency management staff have been working diligently for the past three months on plan updates, including the hazard vulnerability analysis and various data sources. The Saluda County GIS department is working on updated maps which will be incorporated into the plan as soon as they are ready. Director Morton also went through the items that still needed to be updated throughout the plan.

The next step in the planning process are for everyone to review and update for the goals and mitigation actions prior to the October 30th, 2019 meeting. Everyone was encouraged to review the mitigation goals on pages 30 and 31 and ensure that the mitigation actions align with the goals. There was a brief discussion of how to determine priority and timeframe for each mitigation action. All jurisdictions were also reminded that, upon completion, actions should be noted as completed and not just deleted from the plan.

There was a brief discussion regarding the record of changes page with the determination being that each plan update cycle would start with a fresh record of changes page.

At the conclusion of the meeting, Director Morton urged everyone to participate in the planning process for this plan, as our plan will be much stronger if everyone contributes.

The meeting was adjourned at 10:32 am.

Works Referenced

[1] Disaster Mitigation Act of 2000 § 101, Pub. L. No. 106-390, 114 Stat. 1553.

[2] Disaster Mitigation Act of 2000 § 322, Pub. L. No. 106-390, 114 Stat. 1558.

[3] Mitigation Planning, 44 CFR §201.6 (b) (2002).

[4] United States Census Bureau. (n.d.). *Saluda County QuickFacts from the US Census Bureau*. Retrieved July 21, 2014, from http://quickfacts.census.gov/qfd/states/45/45081.html

[5] Saluda, South Carolina Population: Census 2010 and 2000 Interactive Map, Demographics, Statistics, Quick Facts. (n.d.). Retrieved July 8, 2014, from http://censusviewer.com/city/sc/saluda

[6] Ridge Spring, South Carolina Population: Census 2010 and 2000 Interactive Map, Demographics, Statistics, Quick Facts. (n.d.). Retrieved July 8, 2014, from http://censusviewer.com/city/SC/Ridge%20Spring

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