

**Edgefield
County's
Hazard
Mitigation
Plan
2015**

Table of Contents

Introduction	2
Planning Process	6
Risk Assessment	9
Hazard Events	10
Hazard Analysis Table	19
Vulnerability Assessment	19
Development Trends	21
Capabilities Assessment	21
Mitigation Goals, Objectives, Strategies, and Projects	25
Plan Implementation and Maintenance Procedures	32
Critical Facilities List	34
Appendixes	36

I. Introduction

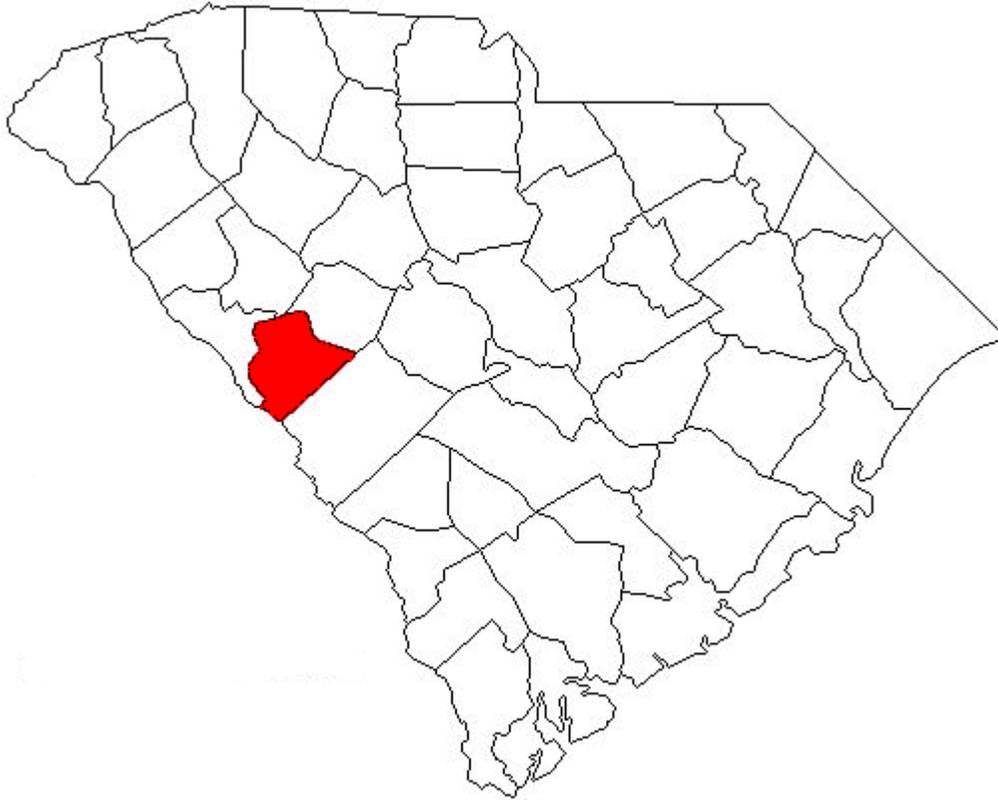
The Edgefield County Hazard Mitigation Plan was developed in accordance with the requirements of the Federal Emergency Management Agency (FEMA) Section 322 local hazard mitigation planning regulations as well as additional guidance documents provided by FEMA and the South Carolina Office of Emergency Management. The goal of this plan is to assist Edgefield County in reducing the human and economic costs of natural disasters. This plan provides a comprehensive risk assessment, vulnerability analysis, mitigation strategies, and implementation schedule for the county and each of the municipalities.

A. Description of Planning Area

Edgefield County is located near the central western portion of the state along the Savannah River. The county is bordered on the north by Saluda County and Greenwood County, on the southeast by Aiken County, to the southwest by the Savannah River, and to the west by McCormick County. The total land area in Edgefield County is 501 square miles. Edgefield County is located approximately 35 miles from Greenwood, SC and 57 miles from Columbia, SC. The population of Edgefield County based on the 2014 US Census estimate was 26,553, showing an increase over the previous decade.

Edgefield County has a continental-type climate, predominantly influenced by air from the west, which has traveled across the central United States. Winters are generally short, with very few days of intense cold. The mean temperature for January is 47 degrees Fahrenheit. Summers are warm, with high humidity and afternoon thunderstorms. The mean temperature during July is 80 degrees Fahrenheit. Precipitation tends to be evenly distributed throughout the year, with an annual average of approximately 48 inches, almost all of that exclusively as rain.

Edgefield County Hazard Mitigation Plan



Edgefield County (red) location within South Carolina

Edgefield County Hazard Mitigation Plan

There are an estimated 12,000 structures in the county. Approximately 87% of these buildings are considered residential uses. The county has other amenities including a courthouse, schools, fire departments, emergency medical services, an emergency communications facility, and a sheriff's Office. There are also facilities that store hazardous materials and small dams located in Edgefield County.

The county contains three incorporated municipalities: Edgefield (county seat), Johnston, and Trenton, all of which are small, rural communities of less than 5,000 people. Edgefield County also contains the following unincorporated communities: Pleasant Lane, Cleora, Morgana, Merriwether, Bettis Academy, and Colliers. A small portion of the incorporated city of North Augusta also lies within Edgefield County.

- **Edgefield** is located near the center of Edgefield County. It is surrounded by unincorporated and largely undeveloped areas. Edgefield is approximately four square miles and has a population of 4,716 people making it the largest municipality in the county. Gentle slopes characterize the topography of Edgefield. The largest portion of the town is made up of single-family homes. Approximately 1,500 acres of the land in the town fall within this land use. Duplex and multi-family units account for an estimated 50 acres within the town. Commercial development in Edgefield is primarily focused in the central business district, an area covering approximately 100 acres.
- **Johnston** is situated approximately 8 miles east of Edgefield with a population of approximately 2,332 people. The town is approximately 2.5 square miles and is surrounded by agricultural or undeveloped land.
- **Trenton** is located southeast of Edgefield. It is approximately 1 square mile in area and has an approximate population of 192 people making it the smallest municipality in the county. Trenton is a residential community surrounded by farmlands.

There are 3 Special Purpose Districts in the county: Edgefield County Water and Sewer Authority which provides utilities, the Edgefield County Hospital, and the Beaverdam Creek Watershed which oversees 2 dams in the county.

Edgefield County Hazard Mitigation Plan

II. Planning Process

The planning process utilized in Edgefield County was based on the Section 322 local planning requirements of the Disaster Mitigation Act of 2000 and supporting guidance documents developed by FEMA and the South Carolina Emergency Management Division. The planning process included the following steps, which will be described in greater detail throughout the plan:

- Step 1: Establish a Hazard Mitigation Planning Committee
- Step 2: Conduct a Risk Assessment
- Step 3: Develop Capabilities Assessment
- Step 4: Create Mitigation Plan
- Step 5: Adopt and implement Plan

The process was led by the Edgefield County Hazard Mitigation Planning Committee members. Due to limited staffing and resources, the monitoring and annual updating of the hazard mitigation plan was a low priority over the past five years. No annual reports were completed. With new staffing currently in place, the Emergency Management Agency has taken a renewed interest in maintaining the plan and keeping it updated on a regular basis.

Meetings of the revised Hazard Mitigation Planning Committee were held on July 27 and August 24, 2015 to discuss hazard mitigation planning in Edgefield County. The sign-in sheet and minutes are attached. Meetings will continue on a regular schedule with the committee meeting at least semi-annually to review goals and accomplishments.

A. The activities undertaken by Edgefield County are all overseen by the planning committee, which is made up of county, municipal, federal, regional, state, and private representatives as described in the table below. Local stakeholders were invited via email by the Edgefield County Emergency Management Agency. A copy of the emails is located on pages 37 and 52.

Edgefield County Hazard Mitigation Committee Membership

Suzy Spurgeon	Edgefield County EMA Director
Gerry Coleman	Edgefield County Tax Assessor
Bob Little	US Forest Service
Travis Haltiwanger	Edgefield County Hospital Safety Officer
John Hare	Edgefield County Water and Sewer Authority Director
Clifton White	SCDOT
Guy Mueller	Edgefield County Building and Planning Flood Manager
Myra Jones	USDA-NRCS
Greg Henderson	Clemson Extension Service Edgefield County Lead Agent
Scot Yarbrough	SC Emergency Management Division
Kristine Whittaker	Edgefield County EMA Deputy Director
Andrew Phillips	SC Emergency Management Division
Ron Talbert	SC Department of Natural Resources
Terrence Culbreath	Town of Johnston Mayor
Will Williams	Economic Development Partnership
James Courtney	Edgefield County School District
Don Zupon	Edgefield County Citizen

Edgefield County Hazard Mitigation Plan

The Hazard Mitigation Planning Committee was asked to comment on the development of this plan. The existing plan was reviewed to start the update process. The goals section was reviewed and public comment was received. With all municipalities and the county participating, this plan now has complete county-wide coverage.

The following existing plans and technical information were used before and during the update process: Edgefield County Hazard Mitigation Plan was used as an existing base document for updating the plan; Edgefield County Comprehensive Plan was used for county-wide mitigation goals and information on natural resources such as flood prone areas, wetlands, and potential impacts on agriculture; Comprehensive Plans from the municipalities (municipal goals and needs); Zoning Ordinances from the municipalities and County for any areas identified as a flood risk; municipal and county Flood Plain Ordinances (see table on page 26); weather reports from the National Oceanographic and Atmospheric Administration for detailed weather event information and various instructional materials from the Federal Emergency Management Agency. Relevant information from these documents was placed at the pertinent location in this updated plan.

B. County and Municipality participation

County and town participation must be defined to create a standard for participation and representation in order for the entities to be considered as participants in the Natural Hazard Mitigation Plan Process.

In Order for the county to approve the plan and be an official participant of this planning process, they must satisfy the following consideration:

- The county Emergency Management Agency Director is a member of the Hazard Mitigation Planning Committee and provides input and commentary on the planning process.

In order for the towns to be official participants of the planning process, they must satisfy one of the following considerations:

- The mayor, administrator, or manager attend a county or public meeting concerning the Natural Hazard Mitigation Plan and provides input and commentary on the planning process.
- The mayor, administrator, or manager appoint a town employee to attend a county or public meeting concerning the Natural Hazard Mitigation Plan and that person provides input and commentary on the planning process.
- The plan coordinator personally discussed the Natural Hazard Mitigation Plan with a mayor, administrator, manager, or appointed town employee.

C. Public Involvement

Throughout the process there were opportunities for public input. The public was asked to comment on the plan at the June 2, 2015 County Council meeting and invited to attend the June 8, 2015 public hearing. The goals of the Natural Hazard Mitigation Plan were discussed with those present and comments were noted in the meeting minutes.

All meetings of the Natural Hazard Mitigation Planning Committee are open to the public. Notices of public meetings are posted at the county offices and made available in all participating jurisdictions. All comments that have been received to date from the public were reviewed and incorporated into the final plan as appropriate. A copy of the plan is posted on the county website.

In addition, the public will be invited to the plan adoption hearing of the Edgefield County Council. A public notice of the adoption hearing will be posted.

After the plan is approved, public involvement will continue through regular presentations by the Emergency Management Agency Director and staff.

Meeting minutes and attendance lists are included in the Appendix of this plan.

III. Risk Assessment

Risk assessment is the process of measuring the potential loss of life, personal injury, economic injury, and property damage resulting from natural hazards. The results of this risk assessment assist Edgefield County and its incorporated municipalities in identifying and understanding their risks from hazards. This information also serves as the foundation for the development of the mitigation plan and strategies to help reduce risks from future hazard events.

The following plans and technical information were used before and during the update process: Edgefield County Hazard Mitigation Plan, Edgefield County Comprehensive Plan, Comprehensive Plans from the municipalities, Zoning Ordinances from the municipalities and county, municipal, and county Flood Plain Ordinance, weather reports from the National Oceanographic and Atmospheric Administration and various instructional materials from the Federal Emergency Management Agency. Relevant information from these documents was placed at the pertinent location in this updated plan.

The entire existing plan was reviewed to start the update process. The risk assessment portion of the plan was reviewed to measure the continuity from how past risk was measured and to monitor trends or point to significant changes.

This risk assessment followed the methodology described in the FEMA publication 386-2 “Understanding Your Risks – Identifying Hazards and Estimating Losses” and was based on a four-step process: 1) Identifying Hazards, 2) Profile Hazard Events, 3) Inventory Assets, and 4) Estimate Losses. Using FEMA guidance as well as the Section 322 regulations for developing local hazard mitigation plans Edgefield County has developed a risk assessment that identifies:

- The hazards to which the county and its communities are susceptible.
- The impact of these hazards on physical, social, and economic assets.
- The areas within the county most vulnerable to these hazards.
- The potential costs of damages or costs avoided through future mitigation projects.

A. Hazard Identification

The first step in the risk assessment process was to identify each of the hazards that can occur within Edgefield County and its incorporated municipalities. This hazard identification process began with a review of previous hazard events based on historical data. A review was completed of existing resources, plans, and reports provided by FEMA, Edgefield County, and other sources to understand the nature and extent of natural hazards in the county. In addition to these resources a hazard identification and prioritization process was developed. The findings from these steps were utilized to determine the priority hazards for Edgefield County and incorporated municipalities, which will become the focus of the mitigations strategies developed in the remainder of this plan.

1. Hazard History

Past occurrences of hazard events are likely predictors of future events. A review of the hazard history of Edgefield County, therefore, helps to provide a better understanding of what hazards the county is susceptible to. Detailed descriptions of the historic hazard events, including information on losses of life and property, as well as estimated damages are included in Appendix. The following are summaries of the major events by hazard type based on information that was available during the development of this plan.

Flood

South Carolina has two high-water periods each year, one in December-April caused by winter rains and spring showers and in the fall when tropical storms may bring additional rain. Hurricanes have often brought flash flooding and river flooding.

Edgefield County has some creeks that are subject to flooding during heavy rainfall periods. The majority of these creeks have sufficient depth to their banks to prevent flooding that would endanger human lives or property. The Savannah River has no significant history of flooding in the area. While flooding is experienced in many creeks around the county during heavy rains, there are no recorded cases in recent history of deaths or serious injuries. There are no repetitive loss structures in the county so the percentage of damages to vulnerable structures would be very low.

Recent Flooding Events

- May 6, 2003: Flash flooding occurred in various parts of the county. No damages or injuries were reported.
- June 2-3, 2013: Flash flooding occurred in the vicinity of Ropers Crossroads and Morgana. No injuries were reported, but there was \$16,000 in property damage.

Edgefield County Hazard Mitigation Plan

Heavy rain from thunderstorms caused widespread flooding across the southern part of the county. Some roads were closed due to flood water as high as 4 feet.

Winter Storm

There were major southeastern snow storms in 1899, 1914, 1973, 2000, 2002, 2010, and 2014. Additionally, there have been many more localized winter storms. In January 1968 and February 1979 large ice storms paralyzed the county for several days. More recently in 2010 and 2014 ice and snow covered the county resulting in power outages and hazardous driving conditions. Edgefield County experiences an average of one to two winter storms each year. The impact of the winter storms is usually small and does not impact vulnerable structures. The damage to structures due to winter storms would be low.

Recent Winter Storm Events

- January 24, 2000: Heavy snowfall was reported over most of the state. Edgefield County was part of the Federal Disaster declaration. School and government facilities were forced to close. There were no reported injuries or damage to public facilities.
- January 2, 2002: A winter storm resulted in road, business, schools, and government facilities closures. There were no reported injuries or damage to public facilities.
- December 4, 2002: A winter storm resulted in road, business, schools, and government facilities closures. There were no reported injuries or damage to public facilities.
- January 25, 2004: A winter storm resulted in road, business, schools, and government facilities closures. There were no reported injuries or damage to public facilities.
- December 26, 2004: A winter storm resulted in roads, business and government facilities closures. There were no reported injuries or damage to public facilities.
- January 29, 2005: A winter storm resulted in road, business, schools, and government facilities closures. There were no reported injuries or damage to public facilities.
- December 26, 2010: A winter storm resulted in roads, business and government facilities closures. There were no reported injuries or damage to public facilities.
- January 10, 2011: A winter storm resulted in road, business, schools, and government facilities closures. There were no reported injuries or damage to public facilities.
- January 28, 2014: A winter storm resulted in road, business, schools, and government facilities closures. There were no reported injuries or damage to public facilities.
- February 12, 2014: A winter storm resulted in road, business, schools, and government facilities closures. There were no reported injuries or damage to public facilities. There was $\frac{1}{2}$ to $\frac{3}{4}$ inch of ice and 2 to 4 inches of snow and sleet across

Edgefield County Hazard Mitigation Plan

Edgefield County that took down a significant number of trees and power lines. Power outages were reported for 90% of the county.

Tornado

Edgefield County has experienced 15 recorded incidences of tornado touchdowns since 1950. The most recent occurred in 2010 and no deaths or injuries were reported.

Tornado Event History

- November 12, 1975: An F2 injured 2 people and caused approximately \$250,000 in property damage.
- November 22, 1992: A F3 tornado hit near Edgefield. No injuries were reported, but over \$250,000 in property damage was recorded.
- May 7, 1998: Several tornados hit various parts of the county. One person was killed and eleven people were injured. Nearly \$2 million in property damages occurred as a result of F2 and F3 tornados.
- May 6, 2003: A F1 tornado hit near Johnston causing no damages or injuries.
- February 13, 2007: An EF1 tornado hit near Edgefield causing \$15,000 in damages but no injuries.
- March 15, 2008: An EF1 tornados hit near the Cleora and Pleasant Lane communities causing no damage or injuries.
- April 4, 2008: An EF1 tornado hit near Johnston causing no damage or injuries.
- March 28, 2010: An EF2 tornado hit near the Morgana community causing \$250,000 in property damage and \$20,000 in crop damage. No deaths or injuries were reported.

Manufactured housing is particularly vulnerable to high winds, tornados, thunder storms, or tropical storms. There are over 3,200 manufactured homes in Edgefield County. Because of the random nature of tornados and the large number of vulnerable structures such as manufactured housing, the potential for damage is very high.

Wildfire

Forest fires are a moderate to low risk in Edgefield County, especially during times of drought or high winds. Records indicate that humans cause a majority of wildfires. Other causes of wildfires include: lightning, campfires, smoking, debris burning, incendiary equipment use, and railroads. The South Carolina Forestry Commission lists an average of 29 fires annually in Edgefield County based on a twenty-year average, burning an average of 132.3 acres. See Appendix. In addition to the South Carolina Forestry Commission personnel, members of the Edgefield County rural fire departments assisted in extinguishing the fires which occurred. These type of fires are usually not large enough to damage vulnerable structures.

Severe Thunderstorms

Edgefield County has numerous severe thunderstorms each year. These storms sometimes produce high winds, hail, lightning, and flash flooding. These factors can be made worse by the occasional tornado accompanying these events. There have been 27 reports of damaging wind since the 2010. The highest estimated wind gust was 100 mph on April 5, 2011. Numerous trees were down across the county and multiple homes were damaged. An estimated \$500,000 in property damage was reported. Because of the propensity for severe thunderstorms the risk of damage to vulnerable structures is moderate.

Drought

Severe droughts have occurred in Edgefield County several times in the past, 1931-35, 1954-57, 1977-81, the late 1990's and again in 2007, 2010-2011 according to the Crop and Livestock Feed Reports. These droughts have devastated crops and pastures in the county. Soybeans and other crops have burned up due to extreme heat and below normal rainfall. Pastures and hay crops were extremely short with poor prospects for the fall. There are few, if any, cases of livestock deaths due to loss of feed. Edgefield County experiences regular incipient seasonal droughts.

Earthquakes

The only major recorded earthquake to be felt in Edgefield County was the Charleston Earthquake of 1886. On February 14, 2014 a 4.1 magnitude earthquake centered 7 north northwest of the Town of Edgefield was felt throughout the area. There was some minor property damage to public and private property. There were no injuries or deaths reported. Two days later a 3.2 magnitude earthquake was felt in the county attributed to a different fault. No injuries or deaths were reported.

Edgefield County is in the medium risk earthquake zone, meaning it is an area where moderate damage may be expected. The risk for vulnerable structures is low due to the limited strength and number of earthquakes.

Hail

Hail can occur across the region at various times of year. Property damage can occur, as well as damage to crops. A June 15, 2010 event caused \$14,000 in property damage and a July 1, 2012 event left \$60,000 in property and crop damage. Since 1960, hail up to 1.75 inches has been reported in Edgefield County. Hail causes limited damage to vulnerable structures making the risk of damage low.

Edgefield County Hazard Mitigation Plan

- May 25, 2014: Severe thunderstorms produced hail as large as 1 inch in the northern part of the county. No property damage was reported.

Non-Thunderstorm Wind

Wind not associated with hurricanes or thunderstorms are rare in Edgefield County, but they have the potential to impact the region. There have been many high wind events in Edgefield County causing \$53,000 in property damage and \$10,000 in crop damage. The most recent event occurred on October 24, 2008. Wind gusted as high as 57 mph downing trees and powerlines in several parts of the county. Windstorms can cause isolated damage to vulnerable structures, but these storms are rare and would cause limited damage so the risk of damage from a non-thunderstorm wind is low.

Tropical Systems

Storms of this nature impact the county through high winds and flooding. Most of the storms of this type that have passed over the county have first struck the Gulf Coast and then proceeded northeast. Since 1959 five tropical depressions have affected Edgefield County.

Tropical System History

- Tropical Depression Arlene, 6/2/1959, wind 20-30 mph, no flooding or damage reported.
- Tropical Depression Cleo, 8/30/1964, wind 25-35 mph, no flooding or damage reported.
- Tropical Depression Abby, 6/1/1968, wind 25-35 mph, no flooding or damage reported.
- Tropical Depression Marco, 10/9/1990, wind 15-25 mph, no flooding or damage reported.
- Tropical Depression Helene, 9/23/2000, wind 25-35 mph, no flooding or damage reported.

2. Priority Hazards

The historical hazards provided insight into some of the priority hazards included in this plan; however, they did not capture all of the possible hazard risks in the county and municipalities. An additional review of possible hazard risks was conducted using the resources provided in “Understanding Your Risks – Identifying Hazards and Estimating Losses” (FEMA 386-2). The Prioritization of Hazards for Edgefield County section describes in greater detail the rationale for selecting these hazards.

Edgefield County Hazard Mitigation Plan

The Prioritization of Hazards for Edgefield County section provides a summary of how the priority hazards were determined using a combination of historical occurrences, public perception of hazard risk, and the probability of future occurrence based on other technical resources.

Information on natural hazards occurring since the last plan were researched and are included in this plan. Based on these findings, it was determined that the priority hazards should not be changed from the previous plan.

a. Prioritization of Hazards for Edgefield County

Based on these findings and results of technical research the following hazards were selected as priority hazards for Edgefield County: severe winter storms, drought, severe thunderstorms/lightning, wind storms, tornados, wildfires, earthquakes, hail, hurricane/tropical storms, and flooding.

B. Profile of Hazard Events

The second step in the risk assessment process was to create a profiles for each of the priority hazards in Edgefield County. This analysis in determining the potential damages in the county from natural hazards. Maps were developed for specific hazards using existing data. The remaining priority hazards are described in narrative form due to data limitations or inability to map the geographic extent of the hazards.

1. Documented Hazards

Floods

Flooding is defined as a general and temporary condition of partial or complete inundation of normally dry land areas from: the overflow of inland or tidal waters, the unusual and rapid accumulation or runoff of surface waters from any source, or mudflows or the sudden collapse of shoreline land. Flooding is one of the moderate priority natural hazards in Edgefield County. This is largely due to the physical geography of the county, which includes several rivers and creeks as well as a varied topography.

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 the major bodies of water in the county and delineate the 100 year floodplain boundaries. These are areas that have a one percent chance of equaling or exceeding the recorded base flood elevation during any year. Based on these maps, the unincorporated areas of the county and the Town of Edgefield have 100 year floodplains in their jurisdictions. According to the Edgefield County's Comprehensive Plan, the other towns in the county have nuisance flooding on the roads due to poorly designed and maintained drainage systems. FEMA Flood Insurance Rate Maps and Flood Hazard Boundary Maps for Edgefield County and the Town of Edgefield are available online.

Edgefield County Hazard Mitigation Plan

Rivers and creeks designated as flood prone areas include but are not limited to the following: Savannah River, Rocky Creek, Mountain Creek, Turkey Creek, Little Stevens Creek, Beaverdam Creek, Cedar Creek, Gundy Creek, Log Creek, Stevens Creek, Horn Creek, Cheves Creek, and other tributaries of the Savannah River. Potential flooding impact in or near the Town of Edgefield is from Beaverdam Creek.

Edgefield County Flood Hazard Area

Jurisdiction	FEMA Mapped Special Flood Hazard Area	NFIP Participant	Flood Hazard Area Included in Plan
Edgefield County	Yes	Yes	Yes
Town of Edgefield	Yes	Yes	Yes
Town of Johnston	No	Yes	Yes

The Town of Johnston does not have a Special Flood Hazard Area within its jurisdictional boundaries but does have a locally identified flood hazard area.

Based on continuing and on-going participation in the National Flood Insurance Program, all future development in the county will conform to NFIP standards. These standards are also used to prioritize action steps of this plan. There are no repetitive loss structures or properties in Edgefield County. The floodplain management program is managed through the Edgefield County Building and Planning Office. County staff monitor building activity and assure that new buildings conform to existing ordinances.

Earthquakes

An earthquake is the violent shaking of the earth caused by a sudden movement of the rock beneath its surface. The effects of an earthquake can be felt far beyond the epicenter. Earthquakes occur without warning and after just a few seconds can cause massive damage and extensive casualties. Common effects of earthquakes are ground motion and shaking, surface fault ruptures, and ground failures. Proximity to faults, along with soil and subsurface characteristics, can all affect the level of earthquake damage.

The magnitude of an earthquake, usually expressed by the Richter Scale, is a measure of amplitude of seismic waves. The moment magnitude of an earthquake is a measure of the amount of energy released – an amount that can be estimated from seismograph readings. The earthquake risk in Edgefield County is moderate to low.

Richter Scale

Magnitude	Description
Less than 2.0	Micro
2.0-2.9	Minor
3.0-3.9	Minor
4.0-4.9	Light
5.0-5.9	Moderate
6.0-6.9	Strong
7.0-7.9	Major
8.0-8.9	Great
9.0-9.9	Great
10.0 +	Massive

Severe Winter Storms

Winter storms vary in size and strength and can be accompanied by strong winds that create blizzard conditions and dangerous wind chill. There are three categories of winter storms. A blizzard is the most dangerous of all winter storms. It combines low temperatures, heavy snow, and winds of at least 35 mph, reducing visibility to only a few yards. A heavy snowstorm is one that drops 4 or more inches of snow in a 12 hour period. An ice storm occurs when moisture falls and freezes immediately upon impact. For the purposes of this risk assessment, it is assumed that all of Edgefield County is equally at risk from severe winter storm events, but is at most risk from ice storms.

Severe Thunderstorms/Lightning

Edgefield County Hazard Mitigation Plan

A severe thunderstorm as defined by the National Weather Service is a storm with hail equal to or greater than 1 inch in diameter or convective wind gusts equal to or greater than 58 mph. Lightning and general thunderstorm wind gusts pose a threat to life and/or property. Severe thunderstorms also have the potential of producing a tornado with little or no advance warning. Based on historical evidence it is assumed that all of Edgefield County is equally at risk from severe thunderstorm events.

Non-thunderstorm Wind

Windstorms are destructive events that occur with or without the presence of other storm events, such as tornados or severe thunderstorms. Localized geographic conditions can exacerbate the damages from high winds and cause increases in wind intensity. Edgefield County has experienced high wind damages in the past and can expect wind-related problems in the future. This assessment assumes that the risk from high wind events is equal throughout the county.

Tornado

A tornado is a violently rotating column of air extending from a thunderstorm to the ground. The most violent tornados are capable of tremendous destruction with wind speeds of 200 mph or greater. Damage paths can be in excess of one mile wide and fifty miles long. Tornados are among the most unpredictable of weather phenomena. Tornados can occur in any state in the U.S. but are more frequent in the Central Plains and Southeast.

Tornados by nature strike at random. While it is known that some areas of the country experience tornados more than others, predicting exactly what part of Edgefield County has a greater chance of being struck by a tornado is difficult. The best predictor of future tornados is the occurrence of previous tornados. Tornados in Edgefield County have ranged from F0 to F3 on the Fujita Tornado Measurement Scale and the Enhanced Fujita Measurement Scale, which categorizes tornados based on wind speed and expected damages. The Enhanced Fujita Scale was implemented in 2007.

For planning purposes it is less important to map the tornado risk than it is to identify it. This is because it is so difficult to predict the path of future tornados that can occur in Edgefield County.

Enhanced Fujita Scale (EF Scale)

Rating	Wind Speed (mph)
EF-0	65-85 mph
EF-1	86-110 mph
EF-2	111-135 mph
EF-3	136-165 mph
EF-4	166-200 mph
EF-5	>200 mph

Drought

Drought refers to an extended period of deficient rainfall relative to the statistical mean for a region. Drought can be defined according to meteorological, hydrological, and agricultural criteria. Meteorological drought is qualified by any significant deficit of precipitation. Hydrological drought is manifest in noticeably reduced river and stream flow and critically low groundwater tables. The term agricultural drought indicates an extended dry period that results in crop stress and harvest reduction.

The Palmer Drought Severity Index (PDSI) is a widely used measure of drought in the United States to track moisture conditions. The PDSI is defined as “an interval of time, generally in months or years in duration, during which the actual moisture supply at a given place rather consistently falls short of the climatically expected or climatically appropriate moisture supply”. The range of PDSI is from -4.0 (extremely dry) to +4.0 (excessively wet), with the central half (-2.0 to +2.0) representing the normal or near normal conditions.

For the purposes of this risk assessment it is assumed that Edgefield County has a moderate drought risk. The risk of drought is not targeted to any particular areas within the county.

Hailstorms

Hailstorms occur when freezing water in thunderstorm type clouds accumulates in layers around an icy core. Hail causes damage by battering crops, structures, automobiles, and transportation systems. When hailstorms are large (especially when combined with high winds) damage can be extensive. Based on available data at the state level it is assumed that the entire county is at moderate risk from hailstorms.

Wildfires

A wildfire is an uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures. They often begin unnoticed, spread quickly, and are usually signaled by dense smoke that fills the area for miles around. Based on available data at the state level, it is assumed that the entire county is at a moderate risk from wildfires.

Tropical Systems

The probability of a hurricane striking South Carolina is less than eight percent in any given year. Any or all counties could be affected with varying degrees of damage. The worst case scenario for Edgefield County would be for a strong hurricane to strike the Beaufort/Savannah area and maintain strength as it moves inland quickly. Most of the

Edgefield County Hazard Mitigation Plan

storms that pass directly over the county approach from the southeast and have weakened considerably over time and land mass. Tropical system intensity is measured using the Saffir-Simpson Scale.

Saffir-Simpson Scale

Category	Wind Speed (mph)
Depression	<38 mph
Storm	39-73 mph
1	74-95 mph
2	96-110 mph
3	111-129 mph
4	130-155 mph
5	>156 mph

Numerical Hazard Analysis Table 2015

Hazard	Events	Years in Record	Return/Period	Annual Chance %
Drought	6	59	59	10.18
Earthquake	4	310	103.33	0.96
Wildfire	29	21	0.03	1.38
Flood	3	59	19.66	5.08
Hail	48	59	1.22	81.35
Hurricane/ Tropical Storm	3	158	52.66	1.89
Severe Winter Storm	12	59	11.8	20.33
Thunderstorms & High Winds	76	59	0.77	128.81
Tornado	15	59	3.93	25.42

Source: Integrated Hazard Assessment Tool (IHAT) USC Hazards Lab

C. Vulnerability Assessment

The vulnerability assessment uses the hazard profile information and combines it with community asset information to analyze and quantify potential damages from future hazard events. The process combines the final two steps of the risk assessment: the inventory of assets and the estimation of losses.

The vulnerability assessment evaluates each type of hazard based upon its frequency and severity to determine which hazards represent the greatest potential risk. The state EMD and the University of South Carolina Hazards Lab developed a format for each county to use to determine their most vulnerable areas. This process helped evaluate the hazard vulnerability of each county utilizing an index calculated from hazard event frequency and a social vulnerability score. This

Edgefield County Hazard Mitigation Plan

social vulnerability score utilizes data from the U.S. Bureau of Census (age, income, etc.) to determine the social vulnerability. The most vulnerable area in the county is the southern central portion of the county.

The overall determination from the risk assessment methodology utilized in this plan is that Edgefield County is vulnerable to many types of hazards. Slight variations in terms of which hazards may pose the greatest risk exist depending on the analysis method utilized to assess the risk. The methodology suggests that potential vulnerability to multiple types of hazards exists, including winter storms, tornados, flooding, wildfires, hazardous materials, drought, and other forms of severe weather.

Included in the Appendix to this plan are maps showing past hazard events and the location of high social vulnerability. The place vulnerability map shows areas where there is high possibility for natural hazards. The most vulnerable places are in the southern portion of the county.

1. Asset Inventory

The asset inventory identifies buildings, roads, and other facilities that can be damaged or affected by hazard events. In order to assess where and to what extent the identified hazards will affect the assets of Edgefield County, the locations of assets were identified and intersected with the mapped hazards in GIS.

The information source used to compile the asset inventory was the E-911 database and maps created by MSAG as part of the Edgefield County E-911 addressing project. This project assigned street addresses to all structures and located them on maps in relation to identified roadways in the county.

According to the E-911 database and Census figures, there are approximately 12,000 structures throughout the county. Also taken from the E-911 database was the location of infrastructure including roadways, railroads, and utilities, which was also intersected with hazard data in GIS to determine vulnerability. Infrastructure layers were also intersected with floodplain data across the county to determine the location and amounts of vulnerable roadways, railroads, and utilities. These mapped areas are shown on the Overall Place Vulnerability maps in the Appendix of this plan.

Using the data supplied by the USC Hazards Lab, maps were developed to show the locations of critical facilities. Critical facilities are defined as facilities that are critical to the health and welfare of the county and that are especially important following hazard events. Critical facilities include, but are not limited to, shelters, police and fire stations and substations, and schools. According to this data, there are 31 critical facilities in Edgefield County.

2. Loss Estimation

The final step in the risk assessment process is the loss estimation. This step helps to estimate the potential losses for any hazard event. Because the most likely hazards could

Edgefield County Hazard Mitigation Plan

occur at virtually any location in Edgefield County, the loss estimations are generalized and cover the total impact a disaster may have on the population as a whole.

Edgefield County Average Annual Losses

Hazard	Property Damage	Crop Damage	Facilities	Injuries
Drought	\$88,661	\$175,352	0	0
Flooding	\$4,105	\$7,628	0	0
Hail	\$3,140	\$17,312	0	0.004
Heat	\$84,332	\$124,418	0	0
Hurricane/ Tropical Storm	\$6,242	\$336	0	0
Lightning	\$2,783	\$1,418	0	0.005
Severe Storm/ Thunderstorm	\$16,840	\$6,349	0.019	0.039
Tornado	\$76,483	\$24,283	0.019	0.344
Wildfire	\$1,857	\$4,716	0	0
Wind	\$16,033	\$2,053	0.001	0.025
Winter Weather	\$35,263	\$280,873	0.07	0.032

Source: SHELDUS 1960-2011

Future building locations are governed by zoning regulations in most of Edgefield County and in all the municipalities. Since these hazard events are random, Edgefield County and the municipal governments strive to place and secure future buildings in locations that offer them the best protection possible from natural hazards.

IV. Analysis of Development Trends

The land development trend in Edgefield County over the last 50 years has been rural style developments with large lots in the unincorporated portions of the county. In recent years there has been more suburban residential and commercial development in the Merriwether area. This development has called for increased services in the vicinity of North Augusta/Merriwether. The area between North Augusta and Trenton is also shown on the vulnerability maps in the Appendix as being the most socially and site vulnerable areas of the county. Any growth in these areas should be monitored by the county government for impact on public services. Growth within the municipal boundaries has been small scale and very slow. The area wide economy has mostly benefited from associated growth.

Comprehensive plans have been updated for Edgefield County and the municipalities since the last hazard plan update 6 years ago. There are no significant changes in development patterns that would affect hazard mitigation issues now or in the near future. Edgefield County will try to

determine how the growth areas in each of the municipalities and the county intersect with hazard areas and include this information in future plan updates. The county has budgeted for a county planner that will assist with this in the future.

V. Capabilities Assessment

The capabilities assessment describes the legal authority vested in local governments to purpose measures to mitigate the impacts of natural hazards. This capability assessment focused on the evaluation of Edgefield County’s existing programs and policies to determine what resources are already in place to support mitigation activities. These policies and programs were identified based on a review of the existing plans and ordinances for the county and municipalities. Programs or regulations that related to mitigation or supported mitigation activities were selected. The following is a list of the identified programs.

Edgefield County: Emergency Management Agency
Sheriff’s Office
County Fire Departments
County Government

Town of Edgefield: Police Department
Fire Department
Town Government

Town of Trenton: Police Department
Fire Department
Town Government

Town of Johnston: Police Department
Fire Department
Town Government

Comprehensive Plans and zoning ordinances exist in each of the municipalities. Integrating mitigation concepts and policies with existing comprehensive plans provides an expand means for implementing initiatives through established legal frameworks. The foundation of these plans lies in the promotion of health, safety, efficiency, and wellbeing for all segments of the population. Some of the primary plan objectives include preservation of the county’s unique natural environment and historic heritage, creation of a stable and diverse economy, and promoting sustainable developments. The recently developed comprehensive plan for the county contains a

Edgefield County Hazard Mitigation Plan

natural resources element that was developed based on review and discussion about the hazard mitigation plan.

The county has zoning in the municipalities and along the corridors of state highways 25, 23, 121, and 230. Zoning can be used to restrict growth in high risk areas, allow low density development, or designate only certain uses in hazard prone areas. All the zoning ordinances require erosion control practices for ground disturbing activities, protection of existing waterways, and re-vegetation. These practices and others promote best management practices and reduce the risk of a flooding hazard in particular.

The county does have a land development ordinance. This document supports hazard planning by regulating building construction in flood plains.

Building codes are important in mitigation because codes are developed for areas of the state in consideration of types, frequency, and intensity of hazards present in that geographic region. Consequently, structures that are built to applicable codes are inherently resistant to many hazards like strong winds, floods, and earthquakes. Edgefield County follows the current state building codes.

Intergovernmental cooperation is a great asset to the implementation of hazard mitigation actions. This way local, county, and state agencies can act as resources for each other. Interaction between county, towns, and regional planning organizations occur in areas such as plan development and grant writing.

The major conclusion reached after developing this plan is that Edgefield County will need to rely on technical and financial assistance from various resources to effectively implement hazard mitigation actions over the next five years. The constraints facing the county and especially the municipalities include both limited staffing and extremely limited funding.

During this planning process, it is apparent that the county has a strong capability to bring together various groups to work together in crafting better communities of the future. The same cooperative effort, if joined with the appropriate technical and financial assistance from regional, state, and federal resources, can be harnessed to implement the priority hazard mitigation actions. A sustained effort by citizens, staff, and local officials can create a more sustainable and disaster resistant future.

Each of the local governments has the capacity to handle mitigation issues, but are limited due to funding and limited staff. The results of this plan help to provide the framework for developing recommendations for specific mitigation actions. It also helps to identify shortfalls in the local government capabilities as well as draws attention to existing success. The capability assessment was analyzed then used to rank the mitigation strategies according to the capability of the county or the municipalities to implement the actions.

A. Incorporation of the Requirements of the Mitigation Plan into Existing Planning Mechanisms

There are several ways to incorporate the hazard mitigation plan requirements into the existing planning process. First, the comprehensive plans are updated every five years and covers features of the jurisdictions such as natural resources and community facilities. Planning commissions within each jurisdiction revise the plans then recommend the revised plan to the local governing bodies for approval. Using this process, hazard mitigation elements can be included in plan updates.

Edgefield County has a capital improvement plan and similar activities are usually included as part of the comprehensive plans. The zoning ordinances are built from the findings of the comprehensive plan, so changes to the zoning ordinances can be made after the comprehensive plan is updated.

Updating the comprehensive plan covers areas such as economic development, land use, natural resources, road construction, and community facilities. From that, then the zoning ordinance could reflect needed changes for issues changes for issues such as development, land uses, storm water retention, or road grading activities.

The emergency operations plans are maintained by the county Emergency Management Agency. These plans are updated annually and include hazard mitigation findings from the previous year.

Building codes are standard across the county and can be updated with hazard mitigation findings by the governing body of each local government. In addition, the state has adopted the latest International Building Codes. As changes are made to the state building code by the state legislature, local jurisdictions may adopt those changes and incorporate them into local building codes.

Each of the municipalities has a flood plain ordinance. Revisions, which might include adoption of more stringent floodplain regulations, are accomplished through review and adoption by the municipal council.

Public hearings, which provide an opportunity for public comment, are required prior to adoption of any of the above mechanisms.

Existing Planning Mechanisms

Jurisdiction	Comprehensive Plan	Capital Improvement Plan	Building Codes	Flood Hazard Ordinance	Zoning Ordinance	Emergency Operation Plan
Edgefield County	Yes	Yes	Yes	Yes	Yes	Yes
Town of Edgefield	Yes	No	Yes	Yes	Yes	No
Town of Johnston	Yes	No	Yes	Yes	Yes	No
Town of Trenton	Yes	No	Yes	No	Yes	No

VI. Mitigation Goals, Objectives, Strategies, and Projects

Using the findings of this plan as a guide, the following mitigation goals, objectives, and strategies for implementation were developed. Goals and objectives were reviewed in a public meeting. Once the final goals and objectives were determined mitigation strategies were developed that would aid the county in meeting the goals and objectives identified in the plan. Strategies were selected using the information obtained from the capabilities assessment, which identified existing programs and shortfalls related to mitigation activities.

The following existing plans and technical information were reviewed before and during the update process: Edgefield County Hazard Mitigation Plan, Edgefield County Comprehensive Plan, Comprehensive Plans from the municipalities, Zoning Ordinances from the county and municipalities, Flood Plain Ordinances from the county and municipalities, weather reports from the National Oceanographic and Atmospheric Administration, and various instructional materials from the Federal Emergency Management Agency.

The goals for this plan are consistent with the hazard vulnerabilities are determined through the process laid out by SCEMD and the University of South Carolina. Working towards achieving all of these goals is expected to minimize hazard related losses associated with any of the hazards for which Edgefield County is potentially at risk. Each of the goals was reviewed for their completeness and continued relevance. In the case of Edgefield County, few of the goals from the previous plan have been completely achieved due to limited staffing and funding.

Projects will be assigned a priority and feasibility rank, in addition to having a listing of implementing agencies and a general timeframe for implementation. The following implementation schedule has been developed. Projects have been listed by priority according to the ranking assigned by the Hazard Mitigation Planning Committee. Feasibility to implement the projects is based in the results of the capability assessment.

Edgefield County Hazard Mitigation Plan

- High Priority Projects with High Feasibility (High/High)
- High Priority Projects with Medium Feasibility (High/Medium)
- High Priority Projects with Low Feasibility (High/Low)
- Medium Priority Projects with High Feasibility (Medium/High)
- Medium Priority Projects with Medium Feasibility (Medium/Medium)
- Medium Priority Projects with Low Feasibility (Medium/Low)
- Low Priority Projects (Low)

The Hazard Mitigation Planning Committee used the following criteria to determine the projects rankings: which projects were most needed, which of these projects were the most likely to be accomplished, and which projects would be most effectively address mitigation needs. In addition to reviewing potential, the committee considered the social impact of each potential project, the technical capabilities of the local government to carry through the project, impact on the environment, economic capabilities (benefit-cost analysis), ability of the local government to maintain the project, and any political or legal effects of the decision.

A. Goals

Goal 1: The health, safety, and welfare of the community's residents and visitors will not be threatened by disasters.

Strategy: Inform the public of potential hazards and the actions they can take to reduce damage.

Strategy: Improve coordination and communication among disaster response organizations and local governments.

Strategy: Improve training for first responders.

Strategy: Plan for reaching the traveling public or temporary visitors in the event of a natural disaster.

Goal 2: The availability and functioning of the community's infrastructure will not be significantly disrupted by disaster.

Strategy: Ensure that all shelters and critical facilities have adequate emergency power resources.

Goal 3: The economic vitality of the community will not be threatened by a disaster.

Strategy: Ensure critical facilities run as smoothly as possible after a disaster.

Goal 4: Reduce the potential impact of natural disasters on private property.

Edgefield County Hazard Mitigation Plan

Strategy: Educate and plan for taking basic steps to mitigate localized disasters.

Goal 5: Reduce the potential impact of natural disasters on the county’s historic district properties.

Strategy: Protect and promote the historic resources of the county.

Goal 6: Develop better hazard data for Edgefield County and the municipalities.

Strategy: Improve basic data holdings related to Edgefield County hazards.

Strategy: Increase awareness of hazardous materials risks throughout the county.

Goal(s)	Mitigation Action	Hazard(s) Addressed	Priority/ Feasibility and Timeframe	Potential/Current Funding Sources	Responsible Agency or Department	Milestones Achieved, Impediments to Implementation
1	Develop a county wide mass notification system	All	High/ Medium Short Term	General Fund/ Grants	Edgefield County EMA	Project is currently being researched for financial feasibility
1	Continue to ensure that all existing shelters and critical facilities can communicate with the EOC	All	High/High On-Going	General Funds/ Grants	Edgefield County EMA	
1	Develop a traveling display to increase awareness of potential disasters	All	High/High On-Going	HMPG/ General Fund	Edgefield County EMA	Grant has been awarded and the project started
1	Continue programs for children to teach them disaster preparedness	All	High/High On-Going	HMPG/ General Fund	Edgefield County EMA	Grant has been awarded and the project started

Edgefield County Hazard Mitigation Plan

1	Continue programs to teach the public about disaster preparedness	All	High/High On-Going	HMPG/ General Fund	Edgefield County EMA	Grant has been awarded and the project started
1	Continue to review communications procedures on regular basis	All	High/High On-Going	General Fund	Edgefield County EMA	
1	Use media to promote pre-disaster planning	All	High/High Short Term	HMPG/ General Fund	Edgefield County EMA	Grant has been awarded and the project started
1	Purchase appropriate firefighting vehicles for countywide use and develop a replacement schedule	All	High/Low Long Term	Fire Fund, Grants	Edgefield County and municipality Fire Departments	
1	Upgrade all shelter resources to include emergency generators	All	High/Low Long Term	General Funds/ Grants	Edgefield County EMA and shelter facilities	
1	The County will analyze and prioritize all future development, planning, and mitigations activities based on compliance with NFIP standards	Flooding	High/Medium On-going	General Fund	Edgefield County and Local Governments	
1	Continue to research and take part in training for first responders	All	High/Medium On-going	General Fund, Grants	Edgefield County, Local Governments, Emergency Services Departments	

Edgefield County Hazard Mitigation Plan

1	Educate residents in the area on notification and evacuation procedures in case of catastrophic failure	Flooding	High/Medium On-going	General Fund/ Grants	Edgefield County EMA, Beaverdam Creek Watershed	
1	Update equipment at existing E-911 Communications Center as needed and funding is available	All	Medium/ Medium Long Term	General Fund/ Grants	Edgefield County E-911 Administration, County Government	
1	Plan for and educate the public on what to do with their animals during a disaster	All	Medium/ Medium Ongoing	General Fund/ Grants	Edgefield County EMA and Animal Control	
1	Update communications equipment on a regular basis as funding is available	All	Medium/ Medium Ongoing	General Fund/ Grants	Edgefield County, Local Governments, Emergency Services Departments	
2	Continue to include utility providers in all planning and drills	All	High/High On-Going	General Fund/ Grants	Edgefield County EMA and utility providers	
2	Ensure all critical facilities have generator backup power	All	High/Low Long Term	General Fund/ Grants	Edgefield County EMA and facilities	
2	Install backup power source for ECWSA Admin and Operating Building	All	High/Medium Long Term	ECWSA General Fund/ Grants	ECSWA	
2	Install backup power to carry the load of the HVAC system	All	High/Medium On-going	ECH General Funds/ Grants	Edgefield County Hospital	

Edgefield County Hazard Mitigation Plan

	to the entire hospital					
2	Develop a plan to address the flooding problem at the Edgefield Gym	Flooding	Low Long Term	Town General Fund	Town of Edgefield	
2	Develop a plan to dispose of bio-hazard waste during a water outage	All	Medium/High Long Term	ECH General Funds/ Grants	Edgefield County Hospital	
3	Continue to regularly inspect roads and bridges throughout the county to ensure they are ready for service	All	High/High Ongoing	General Fund/ Grants	SCDOT, County Roads and Bridges Department, Municipal Public Works	
3	Review local government comprehensive plans and ordinances to ensure that they include provisions for pre and post disaster readiness	All	High/High Ongoing	General Fund	Edgefield County, Local Governments, and Edgefield County EMA	
4	Install hydrants every 1,000 feet along Hwy 25 expansion	Wildfire	High/ High Short Term	ECWSA General Fund/ Grants	ECSWA	Project is being implemented and is expected to be completed by the end of 2017
4	Continue to work with local governments to target storm water problem areas	Flooding	High/High Ongoing	General Fund/ Grants	Edgefield County, Local Governments, and Edgefield County EMA	

Edgefield County Hazard Mitigation Plan

4	Continue outreach to mobile home parks with pre and post disaster information	All	High/High Ongoing	General Fund/ Grants	Edgefield County EMA	
4	Develop promotional materials in Spanish and English	All	High/High Ongoing	General Fund/ Grants	Edgefield County EMA	
4	Adequately support and enforce existing building codes	All	Medium/ Medium Ongoing	General Fund	Edgefield County, Local Governments	
4	As necessary purchase equipment needed to clear ditches or replace storm drains	Flooding	Medium/ Medium Long Term	General Funds/ Grants	SCDOT, County Roads and Bridges Department, Municipal Public Works	
4	Review exiting ordinances related to storm water and update them as necessary	Flooding	Medium/ Medium Long Term	General Funds/ Grants	Edgefield County, Local Governments, and Edgefield County EMA	
4	Install drinking wells at each elevated water tank site to provide an additional potable water source	All	Medium/ Medium Long Term	ECWSA General Fund/ Grants	ECSWA	
4,5	Improve dam gate system to allow for the release of water to avoid overflow	Flooding	High/Medium On-going	Private Source Funding/ Grants	Beaverdam Creek Watershed	
4,5	Replace old fire hydrants	Wildfire	Medium/ Medium Long Term	ECWSA General Fund/ Grants	ECSWA	

Edgefield County Hazard Mitigation Plan

5	Plan for the protection of historic structures in case of natural disasters	All	Medium/ Medium Long Term	General Fund/ Grants	County and Local Archives, Edgefield County EMA	
5	Maintain information on historic properties that may be endangered by natural hazards	All	Medium/ Medium Short Term	General Fund/ Grants	County and Local Archives, Edgefield County EMA	
6	Maintain contacts with railroad companies to remain familiar with their Emergency Action Plans	Hazardous Materials Spill	High/High Ongoing	General Funds	Edgefield County EMA	
6	Conduct a Hazardous Materials survey to identify all hazardous materials that are stored in the county	Hazardous Materials Spill	High/Medium On-going	General Fund/ Grants	Edgefield County, Local Emergency Planning Committee	
6	Utilize FIRM maps to assist in locating and documenting flood prone areas	Flooding	Medium/ Medium Ongoing	General Fund/ Grants	Edgefield County EMA	

VII. Plan Implementation and Maintenance Procedures

The Disaster Mitigation Act of 2000 requires local plans to have a method and schedule for monitoring, evaluating, and updating the Hazard Mitigation Plan within a five-year cycle.

A. Monitoring

Edgefield County Emergency Management Agency will be responsible for tracking the progress of the implementing agencies and ensuring adherence to the plan time line. Updates to the plan and the convening of a Hazard Mitigation Planning Committee will be the responsibility of the Emergency Management Agency.

B. Evaluation

The Edgefield County Hazard Mitigation Planning Committee will develop an annual end of year report. The report will detail mitigation activities undertaken over the course of the year as well as any mitigation projects that have been completed. Any mitigation success stories should be highlighted. The report should also address the following points:

- Evaluate the goals and objectives to ensure they address current and expected conditions.
- Determine if the nature or magnitude of risk has changed.
- Document any implementation problems such as technical, political, financial, legal, or coordination issues with other agencies.
- Discuss whether the outcomes have occurred as expected.
- Document agency and other partner participation.
- Document public participation opportunities.

Copies of the annual report should be made available to each of the implementing agencies, local government, citizens, SCEMD, and FEMA. In addition, to maintain public involvement during the plan monitoring and evaluation process, the public will be invited to attend all meetings of the Hazard Mitigation Planning Committee. During the meetings the public will be provided an opportunity to comment on the implementation and evaluation of the plan.

C. Update

The plan is required to be updated five years after the adoption date. In the event of a significant disaster or any substantial changes in land use planning or regulations that would impact the recommended mitigation projects, more frequent updates should be considered. The Hazard Mitigation Planning Committee and Emergency Management Agency will be responsible for overseeing the update of the Hazard Mitigation Plan. The update process will be similar to the one used to develop this plan and will incorporate opportunities for public involvement. The public will be asked to comment in general on mitigation needs in the county through public hearings advertised in the newspaper and/or by other means of communication.

Due to limited staffing to limited staffing and resources, the monitoring and annual updating of the Hazard Mitigation Plan was a low priority over the past 5 years. No annual reports were completed. With new staffing currently in place, the Emergency Management Agency has taken a renewed interest in maintaining the plan and keeping it updated on a regular basis. Plan reviews will take place at least semi-annually to review the plan goals and accomplishments.

Critical Facilities

Fire Departments

Edgefield

Johnston

Trenton

Westside and substation

Northside and substation

Merriwether and substations 2 and 3

County Line and substation

Municipal Buildings

Edgefield Town Hall

Trenton Town Hall

Johnston Town Hall

County Buildings

County Administration

Courthouse

E-911 Dispatch/Sheriff's Office

Agriculture Building/Emergency Management Office/Emergency Operation Center

Utilities

Edgefield County Water and Sewer Authority

South Carolina Electric and Gas

Aiken Electric Co-op

Edgefield County Hospital

Schools

Strom Thurmond High

JET Middle

Johnston Elementary

Douglas Elementary

Parker Elementary

Merriwether Elementary

Schools continued

Merriwether Middle

Fox Creek High

Francis Hugh Wardlaw Academy

Meeting Notes and Minutes

Edgefield County Hazard Mitigation Plan

From: Rick Green

Sent: Monday, January 04, 2016 2:20 PM

To: McKinney, George; 'chris@mccormickes.com'; 'tthompson@aikencountysc.gov'; 'j.morton@saludacounty.sc.gov'; 'ptucker@columbiacountyga.gov'; 'cjames@augustaga.gov'

Cc: 'Suzy Spurgeon'

Subject: Edgefield County Hazard Mitigation Plan Update

FEMA is requesting that neighboring communities be given the opportunity to review and comment on hazard mitigation plan updates, so attached is a draft of the update from Edgefield County. Please review and if you have any comments, get them back to Suzy Spurgeon or me before noon on Friday, January 15, 2016.

Thank you for your assistance,

Rick Green, AICP

Government Services Director

Upper Savannah Council of Governments

430 Helix Road

Edgefield County Hazard Mitigation Plan

To: Rick Green <rgreen@uppersavannah.com>
Cc: Suzy Spurgeon <SSpurgeon@edgefieldcounty.sc.gov>
Subject: Edgefield County Hazard Mitigation Plan

Rick,

I reviewed the Edgefield Plan and it looks good to me.

Sorry for the delay, but have been busy the last few weeks.

George McKinney II
Emergency Management Coordinator
Greenwood County Emergency Services
528 Monument Street, B-24
Greenwood, SC 29646
(W) 864-942-8553
(C) 864-377-4809
(Fax) 864-942-8553
www.greenwoodsc.gov/countywebsite/index.aspx?page=352



Council of Governments

430 Helix Road
Greenwood, SC 29646-2324

Telephone 864-941-8050
Toll-Free 1-800-922-7729
FAX 864-941-8090

Memorandum

To: Agencies with an interest in natural hazard mitigation planning for Edgefield County

From: Rick Green, Government Services Director

Date: December 2, 2014

Subject: Edgefield County Natural Hazard Mitigation Plan Update Initial Meeting

The Edgefield County Emergency Management Agency and Upper Savannah Council of Governments are about to begin the process of updating the Natural Hazard Mitigation Plan for the county. This plan is a blueprint for reducing property damage and saving lives from the effects of future natural disasters. This plan is also required in order for Edgefield County and the municipalities to receive certain types of state and federal disaster relief funds after disasters occur.

There will be an initial meeting for the update of this plan on Tuesday, December 16 at 10:00 am at the Edgefield County Emergency Management office on Gray Street. You are invited to attend this meeting and actively participate in the planning process. Edgefield County and each municipality will have the option of adopting this plan once updated. Adoption of the plan will mean that the local government is eligible to apply for disaster mitigation funds.

A sample page from the goals section of the plan is copied on the back of this memo for your information.

If you have any questions before the meeting, please call me at (864) 941-8072 or email at rgreen@uppersavannah.com. Thank you for your interest in this project, and I look forward to seeing you or your agency representative on December 16.

Edgefield County and Municipal Hazard Mitigation Planning Goals:

The health, safety, and welfare of the community's residents and visitors will not be threatened by disasters: Inform the public of potential hazards and actions they can take to reduce damage by using a traveling display for public events, create awareness programs for school children, work with local clubs to plan for animal evacuation and shelter, use the media to promote pre-disaster planning

The availability and functioning of the community's infrastructure will not be significantly disrupted by disaster: Work with Red Cross, improve coordination among agencies

The economic vitality of the community will not be threatened by disaster: Provide generators at critical facilities, update equipment, improve training for first responders, notify campers of disaster events, implement emergency siren warning systems, ensure adequate power and communication at all shelters, ensure critical facilities (utilities, shelters, transportation) continue to function after disaster, update comp plans with emergency information

The potential impact of natural and man-made disasters on private property will be reduced: target storm water problem areas, develop materials in English and Spanish, enforce existing building codes,

The potential impact of natural and man-made disasters on historic properties will be reduced: Use GIS to target properties, work with SC Dept of Archives and History

Better hazard data for local governments will be developed: Incorporate flood plain and hazard mapping when possible, verify emergency planning procedures of rail lines, conduct a hazardous materials survey

Edgefield County Hazard Mitigation Plan

ATTENDANCE

DATE 12/16/14

Edgefield County Hazard Mitigation Plan Update

TYPE OF MEETING

NAME	MAILING ADDRESS/CITY/STATE/ZIP	PHONE NUMBER	FAX NUMBER	INCLUDE AREA CODE FOR PHONE/FAX
Rick Green	Upper Savannah CO6	804 941 8072		rgreen@upper.savannah.ga
Suzy Spurgeon	Edgefield EMA	803 637-2123		sspurgeon@county.sc.gov
Jennifer Pearson	Edgefield EMA	803 637 2123		jpearson@county.sc.gov
Roger LeDuc	Town of Edgefield/Trenton	803 637-2014		rleduc@gmail.com
Treas. Hultmanagers	300 Ridge Medical Plaza Edgefield, SC 29829	803-255-6816		hultmanagers@myeck.org
John HAGE - ECWSA	Po Box 416, Edgefield, SC. ECWSA	803-637-3011		ecwsa.jh@bellsouth.net
Terence Culbreath	Town of Johnston	803- 637 275 2488		t.culbreath@johnston.sc.us
Lynn Strom	124 Courthouse Sq. Edgefield, SC	803-637-4000		lstrom@edgefieldcountysc.gov

Edgefield County Hazard Mitigation Plan

Minutes Edgefield County Hazard Mitigation Planning Committee December 16, 2014

The meeting began at 10 AM. Rick Green welcomed the group and gave a brief background report on the hazard mitigation planning process. The group was asked for comments on natural hazards and repetitive losses in Edgefield County.

Communication issues and needed communications were mentioned. Getting warnings to people in campgrounds was mentioned, as well as coordinating better with surrounding counties. A reverse E911 system was mentioned as a possibility.

Generators and portable showers were needed at all shelters and at all critical facilities. The Johnston Armory was mentioned as a possible shelter site. Shelters and warming/cooling stations were discussed and the need for more was mentioned.

Brush trucks and a pumper truck upgrade would help fire-fighting issues county-wide. Debris removal after a storm is a need. A fuel delivery system for critical facilities during and after a hazardous event is also needed.

The group discussed the various natural hazards for Edgefield County and how best to mitigate them. Information was distributed and discussion followed where a variety of mitigation goals and procedures were discussed.

Rick Green gave a brief timeline for the project. He mentioned that local governments would be offered the chance to review and adopt the plan.

Meeting attendees:

Suzy Spurgeon, Edgefield County EMA Director
Jennifer Pearson, Edgefield County EMA Assistant
Roger LeDuc, Town Administrator for Edgefield and Trenton
Travis Haltiwanger, Edgefield County Hospital Safety Officer
Terrance Culbreath, Town of Johnston Mayor
John Hare, Edgefield County Water and Sewer Authority Director
Lynn Strom, Edgefield County Administrator
Rick Green, Upper Savannah COG Government Services Director

will be Rev. Sloan Gordon. Rev. Willie Patten is pastor. Everyone is welcome.

Regularly Scheduled Local Meetings

Edgefield Town Council will meet the first Monday of each month at 5:30 p.m. at Edgefield Town Hall (use rear entrance).

AA Meetings: Thursday meetings 12 noon at Trinity Episcopal Fellowship Hall and at 5:30 p.m. at Chef Bob's Café at 303 Main, Edgefield; Sunday at 5 p.m. at Chef Bob's Cafe.

Edgefield Lion's Club meets first the Monday of each month at 6 p.m. at Aiken Elec. Co-op, 1195 Bauskett St.

Edgefield County Council meets the first Tuesday of each month at 6 p.m. at County Council Chambers on Jeter St.

American Legion Post 154 meets the first Tuesday of each month.

VFW Post 6932 meets first Thursday at 7 p.m. at American Legion post in Edgefield. For info. Cmdr. at 803-637-0051.

Johnston Town Council meets the second Monday of each month at 6:30 p.m. at Johnston Town Hall.

Johnston Sertoma Club meets the second Monday of each month.

Trenton Town Council meets the second Wednesday of each month at Town Hall at 6 p.m.

Edgefield County Planning Commission meets the second Thursday of each month at 6 p.m. at County Council Chambers on Jeter St.

American Legion Post 30 meets the third Thursday of each month at 6 p.m. at the Legion Hut on Penn St.

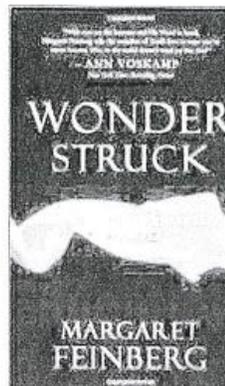
Friends of the Edgefield County Public Library (FOL) meets at the Library at 5 p.m. the third Thursday of every month (Sept. - June).

Edgefield County Hospital Board of Trustees meets the last Monday of each month at 6:30 p.m. in the hospital conference room.



Antonia Adams received the Delta Sigma Theta Sorority Scholarship presented by the Aiken Chapter.

Book Review



Brian Selznick is known for combining a children's novel with the graphic novel. In this case, he has created two stories, one in print and the other in detailed pencil drawings which seem at first to be completely unrelated. By the end of the story, we see the connection between the two tales.

As a person who suffers from hearing loss, I identified with Ben, the young boy in the print story. He has hearing in only one ear, has lost his mother, doesn't

Public Notice

There will be a public hearing to discuss Edgefield County's updated Hazard Mitigation Plan on Monday June 8 at 10:00 a.m. at the Edgefield County Emergency Management Agency offices located at 304 Gray Street, Edgefield, SC 29824. For further information please call Suzy Spurgeon at 803-637-2123.

Public Notice

Edgefield County Water & Sewer Authority's 2014 Water Quality Report is available for Public Review at the Administrative Office located at 100 Waterworks Road, Edgefield, S.C. 29824. M-F 8:30 - 5:00 and at http://ecwsa.com/site/ecwsa_forms?WaterQualityReport.pdf

Is Human/Sex problem in

To learn more about the cing in this area, a Communit held at Mt. Calvary Luthera at 6:30 p.m. The guest speak iCare.

iCare is a non-profit 501c to women and children in th human/sex trafficking.

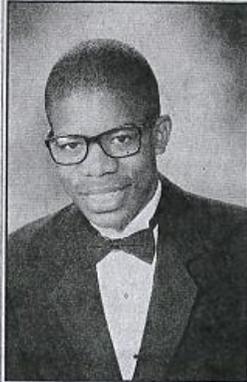
For more information an church office at 803-685-752 net. Refreshments and child

Mt. Calvary is located at ston. For more information

Section 1, June 3, 2015 - 3

Aiken Electric Cooperative Awards Three Scholarships

Aiken Electric Cooperative recently awarded three college scholarships to local graduating seniors. One \$1,000 Trustee scholarship was awarded to Brian Rittenberry of Midland Valley High School and two Touchstone Energy® scholarships were awarded to Jamarr McCain and John Hoffmann of Strom Thurmond High School.



Jamarr McCain,

Jamarr McCain, Strom Thurmond High School, was awarded the scholarship for a four-year university or college. He plans to attend Rhodes College to study Cardiology or Criminal Medical Law. On receiving his Aiken Electric scholarship, McCain said, "The fact that I was a recipient for the Aiken Electric Touchstone Energy scholarship is an honor in itself. My involvement with the Cooperative goes back to a year ago when I was one of seven chosen for the Washington Youth Tour. I am ecstatic to have been chosen for the scholarship to know that it will be a great help for my family with the cost of college. My final words would be for rising juniors and seniors to get involved with Aiken Electric Cooperative. It's one of the best decisions I made in high school."

The winner of the two-year, technical school scholarship is John (Cale) Hoffmann. He plans to attend Midlands



John Hoffmann

Technical College to become a licensed electrician.

"We are pleased to support these outstanding local seniors. Aiken Electric Cooperative strives to grow future leaders in the communities we serve," says CEO Gary Stooksbury.

Southern Cuisine Fit For Any Palate

Right over yonder, just south of Edgefield, S.C. 29824 on the side of historic U.S. Highway 25, near the intersection of Waterworks and Augusta Roads sits one of the jewels in the crown of southern cuisine. "Poppies" All-American BBQ and Grille, a recent name change precipitated by corporate downsizing, offers culinary delights prepared from recipes handed down through generations of the Sprouse family. Harvey "Poppie" Sprouse, well known around and about the western parts of South Carolina for his steak sandwiches, purveys the food that makes South Carolina famous Wednesday through Friday from 11:00 a.m. to 7:00 p.m. daily and



Poppie's staff left to right: Poppie's Pig (Apple Pie), Poppie (Harvey), Poppie's niece (Cathy), Poppie's Diversification Representative (Lee)

Of course ya'll need to know that if you chose to take visitors from outside the known world for a "Poppie's" feast...

each month.

VFW Post 6932 meets first Thursday at 7 p.m. at American Legion post in Edgefield. For info. Cmdr. at 803-637-0051.

Johnston Town Council meets the second Monday of each month at 6:30 p.m. at Johnston Town Hall.

Johnston Sertoma Club meets the second Monday of each month.

Trenton Town Council meets the second Wednesday of each month at Town Hall at 6 p.m.

Edgefield County Planning Commission meets the second Thursday of each month at 6 p.m. at County Council Chambers on Jeter St.

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Public Notice

Edgefield County Council will hold third reading of the FY 2015-2016 General Operating Budget at its regular meeting Tuesday, June 2, 2015. The meeting will be held at 6:00 P.M. in the County Council Chambers at 225 Jeter Street, Edgefield, South Carolina.

Benefit Auction

A benefit auction for Anthony Corley will be held Saturday, May 30, at the home of Pete Cleveland and the late Kathy Cleveland, 305 The Heights 3rd. Ave., Saluda, S.C. It will include catering equipment and other miscellaneous items. Preview begins at 9 a.m. and the sale begins at 10 a.m. There are no early sales For more info call 864-993-6370.

Summer Camp at Women in Unity

June - July

Call 637-2010 for information

choice, and not be frightened over having a Bible, countries, Christians are beheaded for their beliefs.

Because the freedom ensured to us by our war can be educated. My sister wants to become a citizen lived in parts of the Mid-East, she would not be opportunity to go to school. Having an education ant to my family.

Flying our flag is a luxury and freedom to me. When we see it waving, my mom always says it bumps. She told me once that it is a legacy for me. I really didn't understand that as a freedom, but Many of my family members have served and earned their life for me to be able to fly my own American flag stands for freedom to my family.

Freedom means so many things, such as my son on a line, girls earning an education, my family flag and worshipping my God. My family is grateful American veteran and their families for the freedom they provided unselfishly.



Colonel Blake Story addresses citizens that gathered on Memorial Day 2015. Colonel Storey, a combat veteran, in Parksville, South Carolina.

Trenton

from front page

November 25, 1944, 3 months later: Sergeant Albert Ouzts Kemp (Doodle) was killed when his plane was shot down over Germany. He is buried in the United States Military Cemetery in Luxembourg. 20 years old.

February 22, 1945, 3 months later: Major William Roper Day was killed in action on Iwo Jima. He is buried at Ebenezer Cemetery. 28 years old.

April 6, 1945, 2 months later: Chief in the United States Navy Rufus Earl Cato was reported missing in action in the sinking of the

destroyer, the USS Okinawa. He is 31 years old.

April 12, 1945 later: Corporal C Wright was killed in Germany where in which he was ambushed. He is buried in Bethlehem Cemetery Johnston. 31 years

Edgefield

from front page

Master of ceremonies LTC Larry Peoples gave recognition to Mr. Bill Cheatha welding class from Thurmond Caret. They had made five metal crosses rep

Section 1, May 27, 2015 - 3

In England - Quakeproof

by Jack Reece

... has taken the care and well being of ... seriously as he tends to do with all of ... lities. The home that he has provided ... ist and rafters hewn from native timber ... gs. The flooring itself probably came ... s oneraria. No worry about earthquake ... perhaps the dishes. Anyway, the next ... op by and see the unbelievable hardwood



Earthquake? What earthquake?

I was later told it was a 4.2. It was near Ramsgate and Manston Airport. Christine was woken up at 2:51 a.m. by the bed shaking and bedside lamps rattling. Then the seagulls started squawking loudly. Jaye was still asleep. I am not sure whether I was awake at the time, but at some time during the night I was walking across my room and nearly lost my balance. This was a first for all of us. England does have minor quakes, but not often strong enough to feel. I have no knowledge of any damage to property yet, just broken sleep. In 2007 Folkestone in Kent had a strong quake which caused a lot of damage. That was big news here. I suddenly remembered I had an appointment to

see the optician on Wednesday and Louise went with me. I was told there was no change and I do not need to have new glasses. So it was back home and put my feet up. My legs were bad this week, swollen and red. Chris phoned the doctor on Friday morning but they had no free appointments. They did agree to send a district nurse out to look at them. When she arrived she confirmed it was not cellulitis, which had been our worry. She said I needed to see or talk to the

doctor. Chris told her that's what she had tried to do that morning. Now I will have to wait until Tuesday, after the bank holiday on Monday, to try my luck again.

It looks as if it is going to be nice weather for the bank holiday. The Mods and Rockers bikers are due in Margate this weekend.

A great big wasp has just entered the room so I think I will exit, as I do not like those things. Bye for now.

Dorrie Hammant

Essays Published

Memorial Day Service on the Square in ... winners of the essay contest, men- ... paper and sponsored by the American ... as part of the program. They are

Freedom Means to My Family

... says that freedom is the state of ... if that really explains it well enough ... cause, unlike other families, freedom ... things to us. For instance, my dad ... y family. He has been all over the ... third world countries, repairing ... earthquakes and hurricanes, and ... anistan. When he is serving our ... ig freedom and a better way of ... eed it most. Freedom to my family ... soldiers standing on line to make ... hurch of our choice or for girls like ... to college to be a doctor



American Legion Essay Winners: Beth Warnken (right) and Turner Miles Peoples presented their American Legion Essays to those gathered for the Memorial Day Service.

What Does Freedom Mean to My Family?

By Beth Warnken

Edgefield County Hazard Mitigation Plan

Hazard Mitigation Plan Public Hearing

June 8, 2015

Present: Suzy Spurgeon, Edgefield County EMA; Kristine Whittaker, Edgefield County EMA; Scot Yarborough, SCEMD; Don Zupon, ARES; Lynn Strom, Edgefield County; Andrew Phillips, SCEMD; Rodney Ashcraft, Edgefield County; Rick Green, USCOG; Charles Miller, ARES; David Garner, SCEMD

Meeting was called to order at 1009 hrs by Suzy Spurgeon.

Lynn Strom indicated two changes to the plan which she noted:

- **Goal: Purchasing, change the source to "Fire Fund"**
- Project: "Updating communications equipment on a regular basis as funding is available" and Project: "Update equipment at existing E-911 Communications Center as needed and as funding is available", change Responsibility to E911 & County Government on both.

Scot Yarborough and Andrew Phillips will locate the MOU for Edgefield County regarding use of Code Red.

Goal 4: Storm water is to be left as is.

Existing storm water ordinances need to include NFIP. Also we need to investigate why Trenton does not participate in NFIP.

Scot discussed implications of participating in NFIP and how it applies to ALL GRANTS.

Suzy asked if anyone had any mitigation projects they would like to include.

- Scot: would like to include more training for volunteers/first responders on IC
- Lynn: would like to include rail lines and what they carry/hazards they pose to the county in the plan
- Suzy: add LEPC to the responsible parties to "Project: Conduct HazMat survey"; add three special districts (hospital, water & sewer, Beaver Dam) and identify special projects for them such as the Hwy 25 expansion regarding fire hydrants and sewer line replacement; need to encourage more businesses to participate in LEPC
- David: asked if there were possibilities for green space initiatives; Scot advised only possibility was in Stevens Creek area and it was not feasible; Suzy indicated that Stevens Creek HydroElectric Plant had updated their EOP to include update to date emergency contact information; water intake is at risk if the dams break but no one has been able to identify a mitigation measure yet
- David also suggested a new continuity of government project for tornado hardening local businesses.

Edgefield County Hazard Mitigation Plan

- The possibility of Edgefield County forming a HazMat team was discussed. Per Suzy, this county is not ready nor able to form their own team and therefore relies on surrounding counties to respond with their HazMat teams, i.e. Aiken County.
- David also stated that the plan needs to include measurable milestones that can be checked off to show progress on the plan goals/projects.
- Currently the county internet servers are in the county courthouse, which does not have a generator. Adding this as a project to the plan was discussed.
- Suzy pointed out that the history statistics need to be reviewed and updated as some are incorrect.
- David and Lynn discussed the lack of an emergency declaration ordinance for the county. David stated he would search for similar ordinances in other counties as a starting point for getting one in place for Edgefield.
- Suzy added that we need to work with the towns with regards to issuing business licenses so that trusted businesses are available following disasters.

Meeting was adjourned at 1109 hrs.

Edgefield County Hazard Mitigation Plan

Rick Green

From: Rick Green
Sent: Tuesday, June 30, 2015 9:06 AM
To: 'Suzy Spurgeon'; 'jpearson@edgefieldcounty.sc.gov'; 'rleduc@gmail.com'; 'thaltiwanger@myech.org'; 'ecwsajwh@bellsouth.net'; 't.culbreath@johnstonsc.us'; 'Lynn Strom'; 'syarbrough@emd.sc.gov'; 'aphillips@emd.sc.gov'; 'kwhittaker@edgefieldcounty.sc.gov'; 'rodneyashcraft@gmail.com'; 'dgarner@emd.sc.gov'; 'ae4ux@arrl.net'
Subject: Draft Edgefield County Natural Hazard Mitigation Plan

A draft of the Edgefield County Natural Hazard Mitigation Plan is available for review on the Edgefield County website under the In the Spotlight heading. If you have any questions or comments about the draft plan, please contact Suzy Spurgeon or me.

<http://www.edgefieldcounty.sc.gov/Pages/Home.aspx>

Thank you for participating in a previous meeting on this topic.

Rick Green, AICP
Government Services Director
Upper Savannah Council of Governments
430 Helix Road
Greenwood SC 29646-2324
Telephone: 864.941.8072
FAX: 864.941.8090
www.uppersavannah.com

Edgefield County Hazard Mitigation Plan

From: Suzy Spurgeon
Sent: Monday, July 13, 2015 3:55 PM
To: William Henderson <GHNDRSN@clermson.edu>
Subject: Hazard Mitigation Plan

Dear Greg,

Edgefield County Emergency Management Agency is forming a Local Hazard Mitigation Multi-Jurisdictional Plan Committee. In order to be eligible for FEMA mitigation grant funds Edgefield County must have a FEMA approved plan. I would like to ask for your help in creating a new plan that we can submit to FEMA in October or November of this year. Participation from members and organization within and surrounding Edgefield County is vital to being able to develop a successful plan.

There are two main parts of the plan the first is the mitigation goals and projects and the second is the risk assessment. The committee will have input on the whole plan with a focus on the mitigation goals and projects.

I would like to invite you or a member of your organization to become a member of Local Hazard Mitigation Multi-Jurisdictional Plan Committee. This committee will meet once a month until the new plan is approved and twice a year after that. The first meeting will be July 27, 10:00 a.m. at the Emergency Management Agency building located at 304 Gray St, Edgefield. Please let me know if you would like to be a member of this team to better Edgefield County.

Suzy Spurgeon

Director

Edgefield Co. EMA

304 Gray Street

Edgefield, SC 29824

Office: 803-637-2123

Cell: 706-631-5645

sspurgeon@edgefieldcounty.sc.gov

**EDGEFIELD COUNTY HAZARD MITIGATION
PLANNING COMMITTEE MEETING 07/27/2015**

Present: Suzy Spurgeon, ECEMA
Kristine Whittaker, ECEMA
Travis Haltiwanger, ECH
Geray Coleman, EC Tax Assessor
Bob Little, USFS
Clifton White, SCDOT
Guy Mueller, EC Building & Planning
John Hare, ECWSA
Myra Jones, USDA-NRCS
Greg Henderson, Clemson Ext.
Scot Yarbrough, SCEMD
Andrew Phillips, SCEMD

Meeting called to order at 1006h by Suzy Spurgeon.

Overview: Background given to committee about FEMA not approving HM plan and why. New plan will be written by ECEMA and SCEMD with help of the committee.

Housekeeping & Rules

Introductions

Presentation on Mitigation

Discussion:

- John Hare, ECWSA, states Hwy 25 project should be done Jan/Feb 2016. Suzy explained that projects in progress can be in the plan with a projected completion date. It is easier to have it in the plan than to have to go back and submit a revised plan so that money is obtained.
- Suzy states projects need to be prioritized. Not all projects can be high priority nor ongoing.
- Bob Little, USFS, states that he'd like to see the Community Wildfire Protection Plans (CWPP) which address fire adapted communities (instead of "firewise") out of USDA, included in the plan. Just completed the plan in Awendaw. USFS has a hazmit plan for the fire service. They have a GIS program with layers which can show fire prone areas, hurdles, dozer capabilities, etc. USFS will begin using the Nature Conservancy to get the CWPPs. Local region includes Edgefield, McCormick, Greenwood, and Saluda.

EDGEFIELD COUNTY EMERGENCY MANAGEMENT

Edgefield County Hazard Mitigation Plan

Hazard Mitigation Planning Meeting

07/27/2015

2

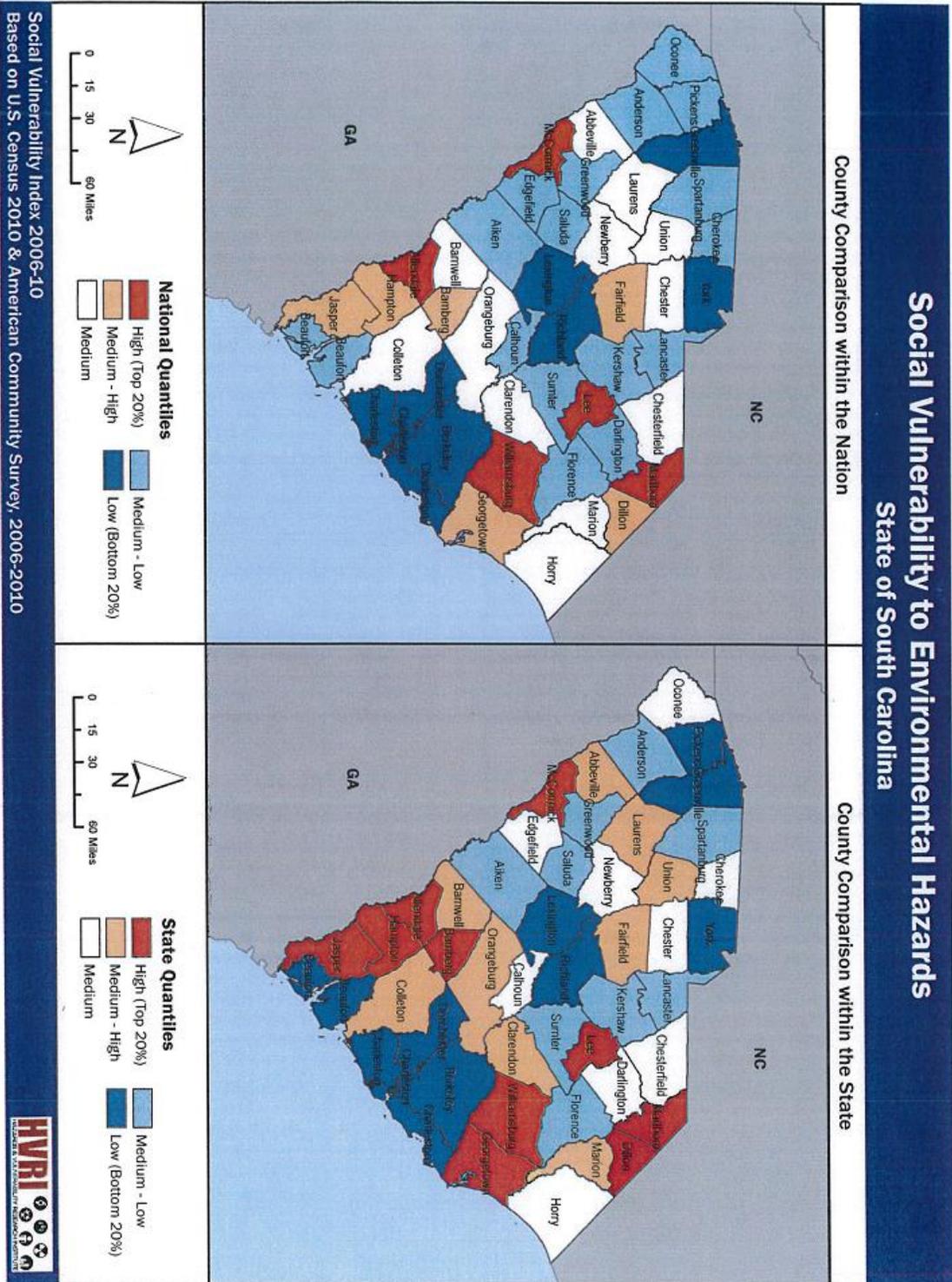
- Scot Yarbrough asked if there is any public education program that addresses the pipelines and their danger to the property owners for land which pipelines run through. Bob stated no, but they would be happy to participate in such a program.
- Travis states they are working on getting a new generator to handle the patient rooms. Current generator is 20+ years old and cannot handle the load. All emergency plans are being updated.
- Geray states he didn't know of any mitigation projects in the works.
- Bob states they also are in the process of building a KML file that can be sent out to property owners and/or business owners.
- Clifton states SCDOT has snow and ice plans that everyone is familiar with; also hurricane plans that facilitate this region assisting coastal regions in the event of a hurricane. Suzy states that information needs to be updated in the HM plan. Clifton states they have a lot of resources. Scot asked how the debris management plan was going; Clifton states that Winter Storm Pax was an eye-opener and plans are being reconsidered and rewritten.
- Suzy states EC has possibilities of earthquake, flooding, tornadoes, and straight line winds. Lack of incidents hampers preparedness, response, and recovery.
- Guy states he would like to see inundation studies conducted. Andrew advised that those could be included in the plan. Would also like to see Municipal Separate Storm Sewer Systems (MS4s) included. Also advised there is no Project Engineer (PE) on staff in EC.
- John states that the plan includes most of his items. Replacing old hydrants could be higher priority. High priority should be secondary water source, possibly drinking water wells; studies must be done first. Currently have six water tanks in the county.
- Myra states the two watersheds associated with Beaver Dam Creek needs valves. Most dams fall to DHEC for inspection because of their size. Suzy states EC has approx. 60 dams that are monitored.
- Greg states that a lot of his part involves livestock, including emergency housing and feeding of livestock. He just participated in Southern Exposure 2015. Maps that were used were lacking information, such as location information. C.A.R.T. has a lot of equipment leftover; Suzy states we need to update our list of resources.
- Suzy asked if there were mitigation efforts in place to deal with drought. According to Greg, no; he states those waters are also mitigated. Greg states there are not really mitigation efforts that can be taken.
- Suzy stated that this committee would like to meet monthly. Next meeting was scheduled for Monday August 24, 2015 at 1000h. Future meetings will be scheduled for the fourth Monday of the month.
- Andrew pointed out the SCEMD role is to help insure the documentation gets approved by FEMA. The meetings and constantly thinking about hazmit will help get the plan and grants being approved.
- Current grant will cover that disaster preparedness trailer. It can be brought to whatever location it is needed. Public education really works!
- Suzy states the more questions that are asked, the better.
- No questions or comments
- Suzy asked that once individuals are committed to the committee, they should stay committed.
- Meeting adjourned at 1126h.

EDGEFIELD COUNTY EMERGENCY MANAGEMENT

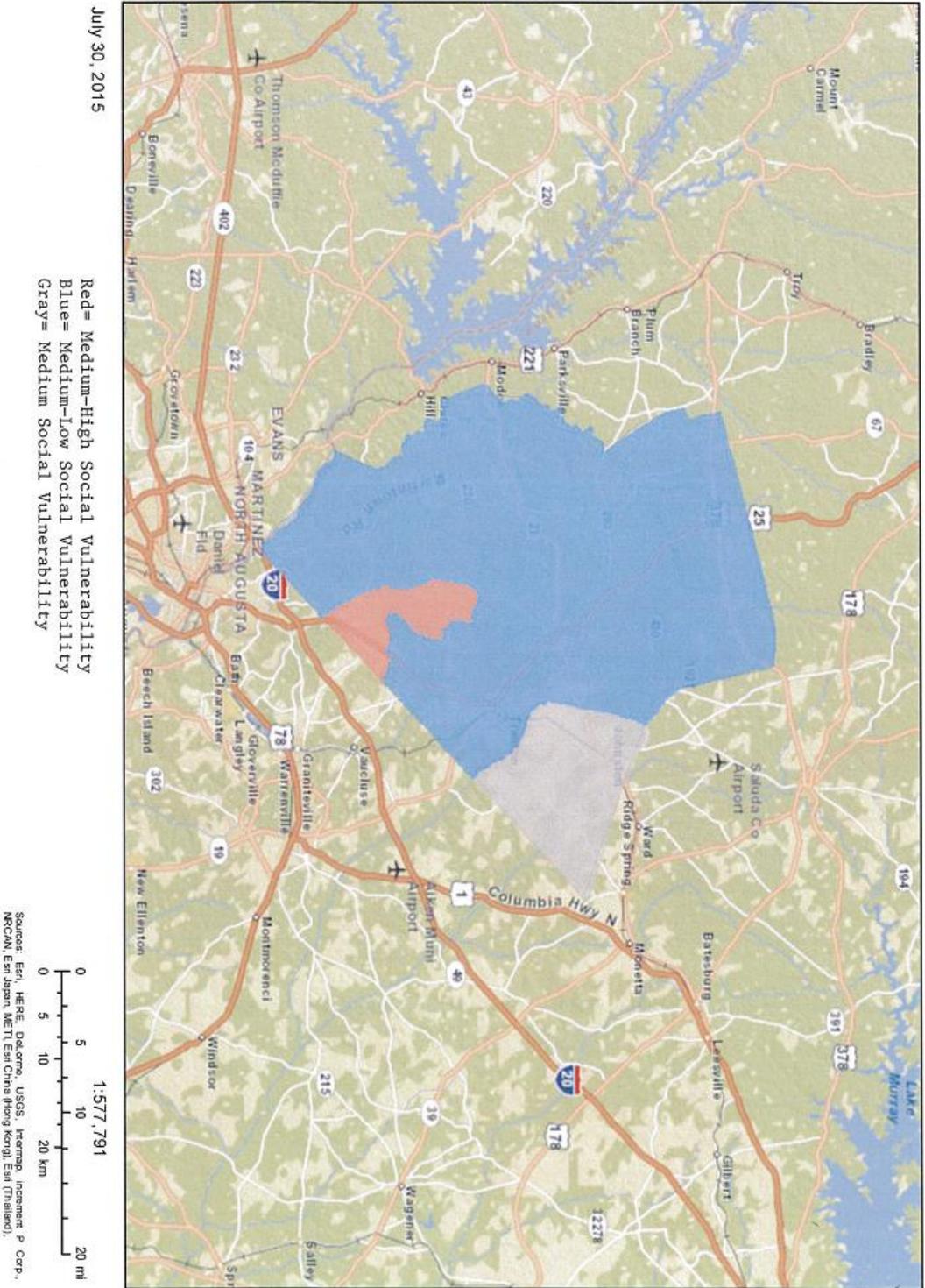
Edgefield County Hazard Mitigation Plan

Sign In
 Hazard Mitigation Planning Committee Meeting
 July 27, 2015

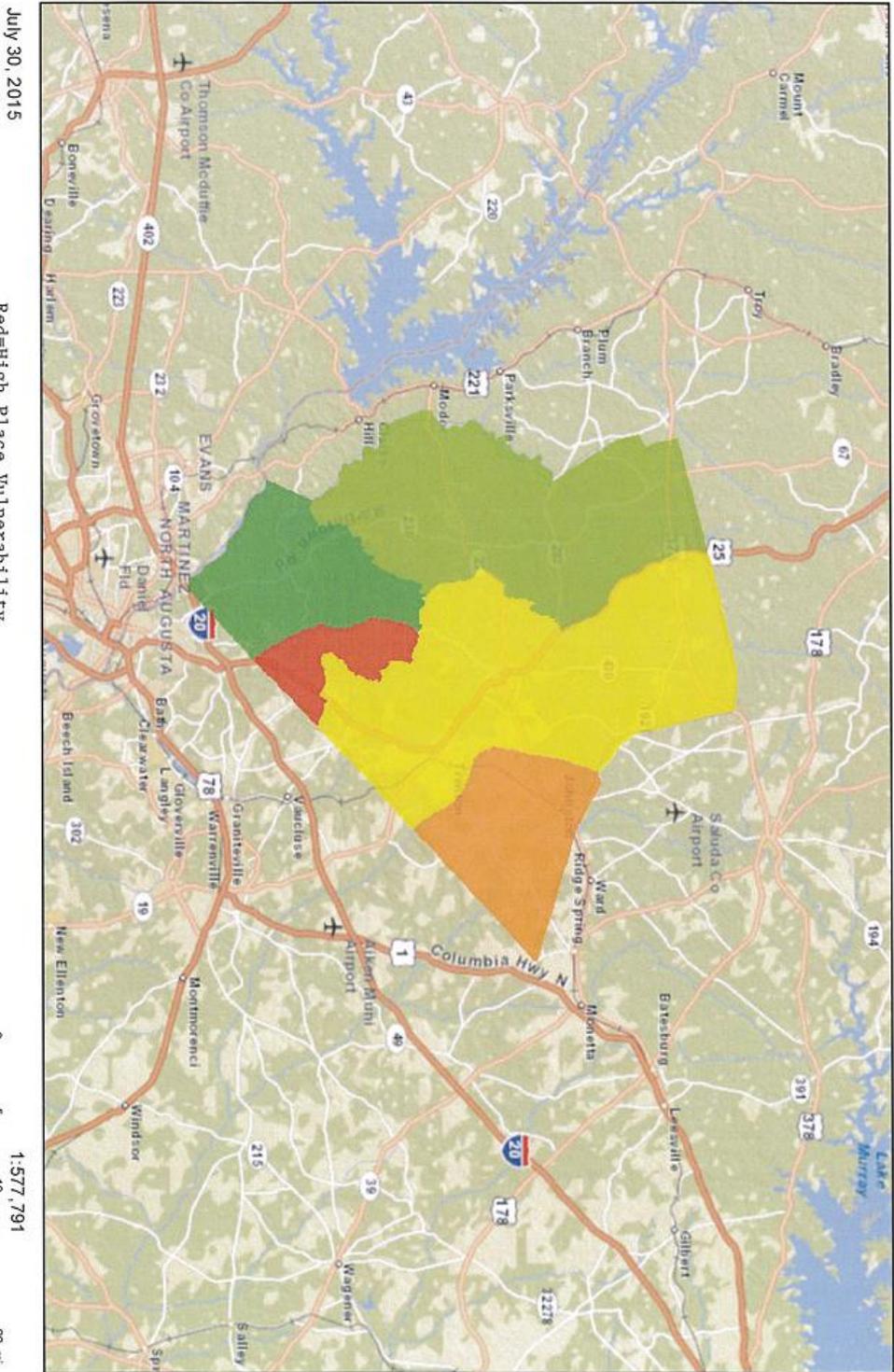
Name	Business/Organization	Phone	Email
Travis Mathewang	Edgefield County Hospital	803-295-6816	mathewang@myeeh.org
Genay Coleman	Edgefield County Tax Assessor	803-637-4057	gcoleman@edgefieldcounty.sc.gov
Bob Lettner	USFS	251-690-6426	rb1lett@fs.fed.us
Cliffen White	SCDOT	(803) 637-6511	whitec@scdot.org
Lucy Okwelle	Edge County T&T	803 637-1873	okwelle@edgellcounty.sc.gov
John Hore	ECUSA	803-637-3011	ecusa@ecusa.net
Mura Jones	USDA-NRCS	803-637-3220	mura.jones@ec.usda.gov
Grace Henderson	CLEMSON EXTENSION	803-637-3161	ghenderson@clmson.edu
Scott Harrison	SCEMD	803 741 6145	sharrison@emd-sc.gov
Kristine Whitaker	ICEMA	803 471 0883	kwhitaker@edgefieldco.sc.gov
Andrew Phillips	SCEMD	803-742-5332	aphillips@emd.sc.gov
Stacy Spurgeon	Edgefield EMA	803-637-2123	sspurgeon@edgefieldcounty.sc.gov



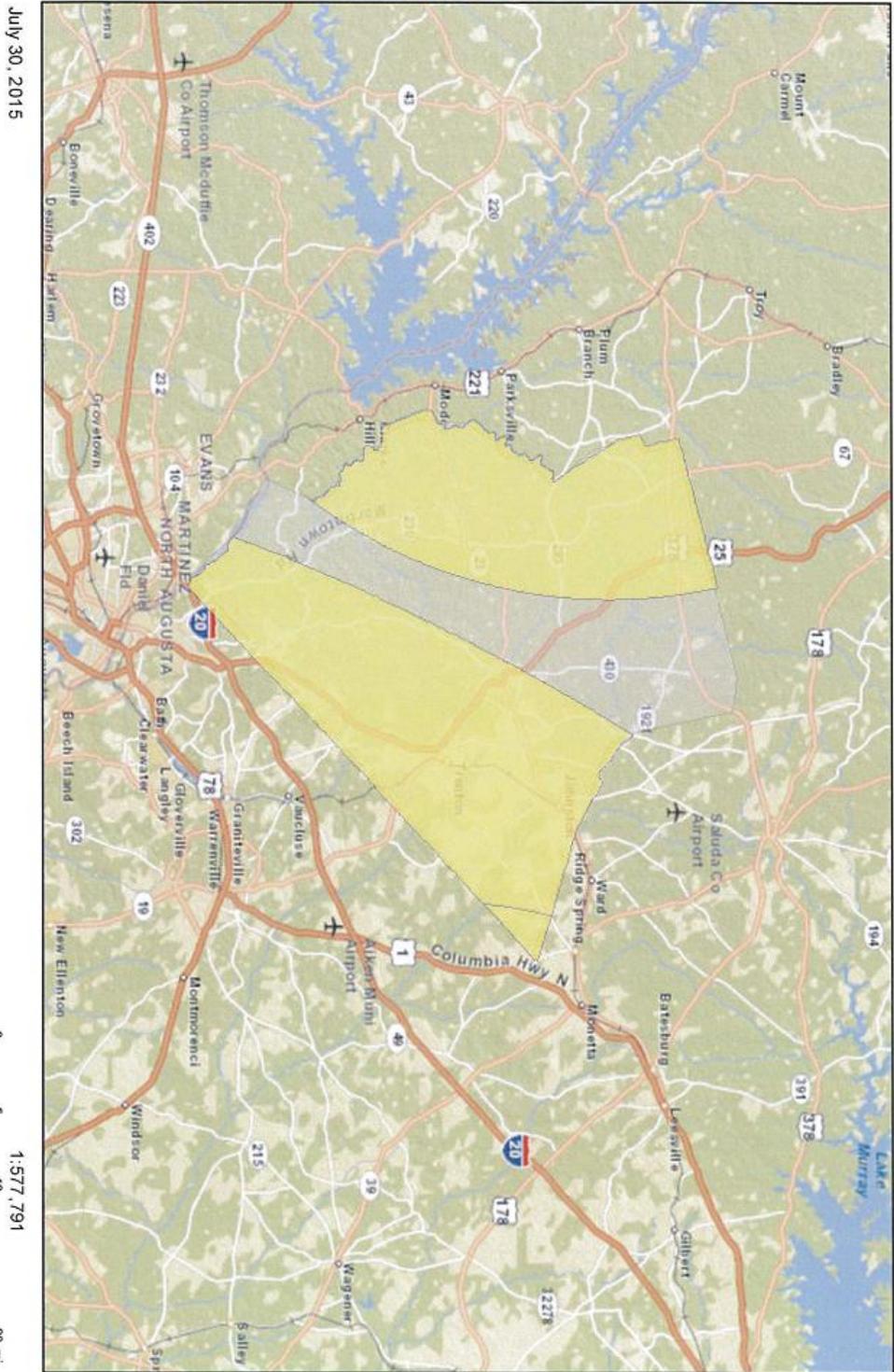
Edgefield County Social Vulnerability (Red)



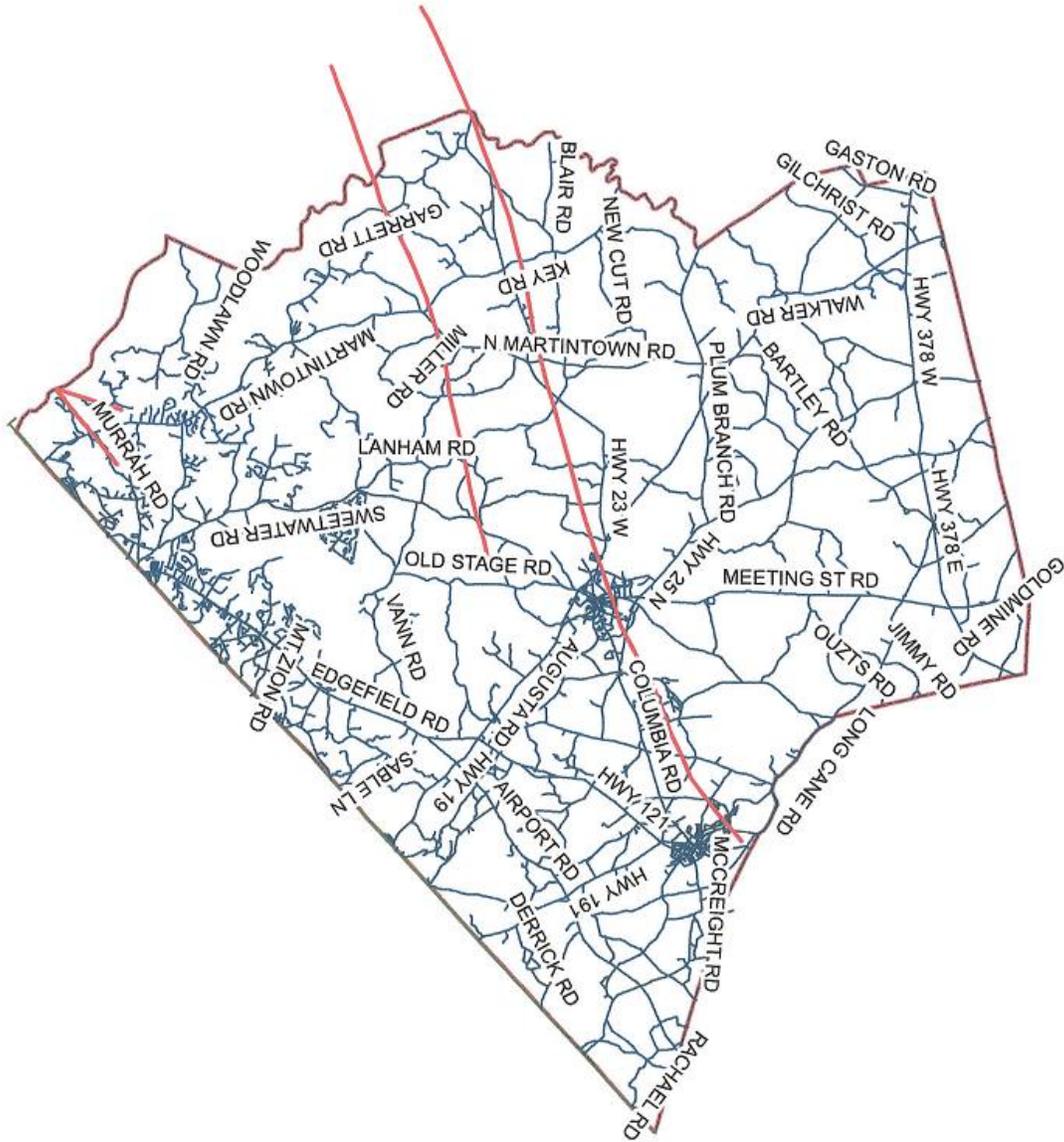
Edgefield County Place Vulnerability (Red highest)



Edgefield County Low Earthquake Frequency (Yellow)

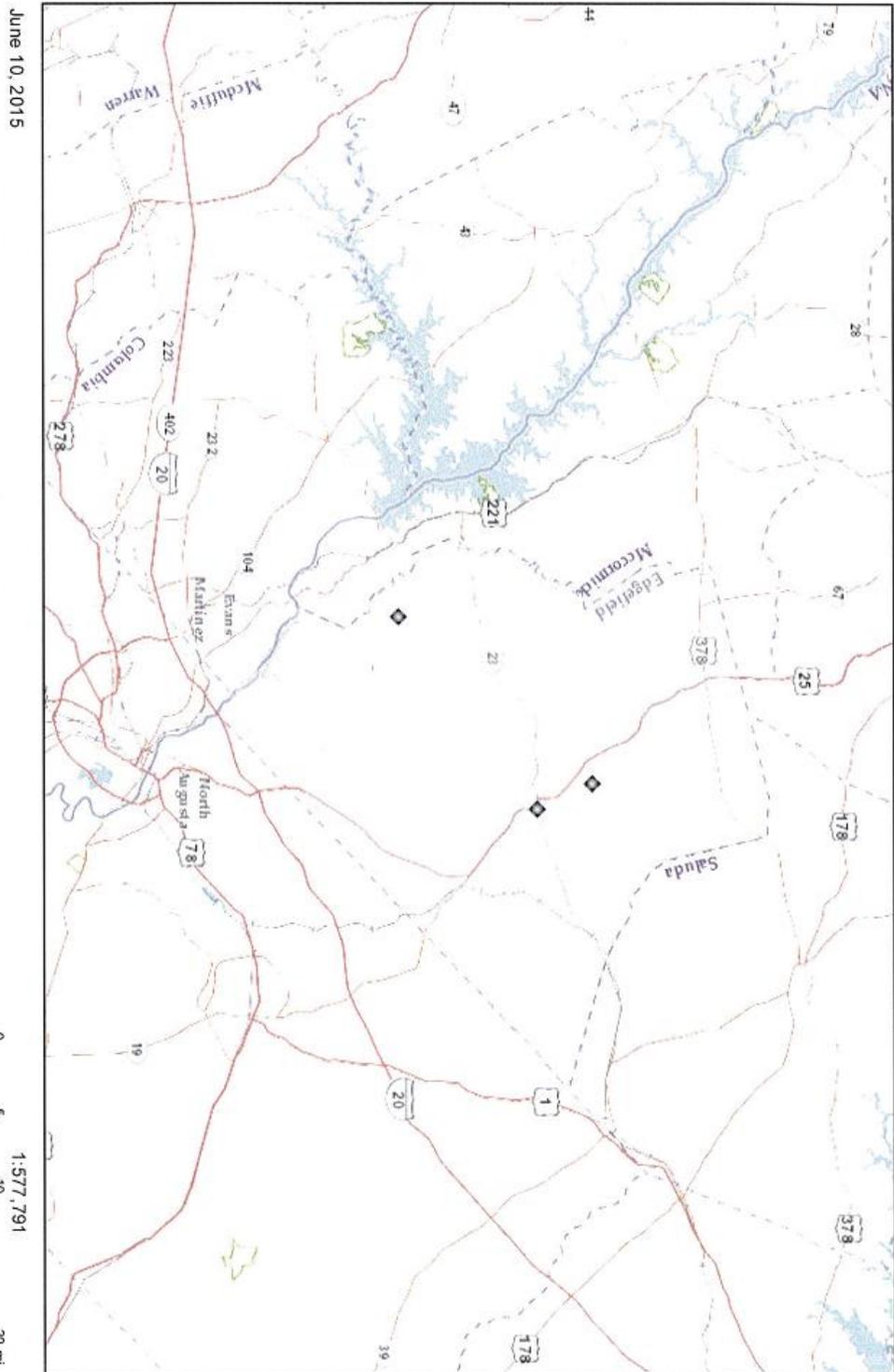


Edgefield County Hazard Mitigation Plan

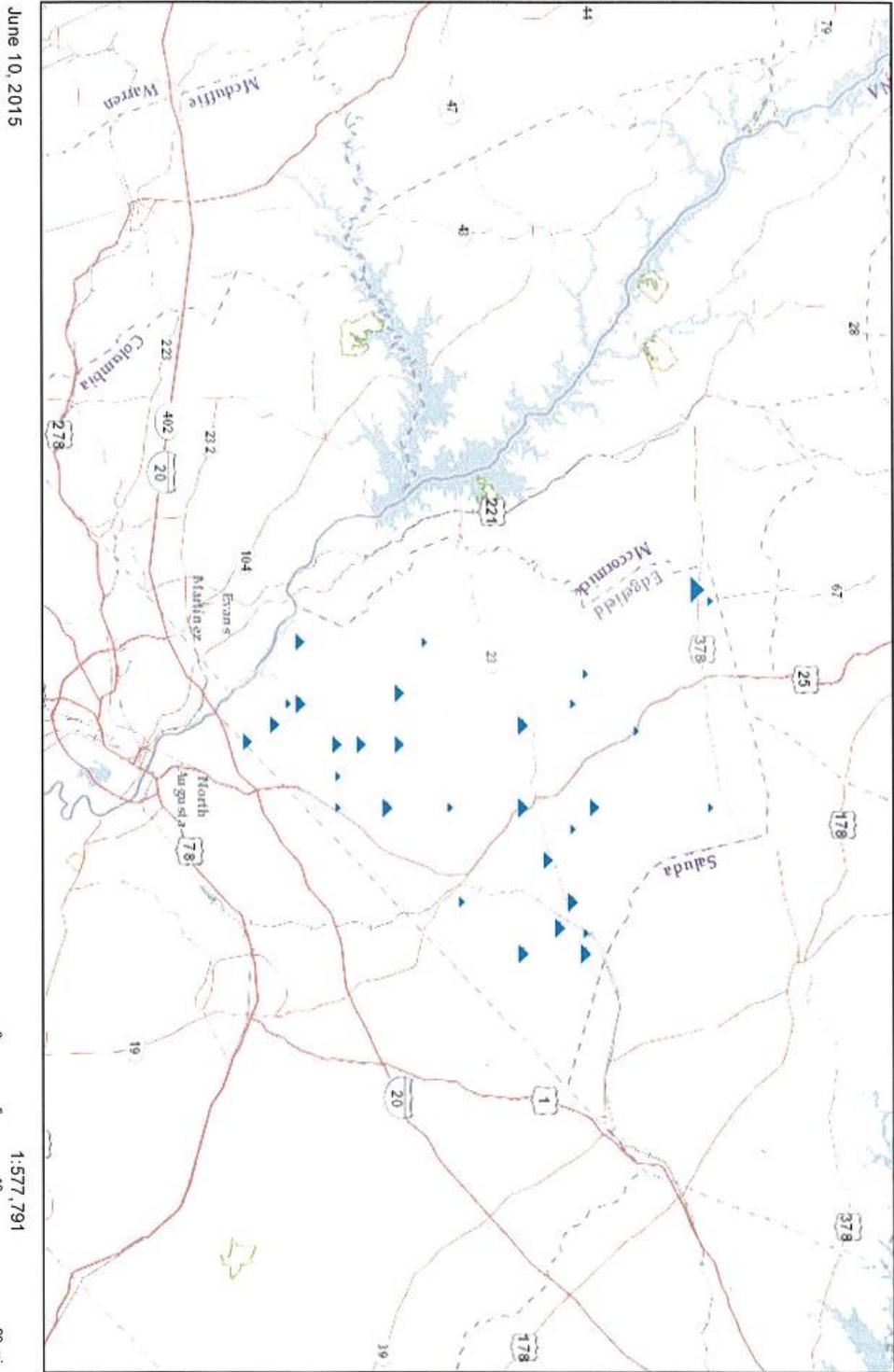


Edgefield County Map With Fault Lines

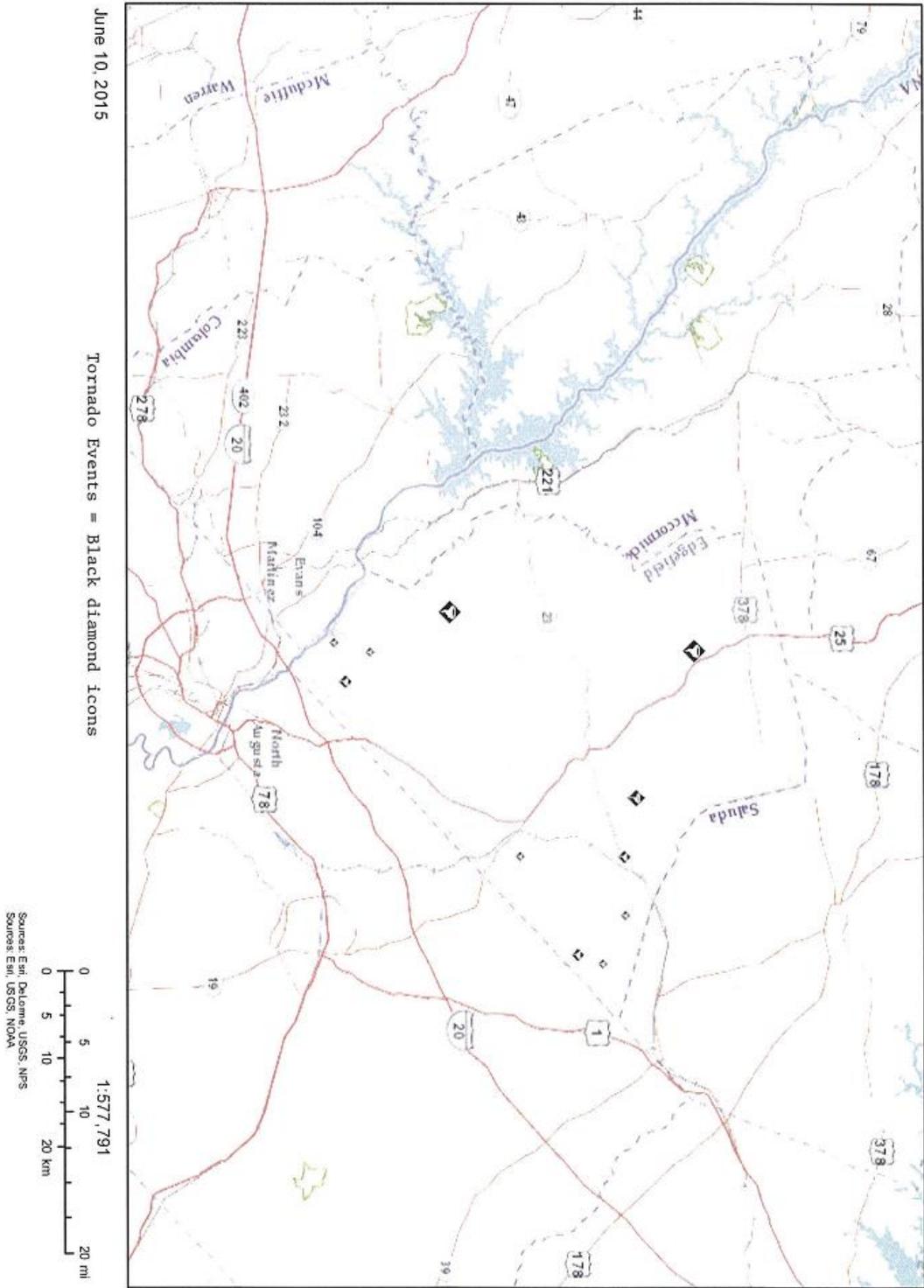
Edgefield County Earthquake Events



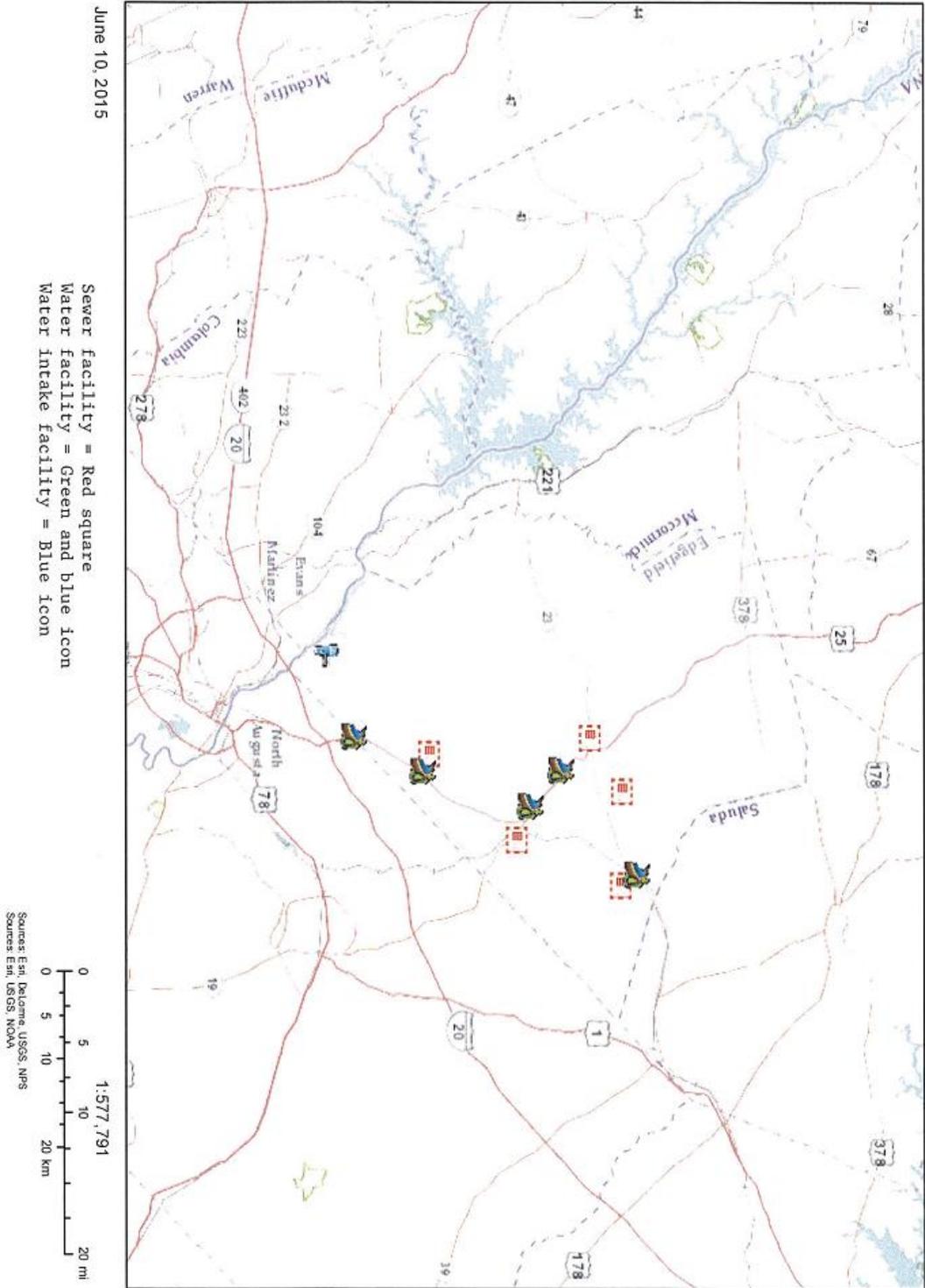
Edgefield County Hail Events



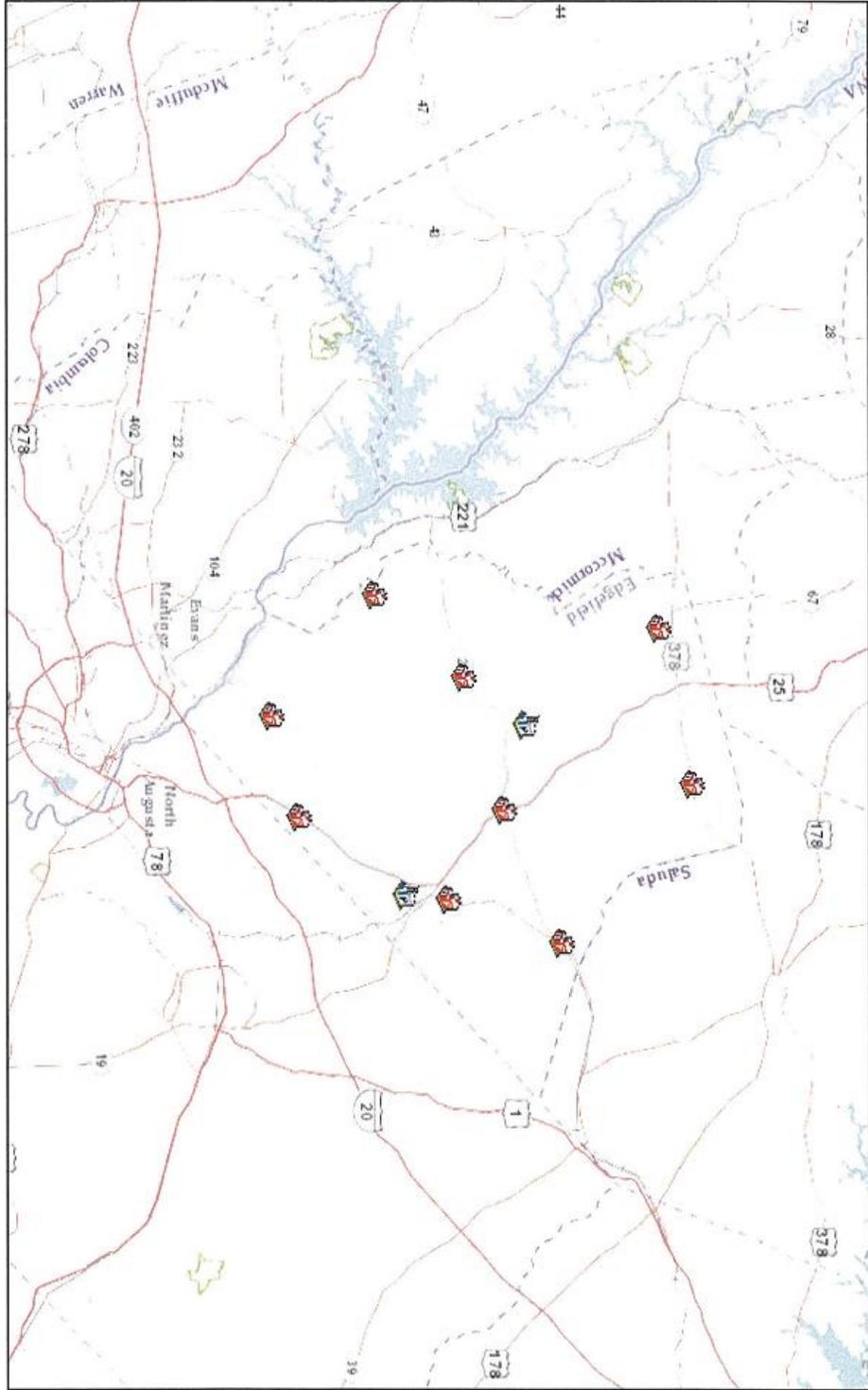
Edgefield County Tornado Events



Edgefield County Water/Sewer Facilities



Edgefield County Police/Fire Stations

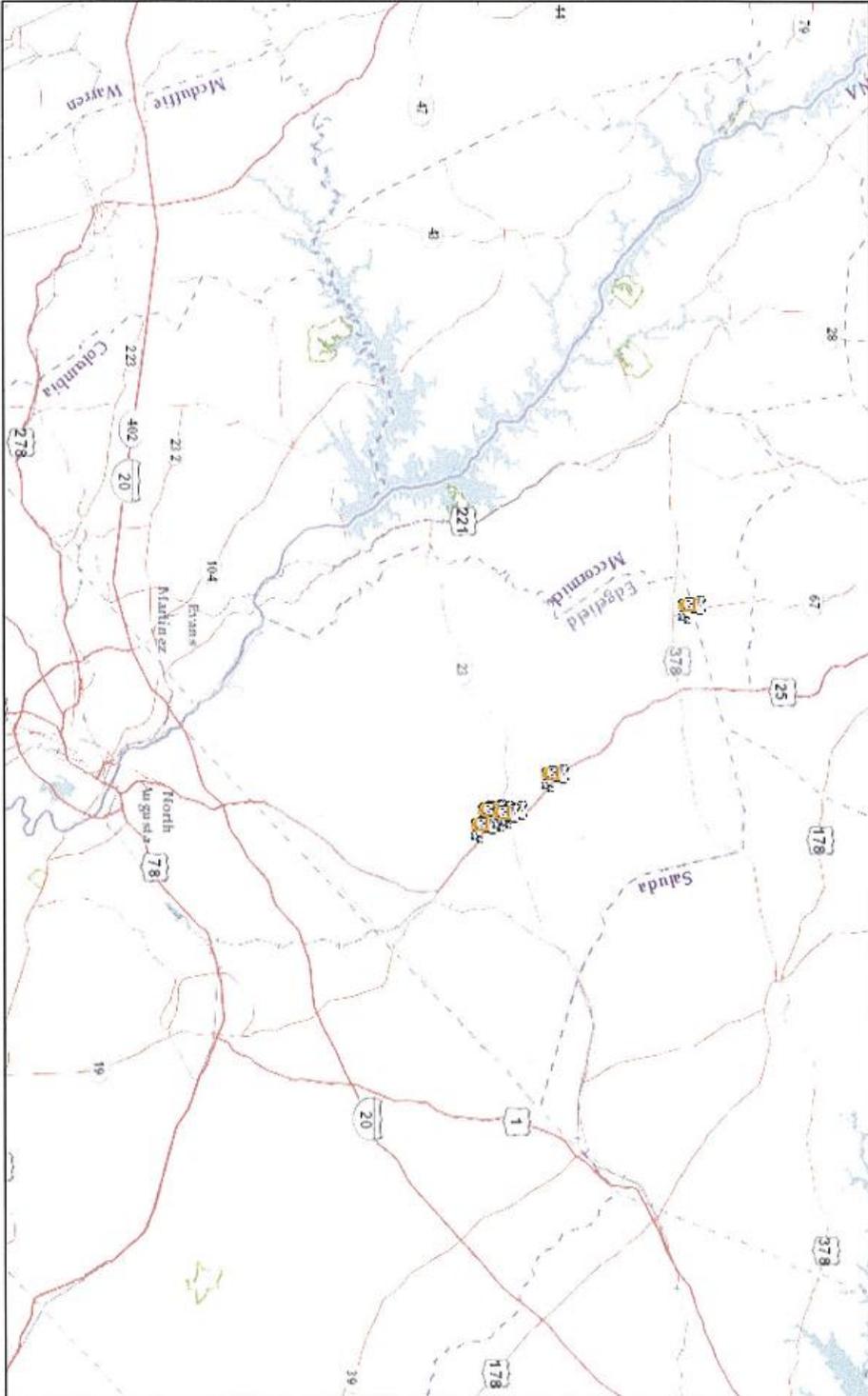


June 10, 2015

Fire Stations = Red icon
Police Stations = White icon

1:577,791
Sources: Esri, DeLorme, USGS, NPS
Sources: Esri, DeLorme, NPS

Edgefield County Healthcare Facilities

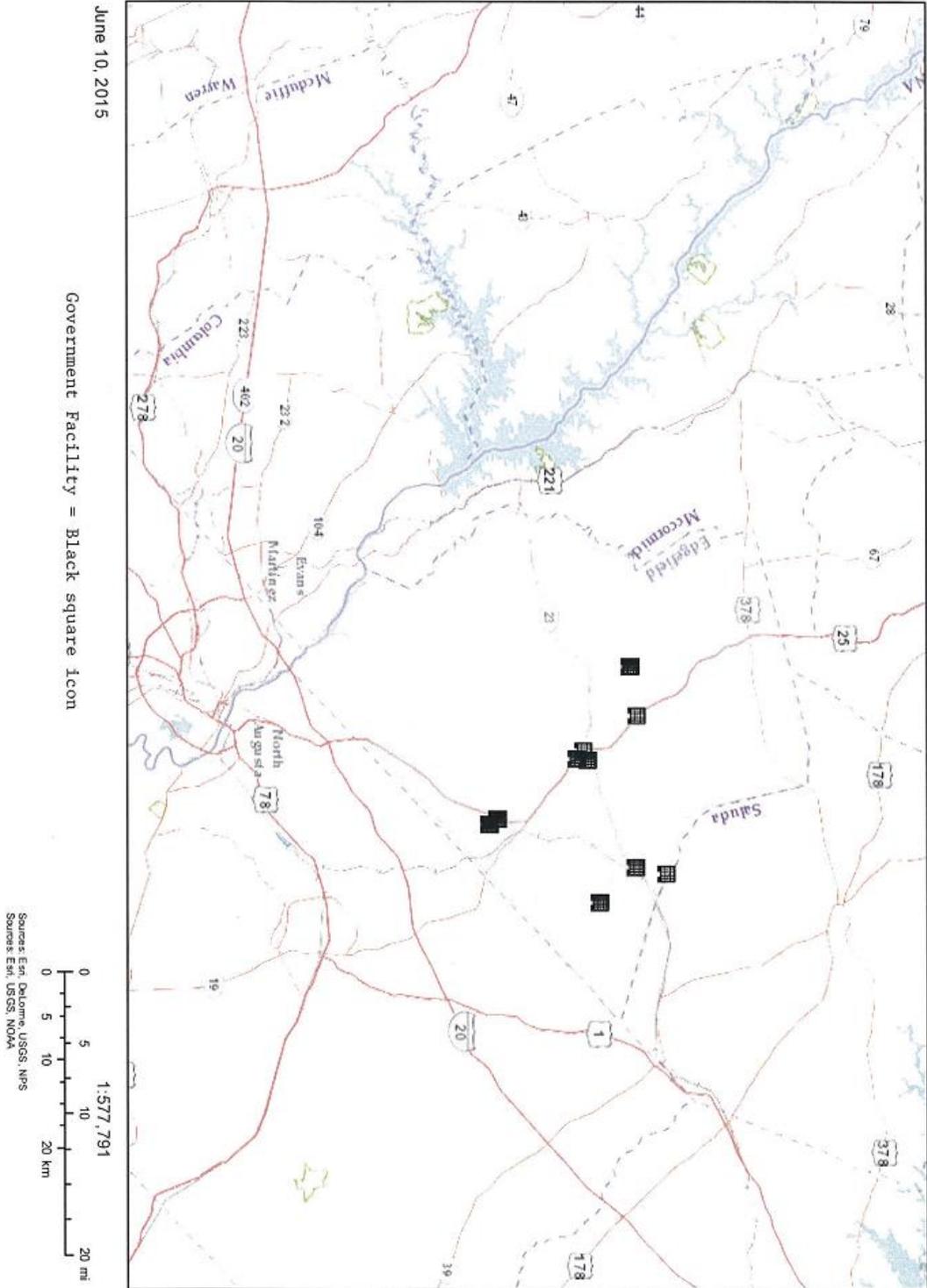


June 10, 2015

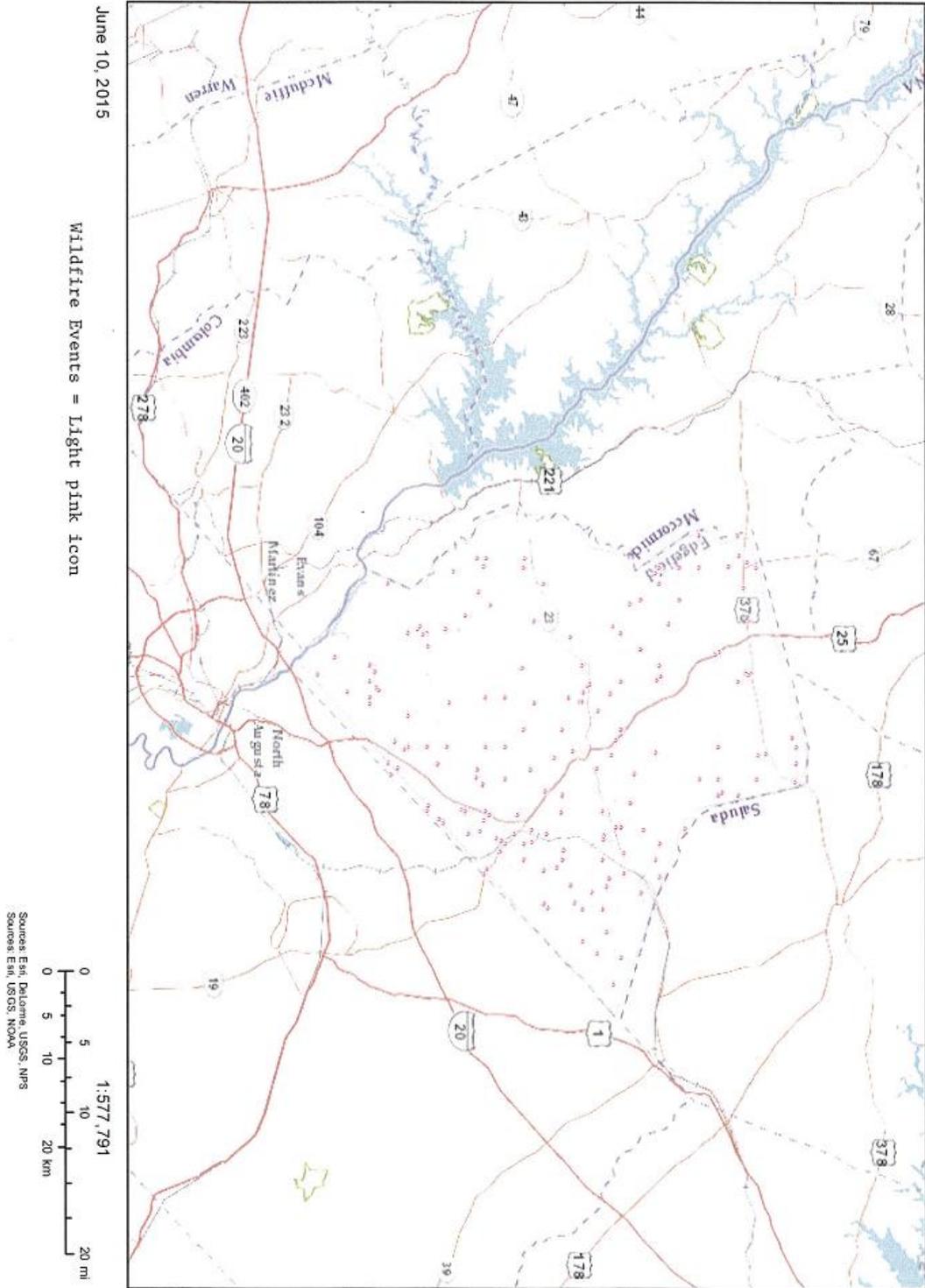
Healthcare facility = Yellow icon

1:577,791
0 5 10 20 km
0 5 10 20 mi
Sources: Esri, DeLorme, USGS, NPS
Sources: Esri, USGS, NOAA

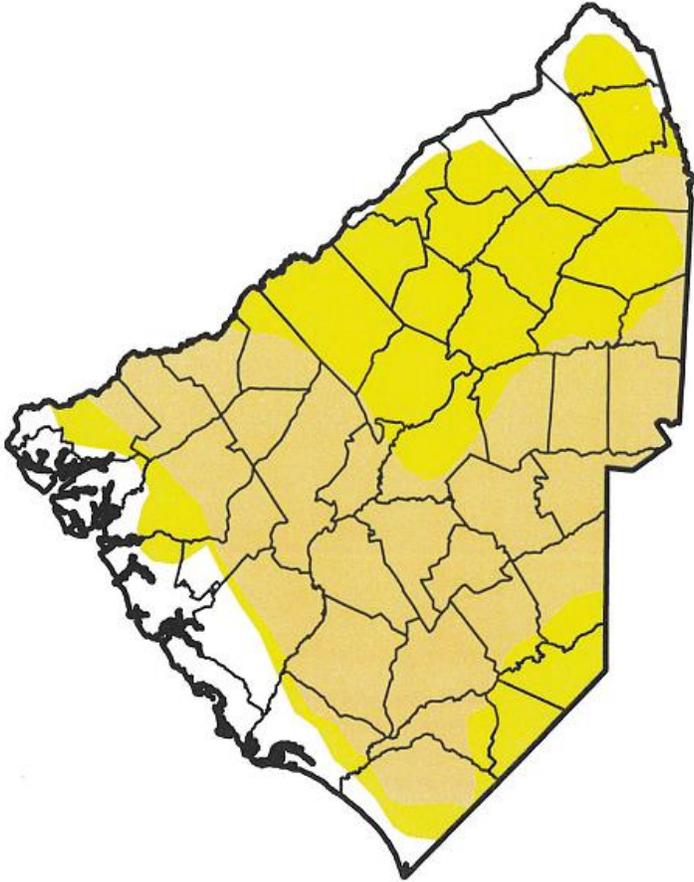
Edgefield County Government Facilities



Edgefield County Wildfire Events



U.S. Drought Monitor South Carolina



July 28, 2015
 (Released Thursday, Jul. 30, 2015)
 Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	14.26	85.74	47.53	0.03	0.00	0.00
Last Week 7/21/2015	32.48	67.52	46.24	0.00	0.00	0.00
3 Months Ago 4/28/2015	99.71	0.29	0.00	0.00	0.00	0.00
Start of Calendar Year 1/2/2014	96.63	3.37	0.00	0.00	0.00	0.00
Start of Water Year 9/30/2014	47.90	52.10	0.00	0.00	0.00	0.00
One Year Ago 7/29/2014	73.66	26.34	0.00	0.00	0.00	0.00

Intensity:

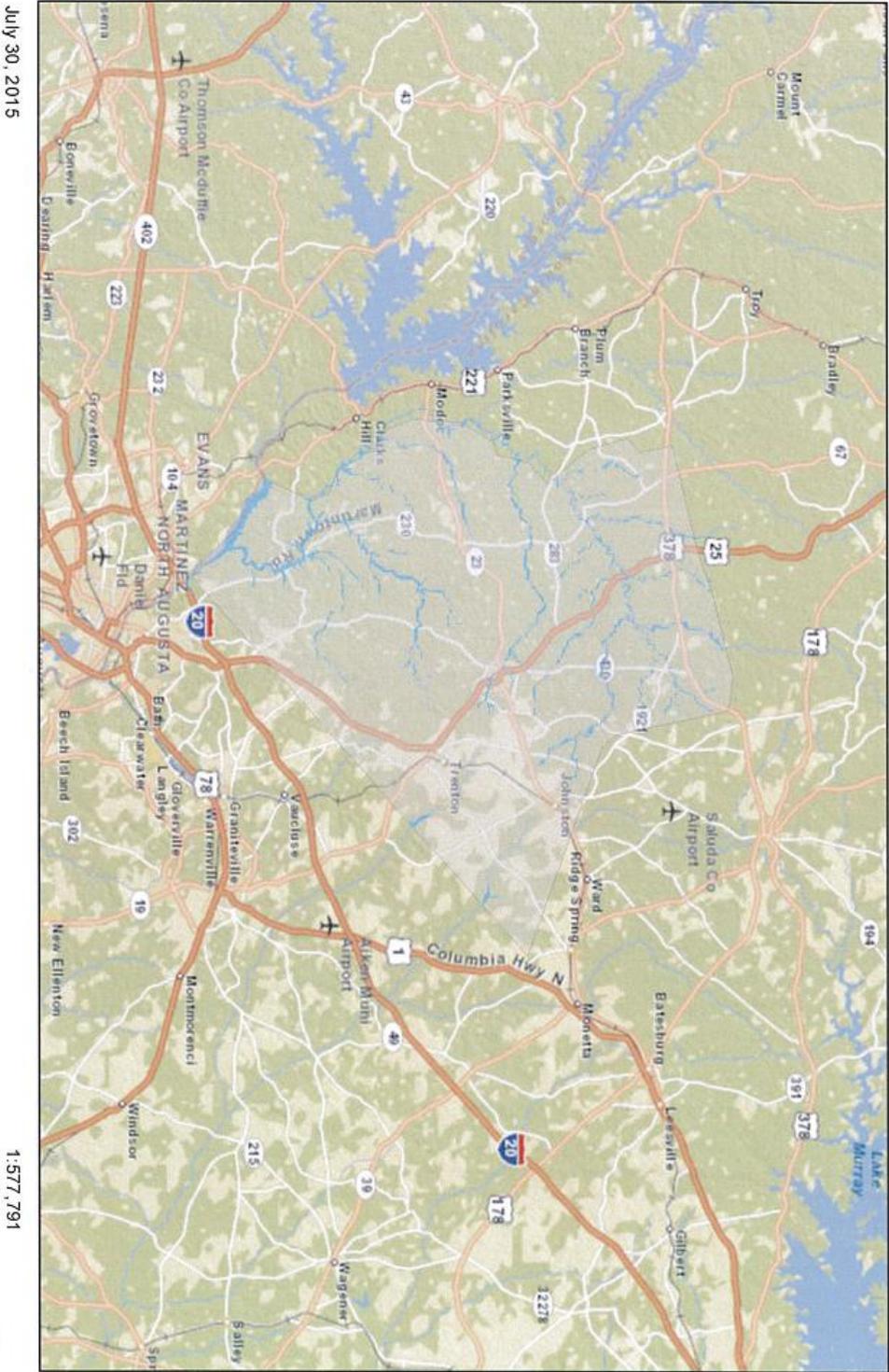
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
 Richard Heim
 NCEI/NOAA

<http://droughtmonitor.unl.edu/>

Edgefield County 100 Year Flood Probability



Edgefield County Hazard Mitigation Plan



SOUTH CAROLINA FORESTRY COMMISSION COMPARISON OF RECENT FISCAL YEAR FIRE ACTIVITY WITH 5, 10 AND 20 YEAR AVERAGES BY COUNTY

COUNTY	2010-2011		5 Year Average		10 Year Average		20 Year Average	
	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres
Abbeville	58	187.7	52	132.2	52	120.3	54	153.2
Aiken	144	823.2	124	633.6	132	605.0	150	675.7
Allendale	30	157.5	24	128.1	22	122.7	22	117.1
Anderson	31	175.5	35	209.3	35	182.7	41	187.1
Bamberg	33	177.8	23	118.5	27	167.3	38	165.3
Barnwell	47	447.2	31	221.4	30	191.0	38	194.1
Beaufort	74	333.9	42	176.0	47	219.7	67	366.4
Berkeley	197	2165.4	133	1,401.0	160	1,607.8	244	2,099.1
Calhoun	34	188.5	31	88.0	38	135.9	40	150.6
Charleston	45	2754.8	39	686.8	45	532.9	81	752.1
Cherokee	17	76.2	24	58.3	27	99.1	43	173.9
Chester	22	66.9	25	115.8	26	122.6	39	157.9
Chesterfield	98	298.5	88	400.2	96	469.0	110	611.0
Clarendon	127	591.2	96	534.5	108	718.1	143	910.9
Colleton	140	1469.8	116	835.4	139	1,106.7	182	1,205.1
Darlington	130	577.2	96	405.2	103	462.9	107	510.9
Dillon	54	376.3	56	297.0	57	402.8	60	342.7
Dorchester	66	1862.7	58	780.1	65	655.8	95	762.8
Edgefield	19	98.8	19	113.6	21	102.3	29	132.3
Fairfield	33	126	45	188.1	47	184.6	58	202.5
Florence	158	483.4	138	490.0	160	942.1	175	1,015.0
Georgetown	72	402.9	61	792.2	70	863.9	91	976.1
Greenville	34	96.6	40	171.2	42	190.0	48	198.6
Greenwood	19	60.8	21	92.8	22	97.2	51	140.4
Hampton	87	561.5	56	428.4	60	331.2	78	326.7
Horry	88	612.3	104	4,625.7	127	3,126.8	150	2,112.2
Jasper	129	1727.8	92	760.5	104	853.9	131	1,036.6
Kershaw	83	476	69	346.6	80	439.3	95	487.0
Lancaster	44	139	32	119.7	34	133.5	41	158.7
Laurens	36	204.1	25	177.8	31	164.2	44	195.9
Lee	36	323.5	44	288.3	52	369.5	73	623.9
Lexington	77	176	73	214.4	102	305.9	170	360.7
Marion	29	97.1	25	117.0	31	210.5	38	175.9
Marlboro	65	553.4	52	259.8	57	372.5	69	396.3
McCormick	10	57.5	15	80.7	20	95.7	30	116.6
Newberry	19	47.9	20	66.1	21	89.6	35	102.7
Oconee	31	49.8	43	194.2	41	170.6	42	145.2
Orangeburg	220	1017.7	161	784.1	179	859.7	204	981.7
Pickens	36	62.6	43	159.7	48	156.9	54	176.6
Richland	31	258.7	41	525.6	52	472.5	66	481.6
Saluda	25	65.4	20	65.4	24	90.6	32	102.3
Spartanburg	31	244.4	38	167.2	38	155.3	46	197.6
Sumter	107	478.2	82	308.6	102	470.7	120	887.4
Union	22	92.8	21	81.5	26	109.5	33	120.4
Williamsburg	179	1357.1	181	1,253.3	200	1,689.4	273	2,444.6
York	32	147.9	22	78.6	27	88.5	39	125.8
State Totals	3,099	22,749.5	2,678	20,172.8	3,024	21,058.7	3,869	23,957.8

9/7/11

Historical Hurricane Tracks

National Oceanic and Atmospheric Administration

Summary of Search

Location: undefined,undefined

Buffer: NaN Meters (NaN Nautical Miles)

Search was not refined



Storm Name Date
ARLENE 1959 May 28, 1959 to Jun 02, 1959

Historical Hurricane Tracks

National Oceanic and Atmospheric Administration

Summary of Search

Location: undefined,undefined
Buffer: NaN Meters (NaN Nautical Miles)
Search was not refined



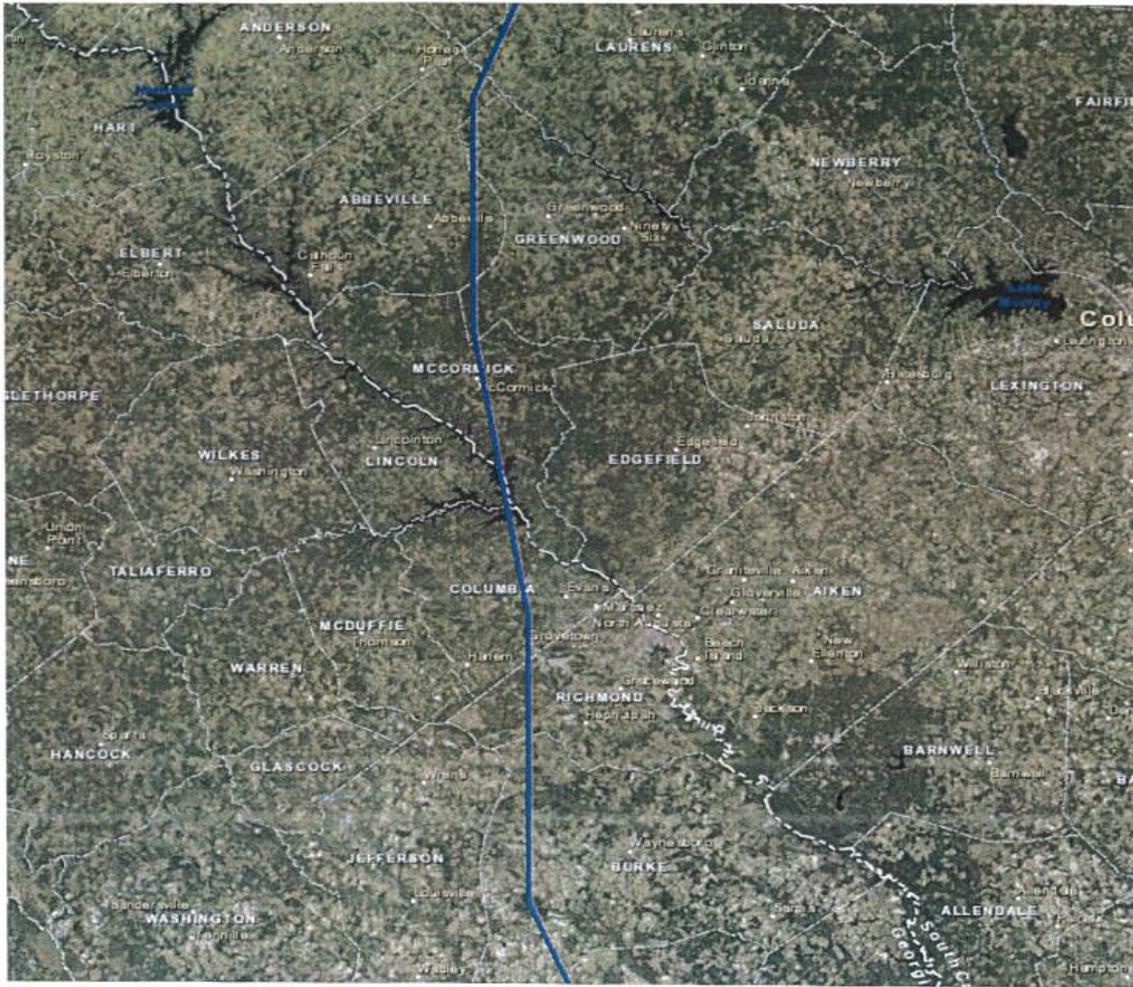
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CLEO 1964 Aug 20, 1964 to Sep 05, 1964

Historical Hurricane Tracks

National Oceanic and Atmospheric Administration

Summary of Search

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Buffer: NaN Meters (NaN Nautical Miles)
Search was not refined



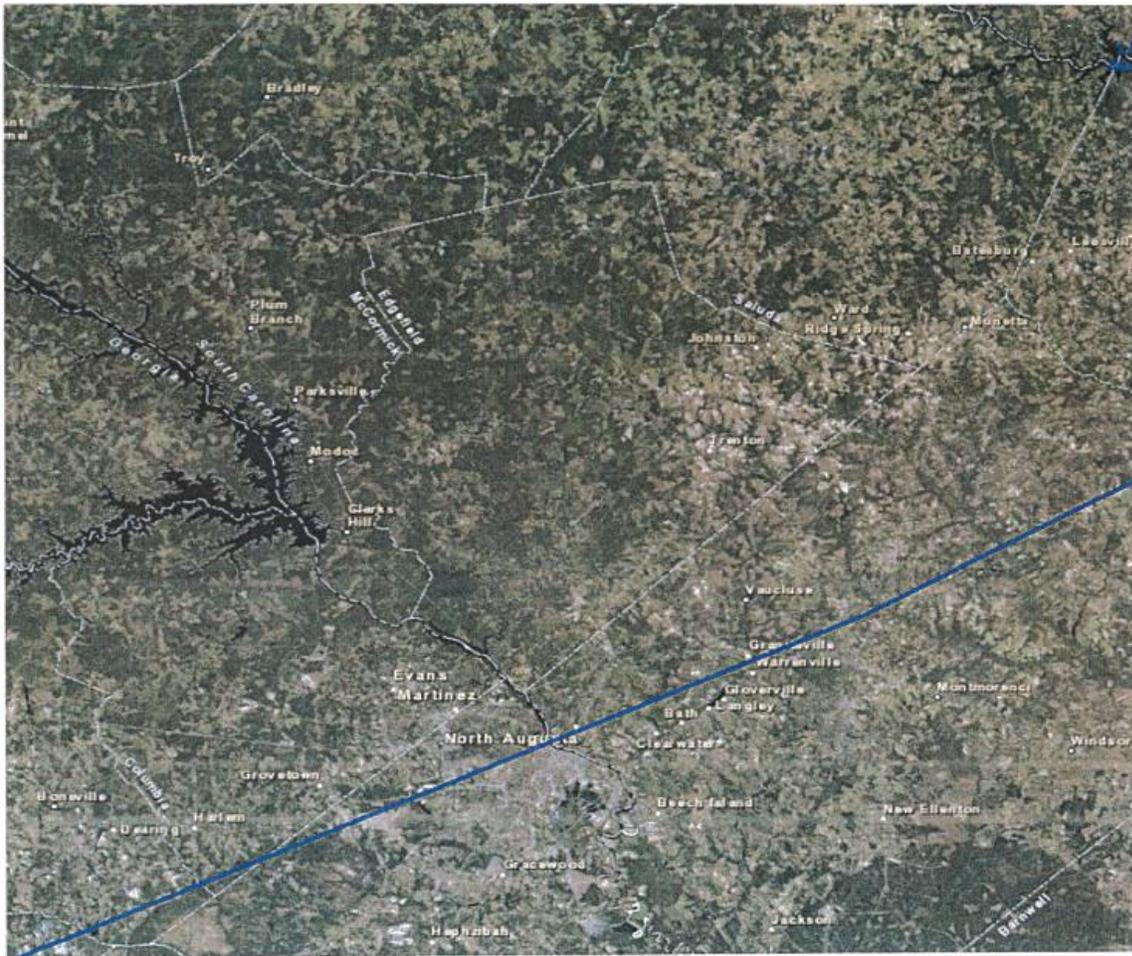
Storm NameDate
ABBY 1968 Jun 01, 1968 to Jun 13, 1968

Historical Hurricane Tracks

National Oceanic and Atmospheric Administration

Summary of Search

Location: undefined,undefined
Buffer: NaN Meters (NaN Nautical Miles)
Search was not refined



Storm Name Date
HELENE 2000 Sep 15, 2000 to Sep 25, 2000