# An All Natural Hazard Risk Assessment and Hazard Mitigation Plan for the 

 Central Midlands Region of South Carolina
## 2010 Update

## PARTICIPATING JURISDICTIONS

Fairfield County
Town of Winnsboro
Town of Ridgeway
Richland County
City of Columbia
City of Forest Acres
Town of Arcadia Lakes
Town of Blythewood
Town of Irmo
Lexington County
Town of Lexington
Town of Batesburg-Leesville
City of West Columbia
City of Cayce
Town of Swansea
Town of South Congaree
Town of Pelion
Town of Chapin
Town of Springdale
Town of Gilbert
Newberry County
City of Newberry
Town of Prosperity
Town of Little Mountain
Town of Pomaria
Town of Peak
Town of Whitmire

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## ExECUTIVE SUMMARY

2009 Update: This document reflects the required five-year update of the All natural Hazard Risk Assessment and Hazard Mitigation Plan for the Central Midlands Region of South Carolina. Since this update occurred at the end of the decade with the 2010 Census due just a few months after the document was to be submitted for approval, staff approached this document as a minor update. As such, the purpose of this document is to provide current data, when available, and monitor and revise any goals and objectives that need to be adjusted accordingly. As an update, the underlying document has been preserved as a guide for the reader and for future updates. Sections that included updated data will be marked for the reader's sake.

The four counties comprising the Central Midlands Region of South Carolina is threatened by a number of different types of natural hazards. These hazards endanger the health and safety of the population of the county, jeopardize its economic vitality, and imperil the quality of its environment. Because of the importance of avoiding or minimizing the vulnerabilities to these hazards, the public and private sector interests with the Central Midlands Region joined together in 2004 to create a CPT to undertake a comprehensive planning process that has culminated in the publication of this document: "An All Natural Hazard Risk Assessment and Hazard Mitigation Plan for the Central Midlands Region of South Carolina." This update reflects the efforts of the staff of CMCOG to coordinate with the participating jurisdictions in the update of the original plan.

## Section 1. Introduction and Purpose

## A. Description of the Planning Process

A correspondence committee for each county was created with representatives from each participating jurisdiction invited. An initial kick-off meeting was held at the Central Midlands Council of Governments office over a two-day period on January $6^{\text {th }}$ and January $7^{\text {th }} 2009$. The Richland and Lexington County Committees met on January $6{ }^{\text {th }}$ and the Fairfield and Newberry County Committees met on January 7th. Wayne Shuler, the staff member from Central Midlands COG, explained the purpose for the update and provided a general plan for how the process would proceed. The committees agreed that for the 2009 update, the framework of the 2004 plan would be maintained when feasible. After the initial meeting, members of the committee were sent material for review and comment via email. Staff at CMCOG coordinated the revision to the document and corresponded with the committee members. The Town of Ridgeway and the Town of Blythewood were new participants to this update. They were not participants in the 2005 plan. The county committees were comprised of the following members who participated in the planning process. Those participants in bold were added during the process to review the goals and work programs. The following jurisdictions are covered by this plan.

## FAIRFIELD COUNTY

| Name | Agency |
| :--- | :--- |
| Charlene Herring | Town of Ridgeway |
| Herbie Rentz | Mid-County Water Company |
| Phyllis Watkins | Fairfield County |
| Marie Milam | Fairfield County School District |
| Don Wood | Town of Winnsboro |

## LEXINGTON COUNTY

| Name | Agency |
| :--- | :--- |
| Britt Poole | Town of Lexington |
| Charles Haggard | Town of Pelion |
| Christopher Emirch | University of South Carolina |
| Fred Taylor | Town of Gilbert |
| Jim Hinton | Lexington School District 2 |
| Ken Knudson | City of Cayce |
| Herbert Berg | Lexington Richland School District 5 |
| Joe Bedenbaugh | Lexington School District 1 |
| Chester Floyd | Lexington School District 3 |
| Mark Forrester | Gilbert-Summit Water District |
| Stay Shealy | Town of Chapin |
| Melisha Shumpert | Town of South Congaree |
| Natalie McKelvey | Town of Springdale |
| Thomas Collins | Lexington County |
| Brian Carter | City of West Columbia |
| Ray Spires | Town of Swansea |
| Jim Wyzsowaty | Town of Batesburg-Leesville |
| Stephen Mann | Joint Municipal Water and Sewer Commission |
| Elizabeth Taylor | Irmo-Chapin Recreation Commission |

## NEWBERRY COUNTY

| Name | Agency |
| :--- | :--- |
| Arnold Lingle | Newberry County Water and Sewer Authority |
| Buddy Johnson | Town of Little Mountain |
| Doug Currier | City of Newberry |
| Jay Crouch | Clemson Extension Service |
| Lisa Jones | SC Department of Natural Resources (NFIP) |
| Jim Suber | Newberry County School District |
| Tommy Long | Newberry County |
| Lewis Shealy | Town of Peak |
| Darryl Hentz | Town of Pomaria |
| Tim Carroll | Town of Whitmire |

RICHLAND COUNTY

| Name | Agency |
| :--- | :--- |
| Howard Lederfind | City of Columbia |
| John Hanson | Town of Irmo |
| Joe Kocy | Richland County |
| Mark Williams | City of Forest Acres |
| Michael Criss | Town of Blythewood |
| Michael N. Smith | Town of Arcadia Lakes |
| Neil Ellis | Richland County |
| Stephen Hefner | Richland School District 2 |
| Shirley Price | Richland School District 1 |
| Robert Allen | Richland County Recreation Commission |
| William Simon | Richland County |
|  |  |

Staff of Central Midlands COG revised each section of the 2004 plan to bring the data as current as possible. Once the revisions were made, the staff emailed copies to the county committees for review. The revisions were marked so that the members of the committees could identify the revisions. Committee members transmitted any changes back to the staff via email. Once the document was completely review, staff of CMCOG then emailed the entire document to the committees for the members to review the document for any additional changes. A second joint meeting of the county committees was held on December $1^{\text {st }}, 2009$ to resolve any outstanding issues and discuss the completion of the draft. After SCEMD reviewed the draft and submitted revisions, a meeting with the county Emergency Management Directors was held on April 5 ${ }^{\text {th }}, 2010$ to discuss how best to address some fo the revisions.

Sign-in sheets for the meetings with the County Corresponding Committees are included in the Appendix. Also included in the Appendix is a list of the emails exchanged showing information requests and drafts exchanged with the Corresponding Committees.

Table 1-A: Project Planning Timeline for Major Work Element

| Step 1 | Establish initial <br> correespnding <br> committees | Complete from |
| :--- | :--- | :--- |
| Step 2 | Gather Data and <br> Hazard Information <br> in Each County | Completed from January, 2009 - <br> December, 2009 |
| Step 3 | Submit draft sections <br> for corresponding <br> committees' review | Completed from January, 2009- <br> December 2010 |
| Step 4 | Submit draft to <br> SCEMD for review | Completed by December 21 ${ }^{\text {st }}, 2009$ |
| Step 5 | First public review <br> Period | Completed by February 12 <br> March 4 - <br> Sth, 2010 |
| Step 6 | Meeting with County <br> Emergency <br> Management <br> Directors | Completed by April 5, 2010 |
| Step 7 | Submit revised draft <br> to corresponding <br> committees | Completed by April, 2010 - May <br> 2010 |
| Step 8 | Submit revised draft <br> to SCEMD | Completed by May 25 ${ }^{\text {th }}, 2010$ |

## B. Structure of the Final Document

The plan is formatted so that the general public can easily follow the process used to
a. Describe and profile the natural hazards that most affect and concern each county
b. Assess vulnerable populations and assets in each county
c. Assess risks varying from one county to another in the region
d. Identify, evaluate and analyze specific goals, mitigation actions and projects that would reduce the effects of identified hazards
e. Devise an action plan for prioritizing, implementing, and administering recommended mitigation actions and projects
f. Outline a procedure to monitor, evaluate, and update the hazard mitigation within a five-year period
g. Devise the process that participating jurisdictions could use to incorporate plan recommendations into local plans and capital improvements programs
h. Explanation of the means recommended ensuring continued public involvement in the ongoing mitigation planning process

In the initial chapters on the background of the region data are presented in as much of a regional approach as possible. However, because responses to hazards and mitigation projects are mostly county-based, this data has been presented at the county level for ease of comprehension and use.

## C. The Procedure for Jurisdictional Participation in the Planning Process

The update began with the participant list from the 2005 plan with no jurisdictions removed. The Town of Blythewood and the Town of Ridgeway were added as new participants to the 2010 plan update.

## D. Citizen Participation Procedures and the Process for Citizen Involvement

## Drafting the plan

In addition to the local governments within the region along with state agencies, school districts and the University Of South Carolina Hazards Lab being involved in the revision of the plan, the public comment period provided additional opportunities for comnmetns from the region including business, non-profits and other interestd parties. A public notice was placed in three newspapers (The State, The Newberry Observer and the Fairfield Herald-Independent) and CMCOG staff asked that the notice be placed in the administrative buildings of the participating jurisdictions. The notice requested public comment for a two week period and directed citizens to the CMCOG website to see a draft of the plan. A printed copy was also place in the CMCOG reception area for public review.

## Adopting the plan

After FEMA review a regional public meeting will be scheduled at CMCOG offices to receive additional comment before local government adoption. The time and date of the public meeting will be advertised in a newspaper of general circulation in each county with information included as to where copies of the drafts could be inspected and where comments and input could be submitted. Copies of the advertisements are included in the Appendix.

After FEMA approvesal the draft, local governments will be given the opportunity to adopt the plan by resolution thereby enabling them to receive hazard mitigation grants after a natural disaster.

Copies of newspaper advertisements, citizen comments gleaned from public meetings and the minutes of the public meetings during the adoption process will be included in Appendix of this plan.

Working with the staff of the Central Midlands Council of Governments (CMCOG), county corresponding committees prepared this multi-governmental hazard plan and
assessment for consideration and adoption by local jurisdictions desiring to secure approval of or credit for the plan by the Federal Emergency Management Agency (FEMA).

## E. The Adoption Process for the Plan

After an extensive revision period including reviews by the county corresponding committees, a public comment period and review by SCEMD, a subsequent draft was submitted back to SCEMD. After completion of the SCEMD review and FEMA review and review and incorporation of any suggestions or necessary revisions, the document will be submitted to participating and affected local governments for adoption by formal resolution.

## F. The Format of the Adoption Resolution for Execution by Each Governing Body Requesting Approval of the Plan

A display advertisement for the presentation of the plan to the public will be published in a newspaper of general circulation in each participating jurisdiction at least two weeks before a regularly scheduled meeting of the county or municipal council. This advertisement will address the purpose and content of the plan and solicit citizen review and input of the draft plan before it is adopted by resolution of the affected governing council.

## All Natural Hazards Mitigation Plan Adoption Resolution

## Resolution \# <br> $\qquad$ Adopting the All Natural Hazards Risk Assessment and Mitigation Plan for the Central Midlands Region of South Carolina

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

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

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

Whereas, (Name of local government) participated jointly in the planning process with the other units of government in the Central Midlands region of South Carolina to prepare an all hazards mitigation plan;

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

Now, therefore, be it resolved, that the (Name of governing council), hereby adopts the update to the All Natural Hazards Risk Assessment and Mitigation Plan for the Central Midlands Region in its entirety as an official plan and will undertake annual recording of hazard events, their impact duration and cost.

Be it further resolved, that the Central Midlands Council of Governments, accepting the All Natural Hazards Risk Assessment and Mitigation Plan from the Central Midlands Regional Risk Assessment and Hazard Mitigation Committee, will submit on behalf of the participating counties and municipalities the adopted All Natural Hazards Plan to the Federal Emergency Management Agency officials for final review and approval.

Passed: (Date $\qquad$ _)

Certifying Official ( $\qquad$ _)
Typed Name and Signature of Chief Administrative or Elected Official

## G. DOCUMENTS CONSULTED FOR THE UPDATE

The updated plan was drafted by staff of Central Midlands COG using the 2005 plan as as starting point. Staff then identified sources for the appropriate update. Section II is a description of the region, including a physical description as well as demographic and economic trends. Apart of the the physical description which has not changed over the past 5 years, CMCOG used the best available demographic estmates for this section. For the estimates, staff used DemogrpahicsNow A note is included in the beginning for the section that for the next comprehensive update, the 2010 Census data will be available. This section was also reviewed by the jurisdictions for consistency with the local documents. Almost all of the jurisdictions have land-use ordinances, including comprehensive plans, zoning ordinances and land development regulations. Most of the jurisdictions also have flood preventions ordinances as part of the National Flood Insurance Program.

Section III is a description of the natural hazards affecting the Central Midlands region. CMCOG staff used data avaialbe from the Nation Climatic Data Center (NCDC) to update the event data within each county and to develop the accompanying maps. This data was made available through State of South Carolina Hazard Assessment, 2008

Section IV is a decscription of the social vulnerabilities for each of the counties. CMCOG used data from SHELDUS and NCDC to update this section. This data was made available through State of South Carolina Hazard Assessment, 2008.

Section V used the vulnerability data in Section IV along with the data provided by each of the counties to update potential loss.

The remainder of the document addresses goals and objectives as well as policies for implementation and future updates. Theses sections with update with coordination with the participating jurisdictions.

# Section II. The Physical Geography and Growth Patterns of the Counties and Municipalities of the Central Midlands Region of South Carolina 

As part of the 2009 update, members of the county corresponding committee received this section for comment. After the SCEMD review and public comment period, the section was then distributed the county corresponding committee and participating jurisdictions for additional review. The changes from the 2005 plan are in bold and italized.

The Central Midlands region is comprised of the four-county area of Fairfield, Lexington, Newberry and Richland and is located near the geographical center of the State. The region is located approximately equidistant between the Appalachian Mountain chain and the Atlantic coast, partially in the Piedmont and partially in the Atlantic Coastal Plain. The Columbia urban area is the largest urban complex in the region.

The region is bisected in a north-south direction by the Broad/Congaree River system. Other major rivers pouring through or on the edge of the region are the Saluda, Enoree, Wateree and North Fork of the Edisto Rivers. The Saluda River feeds Lake Murray, which is a major water oriented recreational and hydropower lake located on the northwest fringe of the Columbia urban area. A reservoir has been created on the eastern edge of Fairfield County by damming the Wateree River, and the southeastern tip of Lake Greenwood touches the western extremity of Newberry County. Lake Monticello has been constructed on a tributary to the Broad River in western Fairfield County. This serves as a reservoir to the V.C. Summer Nuclear Power Plant.

The region is 79 miles wide and 64 miles long, covering an area of 2,800 square miles and accounting for nine percent of the State's total area.

South Carolina's climate is humid and subtropical, with long, hot summers and short, mild winters. The subtropical climate of the state arises from the combination of its relatively low latitude, its generally low elevation, the proximity of the warm Gulf Stream in the Atlantic Ocean, and the Appalachian Mountains, which in winter help to screen out cold air from the interior of the U. S. The average temperature range in Columbia is 32 degrees to 55 degrees in January and from 70 degrees to 92 degrees in July. Brief spells of cold weather occur each year in South Carolina with occasional ice and snowstorms. Thunderstorms are a common occurrence in the summer months and hurricanes threaten the state from the Atlantic Ocean. Tornados also occur but uncommonly in the state. Most of the state receives, on average, 49 inches of precipitation annually with most falling as rain. Flooding may occur with thunderstorms and hurricanes may be a hazardous rain event.

The maps that follow are intended to show the location of the Central Midlands Region within the State of South Carolina; major political subdivisions, manmade, and
natural features of the landscape; the principal water and sewer utility infrastructure within the region; and the principal elements of the highway network within the region.

Map II-A
Map of the Ten Council of Government Planning Regions in South Carolina


Map II-B
The Four Counties and Municipalities within the
Central Midlands Region of S. Carolina





## A. Physical Setting \& Location

The Central Midlands planning area of South Carolina consists of four counties located near the geographical center of the state; Fairfield, Lexington, Newberry, and Richland. The Columbia urban area is the largest urban complex in the region, and also the largest in South Carolina. The region accounts for about $9 \%$ of the State's total area or approximately $1,852,570$ acres ( 749,733 ha.). The surface area for each county is:

| County | in Acres |  | in Hectares |
| :--- | :---: | :---: | :---: |
| Fairfield | 455,323 |  | 184,269 |
| Lexington | 486,222 |  | 196,773 |
| Newberry | 415,486 |  | 168,147 |
| Richland | 495,539 | 200,544 |  |

## Source: South Carolina Statistical Abstract - 2000

Several major interstate highway corridors divide the region: Interstate Routes 20, 26, and 77. Major metropolitan areas within easy driving distance of Columbia include Charlotte, NC ( 92 miles or 148 kilometers), and Atlanta, GA ( 215 miles or 346 km ).

## B. Topography \& Geography

The Central Midlands planning area is located nearly equidistant between the Blue Ridge Mountains and the Atlantic Coast. The region falls within two broad physiographic provinces; the Southern Piedmont, and the Coastal Plain. In the Midlands, the Coastal Plain can be further divided into the Carolina-Georgia Sandhills and the Southern Coastal Plain. The Southern Piedmont has gently undulating to rolling land surfaces that are dissected by numerous streams, typically with dendritic drainage patterns. The Piedmont terrain in the Midlands has gently to moderately steep slopes. The elevations range from 300 feet ( 91 meters) above mean sea level (MSL) near the Coastal Plain to 810 feet ( 247 meters) at the top of Little Mountain in Newberry County. The uppermost portions of Lexington and Richland Counties and all of Fairfield and Newberry Counties are within the Southern Piedmont area. The remainder of the region, with the exception of the southernmost portion of Richland County, is considered Carolina-Georgia Sandhills. This area is characterized by excessively drained sand with gentle to moderate slopes. The elevations range from approximately 250 to 300 feet ( 76 to 91 meters) above sea level.

The lowest portion of Richland County is considered Southern Coastal Plain. Elevations normally occur in the 100 to 270 foot range ( 30 to 82 meters); the lowest occurring in the Congaree Swamp with an elevation of 80 feet ( 24 meters) above MSL. The topography is gently sloping.

## C. Land Cover \& Land Use

In addition to the urbanized areas in each county, the Central Midlands planning area includes a variety of land cover types including several broad forest types - bottomland, evergreen, mixed, and deciduous - nonforested wetlands/marsh, agricultural/ grassland, barren/disturbed and water. Table II-A shows the number of acres found in each category. There are also extensive federal lands in the region with prominent holdings being Ft. Jackson at 82 square miles lying within the City of Columbia and the Enoree Division of the Sumter National Forest in Newberry and Fairfield Counties comprising 56,595 acres in Newberry County and 11,080 acres in Fairfield County. Important state owned recreational areas in the region are the 3, 677-acre Dreher Island Recreational Area on Lake Murray in Newberry County and the 1,419-acre Sesquicentennial State Park, the 22,200-acre Congaree Swamp National Park, and the 2,176-acre Harbison State Forest all in Richland County. Fairfield County is the single most heavily forested county in the state; approximately 395,000 acres or $86.7 \%$ of the county's area is forested.

Table II-A
Central Midlands Planning Area Land Use/Land Cover by County in Acres, 1990

| FAIRFIELD | 175,404.0 | 1,307.0 | 217,843 | 13,178.0 | 346.0 | 0.0 | 21,856.0 | 974.0 | 7,225.0 | 17,190.0 | 455,323.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LEXINGTON | 140,340.0 | 6,242.0 | 100,636 | 31,804.0 | 9,550.0 | 0.0 | 80,272.0 | 2,017.0 | 73,284.0 | 42,077.0 | 486,222.0 |
| NEWBERRY | 42,588.0 | 2,743.0 | 245,869 | 27,264.0 | 268.0 | 0.0 | 70,483.0 | 625.0 | 13,790.0 | 11,857.0 | 415,486.0 |
| RICHLAND | 126,006.0 | 658.0 | 174,903 | 12,608.0 | 51,215.0 | 38.0 | 42,668.0 | 1,293.0 | 70,358.0 | 15,791.0 | 495,539.0 |
| REGION TOTALS | 484,338.0 | 10,950.0 | 739,251 | 84,854.0 | 61,379.0 | 38.0 | 215,279.0 | 4,909.0 | 164,657.0 | 86,915.0 | 1852570 |
| COUNTY | EVERGRN FOREST | DECIDUOUS FOREST | MIXED <br> FORES. | SCRUB/ SHRUB | SATURATED <br> BOTTOMLAND <br> FOREST | NONFORESTED WETLAND/ MARSH | AGRICULTURE/ GRASSLAND | BARREN/ <br> DISTURBED | URBAN BUILT-UP LAND | WATER | COUNTY <br> TOTAL |

[^0]

## D. Demographic \& Economic Trends

The following information was provided as part of the 2004-2005 version of the plan. Since the data was based on the 2000 Census, a more detailed revision should occur as part of the next update after the 2010 Census. Where estimates are available, updated information for 2009 will be added. The source for the estimates is DemogrpahicsNow.

The Central Midlands region has grown rapidly in recent years. Over the past 30 years, the population of the region has grown from 372,152 to 596,253 , a $37.58 \%$ increase compared to a $35.43 \%$ increase for the state over the same period. The most rapid growth rates during this period have occurred in Lexington and Richland counties at $58.79 \%$ and $27.07 \%$, respectively. The counties of Newberry and Fairfield have a growth rate of $18.93 \%$ and $14.73 \%$, respectively, during the same period indicating a much slower growth rate when compared to the other two counties. The 2010 population for the region was 708,359. This is an $18.80 \%$ increase from 2000. During that same period, the Richland and Lexington Counties showed the largest growth at $19.90 \%$ and $\mathbf{2 1 . 2 7 \%}$ respectively. Newberry County shows modest growth and 3.88\% and Fairfield County grew at a rate of $\mathbf{2 . 1 4 \%}$.

The percentage share of the region against the state over the past 30 years has been $14.4 \%$ to $14.86 \%$. The percent share of Richland County vis-à-vis state has decreased during this time period from approximately $9 \%$ to $8 \%$ while that of Lexington County has increased from $3.44 \%$ to $5.83 \%$. Fairfield and Newberry County show decline in the percent population share against the state for the same period from $1.13 \%$ to $0.9 \%$ and $0.77 \%$ to $0.58 \%$ respectively. Based on the 2010 Census, the region is $\mathbf{1 5 . 2 5 \%}$ of the state population. Lexington County has decreased slightly in its share to 5.67\% while Richland County stayed fairly steady at 8.31\%. Fairfield County continued to show a decline to $.52 \%$ while Newberry showed a slight increase to $\mathbf{0 . 7 5 \%}$

At the regional level, Lexington County's percentage share increased steadily from $23.92 \%$ to $36.23 \%$ from 1970 to 2000 while that of the other three counties decreased. Richland County decreased form $62.84 \%$ to $53.78 \%$ while that of Newberry and Fairfield decreased from $7.87 \%$ to $6.06 \%$ and $5.37 \%$ to $3.93 \%$, respectively. For 2010, Richland and Lexington County's share of the region increased to $54.51 \%$ and $\mathbf{3 7 . 2 0 \%}$ respectively, while Newberry and Fairfield Counties' share decreased to 4.89\% and $3.40 \%$ respectively.

On balance, the region has slightly fewer young people than the state as a whole with $24.9 \%$ of its population consisting of school age children (0-17 years) when compared to 25.2 \% for the state. At the other end of the spectrum, $32.5 \%$ of the population is 45 or older and $10.4 \%$ of the population is 65 or older compared to $35.1 \%$ and $12.1 \%$ statewide.

At the regional level, Fairfield and Lexington Counties are nearly tied for the highest percentage of school age children (0-17 years) at $26 \%$ and $26.1 \%$ respectively,
while Richland and Newberry Counties are nearly tied for the least at $24.2 \%$ and $24.1 \%$. At the other spectrum the highest percentage of people over 65 years old is in Newberry County, $14.7 \%$, while the lowest percentage in the same age groups is in Richland County, $9.8 \%$. The population in age group 55-64 in all the four counties varies between $7.3 \%$ and $9.9 \%$. For 2010, Fairfield, Newberry and Richland Counties have close to the same percentage of school age children at $22.7 \%, 22.8 \%$ and $22.8 \%$ respectively. Lexington County had 24.5\%. For people over 65, Newberry County had the highest percentage at 15.9\%, with Fairfield County next at 15\%. Lexington and Richland Counties had $12.2 \%$ and $9.8 \%$ respectively.

The racial mix of the region contains a lower percentage of white population than the state average with $62.6 \%$ white population for the region compared to $66.1 \%$ for the state. The region contains a higher percentage of black population than the state ( $33.3 \%$ versus $29.4 \%$ ). The percentage of Hispanic population in the region is almost the same as the state average ( $2.5 \%$ versus $2.4 \%$ ). The region as a whole and the state both reflect a similar trend.

In the region, the white population has decreased from 1990 to 2000 while the black population has increased slightly in all the counties except Newberry. Lexington County has the highest share of white population, $83.2 \%$ at county level and least share of black population, $12.6 \%$. The difference between the white population and black population in terms of percentage is 5 percentage points in Richland County, 29 percentage points in Newberry County and 20 percentage points in Fairfield County. Newberry has the highest Hispanic population at $4.2 \%$ followed by Richland at $2.7 \%$ while the other two counties have a less significant share. For 2010, Lexington County had the highest percentage of white population at $79.3 \%$ followed by Newberry with 62.1\%. Richland County was next with $47.3 \%$ and Fairfield was at 38.6\%.

The region as a whole doubled its Hispanic population between 1990 and 2000 whereas the state more than tripled its Hispanic population in that same time. All counties saw a 2 to 3 fold increase in their Hispanic populations in the last ten years. However, Newberry County saw a 10 fold increase in its Hispanic population, 147 in 1990 to 1,533 in 2000. By 2010, Hispanics accounted for $7.2 \%$ of Newberry County's population, with $5.5 \%$ in Lexington and $4.8 \%$ in Richland. Hispanics only accounted for 1.6\% of Fairfield County's population.

The region is better off than the state in terms of educational attainment. In the region, $17.4 \%$ of the adult population has less than a high school degree compared to $23.7 \%$ for the state as a whole. Among the better-educated segments of society, i.e., those with at least a four-year college degree, the region is ahead of the state average of $27.6 \%$ for the region and $20.4 \%$ for the state

On the regional level, Fairfield and Newberry Counties with $68.7 \%$ and $64.4 \%$ population having a degree less than a high school respectively lag behind Lexington and Richland counties having $46.5 \%$ and $37.6 \%$ of the population having the same level of education attainment. Those with at least a four-year college degree, Richland and

Lexington counties are ahead of Fairfield and Newberry counties with percentage being $17.0 \%$ and $20.6 \%$ and $8.2 \%$ and $10.7 \%$, respectively. In the last 10 years, the region has reduced its population with less than a $9^{\text {th }}$ grade education from $9.1 \%$ in 1990 to $5.6 \%$ in 2000. While this shows progress, there is still work to be done. For 2009, the percentages for those having education less than a high school diploma stayed approximately the same. Regarding those with at least a four year degree, the percentage for each county increased with the highest percentage being $33.1 \%$ in Richland County and the lowest percentage in Fairfield County at 11.7\%.

Over the past 30 years, per capita income in the region has increased by $\$ 12,056$ in nominal terms and by $44.99 \%$ in real terms adjusted for inflation. The region continues to exceed the state average with a per capita income of \$26,796 in 1999 compared to $\$ 23,538$ statewide. The highest per capita incomes in the region occur in Lexington and Richland counties. Fairfield County has the lowest per capita income in the region while that of Newberry is slightly higher than the former.

The per capita income has increased by $44.99 \%$ in the region as against a statewide and national average increase of $43.37 \%$ and $35.12 \%$ indicating that both the state and region are progressing at a higher rate in terms of per capita income, during 1969 to 1999 after adjusting for inflation.

On balance, in the region, Fairfield County had the highest increase in per capita income with $55.24 \%$ increases, followed by Richland ( $45.79 \%$ ), Lexington ( $42.32 \%$ ) and Newberry ( $37.64 \%$ ) counties during 1969 to 1999 (after adjusting for inflation).

Despite this news, the region and the state both lag behind the national per capita income. There has been a great deal of discussion in recent years concerning the state's per capita income which remains at a sizeable measurement below the national norm ( $18 \%$ below the national norm in 1999) and nearly $10 \%$ less than five neighboring states. (Strategic Plan for Economic Development in South Carolina, Executive Summary, Prepared for SC DOC by Growth Strategies Organization, Inc., November 1999).

Richland County has historically had the largest labor force in the region at 150,195 in 2000, followed by Lexington County, 110,330 in 2000, Newberry County at 15,857 in 2000 and Fairfield at 10,074 in 2000 . Over this time period manufacturing employment has fallen from $21.9 \%$ of the work force to $11.2 \%$ in the region as a whole. The largest relative gains have occurred in Services, up from $29.3 \%$ to $41.6 \%$ and in Finance, Insurance and Real Estate up from $5.6 \%$ to $8.2 \%$. The state also shows the same pattern for the three sectors as the region during the same time period. Agriculture, forestry and fisheries, Mining and Construction and wholesale trade and retail trade show a marginal decrease while Transportation, communication and other public utilities, and Public administration marginal increase in workforce at regional level.

In the region the manufacturing employment decreased by a similar percentage (approximately $15-20 \%$ ) in all the counties except Richland County, 5 percentage points approximately. The growth of employment in Finance, Insurance and Real Estate was
highest in Lexington and Newberry counties while that in Services was highest in Lexington and Fairfield counties followed by Newberry and Richland, respectively. 1999 employment figures suggest a continued strong presence in terms of manufacturing employment at $11 \%$ with $22.4 \%$ of the workforce in the trade sector and $24.6 \%$ in the service sector and $24.7 \%$ in government.

Changes to the economy within the last three years at the state level will have had an effect upon the government sector in particular that are not reflected within this data. The state of South Carolina, as most states, is facing a budgetary crisis. These budgetary issues have taken the shape of several rounds of reductions in force to varying degrees across the state employment pool. Therefore, the level of government employment in the region will be less than reflected in 1999 and it does not appear as if there will be any improvement to that situation in the near future.

In addition, Fairfield County, the region's poorest county, has experienced several large losses in its manufacturing employment within the last 2 years that are also not reflected in these numbers. With the closure of the Mack Trucks facility in Winnsboro, Fairfield County lost its largest employer, over 700 jobs at time of closure, December 2002. In addition to those jobs lost at closure, there had been periodic layoffs. The combined loss of jobs is over 1000 .

From 1969-1999, the percentage of population below poverty level in the region declined from $19.8 \%$ to $11.8 \%$, while the state's percentage declined from $23.0 \%$ to $14.1 \%$. Such declines contrast markedly with the national percentage of population below poverty level, which has increased from $12.6 \%$ to $13.5 \%$ in 1969-89 and dropped to $12.4 \%$ from 1989 to 1999. However, the absolute numbers of individuals living in poverty increases in 1989 and 1999 for everyone except Fairfield and Richland counties that do not see any increase in numbers of people below poverty until 1999.

## E. Population Projections for the Counties of the Central Midlands Region (NOTE TO ADDRESS POPOULATION PROJECTIONS)

Trends in population growth in each county are important to a hazard mitigation plan for the region because population density and areas of growth would be those threatened by a natural disaster. Particularly in Richland and Lexington Counties, the heart of the Columbia, South Carolina Metropolitan Statistical Area, population growth will be significant especially in the areas of the county most distant from this historic core of the urbanized area centering on Columbia, West Columbia and Cayce. Population growth in the rural counties of Newberry and Fairfield will be markedly less in both absolute and percentage terms. Map II-B should be consulted to understand better all geographic references made in the discussion that follows. Since the 2010 Census numbers were released at the end of this planning process, updated population projections were not available.

## Table II-B

## Population Projects for the Counties of the Central Midlands Region 2000-2035

| County | 2000 | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fairfield Co | 23,454 | 24,160 | 24,910 | 25,660 | 26,410 | 27,170 | 27,900 |
| Lexington Co | 216,014 | 247,156 | 276,832 | 306,482 | 336,145 | 365,786 | 395,446 |
| Newberry Co | 36,108 | 37,300 | 38,560 | 39,820 | 41,080 | 42,350 | 43,579 |
| Richland Co | 320,677 | 356,086 | 371,983 | 403,778 | 419,675 | 435,573 | 451,470 |

Source: Year 2000 Population from the U.S. Census Bureau - Based on the Census 2000 SF 1 file. Projections for the counties from the Population Projections Central Midlands Region 2005 through 2035. Projections have not been updated to reflect 2010 Census.

## Fairfield County

Population in the county will grow by only 4,446 or $19 \%$ above the year 2000 level through the planning period ending in 2030. This is an increase of only $0.6 \%$ annually on average. Divided evenly for each five-year period, this is only 741 persons per five-year increment.

The majority of population increases through 2030 will occur in the Ridgeway area along I-77 and Lake Wateree. Of the 4,446 more persons projected for the county by 2030, a total of 2,451 or $55 \%$ will reside in this census tract.

Modest population growth will occur in the western areas of the county, and the Winnsboro area will grow somewhat as the aging population is replaced by in migrants and native population replacement.

## Lexington County

In this county, population increases by census tracts will not rise at roughly the same rate as over the past 20 years. Rather, the hypothesis that energy costs will rise and drive the need for redevelopment of acreage near the geographic center of the urbanized area has been used. This is not to say that in the next 30 years there will be a great upsurge in the population of city center census tracts but rather that the population outflow will begin to reverse in the next decades and that populations will stabilize as new households with school age children begin to repopulate these neighborhoods as the present population is replaced in the normal course age cohort decay.

Redevelopment activity and the development such as the Mungo patio home project near the Riverbanks Zoo botanical garden and the development of Sterling University near the Cayce Riverwalk on the Congaree River are the types of development
that will be a major part of population reversals in tracts where much of the present housing was constructed prior to 1959.

Most of the big winners are in the southern and southeastern portions of the county, near the Town of Lexington, and around Chapin. Land near Lexington will gain at slower rates than historically because much prime developable land has already been accounted for. However, the construction of the Lexington Bypass will stimulate new development west of that municipality.

As the Lexington County Joint Municipal Water and Sewer Commission extends utilities into rural portions of the county where land is still relatively inexpensive, there will be a rapid increase in these areas with the Swansea, Pelion, Boiling Springs, Samaria and Gilbert-Summit seeing the strongest growth.

Batesburg-Leesville should lose population in the planning period but westward expansion of development should help slow and reverse population loss by the closing years of the planning period.

Additional growth in the St. Andrews/Irmo area will be slow as much land has already been developed and as households with children become smaller in size as they graduate and the households are more typified by empty nesters. The rapid rise in taxes on residential properties in Lexington-Richland School District 5 should provide motivation for many elderly to relocate and make way for more households with school age children.

## Newberry County

Population in Newberry County will grow by only 7,471 or $20.7 \%$ above the year 2000 level through the planning period ending in 2030. This is an increase of only $0.7 \%$ annually on average. Divided evenly for each five years, this equates to only 1,245 persons per five-year increment.

The majority of population increases through 2030 will occur near Lake Murray, Prosperity, Little Mountain, and Newberry (north and east). These areas comprise more than $100 \%$ of the growth projected for the county because the remainder of the county should incur a combined loss of 523 persons during the 30 -year period.

New water and sewer facilities being expanded east of Little Mountain and near Peak during the planning period provide rationale for additional population spilling over from Lexington County and the northwestern areas of Richland County.

Growth will be slowest in the northern areas of the county with the Whitmire and Silverstreet tracts losing population. Chappells will grow slowly principally because of the attraction of Lake Greenwood.

## Richland County

A key approach to spreading the amount of population increase in each five-year period was to determine population change in developed areas with older housing. For this analysis, known developments such as Canal Side and other developments in downtown Columbia foreseen by planners involved with the River Alliance, et al. were factored in and an assumption was made that over the planning period the same rates of population decline experienced from the 1970s through 2000 will not recur from 2000 to 2030. If this were the case, some areas of Columbia would be virtually depopulated. New housing will be built and older housing will be rehabbed and older one and two person households will be replaced with households with children.

Energy costs will drive the need for redevelopment of neighborhoods lying near the geographic center of the urbanized area. This is not to say that in the next 30 years there will be a great upsurge in the population of the city center but rather that the population outflow will begin to reverse and that populations will stabilize as new households with school age children begin to repopulate these areas. Affordable older housing in neighborhoods benefiting from Columbia's ongoing investment in its neighborhoods will help attract younger families drawn to urban amenities.

Sharp increases in the number of employment centers and build-out of business parks in the I-77 corridor of Richland County will attract residential development nearby. Growth will be most pronounced in the northeast, north central and northwest areas of the county. Most notably, the historically slow growing southern area of the county will participate in more pronounced growth because of utility extensions and the completion of the Shop Road Extension. As remaining farmers cease business because of weather and costs, some of that available acreage will be available for subdivision development.

Importantly, Fort Jackson should see a gradual increase in population as it benefits from future BRAC activities that will continue a consolidation of Army operations nationwide.

Older, largely minority neighborhoods in north Columbia will record population losses as their populations benefit from improved public education in the county, job opportunities that will increase income, and housing incentives that will promote minority relocation to newer areas of growth in the county.

## F. Further Characteristics of the Municipalities and Counties in the Central Midlands Region Regarding Land Cover, Land Use, and Susceptibility to Natural Hazards

Fairfield County

Within Fairfield County there are only two municipalities, Winnsboro being the county seat of government. Fairfield County is a predominately forested county with the concentrations of land developed for varieties of urban purposes such as residential, commercial and institutional being near Winnsboro and Ridgeway. Wildfires and forest fires will threaten developed land especially near Lake Wateree where there are many second homes and around Lake Monticello in the western part of the county where second homes are also being developed in forested areas. The southwestern portion of the county near Jenkinsville has a large population of low and moderate-income persons living in wooded areas who will also be affected by forest and wild fires. Floodplains lie mainly along the Broad and Wateree Rivers on the western and eastern edges of the county, respectively. Other main watercourses like Little River and Jackson Creek have floodplains, but there is almost no development in these flood susceptible areas. The Towns of Winnsboro and Ridgeway are built on high ridgelines and are not at high risk from watercourse flooding although some areas are subject to short-lived non-floodplain flooding. Hurricanes and tornados as well as high winds from thunderstorms pose major threats to all development in the county especially in the urban areas of Winnsboro and Ridgeway. Winter storms also pose a threat in this heavily forested county.

Development trends in the county show most population growth occurring in the Ridgeway Census County Division east of I-77. This area and the area around Winnsboro will be most affected by major natural hazard events of the future and should be the target of mitigation efforts such as building code and floodplain construction enforcement as well as vigorous enforcement of tie-down requirements on manufactured housing.

| Name of <br> Government | Approximate <br> Size in <br> Square Miles | Rate of <br> Population <br> Growth | Principal <br> Characteristics <br> of Development | Remaining <br> Development/Redevel. <br> Potential |
| :--- | :--- | :--- | :--- | :--- |
| Fairfield <br> County | 686 | Slow | Rural | Substantial |
| Winnsboro | 3.1 | Slow | Urban/Suburban | Moderate |
| Ridgeway | 0.5 | Slow | Urban/Suburban | Minimal to Moderate |

Source: Local Governments and staff of the Central Midlands COG, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## Newberry County

Within Newberry County there are seven municipalities, Newberry being the county seat of government. Newberry County is a predominately rural county with concentrations of forested lands lying in the Enoree Division of the Sumter National Forest between Newberry and Whitmire. Second home residential development
dominates land development on Lakes Greenwood and Murray in the west and south of the county. Concentrations of land developed for varieties of urban purposes such as residential, commercial and institutional lie near Newberry, Whitmire, Prosperity and other small towns like Pomaria. Wildfires and forest fires will threaten timber resources especially in the Sumter National Forest where there is little structural development and forests managed by the U.S. Forest Service dominate the landscape except for minor inholdings. Fires also pose a threat to the second homes on the lakes mentioned above. Floodplains lie mainly along the Broad, Saluda, and Enoree Rivers and by Lakes Murray and Greenwood. Other main watercourses like Bush River and Cannons Creeks have floodplains, but there is almost no development in these flood susceptible areas. Scotts Creek in Newberry is a major area of historic flooding that has and will need remediation. All the towns in the county except Peak lie on high ridgelines and are not at high risk from watercourse flooding although some areas are subject to temporary, non-floodplain flooding. Hurricanes and tornados as well as high winds from thunderstorms pose major threats to all development in the county especially in the urban areas Newberry, Whitmire, and Prosperity. Winter storms also pose a threat in this heavily forested county.

Development trends in the county show most population growth occurring in the Newberry and Prosperity Census County Divisions. These areas near Newberry and near Lake Murray and Prosperity as land development spills over from the Chapin area of Lexington County will be most affected by major natural hazard events of the future and should be the target of mitigation efforts such as building code and floodplain construction enforcement as well as vigorous enforcement of tie-down requirements on manufactured housing.

| Name of <br> Government | Approximate <br> Size in <br> Square Miles | Rate of <br> Population <br> Growth | Principal <br> Characteristics <br> of Development | Remaining <br> Development/Redevel. <br> Potential |
| :--- | :--- | :--- | :--- | :--- |
| Newberry <br> County | 631 | Slow | Rural/Scattered <br> Urban Clusters | Substantial |
| Newberry | 7.0 | Moderate | Urban/Suburban | Moderate |
| Whitmire | 1.1 | Declining | Urban/Suburban | Minimal |
| Prosperity | 2.0 | Slow | Urban/Suburban | Moderate |
| Little <br> Mountain | 1.2 | Slow | Urban/Suburban | Moderate |
| Peak | 0.3 | Slow | Rural | Minimal |
| Pomaria | 1.0 | Slow | Rural | Moderate |
| Silverstreet | 3.5 | Slow | Rural | Moderate |

Source: Local Governments and staff of the Central Midlands COG, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## Lexington County

Within Lexington County there are 13 municipalities, Lexington being the county seat of government. Lexington County is a county of bifurcated development with most urban development occupying the northern and eastern portion of the county centering on the portion of the Columbia urbanized area in Lexington County and the St.

Andrews/Irmo area lying north of the Saluda River. The Chapin Census County Division lying north of Lake Murray is also experiencing rapid, high-value residential development. The more rural portion of the county lies to the west and south of South Congaree and southeast of Batesburg-Leesville. This area possesses most of the manufactured homes in the county scattered among pine and hardwood forests. Rapid urbanization is occurring around Lexington and is spreading west. Second home residential development dominates land development on the shores of Lake Murray. Concentrations of land developed for varieties of urban purposes such as residential, commercial and institutional characterize all municipalities in the county except for Summit that is still essentially rural. Wildfires and forest fires will threaten timber resources especially in the central, western and southern areas of the county and given that these areas have growing numbers of non-farm residential uses, the fire threat is substantial. Fires also pose a threat to the second homes on Lake Murray. Floodplains lie mainly along the Congaree, Saluda, and South Edisto Rivers and by Lake Murray. Other main watercourses like Red Bank, Congaree, Rawls, Beaver, Lightwood Knot, Six Mile and Twelve Mile Creeks have floodplains, but there are not a notable number of structures in these floodplain areas despite so many old and new structures on Lake Murray. The Congaree River floodplain in Cayce has been an historic area of flooding and will likely remain so in the future. Cayce should direct remediation efforts to addressing flooding problems there. West Columbia, Cayce, South Congaree, and Lexington all have major rivers and creeks that have significant acreage within 100-year frequency floodplains. West Columbia and Cayce have acreage within floodways and both have ordinances that restrict development in all flood hazard areas. So, though most local governments are exposed to varying degrees of threat from flood events, all have ordinances in effect that control development that can be damaged or become new repetitive high loss properties. There are scattered locations in older cities like West Columbia, Cayce, and Springdale that suffer from temporary rises in non-floodplain waters. Hurricanes and tornados as well as high winds from thunderstorms pose major threats to all development in the county especially in the urban areas above noted. Winter storms also pose a threat in this heavily populated and developed county where manufactured housing is scattered in rural areas.

Development trends in the county show most population growth will occur in the Lexington area and in the now rural areas of the county south of I-20. Slower growth will occur in the Lexington County portion of the Columbia Urbanized Area. Growth in the Chapin area north of Lake Murray will also be substantial. With the population and with structural development occurring at such a rapid rate in the county, all of Lexington County will be affected by major natural hazard events of the future and should be the target of mitigation efforts such as building code and floodplain construction enforcement as well as vigorous enforcement of tie-down requirements on manufactured housing.

| Name of <br> Government | Approximate <br> Size Square <br> Miles | Rate of <br> Population <br> Growth | Principal <br> Characteristics <br> of Development | Remaining <br> Development/Redev. <br> Potential |
| :--- | :--- | :--- | :--- | :--- |
| Lexington <br> County | 701 | Rapid | Urban/Suburban/ <br> Rural | Substantial |
| Lexington | 9.0 | Rapid | Urban/Suburban | Substantial |


| Cayce | 11.0 | Slow | Urban/Suburban | Moderate |
| :--- | :--- | :--- | :--- | :--- |
| West <br> Columbia | 6.4 | Slow | Urban/Suburban | Moderate |
| Springdale | 3.0 | Slow | Urban/Suburban | Moderate |
| Pine Ridge | 5.2 | Slow | Suburban | Moderate |
| South <br> Congaree | 3.4 | Slow | Suburban | Moderate |
| Gaston | 3.3 | Moderate | Suburban/Rural | Moderate |
| Gilbert | 2.2 | Moderate | Suburban/Rural | Moderate |
| Summit | 1.5 | Slow | Rural | Moderate |
| Swansea | 1.7 | Moderate | Suburban/Rural | Moderate |
| Batesburg/ <br> Leesville | 7.5 | Moderate | Urban/Suburban | Moderate |
| Pelion | 3.7 | Moderate | Rural | Moderate |
| Chapin | 1.7 | Moderate | Suburban/Rural | Substantial |
| Sore |  |  |  |  |

Source: Local Governments and staff of the Central Midlands COG, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## Richland County

Within Richland County there are six municipalities, Columbia being the county seat of government. Richland County is the most populated and most developed county in the region with most urban development occupying the central, northeastern and northwestern portions of the county centering on the portion of the Columbia urbanized area in Richland County, the St. Andrews/Irmo area lying between the Saluda and Broad Rivers and north of Fort Jackson through Blythewood to Fairfield County. The Lower Richland area south of Fort Jackson has experienced along with the north central portion of the county slower rates of growth. These are the most rural and undeveloped areas of the county. Rapid urbanization is occurring north and west of Irmo in the Ballentine area and from there to the county line near Peak in Newberry County. Second home residential development dominates land development on the shores of Lake Murray near Irmo. Concentrations of land developed for varieties of urban purposes such as residential, commercial and institutional characterize all municipalities in the county. Wildfires and forest fires will threaten timber resources especially in the northwestern, north central, and southern areas of the county and given that these areas have growing numbers of non-farm residential uses, the fire threat is substantial. Fires also pose a threat to the second homes on Lake Murray. Floodplains lie mainly along the Broad, Congaree, Saluda, and Wateree Rivers and by Lake Murray. Other main watercourses like Gills, Crane, Hollingshed, Mills, Rawls and many others in this physiographically diverse county have floodplains. Moreover, because of the long history of development there are many structures in these floodplain areas. The Congaree River floodplain south of Columbia has been an historic area of flooding and will likely remain so in the future.

It is important that a new, proposed multi-use development planned for the lands straddling I-77 in Richland County be built in such as way as not to be threatened by recurring documented flooding there.

Remediation efforts are under discussion by Columbia and Richland County to address flooding problems especially along Gills Creek. Forest Acres, Arcadia Lakes and Eastover all have significant acreage within 100-year frequency floodplains. These towns have land use controls within their zoning ordinances to restrict permitting of new structures in flood hazard areas. Although most local governments are exposed to varying degrees of threat from flood events, all affected jurisdictions have ordinances in effect that control development that can be damaged or become new repetitive high loss properties. Throughout the county and the major municipalities there are scattered locations that suffer from temporary rises in non-floodplain waters. Hurricanes and tornados as well as high winds from thunderstorms pose major threats to all development in the county especially in the urban areas above noted. Winter storms also pose a threat in this heavily populated and developed county where manufactured housing is scattered in rural areas. Development trends in the county show most population growth will occur in the northwestern areas west of Irmo and in the northeastern area along the I-77 corridor north of I-20. Slower growth will occur in the north central and Lower Richland County areas with the older core of the Columbia Urbanized Area also showing slower rates of population growth. With the population and with structural development occurring at such a rapid rate in the county, all of Richland County will be affected by major natural hazard events of the future and should be the target of mitigation efforts such as building code and floodplain construction enforcement as well as vigorous enforcement of tie-down requirements on manufactured housing.

| Name of <br> Government | Approximate <br> Size Square <br> Miles | Rate of <br> Population <br> Growth | Principal <br> Characteristics of <br> Development | Remaining <br> Development/Redevel. <br> Potential |
| :--- | :--- | :--- | :--- | :--- |
| Richland <br> County | 756 | Rapid | Urban/Suburban/ <br> Rural | Substantial |
| Columbia | 130.0 | Moderate | Urban/Suburban | Moderate |


| Arcadia <br> Lakes | 1.0 | Slow | Suburban | Minimal |
| :--- | :--- | :--- | :--- | :--- |
| Forest <br> Acres | 6.0 | Slow | Urban/Suburban | Minimal |
| Blythewood | 3.0 | Rapid | Urban/Suburban/Rur. | Substantial through <br> Annexation |
| Eastover | 1.4 | Slow | Rural | Moderate |
| Irmo also in <br> Lex. Cnty. | 4.0 | Moderate | Urban/Suburban | Moderate |

Source: Local Governments and staff of the Central Midlands COG, 2004. Reviewed
by the County Corresponding Committee for the 2010 update.
Population projections for each municipality in all four counties from the year 2000 to 2025 are contained in Tables X-A through X-D.

# Section III. Profiling Natural Hazards Events in Each County 


#### Abstract

This section of the All Natural Hazards Risk Assessment and Mitigation Plan for the Central Midlands Region summarizes the results of the hazard identification, description and mapping used by the Core Planning Team to set the stage for vulnerability assessments, and later Action Plan development to mitigate the effects of high priority hazard events when they occur. An equally important purpose of this section is to provide tabular and spatial information on natural hazards available from key sources such as the Hazards Lab in the Geography Department of the University of South Carolina.


In June 1997 the Federal Emergency Management Agency and the National Emergency Management Association published a State Capability Assessment for Readiness developed to give states an objective procedure to judge disaster mitigation and preparedness (FEMA, 1997). In order to evaluate the success of mitigation and preparedness programs, an assessment of existing or baseline hazards is required. The material that is included in this document will address an historic lack of systematic baseline data that inventories and catalogs hazardous events and vulnerable populations in the counties of the Central Midlands region.

This hazards assessment for the Central Midlands region of S. C. follows a method using a geographic information system. This methodology is detailed the Handbook for Conducting a GIS-based Hazards Assessment at the County Level. It contains four primary elements: hazards identification and occurrence; identification of vulnerable populations; integration of the two elements in a useable geographic or spatial context; and the identification of those areas most physically and socially vulnerable to hazards. This identification should lead ideally to improved mitigation planning and program implementation. The Handbook mentioned in this paragraph addresses issues of map scale for spatial presentation of data at the county level where available.

It must be emphasized that in many cases, however, detailed information regarding the areas potentially impacted by a specific hazard, as well as its potential health and safety, property, environmental and economic impacts of that hazard, has not been available. Staff has chosen to use data provided by the Hazards Research Lab within the Department of Geography at University of South Carolina. Where the absence of hazard and risk-related data at the sub-county level as with droughts, hurricane wind zones, and flood events prevents sub-county analysis, the staff has relied on the knowledge of participating jurisdiction for relevant information on these hazards.

This section details which natural hazards were used in the plan and which were excluded and why. Natural hazards used in this plan are of two types: those that have spatial data associated with them (earthquake, hail, tornado, hurricane wind, and flooding in Richland and Lexington Counties only) and other hazards such as hurricanes and
winter storms and drought that are widespread in their effects and can not be mapped as distinct geographic occurrences like a tornado strike.

Note: Natural hazards such as mudslides, volcanic activity, high desert winds, tsunamis, soil subsidence in sinkholes, etc. were not included in the analysis of hazards for Fairfield County or any county in the Central Midlands Region because those hazards are not encountered or experienced in the region. Those natural hazards of importance to the region are included in the analysis. Those that are not important or not historically experience have been excluded.

The technical planning process begins with hazard identification. In general, there are three main steps in the individual hazard potential determination. These include hazard identification, data acquisition, and calculation of hazard frequency or occurrence. This last is particularly important for this plan because participating jurisdictions in their assessment and prioritization of natural hazard as threats to life and property used the frequency of occurrence.

Risk assessment is a process comprised of three distinct steps these include: 1. An identification of hazards likely to result in disasters, i.e., what hazardous events may occur?
2. An estimation of the risks of such events, i.e., what is the probability of each event?
3. An evaluation of the social consequences of the derived risk, i.e., what is the loss created by each event?

## A. Characteristics of Hazards Affecting South Carolina and the Region

The Central Midlands Region has historically been exposed to several recurring types of natural hazards. Most of these are weather and climate related specifically including severe thunderstorms and wind events, tornados, hurricanes, winter snow and ice storms, and floods. However, loss of life from major natural hazards since 1950 has been fewer than 100 persons in all four counties. (South Carolina Atlas of Environmental Risks and Hazards, 2000, University of S. C.) Threats of natural hazards to the region vary from county to county because of differences in population density and land development. Vulnerability of the population to natural hazards will be dealt with in another section of this plan, but the potential for loss has changed over time given the evolving economic and demographic changes in the diverse region. Suffice it to say here, that higher floor area ratios and the generally low and moderate income populations occupying the core of the Columbia urbanized area make it more vulnerable to major hazards such as tornados, hurricanes, and thunderstorms with high winds and hail than less densely developed and populated areas like western Fairfield County.

The primary focus of hazard related data and commentary is at the county level, but additional remarks will be added to elaborate on the occurrence of natural hazards in the municipalities of the region.

## A. Definition of Hazards Most Likely to Impact the Central Midlands Region of South Carolina

To give the users of this plan a better understanding of the natural hazards discussed in this document, the following definitions of natural hazards are provided as follows: A natural hazard is a rare or extreme event in nature that adversely impacts human life, property, or activity. No human settlements are free from the risk of natural hazards; therefore it is vital that researchers and decision-makers have access to all available hazards information.

Due to its unique geographical setting, the Central Midlands Region of S. C. is vulnerable to a wide array of natural hazards that threaten life and property. These include:

## / Flooding <br> / Hurricanes \& Tropical Storms <br> / Tornadoes <br> / Winter Snow and Ice Storms <br> / Severe Thunderstorms with Lightning <br> / Wildfires <br> / Earthquakes <br> / Drought

Some of these hazards are interrelated (i.e., hurricanes can cause flooding and tornadoes), and some consist of hazardous elements that are not listed separately (i.e., severe thunderstorms can cause lightning; nor'easters can cause coastal erosion). This section provides general descriptions for each of the above listed hazards.

## FLOODING

## Description:

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

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

General floods are usually longer-term events and may last for several days. The primary types of general flooding include riverine flooding, coastal flooding and urban flooding. Riverine flooding is a function of excessive precipitation levels and water runoff volumes within the watershed of a stream or river. Coastal flooding is typically a result of storm surge, wind-driven waves, and heavy rainfall produced by hurricanes, tropical storms, and other large coastal storms. Urban flooding occurs where man-made development has obstructed the natural flow of water and/or decreased the ability of natural groundcover to absorb and retain surface water runoff.

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

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

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

Major flood events occurring in the region in the past century have occurred along the Saluda, Broad, Congaree and Wateree Rivers in 1908, 1929 and 1962. Other less than 100-year flood events have occurred more frequently.

## HURRICANES \& TROPICAL STORMS

## Description:

Hurricanes and tropical storms, both classified as tropical cyclones, are lowpressure storm systems that originate over warm ocean waters but are capable of causing immense destruction when crossing the coastline into land. The primary damaging forces associated with these storms are high-level sustained winds, heavy precipitation and tornadoes. Coastal areas are also vulnerable to the additional forces of storm surge, wind-driven waves and tidal flooding.

The key energy source for a tropical cyclone is the release of latent heat from the condensation of warm water. Their formation requires a low-pressure disturbance, sufficiently warm sea surface temperature, rotational force from the spinning of the earth and the absence of wind shear in the lowest 50,000 feet of
the atmosphere. Hurricanes and tropical storms can form in the Atlantic Ocean, Caribbean Sea and Gulf of Mexico from the months of June to November, but the peak of the Atlantic hurricane season is early to mid-September. The average number of storms that reach hurricane intensity per year in the Atlantic basin is about six.

As an incipient hurricane develops, barometric pressure at its center falls and winds increase. If the atmospheric and oceanic conditions are favorable, it can intensify into a tropical depression. When maximum sustained winds reach or exceed 39 miles per hour, the system is designated a tropical storm, given a name and closely monitored by the National Hurricane Center in Miami, Florida. When sustained winds reach or exceed 74 miles per hour, the storm is deemed a hurricane. Hurricane intensity is further classified by the Saffir-Simpson Scale, which rates hurricane intensity on a scale of I to 5 , with 5 being the most intense. The Saffir-Simpson scale is shown as follows:

| Minimal | $74-95$ | Greater than 980 |
| :--- | :---: | :---: |
| Moderate | $96-110$ | $979-965$ |
| Extensive | $111-130$ | $964-945$ |
| Extreme | $131-155$ | $944-920$ |
| Catastrophic | $155+\mathrm{I}$ | Less than 920 |

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

Damage during hurricanes may also result from spawned tornadoes and inland flooding associated with heavy rainfall that usually accompanies these storms.

## TORNADOS

## Description:

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. It is most often generated by a thunderstorm and produced when cool, dry air intersects and overrides a layer of warm, moist air forcing the warm air to rise rapidly. The damage from a tornado is a result of the high wind velocity and wind-blown debris, although they are commonly accompanied by large hail as well. The most violent tornados have rotating winds of 250 miles per hour or more and are capable of causing extreme
destruction, including uprooting trees and well-made structures, and turning normally harmless objects into deadly missiles.

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

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

The Fujita-Pearson Scale for Tornados was developed to measure tornado strength, and is shown below.

## F-Scale Intensity Wind Speed

| FO | Gale tornado | $40-72 \mathrm{mph}$ |
| :--- | :--- | :--- |
| F1 | Moderate tornado | $73-112$ |
| F2 | Significant tornado | $113-157$ |
| F3 | Severe tornado | $158-206$ |
| F4 | Devastating tornado | $207-260$ |
| F5 | Incredible tornado | $261-318$ |
| F6 | Inconceivable tornado $319-379 \mathrm{mph}$ |  |

According to the Federal Emergency Management Agency, the Central Midlands Region is divided between a Zone III and a Zone IV, the most severe, wind zones. Zone III wind zones can reach 200 miles an hour in Fairfield and Newberry Counties and portions of Lexington and Richland Counties most distant from the Atlantic seaboard. Portions of Richland and Lexington Counties nearest the Atlantic seaboard lie in Zone IV and have potential of enduring tornados with winds of 250 mph .

## SEVERE WINTER SNOW AND ICE STORMS

## Description:

Severe winter storms can produce an array of hazardous weather conditions, including heavy snow, freezing rain and ice pellets, high winds and extreme cold. Severe winter storms are usually extra-tropical cyclones (storms that form outside of the warm tropics) fueled by strong temperature gradients and an active upper-level cold jet stream. Winter storms can paralyze a community by shutting
down normal day-to-day operations, as accumulating snow and ice result in downed trees, power outages and blocked or hazardous transportation routes. Heavy snow can also lead to the collapse of weak roofs or unstable structures. Frequently the loss of electric power means loss of heat for residents, which poses a significant threat to human life, particularly the elderly. According to The State Newspaper, below is the top 10 snowfalls in Columbia, SC history

### 16.0 INCHES...FEBRUARY 9-10 1973

11.8 INCHES...FEBRUARY 11-14 1899
11.7 INCHES...FEBRUARY 25-26 1914
11.3 INCHES...FEBRUARY 24-25 1894
8.8 INCHES...DECEMBER 10-11 1958
8.6 INCHES...FEBRUARY 12-13 2010
8.5 INCHES...FEBRUARY 11-12 1895
8.1 INCHES...FEBRUARY 10-11 1912
6.3 INCHES...FEBRUARY 231901
6.2 INCHES...JANUARY 29-30 1936

Read more: http://www.thestate.com/2011/01/10/1638763/winter-storm-the-
sequel.html\#ixzz1CuUO8JrR
The level of impact severe winter weather will have upon community greatly depends on its ability to manage and control its effects, such as the rapid mobilization of snow removal equipment. Due to the rare occurrence of severe winter weather in central South Carolina, coupled with the expensive costs to acquire and maintain the necessary resources to combat their effects, many communities are not prepared for such events.

Below is table showing monthly temperature and precipitation averages and records for Columbia, South Carolina as provided by The Weateher Channel.

| Month | Avg. High | Avg. Low | Mean | Avg. Precip | Record High | Record Low |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan | $58^{\circ} \mathrm{F}$ | $36^{\circ} \mathrm{F}$ | $47^{\circ} \mathrm{F}$ | 4.57 in. | $84^{\circ} \mathrm{F}$ (1975) | $1^{\circ} \mathrm{F}$ (1985) |
| Feb | $63^{\circ} \mathrm{F}$ | $40^{\circ} \mathrm{F}$ | $52^{\circ} \mathrm{F}$ | 3.75 in. | $86^{\circ} \mathrm{F}$ (1996) | $10^{\circ} \mathrm{F}(1973)$ |
| Mar | $71^{\circ} \mathrm{F}$ | $47^{\circ} \mathrm{F}$ | $59^{\circ} \mathrm{F}$ | 4.56 in. | $90^{\circ} \mathrm{F}$ (1985) | $12^{\circ} \mathrm{F}(1980)$ |
| Apr | $80^{\circ} \mathrm{F}$ | $53^{\circ} \mathrm{F}$ | $66^{\circ} \mathrm{F}$ | 2.96 in. | $97^{\circ} \mathrm{F}$ (2002) | $29^{\circ} \mathrm{F}(1983)$ |
| May | $86^{\circ} \mathrm{F}$ | $61^{\circ} \mathrm{F}$ | $74^{\circ} \mathrm{F}$ | 3.21 in. | $102^{\circ} \mathrm{F}$ (2000) | $39^{\circ} \mathrm{F}(1989)$ |


| Jun | $92^{\circ} \mathrm{F}$ | $68^{\circ} \mathrm{F}$ | $80^{\circ} \mathrm{F}$ | 5.19 in. | $109^{\circ} \mathrm{F}$ (1998) | $50^{\circ} \mathrm{F}(1930)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jul | $95^{\circ} \mathrm{F}$ | $72^{\circ} \mathrm{F}$ | $84^{\circ} \mathrm{F}$ | 5.20 in. | $109^{\circ} \mathrm{F}$ (1999) | $58^{\circ} \mathrm{F}(1982)$ |
| Aug | $93^{\circ} \mathrm{F}$ | $71^{\circ} \mathrm{F}$ | $82^{\circ} \mathrm{F}$ | 4.51 in. | $109^{\circ} \mathrm{F}$ (2007) | $55^{\circ} \mathrm{F}(1930)$ |
| Sep | $88^{\circ} \mathrm{F}$ | $66^{\circ} \mathrm{F}$ | $77^{\circ} \mathrm{F}$ | 3.83 in. | $101^{\circ} \mathrm{F}(1983)$ | $43^{\circ} \mathrm{F}(1967)$ |
| Oct | $79^{\circ} \mathrm{F}$ | $54^{\circ} \mathrm{F}$ | $66^{\circ} \mathrm{F}$ | 2.89 in. | $99^{\circ} \mathrm{F}$ (1954) | $28^{\circ} \mathrm{F}$ (1977) |
| Nov | $69^{\circ} \mathrm{F}$ | $45^{\circ} \mathrm{F}$ | $57^{\circ} \mathrm{F}$ | 3.11 in. | $89^{\circ} \mathrm{F}$ (1974) | $15^{\circ} \mathrm{F}$ (1950) |
| Dec | $61^{\circ} \mathrm{F}$ | $39^{\circ} \mathrm{F}$ | $50^{\circ} \mathrm{F}$ | 3.36 in. | $84^{\circ} \mathrm{F}$ (1998) | $7^{\circ} \mathrm{F}$ (1983) |

## SEVERE THUNDERSTORMS WITH LIGHTNING

## Description:

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

Thunderstorms affect relatively small areas when compared with hurricanes and winter storms, as the average storm is 15 miles in diameter and lasts an average of 30 minutes. Nearly 1,800 thunderstorms are occurring at any moment around the world, however, of the estimated 100,000 thunderstorms that occur each year in the United States only about 10 percent are classified as severe.
Thunderstorms are most likely to happen in the spring and summer months and during the afternoon and evening hours, but can occur year-round and at all hours.

Despite their small size, all thunderstorms are dangerous and capable of threatening life and property in localized areas. Every thunderstorm produces lightning, which results from the buildup and discharge of electrical energy between positively and negatively charged areas. Each year, lightning is
responsible for an average of 93 deaths (more than tornados), 300 injuries, and several hundred million dollars in damage to property and forests.

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

## EARTHQUAKES

## Description:

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

Most property damage and earthquake-related deaths are caused by the failure and collapse of structures due to ground shaking. The level of damage depends upon the amplitude and duration of the shaking, which are directly related to the earthquake size, distance from the fault, site and regional geology.

Other damaging earthquake effects in include landslides, the down-slope movement of soil and rock (mountain regions and along hillsides), and liquefaction, in which ground soil loses it ability to resist shear and flows much like quick sand. In the case of liquefaction, anything relying on the substrata for support can shift, tilt, rupture, or collapse.

Another dramatic byproduct of certain types of earthquakes is a tsunami. Tsunamis are giant ocean waves of extremely long length that are capable of exceeding 500 miles per hour and causing immense devastation to coastal areas. To generate tsunamis, earthquakes must occur underneath or near the ocean, be large and create movements in the sea floor. All oceanic regions of the world can experience tsunamis, but in the Pacific Ocean there is a much more frequent occurrence of large, destructive tsunamis because of the many large earthquakes along the margins of the Pacific Ocean.

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

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

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

Earthquakes are relatively infrequent but not uncommon in South Carolina. The most recent noticeable earthquake to occur in the region was in 1971 and it caused no major damage. The 1886 earthquake in Charleston was felt in the Midlands but caused only minor property damage in the Central Midlands Region. The great earthquake of 1811 centered in the Mississippi Valley near New Madrid, Missouri, was felt in South Carolina, while Intensity V effects were observed in the western part of the state. On February 21,1916, the Asheville area was the center for a large intensity VI earthquake, which was felt in the Central Midlands Region. Finally, according to the U. S. Geological Survey, the Central Midlands Region of S. C. faces only minimal to moderate risk from earthquakes in a given year, generally less than $10 \%$ probability of exceedance in 50 years.

## DROUGHT

## Description:

Drought is a normal, recurrent feature of climate. It occurs almost everywhere, although its features vary from region to region. Defining drought is therefore difficult; it depends on differences in regions, needs, and disciplinary perspectives. Based on the many definitions that have appeared in the literature, for example, we might define drought in Libya as occurring when annual rainfall is less than 180 mm , but in Bali, drought might be considered to occur after a period of only 6 days without rain! In the most general sense, drought originates from a deficiency of precipitation over an extended period of time, resulting in a water shortage for some activity, group, or environmental sectorWhile it is clear
that drought cannot be viewed solely as a physical phenomenon, it should be noted that several times since 2006 the South Carolina Drought Response Committee declared the region in a drought, ranging from "Incipient" to "Severe."

## WILDFIRES

## Description:

A wildfire is an undesirable, uncontrolled burning of grasslands, brush or woodlands. According to the National Weather Service, more than 100,000 wildfires occur in the United States each year. About $90 \%$ of these wildfires are started by humans (i.e., campfires, debris burning, smoking, etc.); lightning starts the other $10 \%$.

The potential for wildfire depends upon surface fuel characteristics, weather conditions, recent climate conditions, topography and fire behavior. Fuels are anything that fire can and will burn, and are the combustible materials that sustain a wildfire. Typically, this is the most prevalent vegetation in a given area. Weather is one of the most significant factors in determining the severity of wildfires. The intensity of fires and the rate with which they spread is directly related to the wind speed, temperature and relative humidity. Climatic conditions such as long-term drought also play a major role in the number and intensity of wildfires, and topography is important because the slope and shape of the terrain can change the rate of speed at which fire travels.

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

Wildfires become significant threats to life and property along what is known as the "wild land/urban interface." The wild land/urban interface is defined as the area where structures and other human development meet or intermingle with undeveloped wild land or vegetative fuels. Since 1985, approximately 9,000 homes have been lost to urban/wild land interface fires across the United States.

Below is table showing 50 year aveage of acres burned in each of the counties in the region as provided by the South Carolina Forestry Commission.

| County | 50 Year Average Acres Burned |
| :--- | :--- |
| Fairfield | 942.6 |
| Lexington | 581.5 |
| Newberry | 131.6 |
| Richland | 851.6 |

The Central Midlands Region has historically been exposed to several recurring types of natural hazards. The most important natural hazards have been described above. Most of these are weather and climate related specifically including severe thunderstorms and wind events, tornados, hurricanes, winter snow and ice storms, and floods. However, loss of life from major natural hazards since 1950 has been fewer than 100 persons in all four counties. (South Carolina Atlas of Environmental Risks and Hazards, 2000, University of S. C.) Threats of natural hazards to the region vary from county to county because of differences in population density and land development. Vulnerability of the population to natural hazards will be dealt with in another section of this plan, but the potential for loss has changed over time given the evolving economic and demographic changes in the diverse region. Suffice it to say here, that higher floor area ratios and the generally low and moderate income populations occupying the core of the Columbia urbanized area make it more vulnerable to major hazards such as tornados, hurricanes, and thunderstorms with high winds and hail than less densely developed and populated areas like western Fairfield County.

The primary focus of hazard related data and commentary is at the county level, but additional remarks will be added to elaborate on the occurrence of natural hazards in the municipalities of the region. Below is an overview of the impact of the natural hazards on the jurisdictions in the region and the possible risk of future events. Table IIIA shows the vulnerability of each jursidition by natural hazard. The information in the table is based on the hazard event data provided later in this chapter and will be used to estimate potential property loss discussed in Chapter IV.
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Table III-A Hazard Event and Vulnerabilty By Jurisdiction in the Central Midlands Region

| Jurisdiction | Flooding | Hurricanes <br> and TS <br> (tracks) | Tornadoes <br> $\left(\mathbf{t}^{\prime}\right.$ downs) | Winter <br> Snow and <br> Ice Storms | Severe <br> Thunderstorms <br> with Lightening | Wildfires | Earthquakes <br> (epicenter) | Drought |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fairfield Co. | Low | Low | Low | Low | Low | Low | Low | Low |
| Town of <br> Winnsboro | N/A | N/A | N/A | Low | Low | N/A | N/A | Low |
| Town of <br> Ridgeway | N/A | Low | N/A | Low | N/A | N/A | N/A | Low |
| Lexington <br> Co | Medium | Low | Low | Low | Low | Low | Low | Low |
| Town of <br> Batesburg- <br> Leesville | Low | N/A | N/A | Low | N/A | N/A | N/A | Low |
| City of <br> Cayce | Low | Low | N/A | Low | Low | N/A | Low |  |
| Town of <br> Chapin | N/A | N/A | N/A | Low | N/A | N/A | N/A | Low |
| Town of <br> Gilbert | Low | N/A | N/A | Low | Low | N/A | N/A | Low |
| Town of <br> Lexington | Low | Low | Low | Low | Low | N/A | Low | Low |


| Jurisdiction | Flooding | Hurricanes <br> and TS <br> (tracks) | Tornadoes <br> (t'downs) | Winter <br> Snow and <br> Ice Storms |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Town of <br> Pelion | Low | N/A | Severe <br> Thunderstorms <br> with Lightening | Wildfires | Earthquakes <br> (epicenter) | Drought |  |  |
| Town of <br> South <br> Congaree | Low | N/A | N/A | Low | Low | N/A | N/A | Low |
| Town of <br> Springdale | Low | Low | N/A | Low | N/A | N/A | N/A | Low |
| Town of <br> Swansea | Low | Low | Low | Low | Low | N/A | N/A | Low |
| City of West <br> Columbia | Low | Low | N/A | Low | Low | N/A | N/A | Low |
| Newberry <br> Co. | Low | Low | Low | Low | Low | N/A | Low |  |
| Town of <br> Little <br> Mountain | No | Low | N/A | Low | N/A | N/A | N/A | Low |
| City of <br> Newberry | Low | Low | Low | Low | Low | Low | Low |  |
| Town of <br> Peak | Low | N/A |  | Low | N/A | N/A | N/A | Low |
| Town of <br> Pomaria | Low | N/A | N/A | Low | Low | N/A | Low |  |


| Jurisdiction | Flooding | Hurricanes <br> and TS <br> (tracks) | Tornadoes <br> (t'downs) | Winter <br> Snow and <br> Ice Storms | Severe <br> Thunderstorms <br> with Lightening | Wildfires | Earthquakes <br> (epicenter) | Drought |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Town of <br> Prosperity | No | No | Low | Low | Low | No | No | Low |
| Town of <br> Whitmire | Low | Low | No | Low | Low | No | No | Low |
| Richland <br> Co. | Low | Low | Low | Low | Low | Low | Low | Low |
| Town of <br> Arcadia <br> Lakes | Low | Low | No | Low | Low | No | No | Low |
| Town of <br> Blythewood | Low | Low | No | Low | Low | No | No | Low |
| City of <br> Columbia | Low | Low | Low | Low | Low | Low | Low |  |
| City of <br> Forest Acres | Low | Low | No | Low | Low | No | No | Low |
| Town of <br> Irmo | Low | Low | No | Low | Low | No | No | Low |

NA= Not affected
Low $=$ Low frequency of events
Medium = Medium frequency of events
High=High frequency of events

## B. Natural Hazards Specifically Relating to Fairfield County

The following is an excerpt from the State of South Carolina Hazard Assessment for 2008.

Fairfield County is vulnerable to . . . natural (hurricanes/tropical storm) . . Winter weather produces the greatest monetary damage with a recurrence interval of 5 years. Drought events also produce significant damages but are less frequent. Wildfires, thunderstorms, and . . are some of the prominent hazards that regularly affect the county, based on past occurrences.

The estimated recurrence of a hazard is a useful element (based on event frequency) for distinguishing between infrequent hazards like earthquakes, and frequent hazards . . . . The most common hazard events in Fairfield County are . . . , severe thunderstorms and wind, wildfires, and earthquakes. Flooding, hurricanes/tropical storms, and drought are hazards with the lowest recurrence intervals. The recurrence and hazard frequency table can be seen in Table III-B.

During January $1^{\text {st }}, 2009$ and June $29^{\text {th }}, 2010$ there were 21 events recorded, including four tornados, seven thunderstorms, three winter storms, one ice storm and three hail storms

Table III-B Hazard Event Data for Fairfield County

| Hazarda | Number of Events | Years in Record | Recurrence <br> Interval <br> (Years) | Hazard Frequency (Percent Chance per Year) |
| :---: | :---: | :---: | :---: | :---: |
| Coastal Events |  |  |  |  |
| Hurricane/Tropical Storm | 10 | 158 | 15.80 | 6.33 |
| Ocean \& Lake Surfb | 1 | 16 | 16.00 | 6.25 |
| Waterspout | 0 | 16 | * | * |
| Dam Failure | - | - | - | - |
| Drought | 1 | 59 | 59.00 | 1.69 |
| Flood | 3 | 59 | 19.67 | 5.08 |
| Fog | 0 | 12 | * | * |
| Geophysical Events |  |  |  |  |
| Avalanche | 0 | 49 | * | * |
| Earthquake | 555 | 310 | 0.56 | 179.03** |
| Landslide | 0 | 49 | * | * |
| Human-Induced Events |  |  |  |  |
| Civil Disturbance | - | - | - | - |
| Hazardous Materials (Hazmat) | 77 | 22 | <0.50 | 350.00** |
| Nuclear Power Plant | 0 | 8 | * | * |
| Terrorism | 0 | 29 | * | * |
| Transportation (Motor Vehicle) | 4,556 | 10 | <0.50 | 45,560** |
| Severe Thunderstorm Events |  |  |  |  |
| Funnel Cloud | 0 | 16 | * | * |
| Hail | 46 | 59 | 1.28 | 77.97 |
| Heavy Precipitation | 0 | 15 | * | * |
| Lightning | 0 | 16 | * | * |
| Thunderstorm \& Wind | 110 | 59 | 0.54 | 186.44** |
| Tornado | 20 | 59 | 2.95 | 33.90 |
| Temperature Extremes | 1 | 16 | 16.00 | 6.25 |
| Wildfire | 1,346 | 21 | <0.50 | 6,409.52** |
| Winter Weather (Snow \& Ice) | 12 | 59 | 4.92 | 20.34 |
| a Data Sources: National Climatic Data Center (www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEve nt~Storm); |  | * Unable to calculate (cannot divide by zero) <br> ** Percent is greater than 100.00, therefore hazard can be <br> expected to occur more than once per year <br> -Data Unavailable <br> Note: Table represents statewide events. Some hazards do not affect the region of the plan |  |  |
| National Geophysical Data Center (www.ngdc.noaa.gov/hazard/ |  |  |  |  |
| b Includes coastal flooding, coastal erosion, coastal winds |  |  |  |  |

SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

The chart indicates that simply in terms of natural hazard frequency alone and not with the assessments of local officials in prioritizing the importance of hazards; wildfires in this largely rural and forested county are the number 1 hazard; thunderstorms wind with accompanying hail is the number 2 hazard; earthquakes are the number 3 hazard; tornados the number 4 hazard; and winter weather is the number 5 hazard. This ranking does not mean the other hazards are insignificant; simply do not rate as highly. Hurricanes/tropical storms are a threat to the county, for example, but they are not so major a problem as others because there have been only 10 occurrences of hurricanes, and 20 tropical storms, to cross the county in 158 years. None of these hurricanes was a

Category 3 or higher in severity. Many of the same mitigation measures that would relate to hurricanes relate to thunderstorm winds with 110 of these recorded events noted in the county over 59 years. So, this hazard is much more of a threat to life and property than hurricanes because the county is $100+$ miles from the coast of S . C.

Map III-A shows the political boundaries of the county, watercourses and lakes, major roads and the generalized corporate boundaries of the two municipalities in the county. Map III-B shows the tracks of hurricanes through the state and through the county demonstrating that they are a very real natural hazard threat to the county. The website www.sheldus.org may be accessed to see the types and damage done by various natural hazards in Fairfield County. Regarding hurricanes, for example, the last significant hurricane to strike Fairfield County was hurricane Hugo in September 1989. It caused $\$ 500,000$ of property damage but $\$ 5,000,000$ of crop damage. On the other hand, a tornado in March 1984 caused $\$ 50,000,000$ of property damage and no crop damage. Earthquake tremors also occur frequently, but they do not cause notable property damage. Wild fires frequently occur in the county but do little damage. However, one such fire in March 1985 caused \$108,000 of crop damage claims.

Map III-C shows the reported tornado touchdowns in the county from 1950 to 2008. In recent years the tornados in the center of the county have been the most damaging but none has touched down in either Winnsboro or Ridgeway. Map III-D shows thunderstorm and wind events far more numerous than tornados and relatively evenly disbursed around the county. All areas of the county are about equally subject to this major natural hazard that can also include hail events. One hail event was recorded within the Town of Winnsboro and one within the Town of Ridgeway. Map III-E shows Earthquake occurrences. Most of these occur in the extreme southwest corner of the county near the Richtex community that is only lightly populated and developed. Earthquakes that may occur near the V. C. Summer Nuclear Station at the southern end of Lake Monticello in the western portion of the county may be more damaging, but that facility was designed to withstand high number Richter Scale earthquakes. Map III-L shows flood zones in the county. There is no mappable sub-county data relating to drought, hail, or wildfires.

Since 1996, FEMA has reported the major disaster declarations and emergency declarations for South Carolina, and Fairfield County is named to receive assistance under the Hazard Mitigation Grant Program for FEMA declaration 1313-03 for a winter storm in 2000 that provides for $75 \%$ grants for removal debris removal, emergency services, snow removal and repair and replacement of disaster-damaged facilities. Fairfield County has not been included in many FEMA disaster declarations over past ten years, but most adjoining counties have been declared disaster recovery eligible counties.

Map III A - Fairfield County Base Map


Map III B - Fairfield County Hurricane Tracks


Map III C - Fairfield County Tornado Touchdowns


Map III D - Fairfield County Thunderstorm and Wind Events


Map III E - Fairfield County Earthquakes



## C. Natural Hazards Specifically Relating to Lexington County

The following is an excerpt from the State of South Carolina Hazard Assessment for 2008.

Winter weather and drought produce the greatest monetary damage; however, the recurrence interval is 59 years and 8.4 years respectively, making these relatively rare events. Wildfires, thunderstorms, > . . are some of the prominent hazards that regularly affect the county, based on past occurrences.

The estimated recurrence of a hazard is a useful element (based on event frequency) for distinguishing between infrequent hazards like earthquakes. . . . The most common hazard events in Lexington County are . . . severe thunderstorms and wind, hail, and wildfires. Droughts and earthquakes are hazards with the lowest recurrence intervals. The recurrence and hazard frequency table can be seen in Table III-C.

Between January $1^{\text {st }}, 2009$ and June $29^{\text {th }}, 2010$, there were 47 events reported, including one tornado, 24 thunderstorms, four winter storms, 13 hail storms, three winter weather events, one flash flood and one strong wind.

Table III-C Hazard Event Data for Lexington County

| Hazarda | Number of Events | Years in Record | Recurrence Interval (Years) | Hazard Frequency (Percent Chance per Year) |
| :---: | :---: | :---: | :---: | :---: |
| Coastal Events |  |  |  |  |
| Hurricane/Tropical Storm | 9 | 158 | 17.56 | 5.70 |
| Ocean \& Lake Surfb | 1 | 16 | 16.00 | 6.25 |
| Waterspout | 0 | 16 | * | * |
| Dam Failure | - | - | - | - |
| Drought | 1 | 59 | 59.00 | 1.69 |
| Flood | 17 | 59 | 3.47 | 28.81 |
| Fog | 0 | 12 | * | * |
| Geophysical Events |  |  |  |  |
| Avalanche | 0 | 49 | * | * |
| Earthquake | 6 | 310 | 51.67 | 1.94 |
| Landslide | 0 | 49 | * | * |
| Human-Induced Events |  |  |  |  |
| Civil Disturbance | - | - | - | - |
| Hazardous Materials (Hazmat) | 274 | 22 | <0.50 | 1,245.45** |
| Nuclear Power Plant | 0 | 8 | * | * |
| Terrorism | 0 | 29 | * | * |
| Transportation (Motor Vehicle) | 53,758 | 10 | <0.50 | 537,580** |
| Severe Thunderstorm Events |  |  |  |  |
| Funnel Cloud | 2 | 16 | 8.00 | 12.50 |
| Hail | 168 | 59 | <0.50 | 284.75** |
| Heavy Precipitation | 0 | 15 | * | * |
| Lightning | 7 | 16 | 2.29 | 43.75 |
| Thunderstorm \& Wind | 313 | 59 | <0.50 | 530.51** |
| Tornado | 22 | 59 | 2.68 | 37.29 |
| Temperature Extremes | 0 | 16 | * | * |
| Wildifire | 4,341 | 21 | <0.50 | 20,671.43** |
| Winter Weather (Snow \& Ice) | 7 | 59 | 8.43 | 11.86 |
| a Data Sources: National Climatic Data Center (www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEve nt~Storm): |  | * Unable to calculate (cannot divide by zero) <br> ${ }^{* *}$ Percent is greater than 100.00, therefore hazard can be expected to occur more than once per year |  |  |
| National Geophysical Data Center (www.ngdc.noaa.gov/hazard/ |  | -Data Unavailable <br> Note: Table represents statewide events. Some hazards do not affect the region of the plan |  |  |
| b Includes coastal flooding, coastal erosion, coastal winds |  |  |  |  |

SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in
South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

The chart indicates that simply in terms of natural hazard frequency alone and not with the assessments of local officials in prioritizing the importance of hazards; wildfires in this rapidly urbanizing county with growing numbers of single family residences scattered in forested areas are the number 1 hazard; thunderstorm wind with accompanying hail and lightning is the number 2 hazard; lighting is the number 3 hazard; tornados are the number 4 hazard; and flooding is the number 5 hazard. Funnel cloud is the number 6 hazard while winter weather (snow and ice) rank 7. Earthquakes and hurricanes/tropical storms were low on the frequency list. The last significant earthquake to strike Lexington County was in 1971. This ranking does not mean other hazards are insignificant; they simply do not rate as highly. Hurricanes/tropical storms are a threat to the county, for example, but they are not so major problem as others because there have been only 9 occurrences to cross the county in 158 years. Only 1 of these was a Category 3 hurricane. Many of the same mitigation measures that would relate to hurricanes relate to thunderstorm winds. The county has experienced 313 recorded thunderstorm \& wind events during the last 59 years. So, this hazard is much more of a threat to life and property than hurricanes/tropical storms because the county is $100+$ miles from the coast of S. C.

Map III-G shows the political boundaries of the county, watercourses and lakes, major roads and the location of the numerous municipalities in the county. Map III-H shows the tracks of hurricanes through the state and through the county demonstrating that they are a real, though infrequent, natural hazard threat to the county. The website www.sheldus.org may be accessed to see the types and damage done by various natural hazards in Lexington County. Regarding hurricanes, for example, the last significant hurricane to brush Lexington County was hurricane Hugo in September 1989. It caused minimal claimed property damage and only $\$ 50,000$ of crop damage. On the other hand, a tornado in August 1984 caused $\$ 50,000,000$ of property damage in the Town of Lexington. Even one hail, high wind, thunderstorm in June 1982 caused \$122,000 of property damage claims.

Map III-I shows the reported tornado touchdowns in the county from 1950 to 2008. In recent years the tornados in the center of the county have been the most damaging. Map III-J shows reported wind and thunderstorm events far more numerous than tornados and concentrated in the northern, more densely populated area of the county. Map III-K shows earthquake occurrences. There is no discernible pattern to earthquakes in the county and it is a minor natural hazard. The only structure of concern for earthquake damage is the large earthen dam at Lake Murray. It is now being improved and upgraded to withstand a higher Richter scale event. Map III-L shows flood zones in the county with the greatest threat lying along the Congaree River in and south of the City of Cayce. There is no mappable sub-county data relating drought, hail, or wildfires.

Since 1992, FEMA has reported on its website the major disaster declarations and emergency declarations for South Carolina. Even the severe tornado damage in 1994 in the Town of Lexington did not produce a disaster declaration because damaged property was privately insured. There have been only a two declarations for damage in recent years and these have been for winter snow and ice storms in 2000 and 2004. For example,

FEMA declaration 1313-DR in 2000 was for such a storm so that property owners and local governments could receive assistance under the Hazard Mitigation Grant Program that provides for $75 \%$ grants for removal debris removal, emergency services, snow removal and repair and replacement of disaster-damaged facilities.

Map III G - Lexington County Base Map


Map III H - Lexington County Hurricane Tracks


Map III I - Lexington County Tornado Touchdowns


Map III J - Lexington County Thunderstorm and Wind Events


Map III K - Lexington County Earthquakes


Map III L - Lexington County Flood Zones


## D. Natural Hazards Specifically Relating to Newberry County

The following is an excerpt from the State of South Carolina Hazard Assessment for 2008.

Newberry County is vulnerable to . . . natural (hurricanes/tropical storm) . . . . Winter weather produces the greatest monetary damage; however, the recurrence interval is 4.9 years, making it a less common event than tornadoes and hail, which also produce significant losses f or the county. Wildfires, thunderstorms, . . . are some of the prominent hazards that regularly affect the county, based on past occurrences.

The estimated recurrence of a hazard is a useful element (based on event frequency) for distinguishing between infrequent hazards like earthquakes, and frequent hazards . ... The most common hazard events in Newberry County are . . . severe thunderstorms and wind, and wildfires. Drought and hurricanes/tropical storms are hazards with the lowest recurrence intervals. The recurrence and hazard frequency table can be seen in Table III-D.

Between January $1^{\text {st }}, 2009$ and June $29^{\text {th }}, 2010$, there were 25 events reported, including one funnel cloud, 10 thunderstorms, six winter storms, four hail storms, two winter weather events, one ice storm and one strong wind.

Table III-D Hazard Event Data for Newberry County

| Hazarda | Number of Events | Years in Record | Recurrence Interval (Years) | Hazard Frequency (Percent Chance per Year) |
| :---: | :---: | :---: | :---: | :---: |
| Coastal Events |  |  |  |  |
| Hurricane/Tropical Storm | 6 | 158 | 26.33 | 3.80 |
| Ocean \& Lake Surfb | 1 | 16 | 16.00 | 6.25 |
| Waterspout | 0 | 16 | * | * |
| Dam Failure | - | - | - | - |
| Drought | 1 | 59 | 59.00 | 1.69 |
| Flood | 6 | 59 | 9.83 | 10.17 |
| Fog | 0 | 12 | * | * |
| Geophysical Events |  |  |  |  |
| Avalanche | 0 | 49 | * | * |
| Earthquake | 21 | 310 | 14.76 | 6.77 |
| Landslide | 0 | 49 | * | * |
| Human-Induced Events |  |  |  |  |
| Civil Disturbance | - | - | - | - |
| Hazardous Materials (Hazmat) | 57 | 22 | <0.50 | 259.09** |
| Nuclear Power Plant | 0 | 8 | * | * |
| Terrorism | 0 | 29 | * | * |
| Transportation (Motor Vehicle) | 7,830 | 10 | <0.50 | 78,300.00** |
| Severe Thunderstorm Events |  |  |  |  |
| Funnel Cloud | 1 | 16 | 16.00 | 6.25 |
| Hail | 64 | 59 | 0.92 | 108.47** |
| Heavy Precipitation | 0 | 15 | * | * |
| Lightning | 1 | 16 | 16.00 | 6.25 |
| Thunderstorm \& Wind | 127 | 59 | <0.50 | 215.25** |
| Tornado | 30 | 59 | 1.97 | 50.85 |
| Temperaiure Extremes | 0 | 16 | * | * |
| Wildifire | 784 | 21 | <0.50 | 3,733.33** |
| Winter Weather (Snow \& Ice) | 12 | 59 | 4.92 | 20.34 |

a Data Sources: National Climatic Data Center (www.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storm);
National Geophysical Data Center
(www.ngdc.noaa.gov/hazard/
b Includes coastal flooding, coastal erosion, coastal winds

* Unable to calculate (cannot divide by zero)
** Percent is greater than 100.00, therefore hazard can be expected to occur more than once per year-Data -Unavailable
Note: Table represents statewide events. Some hazards do not affect the region of the plan

SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

The chart indicates that simply in terms of hazard frequency alone and not reflecting the assessments of local officials in prioritizing the importance of hazards; wildfires in this mainly rural county with single-family residences scattered in forested areas are the number 1 hazard; thunderstorm winds with accompanying hail and lightning are the number 2 hazard; tornados are the number 3 hazard; winter storms (snow and ice) are the number 4 hazard; and flood is the number 5 hazard. Earthquakes are the number 6 hazard while (ocean) lake surf ranks 7. There has not been a damaging earthquake in Newberry County since before 1900 and only 24 tremors since 1698 . This ranking does not mean that hazards like earthquakes do not pose a threat to the county; they simply do not rate as highly. Hurricanes/tropical storms are a threat to the county, for example, but they are not so major problem as other threats because there has been only 6 , to cross the county in 158 years. Many of the same mitigation measures that would relate to hurricanes relate to thunderstorm winds. The county has experienced 127 recorded thunderstorm and wind events over the past 59 years. In June 1982 a thunderstorm resulted in $\$ 122,000$ of property and crop damage. So, this hazard is much more of a threat to life and property than hurricanes because the county is $100+$ miles from the coast of S. C.

Map III-M shows the political boundaries of the county, watercourses and lakes, major roads and the location of the numerous municipalities in the county. Map III-N shows the tracks of hurricanes through the state and through the county demonstrating that they are a real, though infrequent, natural hazard threat to the county. The website www.sheldus.org may be accessed to see the types and damage done by various natural hazards in Newberry County. Regarding hurricanes, for example, the last significant hurricane to brush Newberry County occurred in 1995 and caused $\$ 217,000$ of property damage claims. On the other hand, the tornado of March 1984 caused \$50,000,000 of property damage in and near the City of Newberry and to the southeast. Even one hail, high wind, thunderstorm in June 1982 caused $\$ 122,000$ of property damage claims.

Map III-O shows the reported tornados in the county from 1950 to 2008. In recent years the tornados in the center of the county have been the most damaging. Map III- P shows reported thunderstorm and wind events far more numerous than tornados and concentrated on the west/east axis of U. S. 76 across the county. Newberry, Whitmire, and Prosperity have been struck by tornados since 1950. Map III-Q shows earthquake occurences. There is a clear pattern of tremors in south of the unincorporated community of Maybinton, but this is a lightly populated area on the edge of the Enoree Division of the Sumter National Forest. They are a minor natural hazard. The only structure of concern for earthquake damage is the concrete dam at Buzzard's Roost operated by Duke Power for Lake Greenwood in the far western end of the county. It is capable of withstanding a significant earthquake high on the Richter scale. Map III-R shows flood zones in the county. Areas subject to flooding lie along Scotts Creek in the City of Newberry and along the major rivers such as the Saluda, Broad, Enoree, and Bush. Most of these areas have few developments in floodplains but there are homes built along Lakes Greenwood and Murray that may be subject to 100 -year frequency floods. There is no mappable sub-county data for hail, drought or wildfires.

Since 1992, FEMA has reported on its website the major disaster declarations and emergency declarations for South Carolina. The severe tornado damage in 1984 in and near the City of Newberry produced a disaster declaration because damaged property was in the millions. There have been only a two declarations for damage in more recent years and these have been for winter snow and ice storms in 2000 and 2004. For example, FEMA declaration 1313-DR in 2000 was for such a storm so that property owners and local governments could receive assistance under the Hazard Mitigation Grant Program that provides for $75 \%$ grants for removal debris removal, emergency services, snow removal and repair and replacement of disaster-damaged facilities.

Map III M - Newberry County Base Map


Map III N - Newberry County Hurricane Tracks


Map III O - Newberry County Tornado Touchdowns


Map III P - Newberry County Thunderstorm and Wind Events


Map III Q - Newberry County Earthquakes


Map III R - Newberry County Flood Zones


## E. Natural Hazards Specifically Relating to Richland County

The following is an excerpt from the State of South Carolina Hazard Assessment for 2008.

Richland County is vulnerable to . . . natural (hurricanes/tropical storm) and . . .. Hurricane/tropical storms produce the greatest monetary damage; however, the recurrence interval is 9.3 years, making it a relatively rare event. More frequently occurring events such as tornadoes produce nearly as much damage as hurricanes/tropical storms within the county. Wildfires, thunderstorms, hail, . . . are some of the prominent hazards that regularly affect the county, based on past occurrences.

The estimated recurrence of a hazard is a useful element (based on event frequency) for distinguishing between infrequent hazards like earthquakes, and frequent hazards . . . . The most common hazard events in Richland County are . . . , severe thunderstorms and wind, and wildfires. Droughts and landslides have the lowest recurrence intervals. The recurrence and hazard frequency table can be seen in Table III-E.

Between January $1^{\text {st }}, 2009$ and June $29^{\text {th }}, 2010$, there were 61 events reported, including thirty-seven thunderstorms, three winter storms, seven hail storms, three winter weather events, seven flash floods, two lightining events, one strong wind and one excessive heat event.

Table III-E Hazard Event Data for Richland County

| Hazarda | Number of Events | Years in Record | Recurrence Interval (Years) | Hazard Frequency (Percent Chance per Year) |
| :---: | :---: | :---: | :---: | :---: |
| Coastal Events |  |  |  |  |
| Hurricane/Tropical Storm | 17 | 158 | 9.29 | 10.76 |
| Ocean \& Lake Surfb | 1 | 16 | 16.00 | 6.25 |
| Waterspout | 0 | 16 | * | * |
| Dam Failure | - | - | - | - |
| Drought | 1 | 59 | 59.00 | 1.69 |
| Flood | 23 | 59 | 2.57 | 38.98 |
| Fog | 0 | 12 | * | * |
| Geophysical Events |  |  |  |  |
| Avalanche | 0 | 49 | * | * |
| Earthquake | 18 | 310 | 17.22 | 5.81 |
| Landslide | 1 | 49 | 49.00 | 2.04 |
| Human-Induced Events |  |  |  |  |
| Civil Disturbance |  | - | - | - |
| Hazardous Materials (Hazmat) | 328 | 22 | <0.50 | 1,490.91** |
| Nuclear Power Plant | 0 | 8 | * | * |
| Terrorism | 0 | 29 | * | * |
| Transportation (Motor Vehicle) | 94,120 | 10 | <0.50 | 941,200** |
| Severe Thunderstorm Events |  |  |  |  |
| Funnel Cloud | 2 | 16 | 8.00 | 12.50 |
| Hail | 147 | 59 | <0.50 | 249.15** |
| Heavy Precipitation | 1 | 15 | 15.00 | 6.67 |
| Lightning | 10 | 16 | 1.60 | 62.50 |
| Thunderstorm \& Wind | 269 | 59 | <0.50 | 455.93** |
| Tornado | 34 | 59 | 1.74 | 57.63 |
| Temperature Extremes | 1 | 16 | 16.00 | 6.25 |
| Wildifire | 1,693 | 21 | <0.50 | 8,061.90** |
| Winter Weather (Snow \& Ice) | 6 | 59 | 9.83 | 10.17 |


| a Data Sources: National Climatic Data Center <br> (www.ncdc.noaa.gov/cgi- <br> win/wwcgi.dll?wwEve |  | * Unable to calculate (cannot divide by zero) |
| :---: | :---: | :---: |
|  | nt Storm); | ** Percent is greater than 100.00, therefore hazard can be |
| National Geophysical Data Center (www.ngdc.noaa.gov/hazard/ |  | expected to occur more than once per year -Data Unavailable |
| bllncludes coastal flooding, coastal erosion, coas | tal winds | Note: Table represents statewide events. Some hazards do not affect the region of the plan |

SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South
Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).
The chart indicates that simply in terms of hazard frequency alone and not with the assessments of local officials in prioritizing the importance of hazards; wildfires in this rapidly urbanizing county with growing numbers of single family residences scattered in forested areas are the number 1 hazard; thunderstorms with hail and wind are the number 2 hazard; lighting is the number 3 hazard, and flooding is number 5 . The last significant but minimally damaging earthquake to strike Richland County was in 1971. This ranking does not mean other hazards are insignificant; they simply do not rate as highly. Hurricanes/tropical storms are a threat to the county, for example, but they are not so major a problem as others because there have been only 17 occurrences to cross the county in 158 years. Three of these were Category 1 and three were Category 2
hurricanes. No Category 3 hurricanes have crossed the county in over 158 years. Many of the same mitigation measures that would relate to hurricanes relate to thunderstorm winds. The county has experienced 269 recorded thunderstorm and wind events from over the past 59 years. So, this hazard is much more of a threat to life and property than hurricanes because most of the county is $100+$ miles from the coast of S. C.

Map III-S shows the political boundaries of the county, watercourses and lakes, major roads and the location of the numerous municipalities in the county. Map III-T shows the tracks of hurricanes through the state and through the county demonstrating that they are a real, though infrequent, natural hazard threat to the county. The website www.sheldus.org may be accessed to see the types and damage done by various natural hazards in Richland County. Regarding hurricanes, for example, the last significant hurricane to affect Richland County was hurricane Hugo in September 1989. It caused \$5 million in claimed property damage and $\$ 5$ million in crop damage. On the other hand, a tornado in January 1995 caused $\$ 10$ million of property damage claims and no crop damage. Even one hail, high wind, thunderstorm in June 1989 caused $\$ 10$ million of property damage claims. The Sheldus website confirms the data in Table IIID that forest fires/wild fires are the most common natural hazards followed by thunderstorm with high winds, lightning and hail, but they are normally easily controlled and cause little damage per event.

Map III-U shows 18 reported tornado touchdowns in the county from 1950 to 2001. In recent years the tornados in the center of the county have been the most damaging. Map III-V shows reported thunderstorm and wind events far more numerous than tornados and concentrated in the northern, more densely populated area of the county. Map III-W shows earthquake occurrences.. The last physically notable earthquake to hit Richland County was in 1971 but it caused very little damage. Earthquakes are a minor natural hazard. The only structure of concern for earthquake damage is the large earthen dam at Lake Murray. It is now being improved and upgraded to withstand a higher Richter scale event. Map III-X shows flood zones in the county with the greatest threat lying along the Congaree, Broad, and Wateree Rivers. Of special concern in recent years has been the proposal to build an extensive mixed-use development in the floodplains south of Columbia straddling I-77. There is no subcounty mappable data relating to hail, drought or wildfires.

Since 1992, FEMA has reported on its website the major disaster declarations and emergency declarations for South Carolina. Even the severe tornado damage in 1994 in the Town of Lexington did not produce a disaster declaration because damaged property was privately insured. There have been only a two declarations for damage in recent years and these have been for winter snow and ice storms in 2000 and 2004. For example, FEMA declaration 1313-DR in 2000 was for such a storm so that property owners and local governments could receive assistance under the Hazard Mitigation Grant Program that provides for $75 \%$ grants for removal debris removal, emergency services, snow removal and repair and replacement of disaster-damaged facilities. A more recent disaster declaration for the winter storm of 2004 has allowed local governments in Richland County to apply for $75 \%$ of the cost of clean up.

Map III S - Richland County Base Map


Map III T - Richland County Hurricane Tracks


Map III U - Richland County Tornado Touchdowns


Map III V - Richland County Thunderstorm and Wind Events


Map III W - Richland County Earthquakes



# Section IV. Assessing Vulnerability: Identifying Vulnerable Areas and Critical Assets in Each County of the Central Midlands Region 

Vulnerability, broadly defined, is the potential loss of property or life from natural hazards. Assessments of vulnerability usually involve the determination of the occurrence probability of a given hazard event, the delineation of areas likely to be adversely affected, and the quantification of the value of property likely to be damaged or the number of lives lost within those areas. Often, the results of these assessments are used to fashion various mitigation measures that generally focus on addressing vulnerable areas with the goal of reducing populations and properties at risk.

Inherent in this typical vulnerability assessment method is the assumption that vulnerability is primarily a function of proximity to the hazard and its effects. However, research suggests that the causal structure of vulnerability may be the underlying social conditions that are often remote from the initiating hazard event. The term social vulnerability defines the susceptibility of social groups to potential losses from hazard events. Vulnerability to hazards often reflects limited access to policy-making bodies that can allocate resources among competitors for those limited resources. By using geographic location as the unit of analysis for both social and biophysical vulnerability, one can study how they interact and intersect to create the vulnerability of a given place.

A key component of any vulnerability assessment is the acquisition of systematic baseline data, particularly at the local level. These data provide inventories of hazard areas and vulnerable populations, information that is essential for preimpact mitigation planning, damage assessments, and post-disaster response. One goal of this plan is to create a method of identifying the risk posed by multiple hazards for the purpose of promoting mitigation. Considering the threat from all hazards provides an opportunity to mitigate for several hazards simultaneously. Previous work has rarely attempted to characterize the risk from all hazards or the intersection they share with the most vulnerable populations and critical structures. Using a geographic information system allows for the analysis of multi-hazard information for improved mitigation planning. (The approaches to vulnerable assessment in this section are derived from A GIS-Based Hazards Assessment for Georgetown County, South Carolina, Hazards Research Laboratory, Dept. of Geography, University of South Carolina, 1997.)

## A. Determining geographic areas of greatest vulnerability to combined HAZARDS

## Fairfield County and Its Municipalities

Social vulnerability examines the socioeconomic and demographic character of places and helps to explain the variation in the population's ability to prepare for and respond to hazards. The Social Vulnerability Index (SoVI) is a statistical measure that compares social vulnerability to environmental hazards among places, and then visually displays these comparisons on a map. SoVI thus illustrates where there is uneven capacity for preparedness and response and where additional planning and response resources might be used most effectively to help residents. The variables used in determining the Social Vulnerability (SoVI) score along with how SoVI is calculated are available on the Hazards and Vulnerability Research Institute SoVI website (http://www.sovius.org).

Within Fairfield County, most of the census tracts are in the moderately elevated levels of social vulnerability. Map IV-A provides maps of the Fairfield County depicting (on the left) social vulnerability by census tract and (on the right) cities and major roads.

Map IV-A The Social Vulnerability for Fairfield County, SC by US Census tracts and a general reference map of Fairfield County.


[^1]When compared to South Carolina as a whole, Fairfield County has a higher probability of loss-producing winter weather events, and is slightly above the state average for hail and drought. This comparison between the county and state in Chart IV-A shows hazards that exceeded the state mean in red type.
Thunderstorms and wind are well below the state mean indicating that these hazards have historically produced fewer losses for the county when compared to the state as a whole.

## Chart IV-A The historic loss causing hazard frequency between 1960 and 2008 for Fairfield County compared to South Carolina



SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County Risk_Assessment.html. (February 24, 2011).

The historic loss causing hazard frequency between 1960 and 2008 for Fairfield County compared to South Carolina as reported in SHELDUS. Percentage numbers indicated in red are when the county total exceeds the state mean. Also, a hazard that is identified in the National Climatic Data Center Storm Data reports as a multiple event hazard (flooding, winter weather, coastal storm), and given a statewide or regional location, the impact of the event is equally distributed amongst the counties involved.

Another way of determining how vulnerable a county is to particular hazards is by examining the amount of damage caused by past events. In Table IV-A the cumulative amount of damage from 1960 to 2008 based on twelve hazard types is computed from the Hazards and Vulnerability Research Institute's SHELDUS
database (available at http://www.sheldus.org). The historic losses in Fairfield County exceed $\$ 66$ million, and are largely due to a combination of winter weather, drought, heat, and hurricanes and tropical storms. While significant for the county, these cumulative losses represent less than one percent of the state's total overall, but 4\% of the state's total damages related to hail.

Table IV-A Cumulative Amount of Damage in Fairfield County from 1960-2008

| Hazard | Total Damage (in 2008 dollars) | Percent of State |
| :---: | :---: | :---: |
| Coastal | \$6,476 | 0.01\% |
| Drought | \$14,058,478 | 2.17\% |
| Flooding | \$380,877 | 0.25\% |
| Hail <br> Heat | \$4,311,971 | 4.18\% |
|  | \$11,286,643 | 2.17\% |
| Hurricane/ Tropical Storm | \$10,514,866 | 0.19\% |
| Lightning | \$262,226 | 0.50\% |
| Severe Storm/ Thunder Storm | \$687,405 | 0.33\% |
| Tornado Wildifire Wind | \$4,514,201 | 1.91\% |
|  | \$347,075 | 2.17\% |
|  | \$4,166,668 | 2.86\% |
| Winter Weather | \$15,590,612 | 1.73\% |
| Fairfield - Total | \$66,127,499 | 0.66\% |
| County Losses |  |  |

SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County Risk Assessment.html. (February 24, 2011).

## Lexington County and Its Municipalities

Social vulnerability examines the socioeconomic and demographic character of places and helps to explain the variation in the population's ability to prepare for and respond to hazards. The Social Vulnerability Index (SoVI) is a statistical measure that compares social vulnerability to environmental hazards among places, and then visually displays these comparisons on a map. SoVI thus illustrates where there is uneven capacity for preparedness and response and where additional planning and response resources might be used most effectively to help residents. The variables used in determining the Social Vulnerability (SoVI) score along with how SoVI is calculated are available on the Hazards and Vulnerability Research Institute SoVI website (http://www.sovius.org). Within Lexington County, most of the census tracts exhibit moderate to limited levels of social vulnerability. The exceptions are in West Columbia, Cayce, and Batesburg-Leesville. Map IV-B provides maps of the Lexington County depicting (on the left) social vulnerability by census tract and (on the right) cities and major roads.

Map IV-B The Social Vulnerability for Lexington, SC by US Census tracts and a general reference map of Lexington County.


SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County Risk Assessment.html. (February 24, 2011).

When compared to South Carolina as a whole, Lexington County has a higher probability of loss-producing lightning, thunderstorm, and wind events. This comparison between the county and state in Chart IV-B shows hazards that
exceeded the state mean in red type. Flooding and drought are slightly above the state average as well. Winter weather is well below the state mean indicating that this hazard has historically produced fewer losses for the county when compared to the state as a whole.

Chart IV-B The historic loss causing hazard frequency between 1960 and 2008 for Lexington County compared to South Carolina


SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County Risk Assessment.html. (February 24, 2011).

The historic loss causing hazard frequency between 1960 and 2008 for Lexington County compared to South Carolina as reported in SHELDUS. Percentage numbers indicated in red are when the county total exceeds the state mean. Also, a hazard that is identified in the National Climatic Data Center Storm Data reports as a multiple event hazard (flooding, winter weather, coastal storm), and given a statewide or regional location, the impact of the event is equally distributed amongst the counties involved.

Another way of determining how vulnerable a county is to particular hazards is by examining the amount of damage caused by past events. In Table IV-B the cumulative amount of damage from 1960 to 2008 based on twelve hazard types is computed form the Hazard and Vulnerability Research Institute's SHELDUS database (available at http://www.sheldus.org). The historic losses in Lexington

County exceed $\$ 57$ million, and are largely due to winter weather, drought, heat and tornadoes. While significant for the county, these cumulative losses represent less than one percent of the state's total.

Table IV-B Cumulative Amount of Damage in Lexington County from 1960-2008

| Hazard | Total Damage (in 2008 dollars) | Percent of State |
| :---: | :---: | :---: |
| Coastal | \$6,476 | 0.01\% |
| Drought <br> Flooding <br> Hail | \$14,058,478 | 2.17\% |
|  | \$1,344,802 | 0.87\% |
|  | \$389,738 | 0.38\% |
| Heat | \$11,286,643 | 2.17\% |
| Huricane/ Tropical Storm | \$1,076,866 | 0.02\% |
| lightning <br> Severe Storm/ Thunder Storm | \$1,889,247 | 3.60\% |
|  | \$1,276,048 | 0.60\% |
| Tornado Wildifire | \$10,170,899 | 4.30\% |
|  | \$334,042 | 2.09\% |
| Wind | \$1,468,278 | 1.01\% |
| Winter Weather | \$14,646,000 | 1.63\% |
| Lexington - Total | \$57,947,517 | 0.61\% |
| County Losses |  |  |

SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

## Newberry County and Its Municipalities

Social vulnerability examines the socioeconomic and demographic character of places and helps to explain the variation in the population's ability to prepare for and respond to hazards. The Social Vulnerability Index (SoVI) is a statistical measure that compares social vulnerability to environmental hazards among places, and then visually displays these comparisons on a map. SoVI thus illustrates where there is uneven capacity for preparedness and response and where additional planning and response resources might be used most effectively to help residents. The variables used in determining the Social Vulnerability (SoVI) score along with how SoVI is calculated are available on the Hazards and Vulnerability Research Institute SoVI website (http://www.sovius.org).

Within Newberry County, most of the census tracts exhibit moderate levels of social vulnerability. Census tracts in the center of the county, including those in Newberry city exhibit the highest SoVI scores. Map IV-C provides maps of the Newberry County depicting (on the left) social vulnerability by census tract and (on the right) cities and major roads.

Map IV-C The Social Vulnerability for Newberry, SC by US Census tracts and a general reference map of Newberry County.


SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

When compared to South Carolina as a whole, Newberry County has a higher probability of loss-producing tornado and winter weather events, and is slightly
above the statewide average for drought and hail. This comparison between the county and state in Chart IV-C shows hazards that exceeded the state mean in red type. Thunderstorms, wind, and flooding are well below the state mean indicating that these hazards have historically produced fewer losses for the county when compared to the state as a whole.

## Chart IV-C The historic loss causing hazard frequency between 1960 and 2008 for Newberry County compared to South Carolina



SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

The historic loss causing hazard frequency between 1960 and 2008 for Newberry County compared to South Carolina as reported in SHELDUS. Percentage numbers indicated in red are when the county total exceeds the state mean. Also, a hazard that is indentified in the National Climatic Data Center Storm Data reports as a multiple even hazard (flooding, winter weather, coastal storm) and given a statewide regional location, the impact of the event is equally distributed amongst the counties involved.

Another way of determining how vulnerable a county is to particular hazards is by examining the amount of damage caused by past events Table IV-C the cumulative amount of damage from 1960 to 2008 based on twelve hazard types is
computed from the Hazards and Vulnerability Research Institute's SHELDUS database (available at http://www.sheldus.org). The historic losses in Fairfield County exceed $\$ 66$ million, and are largely due to a combination of winter weather, drought, heat, and hurricanes and tropical storms. While significant for the county, these cumulative losses represent less than one percent of the state's total overall, but 4\% of the state's total damages related to hail.

Table IV-C Cumulative Amount of Damage in Newberry County from 1960-2008

| Hazard | $\begin{aligned} & \text { Total Damage } \\ & \text { (in } 2008 \text { dollars) } \\ & \hline \end{aligned}$ | Percent of State |
| :---: | :---: | :---: |
| Coastal | \$6,476 | 0.01\% |
| Prought | \$14,058,478 | 2.17\% |
| Flooding <br> Hail | \$1,365,708 | 0.88\% |
|  | \$7,812,970 | 7.58\% |
| Heat <br> Hurricane/ Tropical Storm | \$11,286,643 | 2.17\% |
|  | \$975,831 | 0.02\% |
| lightning | \$459,167 | 0.87\% |
| Severe Storm/ Thunder Storm | \$759,185 | 0.36\% |
| Tornado Wildife Wind | \$10,015,297 | 4.23\% |
|  | \$334,042 | 2.09\% |
|  | \$668,237 | 0.46\% |
| Winter Weather | \$15,663,866 | 1.74\% |
| Newberry - Total | \$63,405,900 | 0.66\% |
| County Losses |  |  |

SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in
South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

## Richland County and Its Municipalities

Social vulnerability examines the socioeconomic and demographic character of places and helps to explain the variation in the population's ability to prepare for and respond to hazards. The Social Vulnerability Index (SoVI) is a statistical measure that compares social vulnerability to environmental hazards among places, and then visually displays these comparisons on a map. SoVI thus illustrates where there is uneven capacity for preparedness and response and where additional planning and response resources might be used most effectively to help residents. The variables used in determining the Social Vulnerability (SoVI) score along with how SoVI is calculated are available on the Hazards and Vulnerability Research Institute SoVI website (http://www.sovius.org).

Within Richland County, most of the census tracts exhibit moderate levels of social vulnerability. Concentrations of high social vulnerability are in Columbia, while low levels of social vulnerability are found in the suburban areas northeast, northwest, and southeast of the city. Figure 1 provides maps of the Richland County depicting (on the left) social vulnerability by census tract and (on the right) cities and major roads.

Map IV-C The Social Vulnerability for Richland County, SC by US Census tracts and a general reference map of Richland County.


SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County Risk Assessment.html. (February 24, 2011).

The Social Vulnerability for Richland County, SC by US Census tracts and a general reference map of Richland County.

When compared to South Carolina as a whole, Richland County has a higher probability of loss-producing flooding, hail, landslide, lightning, thunderstorm, heat, and tornado events, and is slightly above the state average for drought. This comparison between the county and state in Chart IV-D shows hazards that exceeded the state mean in red type. Wind and winter weather are well below the state mean indicating that these hazards have historically produced fewer losses for the county when compared to the state as a whole.

## Chart IV-D The historic loss causing hazard frequency between 1960 and 2008 for Richland County compared to South Carolina



SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County Risk Assessment.html. (February 24, 2011).

The historic loss causing hazard frequency between 1960 and 2008 for Richland County compared to South Carolina as reported in SHELDUS . Percentage numbers indicated in read are when the county total exceeds the state mean. Also, a hazard that is identified in the National Climatic Data Center Storm Data reports as a multiple event hazard (flooding, winter weather, coastal storm) and given a statewide or regional location, the impact of the event's equally distributed amongst the counties involved.

Another way of determining how vulnerable a county is to particular hazards is by examining the amount of damage caused by past events. In Table IV-D the cumulative amount of damage from 1960 to 2008 based on twelve hazard types is computed form the Hazards and Vulnerability Research Institute's SHELDUS database (available at http://www.sheldus.org). The historic losses in Richland County exceed $\$ 91$ million, and are largely due to a combination of hazards: hurricanes and tropical storms, tornadoes, winter weather, drought, and heat. While significant for the county, these cumulative losses represent less than one percent of the state's total overall, but $7 \%$ of the state's total damages related to lightening and 7\% of the states damages related to tornadoes.

Table IV-C Cumulative Amount of Damage in Newberry County from 1960-2008

| Hazard | Total Damage (in 2008 dollars) | Percent of State |
| :---: | :---: | :---: |
| Coastal | \$6,476 | 0.01\% |
| Drought <br> Flooding <br> Hail | \$14,058,478 | 2.17\% |
|  | \$684,380 | 0.44\% |
|  | \$474,144 | 0.46\% |
| Heat | \$11,286,643 | 2.17\% |
| Hurricane/ Tropical Storm | \$18,314,866 | 0.33\% |
| Landslide <br> lightning <br> Severe Storm/ Thunder Storm <br> Tornado | \$0 | 0.00\% |
|  | \$3,688,835 | 7.02\% |
|  | \$6,392,254 | 3.03\% |
|  | \$16,083,528 | 6.80\% |
| Wildfire | \$334,042 | 2.09\% |
| Wind | \$5,945,453 | 4.08\% |
| Winter Weather | \$14,597,406 | 1.62\% |
| Richland - Total | \$91,866,506 | 0.96\% |
| County Losses |  |  |

[^2]
## C. Correlation between Vulnerable Populations, Hazardous Events and Critical Facilities

As part of the 2009 update, the county committees were given the list of critical facilities included in the 2005 plan. The committees had na opportunity to review the list and make changes.

For each county in the Central Midlands Region, tables identifying the most prominent critical facilities serving the entire population of a county but with vital importance to special needs populations are identified and their addresses provided. The most prominent critical facilities listed in these tables include the names and addresses of public schools, private schools, child daycare facilities, adult daycare facilities, evacuation shelters, medical facilities, police stations, and fire stations/EMS facilities.

For Fairfield County these critical facilities are presented in Table IV-E by name and address. Facilities are also listed by their location within a given municipality or if they are in the unincorporated county. Critical facilities were determined and identified by the USC Hazards Lab and that is why they are included in the 2005 plan. For the 2010 update the county committees reviewed the list for any changes. Map IV-E shows the location of these critical facilities in Fairfield County. Map IV-F shows the intersection of vulnerable populations overlaid with critical facilities serving special needs populations. This is a key map to grasping which areas of the county are most susceptible to natural disasters and which are best or least well served by existing critical facilities. Combining multiple data sets on Map IV-F is one of the most powerful visual tools in this plan for showing areas of the county that should be better served with hazard mitigation efforts. Facilities especially important to the serving special needs or vulnerable populations are concentrated in the Winnsboro urbanized area that also highly vulnerable to natural hazards. The challenge in Fairfield County is designing natural hazard response plans that address vulnerable areas and their populations outside the Winnsboro urban area.

The exact location and current exact name of each critical facility are not really needed or necessary because of how the names of emergency shelters are provided for public information and referral. That is, emergency shelter locations have been designated in each county by emergency preparedness agencies, but these are not normally publicized prior to an emergency for several reasons. First, not all shelters may be opened because of staffing concerns. Second, not all shelters may be needed during an emergency and if they are publicized, the public may go to a shelter thinking it may be open and it may not be. This will necessitate their finding another shelter and not being able to find one over impassable roads. Third, it may be imprudent to publicize the names and locations of emergency shelters in case of terrorist attacks because shelters may be targets of such attacks. It is preferred that shelters and directions to those shelters be provided as the need arises on emergency broadcast networks so that the public will know where to find shelter that can be
provided. Moreover, none is located in a special flood hazard area in any locality in the region.

TABLE IV-E Selected Critical Facilities Serving Special Needs Populations in Fairfield County

| Facility | Address | Municipality |
| :---: | :---: | :---: |
| Public Schools |  |  |
| McCrorey Liston Elementary | 1978 State Highway 215 South | Blair |
| Gordon Odyssey Academy | 542 Fairfield Street | Winnsboro |
| Fairfield Middlel School | 728 US Highway 321 Bypass South | Winnsboro |
| Fairfield Central High School | 836 US Highway 321 Bypass South | Winnsboro |
| Fairfield Magnet School | 1647 US Highway 321 Bypass North | Winnsboro |
| Fairfield Career \& Technology Center | 1451 US Highway 321 North | Winnsboro |
| Fairfield Elementary School | 175 Medley Road | Winnsboro |
| Geiger Elementary School | 150 T M Cook Lane | Ridgeway |
| Kelly Miller School | 255 Kelly Miller Road | Winnsboro |
| Alpha \& Omega Christian Academy | 183 St Luke Church Rd | Winnsboro |
| Celida's Playpen Day Care | 325 Elm Street | Winnsboro |
| Christian Liberty Classical School | 401 Vanderhorst St | Winnsboro |
| Fairfield Learning Center | 560 Fairfield St | Winnsboro |
| Fairfield Learning Center | 255 Kelly Miller Rd | Winnsboro |
| Learning Center | 250 Roosevelt St | Winnsboro |
| Palmetto Montessori of Ridgeway | 1364 Cook Rd | Ridgeway |
| The Children's Center | 63 Cedar Terrace Drive | Winnsboro |
| Private Schools |  |  |
| Richard Winn Academy | PO Box 3901796 Old Chester Road | Winnsboro |
| Palmetto Montessori of Ridgeway | 1364 Cook Rd | Ridgeway |
| Child Daycare |  |  |
| McCrorey Liston Child Development Center | 1978 State Highway 215 South | Blair |
| Small World Child Care Center | 325 Elm Street | Winnsboro |
| Fairfield Elementary School | 175 Medley Road | Winnsboro |
| Kelly Miller School | 255 Kelly Miller Road | Winnsboro |
| Richard Winn Academy | 1796 Old Chester Road | Winnsboro |
| Geiger Child Development Center | 150 T M Cook Lane | Ridgeway |
| Palmetto Montessori of Ridgeway | 1364 Cook Rd | Ridgeway |
| Celinda's Playpen Day Care | 325 Elm Street | Winnsboro |
| The Children's Center | 63 Cedar Terrace Dr. | Winnsboro |


| Adult Daycare |  |  |
| :---: | :---: | :---: |
| Precious Adult Center Winnsboro Active Daycare Center Fairfield County Dialysis Center | 121 Fagan Road 219 North Congress Street 1126 US Highway 321 Business South | Winnsboro Winnsboro Winnsboro |
| Evacuation Shelter |  |  |
| Fairfield Memorial Hospital | 102 US Highway 321 Bypass North | Winnsboro |
| Fairfield Magnet School | 1647 US Highway 321 Bypass North | Winnsboro |
| Fairfield Central High School | 836 US Highway 321 Bypass South | Winnsboro |
| Fairfield Primary School | 175 Medley RD | Winnsboro |
| White Oak Conference Center | 633 Mobley Highway | Winnsboro |
| Medical Facilities |  |  |
| Fairfield Memorial Hospital | 102 US Highway 321 Bypass North | Winnsboro |
| Law Enforcement |  |  |
| Winnsboro Department of Public Safety <br> Ridgeway PD <br> Fairfield County Sheriff Office | 103 W. Washington St. 249 Palmer St. 350 Columbia Rd. | Winnsboro Ridgeway Winnsboro |
| Fire Stations/EMS |  |  |
| Winnsboro Department of Public Safety | 103 W. Washington Street | Winnsboro |
| Blackstock/Woodward VFD | 725 Blackstock Road | Blackstock |
| Blair VFD | 32199 Road | Blair |
| Community VFD | 110 Winter Street | Winnsboro |
| Dutchman Creek VFD | 6 Dutchman Lane | Winnsboro |
| Southeastern EMS Sub-Station | 5091 Park Rd | Ridgeway |
| Jenkinsville EMS Sub-Station | 12540 State Highway 213 | Jenkinsville |
| Mitford VFD | 70 Meeting St. | Great Falls |
| Ridgeway | 170 S. Palmer St. | Ridgeway |
| Jenkinsville VFD | 12922 US Highway 213 | Jenkinsville |
| Lebanon VFD | 5364 Newberry Road | Winnsboro |
| Mitford VFD | 70 Meeting Street | Great Falls |
| Southeastern VFD | 5089 Park Road | Ridgeway |
| Winnsboro Fire Station | 117 West Washington Street | Winnsboro |
| Community Substation VFD | 2954 US Highway 321 N | Winnsboro |
| Feasterville VFD | 2785 Clowney Rd. | Blair |
| Greenbrier-Bethel VFD | 3025 State Highway 213 | Winnsboro |
| Greenbrier Substate VFD/EMS | 2091 E. Peach Rd | Winnsboro |
| Blair EMS Substation | 194 Ashford Ferry Rd. | Blair |
| EMS Headquarters | 108 US Highway 321 Bypass South | Winnsboro |

Map IV E-Selected Critical Facilities in Fairfield County


Map IV F- Intersection of Critical Facilities and Socially Vulnerable Populations in Fairfield County


For Lexington County these critical facilities are presented in Table IV-F by name and address. Facilities are also listed by their location within a given municipality or if they are in the unincorporated county. Critical facilities were determined and identified by the USC Hazards Lab and that is why they are included in the 2005 plan. For the 2010 update the county committees reviewed the list for any changes. Map IV-G shows the location of these critical facilities in Lexington County. Map IV-H shows the intersection of vulnerable populations overlaid with
critical facilities serving special needs populations. This is a key map to grasping which areas of the county are most susceptible to natural disasters and which are best or least well served by existing critical facilities. Combining multiple data sets on Map IV-H is one of the most powerful visual tools in this plan for showing areas of the county that should be better served with hazard mitigation efforts. In Lexington County, the urbanized portion of the county near Columbia and north of I-20 has concentrations of facilities to serve special needs populations. However, the most vulnerable areas of the county south and west of the Columbia Metropolitan Airport have fewer facilities to serve special needs populations in these vulnerable areas. These areas are less well placed for service to special needs populations. Community development and social service facilities may be targeted for these areas because they will be the rapid growth areas of the future.

## TABLE IV-F Selected Critical Facilities Serving Special Needs Populations in Lexington County

| NAME | ADDRESS | CITY |
| :--- | :--- | :--- |
|  | Public Schools |  |
| Gilbert High | 146 Main St. | Gilbert |
| Lexington High | 2463 Augusta Hwy. | Lexington |
| Pelion High | 758 Magnolia St. | Pelion |
| Gilbert Elementary | 350 Main St. | Gilbert |
| Lexington Intermediate School | 420 Hendrix St. | Lexington |
| Lexington Elementary | 116 Azalea Dr. | Lexington |
| Pelion Elementary | 1202 Pine St. | Pelion |
| Oak Grove Elementary | 479 Oak Dr. | Lexington |
| Lexington Middle | 702 North Lake Dr. | Lexington |
| Red Bank Elementary | 246 Community Dr. | Lexington |
| Lexington1 Alternative School | $944-A$ Pisgah Church Road | Lexington |
| White Knoll Elementary | 132 White Knoll Way | West Columbia |
| Saxe Gotha Elementary | 100 Bill Williamson | Lexington |
| White Knoll Middle School | 116 White Knoll Way | West Columbia |
| Gilbert Middle School | 120 Rikard Circle | Gilbert |
| Midway Elementary | 180 Midway Rd. | Lexington |
| Continuing Education | 2421 Augusta Hwy | Lexington |
| Lexington Technology Center | 2421 Augusta Hwy. | Lexington |
| White Knoll High School | 5643 Platt Springs Road | Lexington |
| Pelion Middle School | 758 Magnolia St. | Pelion |
| Lake Murray Elementary | 205 Wise Ferry Rd. | Lexington |
| Gilbert Primary School | 520 Main St. | Gilbert |
| Carolina Springs Elementary | 100 Tarrar Springs Rd. | Lexington |
| Carolina Springs Middle | 6180 Platt Springs Rd. | Lexington |
| Forts Pond Elementary | 7350 Fish Hatchery Rd. | Pelion |
| New Providence Elementary | 1118 Old Cherokee Rd. | Lexington |
|  |  |  |

Pleasant Hill Elementary
Pleasant Hill Middle
Airport High
Brookland-Cayce High
R. H. Fulmer Middle School
B. C. Grammar School \#1

R Earle Davis Elementary
Granby Education Center
Congaree Elementary
Northside Middle School
George I Pair Elementary
Pineview Elementary
Saluda River Elementary
Springdale Elementary
Claude A. Taylor Elementary
Pine Ridge Middle School
Herbert A. Wood Elementary
Congaree Wood Early Childhood Center

664 Rawl Rd.
660 Rawl Rd.
1315 Boston Ave.
1300 State St.
1614 Walterboro St.
114 Hook Ave.
2305 Frink St.
1407 Dunbar Rd.
1221 Rambling Rd.
157 Cougar Dr.
2325 Platt Springs R
3035 Leaphart Rd.
1520 Duke St.
361 Wattling Rd.
103 Ann Lane
735 Pine Ridge Dr.
737 Pine Ridge Dr.
739 Pine Ridge Dr.

Lexington
Lexington
West Columbia
Cayce
West Columbia
West Columbia
Cayce
Cayce
West Columbia
West Columbia
West Columbia
West Columbia
West Columbia
West Columbia
Cayce
West Columbia
West Columbia
West Columbia

Batesburg
Swansea
Swansea
Gaston
Swansea
Swansea
Gaston
Swansea
Chapin
Irmo
Irmo
Chapin
Irmo
Irmo
Columbia
Columbia
Columbia
Chapin
Irmo
Chapin
Cayce
West Columbia

| Riverland Hills Baptist Kindergarten | 500 St. Andrews Rd. | Columbia |
| :---: | :---: | :---: |
| St. Andrews Christian Academy | PO Box 21688 | Columbia |
| Colonial Christian School | 1110 Meeting Street | West Columbia |
| Covenant Christian Academy | 3222 Platt Springs Rd. | West Columbia |
| Grace Christian School | 416 Denham Ave. | West Columbia |
| Columbia Junior Academy | 241 Riverchase Way | Lexington |
| Calvary Christian School | 1312 W Main St. | Lexington |
| Community Christian Academy | 1798 Utopia School Rd. | Leesville |
| Ben Lippen School | 6952 St. Andrews Rd. | Columbia |
| Distinctive Educational Center | 1831 Airport Blvd. | Cayce |
| Will Lou Gray Opportunity | 330 W. Campus Rd. | Springdale |
|  | Child Daycare |  |
| Anne Pitts Child Day Care | 291 Andrew Corley Rd. | Lexington |
| Happy Time Child Development Center | 419 Columbia Ave. | Lexington |
| Adlerian Child Care Center | 561 Whiteford Way | Lexington |
| Bright Ideas Child Development Center | 101 Dickert Dr. | Lexington |
| South Lake Child Care | 320 S Lake Drive | Lexington |
| Lexington Kindergarten Child Care Center | 203 Hendrix St. | Lexington |
| Cuddley Care Day Care \& PreSchool | 1240 South Lake Dr. | Lexington |
| State Street Baptist Kindergarten and Daycare | 1420 State St. | Cayce |
| Children's House | 2030 Charleston Hwy. | Cayce |
| Hartman Hall Child Development Center | 1247 Glenn St. | Cayce |
| Pen Pals Inc. | 188 Friarsgate Blvd. | Irmo |
| Fantasy Island Child Care | 7422 Childs St. | Irmo |
| Happy Day Child Care Center | PO Box 404, 1319 Fork Avenue | Irmo |
| Days Of Discovery Child Day Care Center | 7464 Woodrow St. | Irmo |
| Earlwoods Karate Kamp | 7701 St. Andrews Rd. | Irmo |
| Lexington Christian Learning Center | 5151 Sunset Blvd. Faith UMC | Lexington |
| Discovery Point Child Day Care | 5307 Sunset Blvd. | Lexington |
| La Petite Academy | 5625 Sunset Blvd. | Lexington |
| Lexington Leisure Center | 108 Park Rd. | Lexington |
| Talkers and Toddlers | 202 Summerland Ave. | Batesburg |
| Abundant Life Outreach Child Dev Center | 1619 Middleton St. | Cayce |
| Gingerbread House Nursery \& Kindergarten | 1819 Middleton St. | Cayce |
| Robins Nest Children's Day Care Inc. | 650 Frink St. | Cayce |
| Panther Place Child Care | 1105 Pine St. | Pelion |
| Panther Place Child Care Center After School | PO Box 236 | Pelion |
| Tiny Junction Inc. | PO Box 1286, 1106 Two Notch Road | Lexington/ Red Bank |


| Mother Goose Nursery/Christian Day Care The Sunshine House |
| :---: |
| The Sunshine House |
| Chapin's Children's Center |
| Inez's Child Care Center |
| Union United Methodist Church Pre. and Kind. <br> Grace Christian School Day Care <br> Wil Lou Gray Opportunity School <br> EduCare Children's Center |
| Future Images |
| Kids Incorporated |
| Christian Outreach Academy \& Day Care Emmanuel Wee Care Day Care The Kids Place Inc. Gaston Child Care Center |
| Bright Ideas Child Development Center Hi Ideals Mini School |
| Pauline's Child Care |
| Love and Laughter |
| Wonder Years |
| Lexington Medical Center Child Dev Center Kid's Stuff Learning Center |
| Kids Of Today Child Day Care Center |
| Platt Springs Learning Center HS |
| Browder's Kiddie Kove |
| ABC Darian Mini School |
| Red Apple Preschool |
| Price E. Child Care Center Inc. |
| Bama's Child Care |
| St. David Lutheran Church Day School |
| Bobbie's Child Care Center |
| Children's World II |
| Brookland Baptist Child Day Care |
| A \& A Learning Center |
| Hide-A-Way Child Care |
| La Petite Academy |


| 210 North Brown St. (off 12) | West Columbia |
| :---: | :---: |
| 210 Main St. | Gilbert |
| PO Box 390, 4339 Augusta Highway | Gilbert |
| PO Box 330, 432 East Boundary Street | Chapin |
| PO Box 523, 411 Lexington Ave. | Chapin |
| PO Box 765, 7582 Woodrow Street | Irmo |
| 416 Denham Ave. | West Columbia |
| West Campus Rd. | West Columbia |
| 2882 Emmanuel Church Rd., off Platt | S West Columbia |
| 309 N Lake Dr. | Lexington |
| 109 Lisa Dr. | Lexington |
| 1049 Harbor Rd. | West Columbia |
| 150 East Fourth St. | Swansea |
| 145 Basil Rd. | Swansea |
| PO Box 189, 117 South Main Street | Gaston |
| 101 Dickert Dr. | Lexington |
| 2233 Leaphart Rd. | West Columbia |
| 639 Hooksen Circle | West Columbia |
| 3211 Leaphart Rd. | West Columbia |
| 3912 Leaphart Rd. | West Columbia |
| 2720 Sunset Blvd. | West Columbia |
| 813 Springdale Rd. | West Columbia |
| 1120 Silstar Rd. | Springdale |
| 1309 Platt Springs Rd. | West Columbia |
| 1311 C Ave. | West Columbia |
| 640 B Ave. | West Columbia |
| 633 B Ave. | West Columbia |
| 111 Huckabee Rd. | West Columbia |
| 1900 Holland St. | West Columbia |
| 132 St. David Church Rd. | West Columbia |
| 4033 Delree St. | West Columbia |
| 130 McSwain Dr. | West Columbia |
| 1032 Monticello St. | West Columbia |
| 838 Center St. | West Columbia |
| 6696 Platt Springs Rd. | Lexington |
| 4027 Platt Springs Rd. | West Columbia |

## Adult Daycare

| Hope Bridge Adult Day Health Services | 1111 State St | Cayce |
| :---: | :---: | :---: |
| South Carolina Endoscopy Center | 131 Summerplace Drive | West Columbia |
| Urology Surgery Center | 129 Summerplace Drive | West Columbia |
| Heartland of Lexington Rehab. \& Nursing | 2416 Sunset Blvd. | West Columbia |
| Agape | 300 Agape Drive | West Columbia |
| Agape at Harbison | 990 Columbia Avenue | Irmo |
| Agape Senior - Lex | 5422 Augusta Road | Lexington |
| Agape Senior - WC | 2705 Leaphart Road | West Columbia |
| Ascension Hospice/Lodge | 7142 Woodrow Street | Irmo |
| B\&J Community Care Home | 324 Meadowlark Road | Little Mountain |
| Babcock Center - Batesburg | 181 Brookwood Drive | Batesburg |
| Babcock Center - WC | 1147 Walter Price Drive | Cayce |
| Batesburg Group Home | 132 David Drive | Batesburg |
| Brian Ctr Nursing Care-St Andrews | 3514 Sidney Road | Columbia |
| Burton Smith ICF | 139 Burton Smith Road | Lexington |
| Hendrix Street Group Home | 425 Hendrix Street | Lexington |
| Burton Center ICF | 1118 Nazareth Road | Lexington |
| Wire Road I \& II | 941-A Wire Road | Gilbert |
| Cedar Acres | 2091 Sams Elbow Road | West Columbia |
| Clusters of Lexington | 201 Duffie Drive | Lexington |
| Deep Wood Estates | 203 Old Chapin Road | Lexington |
| Generations of Batesburg/Happy Haus | 111 Generations Blvd | Batesburg |
| Generations of Chapin | 431 E Boundary Street | Chapin |
| HCR - Heartland of Lexington | 2416 Sunset Blvd | West Columbia |
| Hulon Greene | 900 Poinsetta Place | West Columbia |
| JB Guest Home Inc | 7122 Edmund Hwy | Pelion |
| Jenni-Lynn Assisted Living | 915 Hook Avenue | West Columbia |
| Kitti Wake Drive ICF/MR | 355 Kitti Wake Drive | West Columbia |
| Laurel Crest Assisted Living | 10 Joseph Walker Drive | West Columbia |
| Laurel Crest Retirement Center | 920 Laurel Crest Drive | West Columbia |
| Leaning Pines Trail ICF/MR | 250 Leaning Pines Trail | Lexington |
| Lex Co Comm Mental Health Ctr/Brookpine | 301 Palmetto Park Blvd | Lexington |
| Lexington Gardens, Sunwest Mgt | 190 McSwain Drive | West Columbia |
| Lexington Medical Center Extended Care | 815 Old Cherokee Road | Lexington |
| Little Valley Community Residence | 141 Worlin Drive | West Columbia |
| Morningside Assisted Living | 218 Old Chapin Road | Lexington |
| Murray Place | 690 S Lake Drive | Lexington |
| National Healthcare Ctr of Lexington | 2993 Sunset Blvd | West Columbia |
| Oakleaf Village of Lexington | 800 N Lake Drive | Lexington |
| Peachtree ICF/MR | 530 Gunter Street | Batesburg |
| Pelion/Perry Eldercare | 850 Maple Street | Pelion |
| Presbyterian Home | 700 Davega Drive | Lexington |
| Rapha Residential Care | 3959 Fish Hatchery Road | Gaston |

SC Episcopal Home at Still Hopes
Southern Heritage Annex
Southern Heritage I
Southside Residential Care
Stephanie's Residential Care
Still Hopes
Sunset of Lexington
Three Rivers Behavioral Care
Three Rivers Residential Treatment Ctr
Twilite Manor Adult Residential Care
Women Community Residence
Red Bank
Edmund FD
Boiling Springs FD
Pine Grove FD
West Columbia FD
$1007^{\text {th }}$ St Ext
1713 Charleston Hwy
770 Hoffman Drive
100 White's Home Place
4033 Delree Street
1 Still Hopes Drive
120 Addy Lane
2900 Sunset Blvd
200 Ermine Road
2306 Forrest Road
1435 Platt Springs Road
1385 South Lake Dr.
5715 Edmund Hwy.
2639 Calks Ferry Rd.
665 Old Barnwell Rd.
603 N. 12th St.

West Columbia
West Columbia
West Columbia
Little Mountain
West Columbia
West Columbia
Lexington
West Columbia
West Columbia
Cayce
West Columbia
Lexington
Lexington
Lexington
West Columbia
West Columbia


## Special Needs <br> Lexington Medical Center

## Mandatory

Airport High School
Batesburg-Leesville leisure Center
Brookland Cayce High School
Busbee Creative Arts Academy
Carolina Springs Middle School
Chapin High School
Chapin United Methodist Church
Church of Jesus Christ of the Latterday Saints
Congaree Wood Early Childhood Center
Crooked Creek Park
Crossroads Middle School
Frances mack Primary School
Gilbert Elementary School
Gilbert High School
Irmo High School
Irmo Middle School
Lexington High Schoo
Lexington Leisure Center
Lexington Middle School

2720 Sunset Blvd.

| 1415 Boston Ave | West Columbia |
| :--- | :--- |
| 227 Highland Ave | Batesburg-Leesville |
| 1300 State Street | Cayce |
| 501 Bulldog Blvd | Cayce |
| 6180 Platt Springs Road | Lexington |
| 300 Columbia Ave | Chapin |
| 415 Lexington Ave | Chapin |
| 1330 Whipporwill Dr. | West Columbia |
| 730 Pine Ridge Drive | West Columbia |
| 1098 Old Lexington Highway | Chapin |
| 6949 St. Andrews Road |  |
| 161 Gaston Street | Gaston |
| 250 Main Street | Gilbert |
| 765 Main Street | Gilbert |
| 6671 St. Andrews Road | Columbia |
| 6051 Westcott Road | Columbia |
| 2463 Augusta Hwy | Lexington |
| 108 Park Rd | Lexington |
| 702 Norhtlake Dr | Lexington |

Mount Horab Lutheran Church
Northside Baptist Church
Pelion High School
Pine Ridge Middle Schol
R. H. Fulmer Middle School

St. David's Lutheran Church
St. Matthews Lutheran Church
St. Stephens Lutheran Church
Sand Hills Middle School
Sandy Run Elementary School
Swansea High School
Tri-City Leisure Center
Trinity Baptist Church

White Knoll High School

101 E. Boundary St. Chapin
157 Cougar St. West Columbia
600 Lydia Drive Pelion
735 Pine Ridge Drive West Columbia
1614 Walterboro St. West Columbia
132 St. David Church Rd. West Columbia
1273 Caulksferry Rd. Lexington
119 N. Church St. Lexington
582 Meadowfield Road Gaston
450 Old Swamp Rd. Swansea
500 East First St. Swansea
700 Dreher Rd.
West Columbia
Cayce

Lexington

|  | Medical Facilities |  |
| :--- | :--- | :--- |
| Charter Rivers Behavioral Heal | 2900 Sunset BLVD | West Columbia |
| Lexington Medical Center | 2720 Sunset BLVD | West Columbia |
| South Carolina Vocational Rehab | 1400 Boston AV | West Columbia |
| LMC - Gilbert Satellite | 4080 Augusta Hwy | Gilbert |
| LMC - Chapin Satellite | 557 Columbia Ave | Chapin |
| LMC - Batesburg-Leesville | 338 E. Columbia Ave | Leesville |
| LMC - Swansea Satellite | 935 W. 2nd. St. | Swansea |
| LMC - Irmo Satellite | 7035 St. Andrews Rd. | Irmo |
| LMC - Lexington Satellite | 811 W. Main St. | Lexington. |
|  |  |  |
|  |  |  |
|  |  |  |


| Columbia Police Department Harbison | 108 Harbison Blvd | Columbia |
| :---: | :---: | :---: |
| Irmo Police Department | 1239 Columbia Ave | Irmo |
| Pine Ridge Police Dispatch-Department | 1015 Fish Hatchery Road | Lexington |
| Town of Lexington Police Department | 111 Maiden Lane | Lexington |
| Lexington County Sheriff's Department | 521 Gibson Rd. | Lexington |
| Pelion Police Department | 1010 Main St | Pelion |
| Springdale Police Department | 2915 Platt Springs Rd | Springdale |
| Swansea Police Department | 320 W 3rd St | Swansea |
| South Congaree Police Department | 119 W Berry Rd | West Columbia |
| West Columbia Police Department | 200 N 12th Street | West Columbia |
|  | Fire/EMS |  |
| Airport Fire Department | 3000 Aviation Way | West Columbia |
| Lexington Co. Fire Service (Samaria) | 5321 Fairview Rd | Batesburg |
| Leesville FD (Station 26) | 660 West Columbia Ave | Batesburg |
| Cayce FD | 1800 12th St. | Cayce |
| Lexington Co. Fire Service (Chapin) | 102 Lexington Ave | Chapin |
| Lexington Co. Fire Service (Crossroads) | 2720 Wessinger Rd | Chapin |
| Lexington Co. Fire Service (Amicks Ferry) | 960 Amicks Ferry Rd | Chapin |
| Irmo Fire District (Headquarters) | 6017 St Andrews Rd | Columbia |
| Lexington Co. Fire Service (Gaston) | 1701 Busbee Rd | Gaston |
| Lexington Co. Fire Service (Gilbert-Summitt) | 103 Main St | Gilbert |
| Lexington Co. Fire Service (Hollow Creek) | 117 Beulah Church Rd | Gilbert |
| Lexington Co. Fire Service (Cedar Grove) | 134 Cedar Grove Rd | Leesville |
| Lexington Co. Fire Service (Fairview) | 2907 Fairview Rd | Leesville |
| BATESBURG-LEESVILLE RESCUE SQ. | 311 WEST CHURCH STREET | LEESVILLE |
| Batesburg FD (Station 25) | 431 E Church St | Leesville |
| Lexington Co. Fire Service (Lake Murray) | 1001 St Peters Rd | Lexington |
| Lexington Co. Fire Service (Lexington) | 112 Park Rd | Lexington |
| Lexington Co. Fire Service (Corley Mill) | 121 Riverchase Way | Lexington |
| Lexington Co. Fire Service (Red Bank) | 1385 South Lake Dr | Lexington |
| Lexington Co. Fire Service (Boiling Springs) | 2639 Calks Ferry Rd | Lexington |
| Lexington Co. Fire Service (Round Hill) | 2703 Two Notch Rd | Lexington |
| Lexington Co. Fire Service (Sharpes Hill) | 3124 Hwy 6 | Lexington |
| LEXINGTON COUNTY EMS | 407 BALLPARK RD. | LEXINGTON |
| Lexington Co. Fire Service (Oak Grove) | 447 Oak Dr | Lexington |
| Lexington Co. Fire Service (Edmond) | 5715 Edmund Hwy | Lexington |
| Lexington Co. Fire Service (Pelion) | 940 Pine St | Pelion |
| Lexington Co. Fire Service (Mack Edisto) | 2142 Hwy 178 | Swansea |


| Lexington Co. Fire Service (Swansea) | 350 W 3rd St | Swansea |
| :--- | :--- | :--- |
| Lexington Co. Fire Service (Sandy Run) | 752 Calvary Church Rd | Swansea |
| Lexington Co. Fire Service (South Congaree) | 300 Oak St | W Columbia |
| Lexington Co. Fire Service (Pine Grove) | 665 Old Barnwell Rd | W Columbia |
| GOLD CROSS AMBULANCE SERVICE | 3038 LEAPHART RD. | WEST COLUMBIA |
| REGIONAL AMBULANCE SERVICE,INC | 3800 SUNSET BLVD | WEST COLUMBIA |
| West Columbia Fire Department | 603 North 12th Street | West Columbia |
| EASTMAN CHEMICAL COMPANY | I-26 East \& Highway 21 | WEST COLUMBIA |
|  | South |  |

## Map IV G- Selected Critical Facilities in Lexington County



Map IV H- Intersection of Critical Facilities and Socially Vulnerable Populations in Lexington County


For Newberry County these critical facilities are presented in Table IV-G by name and address. Facilities are also listed by their location within a given municipality or if they are in the unincorporated county. Critical facilities were determined and identified by the USC Hazards Lab and that is why they are included in the 2005 plan. For the 2010 update the county committees reviewed the list for any changes. Map IV-I shows the location of these critical facilities in Newberry County. Map IV-J shows the intersection of vulnerable populations overlaid with critical facilities serving special needs populations. This is a key map to grasping which areas of the county are most susceptible to natural disasters and which are best or least well served by existing critical facilities. Combining multiple data sets on Map IV-J is one of the most powerful visual tools in this plan for showing areas of the county that should be better served with hazard mitigation efforts. In Newberry

County, areas both subject to high threats from natural hazards and areas of vulnerable populations are relatively close to Newberry, the county seat, where most of the critical facilities targeting special needs populations are located. Prosperity is also served by critical facilities. It is the fringe areas of the county where there is need for additional support for vulnerable populations should be planned.

TABLE IV-G Selected Critical Facilities Serving Special Needs Populations in Newberry County

| Facility | Address | Municipality |
| :---: | :---: | :---: |
|  | Public Schools |  |
| Mid Carolina Middle School | 6834 US Hwy 76 | Prosperity |
| Mid Carolina High | 6794 Hwy 76 | Prosperity |
| Prosperity-Rikard Elementary | 381 South Wheeler Ave. | Prosperity |
| Whitmire Elementary | 2597 SC Hwy. 66 | Whitmire |
| Whitmire | 1402 Coleman Ave. | Whitmire |
| Pomaria/Garmany Elementary | 7288 Us Hwy. 176 | Pomaria |
| Little Mountain Elementary | 692 Mill St. | Little Mountain |
| Speers Street | 1121 Speers St. | Newberry |
| Gallman Elementary | 540 Brantley St. | Newberry |
| Reuben Elementary School | 3605 Speerman Rd. | Newberry |
| Newberry Middle School | 1829 Nance St. | Newberry |
| Boundary Street Elementary | 1406 Boundary St. | Newberry |
| Newberry County Career Center | 3413 Main St. | Newberry |
| Newberry 2 Learning Center | PO Box 5173321 Main St. | Newberry |
| Newberry High | 3113 Main St. | Newberry |
| PRIVATE SCHOOLS |  |  |
| Central Christian School | 931 Cornelia St | Newberry |
| Newberry Academy | PO Box 669 Smith St | Newberry |
| CHILD DAYCARE |  |  |
| Kids Unlimited Of Prosperity | PO Box 15711299 C R Koon Hwy. | Prosperity |
| The Master's Baptist Church Day Care | 169 Supertown Rd. | Whitmire |
| Little Angels Day Care | 753 SC 202 Hwy | Little Mountain |
| Triangle Day Care Center | PO Box 333 | Newberry |
| Miss Susan's Child Care | 1911 Golden St. | Newberry |
| Little Folks Child Care | 2300 Evans St. | Newberry |
| Sunshine Barn Day Care Inc. | 3288 College St. | Newberry |
| Holy Trinity Lutheran Church | 531 Church Street | Little Mountain |
| ADULT DAYCARE |  |  |
| Springfield Place Residential Care | 2006 Springfield Circle | Newberry |


| EVACUATION SHELTER |  |  |
| :---: | :---: | :---: |
| Newberry County Memorial Hospital Newberry High | 2669 Kinard St <br> 3113 Main St | Newberry Newberry |
| MEDICAL FACILITY |  |  |
| Newberry County Memorial Hospital NC Memorial Hospital Community Med. Ctr. | 2669 Kinard St Intr. N. Boundary and N. Mill | Newberry Little Mountain |
| POLICE STATION |  |  |
| Police /Fire Complex <br> Tower-Police/Fire Complex <br> Prosperity Police Dept <br> Police Dept <br> Sheriff's Sub-stateion | 1507 Nance St <br> 1507 Nance St <br> City Hall <br> Main Street <br> Little Mountain Town Hall | Newberry <br> Newberry <br> Prosperity <br> Whitmire <br> Little Mountain |
| FIRE STATION/EMS |  |  |
| Police /Fire Complex | 1507 Nance St | Newberry |
| Tower-Police/Fire Complex | 1507 Nance St | Newberry |
| Prosperity | 118 McNeary ST | Prosperity |
| Whitmire | Gillian St | Whitmire |
| Consolidated | 3463 Hwy 34 | Pomaria |
| Pomaria | PO Box 193 Holloway ST | Pomaria |
| St. Phillips | 166 Mudcreek Rd. | Newberry |
| Bush River | 1041 Wilson Rd. | Newberry |
| Chappells | Hwy. 39 \& 56 | Chappells |
| Silverstreet | Hwy. 34 | Silverstreet |
| Fairview | Macedonia Church Rd. | Prosperity |
| Friendly | 927 Harrington St. | Newberry |
| Little Mountain | N. Boundary Street | Little Mountain |

Map IV I - Selected Critical Facilities in Newberry County


Map IV J - Intersection of Critical Facilities and Socially Vulnerable Populations in Newberry County


For Richland County these critical facilities are presented in Table IV-H by name and address. Facilities are also listed by their location within a given municipality or if they are in the unincorporated county. Critical facilities were determined and identified by the USC Hazards Lab and that is why they are included in the 2004 plan. For the 2010 update the county committees reviewed the list for any changes. Map IV-K shows the location of these critical facilities in Lexington County. Map IV-L shows the intersection of hazard areas and vulnerable populations overlaid with critical facilities serving special needs populations. This is a key map to grasping which areas of the county are most susceptible to natural disasters and which
are best or least well served by existing critical facilities. Combining multiple data sets on Map IV-L is one of the most powerful visual tools in this plan for showing areas of the county that should be better served with hazard mitigation efforts. In Richland County, the areas of most susceptibility to hazards and that have populations most vulnerable to hazards are in the western part of Ft. Jackson, the Richland Northeast area, and the portion of the county lying north of Irmo. Areas of moderate hazard threat and vulnerable population are found in the City of Columbia and area overlaid by most critical facilities serving special needs populations. Generally speaking areas in Richland County north of Leesburg Road (the southern boundary of Ft. Jackson) are well served by critical faculties. It is the Lower Richland Area, including Horrell Hill and Eastover that has the greatest need of additional critical facilities and services in case of a large-scale natural hazard event. Planning for hazard mitigation should best be concentrated here as it should be in other areas of the region with high to medium threat potential but not possessing an equal presence of response capacity

## TABLE IV-H Selected Critical Facilities Serving Special Needs Populations in Richland County

| Facilities | Address | Municipality |
| :--- | :--- | :--- |
|  | Public Schools |  |
| Lake Murray Elementary | 1531 Three Dog Road | Chapin |
| Meadowfield Elementary | 525 Galway Lane | Columbia |
| Mccants Elementary | 3501 Lyles St. | Columbia |
| Hall Institute | P.O. Box 202 | Columbia |
| Ballentine Elementary | 1040 Bickley Road | Irmo |
| Dutch Fork High | 1400 Old Tamah Rd. | Irmo |
| Dutch Fork Middle School | Old Tamah Rd. | Irmo |
| Dutch Fork Elementary | 7900 Broad River Rd. | Irmo |
| H. E. Corley Elementary | 1500 Chadford Rd. | Irmo |
| Oak Pointe Elementary | 1 River Bottom Road | Irmo |
| River Springs Elementary | 115 Connie Wright Road | Irmo |
| Olympia School | 621 Bluff Rd. | Columbia |
| H. B. Rhame Jr. Elementary | 1300 Arrowwood Rd. | Columbia |
| St. Andrews Middle School | 1231 Bluefield Rd. | Columbia |
| William S Sandel Elementary | 2700 Seminole Rd. | Columbia |
| Columbia High School | 1701 Westchester Dr. | Columbia |
| Denny Terrace Elementary | 6429 Bishop Ave. | Columbia |
| Morris Village | 610 Faison Dr. | Columbia |
| W. J. Keenan High School | 3455 Pinebelt Rd. | Columbia |
| Virginia Pack Elementary | 3602 Thurmond | Columbia |
| Heyward Career Center | 3560 Lynhaven Dr. | Columbia |
| Watkins Elementary | 2612 Covenant Rd. | Columbia |
| Lyon Street Elementary | 1310 Lyon St. | Columbia |
| Carver Elementary | 2100 Waverly St. | Columbia |
| C. A. Johnson High School | 2219 Barhamville Rd. | Columbia |
| W. A. Perry Middle School | 2600 Barhamville Rd. | Columbia |
| Lower Richland High School | 2615 Lower Richland | Hopkins |
| Mill Creek Elementary School | 925 Universal Dr. | Columbia |
| Caughman Road Elementary | 7725 Caughman Rd. | Columbia |
|  |  |  |


| L. W. Condor Elementary | 8040 Hunt Club Rd. | Columbia |
| :---: | :---: | :---: |
| E. L. Wright Middle School | 27 Alpine Rd. | Columbia |
| Windsor Elementary | 9800 Dunbarton Dr. | Columbia |
| Lonnie B. Nelson Elementary | 225 N Brickyard Rd. | Columbia |
| Spring Valley High School | 120 Sparkleberry Ln. | Columbia |
| Pontiac Elementary | 500 Spears Creek Rd. | Elgin |
| North Springs Elementary | 1300 Clemson Rd. | Columbia |
| Summit Parkway Middle School | 200 Summit Parkway | Columbia |
| Center For Inquiry | 200-1/2 Summit Parkway | Columbia |
| Rice Creek Elementary | 4751 Hardscrabble Rd. | Columbia |
| Ridge View High | 4801 Hard Scrabble Rd. | Columbia |
| Ridge View Vocational | 4801 Hardscrabble Rd. | Columbia |
| Blythewood Middle | 2301 Longtown Rd. East | Blythewood |
| Bethel-Hanberry Elementary | 125 Boney Rd. | Blythewood |
| Blythewood High School | 10901 Wilson Boulevard | Blythewood |
| Horrell Hill Elementary | 517 Horrell Hill Rd. | Hopkins |
| Gadsden Elementary | 1660 South Goodwin | Gadsden |
| Hopkins Middle School | 1601 Clarkson Rd. | Hopkins |
| Hopkins Elementary | 6120 Cabin Creek Road | Hopkins |
| Webber | 140 Webber School Rd. | Eastover |
| Sarah Nance | 2611 Grant St. | Columbia |
| Arden Elementary School | 1300 Ashley St. | Columbia |
| Public Schools |  |  |
| Alcorn Middle School | 5125 Fairfield Rd. | Columbia |
| Eau Claire | 4800 Monticello Rd. | Columbia |
| Gibbes Heyward Middle | 500 Summerlea Dr. | Columbia |
| Edward E. Taylor Elementary | Mcrae St. | Columbia |
| Crane Creek Elementary | 7405 Fairfield Rd. | Columbia |
| A. J. Lewis Greenview Element | 726 Easter St. | Columbia |
| John P Thomas Elementary | 6001 Weston Ave. | Columbia |
| W. G. Sanders Middle School | 136 Alida St. | Columbia |
| Pendergrass Fairwold School | 5935 Token St. | Columbia |
| Burton Elementary School | 5026 Farrow Rd. | Columbia |
| Hand Middle School | 2600 Wheat St. | Columbia |
| A. C. Moore Elementary | 333 Etiwan Ave. | Columbia |
| Rosewood Elementary | 3300 Rosewood Dr. | Columbia |
| Brennen Elementary | 4438 Devereaux Rd. | Columbia |
| South Kilbourne Elementary | 1400 Kilbourne Rd. | Columbia |
| Brockman | 2245 Montclair Dr. | Columbia |
| Crayton Middle School | 5000 Clemson Ave. | Columbia |
| Dent Middle | 6950 North Trenholm Road | Columbia |
| Forest Lake Elementary | 6801 Brookfield Rd. | Columbia |
| Richland Northeast | 7500 Brookfield Rd. | Columbia |
| Dreher | 701 Adger Rd. | Columbia |
| A. C. Flora | 1 Falcon Dr. | Columbia |
| Bradley Elementary | 3032 Pine Belt Rd. | Columbia |
| Satchel Ford Elementary | 5901 Satchel Ford Rd. | Columbia |
| Annie Burnside Elementary | 7200 Patterson Rd. | Columbia |
| Richland NE Vocational | 7500 Brookfield Road | Columbia |
| Joseph Keels Elementary | 7500 Springcrest Dr. | Columbia |
| Anna Boyd Child Dev | 7900 Brookmont Lane | Columbia |


| Private Schools |  |  |
| :---: | :---: | :---: |
| Montessori College of Early Learning | 1313 Means Ave. | Columbia |
| Columbia's Jewish School (Day School) | 3534 Greenway Dr. | Columbia |
| Palmetto Baptist Academy | 1510 S Beltline Blvd. | Columbia |
| Temple Baptist Kindergarten | 806 Universal Dr. | Columbia |
| Trinity Presbyterian Church Kindergarten | 1000 Greenlawn Dr. | Columbia |
| Hammond School | 854 Galway Lane | Columbia |
| Covenant Christian School | 2801 St.epp Dr. | Columbia |
| St. John School | 3404 W Beltline Blvd. | Columbia |
| Northminster Early Child Development Center | 6717 David St. | Columbia |
| Reid VV Elementary School | 612 Gabriel St. | Columbia |
| Victory Child Development Center | 2638 Two Notch Road | Columbia |
| Trenholm Rd. United Methodist Presbyterian | 3401 Trenholm Rd. | Columbia |
| Eastminster Day School | 3200 Trenholm Rd. | Columbia |
| St. Martin De Porres School | 1500 Oak St. | Columbia |
| Epworth Learning Center | 2900 Millwood Ave. | Columbia |
| Shandon Presbyterian Kindergarten Child Develop | 607 Woodrow St. | Columbia |
| Shandon United Methodist Preschool | 3407 Devine St. | Columbia |
| Columbia Montessori Elementary School | 2807 Oceola Dr. | Columbia |
| Lutheran Church of Holy Spirit | 2015 Lorick Ave. | Columbia |
| St. Peter's School | 1035 Hampton St. | Columbia |
| Kirkland Kiddie Koop \& Kindergarten | 154 Bluff Rd. | Columbia |
| Heathwood Hall Episcopal School | 3000 S Beltline Blvd. | Columbia |
| St. Joseph's School | 3700 Devine St. | Columbia |
| The Sunshine House \#21 | 3011 Broad River Rd. | Columbia |
| Westminster Child Development Center | 1715 Broad River Rd. | Columbia |
| Virginia Wingard Christian Learning | 1500 Broad River Rd. | Columbia |
| Montessori Early Learning Center and | Canal St. and Broad River | Columbia |
| School of th |  | Columbia |
| Sloans School, INC | 171 Starlight Dr. | Columbia |
| Ben Lippen School | 7401 Monticello Road | Columbia |
| Sandhills Academy | 1500 Hallbrook Drive | Columbia |
| St. John Neumann School | 721 Polo Rd. | Columbia |
| Cardinal Newman High School | 4701 Forest Dr. | Columbia |
| Bayview Baptist Kindergarten | 5300 Two Notch Rd. | Columbia |
|  | Day Care |  |
| Bethel-Hanberry | Child 125 Boney Rd. | Blythewood |
| Little Zion Baptist Church Day Care | 8225 Winnsboro Rd. | Blythewood |
| Blythewood Head Start | Hwy. 21 Old Blythewood Elementary School | Blythewood |
| The Learning Tree Child Developmental | PO Box 764 | Columbia |
| Presbyterian Child Development | 10336 Wilson Blvd. | Blythewood |


| Center |  |  |
| :---: | :---: | :---: |
| Pontiac Head Start | 500 Spears Creek Church Rd | Elgin |
| Skateland U S A Day Care | 800 Bookman Rd. | Elgin |
| La Petite Academy | 101 N Royal Tower Dr. | Irmo |
| Adlerian Child Care Center and | 7817 Brd. River Rd. | Irmo |
| Children's World | 7624 Woodrow St. | Irmo |
| Wee Care Child Development Center | 97 Riverwalk Way | Irmo |
| Cambridge Hall Preschool II | 1001 Old Two Notch Rd. | Pontiac |
| Cross Road Community Day Care | P.O. Box 546-2750 McCord Field Rd. | Eastover |
| Myers Nursery and Day Care | 6157 Cabin Creek Rd. | Hopkins |
| New Light BeULaH Baptist Church | 1330 Congaree Rd. | Hopkins |
| Bundle Of Joy | 2803 Padgett Rd. | Hopkins |
| Aye's Kinder Roo Child Day Care | 213 Vanbroken St. | Eastover |
| Evacuation Shelters |  |  |
| Palmetto Baptist Medical Cente | Taylor at Marion ST | Columbia |
| Palmetto Richland Memorial Hos | Five Richland Medical Park | Columbia |
| Lower Richland High | 2615 Lower Richland Blvd | Hopkins |
| Spring Valley High | 120 Sparkleberry | Columbia |
| Summit Parkway Middle | 200 Summit Parkway | Columbia |
| Horrell Hill Elementary | 517 Horrell Hill | Hopkins |
| Eau Claire High | 4800 Monticello | Columbia |
| Dent Middle | 6950 North Trenh | Columbia |
| Richland Northeast High | 7500 Brookfield | Columbia |
| Dreher High | 701 Adger Rd. | Columbia |
| A. C. Flora High | 1 Falcon Dr. | Columbia |
| Southeast Middle School | 731 Horrell Hill Road | Hopkins |
| Medical Facilities |  |  |
| DORN VETERANS HOSPITAL | 6439 GARNERS FERRY ROAD | COLUMBIA |
| MONCRIEF ARMY COMMUNITY HOSP |  | FORT JACKSON |
| Columbia Care Center | 7901 Farrow RD | Columbia |
| Earle E. Morris, Jr. Alcohol \& | 610 Faison DR | Columbia |
| G. Werber Bryan Psychiatric Ho | 220 Faison DR | Columbia |
| Gilliam Psychiatric Hospital | 4344 Broad River RD | Columbia |
| Healthsouth Rehabilitation Hos | 2935 Colonial DR | Columbia |
| InterMedical Hospital of South | Taylor at Marion ST | Columbia |
| Kirkland Correctional Institut | 4344 Broad River RD | Columbia |
| Palmetto Baptist Medical Cente | Taylor at Marion ST | Columbia |
| Palmetto Richland Memorial Hos | Five Richland Medical Park | Columbia |
| Providence Hospital | 2435 Forest DR | Columbia |
| Providence Hospital Northeast | 120 Gateway BLVD | Columbia |
| South Carolina State Hospital | 2100 Bull ST | Columbia |
| William S. Hall Psychiatric In | 1800 Colonial DR | Columbia |
| Willow Lane Infirmary | 4650 Broad River RD | Columbia |

[^3]| Irmo Police Department |  | Irmo |
| :---: | :---: | :---: |
| Norfolk Southern Corp. Police Department | 1770 Andres Rd. | Columbia |
| Columbia Police Department Greenview | 6700 David St. | Columbia |
| VA Medical Center Police and Security | Garners Ferry Rd. | Columbia |
| CAYCE PUBLIC SAFETYPOLICE \& F |  | Columbia |
| City of Forest Acres Police | 5205 North Trenholm Rd. |  |
| Department <br> USC Police Department | USC Campus | Forest Acres Columbia |
|  | Fie Stations/EMS |  |
| Spring Hill Station | 11808 Broad River rd. | Chapin |
| Harbison station | 131 Lake Murray Blvd. | Columbia |
| St. Andrews Station | 1225 Briargate Circle | Columbia |
| Harden St. | 1901 Harden St. | Columbia |
| Headquarters | 1800 Laurel St. | Columbia |
| Shandon FD | 2847 Devine St. | Columbia |
| Fire Station \#2 | 1015 Ferguson St. | Columbia |
| Industrial Park Station | 2740 The Boulevard | Columbia |
| Atlas Road | 153 Atlas Rd. | Columbia |
| Capitol View station | 8100 Burdell Dr. | Columbia |
| Eau Claire Station | 4005 Ensor Ave. | Columbia |
| North Columbia Station | 2622 Main St. | Columbia |
| Dentsville Station | 7214 Fire Lane Dr. | Columbia |
| Sands Hills Station | 130 Sparkelberry Lane | Columbia |
| Killian Station | 9651 Farrow Rd. | Columbia |
| Fort Jackson Station | Bld. 7300 Imboden Dr. | Columbia |
| Fort Jackson Station | Bld. 1444 Marion St. | Columbia |
| Congaree Run Station | 115 old Congaree Run Rd. | Eastover |
| Eastover | 504 Henry St. | Eastover |
| Gadsden Station | 122 Gadsen Community Center Dr. | Gadsden |
| Hopkins Station | 1631 Clarkson St. | Hopkins |
| Lower Richland station | 2612 Lower Richland Blvd. | Hopkins |
| Crane Creek Station | 7401 Fairfield rd. | Columbia |
| Upper Richland | 300 Campground Rd. | Columbia |
| Cedar Creek station | 8300 Winsboro Rd. | Blythwood |
| Blythwood Station | 435 Main St. | Blythwood |
| Bear creek Station | 1613 Heins Rd. | Blythwood |
| Ballentine Station | 10726 Broad River Rd. | Irmo |



Map IV L - Intersection of Critical Facilities and Socially Vulnerable Populations in Richland County


# Section V. Assessing Vulnerability: Estimating Potential Losses in Each County 


#### Abstract

An attempt was made by COG staff to collected updated data for this section. Since the 2010 Census is only a few months away as of this writing, a more accurate population number will be available within the year. Updating this section with the newest population numbers should be done prior to the next 5-year update. It should also be noted that the repetivie loss data collected did not indicate the type of structure. Working with NFIP, this data set should be collected as part of the next plan udate.


Against a backdrop of flood related data on structures and populations in flood hazard zones and data on the appraised and assessed values of real property by land use in the various counties and municipalities of the Central Midlands Region, estimates of damage inflicted by various types of natural hazards will be offered in a tabular format.

The numbers of persons in floodplains within participating jurisdictions and the numbers and type of structures within floodplains subject to 100-year floods were estimated by staff of the Core Planning Team using the 2001-2002 Biennial Report of local governments participating in the National Flood Insurance Program, where available, combined with analysis of flood maps, tax maps and GIS information.

The principal resource in developing loss estimates for each participating county or municipality data provided by the USC Hazards Lab and www.sheldus.org/. The sheldus.org website offered actual damages in each county for natural hazard events occurring in recent years. This enabled realistic present day estimates to be made of the damage potentially caused by future natural hazard events. Also presented in this section is best information relating to the value of buildings, parcels and real and personal property by jurisdiction as could be obtained from various county sources. The purpose of this information is to provide knowledge of the values of properties that would be subjected to natural hazards that affect jurisdictions in the Central Midlands Region. Areawide natural hazards such as hurricanes or tornados or drought would cause extensive damage because of the number of buildings/parcels in the various jurisdictions of the region.

An example of the difficulty of predicting with accuracy the cost of future hazards in a local jurisdiction, the recent winter ice storm of January 2004 in the Central Midlands Region is a case in point. FEMA will reimburse local governments $75 \%$ of overtime wages and benefits for public works fire or police activities related to storm mitigation. Local governments will also be compensated for depreciation on equipment used in clean up. Costs to local government varied substantially. The City of Columbia may receive up to $\$ 500,000$ for storm related costs while Lexington

County might receive about $\$ 120,000$. Richland County estimates it will be able to justify about $\$ 800,000$ in expenses related to clean up. A longer lasting and more severe storm would have cost more but it is not possible to predict the outcome of such an event with accuracy. The January storm is useful as a base point for cost estimation but the storm did little damage to private or public buildings. (The State, March 11, 2004, page B5.)

Table V-A
Flood Related Data Relating to Richland County (Participating Local Governments)

| Name of <br> Local <br> Government | Permanent <br> Year- <br> Round <br> Population | Permanent <br> Pop. in <br> Flood <br> Hazard <br> Areas | 1-4 Family <br> Structures in <br> Flood <br> Hazard <br> Areas <br> 5,901 | All Other <br> Structures <br> in Flood <br> Areas | Repetitive <br> Loss Flood <br> Properties* |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Unincorp. <br> Richland <br> County | 184,611 | 5,057 | 341 | 1 Residential |  |
| Columbia | 116,278 | 979 | 368 | 59 | 7 Residential <br> 3 Non- <br> residential |
| Forest Acres | 10,558 | 280 | 69 | 34 | 1 Residential |
| Irmo | 7,348 | 258 | 97 | 3 | 0 |
| Arcadia Lakes | 882 | 49 | 21 | 4 | 0 |

Source: Local Government Biennial Reports where available, GIS Data, Tax Maps and Flood Insurance Rate Maps of Jurisdictions, 2004
*As of 12/31/2010

## Table V-B

(Participating Local Governments)

| Name of <br> Local <br> Government | Permanent <br> Year-Round <br> Population | Permanent <br> Pop. in <br> Flood <br> Hazard <br> Areas | 1-4 Family <br> Struc. In <br> Flood Haz. <br> Areas | All Other <br> Struc. in <br> Flood <br> Areas | Repetitive <br> Loss Flood <br> Properties* |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Unincorp. <br> Lexington <br> County | 161,500 | 4,109 | 1,625 | 277 | 7 Residential |
| Lexington | 9,793 | 115 | 46 | 18 | 0 |
| W. Columbia | 13,064 | 112 | 45 | 12 | 0 |
| Cayce | 12,150 | 631 | 271 | 88 | 0 |
| Springdale | 2,877 | 70 | 27 | 5 | 0 |
| Irmo (Lex. <br> Cnt. Portion | 3,691 | 90 | 35 | 4 | 1 Residential |
| South <br> Congaree | 2,266 | 35 | 17 | 3 | 0 |
| Pelion | 553 | 9 | 3 | 0 | 0 |
| Chapin | 628 | 13 | 5 | 1 | 0 |
| Gilbert | 500 | 12 | 4 | 1 | 0 |

Source: Local Government Biennial Reports where available, GIS Data, Tax Maps and Flood Insurance Rate Maps of Jurisdictions, 2004

* As of $12 / 31 / 2010$

Table V-C
Flood Related Data Relating to Newberry County
(Participating Local Governments)

| Name of <br> Local <br> Government | Permanent <br> Year-Round <br> Population | Permanent <br> Pop. in <br> Flood <br> Hazard <br> Areas | 1-4 Family <br> Struc. In <br> Flood Haz. <br> Areas | All Other <br> Struc. in <br> Flood Areas | Repetitive <br> Loss Flood <br> Properties* |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Unincorp. <br> Newberry <br> County | 22,260 | 976 | 402 | 45 | $1-$ <br> Residential |
| City of <br> Newberry | 10,580 | 196 | 85 | 12 | $2-$ <br> Residential |
| Prosperity | 1,047 | 23 | 12 | 3 | 0 |
| Whitmire | 1,512 | 12 | 5 | 2 | 0 |
| Peak | 61 | 7 | 3 | 1 | 0 |

Source: Local Government Biennial Reports where available, GIS Data, Tax Maps and Flood Insurance Rate Maps of Jurisdictions, 2004

* As of $12 / 31 / 2010$

Table V-D
Flood Related Data Relating to Fairfield County
(Participating Local Governments)

| Name of <br> Local <br> Government | Permanent <br> Year-Round <br> Population | Permanent <br> Pop. in <br> Flood <br> Hazard <br> Areas | 1-4 Family <br> Struc. In <br> Flood Haz. <br> Areas | All Other <br> Struc. in <br> Flood <br> Areas | Repetitive <br> Loss Flood <br> Properties* |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Unincorp. <br> Fairfield <br> County | 19,527 | 600 | 243 | 38 | 1 - Residential |
| Town of <br> Winnsboro | 3,599 | 39 | 16 | 4 | 0 |

Source: Local Government Biennial Reports where available, GIS Data, Tax Maps and Flood Insurance Rate Maps of Jurisdictions, 2004

* 12/31/2010

Appraised and Assessed Values of Buildings by Major Land Use Classifications
Reported for General Purpose Units of Local Government in Fairfield and Newberry Counties Levying ad Valorem Taxes

## Table V-E

Appraised and Assessed Values of Buildings by Major Land Use Classifications in Fairfield County, SC

| Name of Government/ | Buildings |  |  | Appriased Value |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | $\begin{array}{\|c} \hline \text { As of } \\ \text { April } \\ 27^{\text {th }}, \\ 2010 \\ \hline \end{array}$ | Diff. |  | 2004 |  | 2009 | Diff. |
| Uninc. Fairfield County |  |  |  |  |  |  |  |  |
| Total | 5645 | 6618 | 17\% | \$ | 202,588,060 |  | 551,074,200 | 172\% |
| Town of Winnsboro |  |  |  |  |  |  |  |  |
| Total | 1491 | 1399 | -6\% | \$ | 14,272,400 |  | 102,787,800 | 620\% |
| Town of Ridgeway |  |  |  |  |  |  |  |  |
| Total | 180 | 158 | -12\% | \$ | 2,131,300 |  | 16,732,900 | 685\% |
| Town of Blythwood (Fairifield County Portion |  |  |  |  |  |  |  |  |
| Total | NV | 14 |  | NV |  |  | $15,300$ | NV |

Source: Fairfield County Tax Assessor 2004 and 2010

## Table V-F

## Appraised and Assessed Values of Buildings by Major Land Use Classifications in Newberry County, SC

Mobile Home/Manufactured Homes

| Name of Government/ Type of Land Use | \# of Mobile Homes |  | Appraised Value |  | Assessed Value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | $\begin{array}{\|l} \hline \text { As of April } \\ \mathbf{2 8}^{\mathrm{th}} \mathbf{2 0 1 0} \\ \hline \end{array}$ | 2004 | $\begin{array}{\|l\|} \hline \text { As of April } \\ \hline \mathbf{2 8}^{\text {th }} 2010 \\ \hline \end{array}$ | 2004 | $\begin{gathered} \text { As of April } \\ 28^{\text {th }} 2010 \end{gathered}$ |
| Newberry Co. Unincorporated |  |  |  |  |  |  |
| Residential | 3,679 | 3412 | \$92,000,000 | \$64,996,000 | \$3,700,000 | \$3,069,062 |
| Commercial | 80 | NVA | \$92,000 | NVA | \$5,500 | NVA |
| Public/Institutional | 6 | NVA | NVA/No <br> Value <br> Assigned | NVA | NVA | NVA |
| Newberry City |  |  |  |  |  |  |
| Residential | 155 | 139 | \$2,640,000 | \$1,417,300 | \$105,600 | \$70,470 |
| Commercial | 6 | NVA | \$44,000 | NVA | 2,600 | NVA |
| Public/Institutional | 0 | NVA | NVA | NVA | NVA | NVA |
| Whitmire |  |  |  |  |  |  |
| Residential | 67 | 63 | \$773,200 | \$394,600 | \$31,000 | \$17,472 |
| Commercial | 3 | NVA | \$15,500 | NVA | \$1,000 | NVA |
| Public/Institutional | 0 | NVA | NVA | NVA | NVA | NVA |
| Pomaria |  |  |  |  |  |  |
| Residential | 20 | 16 | \$495,000 | \$301,100 | \$19,800 | \$13,534 |
| Commercial | 0 | NVA | 0 | NVA | 0 | NVA |
| Public/Institutional | 0 | NVA | NVA | NVA | NVA | NVA |
| Little Mountain |  |  |  |  |  |  |
| Residential | 34 | 20 | \$257,500 | \$211,300 | \$10,300 | \$10,368 |
| Commercial | 1 | NVA | \$10.300 | NVA | \$600 | NVA |
| Public/Institutional | 0 | NVA | NVA | NVA | NVA | NVA |
| Prosperity |  |  |  |  |  |  |
| Residential | 124 | 122 | \$252,900 | \$223,300 | \$101,100 | \$100,112 |
| Commercial | 3 | NVA | \$35,300 | NVA | \$2,100 | NVA |
| Public/Institutional | 1 | NVA | NVA | NVA | NVA | NVA |
| Peak |  |  |  |  |  |  |
| Residential | 4 | Included in unincorporated | \$40,000 | Included in unincorporated | \$1,600 | Included in unincorporated |
| Commercial | 0 | NVA | 0 | NVA | 0 | NVA |
| Public/Institutional | 0 | NVA | 0 | NVA | 0 | NVA |
| Silverstreet |  |  |  |  |  |  |
| Residential | 18 | Included in | \$200,000 | Included in | \$8,000 | Included in |


|  |  | unincorporated |  | unincorporated |  | unincorporated |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial | 0 | NVA | 0 | NVA | 0 | NVA |
| Public/Institutional | 0 | NVA | 0 | NVA | 0 | NVA |

Source: Newberry County Tax Assessor, 2004 and 2010

Table IV-F Continued
Real Estate

| Name of | Buildings |  |  | Appriased Value |  |  | Assessed Value |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | $\begin{gathered} \text { As of April } 28^{\text {th }} \\ 2010 \\ \hline \end{gathered}$ | Difference | 2004 | $\begin{gathered} \text { As of April } 28^{\text {th }} \\ 2010 \\ \hline \end{gathered}$ | Difference | 2004 | $\begin{gathered} \hline \text { As of April } \\ 28^{\text {th }} \mathbf{2 0 1 0} \\ \hline \end{gathered}$ | Difference |
| Uninc. Newberry County |  |  |  |  |  |  |  |  |  |
| Residential | 9163 | 8926 | -3\% | \$ 329,046,000 | \$ 829,475,349 | 152\% | \$ 13,162,000 | \$ 36,122,487 | 174\% |
| Commercial | 221 | 482 | 118\% | \$ 115,683,000 | \$ 53,841,051 | -53\% | \$ 6,941,000 | \$ 3,230,463 | -53\% |
| Industrial | 23 | NVA | NVA | NVA | NVA | NVA | NVA | NVA | NVA |
| Agricultural | 1724 | 2262 | 31\% | \$ 14,050,000 | \$ 19,006,562 | 35\% | \$ 562,000 | \$ 835,483 | NVA |
| Public/Institutional | 205 | 13 | -94\% | NVA | NVA | NVA | NVA | NVA | NVA |
|  |  |  |  |  |  |  |  |  |  |
| Newberry City |  |  |  |  |  |  |  |  |  |
| Residential | 3,330 | 3311 | -1\% | \$ 102,721,000 | \$ 267,333,758 | 160\% | \$ 4,109,000 | \$ 12,237,561 | 198\% |
| Commercial | 155 | 441 | 185\% | \$ 97,469,000 | \$ 97,348,712 | 0\% | \$ 5,848,000 | \$ 5,840,922 | 0\% |
| Industrial | 7 |  |  | From Tax Comm. | NVA | NVA | Tax Comm. | NVA | NVA |
| Agricultural | 0 | 0 |  | $\$$ | NVA | NVA | $\$$ | NVA | NVA |
| Public/Institutional | 97 | 143 | 47\% | NVA | NVA | NVA | NVA | NVA | NVA |
|  |  |  |  |  |  |  |  |  |  |
| Whitmire |  |  |  |  |  |  |  |  |  |
| Residential | 590 | 653 | 11\% | \$ 12,302,000 | \$ 25,754,300 | 109\% | \$ 491,000 | \$ 1,194,198 | 143\% |
| Commercial | 23 | 63 | 174\% | \$ 6,617,000 | \$ 3,756,900 | -43\% | \$ 403,000 | \$ 225,414 | -44\% |
| Industrial | 1 | NVA | NVA | NVA | NVA | NVA | NVA | NVA | NVA |
| Agricultural | 1 | 1 | 0\% | \$ | \$ | -50\% | NIL | \$ | NVA |


|  |  |  |  |  | 2,000 |  | 1,000 |  |  |  | 60 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Public/Institutional | 25 | 6 | -76\% |  | NVA |  | NVA | NVA | NVA |  | NVA |  | NVA |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pomaria |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential | 70 | 75 | 7\% | \$ | 2,553,000 | \$ | 6,107,700 | 139\% | \$ | 102,000 | \$ | 276,144 | 171\% |
| Commercial | 8 | 11 | 38\% |  | $\begin{gathered} \$ \\ 950,000 \end{gathered}$ |  | $\begin{gathered} \hline \$ \\ 301,900 \end{gathered}$ | -68\% | \$ | 57,000 |  | $\begin{gathered} \$ \\ 18,114 \end{gathered}$ | -68\% |
| Industrial | 0 | NVA | NVA |  | NVA |  | NVA | NVA |  | NVA |  | NVA | NVA |
| Agricultural | 0 | 8 | NVA |  | NVA |  | $\begin{gathered} \$ \\ 5,300 \end{gathered}$ | NVA |  | \$ |  | $\begin{gathered} \$ \\ 212 \end{gathered}$ | NVA |
| Public/Institutional | 7 | 2 | -71\% |  | NVA |  | NVA | NVA |  | NVA |  | NVA | NVA |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Little Mountain |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential | 86 | 96 | 12\% | \$ | 4,425,000 | \$ | 10,567,500 | 139\% | \$ | 177,000 | \$ | 458,468 | 159\% |
| Commercial | 13 | 17 | 31\% | \$ | 1,898,000 | \$ | 1,549,800 | -18\% | \$ | 114,000 |  | $\begin{gathered} \$ \\ 92,688 \end{gathered}$ | -19\% |
| Industrial | 0 | NVA | NVA |  | NVA |  | NVA | NVA |  | NVA |  | NVA | NVA |
| Agricultural | 0 | 10 | NVA |  | NVA |  | $\begin{gathered} \$ \\ 15,500 \end{gathered}$ | NVA |  | NVA |  | $\begin{gathered} \$ \\ 620 \end{gathered}$ | NVA |
| Public/Institutional | 5 | 1 | -80\% |  | NVA |  | NVA | NVA |  | NVA |  | NVA | NVA |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Prosperity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential | 328 | 374 | 14\% | \$ | 13,419,000 | \$ | 35,227,825 | 163\% | \$ | 537,000 | \$ | 1,551,132 | 189\% |
| Commercial | 20 | 67 | 235\% | \$ | 7,293,000 | \$ | 8,734,875 | 20\% | \$ | 438,000 | \$ | 524,093 | 20\% |
| Industrial | 2 | NVA | NVA |  | DOR |  | NVA | NVA |  | DOR |  | NVA | NVA |
| Agricultural | 0 | 10 | NVA |  | NVA |  | $\begin{gathered} \$ \\ 9,000 \end{gathered}$ | $\begin{gathered} \$ \\ 9,000 \end{gathered}$ |  | NVA |  | $\begin{gathered} \hline \$ \\ 360 \end{gathered}$ |  |
| Public/Institutional | 7 | 2 | -71\% |  | NVA |  | NVA | NVA |  | NVA |  | NVA | NVA |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak |  |  |  |  |  |  |  |  |  |  |  |  |  |



Source: Newberry County Tax Assessor, 2004 and 2010.

Table V-G

## Appraised and Assessed Values of Parcels (A Combination of Buildings and Land) by Major Land Use Classifications in Lexington County, SC)

| Name of | Buildings |  |  | Appraised Value |  |  | Assessed Value |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | $\begin{gathered} \text { As of June 30, } \\ 2011 \\ \hline \end{gathered}$ | Difference | 2004 | $\begin{gathered} \hline \text { As of June 30, } \\ 2011 \\ \hline \end{gathered}$ | Difference | 2004 | $\begin{gathered} \text { As of June } \\ \mathbf{3 0 , 2 0 1 1} \\ \hline \end{gathered}$ | Difference |
| Uninc. Lexingon County |  |  |  |  |  |  |  |  |  |
| Single Family | 46,507 | 70645 | +24135 | \$4.3 billion | 11.2 billion | 160\% | \$177 million | 432 million | 144\% |
| Multi-Family | 134 | 75 | -59 | 39 million | 136 million | 249\% | 2.34 million | 7.9 million | 238\% |
| Manufactured Homes | 22,566 | 20916 | -1650 | 1.1 billion | 289 million | -74\% | 51 million | 13.1 million | -74\% |
| Commercial | 1,610 | 2992 | 1382 | 488 million | 1.2 billion | 146\% | 30 million | 66.7 million | 122\% |
| Industrial | 112 | 103 | -9 | 37 million | 27 million | -27\% | 3.9 million | 1.5 million | -62\% |
| Agricultural | 9,893 | 5551 | -4342 | 670 million | 912 million | 36\% | 2.3 million | 957250 | -58\% |
| Public/Institutional | NA | 1590 | 1590 | NA | 334 million | NA | NA | 16.6 million | NA |
|  |  |  |  |  |  |  |  |  |  |
| Town of Lexington |  |  |  |  |  |  |  |  |  |
| Single Family | 3,895 | 5404 | 1509 | 443 million | 943 million | 113\% | 19 million | 39 million | 105\% |
| Multi-Family | 29 | 27 | -2 | 41 million | 110 million | 168\% | 2.5 million | 6.5 million | 160\% |
| Manufactured Housing | 115 | 96 | -19 | 1.7 million | 873,100 | -49\% | 79,750 | 42,900 | -46\% |
| Commercial | 385 | 633 | 248 | 214 million | 461 million | 115\% | 13 million | 26.8 million | 106\% |
| Industrial | 3 | 6 | 3 | 755,000 | 5.8 million | 628\% | 45,300 | 300,870 | 564\% |
| Agricultural | 38 | 24 | -6 | 4.2 million | 5.8 million | 31\% | 1,800 | 4,550 | 153\% |


| Public/Institutional | NA | 145 | 145 | NA | 77.4 million | NA | NA | 4.2 million | NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| West Columbia |  |  |  |  |  |  |  |  |  |
| Single Family | 4,216 | 4934 | 718 | 301 million | 608 million | 102\% | 13.4 million | 26 million | 94\% |
| Multi Family | 188 | 44 | -144 | 34 million | 43 million | 26\% | 2 million | 2.5 million | 25\% |
| Manufactured Housing | 466 | 432 | -34 | 4 million | 1.9 million | -53\% | 193,000 | 96,140 | -50\% |
| Commercial | 547 | 667 | 120 | 134 million | 247 million | 84\% | 8 million | 13.4million | 68\% |
| Industrial | 12 | 7 | -5 | 12 million | 4.5 million | -63\% | 174,000 | 241,880 | 39\% |
| Agricultural | 35 | 31 | -4 | 3.5 million | 4.2 million | 20\% | 1,450 | 3.490 | 141\% |
| Public/Institutional | NA | 230 | 230 | NA | 39 million | NA | NA | 2.1 million | NA |
| Cayce |  |  |  |  |  |  |  |  |  |
| Single Family | 3,990 | 4470 | 480 | 266 million | 504 million | 89\% | 11.7 million | 21.4 million | 83\% |
| Multi-Family | 117 | 19 | -98 | 33.6 million | 32.6 million | -3\% | 2 million | 1.9 million | -5\% |
| Manufactured Housing | 222 | 176 | -46 | 3.7 million | 1.6 million | -57\% | 175,000 | 74,380 | -57\% |
| Commercial | 311 | 359 | 48 | 95.8 million | 168.7 million | 76\% | 5.7 million | 9.1 million | 60\% |
| Industrial | 17 | 18 | 1 | 2 million | 7.4 million | 270\% | 123,000 | 417,500 | 239\% |
| Agricultural | 45 | 53 | 8 | 10 million | 16 million | 60\% | 11,000 | 7,760 | -29\% |
| Public/Institutional | NA | 183 | 183 | NA | 26 million | NA | NA | 1.4 million | NA |
| Springdale |  |  |  |  |  |  |  |  |  |
| Single Family | 935 | 1018 | 83 | 88.9 million | 147.2 million | 66\% | 3.7 million | 6.2 million | 68\% |
| Multi-Family | 2 | 1 | -1 | 4 million | 7.6 million | 90\% | 242,000 | 456,000 | 88\% |
| Manufactured Housing | 16 | 11 | -5 | 31,000 | 8,400 | 171\% | 1,800 | 8,400 | 367\% |
| Commercial | 52 | 63 | 11 | 21.5 million | 35 million | 63\% | 1.2 million | 1.6 million | 33\% |


| Industrial | 5 | 1 | -4 | 900,000 | 20,520 | -98\% | 54,000 | 1.230 | -98\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agricultural | 50 | 33 | -17 | 4.1 million | 3.7 million | -10\% | 2,100 | 1.950 | -7\% |
| Public/Institutional | NA | 37 | 37 | NA | 7.2 million | NA | NA | 7.4 million | NA |
|  |  |  |  |  |  |  |  |  |  |
| Pine Ridge |  |  |  |  |  |  |  |  |  |
| Single Family | 482 | 778 | 296 | 42.3 million | 104.5 million | 147\% | 1.8 million | 4.2 million | 133\% |
| Multi-Family | 1 | 0 | -1 | 126,000 | NA | -100\% | 6,920 | 0 | -100\% |
|  | 95 | 81 | -14 | 1.3 million | 599400 | -54\% | 60,500 | 27,020 | -55\% |
| Commercial | 7 | 18 | 11 | 1.8 million | 5.1 million | 183\% | 103,500 | 220,530 | 113\% |
| Industrial | 1 | 1 | 0 | 61,630 | 172,550 | 180\% | 3,700 | 8,500 | 130\% |
| Agricultural | 32 | 26 | -6 | 2.1 million | 3.2 million | 52\% | 4,100 | 4,630 | 13\% |
| Public/Institutional | NA | 14 | 14 | NA | 3 million | NA | NA | 116,900 | NA |
|  |  |  |  |  |  |  |  |  |  |
| South Congaree |  |  |  |  |  |  |  |  |  |
| Single Family | 587 | 768 | 181 | 42.8 million | 84.5 million | 97\% | 1.8 million | 3.4 million | 89\% |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | NVA | 0 | 0 | 0\% |
| Manufactured Homes | 381 | 349 | 32 | 3.3 million | 1.5 million | -55\% | 169,000 | 74,410 | -56\% |
| Commercial | 41 | 55 | 14 | 1.8 million | 16 million | 789\% | 437,000 | 866,960 | 98\% |
| Industrial | 0 | 0 | 0 | 0 | 0 | NV | 0 | 0 | 0 |
| Agricultural | 65 | 36 | -29 | 2.8 million | 2.7 million | -4\% | 4,500 | 2,200 | -51\% |
| Public/Institutional | NA | 28 | 28 | NA | 6.4 million | NA | NA | 204,020 | NA |
|  |  |  |  |  |  |  |  |  |  |
| Swansea |  |  |  |  |  |  |  |  |  |
| Single Family | 211 | 305 | 94 | 9.8 million | 18.6 million | 90\% | 422,000 | 755,190 | -82\% |
| Multi-Family | 2 | 2 | 0 | 929,000 | 1.2 million | 29\% | 56,000 | 73,690 | 32\% |
| Manufactured Housing | 33 | 27 | -6 | 553,000 | 33,600 | -94\% | 25,000 | 15,410 | -38\% |


| Commercial | 67 | 80 | 13 | 3 million | 3.5 million | $17 \%$ | 176,000 | 365,540 | $108 \%$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Industrial | 1 | 1 | 0 | 41,000 | 64,800 | $58 \%$ | 2,500 | 3,890 | $16 \%$ |  |
| Agricultural | 17 | 14 | -3 | 574,000 | 627,910 | $9 \%$ | 1,700 | 620 | $-64 \%$ |  |
| Public/Institutional | NA | 52 | 52 | NA | 2.1 million | NA | NA | 119,120 | NA |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Gaston |  |  |  |  |  |  |  |  |  |  |
| Single Family | 448 | 558 | 110 | 18.1 million | 34 million | $88 \%$ | 746,000 | 1.4 million | $88 \%$ |  |
| Multi Family | 2 | 0 | -2 | 127,000 | NVA | $-100 \%$ | 7,600 | 0 | $-100 \%$ |  |
| Manufactured <br> Housing | 287 | 301 | 14 | 5.4 million | 4 million | $-26 \%$ | 253,000 | 191,500 | $-24 \%$ |  |
| Commercial | 17 | 46 | 29 | 2.8 million | 12.7 million | $354 \%$ | 156,000 | 728,200 | $367 \%$ |  |
| Industrial | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 \%$ |  |
| Agricultural | 39 | 35 | -4 | 2.2 million | 5.6 million | $155 \%$ | 3,700 | 7,080 | $91 \%$ |  |
| Public/Institutional | NA | 31 | 31 | NA | 1 million | NA | NA | 62,580 | NA |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Gilbert |  |  |  |  |  |  |  |  |  |  |
| Single Family | 149 | 168 | 19 | 10.7 million | 24.3 million | $127 \%$ | $\$ 428,000$ | 845,220 | $97 \%$ |  |
| Multi-Family | 1 | 0 | -1 | 235,000 | NVA | $-100 \%$ | $\$ 14,000$ | 0 | $-100 \%$ |  |
| Manufactured | 72 | 70 | -2 | 1.2 million | 800,200 | $-33 \%$ | $\$ 55,800$ | 37,070 | $-34 \%$ |  |
| Housing |  |  |  |  |  |  |  |  |  |  |
| Commercial | 11 | 14 | 3 | 900,000 | 2.5 million | $178 \%$ | $\$ 56,000$ | 122,200 | $118 \%$ |  |
| Industrial | 1 | 1 | 0 | 35,000 | 154,440 | $341 \%$ | $\$ 2,100$ | 3,870 | $41 \%$ |  |
| Agricultural | 48 | 35 | -13 | 1.8 million | 6.6 million | $267 \%$ | $\$ 3,500$ | 3,050 | $-13 \%$ |  |
| Public/Institutional | NA | 49 | 49 | NA | 3.5 million | NA | NA | 119,850 | NA |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Batesburg-Leesville |  |  |  |  |  |  |  |  |  |  |
| Single Family | 1,781 | 1184 | -597 | 101 million | 146 million | $45 \%$ | 4.4 million | 6.3 million | $43 \%$ |  |
| Multi-Family | 35 | 13 | -23 | 6.8 million | 6.7 million | $-1 \%$ | 409,000 | NV | $-100 \%$ |  |


| Manufactured Housing | 54 | 50 | -4 | 575,000 | 492,000 | -14\% | 24,400 | 21,600 | -11\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial | 252 | 294 | 52 | 30.3 million | 70.3 million | 132\% | 1.8 million | 3.8 million | 111\% |
| Industrial | 11 | 10 | -1 | 438,000 | 687,230 | 57\% | 26,300 | 33,970 | 29\% |
| Agricultural | 103 | 67 | 36 | 3.8 million | 3.8 million | 0 | 8,800 | 4,990 | -43\% |
| Public/Institutional | NA | 141 | 141 | NA | 8.2 million | NA | NA | 412,520 | NA |
|  |  |  |  |  |  |  |  |  |  |
| Chapin |  |  |  |  |  |  |  |  |  |
| Single Family | 407 | 615 | 208 | 31.5 million | 80.4 million | 155\% | 1.5 million | 3.4 million | 127\% |
| Multi-Family | 0 | 0 | 0 | \$0 | NVA | 0 | 0 | 0 | 0\% |
| Manufactured Housing | 19 | 13 | -6 | 389,000 | 125,000 | -68\% | 16,600 | 5,310 | -68\% |
| Commercial | 76 | 135 | 59 | 26 million | 76.6 million | 195\% | 1.6 million | 3.8 million | 138\% |
| Industrial | 2 | 1 | -1 | 437,000 | 672,300 | 54\% | 26,200 | 25,770 | -2\% |
| Agricultural | 15 | 22 | 7 | 940,000 | 10.2 million | 985\% | 670 | 1,270 | 90\% |
| Public/Institutional | NA | 52 | 52 | NA | 22.2 million | NA | NA | 648,870 | NA |
|  |  |  |  |  |  |  |  |  |  |
| Irmo |  |  |  |  |  |  |  |  |  |
| Single Family | 1351 | 1509 | 158 | 6.2 million | 220 million | 3448\% | 6.2 million | 9.3 million | 191\% |
| Multi-Family | 42 | 1 | -41 | 5.9 million | 2.2 million | 63\% | 353,000 | 131,400 | -63\% |
| Manufactured Housing | 21 | 6 | -15 | 128,000 | 25,600 | 80\% | 5,800 | 1,300 | -78\% |
| Commercial | 138 | 172 | 44 | 53.2 million | 110.2 million | 107\% | 5.0 million | 6.5 million | 30\% |
| Industrial | 1 | 0 | -1 | 25,000 | NVA | -100\% | 1,500 | 0 | -100\% |
| Agricultural | 10 | 6 | -4 | 6.8 million | 435,330 | -94\% | 500 | 130 | -74\% |
| Public/Institutional | NA | 55 | 55 | NA | 19.2 million | NA | NA | 1.1 million | NA |

Source: Lexington County Tax Assessor, 2004 and 2011

Table V-H
Assessed Values of Property Types in Richland County by Jurisdiction

| Name of Government/ Type of Land Use | Assessed Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2004 |  | 2009 | Diff |
| Uninc. Rich. Co. |  |  |  |  |
| Manufac./Utilities/Railroads* | \$ 130,626,000 | \$ | 152,440,000 | 17\% |
| Business Inventories | \$ 27,708,000 | \$ | 29,564,000 | 7\% |
| Comm./Res. Real Estate | \$ 386,409,000 | \$ | 562,773,000 | 46\% |
| Vehicles/Boats/Plans/Motor Homes, etc | \$ 109,651,000 | \$ | 101,297,000 | -8\% |
| City of Columbia |  |  |  |  |
| Manufac./Utilities/Railroads* | \$ 42,344,000 | \$ | 37,480,000 | -11\% |
| Business Inventories | \$ 20,720,000 | \$ | 29,332,000 | 42\% |
| Comm./Res. Real Estate | \$ 206,317,000 | \$ | 326,848,000 | 58\% |
| Vehicles/Boats/Plans/Motor Homes, etc | \$ 40,615,000 | \$ | 29,383,000 | -28\% |
| City of Cayce (Richland Portion) |  |  |  |  |
| Manufac./Utilities/Railroads* | NV | NV |  |  |
| Business Inventories | NV | NV |  |  |
| Comm./Res. Real Estate | NV |  |  |  |
| Vehicles/Boats/Plans/Motor Homes, etc | NV | NV |  |  |
| City of Forest Acres |  |  |  |  |
| Manufac./Utilities/Railroads* | \$ 1,874,000 | \$ | 2,768,000 | 48\% |
| Business Inventories | \$ 1,132,000 | \$ | 1,453,000 | 28\% |
| Comm./Res. Real Estate | \$ 30,259,000 | \$ | 39,680,000 | 31\% |
| Vehicles/Boats/Plans/Motor Homes, etc | \$ 6,250,000 | \$ | 4,758,000 | -24\% |
| Town of Arcadia Lakes |  |  |  |  |


| Manufac./Utilities/Railroads* | \$ | 119,000 | \$ | 437,000 | 267\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Business Inventories | \$ | 106,000 | \$ | 265,000 | 150\% |
| Comm./Res. Real Estate | \$ | 2,893,000 | \$ | 4,282,000 | 48\% |
| Vehicles/Boats/Plans/Motor Homes, etc | \$ | 746,000 | \$ | 498,000 | -33\% |
| Town of Irmo (Richland Portion) |  |  |  |  |  |
| Manufac./Utilities/Railroads* | \$ | 1,747,000 | \$ | 1,069,000 | -39\% |
| Business Inventories | \$ | 197,000 | \$ | 407,000 | 107\% |
| Comm./Res. Real Estate | \$ | 10,107,000 | \$ | 15,561,000 | 54\% |
| Vehicles/Boats/Plans/Motor Homes, etc | \$ | 3,327,000 | \$ | 2,552,000 | -23\% |
| Town of Blythewood |  |  |  |  |  |
| Manufac./Utilities/Railroads* | \$ | 356,000 | \$ | 520,000 | 46\% |
| Business Inventories | \$ | 193,000 | \$ | 382,000 | 98\% |
| Comm./Res. Real Estate | \$ | 4,065,000 | \$ | 13,120,000 | 223\% |
| Vehicles/Boats/Plans/Motor Homes, etc | \$ | 364,000 | \$ | 769,000 | 111\% |
| Town of Eastorver |  |  |  |  |  |
| Manufac./Utilities/Railroads* | \$ | 403,000 | \$ | 454,000 | 13\% |
| Business Inventories |  |  | $\begin{aligned} & \$ \\ & 26,000 \end{aligned}$ |  | -24\% |
| Comm./Res. Real Estate | \$ | 570,000 | \$ | 648,000 | 14\% |
| Vehicles/Boats/Plans/Motor Homes, etc | \$ | 129,000 | \$ | 109,000 | -16\% |

Source: Richland County Auditor, 20042009 *Includes Fee-in-lieu

Table V-I
Potential Losses in Fairfield County and Municipalities by Type of Hazard in a Given Year

| Name of <br> Local <br> Govern't | Potential Losses from <br> Forest Fires/Wild Fires |  | Potential Losses from <br> Thunderstorms with Hail, <br> Wind \& Lightning |  | Potential Losses from <br> Flooding |  | Potential Losses from Winter <br> Snow and Ice Storms |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Property <br> Damage | Crop <br> Damage | Property <br> Damage | Crop <br> Damage | Property <br> Damage | Crop Damage | Property <br> Damage | Crop Damage |  |
| Unincorp. <br> Fairfield <br> County | $\$ 136,000$ | $\$ 125,000$ | $\$ 272,000$ | $\$ 5,000$ | $\$ 2,040,000$ | $\$ 10,000$ | $\$ 680,000$ | $\$ 50,000^{*}$ |
| Town of <br> Winns- <br> boro | $\$ 36,000$ | 0 | $\$ 720,000$ | 0 | $\$ 1,440000$ | 0 | $\$ 1,440,000$ | 0 |
| Town of <br> Ridgeway | $\$ 15,700$ | 0 | $\$ 78,500$ | 0 | 0 | 0 | $\$ 117,750$ | 0 |

*Damage to timber
Source: For all events is www.sheldus.org where damage to property and crops is listed by county for all types of hazards for selected days, months, and years. Damage estimates are for municipalities are based on Sheldus data modified by interviews with local officials.For 2010 update, property damage estimates are based on 2004 numbers with the percent appraised property values included. Crop damage estimates were not changed.

Table V-I Cont'd
Potential Losses in Fairfield County and Municipalities by Type of Hazard in a Given Year

| Name of <br> Local <br> Govern't | Potential Losses from <br> Tornados |  | Potential Losses from <br> Hurricanes |  | Potential Losses from <br> Earthquakes |  | Potential Losses from <br> Drought/Heat |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Property <br> Damage | Crop <br> Damage | Property <br> Damage | Crop <br> Damage | Property <br> Damage | Crop Damage | Property <br> Damage | Crop Damage |  |
| Unincorp. <br> Fairfield <br> County | $\$ 136,000,00$ <br> 0 | $\$ 10,000$ | $\$ 86,600,000$ | $\$ 2,000,000$ <br> $* * *$ | $\$ 13,600,000$ | 0 | $\$ 27,200,000$ | $\$ 100,000$ |
| Town of <br> Winns- <br> boro | $\$ 252,000,00$ <br> 0 | 0 | $\$ 36,000,000$ | 0 | $\$ 3,600,000$ | 0 | $\$ 2,160,000$ | 0 |
| Town of <br> Ridgeway | $\$ 23,550,000$ | $\$ 3,925,0$ <br> 00 | $\$ 500,000$ | 0 | $\$ 785,000$ | 0 | $\$ 196,250$ | 0 |

**Based on the impact of Hurricane Hugo in Sumter County
***Damage to crops and timber
Source: For all events is www.sheldus.org where damage to property and crops is listed by county for all types of hazards for selected years. Damage estimates are for municipalities are based on Sheldus data modified by interviews with local officials. For 2010 update, property damage estimates are based on 2004 numbers with the percent appraised property values included. Crop damage estimates were not changed.

Table V-J
Potential Losses in Newberry County and Municipalities by Type of Hazard in a Given Year

| Name of Local Govern't | Potential Losses from Forest Fires/Wild Fires |  | Potential Losses from Thunderstorms with Hail, Wind \& Lightning |  | Potential Losses from Winter Snow \& Ice Storms |  | Potential Losses from Flooding |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Property Damage | Crop Damage | Property Damage | Crop Damage | Property Damage | Crop Damage | Property Damage | Crop Damage |
| Unincorp.N ewberry County | \$39,400 | \$125,000 | \$197,000 | \$5,000 | \$492,000 | \$50,000* | \$1,418,400 | \$10,000 |
| Newberry City | \$45,500 | 0 | \$182,000 | 0 | \$182,000 | 0 | \$364,000 | 0 |
| Whitmire | \$39,000 | 0 | \$15,600 | 0 | \$39,000 | 0 | 0 | 0 |
| Pomaria | \$45,500 | 0 | \$9,150 | 0 | \$9,150 | 0 | 0 | 0 |
| Prosperity |  |  | 10,600 | 0 | \$21,200 | 0 | 0 | 0 |
| Little <br> Mountain | 48,000 | 0 | 9,600 | 0 | \$9,600 | 0 | 0 | 0 |
| Peak | \$45,000 | 0 | \$9,150 | 0 | \$9,150 | 0 | 0 | 0 |
| Silverstreet | \$48,000 | 0 | \$9,150 | 0 | \$ | 0 | 0 | 0 |

* Damage to timber

Source: For all events is www.sheldus.org where damage to property and crops is listed by county for all types of hazards for selected years. Damage estimates are for municipalities are based on Sheldus data modified by interviews with local officials. For 2010 update, property damage estimates are based on 2004 numbers with the percent appraised property values included. Crop damage estimates were not changed.

Table V-J Cont'd
Potential Losses in Newberry County and Municipalities by Type of Hazard in a Given Year

| Name of <br> Local <br> Govern't | Potential Losses from <br> Tornados |  | Potential Losses from <br> Hurricanes |  | Potential Losses from Drought |  | Column intentionally retained <br> blank (reserved) |  |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Property | Crop <br> Damage | Property <br> Damage | Crop <br> Damage | Property <br> Damage | Crop Damage |  |  |  |
| Unincorp. <br> Newberry <br> County | $\$ 88,650,000$ | $\$ 10,000$ | $\$ 143,750,000$ | $\$ 1,500,000$ <br> $* * *$ | $\$ 19,700,000$ | $\$ 1,500,000$ |  |  |
| Newberry <br> City | $\$ 63,700,000$ | 0 | $\$ 18,200,000$ | 0 | $\$ 910,000$ | 0 |  |  |
| Whitmire | $\$ 4,680,000$ | 0 | $\$ 780,000$ | 0 | $\$ 39,000$ | 0 |  |  |
| Pomaria | $\$ 915,000$ | 0 | $\$ 183,000$ | 0 | $\$ 9,150$ | 0 |  |  |
| Prosperity | $\$ 2,120,000$ | 0 | $\$ 1,060,000$ | 0 | $\$ 53,000$ | 0 |  |  |
| Little <br> Mountain | $\$ 960,000$ | 0 | $\$ 576,000$ | 0 | $\$ 19,200$ | 0 |  |  |
| Peak | $\$ 400,000$ | 0 | $\$ 100,000$ | 0 | $\$ 10,000$ | 0 |  |  |
| Silver- <br> street | $\$ 500,000$ | 0 | $\$ 100,000$ | 0 | $\$ 10,000$ | 0 |  |  |

**Based on the impact of Hurricane Hugo in Sumter County
***Damage to crops and timber
Source: For all events is www.sheldus.org where damage to property and crops is listed by county for all types of hazards for selected years. Damage estimates are for municipalities are based on Sheldus data modified by interviews with local officials For 2010 update, property damage estimates are based on 2004 numbers with the percent appraised property values included. Crop damage estimates were not changed.

Table V-K
Potential Losses in Lexington County and Municipalities by Type of Hazard in a Given Year

| Name of Local Govern't | Potential Losses from Forest Fires/Wild Fires |  | Potential Losses from Flooding |  | Potential Losses from Winter Snow \& Ice Storms |  | Potential Losses from <br> Thunderstorms with Hail, Wind \& Lightning |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Property Damage | Crop Damage | Property Damage | Crop <br> Damage | Property Damage | Crop Damage | Property Damage | Crop Damage |
| Unincorp.Le xington County | \$455,000 | \$150,000 | \$910,000 | \$100,000 | \$364,000 | \$50,000 | \$546,000 | \$125,000 |
| Lexington Town | \$201,000 | 0 | 0 | 0 | \$134,000 | 0 | \$268,000 | 0 |
| Cayce | \$129,750 | 0 | \$865,000 | 0 | \$86,500 | 0 | \$173,000 | 0 |
| West Columbia | \$89,250 | 0 | \$178,500 | 0 | \$59,500 | 0 | \$119, 00 | 0 |
| Springdale | \$36,750 | 0 | \$147,000 | 0 | \$36,750 | 0 | \$110,250 | 0 |
| Pine Ridge | \$84,000 | 0 | \$168,000 | 0 | \$42,000 | 0 | \$126,000 | 0 |
| South Congaree | \$128,000 | 0 | \$256,000 | 0 | \$64,000 | 0 | \$192,000 | 0 |
| Gaston | \$93,500 | 0 | 0 | 0 | \$35,450 | 0 | \$140,250 | 0 |
| Swansea | \$41,300 | 0 | \$17,700 | 0 | \$29,500 | 0 | \$59,000 | 0 |
| Pelion**** | \$35,000 | 0 | 0 | 0 | \$20,000 | 0 | \$25,000 | 0 |
| BatesburgLeesville | \$102,750 | 0 | \$68,500 | 0 | \$50,000 | 0 | \$137,000 | 0 |
| Gilbert | \$80,500 | 0 | \$80,500 | 0 | \$57,500 | 0 | \$57,500 | 0 |
| Chapin | \$112,350 | 0 | 0 | 0 | \$80,250 | 0 | \$160,500 | 0 |

**Based on the impact of Hurricane Hugo in Sumter County
***Damage to crops and timber
**** Insufficent data to update
Source: For all events is www.sheldus.org where damage to property and crops is listed by county for all types of
hazards for selected years. Damage estimates are for municipalities are based on Sheldus data modified by interviews with local officials
For 2010 update, property damage estimates are based on 2004 numbers with the percent appraised property values included. Crop damage estimates were not changed.

Table V-K Cont'd
Potential Losses in Lexington County and Municipalities by Type of Hazard in a Given Year

| Name of Local | Potential Losses from Hurricanes |  | Potential Losses from Tornados |  | Potential Losses from Earthquakes |  | Potential Losses from Drought/Heat |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Property Damage | Crop Damage | Property Damage | Crop <br> Damage | Property Damage | Crop Damage | Property Damage | Crop Damage |
| Unincorp.Le xingtonCou nty | $\begin{aligned} & \$ 182,000,00 \\ & 0 \end{aligned}$ | \$5,000,000 | \$136,500,000 | \$1,000,000 | \$9,100000 | 0 | \$18,200000 | \$1,000,000 |
| Lexington Town | \$26,800000 | 0 | \$13,400,000 | 0 | \$1,340000 | 0 | \$2,680,000 | 0 |
| Cayce | \$17,300,000 | 0 | \$8,650,000 | 0 | \$865,000 | 0 | \$1,730,000 | 0 |
| West Columbia | \$11,900,000 | 0 | \$5,950,000 | 0 | \$595,000 | 0 | \$1,190,000 | 0 |
| Springdale | \$7,350,000 | 0 | \$1,470,000 | 0 | \$147,0000 | 0 | \$36,750 | 0 |
| Pine Ridge | \$3,360,000 | 0 | \$840,000 | 0 | \$84,000 | 0 | \$42,000 | 0 |
| South Congaree | \$5,120,000 | 0 | \$1,280,000 | 0 | \$128,000 | 0 | \$34,000 | 0 |
| Gaston | \$3,740,000 | 0 | \$935,000 | 0 | \$93,500 | 0 | \$46,750 | 0 |
| Swansea | \$1,190,000 | 0 | \$416,500 | 0 | \$59,500 | 0 | \$26,750 | 0 |
| Pelion**** | \$500, 000 | 0 | \$350,000 | 0 | \$35,000 | 0 | \$15,000 | 0 |
| BatesburgLeesville | \$6,850,000 | 0 | \$6,850,000 | 0 | \$548,000 | 0 | \$274,000 | 0 |
| Gilbert | \$1,150,000 | 0 | \$805,000 | 0 | \$80,500 | 0 | \$34,500 | 0 |
| Chapin | \$1,600,000 | 0 | \$1,120,000 | 0 | \$112,000 | 0 | \$80,000 | 0 |

**Based on the impact of Hurricane Hugo in Sumter County
***Damage to crops and timber
**** Insufficient data to update
Source: For all events is www.sheldus.org where damage to property and crops is listed by county for all types of
hazards for selected years. Damage estimates are for municipalities are based on Sheldus data modified by interviews with local officials

Table V-L
Potential Losses in Richland County and Municipalities by Type of Hazard in a Given Year

| Name of Local Govern't | Potential Losses from Forest Fires/Wild Fires |  | Potential Losses from Flooding |  | Potential Losses from Winter Snow \& Ice Storms |  | Potential Losses from Thunderstorms with Hail, Wind \& Lightning |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Property Damage | Crop Damage | Property Damage | Crop Damage | Property Damage | Crop Damage | Property Damage | Crop Damage |
| Unincorp. <br> Richland <br> County | \$322,500 | \$150,000 | \$645,000 | \$100,000 | \$1,032,000 | \$50,000* | \$967,500 | \$50,000* |
| City of Columbia \# | \$204,000 | 0 | \$680,000 | 0 | \$680,000 | 0 | \$480.000 | 0 |
| Blythewood | \$74,250 | 0 | \$29,700 | 0 | \$74,250 | 0 | \$74,250 | 0 |
| Forest Acres | \$92,250 | 0 | \$123,000 | 0 | \$123,000 | 0 | \$92,250 | 0 |
| Eastover | \$38,150 | 0 | \$54,500 | 0 | \$54,500 | 0 | \$27,250 | 0 |
| Arcadia Lakes | \$106,500 | 0 | \$142,000 | 0 | \$71,000 | 0 | \$71,000 | 0 |
| Irmo\# | \$95,250 | 0 | \$127,000 | 0 | \$95,250 | 0 | \$95,250 | 0 |

* Damage to timber \#Includes both the Richland and Lexington County portions of the municipality

Source: For all events is www.sheldus.org where damage to property and crops is listed by county for all types of hazards for selected years. Damage estimates are for municipalities are based on Sheldus data modified by interviews with local officials. For 2010 update, property damage estimates are based on 2004 numbers with the percent assessed property values included. Crop damage estimates were not changed.

Table V-L Cont'd
Potential Losses in Richland County and Municipalities by Type of Hazard in a Given Year

| Name of <br> Local <br> Govern't | Potential Losses from <br> Hurricanes |  | Potential Losses from <br> Tornados |  | Potential Losses from <br> Earthquakes |  | Potential Losses from <br> Drought/Heat |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Damage | Crop <br> Damage | Property <br> Damage | Crop <br> Damage | Property <br> Damage | Crop Damage | Property <br> Damage | Crop Damage |  |
| Unincorp. <br> Richland <br> County | $\$ 193,500000$ | $\$ 5,000$, <br> 000 | $\$ 96,750,000$ | $\$ 1,000,000$ <br> $* * *$ | $\$ 6,450,000$ | 0 | $\$ 12,900,000$ | $\$ 1,000,000$ |
| City of <br> Columbia | $\$ 136,000,000$ | 0 | $136,000,000$ | 0 | $\$ 34,000,000$ | 0 | $\$ 1,360,000$ | 0 |
| Blythe- <br> wood | $\$ 2,970,000$ | 0 | $\$ 1,485,0000$ | 0 | $\$ 1,485,000$ | 0 | $\$ 1,485,000$ | 0 |
| Forest <br> Acres | $\$ 12,300,000$ | 0 | $\$ 6,150,000$ | 0 | $\$ 615,000$ | 0 | $\$ 123,000$ | 0 |
| Eastover | $\$ 545,000$ | 0 | $\$ 327,000$ | 0 | $\$ 54,500$ | 0 | $\$ 54,500$ | 0 |
| Arcadia <br> Lakes | $\$ 2,840,000$ | 0 | $\$ 4,260,000$ | 0 | $\$ 426,000$ | 0 | $\$ 71,000$ | 0 |
| Irmo | $\$ 12,700,000$ | 0 | $\$ 6,350,000$ | 0 | $\$ 635,000$ | 0 | $\$ 127,000$ | 0 |

**Based on the impact of Hurricane Hugo in Sumter County
***Damage to crops and timber
Source: For all events is www.sheldus.org where damage to property and crops is listed by county for all types of hazards for selected years. Damage estimates are for municipalities are based on Sheldus data modified by interviews with local officials. For 2010 update, property damage estimates are based on 2004 numbers with the percent assessed property values included. Crop damage estimates were not changed.

# Section VI. Broad Regional Mitigation Goals and Objectives to Reduce or Avoid Long-Term Vulnerabilities to Identified Hazards 

For the 2010 update, the corresponding committee of each county reviewed the goals and work program for current status and continuation. The following was maintained as goals for the 2010 update.

Working with the staff of the Central Midlands Council of Governments (COG), the Central Midlands Regional Risk Assessment and Hazard Mitigation Committee (Core Planning Team) has undertaken a planning effort to improve upon the protection of the citizens of participating jurisdictions in all four counties of the region from natural hazard threats. They have worked to minimize the impact of natural disasters on vulnerable populations and critical facilities in the region. Key broad goals for all participating local governments as developed by the CMRRAHMC are as follows. The respective governing councils will adopt goals and objectives for each participating jurisdiction as part of the action of each governing council to adopt the resolution contained in Section I of this plan. Goals and Objectives listed below for all general-purpose units of local governments will be reflected in more specific goals of counties and municipalities as part of their participation in this hazard mitigation plan.

## A. GOALS

1. Encourage all governments in the region to work together to create a disaster resistant community by the year 2020 .
2. Increase each local jurisdiction's internal capabilities to initiate and sustain emergency response operations during and after a disaster and thereby mitigate the effects of natural hazards.
3. Enhance existing or design new policies in local jurisdictions to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming throughout the region.
4. Protect the most vulnerable populations, buildings and critical facilities in every local jurisdiction through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in the mitigation of risks caused by those hazards.
6. Increase understanding of all residents of local jurisdictions throughout the region about the hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the region in the face of natural disasters.
8. Ensure that the residents of local governments throughout the region will have secure homes, institutions and places of employment that are now vulnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of local governments in the region will not be significantly disrupted by a natural disaster.
10. To realize these goals, the local jurisdictions within each county of the region will collaborate to achieve the following objectives dealt with in this plan and report.

## B. OBJECTIVES

1. Implement the purposes and objectives of the Federal Emergency Management Agency (FEMA) Section 322 local hazard mitigation planning regulations as well as additional guidance documents provided by the Emergency Preparedness Division of the S. C. Adjutant General.
2. Improve the capability of local governments in the region to develop, implement, and maintain effective mitigation programs and projects that if implemented will reduce devastation caused by hazardous occurrences.
3. Provide a comprehensive risk assessment, vulnerability analysis, mitigation projects and strategies and implementation schedule for the counties of the region including each of the major municipalities.
4. Develop information for each county that specifies the location of high-risk and vulnerable populations most adversely affected by hazardous occurrences.

## NOTE:

Because land cover, land use, and the incidence of natural hazards are different within counties from jurisdiction to jurisdiction, hazard mitigation goals and activities will vary among the various counties and municipalities. Representatives of the various municipalities are aware that the above stated Goals and Objectives reflect regional policy priorities and that county-level and municipal level hazard occurrences should be reflected in goals that address the views and needs of different local governments around the region. The umbrella goals stated above are reflected in the goals of various local governments in Section VIII, Action Plans of Participating General Purpose Units of Government within the Four Counties of the Central Midlands Region

# Section VII. An Identification, Evaluation, and Analysis of Specific Mitigation Actions and Projects Reducing the Effects of Natural Hazards 

The material that follows is a non-exhaustive list of the types of hazard mitigation measures that may be used by in the Action Plans of participating jurisdictions during the first year of activities or subsequent years of planning and implementing activities. See Section VIII that contains the Action Plans of the Participating Jurisdictions.

Because this is a regional plan intended for current and future applicability to all affected jurisdictions within the Central Midlands Region, specific project selection, for the most part, is not included within this plan. County-based committees consisting of invitees from the jurisdictions, non-profit sector, and/or the public at large have been established to prioritize hazards and identify activities and projects to mitigate hazards. They have also identified potential funding sources for those projects. Jurisdictions have prepared Action Plans that contain some but not all items listed in the activities below. The list below is included to show citizens and jurisdictions the wide range of activities that they may use now and in the future as plans are refined and updated.

## A. PREVENTIVE ACTIVITIES (PA)

Preventive activities include such items as floodplain management regulations, stormwater management regulations, building-related codes, fire prevention codes, wetlands protection regulations, water quality regulations, stream-dumping regulations, and the preservation of open space. Public information activities will be discussed in the section of this plan specifically designated to this topic.

Activities within the jurisdictions of the Central Midlands Region that would be classified as preventive activities, the type of organization(s) performing the function, and funding mechanisms for these activities are provided in the following table:

| Activity | Type of Organization |
| :--- | :--- |
| Floodplain Management <br> Regulations | Local jurisdictions, SC Dept. of Natural <br> Resources, US ACOE |
| Fire Protection Regulations | Local jurisdictions, State Fire Marshal |
| Wetlands Protection <br> Regulations | U.S. Army Corps of Engineers, <br> S. C. DHEC |
| Other Management <br> Regulations <br> (e.g. Building Code <br> Enforcement <br> Assistance, flood <br> mapping/delineation | S.C. Dept. of Insurance, S. C. Dept. of <br> Natural Resources, US ACOE |
| Preservation of Open Space | County Parks \& Recreation <br> Commissions, Local Jurisdictions, <br> Regionalwetlands bank |
| Stormwater Management <br> Regulations | S. C. DHEC, Local Jurisdictions, <br> US ACOE |
| Wind Building Regulations | Local Jurisdictions |
| Earthquake Building | Local Jurisdictions |
| Water Quality Regulations | SC DHEC, U. S. Army Corps of <br> Engineers, S.C. Dept. of Natural <br> Resources |
| Stream Dumping Regulations | Local Jurisdictions |

Additional preventive activities that may be considered by the jurisdictions in the Central Midlands Region include, but are not limited to, the following:

Considering areas subject to repetitive flooding for acquisition for parks and other permanent open space.

Revising floodplain management ordinances to include a one (1) foot freeboard in areas without other restrictions that make the requirement for an extra foot of elevation impractical (e.g. historic buildings, areas with zoning ordinances with height limitations, etc.).

Adopting voluntary standards for single-family residence construction that exceed minimal building code requirements for wind and seismic design.

Adopting stream-dumping ordinances.
Modernizing flood insurance rate maps.
Developing maps to indicate areas where radon protection would be recommended.

Sponsoring educational programs for design professionals, contractors, building code officials, insurance agents, etc. on regulations and codes.

Developing a monitoring program for known repetitively flooded properties to verify that substantial improvements are not being performed without proper permitting in an effort to avoid elevating the structures.

Encouraging a standardized system to collect data on flood events throughout the region for future flood studies.

Participating in a "Drainage Awareness Campaign" to educate citizens regarding effects of dumping foreign materials into drainageways.

Encouraging development reviewers to consider provisions for "no adverse impact" when development is proposed within floodplain areas.

## B. PROPERTY PROTECTION (PP)

Property protection includes but is not limited to such items as educating or assisting citizens regarding retrofitting existing structures to be more resistant to hazards (e.g. hurricane, flood, earthquake, tornado, forest fires/wild fires, elevating existing structures so that the finished floor/lowest horizontal structural member is at or above the base flood elevation or freeboard elevation, demolishing structures below the base flood elevation which can not be cost effectively elevated or retrofitted, relocating structures in areas subject to repetitive flooding to areas not within the special flood hazard area, educating citizens regarding hazard safe interior rooms for tornado shelters, educating property owners regarding glazing protection in the event of a hurricane, providing information regarding hazard insurance to citizens, and insuring public owned facilities against hazards.

On-going projects within the Central Midlands Region that would be classified as property protection activities, the type of organization(s) performing the function, and funding mechanisms for these activities are provided in the following table (the order of the activity in the table corresponds to the prioritization of these activities from most important to least important per the average of the questionnaire responses):

| Activity | Type of Organization |
| :--- | :--- |
| Providing information re: flood <br> insurance to citizens | Local Jurisdictions, SC DNR, <br> FEMA US ACOE |
| Designing new publicly owned <br> buildings to exceed minimal hazard <br> resistance design criteria | Local Jurisdictions, State <br> Engineer, SC DOT, US ACOE |
| Purchase flood insurance for <br> publicly owned buildings | Local Jurisdictions, State <br> Engineer |
| Elevating/Retrofitting repetitively <br> damaged property | Local Jurisdictions, SC DNR, <br> FEMA, US ACOE, SC DOT |
| Retrofitting existing publicly <br> owned structures to meet minimal <br> hazard resistance design criteria | Local Jurisdictions, State <br> Engineer, SC DOT, US ACOE |
| Purchase earthquake insurance for <br> publicly owned buildings | Local Jurisdictions, State <br> Engineer |
| Demolition of repetitively <br> damaged properties (flood) | Local Jurisdictions, SC DNR, <br> FEMA, SC DOT, SC DHEC |
| Purchase wind insurance for <br> publicly owned buildings | Local Jurisdictions, State <br> Engineer |
| Provide information re: earthquake <br> insurance to citizens | Local Jurisdictions, FEMA |
| Acquisition/Relocation of <br> repetitively damaged property | SC DNR, FEMA, US ACOE, <br> SC DOT, SC DHEC |

Activities the jurisdictions in the Central Midlands Region may want to consider implementing in addition to those activities in the above chart the following activities:

Encouraging lenders to provide low interest rate loans for retrofitting structures for hazard resistance.

Encouraging local building material/hazard resistant product suppliers to donate or provide supplies at a reduced cost for retrofitting existing structures for hazard resistance.

Encouraging local volunteer agencies/contractors/design professionals to donate or provide services at a reduced cost for retrofitting existing structures for hazard resistance.

Educating citizens regarding hazard safe interior room construction.
Establishing a volunteer network to assist elderly/infirmed property owners with installing glazing protection when a hurricane warning is issued.

Utilizing available software for conducting vulnerability analyses to various types of natural or man-made hazards (e.g. HAZUS, CAMEO, Consequences Assessment Tool set, etc.)

Develop a voluntary set of specifications that exceed minimal code to encourage builders and property owners to construct or retrofit their homes in a more hazard resistant manner.

Develop educational materials to educate residents about hazard resistant construction techniques and protecting property from hazard-related damages.

Retrofitting existing critical facilities for enhanced hazard-resistance.
Supporting demonstration projects where residents may learn how to protect their homes from hazard events.

## C. NATURAL AND BENEFICIAL FUNCTIONS OF FLOODPLAINS/RESOURCE PRESERVATION (NB)

Floodplains in the Central Midlands Region area may contain wetland areas that serve important functions. Specifically, wetlands may moderate flooding, enhance water quality, enhance ground water recharge, and often serve as habitats for wildlife. Activities geared towards the protection of natural and beneficial functions of floodplains include but are not limited to wetlands protection through permitting processes, building set-back lines for wetlands, tree protection ordinances, erosion-control requirements for commercial construction, and installation of environmentally sensitive wastewater treatment facilities.

On-going projects within the Central Midlands Region that would be classified as natural and beneficial function protection activities, the type of organization(s) performing the function, and funding mechanisms for these activities are provided in the following table:

| Activity | Type of Organization |
| :--- | :--- |
| Permitting of wastewater <br> treatment facilities | SC DHEC Env. Health |
| Erosion Control | Local Jurisdictions, SC DHEC, contractors |
| Permitting for wetland <br> disturbance | SC DHEC OCRM, US ACOE |
| Tree protection/landscaping <br> ordinances | Local Jurisdictions |
| Designation of wildlife <br> preservation areas | US DOI, SC DNR |
| Preservation/retrofitting of <br> Historic sites/structures for hazard <br> resistance | Local Jurisdictions, SC Dept. of <br> Archives, US DOI |
| National Water Quality <br> Assessment Program | US Geological Survey US ACOE |
| Biological <br> Biological and Ecological studies | USGS. U. S. Fish \& Wildlife <br> Service. US ACOE |
| Preservation of open space as parks | Local Jurisdictions, SC Dept. of Recreation, US <br> ACOE |

Activities the jurisdictions in the Central Midlands Region may want to consider implementing in addition to those on-going projects for natural and beneficial function protection include but are not limited to the following:

Educating citizens regarding hazard resistant landscaping and coastal and endangered species. Participating in a "Garden Spot for Kids" program.

Developing programs to encourage young people to take an interest in preserving natural and historic resources.

Encouraging wetlands preservation through educating the public about wetlands buffer zones or regulating these buffer zones through development ordinances.

Encouraging citizens to preserve natural and historic resources at appropriate existing public venues and parks.

## D. EMERGENCY SERVICES (ES)

Emergency services includes but is not limited to post hazard event activities such as damage assessment, search and rescue, treatment of injuries, traffic control, crime control, fire fighting, hazardous material cleanup/control, debris removal, road clearing, distribution of emergency supplies, and disposition of debris. Emergency services also include the provision of emergency shelters, emergency mass transportation, evacuation procedures, and emergency warning.

On-going projects within the Central Midlands Region that would be classified as emergency services activities, the type of organizations) performing the function, and funding mechanisms for these activities are provided in the following table:

| Activity | Type of Organization |
| :--- | :--- |
| Emergency Health Care <br> Services Provision | Local Jurisdictions, Hospitals, <br> Ambulance companies, <br> American Red Cross |
| Emergency Warning <br> (Emergency Broadcast <br> System) | Local jurisdictions, media, <br> NOAA NWS, US ACOE |
| Distribution of Emergency <br> Supplies | Local Jurisdictions, American <br> Red Cross, FEMA, US <br> ACOE |
| Evacuation Shelters | American Red Cross, Local <br> Jurisdictions, US ACOE |
| Fire suppression | Local Jurisdictions |
| Hazardous Material <br> cleanup/control | Local Jurisdictions, <br> Transporters/storage location <br> operators of hazardous <br> materials |


| Crime Control | Local Jurisdictions, SLED, <br> US FBI |
| :--- | :--- |
| Debris removal/disposition | Local Jurisdictions, FEMA |
| Coordination of Volunteer <br> services (post-event) | Local Jurisdictions, American <br> Red Cross, Salvation Army |
| Flood forecasting | NOAA NWS, US ACOE |
| Gathering and providing <br> hydrologic data | USGS, State Hydrologist, US <br> ACOE |
| Sandbagging for flooding | Local Jurisdictions |
| Staffing Emergency <br> Operation Centers | Local Jurisdictions, American <br> Red Cross, Salvation Army, <br> media providers, US ACOE |

Activities the jurisdictions in the Central Midlands Region may want to consider implementing in addition to those on-going projects for emergency services include but are not limited to the following:

Retrofitting existing critical facilities for hazard resistance.
Identifying evacuation shelters for areas currently not within reasonably close proximity to a shelter for humans and pets/domestic animals.

Making provisions for emergency warning during normal sleep hours (particularly for hazards with little warning such as tornadoes).

Making provisions for transportation to emergency shelters for those in need of transportation.

Constructing new critical facilities to the extent practical in such a manner as to exceed minimal standards for hazard resistance and to be located in areas that are the least prone to damage by hazard events (e.g. not in the special flood hazard area if possible and still meet the service needs for the facility).

Obtaining information regarding/ assisting with the preparation of emergency plans for places of large assembly (e.g. high schools, Colonial Center, athletic stadiums, etc.) and tourist activity centers.

Providing resources to enable emergency shelters to be opened quickly in the event of a hazard with little or no warning.

Making applications to nationally recognized programs that promote emergency preparedness such as the "Storm Ready" program of the National Weather Service.

Providing updated weather radios to schools for early warning of pending hazard events.

Promoting hazard awareness through media campaigns using weather radios as give-away items.

## E. STRUCTURAL PROJECTS (SP)

Structural projects include, but are not limited to, drainage improvement projects, stream channel modification/dredging, dam construction, and infrastructure construction/modification/repair. Since Geographic Information Systems (G1S) are potentially valuable tools for use in structural projects, GIS related projects are included within this section of the plan.

On-going projects within the Central Midlands Region that would be classified as structural project activities, the type of organization(s) performing the function, and funding mechanisms for these activities are provided in the following table:

| Activity | Type of Organization |
| :--- | :--- |
| Drainage Improvement Projects | Local Jurisdictions, <br> US ACOE |
| Drainage studies | Local Jurisdictions, <br> US ACOE |
| Drainage System Maintenance | Local Jurisdictions, <br> SC DOT |
| Installation of dry fire hydrants in rural areas | Local Jurisdictions |


| GIS Mapping | Local Jurisdictions, <br> US ACOE, Central Midlands <br> COG, SC DNR <br> USGS, FEMA |
| :--- | :--- |
| Establishing elevation reference marks | US ACOE, FEMA |$|$| Inspecting elevation reference marks | Local Jurisdictions <br> SC DOT, US ACOE |
| :--- | :--- |
| Road/bridge construction/repair | Local Jurisdictions, <br> SC DOT, utility <br> service providers, US <br> ACOE |
| Utility right-of-way permitting/construction |  |

Activities the jurisdictions in the Central Midlands Region may want to consider implementing in addition to those on-going structural projects include but are not limited to the following:

Developing and updating master drainage plans.
Implementing drainage improvement projects consistent with results of the drainage studies.

Developing and updating an accurate inventory of existing and likely Repetitive Loss Properties in all jurisdictions participating in the NFIP.

Implementing a Drainage Awareness Campaign program.
Developing a system for recording flood damages as a result of inadequate drainage in a consistent manner across jurisdictions.

Developing a schedule for placing existing above ground utilities under ground where feasible, particularly along evacuation routes, major arteries, and highly congested areas.

Developing a schedule to repair/replace existing roads/bridges, which based upon vulnerability analyses and inspection results are least likely to withstand hazard events.

Developing a system for the sharing of GIS maps and support data amongst the jurisdictions to minimize duplication of effort.

Installing signs indicating anticipated flood elevation levels over major roadways in the event of a severe flood event.

Educating residents on proper generator usage.
Educating residents on procedures to follow to underground their utilities going to their individual properties.

## F. PUBLIC INFORMATION ACTIVITIES (PI)

Public information activities include but are not limited to mailing brochures regarding hazards to residents, providing literature regarding hazards to citizens at offices/public libraries, television advertisements, participating in hazard awareness weeks, newspaper advertisements, providing speakers for schools/groups, conducting inspections of structures at the request of residents to verify hazard resistant construction, maintaining lists of contractors qualified to perform hazard mitigationrelated construction, and radio advertisements.

On-going projects within the Central Midlands Region that would be classified as public information activities, the type of organization(s) performing the function, and funding mechanisms for these activities are provided in the following table:

| Activity | Type of Organization |
| :--- | :--- |
| Mailing hazard brochures to all <br> residents | Local Jurisdictions, FEMA, <br> SC DNR, US ACOE |
| Providing literature to citizens at <br> offices/places of business | Local Jurisdictions, FEMA, <br> SC DNR, US ACOE, <br> USGS, American Red <br> Cross, DHEC, media providers |
| Television Advertisements | FEMA, media providers, <br> Corporate sponsors |

$\left.\begin{array}{|l|l|}\hline \begin{array}{l}\text { Participating in Hazard Awareness } \\ \text { Weeks }\end{array} & \begin{array}{l}\text { Local Jurisdictions, } \\ \text { American Red Cross, } \\ \text { Corporate sponsors, US } \\ \text { ACOE; National Weather } \\ \text { Service }\end{array} \\ \hline \text { Newspaper advertisements } & \begin{array}{l}\text { Local Jurisdictions, FEMA, } \\ \text { American Red Cross, SC } \\ \text { DOT, DHEC }\end{array} \\ \hline \begin{array}{l}\text { Providing speakers for } \\ \text { schools/groups }\end{array} & \begin{array}{l}\text { Local Jurisdictions, US } \\ \text { ACOE, SC DNR, DHEC } \\ \text { FEMA, American }\end{array} \\ \text { Red Cross, SC DOT, } \\ \text { USGS; National Weather } \\ \text { Service }\end{array}, \begin{array}{l}\text { Local Jurisdictions }\end{array}, \begin{array}{l}\text { Local Jurisdictions, } \\ \text { American Red Cross, media } \\ \text { providers, National Weather } \\ \text { Service }\end{array}, \begin{array}{l}\text { Mailing hazard brochures to } \\ \text { floodplain residents }\end{array} \quad \begin{array}{l}\text { FEMA, Earthquake } \\ \text { Education Center, State Fire } \\ \text { Marshal, SC EPD, Local } \\ \text { Jurisdictions, }\end{array}, \begin{array}{l}\text { Local Jurisdictions, FEMA, } \\ \text { related/product expos } \\ \text { NOAA NWS, SC DNR, US } \\ \text { ACOE, USGS, American } \\ \text { Red Cross, SC DOT, media } \\ \text { Providers }\end{array}\right\}$

Activities the jurisdictions in the Central Midlands Region may want to consider implementing in addition to those on-going public information projects include but are not limited to the following:

Participating in a study of the residents of their local jurisdiction, e.g., the City of Cayce, SC regarding their knowledge level of hazards facing this area.

Participating in "Project Impact" public information activities to the extent feasible.

Participating in contractor hazard resistant building techniques workshops.
Participating in a children's hazard awareness program.
Participating in the development of a mobile hazard-related educational display.

Participating in hazard mitigation techniques demonstration projects.
Establishing an information sharing resource centrally located so that all the jurisdictions have access to hazard-related information when needed.

Encouraging local restaurants and/or movie cinemas to participate in public education campaigns targeted for these establishments.

Participating in hazards expos and other events designed to educate citizens about hazard preparation and protection.

Assisting with the development and/or distribution of printed materials to residents or visitors on hazard-related topics.

Participating in the speaker's bureau and/or asking speakers to present hazardrelated topics at local functions or events.

Encouraging young people to learn more about hazard preparations through activities and programs aired at this audience.

Working with media outlets to provide hazard-related information to local citizens.

# Section Vili. Goals and Action Plans of Participating General Purpose Units of Government within the Four Counties of the Central Midlands Region Reflecting Regional and Jurisdiction Specific Goals 

The corresponding committees reviewed the following goals and work program for revisions, with changes noted, inlcuidng strikethrough goals and objectives from the previous plan that no longer apply. For the 2010 update, characteristics for cost and benefit were added. Cost estimates are based on the following range

- Low Less than \$250,000
- Medium $\$ 250,000$ to $\$ 750,000$
- High Greater than \$750,000

Benefit is rated in Low, Medium and High based on the direct impact the project would have on protecting people and/or property. The monitoring reports outlined in the 2005 plan were not submitted, but participating jurisdictions had an opporuntiy to identify completed projects. The corresponding committees reviewed the goals and work programs for each of the jurisdictions and concluded that they should be maintained along with the priority ranking. In most case, if not all, the priorty rankings were carried-over from the 2005 plan. Jurisdictions participating in the NFIP were given opportunity to analyze and prioritize the goals for compliance with the program. Greater effort will be made to implement the monitoring program as outlined in SectionX.

The purpose of the Actions Plans that follow is to qualify participating local governments under the provisions of the Disaster Mitigation Act of 2000. It is not intended to meet all of the requirements of the Community Ranking System of the National Flood Insurance Program. Nevertheless, work items regarding flooding will be included that may help achieve that goal as individual local governments undertake planning efforts to improve their CRS rankings.

All participating jurisdictions through participation in this planning process will collaborate and cooperate with the Emergency Preparedness Division of the S. C. Adjutant General's Office in the implementation of the S. C. Emergency Operations Plan put into force on April 11, 2001. The plan is intended to guide, not supplant, local government efforts to ensure mitigation and preparedness, appropriate response and timely recovery from hazards that may affect South Carolina. The plan is predicated on the concept that emergency operations will begin at the level of government most appropriate to provide effective response. This is why each of the following Actions Plans is different because of local assessments and evaluation of the threats posed by different natural hazards. The S. C. Emergency Operations Plan may be accessed on the S. C. Emergency Preparedness Division's website at www.state.sc.us/epd/.

Also, of critical importance to the well-being of the citizens of the four county Central Midlands Region is Appendix 1 of the S. C. Emergency Operations Plan. This actively enforced and followed document lays out the procedure that State agencies and local governments will follow in case of a hurricane. For the Central Midlands Region, its primary impact will be traffic flow on Interstate highways as all lanes will be used for westward movement of traffic and the designation of emergency shelters, their locations and hours of operation. It is included as part of the total Emergency Operations Plan by reference in this plan for the Central Midlands Region.

To align the goals of the different participating governmental jurisdictions with their Action Plans, goals developed by each local government are presented in this section and not in Section VI enumerating broad regional goals and objectives for hazard mitigation. Goals will be similar but will not be identically worded or prioritized. Objectives listed in Section VI for the region apply to all participating local governments and both goals and objectives will be implemented by the projects listed in each different Action Plan.

## GOALS OF FAIRFIELD COUNTY

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in Fairfield County.
2. Increase the county's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the county to reduce the potential damaging effects of hazards without hindering other commmity goals or impeding hazard mitigation programming in the county.
4. Protect the most vulnerable populations, buildings and critical facilities in the county through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the county about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the county in the face of natural disasters.
8. Ensure that the residents of the county will have secure homes, institutions and place ef employment that are now winerable to natural disasters.
9. Enstre that the availability and functioning of the infrastructure of the county will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR UNINCORPORATED FAIRFIELD COUNTY, SC

Natural hazards ranked by priority in unincorporated Fairfield County:

1) Forest Fires/Wild Fires
2) Thunderstorms/Summer Storms with accompanying hail and wind
3) Flooding
4) Winter Snow and Ice Storms
5) Tornados
6) Hurricanes
7) Earthquakes
8) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Fairfield County participants in the planning process.

The following are the proposed projects to be undertaken/continued in unincorporated Fairfield County for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Types of hazard mitigation projects such as operation of the transit system would apply in several types of hazards but are not repeated for each type of hazard. Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance Source | Local Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Forest <br> Fires/ Wild Fire | Clear public lands as needed near critical facilities | Fairfield County/ school districts/ towns | Public <br> Works <br> Operating <br> Budgets | 2, 4, 5, 7, | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Forest <br> Fires/ Wild Fire | Conduct detailed assessments of wild fire risk for critical facilities | Fairfield County/ school district/ towns. | Emer. <br> Manage. <br> Services <br> Operating <br> Budget | 2, 4, 5, 7, | 1 | Low | Low | Ongoing | Ongoing |
| PA | Forest <br> Fires/ Wild Fire | Maintain cleared fire breaks to protect critical facilities | Fairfield <br> County <br> Public <br> Works | Public <br> Works <br> Operating Budget | 2, 4, 5, 7, | 1 | Low | Low | Ongoing | Ongoing |
| GIS | Forest <br> Fires/ Wild Fire | Use GIS capacity to map, record all hazards | Fairfield County Planning Dept./ assessor | Capital <br> Improve. <br> Budget | 2, 4, 5, 7, | 1 | Low | Low | Ongoing | Ongoing |


| PA | Thunderstorms (Hail, Wind, Lightning) | Replace vulnerable exterior building surfaces with hail resistant surfaces | Fairfield County/ school district/ towns | Capital Improve. Budget | 2, 4, 5, 7, | 2 | Medium | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Fairfield County/ school district/ towns | Capital Improve. Budget | 2, 4, 5, 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt <br> procedures for suspension of operations | Fairfield County/ School District/ towns | Operating <br> Budgets | 2, 4, 5, 7, | 3 | Low | Low | Ongoing | Ongoing |
| NB | Thunderstorms (Hail, Wind, Lightning) | Clear power and utility easements of debris | Fairfield County/ towns/ water comp. | Capital Improve. Budgets | 2, 4, 5, 7, | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Enforce zoning to restrict devel. in flood-plains | Fairfield County/ towns in county | Operating <br> Budget | 2, 4, 7, | 1 | Low | Medium | Ongoing | Ongoing |


| PI | Flooding | Declare May of each year to be Flood Awareness Month | Fairfield County Council | Operating <br> Budget | 2, 4, 7, | 2 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Develop a parcel based GIS system to track all structures and demolition permits in flood area | Fairfield County/ towns in county | Operating <br> Budget | $1,2,4,7$, and 10 | 2 | Medium | Medium | Completed | Completed <br> May 2005 |
| NB | Flooding | Coordinate with other local gov'ts in county to make stream channel improvement | Fairfield County/ towns in county | Capital <br> Improve. <br> Budgets | 2, 3, 4, | 3 | Low | Medium | Ongoing | Ongoing |
| NP | Flooding | Replace structurally obsolete bridges | Fairfield <br> County/ <br> SCDOT | Capital <br> Improve. <br> Budgets | 2, 4, 5, 7, | 2 | High | High | Ongoing | Ongoing |


| PA | Flooding | Identify \& contact all repetitive loss properties | Fairfield County/ towns in county | Operating <br> Budgets | 5 | 1 | Low | Medium |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Fairfield County/ towns in county | Operating <br> Budgets | 5 | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Undertake Planning to participate in Community Rating System | Fairfield County/ towns in county | Operating <br> Budgets | 5 | 1 | Low | Medium | Ongoing | Ongoing |
| $P A$ | Flooding | Maintain status in the NFIP | Fairfield <br> County | Operating <br> Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |


| PA | Winter Snow \& Ice Storms | Use bus transit system for emergency shelter, evacuation \& communic. capacity | Fairfield <br> County <br> Transit <br> System | Capital <br> Improve. <br> Budget | 2, 4, | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Winter Snow \& Ice Storms | Establish mutual aid agreements with Winnsboro Ridgeway | Fairfield County/ towns in county | Operating <br> Budgets | 2, 7, | 1 | Low | High | Ongoing | Ongoing |
| ES | Winter <br> Snow \& Ice Storms | Install standby elec. power for sewer \& water plants \& pumps (portable generators \& pumps) | Town of <br> Winns./ <br> Water <br> compny. <br> in <br> county | Capital <br> Improve. <br> Budget | 2, 4, 5 | 1 | High | High | Ongoing | Ongoing |
| SP | Tornados | "Harden" <br> utility services to critical facil. | Fairfield County | Capital <br> Improve. <br> Budget | 2, 4,7, | 1 | Medium | Medium | Ongoing | Ongoing |


| PA | Tornados | Conduct engineering strength studies of critical facilities | Fairfield County/ towns in county | Capital Improve. Budgets | 2, 4,7, | 2 | Medium | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those in areas of vulnerable populations | Fairfield County/ school district/ towns in county | Operating <br> Budgets | 2, 4,7, | 1 | Medium | Low | Ongoing | Ongoing |
| ES | Tornadoes | Emergency response chain saw project and other efforts to remove debris | Fairfield <br> County/ <br> SCANA <br> Coops/ <br> water <br> compan <br> y | Operating <br> Budgets | 2, 4,7, | 1 | Low | Low | Ongoing | Ongoing |
| ES | Hurricanes | Develop <br> Portable <br> Water <br> Treatment Facilities | Rural <br> Water <br> Compan -ies in Fairfield County | Capital <br> Improve. <br> Budgets | 2, 4, 5, 7, | 2 | Medium | High | Ongoing | Ongoing |


| NB | Hurricanes | Replace water storage tanks and pumps as needed | Rural <br> Water Compan -ies in Fairfield County | Capital <br> Improve. <br> Budgets | 2, 4, 5, 7, | 2 | Medium | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Hurricanes | Provide mobile backup generators for critical facilities | Fairfield County/ towns in county | Capital <br> Improve. <br> Budgets | 2, 4, 5, 7, | 1 | Medium | High | Ongoing | Ongoing |
| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week annually | Fairfield County/ towns in county | Operating Budgets | 4, | 1 | Low | Low | Ongoing | Ongoing |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in southwestern Fairfield Cty. | Fairfield <br> County | Operating <br> Budget | 2,.4, 5, | 1 | Low | Medium | Ongoing | Ongoing |


| PA | Earthquak. | Work with SCANA to ensure that the Summer Facility can withstand earthquakes | Fairfield <br> County and SCANA | Operating <br> Budgets | 2,.4, 5, | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Earthquak. | Ensure that warning siren system is working to ensure rapid evacuation from the Summer Fac. | Fairfield <br> County <br> and <br> SCANA | Operating <br> Budgets | 2,.4, 5, | 1 | Low | High | Ongoing | Ongoing |
| ES | Earthquak. | Ensure that evacuation routes are clearly marked and open | Fairfield <br> County and SCANA | Operating <br> Budgets | 2,.4, 5, | 1 | Low | High | Ongoing | Ongoing |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Fairfield County | Operating <br> Budget | 5 | 1 | Low | High | Ongoing | Ongoing |


| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assembly | Operating <br> Budget | 1,5 , and 6 | 3 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Fairfield County | Operating Budget | -5, | 4 | Low | Medium | Duplicate objective | Ongoing |

Source: Fairfield County Emergency Preparedness Staff, 2004.Revised by the staff of Fairfield County, 2010. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF WINNSBORO

1. Develop better data for the town relating to type, impact, location and cost of the mitigation of natural disasters oceurring in Winnsboro.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the county.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards
threatening lecal areas and the teehniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now velnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF WINNSBORO, SC

Natural hazards ranked by priority in the Town of Winnsboro:

1) Winter Snow and Ice Storms
2) Tornados
3) Hurricanes
4) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
5) Earthquakes
6) Flooding
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten Winnsboro. These are the most important natural hazards as rated by town participants in the planning process.

The following are the proposed projects to be undertaken/continued in the Town of Winnsboro for hazard mitigation during 20102015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB $=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are explained in Section VII.

| $\begin{aligned} & \text { Typ } \\ & \text { e } \end{aligned}$ | Type of Hazard | Activity | Lead Agent | Finance <br> Source | Plan Goals <br> Addressed | Priority <br> (1 <br> highest, <br> 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Winter Snow \& Ice Storms | Provide portable pumps to keep utility systems in operating | Town of Winns. | Capital <br> Improve. <br> Budget | 2, 4, 7, and | 1 | Low | Medium | Deferred due to funding | 2015 |
| PP | Winter Snow \& Ice Storms | Cover regulator stations | Town of Winns. | Capital <br> Improve. <br> Budget | 2, 4, 7, and | 1 | Low | Low | Deferred due to funding | 2015 |
| ES | Winter Snow \& Ice Storms | Install standby elec. power for sewer \& water plants \& pumps (portable generators \& pumps) | Town of Winns. | Capital Improve. Budget | 2, 4, 5, and | 1 | Low | Medium | Deferred due to funding | 2015 |
| SP | Tornados | Harden utility services to critical facil. | Town of Winns. | Capital <br> Improve. <br> Budget | 2, 4, 7, and | 1 | Low | Medium | Deferred due to funding | 2015 |


| ES | Tornados | Install barricades and fencing for all regulator stations | Town of Winns. | Capital <br> Improve. <br> Budget | 2, 4, 7, and | 1 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of Winns. | Capital <br> Improve. <br> Budget | 2, 4, 7, and | 1 | Low | Low | Deferred due to funding | 2015 |
| ES | Tornados | Install safe rooms in critical facilities | Town of Winns. Fairfield County/ School District | Capital <br> Improve. <br> Budget | 2, 4, 7, and | 2 | Low | Medium | Deferred due to funding | 2015 |
| PA | Fornados | Town declares Interna. Building Safety Week to promote safety in built environment | Town of Winns. Council | Operating Budget | , , and | 3 | Low | Low | Removed due goals being removed |  |


| SP | Hurricanes | Construct drainage dikes around sewer pump stations | Town of Winns. | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> and | 2 | Medium | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Construct cover for water reservoir | Town of Winns. | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Hurricanes | Construct holding pond at water treatment plant | Town of Winns. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PI | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week | Town of Winns. | Operating Budget | and | $z$ | Lew | Lew | Removed due to goals being removed |  |
| NB | Hurricanes | Provide a dry chemical standby fire suppression system | Town of Winns. | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> and | 2 | Low | Low | Deferred due to funding | 2015 |


| SP | Hurricanes | Replace <br> storm <br> damaged water storage tanks and pumps as needed | Town of Winns. | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> and | 2 | Medium | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Town of Winns. | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> and | 1 | Low | Low | Deferred due to funding | 2015 |
| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt procedure for suspension of operations during storms | Town of Winns. | Operating Budget | $2,4,5,7,$ <br> and | 2 | Low | Low | Deferred | 2015 |
| ES | Thunderstorms (Hail and Wind) | Clear power line and utility easements of debris | Town of Winns. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |


| PA | Thunderstorms (Hail and Wind) | Remove taller trees near critical facilities | Town of Winns. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail and Wind) | Acquire portable disinfection equipment | Town of Winns. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Low | Deferred due to funding | 2015 |
| PA | Earthquak. | Acquire and install collapsible water pipes | Town of Winns. | Capital <br> Improve. <br> Budget | $2,4,5$, and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Earthquak. | Acquire tanker truck for water division | Town of Winns. | Capital <br> Improve. <br> Budget | $2, .4,5$, and | 1 | Medium | Low | Deferred due to funding | 2015 |
| ES | Earthquak. | Ensure that evacuation routes are marked and open to ensure rapid evacuation from Summer Nuclear Facility | Town of Winns. and SCANA | Operating <br> Budgets | $2, .4,5$, and | 1 | Low | Medium | Ongoing | Ongoing |


| GIS | Flooding | Enhance GIS capacity to map all parcels and structures in flood areas | Town of Winns./ Fairfield County | Operating Budget | and 10 | 2 | Medium | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of Winns. | Operating <br> Budgets | and 10 | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of Winns. | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |


| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assembly | Operating <br> Budget | , 5, and | 3 | Low | Low | Deferred | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Drought | Add to the town's surface water supply | Town of Winns. | Capital <br> Budgets of <br> Public <br> Works <br> Programs | 2, , 4, 7, , and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| NB | Drought | Institute a drought water storage program for water emergencies | Town of Winns. | Capital <br> Budgets of <br> Public <br> Works <br> Programs | 2, , 4, 7, , and | 1 | Low | Low | Deferred due to funding | 2015 |
| PA | Prought | Develop and publicize water conservation practicesto respond to drought declarations | Town of Winms. | Operating <br> Budget | 1,5, and 6 | 4 | Lew | Lew | Duplicate Objective |  |

Source: Town of Winnsboro staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF RIDGEWAY

1. Develop better data for the town relating to type, impact, location and cost of the mitigation of natural disasters oecurring in Ridgeway.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the county.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards
threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now vulnerable to natwal disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF RIDGEWAY, SC

Natural hazards ranked by priority in the Town of Ridgeway:

1) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
2) Flooding
3) Winter Snow and Ice Storms
4) Hurricane
5) Tornados
6) Earthquakes
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county; these are the most important natural hazards as rated by Town of Ridgeway' participants in the planning process.

The following are the proposed projects to be undertaken/continued in the town for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Complted by |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | FAIRFIE <br> LD <br> ELECTR <br> IC <br> COOP/S <br> CE\&G | Public <br> Works <br> Operating <br> Budgets | 2, , 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Town of Ridgewa y/ <br> Fairfield Electric COOP/S CE\&G | Public <br> Works <br> Operating Budget | 2, , 4, 7, , and | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Enforce <br> town <br> zoning to restrict developme nt in floodplains | Town of Ridgewa y | Operating <br> Budget |  | 1 | Low | Low | Ongoing | Ongoing |


| PI | Flooding | Declare <br> May of each year to be Flood Awareness Month | Ridgewa <br> y Town <br> Council | Operating <br> Budget |  | 2 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Coordinat. with <br> Fairfield <br> County's <br> GIS system <br> to track all <br> structures <br> and <br> demolition <br> permits in <br> flood area | Town of Ridgewa y | Operating <br> Budget | and 10 | 2 | Low | Medium | Ongoing | Ongoing |
| NB | Flooding | Coordinate with other local gov'ts in county to make stream channel improveme nt | Town of Ridgewa y/ <br> Fairfield County/S CE\&G | Capital <br> Improve. <br> Budgets |  | 3 | Low | Low | Ongoing | Ongoing |


| PA | Flooding | Identify \& contact all repetitive loss properties | Town of Ridgewa y | Operating <br> Budgets |  | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of Ridgewa y | Operating <br> Budgets |  | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Undertake Planning to participate in Communit y Rating System | Town of Ridgewa y | Operating <br> Budgets |  | 1 | Low | Medium | Ongoing | Ongoing |
| SP | Flooding | Replace structurally obsolete bridges | Fairfield <br> County/S <br> CDOT | Capital Improve. Budgets | 2, , 4, 7, , and | 2 | High | Medium | Ongoing | Ongoing |


| PP | Winter Snow \& Ice Storms | Power line and utility R-O-W easement clearance | Fairfield Electric COOP/T own of Winnsbor o/SCE\& G | Electric utility providers | 2, , 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Fairfield <br> Electric <br> COOP/ S. <br> C. <br> DOT/Fairfi <br> eld <br> County/SC <br> E\&G | Town A. <br> Lakes/ <br> County <br> Public <br> Works <br> Operating <br> Budget | 2, , 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators for vulnerable citizens of Ridgeway | Town of Ridgeway | Capital Improve Budgets | 2, , 4, 7, , and | 1 | Mediu <br> m | Medium | Ongoing | Ongoing |
| ES | Hurricanes | Increased generating capacity at water plants and key pump stations | Town of Winnsbor o | Capital Improve. Budgets | 2, , 4, 7, , and | 2 | Mediu <br> m | Medium | Ongoing | Ongoing |


| SP | Hurricanes | Continue to enforce Internation al Building and Fire Codes with Fairfield County | Town <br> Ridgewa <br> y <br> Fairfield <br> County | Operating <br> Budgets | 2, , 4, and | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Hurricane | Cooperate with the County's Emergency Response Plans for Severe Weather | Town of <br> Ridgewa <br> y/ <br> Fairfield <br> County | Operating Budgets | 2, , 4, and | 2 | Low | Medium | Ongoing | Ongoing |
| SP | Tornados | Harden utility services identified as critical | Town of <br> Ridgewa y/ <br> Fairfield County/T own of Winnsbor o | Capital <br> Improve. <br> Budget | 2, , 4, 7, , and | 1 | Mediu <br> m | Medium | Ongoing | Ongoing |


| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town <br> Ridgewa <br> y <br> Fairfield <br> Electric <br> COOP <br> SCE\&G | Capital <br> Improve. <br> Budget | 2, , 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Tornados | Establish GIS mapping of all hazard events by location, effect, and time | Town of <br> Ridgewa <br> y/ <br> Fairfield <br> County | Operating Budgets of town and county | and 10 | 3 | Mediu <br> m | Low | Ongoing | Ongoing |
| PA | Earthquak. | Work with S.C. <br> DHEC to ensure that the major lakes \& ponds in town may withstand future e'quakes | Town of Ridgewa y. / S.C. DHEC | Operating Budget | , 4, and | 1 | Mediu <br> m | High | Ongoing | Ongoing |


| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the town | Town of Ridgewa y/ Fairfield County | Operating <br> Budgets | 5 and | 1 | Mediu <br> m | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop <br> and <br> publicize <br> water <br> conservatio <br> n practices <br> to respond <br> to drought <br> declaration <br> s | Ridgewa y | Operating Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Drought | Amend <br> state <br> drought <br> legislation <br> to stiffen <br>  <br> clarify <br> laws | S. C. <br> General <br> Assembly | Operating <br> Budget | , 5, and | 3 | Low | Low | Ongoing | Ongoing |


| PA | Drought | Develop and publicize water conservatio n practices to respend to drought declaration s | Ridgewa <br> y | Operating Budget | 1,5, and 6 | 4 | Low | Low | Duplicate <br> Objective |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Source: Town of Ridgeway' staff, 2010. Reviewed by the County Corresponding Committee for the 2010 update.

1. Develop better data for the JWC relating to type, impact, location and cost of the mitigation of natural disasters occurring in Jenkinsville area of Fairfield County.
2. Increase the JWC's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Protect the most vulnerable buildings and critical facilities of the JWC through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
4. Protect the public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in the mitigation of risks caused by natural hazards.
5. Increase understanding of all residents served by the JWC about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
6. Ensure that the availability and functioning of the infrastructure of the JWC will not be significantly disrupted by a natural disaster.
7. Inventory and map all water mains and lines and structures in flood plains and assess properties that are or may be threatened by flood events.

## ACTION PLAN FOR THE JENKINSVILLE WATER COMPANY IN WESTERN FAIRFIELD COUNTY, SC (Created by State Law, Special Legislation)

Natural hazards ranked by priority by the Jenkinsville Water Company:

1) Tornados
2) Winter Snow and Ice Storms
3) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
4) Hurricanes
5) Drought
6) Earthquakes
7) Flooding

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by the Jenkinsville Water Company's participants in the planning process.

The following are the proposed projects to be undertaken/continued by the Jenkinsville Water Company (JWC) for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB $=$ Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are explained in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Plan Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed By |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install standby generators at each well on the system | JWC | Capital Improve. Budgets | 2,3 , and 6 | 2 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Undertake road improvement to and at wells on the system | Fairfield County/ JWC/ SCDOT | Capital Improve. Budgets | 2, 3, and 6 | 1 | High | Medium | Deferred due to funding | 2015 |
| ES | Hurricanes | Develop <br> Back-up <br> Mobile <br> Water <br> Treatment <br> Facilities | JWC | Capital Improve. Budget | 2, 3, and 6 | 2 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | JWC | Capital Improve. Budget | 2, 3, and 6 | 2 | Medium | Medium | Deferred due to funding | 2015 |


| PP | Winter Snow \& Ice Storms | Power line \& road R-O-W clearance to wells | SCE\&G <br> / Elec. <br> Coops./ <br> SCDOT | Operating <br> Budget | 2, 3, and 6 | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Develop additional back-up pump facilities to move water through system | JWC | Capital <br> Improve. <br> Budget | 2, 3, and 6 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | SCE\&G <br> / Elec. <br> Coops./ <br> SCDOT | Public <br> Works <br> Operating <br> Budget | 2, 3, and 6 | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General Assembly | Operating <br> Budget | 4 and 5 | 3 | Low | Low | Deferred | 2015 |


| SP | Drought | Build new clear well and elevated storage tank to add to the JWC's water supply | JWC | Capital <br> Improve. <br> Budget | 2,3 and 6 | 2 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Drought | Publicize water conser. practices | JWC | Operating <br> Budget | 4 and 5 | 1 | Low | Low | Ongoing | Ongoing |
| ES | Forest <br> Fire/Wild <br> Fires | Improved suppression response (tankers, dry chemicals) | JWC/ <br> Fairfield <br> County <br> Rural <br> Fire <br> System | Capital <br> Budget | 2,3 , and 6 | 1 | Low | Low | Deferred due to funding | 2015 |
| PA | Forest <br> Fire/Wild <br> Fires | Fire break tree \& brush thinning Controlled open burning by permit (Red flag alerts) | Fairfield <br> County | Operating budget | 2,3 and 6 | 2 | Low | Medium | Ongoing | Ongoing |


| PA | Flooding | Clear and <br> drainage <br> channels <br> affecting <br> water mains | JWC | Capital <br> Improve. <br> Budget | 2,3, and 6 | 1 | Low | Ongoing |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Source: JWC staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE MID-COUNTY WATER COMPANY

1. Develop better data for the MCWC relating to type, impact, location and cost of the mitigation of natural disasters occurring in central and western areas of Fairfield County. 2. Increase the MCWC's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
2. Protect the most vulnerable buildings and critical facilities of the MCWC through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
3. Protect the public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in the mitigation of risks caused by natural hazards.
4. Increase understanding of all residents served by the MCWC about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
5. Ensure that the availability and functioning of the infrastructure of the MCWC will not be significantly disrupted by a natural disaster.
6. Inventory and map all water mains and lines and structures in flood plains and assess properties that are or may be threatened by flood events.

# ACTION PLAN FOR THE MID-COUNTY WATER COMPANY IN CENTRAL FAIRFIELD COUNTY, SC (Created by State Law, Special Legislation) 

Natural hazards ranked by priority by the Mid-County Water Company:

1) Tornados
2) Winter Snow and Ice Storms
3) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
4) Hurricanes
5) Drought
6) Earthquakes
7) Flooding

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by the Mid-County Water Company's participants in the planning process.

The following are the proposed projects to be undertaken/continued by the Mid-County Water Company (MCWC) for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are explained in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local <br> Goals <br> Address ed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed By: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install standby generators at each well on the system | MCWC | Capital <br> Improve. <br> Budgets | $2,3 \text {, and }$ $6$ | 2 | Medium | Medium | Ongoing | Ongoing ${ }^{\text {l }}$ |
| ES | Tornados | Undertake road improvement to and at wells on the system | Fairfield <br> County/ <br> MCWC/ <br> SCDOT | Capital <br> Improve. <br> Budgets | $2,3 \text {, and }$ $6$ | 1 | High | Medium | Ongoing | Ongoing2 |
| ES | Hurricanes | Develop <br> Back-up <br> Mobile <br> Water <br> Treatment <br> Facilities | MCWC | Capital <br> Improve. <br> Budget | $2,3 \text {, and }$ $6$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | MCWC | Capital <br> Improve. <br> Budget | $2,3 \text {, and }$ $6$ | 2 | Medium | Medium | Ongoing | Ongoing3 |


| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | SCE\&G <br> / Elec. <br> Coops./ <br> SCDOT | Public <br> Works <br> Operating <br> Budget | 2, 3, and 6 | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Forest <br> Fire/Wild <br> Fires | Fire break tree \& brush thinning Controlled open burning by permit | Fairfield County | Operating budget | $\begin{aligned} & 2,3 \text { and } \\ & 6 \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |
| SP | Forest <br> Fire/Wild <br> Fires | Fencing/security of wells and facilities | MCWC | Capital <br> Budget | $\begin{aligned} & 2,3 \text {, and } \\ & 6 \end{aligned}$ | 2 | Low | Low | Ongoing | Ongoing4 |
| PP | Winter Snow \& Ice Storms | Power line \& road R-O-W clearance to wells | SCE\&G <br> / Elec. <br> Coops./ <br> SCDOT | Operating <br> Budget | $\begin{aligned} & 2,3, \text { and } \\ & 6 \end{aligned}$ | 1 | Low | Low | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Develop additional back-up pump facilities to move water through system | MCWC | Capital <br> Improve. <br> Budget | 2, 3, and 6 | 1 | Medium | Medium | Ongoing | Ongoing 5 |


| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General <br> Assembly | Operating <br> Budget | 4 and 5 | 3 | Low | Low | Deferred | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Drought | Build new clear well and elevated storage tank to add to the JWC's water supply | MCWC | Capital <br> Improve. <br> Budget | 2,3, and 6 | 2 | Medium | Medium | Deferred due to funding | 2015 |
| PI | Drought | Publicize water conser. Practices | MCWC | Operating <br> Budget | 4 and 5 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Replace main line at Little River \& S. C. 213 | MCWC | Capital <br> Improve. <br> Budget | 2, 3, and 6 | 1 | Medium | Medium | Deferred due to funding | 2015 |

Source: Mid-County Water Company staff, 2004. Revised by the MCWC staff for the 2010 update

1. Generator transfer switch(s) installed at the office and booster pumps; two generators on hand.
${ }^{2}$. Roads to wells and tanks have been cleared and improved by MCWC and Fairfield County
${ }^{3 .}$ Tank(s) cleaned and painted. Pumps replaced (wiring, pipe, pumps)
2. Fences are repaired/replaced as needed. Debris removed from fence line.
${ }^{5}{ }^{4}$ Booster pump to supply back-up supply of water in District maintained and serviced. Generator hook-up at site to prvide electricity to operated booster pumps

## GOALS OF RICHLAND COUNTY

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in Richland County.
2. Increase the county's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the county to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the county.
4. Protect the most vulnerable populations, buildings and critical facilities in the county through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the county about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the county in the face of natural disasters.
8. Ensure that the residents of the county will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the county will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR UNINCORPORATED RICHLAND COUNTY, SC

Natural hazards ranked by priority in unincorporated Richland County:

1) Forest Fires/Wild Fires
2) Flooding
3) Winter Snow and Ice Storms
4) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
5) Hurricanes
6) Tornados
7) Earthquakes
8) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Richland County participants in the planning process.

The following are the proposed projects to be undertaken/continued in unincorporated Richland County for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA $=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural
Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed By: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Forest <br> Fire/Wild <br> Fires | Improved suppression response (tankers, dry chemicals) | Rich. County | Capital <br> Improve. <br> Budget | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| PA | Forest <br> Fire/Wild <br> Fires | Regulate open burning by permit (Red flag alerts) | Rich. County | Operating budget | 3 and 8 | $z$ | Low | Medium | Ongoing |  |
| PA | Forest <br> Fire/Wild <br> Fires | Fire Code enforcement/ inspections | Rich. County | Operating budgets | 2, 5, | 1 | Low | Low | Ongoing | Ongoing |
| PP | Forest <br> Fire/Wild <br> Fires | Construct dry hydrant program in rural areas of county | Rich. <br> County/ Columb. /Winns. | Capital Improve. Budgets | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |


| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS capacity to map, record wild fires, all hazard events | Rich. County | Operating <br> Budget | 10 | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Maintain \& upgrade warning siren system for Lake Murray Dam | SCANA | Capital <br> Improve. <br> Budget | 2,5, | 1 | Low | High | Ongoing | Ongoing |
| PA | Flooding | Enforce county zoning to restrict development in floodplains | Rich. County | Operating <br> Budget | 2,5 , | 1 | Low | Low | Ongoing | Ongoing |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Rich. County | Operating <br> Budget | 2,5, | 2 | Low | Low | Ongoing | Ongoing |


| PP | Flooding | Coordinate with other local gov'ts in county to make stream channel imp. | Rich. <br> County/ municip alities in county | Capital Improve. Budgets | 2, , 7, | 3 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Flooding | Replace structurally obsolete bridges | Rich. <br> County/ towns/ SCDOT | Capital <br> Improve. <br> Budgets | 2, , 7, | 2 | High | High | Ongoing | Ongoing |
| PA | Flooding | Identify \& contact all repetitive loss properties | Rich. <br> County/ towns in county | Operating <br> Budgets | 1,5, and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Rich. <br> County/ towns in county | Operating <br> Budgets | 2,5 , and 10 | 1 | Low | Low | Ongoing | Ongoing |


| PA | Flooding | Undertake <br> Planning to participate in Community Rating System | Rich. County/ towns in county | Operating <br> Budgets | 2,5 , and 10 | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $P A$ | Flooding | Maintain status in the NFIP | Richland County | Operating <br> Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | Rich. <br> County/ <br> SCANA <br> Elect. <br> Coops. | Electric utility providers | 2, 7, | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Rich. <br> County <br> Public <br> Works and <br> S. C. DOT | Rich. <br> County <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, , 7, | 1 | Low | Medium | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Use bus and van transit system for emergency shelters, evacuation \& communicat. capacity | Central Midlands Transit System/ DART system, etc. | CMRTA <br> and <br> DART <br> budgets | , 4, 7, | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Procure and Use elec. generators at critical facil. | Richland County/ school dist cities/ recreation comm. | Capital Improve. budgets | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Rich. <br> County \& School Districts \& cities | Capital <br> Improve. <br> Budgets | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt <br> procedure to <br> suspend operations during lightning storms | Rich. County | Operating Budget | $2,, 4,5$, | 2 | Low | Low | Ongoing | Ongoing |


| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | SCANA/ <br> Elec. <br> Coops | Public <br> Works Operating Budgets | 2, , 7, | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Rich. <br> County <br> \& Coops <br> SCANA | Public <br> Works <br> Operating Budget | 2, 7, | 2 | Low | Medium | Ongoing | Ongoing |
| ES | Hurricanes | Develop <br> Portable <br> Water <br> Treatment Facilities | Rich. <br> Utilities/ <br> Columb. | Capital Improve. Budget | 2, , 7, | 2 | Medium | Medium | Ongoing | Ongoing |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | Water provider s in county | Capital Improve. Budgets | 2, , 7, | 2 | Medium | Medium | Ongoing | Ongoing |


| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the county to handle more debris | Rich. County and solid waste contract ors | Capital <br> Improve. <br> Budgets | 2, , 7, | 2 | Medium | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Tornados | "Harden" <br> utility services especially in highly vulnerable areas | Rich. County | Capital <br> Improve. <br> Budget | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Rich. County | Capital <br> Improve. <br> Budget | 2, , 4, | 1 | Medium | Medium | Ongoing | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Rich. <br> County/ SCANA/ <br> Elect. <br> Coops and towns in county | Capital <br> Improve. <br> Budgets | 2, , 7, | 1 | Low | Medium | Ongoing | Ongoing |


| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Rich. County | Capital Improve. Budget | 2, , 7, | 2 | Medium | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Tornados | Establish GIS mapping of all hazard events by location, effect, and time | Rich. County, Columb. other municip. | Capital <br> Improve. <br> Budgets | 10 | 3 | Low | Medium | Ongoing | Ongoing |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in Rich. County | Rich. <br> County/ City of Columb. | Public <br> Works <br> Depts.' <br> Capital <br> Budgets | 2, , 4, | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Earthquak. | Work with SCANA to ensure that the Lake Murray Dam withstands future events | Rich. <br> County and SCANA | Operating <br> Budget | 2, 4, | 1 | Low | High | Ongoing | Ongoing |


| ES | Earthquak. <br> causing <br> dam <br> failure | Ensure that warning signal system works for rapid evacu. from lands downstream of Lake Dam | SCANA | Operating <br> Budget | 2, , 4, | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. <br> causing <br> dam <br> failure | Develop clearly marked and explained evacuation routes for dam failure | Rich. <br> County/ City of Columb. Irmo/ SCANA | Capital Improve. Budgets | 2, , 4, | 1 | Low | High | Ongoing | Ongoing |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the county | Rich. <br> County/ SCANA towns cities | Operating <br> Budget | 2, 4, 5, | 1 | Low | Low | Ongoing | Ongoing |


| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | County of Richl. | Operating <br> Budget | 5 | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assembly | Operating <br> Budget | 5, | 3 | Low | Low | Ongoing | Ongoing |
| NB | Drought | Develop a county water well program in vulnerable fringe areas of county | Rich. <br> County/ City of Columb. | Capital <br> Budgets of <br> Public <br> Works <br> Programs | 2, , 4, 7, | 2 | Low | Low | Ongoing | Ongoing |
| NB | Drought | Institute a drought water storage program for fire suppression | Rich. <br> County/ City of Columb. | Capital <br> Budgets of Public <br> Works <br> Programs | 2, 4, 7, | 1 | Low | Low | Ongoing | Ongoing |

$\left.\begin{array}{|l|l|l|l|l|l|l|l|l|}\hline \text { PA } & \text { Drought } & \begin{array}{l}\text { Pevelop and } \\ \text { publicize } \\ \text { water } \\ \text { eonservation } \\ \text { practices to } \\ \text { respend to } \\ \text { drought } \\ \text { declarations }\end{array} & \begin{array}{l}\text { Rich. } \\ \text { Comnty }\end{array} & \begin{array}{l}\text { Operating } \\ \text { Budget }\end{array} & 5, & 4 & \text { Lew } & \text { Lew } \\ \text { objective }\end{array}\right\}$

Source: Richland County Dept. of Emergency Services Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE CITY OF COLUMBIA

1. Develop better data for the city relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the City of Columbia.
2. Increase the city's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the city to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the city.
4. Protect the most vulnerable populations, buildings and critical facilities in the city through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the county about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the city in the face of natural disasters.
8. Ensure that the residents of the city will have secure homes, institutions and place of employment that are now wilnerable to natural disasters.
9. Enstre that the availability and functioning of the infrastructure of the city will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE CITY OF COLUMBIA, SC

Natural hazards ranked by priority in the City of Columbia:

1) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
2) Flooding
3) Winter Snow and Ice Storms
4) Tornados
5) Hurricanes
6) Earthquakes
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by City of Columbia participants in the planning process.

The following are the proposed projects to be undertaken/continued in the City of Columbia for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are explained in Section VII.

| Type | Type of <br> Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 <br> highest, 4 <br> lowest) | Cost | Benefit | Status |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| By: |  |  |  |  |  |  |  |  |  |


|  | Lightning) | facilities | Districts |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Procure and provide auxiliary power supply to critical facilities | City of Columb. | Capital Improve. Budget | 2, 4, 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Clear power <br> line and utility easements of debris | City of Columb. <br> SCANA | Public <br> Works' <br> Operating <br> Budgets | 2, 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | City of Columb. <br> SCANA | Public <br> Works' <br> Operating Budget | 2, 4, 7, , and | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Maintain \& upgrade warning siren system for Lake Murray Dam | SCANA | Capital <br> Improve. <br> Budget | 4, 5, and | 1 | Low | High | Ongoing | Ongoing |
| PA | Flooding | Enforce county zoning to | City of | Operating | , 4, 5, and | 1 | Low | Low | Ongoing | Ongoing |


|  |  | restrict development in floodplains | Columb. | Budget |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Columb. <br> City <br> Council | Operating <br> Budget | 5 and | 2 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Use <br> Columbia's GIS system to track all structures and demolition permits in flood areas | City of Columb. | Operating <br> Budget | and 10 | 2 | Low | Low | Ongoing | Ongoing |
| NB | Flooding | Coordinate with other local gov'ts in county to make stream channel improvement | City of Columb. Rich. County/ towns in county | Capital <br> Improve. <br> Budgets | 2, 4, 7, , and | 3 | Low | Low | Ongoing | Ongoing |


| PA | Flooding | Identify \& contact all repetitive loss properties | City of Columbia | Operating <br> Budgets | , 5, and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | City of Columbia | Operating <br> Budgets | , 5, and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Undertake Planning to participate in Community Rating System | City of Columbia | Operating <br> Budgets | , 5, , and | 1 | Low | Low | Ongoing | Ongoing |
| SP | Flooding | Replace structurally obsolete bridges | City of Columb./ SCDOT | Capital <br> Improve. <br> Budgets | 2, 4, 7, , and | 2 | High | High | Ongoing | Ongoing |


| PA | Flooding | Maintain status in the NFIP | City of Columbia | Operatin <br> g Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line clearance with the Elec. Coop. \& SCANA | Rich. <br> County/ <br> SCANA <br> Elect. <br> Coops. | Electric utility providers | 2, 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | City of Columb. Public Works and S. C. DOT | City of Columb./ County Public <br> Works <br> Operating Budget | $2,4,7,8$ <br> and 9 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Use bus and van transit system for emergency shelter, evacuation \& communicat. | Central <br> Midlands <br> Transit <br> System/ <br> DART <br> system, etc. | CMRTA <br> and DART budgets | , 4, 7, and | 1 | Low | Medium | Ongoing | Ongoing |


|  |  | capacity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facilities | City of Columb./Ri chland County/ school dist cities/ recreation comm. | Capital <br> budgets | 2, 4, 7, , and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Tornados | Harden utility services to facilities especially serving vulnerable populations | City of Columb./ Rich. County | Capital <br> Improve. <br> Budget | 2, 4, 7, , and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Tornados | Conduct engineering strength studies of critical fac. | City of Columb. | Capital <br> Improve. <br> Budget | 2, 7, and | 1 | Low | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | City of Columb. SCANA | Capital <br> Improve. <br> Budget | 2, 4, 7, , and | 1 | Low | Medium | Deferred due to funding | 2015 |


| ES | Tornados | Install safe rooms in critical facilities especially those serving vulnerable populations | City of Columb./ School District1 | Capital <br> Improve. <br> Budgets | 2, 4, 7, , and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Tornados | Establish GIS mapping of all hazard events by location, effect, and time | City of Columb./ Rich. County | Operating <br> Budgets <br> of city <br> and <br> county | and 10 | 3 | Low | Low | Ongoing | Ongoing |
| ES | Hurricanes | Increased generating capacity at water plants and key pump stations | City of Columb./ other water providers | Capital <br> Improve. <br> Budgets | 2, 4, 7, , and | 2 | High | High | Deferred due to funding | 2015 |
| SP | Hurricanes | Develop more raw and treated water impoundmen ts offsite | City of Columb. and other water providers in county | Capital Improve. Budgets | 2, 4, 7, , and | 2 | High | High | Deferred due to funding | 2015 |


| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the county to handle more debris | City of Columb. and solid waste contractors | Capital <br> Improve. <br> Budgets and Plans | 2, 4, 7, , and | 2 | High | High | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Hurricane | Implement the terms and provisions of Columbia's Severe Weather Operation Plans | City of Columb. | Capital <br> and <br> Operating <br> Budgets | 2, , 4, , and | 2 | Low | Low | Ongoing | Ongoing |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in the City of Columb. | City of Columb./ Rich. County | Public <br> Works <br> Depts. <br> Capital <br> Budgets | 2,4, and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Earthquak. <br> related <br> dam <br> failure | Work with SCANA to ensure that the Lake Murray Dam withstands future e'quakes | Rich. <br> County <br> and <br> SCANA | Operating <br> Budget | $2,, 4$, and | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Earthquak. <br> related <br> dam <br> failure | Ensure that warning signal system works for rapid evacu. from lands downstream of Lake Murray Dam | City of Columb. <br> SCANA | Operating <br> Budget | $2,, 4$, and | 1 | Low | High | Ongoing | Ongoing |
| PA | Earthquak. <br> related <br> dam <br> failure | Develop clearly marked and explained evacuation routes for Lake Murray dam failure | City of Columb./ Rich. County/ SCANA | Capital <br> Improve. <br> Budgets | $2,, 4$, and | 1 | Low | High | Ongoing | Ongoing |


| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the county | City of Columb. with Rich. County/ SCANA towns cities | Operating <br> Budget | , 4, 5, and | 1 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | City of Columb | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assembly | Operating <br> Budget | , 5, and | 3 | Low | Low | Deferred | 2015 |
| NB | Drought | Institute a drought water storage | City of Columb | Capital Budgets of Public | $2,, 4,7,$ <br> and | 1 | Low | Low | Ongoing | Ongoing |


|  |  | program for fire suppression |  | Works Programs |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respend to drought declarations | Newber. County | Operating <br> Budget | , 5, and | 4 | Low | Low | Duplicate Objective |  |

Source: City of Columbia staff of the Utilities Department, the Columbia-Richland 911 Communications staff, and staff of the Columbia Emergency Operations Center, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## gOALS OF THE TOWN OF ARCADIA LAKES

1. Develop better data for the town relating to type, impact, location and cost of the mitigation of natural disasters oceurring in Areadia Lakes.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other commminty goals or impeding hazard mitigation programming in the county.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and
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understanding of existing hazards and by fostering both individual and public
responsibility in the mitigation of risks through the techniques available to minimize
vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards
threatening local areas and the techniques available to minimize vulnerability to those
hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place
of employment that are now vulnerable to natural disasters.
9. Ensure that the availability and functioning of the imfrastructure of the town will not
be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or
may be repetitive loss properties.
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## ACTION PLAN FOR THE TOWN OF ARCADIA LAKES, SC

Natural hazards ranked by priority in the Town of Arcadia Lakes:

1) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
2) Flooding
3) Winter Snow and Ice Storms
4) Hurricane
5) Tornados
6) Earthquakes
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Town of Arcadia Lakes' participants in the planning process.

The following are the proposed projects to be undertaken/continued in the town for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local <br> Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed By: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | SCANA | Public <br> Works <br> Operating <br> Budgets | 2, , 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Town of Arcad. Lakes/ SCANA | Public <br> Works <br> Operating Budget | 2, , 4, 7, , and | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Enforce town zoning to restrict developmen t in flood- | Town of Arcad. <br> Lakes | Operating <br> Budget |  | 1 | Low | Low | Ongoing | Ongoing |


|  |  | plains |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Flooding | Declare <br> May of each year to be Flood Awareness Month | Arcad. <br> Lakes <br> Town <br> Council | Operating <br> Budget |  | 2 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Coordinat. with Rich. County's GIS system to track all structures and demolition permits in flood area | Town of Arcad. <br> Lakes | Operating <br> Budget | and 10 | 2 | Low | Medium | Ongoing | Ongoing |
| NB | Flooding | Coordinate with other local gov'ts in county to make stream channel improveme nt | Town of <br> Arcad. <br> Lakes/ <br> Rich. <br> County | Capital <br> Improve. <br> Budgets |  | 3 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Identify \& contact all repetitive | Town of Arcad. | Operating <br> Budgets |  | 1 | Low | Medium | Ongoing | Ongoing |


|  |  |  | loss <br> properties | Lakes |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Maintain status in the NFIP | Town of <br> Arcad. <br> Lakes | Operating <br> Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| PP | Winter <br> Snow \& Ice Storms | Power line and utility R-O-W easement clearance | SCANA <br> /City of Columb. | Electric utility providers | 2, , 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | SCANA/ <br> S. C. DOT/Rich County | Town A. <br> Lakes/ <br> County <br> Public <br> Works <br> Operating <br> Budget | 2, , 4, 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter <br> Snow \& Ice Storms | Use bus and van transit system for emergency shelter, evacuation \& communicat . capacity | Central Midlands Transit System/ DART system, etc. | CMRTA and DART budgets | , 4, and | 1 | Low | Medium | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Procure and use elec. generators for vulnerable citizens of Arcadia Lakes | Town A. Lakes | Capital Improve <br> Budgets | 2, , 4, 7, , and | 1 | Mediu <br> m | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Hurricanes | Increased generating capacity at water plants and key pump stations | City of Columb. /other water provider | Capital <br> Improve. <br> Budgets | 2, , 4, 7, , and | 2 | Mediu <br> m | Medium | Deferred due to funding | 2015 |
| SP | Hurricanes | Continue to enforce Internationa 1 Building and Fire Codes with Rich. County | Town A. <br> Lakes/ <br> Rich. <br> County | Operating <br> Budgets | 2, , 4, and | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Hurricane | Cooperate with the County's Emergency Response Plans for Severe | Town of Arcad. <br> Lakes/ <br> Rich. <br> County | Operating <br> Budgets | 2, , 4, and | 2 | Low | Medium | Ongoing | Ongoing |


|  |  | Weather |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. | Work with S.C. DHEC to ensure that the major lakes \& ponds in town may withstand future e'quakes | Town of Arcad. Lakes. / S.C. DHEC | Operating <br> Budget | , 4, and | 1 | Mediu m | High | Ongoing | Ongoing |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the town | Town of Arcad. <br> Lakes/ Rich. County | Operating <br> Budgets | 5 and | 1 | Mediu <br> $\boldsymbol{m}$ | High | Deferred due to funding | Ongoing |
| PA | Drought | Develop <br> and <br> publicize <br> water <br> conservatio <br> n practices | Arcadia Lakes | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |


|  |  | to respond to drought declarations |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend <br> state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assembly | Operating <br> Budget | , 5, and | 3 | Low | Low | Deferred | 2015 |
| PA | Prought | Develop and publicize water eonservatio n practices to respond to drought declafations | Areadia Lakes | Operating <br> Budget | ,5, and | 4 | Lew | Low | Duplicate objective |  |

Source: Town of Arcadia Lakes' staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## gOALS OF THE CITY OF FOREST ACRES

1. Develop better data for the city relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the City of Forest Acres.
2. Increase the city's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the city to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the city.
4. Protect the most vulnerable populations, buildings and critical facilities in the city through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the county about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the city in the face of natural disasters.
8. Ensure that the residents of the city will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9. Enstre that the availability and functioning of the infrastructure of the city will not be significantly disfupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE CITY OF FOREST ACRES, SC

Natural hazards ranked by priority in the City of Forest Acres:

1) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
2) Flooding
3) Winter Snow and Ice Storms
4) Tornados
5) Hurricanes
6) Earthquakes
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by City of Forest Acres' participants in the planning process.

The following are the proposed projects to be undertaken/continued in the city for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are explained in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed By: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | City of <br> Forest <br> Acres/ <br> Rich. <br> County/ <br> School <br> Districts | Capital <br> Improve. <br> Budgets | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | City of Columb. E. <br> Richlan. <br> Publ <br> Serv <br> District. <br> SCANA <br> City of <br> F. Acres | Public <br> Works <br> Operating <br> Budgets | $\begin{aligned} & 2,4,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | City of <br> Forest <br> Acres/ <br> SCANA | Public <br> Works <br> Operating <br> Budget | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |


| PA | Flooding | Enforce city zoning to restrict development in floodplains | City of Forest Acres | Operating <br> Budget | , 4, 7, and | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Forest <br> Acres <br> City <br> Council | Operating <br> Budget | , 4, 7, and | 2 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Coordinat. with Rich. County's GIS system to track all structures and demolition permits in flood areas | City of Forest Acres | Operating <br> Budget | and 10 | 2 | Low | Low | Ongoing | Ongoing |
| NB | Flooding | Coordinate with other local gov'ts in county to make stream channel improvement | City of <br> Forest <br> Acres/ <br> Rich. <br> County | Special millage agreement w/Richl. Co. for strmwater. managem. | , 2, , and 10 | 3 | Low | Low | Ongoing | Ongoing |


| NP | Flooding | Replace structurally obsolete bridges | Rich. <br> County/ <br> SCDOT | Capital Improve. Budgets | $2,, 4,7,$ <br> and | 2 | High | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Identify \& contact all repetitive loss properties | City of <br> Forest <br> Acres | Operating <br> Budgets | 1,2,3 and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | City of Forest Acres | Operating <br> Budgets | , 4, and | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Undertake Planning to participate in Community Rating System | City of Forest Acres | Operating <br> Budgets | , 4, and | 1 | Low | Low | Deferred due to funding | 2015 |


| PA | Flooding | Maintain status in the NFIP | City of Forest Acres | Operating <br> Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line \& utility easement clearance | City of Columb. Forest Acres/ SCANA /Columb |  <br> water and sewer utility providers | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | City of <br> Forest <br> Acres <br> SCANA/ <br> E. Rich. <br> Co. Pub. <br> Serv.Dist | City of F. <br> Acres/ <br> County <br> Public <br> Works <br> Operating <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Use bus and van transit system for emergency shelter, evacuation \& communicat. Capacity | Central Midlands Transit System/ DART system, etc. | CMRTA and DART budgets | 2, , 4, and | 1 | Low | Low | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facilities | Town A. <br> Lakes/ <br> Rich. <br> County/ school dist | Capital Improve. Budgets | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Tornados | Harden utility services to facilities especially serving vulnerable populations | E. Rich. <br> Public <br> Serv. <br> Dist./ <br> Rich. <br> County/ City of Columb. | Capital Improve. Budget | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | City of Forest Acres/ SCANA / SCDOT | Capital Improve. Budget | $2,, 4,7,$ <br> and | 1 | Low | Medium | Deferred due to funding | 2015 |
| GIS | Tornados | Establish GIS mapping of all hazard events by location, effect, and occurrence | City of <br> Forest <br> Acres/ <br> Rich. <br> County | Operating Budgets of city and county | and 10 | 3 | Low | Low | Ongoing | Ongoing |


| ES | Hurricanes | Increased generating capacity at water plants and key pump stations | City of Columb. | Capital Improve. Budgets | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Continue to enforce <br> International Building and Fire Codes | City of Forest Acres | Operating <br> Budgets | , 2, , 4, and | 2 | Low | Low | Ongoing | Ongoing |
| PA | Hurricane | Cooperate with the County's Emergency Response Plans for Severe Weather | City of <br> Forest <br> Acres/ <br> Rich. <br> County | Operating <br> Budgets | 2, , 4, 7, and | 2 | Low | High | Ongoing | Ongoing |


| PA | Earthquak. | Work with S.C. DHEC to ensure that the major lakes \& ponds in F.A. may withstand future e'quakes | City of <br> Forest <br> Acres/ <br> S.C. <br> DHEC | Operating <br> Budget | , 2, , 4, and | 1 | High | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Earthquak. | Develop speakers bureau about earthquake and other hazards to F . Acres | City of Forest Acres/ Rich. County | Operating <br> Budgets | 2, , 4, and | 1 | Low | High | Deferred due to funding | 2015 |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | City of Forest Acres | Operating Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |


| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assem- <br> bly | Operating Budget | , 5, and | 3 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respend to drought declarations | Gity of <br> Forest <br> Acres | Operating Budget | ,5, and | 4 | Low | Low | Duplicate objective |  |

Source: City of Forest Acres staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

1. Develop better data for the city relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Irmo.
2. Increase the city's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the county about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now wilnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF IRMO, SC

Natural hazards ranked by priority in the Town of Irmo:

1) Flooding
2) Forest Fires/Wild Fires
3) Tornados
4) Thunderstorms accompanied by Wind, Hail \& Lightning
5) Winter Snow and Ice Storms
6) Hurricanes
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by the Town of Irmo's participants in the planning process.

The following are the proposed projects to be undertaken/continued in the town for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are explained in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Enforce town zoning \& stormwater ordinances to restrict flood development | Town of Irmo | Operating <br> Budgets | 2,5, and | 1 | Low | Medium | Ongoing | Ongoing |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Town of Irmo Council | Operating <br> Budget | 2,5, and | 2 | Low | Low | Deferred due to funding | Ongoing |
| PP | Flooding | Coordinate with other local gov'ts in counties to make stream channel imp. | Town of Irmo/ Lexing \& Rich. Counties | Capital Improve. Budgets | 2, , 7, , and | 3 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Identify \& contact any repetitive loss properties | Town of Irmo | Operating <br> Budgets | , 5, and 10 | 1 | Low | Medium | Ongoing | Ongoing |


| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of Irmo | Operating <br> Budget | 2,5, and 10 | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Undertake Planning to improve Community Rating System Ranking | Town of Irmo | Operating Budget | 2,5, and 10 | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Maintain status in the NFIP | Town of Irmo | Operating <br> Budget | $2,4,5,7,10$ | 1 | Low | High | Ongoing | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove | Town of Irmo/ Counties SCANA /Elect. Coops | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Deferred due to funding | Ongoing |


|  |  | debris | SCDOT |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Tornados | Establish GIS mapping of all hazard events by location, effect, and time | Town of Irmo \& Lexing. \& Rich. Counties | Capital <br> Improve. <br> Budgets | and 10 | 3 | Low | Medium | Ongoing | Ongoing |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | Lexing./ <br> Rich. <br>  <br> School <br> Districts | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Deferred due to funding | 2015 |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure to suspend operations in elec. storms | Town of Irmo/ Counties | Operating <br> Budget | 2, , 4, 5, and | 2 | Low | Low | Deferred | 20115 |
| PA | Thunderstorms (Hail, Wind, | Clear power <br> line and utility easements of | SCANA <br> / Elec. <br> Coops | Public <br> Works Operating | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |


|  | Lightning) | debris |  | Budgets |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Remove taller trees near critical facilities | Town of Irmo/ <br> Lexing./ <br> Richlan <br> Counties <br> \& Coops <br> SCANA | Public <br> Works <br> Operating <br> Budget | 2, , 7, , and | 2 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Lexington County/ school dist cities/ recreation comm. | Capital <br> Improve. <br> budgets or operating budget if rental | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Hurricanes | Continue to enforce <br> International Building and Fire Codes | Town of Irmo/ Lexing. \& Rich. Counties | Operating <br> Budget | , 2, , 4, and | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Hurricanes | Cooperate with the two County's Emergency Response | Town of Irmo/ Rich. \& Lexing. | Operating <br> Budgets | 2, , 4, 7, and | 2 | Low | Medium | Ongoing | Ongoing |


|  |  | Plans for Severe Weather | Counties |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of Irmo | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General Assembly | Operating <br> Budget | , 5, and | 3 | Low | Low | Deferred | 2015 |
| PA | Drought | Develop and publicize water conservation practices to respend to drought | Town of Irme | Operating <br> Budget | , 5, and | 4 | Low | Low | Duplicate objective |  |



Source: Town of Irmo Administration and Police Departments Staff, 2004. Reviewed by the County Corresponding Committee for the 2009 update.

## GOALS OF TOWN OF BLYTHEWOOD

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in Town of Blytheweod.
2. Increase the county's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other commmnity goals or impeding hazard mitigation programming in the county.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the county about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now rulnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR UNINCORPORATED TOWN OF BLYTHEWOOD, SC

Natural hazards ranked by priority in the Town of Blythewood:

1) Forest Fires/Wild Fires
2) Flooding
3) Winter Snow and Ice Storms
4) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
5) Hurricanes
6) Tornados
7) Earthquakes
8) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by Town of Blythewood participants in the planning process.

The following are the proposed projects to be undertaken/continued in unincorporated Town of Blythewood for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of <br> Hazard | Activity | Lead Agent | Finance <br> Source | Local <br> Goals <br> Addresse <br> d | Priority (1 <br> highest, 4 <br> lowest | Cost | Benefit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| ES | Forest <br> Fire/Wild <br> Fires | Improved suppression response (tankers, dry chemicals) | Rich. County | Capital <br> Improve. <br> Budget | $2,, 7$, and | 1 | Medium | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Forest <br> Fire/Wild <br> Fires | Fire Code enforcement/ inspections | Rich. County | Operating budgets | 2,5, and | 1 | Low | Low | Ongoing | Ongoing |
| PP | Forest <br> Fire/Wild <br> Fires | Construct dry hydrant program in rural areas of county | Rich. <br> County/Col umb./Winns | Capital <br> Improve. <br> Budgets | $2,, 7$, and | 1 | Medium | Medium | Ongoing | Ongoing |
| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS capacity to map, record wild fires, all hazard events | Rich. County | Operating <br> Budget | and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Adopt development standards to restrict development in floodplains | Town of Blythewood | Operating <br> Budget | 2,5, and | 1 | Low | Low | Ongoing | Ongoing |


| PI | Flooding | Declare May of each year to be Flood Awareness Month | Town of Blythewood | Operating Budget | 2,5, and | 2 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Flooding | Coordinate with county to make stream channel imp. | Rich. <br> County/ <br> Town of Blythewood | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 3 | Low | Low | Ongoing | Ongoing |
| SP | Flooding | Replace structurally obsolete bridges | Rich. <br> County/ <br> Town of Blythewood SCDOT | Capital Improve. Budgets | 2, , 7, , and | 2 | High | High | Ongoing | Ongoing |
| PA | Flooding | Identify \& contact all repetitive loss properties | Rich. <br> County/ <br> Town of Blythewood | Operating <br> Budgets | , 5, and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Ensure that the FEMA Elevation | Rich. <br> County/ <br> Town of | Operating <br> Budgets | 2,5, , and 10 | 1 | Low | Low | Ongoing | Ongoing |


|  |  | Certificate is properly completed before issuance on property in flood areas | Blythewood |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Undertake Planning to participate in Community Rating System | Town of Blythewood | Operating <br> Budgets | 2,5 , and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | Rich. <br> County/ <br> SCANA <br> Fairfield <br> Elect. Coop. | Electric utility providers | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Town of Blythewood/ Rich. County Public Works and S. C. DOT | Rich. <br> County <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter <br> Snow \& Ice Storms | Use bus and van transit system for emergency | Central <br> Midlands <br> Transit <br> System/ | CMRTA and DART budgets | , 4, 7, and | 1 | Low | Medium | Ongoing | Ongoing |


|  |  | shelters, evacuation \& communicat. capacity | DART <br> system, etc. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Procure and Use elec. generators at critical facil. | Town of Blythewood/ school dist cities/ recreation comm. | Capital Improve. budgets | 2, , 7, , and | 1 | Medium | Medium | Ongoing | Ongoing |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Town of Blythewood / Rich. County/ School Districts \& cities | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Medium | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure to suspend operations during lightning storms | Town of Blythewood /Rich. County | Operating <br> Budget | $\begin{aligned} & 2,, 4,5, \\ & \text { and } \end{aligned}$ | 2 | Low | Low | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, | Clear power line and utility easements of | SCANA/ <br> Fairfield <br> Electric | Public <br> Works Operating | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |


|  | Lightning) | debris | Coop | Budgets |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Town of Blythewood / Rich. <br> County/ <br> Fairfield <br> Electric <br> Coop/ <br> SCANA | Public <br> Works <br> Operating Budget | 2, , 7, , and | 2 | Low | Medium | Ongoing | Ongoing |
| ES | Hurricanes | Develop <br> Portable <br> Water <br> Treatment <br> Facilities | City of Columbia/T own of Winnsboro. | Capital Improve. Budget | 2, , 7, , and | 2 | Medium | Medium | Ongoing | Ongoing |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | City of Columbia/T own of Winnsboro | Capital Improve. Budgets | 2, , 7, , and | 2 | Medium | Medium | Ongoing | Ongoing |
| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the county to handle more debris | Rich. <br> County and solid waste contractor | Capital Improve. Budgets | 2, , 7, , and | 2 | Medium | High | Ongoing | Ongoing |


| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly vulnerable areas | Rich. <br> County/utili ty providers | Capital <br> Improve. <br> Budget | 2, , 7, , and | 1 | Medium | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Town of <br> Blythwood/ <br> Rich. <br> County | Capital <br> Improve. <br> Budget | 2, ,4, and | 1 | Medium | Medium | Ongoing | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of Blythewood /Rich. <br> County/ SCANA/Fai rfield Electric Coop | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable | Town of Blythewood /Rich. County | Capital <br> Improve. <br> Budget | 2, , 7, , and | 2 | Medium | Medium | Ongoing | Ongoing |


|  |  | populations |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Tornados | Establish GIS mapping of all hazard events by location, effect, and time | Town of Blytheewoo d/Rich. County, | Capital <br> Improve. <br> Budgets | and 10 | 3 | Low | Medium | Ongoing | Ongoing |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in Rich. County | Town of Blythewood /Rich. County. | Public <br> Works <br> Depts.' <br> Capital <br> Budgets | 2, , 4, and | 1 | Low | Medium | Ongoing | Ongoing |
| PI | Earthquak <br> e. | Develop speakers bureau about earthquake and other natural disaster threats to the county | Town of Blythewood /Rich. <br> County/ SCANA towns cities | Operating <br> Budget | $2,4,5$ <br> and | 1 | Low | Low | Ongoing | Ongoing |




Source: Town of Blythewood, 2010.

## GOALS OF RICHLAND SCHOOL DISTRICT 1

1. Develop better data for RCSD1 relating to type, impact, location and cost of the mitigation of natural disasters affecting the district.
2. Increase the school district's internal capacity to initiate and sustain emergency response operations in cooperation with other units of government during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the school district to reduce the potential damaging effects of hazards without hindering other district goals or impeding hazard mitigation programming in the district or by other units of government. 4. Protect the most vulnerable buildings and critical facilities in RCSD1 through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
4. Protect the health, safety and welfare of students and staff by increasing their awareness of existing hazards and by fostering responsibility in the mitigation of risks caused by natural hazards.
5. Increase understanding of students and staff in the district about the natural hazards threatening school facilities and the techniques available to minimize vulnerability to those hazards.
6. Ensure that the availability and functioning of the infrastructure serving the district ' $s$ facilities will not be significantly disrupted by a natural disaster.

## ACTION PLAN FOR RICHLAND COUNTY SCHOOL DISTRICT 1

Natural hazards ranked by priority in Richland County School District 1:

1) Tornados
2) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
3) Flooding
4) Hurricanes
5) Earthquakes
6) Winter Snow and Ice Storms
7) Forest Fires/ Wild Fires

This is not intended to be an exclusive list of natural hazards that threaten the school district. These are the most important natural hazards as rated by Richland County School District 1 (RCSD1) participants in the planning process.

The following are the proposed projects to be undertaken/continued in the school district for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local <br> Goals <br> Addressed | Priority <br> (1 <br> highest, 4 <br> lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Conduct engineering strength studies of critical facil. | RCSD1 | Capital <br> Improve. <br> Budget | 2,3 , and 4 | 1 | Medium | High | Deferred due to funding | 2015 |
| ES | Tornados | Install safe rooms in critical facilities especially those serv. vulnerable populations | RCSD1 | Capital Improve. Budget | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Rich. <br>  <br> RCSD1 <br> \& cities | Capital Improve. Budgets | 2, 3, 4, and 5 | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Adopt procedure to suspend operations during lightning storms | RCSC1 | Operating Budget | 4, 5, and 7 | 2 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Rich. <br> County/ <br> RCSD1, <br> Coops, <br> SCANA | Public <br> Works <br> Operating Budget | 2, 3, 4, and 7 | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Identify all school structures in 100-year floodplains \& work with local government s to lower flood insurance premiums | RCSD1 | Operating <br> Budget | 2, 3, 4, and 7 | 2 | Low | High | Deferred due to funding | 2015 |


| SP | Flooding | Flood proof school buildings and critical facilities where need. | RCSD1 | Capital Budget | 2, 3, 4, and 7 | 2 | Low | High | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Flooding | Coordinate with local gov'ts in county to make critical stream channel improveme nt to lower flood levels | RCSD1/ <br> City of Columb. Rich. County/ municipalities in county | Capital Improve. Budgets | 2, 3, 4, and 7 | 3 | Low | Medium | Ongoing | Ongoing |
| SP | Hurricanes | Use identified school buildings as emergency shelters | RCSD1 | Operating. <br> Budget | 2, 3, 4, and 7 | 2 | Low | High | Ongoing | Ongoing |
| SP | Hurricanes | Rebuild school buildings damaged by hurricane event | RCSD1 | Capital <br> Budget | 2, 3, 4, and 7 | 2 | High | Low | Deferred due to funding | Ongoing |


| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in RCSD1 | RCSD1/ <br> Rich. <br> County/ <br> munici- <br> palities <br> in <br> county | Public <br> Works <br> Depts.' <br> Capital <br> Budgets | 2, 3, 4, and 7 | 1 | Low | High | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. | Work with SCANA to ensure that the Lake Murray Dam withstands future events | Rich. <br> County, <br> SCANA <br>  <br> RCSD1 | Operating Budgets | 2, 3, 4, and 7 | 1 | Low | High | Ongoing | Ongoing |
| ES | Earthquak. <br> causing <br> dam <br> failure | Ensure that warning signal system works for rapid evacu. from lands downstream of Lake Dam | SCANA <br> /RCSD1 | Operating <br> Budget | $2,3,4,5, \text { and }$ $6$ | 1 | Low | High | Ongoing | Ongoing |


| PA | Earthquak. <br> causing <br> dam <br> failure | Develop clearly marked and explained evacuation routes for dam failure | Rich. <br> County/ City of Columb. Irmo/ SCANA /RCSD1 | Capital Improve. Budgets | $\begin{aligned} & 2,3,4,5, \text { and } \\ & 6 \end{aligned}$ | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Use bus and van transit system for emergency shelters, evacuation \& communicat . capacity | RCSD1/ <br> Central Midlands <br> Transit System/ DART system, etc. | CMRTA and DART budgets | 2,3 , and 5 | 1 | Low | High | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and Use elec. generators at critical facil. | Richland County/ RCSD1 cities | Capital <br> Improve. <br> Budgets | $2,3,4,5, \text { and }$ $6$ | 1 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Forest <br> Fire/Wild <br> Fires | Create clear zones near critical facilities to lessen threat from forest/wild fires | RCSD1 | Capital <br> Improve. <br> Budget | 2, 3, 4, and 7 | 1 | Low | High | Deferred due to funding | 2015 |


| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS <br> capacity to <br> map, record <br> wild fires, <br> all hazard <br> events | RCSD1/ <br> Rich. <br> County | Operating <br> Budgets | $1.2,3,4$, and <br> 7 | 1 | Low | Low |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Source: Richland County School District 1 Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF RICHLAND SCHOOL DISTRICT 2

1. Develop better data for RCSD2 relating to type, impact, location and cost of the mitigation of natural disasters affecting the district.
2. Increase the school district's internal capacity to initiate and sustain emergency response operations in cooperation with other units of government during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the school district to reduce the potential damaging effects of hazards without hindering other district goals or impeding hazard mitigation programming in the district or by other units of government. 4. Protect the most vulnerable buildings and critical facilities in RCSD2 through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
4. Protect the health, safety and welfare of students and staff by increasing their awareness of existing hazards and by fostering responsibility in the mitigation of risks caused by natural hazards.
5. Increase understanding of students and staff in the district about the natural hazards threatening school facilities and the techniques available to minimize vulnerability to those hazards.
6. Ensure that the availability and functioning of the infrastructure serving the district 's facilities will not be significantly disrupted by a natural disaster.

## ACTION PLAN FOR RICHLAND COUNTY SCHOOL DISTRICT 2

Natural hazards ranked by priority in Richland County School District 2:

1) Tornados
2) Hurricanes
3) Winter Snow and Ice Storms

This is not intended to be an exclusive list of natural hazards that threaten the school district. These are the most important natural hazards as rated by Richland County School District 2 (RCSD2) participants in the planning process.

The following are the proposed projects to be undertaken/continued in the school district for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance <br> Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Tornados | Rebuild <br> school <br> buildings <br> damaged by <br> tornados | RCSD2 | Capital <br> Budget | $2,3,4$ and 7 | 2 | High | Low | Deferred due to funding | Ongoing |


| SP | Hurricanes | Use identified school buildings as emergency shelters | RCSD2 | Operating. <br> Budget | 2, 3, 4, and 7 | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Rebuild school buildings damaged by hurricane event | RCSD 2 | Capital <br> Budget | 2, 3, 4, and 7 | 2 | High | Low | Deferred due to funding | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and Use elec. generators at critical facil. | RCSC2 <br> Richland County/ towns in county | Capital <br> Improve. <br> budgets | 2, 3, 4, and 7 | 1 | High | Medium | Deferred due to funding | Ongoing |

Source: Richland County School District 2 Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF LEXINGTON COUNTY, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in Lexington County.
2. Increase the county's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the county to reduce the potential damaging effects of hazards without hindering other commmity goals or impeding hazard mitigation programming in the county.
4. Protect the most vulnerable populations, buildings and critical facilities in the county through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the county about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the county in the face of natural disasters.
8. Ensure that the residents of the county will have secure homes, institutions and place ef employment that are now winerable to natural disasters.
9. Enstre that the availability and functioning of the infrastructure of the county will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR UNINCORPORATED LEXINGTON COUNTY, SC

Natural hazards ranked by priority in unincorporated Lexington County:

1) Forest Fires/Wild Fires
2) Flooding
3) Winter Snow and Ice Storms
4) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
5) Hurricanes
6) Tornados
7) Earthquakes
8) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Lexington County participants in the planning process.

The following are the proposed projects to be undertaken/continued in unincorporated
Lexington County for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance Source | Local Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Forest <br> Fire/Wild <br> Fires | Improved suppression response (tankers, dry chemicals) | Lexing. County | Capital <br> Improve. <br> Budget | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| PA | Forest <br> Fire/Wild Fires | Regulate open burning by permit (Red flag alerts) | Lexing. County | Operating budget | 3 and 8 |  | Low | Medium | Ongoing | Ongoing |
| PA | Forest <br> Fire/Wild Fires | Fire Code enforcement/ inspections | Lexing. County | Operating budgets | 2, 5, | 1 | Low | Medium | Ongoing | Ongoing |
| PP | Forest <br> Fire/Wild <br> Fires | Construct dry hydrant program in rural areas of county | Lexing. County | Capital <br> Improve. <br> Budgets or Grants | 2,3, 7, | 1 | Medium | Medium | Ongoing | Ongoing |


| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS capacity to map, record wild fires, all hazard events | Lexing. County | Operating <br> Budget | 10 | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Enforce county zoning \& stormwater ordinances to restrict development in floodplains | Lexing. County | Operating <br> Budget | 2, 5, | 1 | Low | Medium | Ongoing | Ongoing |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Lexing. County | Operating <br> Budget | 2, 5, | 2 | Low | Low | Ongoing | Ongoing |
| PP | Flooding | Coordinate with other local gov'ts in county to make stream channel imp. | Lexing. County/ municip alities in county | Capital <br> Improve. <br> Budgets | 2, , 7, | 3 | Low | Low | Ongoing | Ongoing |


| SP | Flooding | Replace structurally obsolete bridges | Lexing. County/ towns/ SCDOT | Capital Improve. Budgets | 2, , 7, | 2 | High | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Identify \& contact all repetitive loss properties | Lexing. County/ towns in county | Operating <br> Budgets | , 5, and 10 | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Ensure that the FEMA <br> Elevation Certificate is properly completed before issuance on property in flood areas | Lexing. County/ towns in county | Operating <br> Budgets | 2,5 , and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Undertake <br> Planning to improve Community Rating System Ranking | Lexing. County/ towns in county | Operating <br> Budgets | 2,5 , and 10 | 1 | Low | Low | Ongoing | Ongoing |


| PA | Flooding | Maintain status in the NFIP | Lexingto <br> $n$ <br> County | Operating <br> Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | Lexing. <br> County/ SCANA <br> Elect. <br> Coops. | Electric utility providers | 2, , 7, | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Lexing. County Public Works and S. C. DOT | Lexing. <br> County <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, , 7, | 1 | Low | Medium | Onoging | Ongoing |
| ES | Winter Snow \& Ice Storms | Use bus and van transit system for emergency shelters, evacuation \& communicat. Capacity | Central Midlands Transit System/ DART system, etc. | CMRTA and DART budgets | 4, 7, | 1 | Low | Low | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Lexington County/ school dist cities/ recreation comm. | Capital Improve. budgets or operating budget if rental | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | Lexing. County \& School Districts \& cities | Capital <br> Improve. <br> Budgets | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure to suspend operations in elec. storms | Lexing. County | Operating <br> Budget | $2,, 4,5$, and | 2 | Low | Low | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Clear power line and utility easements of debris | SCANA <br> / Elec. <br> Coops | Public <br> Works <br> Operating <br> Budgets | 2, , 7, | 1 | Low | Medium | Ongoing | Ongoing |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Lexing. County \& Coops SCANA | Public <br> Works <br> Operating <br> Budget | 2, , 7, | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Hurricanes | Develop portable water treatment facilities | Lexing. <br> Joint <br> Munipi./ <br> City <br> Utilities/ <br> Columb. | Capital <br> Improve. <br> Budget | 2, , 7, | 2 | Medium | Medium | Ongoing | Ongoing |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | Water provider s in county | Capital Improve. Budgets | 2, , 7, | 2 | Medium | Medium | Ongoing | Ongoing |
| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the county to handle more debris | Lexing. County and solid waste contract ors | Capital <br> Improve. <br> Budgets | 2, , 7, | 2 | Medium | High | Ongoing | Ongoing |


| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly <br> vulnerable areas | Lexing. County | Capital <br> Improve. <br> Budget | 2, , 7, | 1 | Medium | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Lexing. County | Capital <br> Improve. <br> Budget | 2, , 4, | 1 | Medium | Medium | Ongoing | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Lexing. County/ SCANA /Elect. Coops SCDOT \& towns in county | Capital <br> Improve. <br> Budgets | 2, , 7, | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Lexing. County | Capital <br> Improve. <br> Budget | 2, , 7, | 2 | Medium | Medium | Ongoing | Ongoing |


| GIS | Tornados | Establish GIS mapping of all hazard events by location, effect, and time | Lexing. <br> County, West Columb. /Cayce \& other municip. | Capital <br> Improve. <br> Budgets | 10 | 3 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in Lexing. Cnty | Lexing. <br> County/ City of West Columb. /Cayce | Public <br> Works <br> Depts.' <br> Capital <br> Budgets | 2, , 4, | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Earthquak. | Work with SCANA to ensure that the Lake Murray Dam withstands future events | Lexing. <br> County and SCANA | Operating <br> Budget | 2, , 4, | 1 | Low | High | Ongoing | Ongoing |
| ES | Earthquak. <br> causing <br> dam <br> failure | Ensure that warning system works for rapid evacu. from lands downstream of Lake Dam | SCANA | Operating <br> Budget | 2, , 4, | 1 | Low | High | Ongoing | Ongoing |


| PA | Earthquak. <br> causing <br> dam <br> failure | Develop clearly marked and explained evacuation routes for dam failure | Lexing. County/ City of West Columb/ Cayce \& SCANA | Operating <br> Budgets | 2, , 4, | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the county | Lexing. County/ SCANA towns cities | Operating <br> Budget | 2, 4, 5, | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Earthquak. | Implement <br> Emergency <br> Notification <br> System to affected e'quake area | Lexing. County | Capital <br> Budget | 2, , 4, | 2 | Low | High | Ongoing | Ongoing |
| PA | Drought | Develop and publicize water conservation | Lexing. County/ Towns in | Operating <br> Budget | 5 | 1 | Low | Low | Ongoing | Ongoing |


|  |  | practices to respond to drought declarations | County |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assembly | Operating <br> Budget | 5, | 3 | Low | Low | No action, this is not a local issue |  |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Lexing. <br> County/ <br> Towns in <br> County | Operating <br> Budget | 5, | 1 | Low | Low | Ongoing | Ongoing |
| PP | Drought | Add to surface water reservoirs and resources in the county | Lexing. <br> County/ <br> Towns in <br> County | Capital <br> Budgets | 2, 4, | 2 | High | Medium | Ongoing | Ongoing |

Source: Lexington County Dept. of Public Works and Public Safety Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF LEXINGTON

1. Develop better data for the town relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Lexington.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other commmnity goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now vulnerable to naturaldisasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF LEXINGTON, SC

Natural hazards ranked by priority in the Town of Lexington:

1) Tornados
2) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
3) Flooding
4) Hurricanes
5) Earthquakes
6) Winter Snow and Ice Storms
7) Forest Fires/ Wild Fires
8) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by Town of Lexington participants in the planning process.

The following are the proposed projects to be undertaken/continued in the town for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Complete by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Plan to <br> improve early warning notification system (sirens, etc.) = | Town of Lexing./L exing. County | Operating <br> Budgets | 2, 4, 5, , 7, | 1 | Low | High | Deferred due to funding | 2015 |
| ES | Tornados | Improve EMS, Fire, Police training for hazard resp. | Town of Lexing./L exing. County | Operating <br> Budgets | 2, 4, 5, , 7, | 1 | Low | High | Ongoing | Ongoing |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Town of Lexing. | Capital <br> Improve. <br> Budget | 2, 4, 5, , 7, | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove | Town of Lexing./L exing. County | Capital Improve. Budgets | 2, 4, 5, , 7, | 1 | Low | Low | Deferred due to funding | 2015 |


|  |  | debris |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those serv. vulnerable populations | Town of Lexing. | Operating. <br> Budget | 2, 4, 5, 7, | 1 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Hurrican es | Use identified public buildings as emergency shelters | Town of Lexing | Operating. <br> Budget | 2, 4, 5, , 7, | 2 | Low | Low | Ongoing | Ongoing |
| SP | Hurrican es | Rebuild <br> public buildings damaged by hurricane event | Town of Lexing | Capital Improve. Budget | 2, , 47, | 2 | Medium | Low | Deferred due to funding | Ongoing |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | Town of Lexing./L exing. County/ SCANA | Capital <br> Improve. <br> Budgets | 2, , 47, | 1 | Low | Low | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Town of <br> Lexing./ <br> Lexing. <br> County <br> Public <br> Works/ S. <br> C. DOT | Rich. <br> County <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, , 47, | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Town of Lexing. | Capital Improve. Budgets | 2, 47, | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Flooding | Identify all critical facilities in 100-year floodplains \& plan to lower flood insurance premiums | Town of Lexing. | Operating <br> Budget | $, 2,, 4$, and 10 | 2 | Low | Low | Deferred due to funding | Ongoing |
| SP | Flooding | Flood proof town critical facilities where needed | Town of Lexing. | Capital <br> Budget | $, 2,, 4$, and 10 | 2 | Medium | Low | Deferred due to funding | Ongoing |


| NB | Flooding | Coordinate with local gov'ts in county to make critical stream channel improvement to lower flood levels | Town of <br> Lexing./ <br> Lexing. <br> County <br> Public <br> Works/ S. <br> C. DOT | Capital <br> Improve. <br> Budgets | 2, , 47, and | 3 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $P A$ | Flooding | Maintain status in the NFIP | Town of Lexington | Operating <br> Budget | $2,4,5,7,10$ | 1 | Low | High | Ongoing | Ongoing |
| ES | Forest <br> Fire/Wild <br> Fires | Create clear zones near critical facilities to lessen threat from forest/wild fires | Town of <br> Lexing./ <br> Lexing. <br> County <br> Public <br> Works/ S. <br> C. DOT | Capital <br> Improve. <br> Budget | 2, , 47 , , and | 1 | Low | Low | Ongoing | Ongoing |
| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS capacity to map, record wild fires, all hazard events | Town of <br> Lexing./ <br> Lexing. <br> County <br> Public <br> Works/ S. <br> C. DOT | Operating <br> Budgets | , 2, , 4, and 10 | 1 | Low | Low | Ongoing | Ongoing |


| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of Lexing. | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assembly | Operating Budget | , 5, and | 3 | Low | Low | Deferred | 2015 |
| PA | Prought | Develop and publicize water eonservation practices to respond to drought declarations | Town of Lexing. | Operating Budget | , 5, and | $\pm$ | Low | Low | Duplicate objective |  |

Source: Town of Lexington Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE CITY OF CAYCE, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the City of Cayce.
2. Increase the city's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the city to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the city.
4. Protect the most vulnerable populations, buildings and critical facilities in the city through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the city about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the city in the face of natural disasters.
8. Ensure that the residents of the city will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9. Enstre that the availability and functioning of the infrastructure of the city will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE CITY OF CAYCE, SC

Natural hazards ranked by priority in the City of Cayce:

1) Flooding
2) Forest Fires/Wild Fires
3) Tornados
4) Hurricanes
5) Winter Snow and Ice Storms
6) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by City of Cayce participants in the planning process.

The following are the proposed projects to be undertaken/continued in the City of Cayce for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Extend warning siren system for Lake Murray Dam to Cayce | SCANA | Capital Improve. Budget | 4,5, and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Flooding | Enforce city zoning to restrict development in floodplains | City of Cayce | Operating <br> Budget | , 4, 5, and | 1 | Low | Medium | Ongoing | Ongoing |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | City of Cayce | Operating <br> Budget | 5 and | 2 | Low | Low | Deferred due to funding | Ongoing |


| PA | Flooding | Use Cayce's GIS system to track all structures and demolition permits in flood areas | City of Cayce | Operating <br> Budget | and 10 | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Flooding | Coordinate with other local gov'ts in county to make stream channel improvement | Cayce/ <br> W. Cola. <br> Lexing. <br> County | Capital Improve. Budgets | 2, 4, 7, , and | 3 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Identify \& contact all repetitive loss properties | City of Cayce | Operating <br> Budget | , 5, and | 1 | Low | Low | Ongoing | Ongoing |


| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | City of Cayce | Operating <br> Budget | , 5, and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Undertake Planning to participate in Community Rating System | City of Cayce | Operating <br> Budgets | , 5, , and | 1 | Low | Low | Deferred due to funding | Ongoing |
| SP | Flooding | Procure and use elec. generators at designated critical facil. | City of Cayce/ Lex. Cnty. School District | Capital <br> Improve. budgets or operating budgets if rentals | 2, and 9 | 3 | Medium | Medium | Deferred due to funding | Ongoing |


| PA | Flooding | Conduct information meetings in flood prone areas informing citizens of the hazards or flooding and what they can do to prepare | City of Cayce | Operating budget | 2, , 7, , and | 2 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Maintain status in the NFIP | City of Cayce | Operating <br> Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| PA | Forest <br> Fires/ <br> Wild Fire | Clear public <br> lands as needed near critical facilities | City of Cayce/ Lexing. County/ School districts | Public <br> Works <br> Operating <br> Budgets | $2,4,5,7,$ <br> and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Forest <br> Fires/ <br> Wild Fire | Conduct detailed assessments of wild fire risks for critical facilities | City of Cayce | Cayce <br> Public <br> Works <br> Dept. <br> Capital <br> Budget | $2,4,5,7,$ <br> and | 1 | Low | Low | Deferred due to funding | Ongoing |


| GIS | Forest <br> Fires/ Wild Fire | Use GIS capacity to map, record all fire events | City of Cayce | Capital Improve. Budget | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Improve early warning system in Cayce for wind events | City of Cayce | Capital <br> Improve. <br> Budget | 2,7, , and | 1 | Low | Low | Deferred due to funding | Ongoing |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | City of Cayce | Capital Improve. Budget | 2, 7, and | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Tornados | "Harden" utility services especially in highly vulnerable areas | City of Cayce/ SCANA | Capital Improve. Budgets | 2,7, and | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| PA | Tornados | Conduct engineering strength studies of critical facil. | Cayce/ <br> Lexing. <br> County/ <br> School <br> district | Capital Improve. Budgets | 2, , 4, and | 1 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Cayce/ <br> Lexing. <br> County/ <br> SCANA <br> /Elect./ <br> SCDOT | Capital Improve. Budgets | 2, , 7, , and | 1 | Low | Low | Deferred due to funding | 2015 |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | City of Cayce Public Works and S. C. DOT | Cayce <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, , 7, , and | 1 | Low | Low | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Cayce/ <br> County/ <br> School <br> district | Capital Improve. budgets or operating budget if rental | 2, , 7, , and | 3 | Medium | Medium | Deferred due to funding | Ongoing |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | City of Cayce \& SCANA | Public <br> Works <br> Operating Budget | 2, , 7, , and | 2 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Install surge protectors in critical facilities | City of Cayce \& Lexing. School Dist 2/ Lexing. County | Capital Improve. Budgets | 2, , 4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Adopt procedure to suspend operations during lightning sto. | City of Cayce | Operating <br> Budget | 2 , and 4 | 2 | Low | Low | Deferred due to funding | 2015 |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | City of Cayce | Operating <br> Budget | 5 and | 1 | Low | Low | Deferred due to funding | Ongoing |


| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assem- <br> bly | Operating <br> Budget | 1,5 , and 6 | 3 | Low | Low | Deffered | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respend to drought declarations | $\begin{aligned} & \text { City of } \\ & \text { Gayce } \end{aligned}$ | Operating <br> Budget | ,5, and | 4 | Low | Low | Duplicate objective |  |

Source: City of Cayce Planning and Public Works staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## gOALS OF THE CITY OF WEST COLUMBIA, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the City of West Columbia.
2. Increase the city's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the city to reduce the petential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the city.
4. Protect the most vulnerable populations, buildings and critical facilities in the city through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the city about the natural hazards
threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the city in the face of natural disasters.
8. Ensure that the residents of the city will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9 . Ensure that the availability and functioning of the infrastructure of the city will not be significantly disrupted by a natural disaster.
9. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE CITY OF WEST COLUMBIA, SC

Natural hazards ranked by priority in the City of West Columbia:

1) Tornados
2) Hurricanes
3) Winter Snow and Ice Storms
4) Flooding
5) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
6) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by City of West Columbia participants in the planning process.

The following are the proposed projects to be undertaken/continued in the City of West Columbia for hazard mitigation during 20102015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance Source | Local Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Improve early warning system in city for wind events | City of West Columb. | Capital <br> Improve. <br> Budget | 2, , 7, and | 1 | Low | High | Deferred due to funding | Ongoing |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | City of West Columb. | Capital <br> Improve. <br> Budget | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Tornados | "Harden" utility services especially in highly vulnerable areas | City of West Columb. | Capital <br> Improve. <br> Budget | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Tornados | Conduct engineering strength studies of critical facil. | City of W. Columb. /Lexing. County | Capital <br> Improve. <br> Budget | 2, , 4, and | 1 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | W, Cola. <br> Public <br> Works/ <br> Lex. <br> County/ <br> SCANA <br> SCDOT | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Low | Low | Deferred due to funding | 2015 |
| NB | Hurricanes | Replace water storage tanks and pumps as needed | W. Cola. <br> Public <br> Works Dept. | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Hurricanes | Provide <br> mobile <br> backup <br> generators <br> for critical <br> facilities | W. Cola. <br> Public <br> Works/ <br> Safety <br> Depts | Capital <br> Improve. <br> Budgets | $2,4,5,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week annually | W. Cola City Council | Operating <br> Budget | 4, 6 and | 1 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | City of West Columb.S CANA | Capital Improve. Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | City of West Columb. and S. C. DOT | W. Cola. <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter <br> Snow \& Ice Storms | Procure and use elec. generators at critical facil. | W. Cola./ County/ School district | Capital <br> Improve. <br> budgets <br> or <br> operating budget if rental | $2, ~ 7, ~$ and | 3 | Medium | Medium | Deferred due to funding | Ongoing |


| PA | Flooding | Identify \& contact all repetitive loss properties | City of West Columb. | Operating <br> Budget | , 5, and | 1 | Low | Low | Deferred | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | City of West Columb. | Operating <br> Budget | , 5, and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Undertake Planning to participate in Community Rating System | City of West Columb. | Operating <br> Budget | , 5, , and | 1 | Low | Low | Deferrred | Ongoing |
| SP | Flooding | Procure and use elec. generators at designated critical facil. | City of West Columb. Lex. Cnty. School District | Capital <br> Improve. <br> budgets <br> or <br> operating budgets if rentals | 2, , 7, , and | 3 | Medium | Medium | Deferred due to funding | Ongoing |


| PA | Flooding | Maintain status in the NFIP | City of <br> West <br> Columbia | Operatin <br> g Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | City of <br> West Columb. \& SCANA | Public <br> Works <br> Operating <br> Budgets | 2, , 7, , and | 2 | Low | Low | Ongoing | Ongoing |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | City of West Columb. Lexing. County/Sc hool Distric | Capital <br> Improve. <br> Budgets | $2,, 4$, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure to suspend operations during lightning storms | City of West Columb | Operating <br> Budget | 2 , and 4 | 2 | Low | Low | Deferred | 2015 |


| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | City of West Columb. | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General Assembly | Operating Budget | , 5, and | 3 | Low | Low | Deferred | 2015 |
| PA | Prought | Develop and publicize water emnservation practices to respond to drought declarations | Gity of West Columb. | Operating Budget | ,5, and | 4 | Lew | Lew | Duplicate objective |  |

Source: City of West Columbia Fire Dept. and Public Works staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF SPRINGDALE, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Springdale.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.

8 . Ensure that the residents of the town will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9 . Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF SPRINGDALE, SC

Natural hazards ranked by priority in the Town of Springdale:

1) Flooding
2) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
3) Winter Snow and Ice Storms
4) Drought/Heat Wave
5) Hurricanes
6) Tornados

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Town of Springdale's participants in the planning process.

The following are the proposed projects to be undertaken/continued in the Town of Springdale for hazard mitigation during 20102015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Prepare \& Implement a storm water management plan \& ordinance | City of West Columb. | Operating <br> Budget | , 5, and | 1 | Low | Medium | Deferred due to funding | Ongoing |
| PP | Flooding | Improve stormwater \& drainage systems | Town of Springdale/Lex County | Capital <br> Budgets | $\begin{aligned} & 2,4,5,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Flooding | Identify \& contact all repetitive loss properties | Town of Springdale |  | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Low | Deferred due to funding | Ongoing |


| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of Springdale | Operating <br> Budget | 1,5 , and 8 | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Undertake Planning to participate in Community Rating System | Town of Springdale | Operating <br> Budget | , 5, 6, and | 1 | Low | Low | Deferred | Ongoing |
| GIS | Flooding | Use GIS capacity to map, record all flood and all hazard events | Town of Springdale | Operating <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Deferred due to funding | Ongoing |
| PA | Flooding | Maintain status in the NFIP | Town of Springd ale | Operating <br> Budget | $2,4,5,7,10$ | 1 | Low | High | Ongoing | Ongoing |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Town of Springdale \& SCANA | Public <br> Works <br> Operating <br> Budgets | 2, , 7, , and | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | Town of Springdale Lexing. County/ School Distric | Capital <br> Improve. <br> Budgets | 2,4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure to suspend operations during lightning storms | Town of Springdale | Operating <br> Budget | 2, and 4 | 2 | Low | Low | Deferred due to funding | 2015 |
| PP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Bury overhead utility lines located in the town | SCANA <br> /Bell <br> South/ <br> Time <br> Warner <br> Cable | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 3 | High | High | Deferred due to funding | 2015 |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Place new reflector tape or paint along road edges and at the center line of all major streets | SCDOT/ <br> Lexing. <br> County/ <br> Springdale | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,4,5,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Continue enforcement of International Building Codes | Town of Springdale | Operating <br> Budget | 2, , 7, , and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Winter Snow \& Ice Storms | Purchase or lease snow/ice/ debris removal equipment | Town of Springdale | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | High | Low | Deferred due to funding | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Springdale/ Lexing. County/ SCANA S. C. DOT | W. Cola. <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, 3, 7, , and | 1 | Low | Low | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Town of Springdale/ School District | Capital Improve. budgets or operating budget if rental | 2, , 7, , and | 3 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General <br> Assem- <br> bly | Operating <br> Budget | 4 and 5 | 3 | Low | Low | Deferred | 2015 |
| PI | Drought | Publicize water conser. practices | Town of Springdale/ West Columb. | Operating <br> Budget | 4 and 5 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Dam/ <br> Levee <br> Failure | Monitor and identify dams/levees in town to ensure structural soundness to withstand flooding | Town of Springdale/ S. C. Dept. of Nat. Resourc es | Operating <br> Budgets | 2, , 7, , and | 1 | Medium | Medium | Ongoing | Ongoing |


| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week <br> annually | Town of Springdale | Operating Budget | 4, 6 and | 1 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Hurricanes | Prepare <br> Emergency <br> Operations Plan identifying responsibilities of town depts. and contact list | Town of Springdale | Operating <br> Budget | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Tornados | Improve early warning system in town wind events | Town of Springdale | Capital <br> Improve. <br> Budget | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town of Springdale/ School District | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | Ongoing |


| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly <br> vulnerable areas | Town of Springdale/ Utilities serving the town | Capital Improve. Budgets | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Town of Springdale | Capital <br> Improve. <br> Budget | 2, , 4, and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Spring- <br> dale <br> Public <br> Works/ <br> Lex. <br> County/ <br> SCANA <br> SCDOT | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Deferred due to funding | 2015 |

Source: Town of Springdale Administrative and Public Works Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF SOUTH CONGAREE, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters occurring in the Town of South Congaree.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.

8 . Ensure that the residents of the town will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9. Ensure that the availability and functioning of the imfrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF SOUTH CONGAREE, SC

Natural hazards ranked by priority in the Town of South Congaree:

1) Flooding
2) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
3) Winter Snow and Ice Storms
4) Hurricanes
5) Tornados
6) Forest Fires/Wild Fires
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Town of South Congaree's participants in the planning process.

The following are the proposed projects to be undertaken/continued in the Town of South Congaree for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding on First and Congaree Creeks | Prepare \& Implement a storm water management plan \& ordinance | Town of South Congar. / Lexing. County | Operating <br> Budget | , 5, and | 1 | Low | Medium | Deferred due to funding | Ongoing |
| PP | Flooding on First and Congaree Creeks | Improve stormwater \& drainage systems | Town of South Congar. / Lexing. County | Capital <br> Budgets | $\begin{aligned} & 2,4,5,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Flooding on First and Congaree Creeks | Identify \& contact all repetitive loss properties | Town of South Congar. / Lexing. County | Operating Budgets | $2,4,5,7,$ <br> and | 2 | Low | Low | Deferred due to funding | Ongoing |


| PA | Flooding on First and Congaree Creeks | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of South Congar. / Lexing. County | Operating <br> Budget | , 5, and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding on First and Congaree Creeks | Rework and/ or replace bridges at S . C. 302 and Ramblin Rd. | Town of South Congar. / SCDOT | Operating <br> Budget | , 5, , and | 1 | High | High | Deferred due to funding | 2015 |
| GIS | Flooding on First and Congaree Creeks | Use GIS capacity to map, record all flood and all hazard events | Town of South Congar. / Lexing. County | Operating <br> Budget | $2,4,5,7,$ <br> and | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Maintain status in the NFIP | Town of South Congaree | Operatin <br> g Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Town of <br> South <br> Congar./ <br> SCANA <br> Lex. Co. | Public <br> Works <br> Operating <br> Budgets | 2, , 7, , and | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | Town of South Congar. / Lexing. County | Capital <br> Improve. <br> Budgets | 2, , 4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt <br> procedure to <br> suspend <br> operations <br> during <br> lightning storms | Town of South Congar. | Operating <br> Budget | 2 , and 4 | 2 | Low | Low | Deferred due to funding | Ongoing |
| PP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Bury overhead utility lines located in the town | SCANA/ <br> Bell <br> South/ <br> Time <br> Warner <br> Cable | Capital <br> Improve. <br> Budgets | $2,4,5,7,$ <br> and | 3 | High | High | Deferred due to funding | 2015 |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Place new reflector tape or paint along road edges and at the center line of all major streets | SCDOT/ <br> Lexing. <br> County/ <br> South <br> Congar. | Capital Improve. Budgets | $2,4,5,7,$ <br> and | 2 | Low | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Continue enforcement of <br> International Building Codes | Town of South Congar. | Operating <br> Budget | 2, , 7, and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Winter Snow \& Ice Storms | Purchase or lease snow/ice/ debris removal equipment | Town of South Congar. | Capital <br> Improve. <br> Budget | 2, , 7, , and | 1 | High | Low | Deferred due to funding | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Town of South Congar. / Lexing. County SCDOT | W. Cola. <br> Public <br> Works \& SCDOT <br> Operating <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Town of <br> South <br> Congar./ <br> School <br> Dist. 2/ <br> Lexing. <br> Cnty. | Capital <br> Improve. <br> budgets <br> or <br> operating budget if rental | $2,, 7$, and | 3 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week annually | Town of South Congar. | Operating <br> Budget | 4, 6 and | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Hurricanes | Prepare <br> Emergency <br> Operations <br> Plan <br> identifying responsibilities of town depts. and contact list | Town of South Congar. | Operating <br> Budget | 2, , 7, , and | 1 | Low | Low | Deferred due to funding | 2015 |
| ES | Tornados | Improve early warning system in town wind events | Town of South Congar./ Lexing. County | Capital <br> Improve. <br> Budget | 2, , 7, , and | 1 | Low | Medium | Deferred due to funding | Ongoing |


| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town of South Congar./ School District 2 | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Tornados | "Harden" utility services especially in highly vulnerable areas | Town of South Congar. / Utilities serving the town | Capital Improve. Budgets | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Town of South Congar. / Lexing. County | Capital Improve. Budget | 2, , 4, and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of South Congar. / Lexing. County/S CDOT | Capital Improve. Budgets | 2, , 7, , and | 1 | Low | Medium | Deferred due to funding | 2015 |


| PA | Forest <br> Fires/ Wild Fires | Carefully regulate outside burning with Red Flag alerts | Town of South Congar. /Lexing. County/S CDNR | Operating <br> Budgets | 2, , 7, , and | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of South Congar. | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assem- <br> bly | Operating <br> Budget | , 5, and | 3 | Low | Low | Deferred | 2015 |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of South Congar. | Operating <br> Budget | ,5, and | 4 | Low | Low | Duplicate objective |  |

Source: Town of South Congaree Administrative Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF SWANSEA, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters occurring in the Town of Swansea.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly dissupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF SWANSEA, SC

Natural hazards ranked by priority in the Town of Swansea:

1) Forest Fires/ Wild Fires
2) Tornados
3) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
4) Winter Snow and Ice Storms Hurricanes
5) Hurricanes
6) Flooding
7) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by Town of Swansea participants in the planning process.

The following are the proposed projects to be undertaken/continued in the Town of Swansea for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Forest <br> Fire/Wild <br> Fires | Improved suppression response (tankers, dry chemicals) | Town of Swansea / Lex. County Fire Dept. | Capital <br> Improve. <br> Budget | 2, , 7, , and | 1 | Medium | High | Deferred due to funding | 2015 |
| PA | Forest <br> Fire/Wild <br> Fires | Fire Code enforcement/ inspections | Town of Swansea | Operating budget | 2, 5, and | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Forest <br> Fire/Wild <br> Fires | Improve ambulance and fire dept response time | Town of Swansea /Lex. County EMS | Operating <br> Budgets | 2, , 7, , and | 1 | Medium | Low | Ongoing | Ongoing |
| SP | Tornados | "Harden" utility services especially in highly vulnerable areas | Town of Swansea /Lexing. County | Capital Improve. Budgets | 2,, 7, , and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Tornados | Conduct engineering strength studies of critical facil. | Town of Swansea /Lexing. County/ Lex. School Distr. 4 | Capital Improve. Budgets | 2, , 4, and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of <br> Swansea <br> /Lexing. <br> County/ <br> SCANA <br> /Elect. <br> Coops <br> SCDOT | Capital Improve. Budgets | 2, , 7, and | 1 | Low | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town of <br> Swansea /Lexing. County/ Lex. <br> School <br> Dist. 4 | Capital Improve. Budgets | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | Ongoing |


| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Town of Swansea / School District 4/ Recreat. Comm./ Lexing. County | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure to suspend operations in elec. storms | Town of Swansea | Operating <br> Budget | 2, , 4, 5, and | 2 | Low | Low | Deferred due to funding | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Clear power line and utility easements of debris | SCANA <br> /Town <br> of <br> Swansea | Public <br> Works <br> Operating <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Town of Swansea / SCANA | Public <br> Works <br> Operating <br> Budgets | 2, , 7, , and | 2 | Low | Medium | Ongoing | Ongoing |
| NB | Hurricanes | Replace water storage tanks and pumps as | Town of <br> Swansea <br> Public <br> Works | Capital <br> Improve. <br> Budgets | $2,4,5,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | Ongoing |


|  |  | needed | Dept. / <br> Joint <br> Munici. <br> Water \& Sewer |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Hurricanes | Provide mobile backup generators for critical facilities | Town of Swansea Public Works/ Safety Depts | Capital <br> Improve. <br> Budgets | $2,4,5,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness Week annually | Town of Swansea Council | Operating <br> Budget | 4, and | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of Swansea | Operating <br> Budget | 2,5, and 10 | 1 | Low | Low | Ongoing | Ongoing |


| PA | Flooding | Undertake <br> Planning to <br> improve <br> Community <br> Rating <br> System <br> Ranking | Town of Swansea | Operating <br> Budget | 2,5, and 10 | 1 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Flooding | Map all structures in 100-year floodplains \& floodways | Town of Swansea /Lexing. County | Operating <br> Budgets | $, 2,, 4,5$ <br> and 10 | 1 | Low | Low | Ongoing | Ongoing |
| $P A$ | Flooding | Maintain status in the NFIP | Town of <br> Swansea | Operating <br> Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of Swansea | Operating <br> Budget | 5 and | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Drought | Amend state drought legislation to | S. C. <br> General <br> Assem- | Operating <br> Budget | , 5, and | 3 | Low | Low | Deferred | 2015 |


|  |  | stiffen penalties \& clarify laws | bly |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of Swansea | Operating <br> Budget | , 5, and | 4 | Lew | Low | Duplicate objective |  |

Source: Town of Swansea Administrative Staff and Police Department, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF PELION, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Swansea.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9 . Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
9. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties, should any flood prone areas be annexed into the town limits. At present there are no structures located in the one identified FEMA flood prone area within the town limits.

## ACTION PLAN FOR THE TOWN OF PELION, SC

Natural hazards ranked by priority in the Town of Pelion:

1) Tornados
2) Hurricanes
3) Winter Snow and Ice Storms
4) Flooding
5) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
6) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Town of Pelion participants in the planning process.

The following are the proposed projects to be undertaken/continued in the Town of Pelion for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of <br> Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 <br> highest, 4 <br> lowest) | Cost | Benefit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ES | Tornados | Improve <br> early <br> warning <br> system in <br> city for wind | Town of <br> Pelion | Capital <br> Improve. <br> Budget | $2,, 7$, and | 1 | Status |  |


|  |  | events |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town of Pelion | Capital <br> Improve. <br> Budget | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Tornados | "Harden" <br> utility <br> services especially in highly vulnerable areas | Town of Pelion/ Lex. School District 1 | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Town of Pelion /Lexing. County/ School Distr. 1 | Capital Improve. Budgets | 2, , 4, and | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of Pelion/ Lex. County/ SCANA SCDOT | Capital Improve. Budgets | $2, ~ 7, ~$ and | 1 | Low | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Hurricanes | Replace water storage tanks and pumps as needed | Town of <br> Pelion/ <br> Joint <br> Munici. <br>  <br> Sewer <br> Comm. | Capital Improve. Budgets | $2,4,5,7$ <br> and | 2 | Medium | Medium | Responsibility of the LCJMWSC | Ongoing |
| ES | Hurricanes | Provide mobile backup generators for critical facilities | Town of Pelion/ Lexing. County/ Lex. School Dist. 1 | Capital Improve. Budgets | $2,4,5,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week annually | Town of Pelion Council | Operating <br> Budget | 4, and | 1 | Low | Low | Deferred due to funding | Ongoing |


| PP | Winter Snow \& Ice Storms | Power line easement clearance | SCANA / Elec, Coop. | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Town of Pelion and <br> S. C. DOT | Town of Pelion \& SCDOT Operating Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Town of Pelion/ Lex. <br> School Dist. 1 | Capital <br> Improve. budgets or operating budget if rental | 2, , 7, , and | 3 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Flooding | Identify \& contact all repetitive loss properties | Town of Pelion | Operating Budget | , 5, and | 1 | Low | Low | There are no structures located in the only flood prone area of the town | There are no structures located in the only flood prone area of the town |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on | Town of Pelion | Operating <br> Budget | , 5, and | 1 | Low | Low | There are no structures located in the only flood prone area of the town | There are no structures located in the only flood prone area of the town |


|  |  | property in <br> flood areas |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Undertake Planning to participate in Community Rating System | Town of Pelion | Operating <br> Budget | , 5, , and | 1 | Low | Low | There are no structures located in the only flood prone area of the town | There are no structures located in the only flood prone area of the town |
| SP | Flooding | Procure and use elec. generators at designated critical facil. | Town of Pelion/ Lex. Cnty. School Dist. 1 | Capital <br> Improve. <br> budgets or operating budgets if rentals | 2, , 7, , and | 3 | Medium | Medium | There are no structures located in the only flood prone area of the town | There are no structures located in the only flood prone area of the town |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Town of Pelion \& SCANA / Elec. Coop. | Public <br> Works <br> Operating <br> Budgets | $2, ~ 7, ~$ and | 2 | Low | Medium | Ongoing | Ongoing |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Town of Pelion Lexing. County/ School Dist. 1 | Capital <br> Improve. <br> Budgets | 2, , 4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt procedure to suspend operations during lightning storms | Town of Pelion | Operating <br> Budget | 2 , and 4 | 2 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of Pelion | Operating Budget | 5 and | 1 | Low | Low | To be accomplishe d by the LCJMWSC | Ongoing |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General Assembly | Operating Budget | , 5, and | 3 | Low | Low | Deferred until required by $S$. C. Legislature | Awaiting requirement |
| PA | Drought | Develop and publicize water eonservation practices to respond to drought declarations | Town of Pelion | Operating <br> Budget | ,5, and | 4 | Low | Low | Duplicate objective |  |


| PP | Drought | Develop additional deep well water sources | Town of Pelion | Capital <br> Budget | ,5, and | 1 | Medium | Medium | Not applicable, as all water purchased from LCJMWSC from West Columbia WTP | Not applicable, as all water purchased from LCJMWSC from West Columbia WTP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Source: Town of Pelion administrative staff and Mayor, 2004. Revised by The Town of Pelion, 2010

## GOALS OF THE TOWN OF CHAPIN, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Chapin.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other commmnity goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now rulnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF CHAPIN, SC

Natural hazards ranked by priority in the Town of Chapin:

1) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
2) Tornados
3) Forest Fires/Wild Fires
4) Drought/Heat Wave
5) Hurricane
6) Winter Snow and Ice Storms
7) Earthquakes
8) Drought/Heat

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Town of Chapin participants in the planning process.

The following are the proposed projects to be undertaken/continued in the Town of Chapin for hazard mitigation during 20102015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | Town of Chapin/ Lexing. County School District 5 | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt procedure to suspend operations in elec. storms | Town of Chapin | Operating <br> Budget | $2,, 4,5$, and | 2 | Low | Low | Deferred due to funding | 2015 |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | SCANA <br> / Elec. <br> Coops/ <br> Town of Chapin | Public <br> Works <br> Operating <br> Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Town of Chapin \& Coops SCANA | Public <br> Works <br> Operating <br> Budget | 2, , 7, , and | 2 | Low | Medium | Ongoing | Ongoing |


| PP | Thunderstorms (Hail, Wind, Lightning) | Encourage elec. utilities to place new electric lines below ground | Electric <br> Coops / <br> SCANA | Capital Improve. Budgets | 2, , 7, , and | 2 | Low | High | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly vulnerable areas | Town of Chapin/ Lexing. Cnty. School Dist. 5 | Capital <br> Improve. <br> Budget | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Town of Chapin/ Lexing. Cnty. School Dist. 5 | Capital Improve. Budget | 2, , 4, and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of Chapin/ SCANA /Elect. Coops SCDOT Lexing. County | Capital Improve. Budgets | 2, , 7, , and | 1 | Low | Medium | Deferred due to funding | 2015 |


| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town of <br> Chapin/ <br> Lexing. <br> County. <br> Lex. <br> School <br> Dist. 5 | Capital <br> Improve. <br> Budget | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Tornados | Establish GIS mapping of all hazard events by location, effect, and time | Town of <br> Chapin/ <br> Lexing. <br> County. | Capital Improve. Budgets | and 10 | 3 | Low | Low | Deferred due to funding | Ongoing |
| ES | Forest <br> Fire/Wild Fires | Improved suppression response (tankers, dry chemicals) | Town of <br> Chapin/ <br> Lexing. <br> County | Capital <br> Improve. <br> Budget | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
|  |  |  |  |  |  |  |  |  | Deleted due to the goals being deleted |  |
| PA | Forest <br> Fire/Wild Fires | Fire Code enforcement/ inspections | Town of Chapin/ Lexing. County | Operating budgets | 2,5, and | 1 | Low | Medium | Ongoing | Ongoing |


| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS capacity to map, record wild fires, all hazard events | Town of Chapin/ Lexing. County | Operating <br> Budget | and 10 | 1 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought/ <br> Heat Wave | Ensure that <br> Chapin's <br> Drought <br> Manage. <br> Ordinance is up-to-date and enforced | Town of Chapin | Operating <br> Budget | 2, , 7, , and | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Drought/ <br> Heat Wave | Monitor <br> water use and impose restrictions as needed | Town of Chapin/ City of Columb. | Operating <br> Budgets | 2, , 7, , and | 1 | Low | Low | Ongoing | Ongoing |
| ES | Hurricanes | Develop portable water treatment facilities | Town of Chapin/ City of Columb. | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Hurricanes | Replace water storage tanks and pumps as | Chapin/ City of Columb. | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | Ongoing |


|  |  | needed |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the county to handle more debris | Town of Chapin and solid waste contract ors | Capital <br> Improve. <br> Budgets | 2, , 7, , and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Hurricanes | Prepare <br> Emergency Operations Plan to Link with Lexing. County's Plan | Town of Chapin/ Lexing. County. | Operating <br> Budgets | 2, , 7, , and | 2 | Low | Low | Deferred due to funding | Ongoing |
| ES | Winter <br> Snow \& Ice Storms | Debris removal and road clearance work | Town of Chapin/ Lexing. County/ SDCOT | Town of Chapin/ Lexing. County/ SCDOT Operating Budgets | 2, , 7, , and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter <br>  <br> Ice Storms | Procure and use elec. generators at critical facil. | Town of Chapin Lexington County/ School | Capital <br> Improve. budgets or operating budget if | 2, , 7, , and | 1 | Medium | Medium | Deferred due to funding | Ongoing |


|  |  |  | Dist 5 | rental |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in Lexing. Cnty | Town of Chapin/ Lexing. County | Capital <br> Improve. <br> Budgets | 2, , 4, and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the town | Town of Chapin/ Lexing. County | Operating <br> Budgets | $2,4,5$, and | 1 | Low | Low | Deferred due to funding | 2015 |
| ES | Earthquak. | Implement "Reverse 911" Alert to affected e'quake areas | Town of Chapin | Capital <br> Budget | 2, , 4, and | 2 | Medium | High | Deferred due to funding | 2015 |
| PA | Flooding | Maintain status in the NFIP | Town of Chapin | Operating <br> Budget | $2,4,5,7,10$ | 1 | Low | High | Ongoing | Ongoing |


| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Town of Chapin | Operating Budget | 5 and | 1 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General Assembly | Operating <br> Budget | , 5, and | 3 | Low | Low | Deferred due to funding | 2015 |
| PA | Drought | Develop and publicize water eonservation practices to respond to drought declarations | Town of Chapin | Operating Budget | ,5, and | 4 | Lew | Lew | Duplicate objective |  |

Source: Town of Chapin Mayor and Public Safety Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF BATESBURG-LEESVILLE, SC

1. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
2. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
3. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
4. Protect the public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in the mitigation of risks caused by natural hazards.
5. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
6. Maintain the economic vitality of the town in the face of natural disasters.
7. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
8. Ensure that the residents of the town will have secure homes, institutions and places of employment that are now vulnerable to natural disasters.
9. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters occurring in the Town of Batesburg-Leesville.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF BATESBURG-LEESVILLE, SC

Natural hazards ranked by priority in the Town of Batesburg-Leesville, SC:

1) Tornados
2) Hurricanes
3) Winter Snow and Ice Storms
4) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
5) Flooding
6) Drought/Heat

This is not intended to be an exclusive list of natural hazards as rated by the Town of Batesburg-Leesville participants in the planning process.

The following are the proposed projects to be undertaken/continued in the Town of Batesburg for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of <br> Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 <br> highest, 4 <br> lowest | Cost | Benefit | Sompleted by: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| ES | Tornados | Improve early warning system in city for wind events | Town of BatesbLeesv. | Capital <br> Improve. <br> Budget | $1,2,3,7,$ <br> and 8 | 1 | Low | High | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town of BatesbLeesv. / Lexing. School Dist 3 | Capital <br> Improve. <br> Budgets | $1,2,3,7,$ <br> and 8 | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly vulnerable areas | Town of BatesbLeesv./ Lexing. County | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 1,2,3,6,7 \text {, } \\ & \text { and } 8 \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts | Batesb- <br> Leesv./ <br> Public <br> Works/ <br> Lex. | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 1,2,3,6,7, \\ & \text { and } 8 \end{aligned}$ | 1 | Low | Medium | Deferred due to funding | 2015 |


|  |  | to remove debris | County/ <br> SCANA <br> SCDOT |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Hurricanes | Replace water storage tanks and pumps as needed | Town of Bates. Leesv. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 1,2,3,6,7 \text {, } \\ & \text { and } 8 \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Hurricanes | Provide <br> mobile <br> backup <br> generators <br> for critical <br> facilities | Town of Bates.Leesv./ School Dist. 3 | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 1,2,3,6,7 \text {, } \\ & \text { and } 8 \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week annually | Bates.- <br> Leesv. <br> Town <br> Council | Operating <br> Budget | 2, 4, 6 and 8 | 1 | Low | Low | Deferred due to funding | Ongoing |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | Town of Bates.Leesv./ SCANA | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 1,2,3,6,7, \\ & \text { and } 8 \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Bates- <br> Leesv. <br> Public <br> Works/ <br> SCDOT | Bates.- <br> Lees. <br> Town <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | $\begin{aligned} & 1,2,3,6,7, \\ & \text { and } 8 \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Town of Bates.Leesv./ County/ School Dist. 3/ recreation comm. | Capital <br> Improve. <br> budgets or operating budget if rental | $\begin{aligned} & 1,2,3,6,7 \text {, } \\ & \text { and } 8 \end{aligned}$ | 3 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Install surge protectors in critical facilities | Town of Bates.- <br> Leesv./ <br> Lexing. <br> County/ <br> School <br> Distric 3 | Capital <br> Improve. <br> Budgets | $1,2,3,4,$ <br> and 8 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure to suspend operations during lightning | Town of BatesbLeesv. | Operating <br> Budget | $\begin{aligned} & 1,2,3,6,7 \text {, } \\ & \text { and } 8 \end{aligned}$ | 2 | Low | Low | Deferred due to funding | 2015 |


|  |  | storms |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Identify \& contact all repetitive loss properties | Town of BatesbLeesv. | Operating <br> Budget | $\begin{aligned} & 1,2,3,6,7, \\ & 8,9, \text { and } 10 \end{aligned}$ | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of BatesbLeesv. | Operating <br> Budget | $\begin{aligned} & 1,2,3,6,7 \\ & 8,9, \text { and } 10 \end{aligned}$ | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Undertake Planning to participate in Community Rating System | Town of BatesbLeesv. | Operating <br> Budget | $\begin{aligned} & 1,2,3,6,7, \\ & 8,9, \text { and } 10 \end{aligned}$ | 1 | Low | Low | Deferred due to funding | Ongoing |
| SP | Flooding | Procure and use elec. generators at designated critical facil. | Town of BatesbLeesv. Lex. Cnty. School Distr. 3 | Capital <br> Improve. budgets or operating budgets if rentals | $\begin{aligned} & 1,2,3,7, \\ & \text { and } 8 \end{aligned}$ | 3 | Medium | Medium | Deferred due to funding | Ongoing |


| $P A$ | Flooding | Maintain status in the NFIP | Town of Bates.Leesville | Operating <br> Budget | 2, 4, 5, 7, 10 | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought/ <br> Heat Wave | Ensure that BatesLeesville has an up-to-date and enforced Drought Management Ordinance | Town of Bates.Leesv. | Operating <br> Budget | $1,2,3,7$ $\text { through } 10$ | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Drought/ <br> Heat Wave | Monitor water use and impose restrictions as needed | Town of Bates.Leesv. | Operating Budget | $1-47$ and 8 | 1 | Low | Low | Ongoing | Ongoing |

Source: Town Batesburg-Leesville Administrative and Public Safety staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF GILBERT, SC

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Gilbert.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.

8 . Ensure that the residents of the town will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9 . Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF GILBERT, SC

Natural hazards ranked by priority in the Town of Gilbert:

1) Flooding
2) Forest Fires/Wild Fires
3) Tornados
4) Hurricanes
5) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
6) Winter Snow \& Ice Storms
7) Drought
8) Earthquake

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Town of Gilbert participants in the planning process.

The following are the proposed projects to be undertaken/continued in the Town of Gilbert for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Conduct details map and inventory of flood potential in town | Town of Gilbert | Capital <br> Improve. <br> Budget | 4,5, and | 1 | Medium | Medium | Ongoing | $\begin{aligned} & \text { 2010/ new } \\ & \text { FIRM } \end{aligned}$ |
| PA | Flooding | Enforce town zoning to restrict development in floodplains | Town of Gilbert | Operating <br> Budget | , 4, 5, and | 1 | Low | Medium | Completed | 2006 |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Town of Gilbert | Operating <br> Budget | 5 and | 2 | Low | Low | Ongoing | Ongoing |


| PA | Flooding | Use Lexing. County's GIS system to track all structures and demolition permits in flood areas | Town of Gilbert/ Lexing. County | Operating <br> Budget | and 10 | 2 | Low | Low | Completed | 2006/ FIRM's |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Identify \& contact all repetitive loss properties | Town of Gilbert | Operating <br> Budget | , 5, and | 1 | Low | Low | Completed | 2006 |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of Gilbert | Operating <br> Budget | , 5, and | 1 | Low | Low | Ongoing | Ongoing |


| PA | Flooding | Undertake Planning to participate in Community Rating System | Town of Gilbert/ Lexing. County | Operating <br> Budgets | , 5, , and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Flooding | Procure and use elec. generators at designated critical facil. | Town of Gilbert / Lex. Cnty. School District 1 | Capital Improve. budgets or operating budgets if rentals | 2, , 7, , and | 3 | Medium | Medium | Ongoing | Ongoing |
| PA | Forest <br> Fires/ Wild Fire | Use prescribed and monitored fires by private landowners to reduce fire threat | Town of Gilbert / Lexing. County/ 1 | Public <br> Works <br> Operating <br> Budgets | $2,4,5,7,$ <br> and | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Forest <br> Fires/ Wild Fire | Conduct detailed assessments of wild fire risks for critical facilities | Town of Gilbert | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> and | 1 | Low | Medium | Ongoing | Ongoing <br> Forestry <br> Commission |


| GIS | Forest <br> Fires/ Wild Fire | Use GIS capacity to map, record all fire events | Town of Gilbert/ Lexing. County | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,4,5,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Low | No action | Forestry Commission |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Improve early warning system in Gilbert for wind events | Town of Gilbert | Capital <br> Improve. <br> Budget | $2,, 7$, and | 1 | Low | High | Ongoing | Ongoing |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town of Gilbert | Capital Improve. Budget | 2, , 7, , and | 2 | Medium | Medium | Ongoing | Ongoing |
| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly <br> vulnerable areas | Town of Gilbert / SCANA / Coops. | Capital Improve. Budgets | $2,, 7$, and | 1 | Medium | Medium | Completed | 2006 |


| PA | Tornados | Conduct engineering strength studies of critical facil. | Gilbert/ <br> Lexing. <br> County/ <br> School <br> Dist. 1 | Capital Improve. Budgets | 2, , 4, and | 1 | Medium | Medium | No action | School District |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Gilbert/ <br> Lexing. <br> County/ <br> SCANA <br> /Elect./ <br> SCDOT | Capital Improve. Budgets | 2, , 7, , and | 1 | Low | Medium | Completed | 2009 |
| NB | Hurricanes | Replace water storage tanks and pumps as needed | Gilbert/ <br> Summit <br> Water <br> Dist./ <br> Joint <br> Munici. <br> Comm. | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> and | 2 | Medium | Medium | No action | Gilbert- <br> Summit Water <br> District |
| ES | Hurricanes | Provide <br> mobile <br> backup <br> generators <br> for critical <br> facilities | Town of Gilbert./ School Dist. 1 | Capital Improve. Budgets | $2,4,5,7,$ <br> and | 1 | Medium | Medium | Ongoing | Ongoing |


| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week annually | Town of Gilbert Council | Operating Budget | 4, and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Town of Gilbert/ SCANA /Coops. | Public <br> Works Operating Budgets | 2, , 7, , and | 2 | Low | Medium | Completed | 2007 |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Town of Gilbert/ Lexing. County. LCSD 1 | Capital <br> Improve. <br> Budgets | $2,, 4$, and 7 | 1 | Medium | Medium | Ongoing | 2014 |
| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt <br> procedure to suspend operations during lightning storms | Town of Gilbert | Operating <br> Budget | 2 , and 4 | 2 | Low | Low | No action | Weather alert notification |


| PA | Drought/ <br> Heat Wave | Reduce \& control development of impervious surfaces and promote wetland preservation | Town of Gilbert/ Lexing. County | Operating <br> Budget | $2,, 7$, and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought/ Heat Wave | Monitor water use and impose restrictions as needed | Gilbert- <br> Summit <br> Water <br> Dist./Jnt <br> Munici. <br>  <br> Sewer <br> Comm. | Operating <br> Budgets | $2,, 7$, and | 1 | Low | Low | No action | Gilbert- <br> Summit Water <br> District |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the town | Town of Gilbert/ Lexing. County | Operating <br> Budgets | 2, 4, 5, and | 1 | Low | Low | No action | County <br> Initiative |


| ES | Earthquak. | Implement <br> "Reverse <br> 911" Alert to <br> affected <br> e'quake <br> areas | Town of <br> Gilbert | Capital <br> Improve. <br> Budget | $2,, 4$, and | 2 | Medium | High |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Source: Town of Gilbert Mayor and Zoning Administrator, 2004. Revised by the Town of Gilbert. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE IRMO-CHAPIN RECREATION COMMISSION

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters occurring in the service area of the Commission.
2. Increase the commission's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the Commission to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the Commission.
4. Protect the most vulnerable populations, buildings and critical facilities in the Commission through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in the mitigation of risks caused by natural hazards.
6. Increase understanding of all residents in the Commission about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Ensure that the residents of the Commission will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
8. Ensure that the availability and functioning of the infrastructure of the Commission will not be significantly disrupted by a natural disaster.

## ACTION PLAN FOR THE IRMO-CHAPIN RECREATION COMMISSION

Natural hazards ranked by priority by the Irmo-Chapin Recreation Commission (ICRC):

1) Tornados
2) Flooding
3) Winter Snow and Ice Storms
4) Forest Fires/Wild Fires
5) Hurricanes

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by the ICRC participants in the planning process.

The following are the proposed projects to be undertaken/continued by the ICRC for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of <br> Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 <br> highest, 4 <br> lowest) | Cost | Benefit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ES | Tornados | "Harden" <br> facilities to <br> withstand <br> very high <br> winds | ICRC | Capital <br> Improve. <br> Budget | $2,3,7$, and 8 | 1 | Mempleted by: |  |


| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | ICRC | Capital Improve. Budget | 2, 3, 7, and 8 | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install early warning sirens at athletic fields and outdoor facilities | ICRC | Capital Improve. Budget | $2,3,7$, and 8 | 1 | Low | High | Deferred due to funding | Ongoing |
| ES | Tornados | Identify and procure equipment for improved emergency response | ICRC | Capital <br> Improve. <br> Budget | $2,3,7$, and 8 | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Flooding | Mark clear escape routes from ICRC facilities in floodways \& floodplains | ICRC | Operating <br> Budget | $1,2,3,7,$ $\text { and } 8$ | 1 | Low | High | Ongoing | Ongoing |


| SP | Flooding | Procure and use elec. generators at designated critical facil. | ICRC/ <br> Lex. Cnty. <br> School <br> Distr 5 | Capital <br> Improve. budgets or operating budgets if rentals | $2,3,7$ and 8 | 3 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | IRCR/ <br> SCANA <br> / Elec, Coop. | Capital <br> Improve. <br> Budgets | $2,3,7$, and 8 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | ICRC/ <br> Lexing. <br> County/ <br> SCDOT |  <br> SCDOT <br> Operating <br> Budgets | $2,3,7$, and 8 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | ICRC | Capital Improve. budget or operating budget if rental | 2, 3, 7, and 8 | 3 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Hurricanes | Provide <br> mobile <br> backup <br> generators <br> for critical <br> facilities | ICRC | Capital <br> Improve. <br> Budgets | 2, 3, 7, and 8 | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week <br> annually | ICRC | Operating <br> Budget | 4,6 and 8 | 1 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities |  <br> SCANA <br> / Elec. <br> Coop. | Public <br> Works <br> Operating <br> Budgets | 2, 3, 7, and 8 | 2 | Low | Medium | Ongoing | Ongoing |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | ICRC | Capital <br> Improve. <br> Budgets | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure to suspend operations during lightning storms | ICRC | Operating <br> Budget | 2, 3 and 4 | 2 | Low | Low | Deferred due to funding | 2015 |

Source: ICRC administrative and planning staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE GILBERT-SUMMIT RURAL WATER DISTRICT

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters occurring in the service area of the GSRWD.
2. Increase the GSRWD's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the GSRWD to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the GSRWD.
4. Protect the most vulnerable populations, buildings and critical facilities in the GSRWD through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in the mitigation of risks caused by natural hazards.
6. Increase understanding of all residents in the GSRWD about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the GSRWD in the face of natural disasters.
8. Ensure that the residents of the GSRWD will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the GSRWD will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE GILBERT-SUMMIT RURAL WATER DISTRICT

Natural hazards ranked by priority in the Gilbert-Summit Rural Water District:

1) Winter Storms
2) Flooding
3) Tornados
4) Hurricanes
5) Drought/Heat Wave
6) Forest Fires/ Wild Fires
7) Earthquakes

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by GSRWD's participants in the planning process.

The following are the proposed projects to be undertaken/continued in the service area of the GSRWD for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. NB $=$ Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | GSRWD /SCAN <br> A/Elect. Coops. | GSRWD / Electric Utility providers | $\begin{aligned} & 2,3,7,8, \\ & \text { and } 9 \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris <br> removal and clearance work | GSRWD <br> /Lexing. County Public Works and S.C. DOT | GSRWD <br> /Lexing. <br> County <br> Public <br> Works <br> and S.C. <br> DOT <br> Operatin <br> g <br> Budgets | $\begin{aligned} & 2,3,7,8, \\ & \text { and } 9 \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter <br>  <br> Ice <br> Storms | Procure and use elec. <br> Generators at critical facilities | GSRWD /Lex. County/ School District/ Towns/ Rec. comm. | Capital <br> Improve. <br> Budgets <br> or <br> operating budget if rental | $\begin{aligned} & 2,3,7,8, \\ & \text { and } 9 \end{aligned}$ | 1 | Low | Medium | No Action lack of funding | When funding is available |


| PA | Flooding | Prepare \& implement a storm water management plan in concert with Lexing. Co. \& towns | Gilbert- <br> Summit <br> RWD/ <br> Lexing. <br>  <br> towns | Operating <br> Budgets | 1,5 , and 8 | 1 | Low | Low | No Action lack of funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Lexing. <br> County/ <br> Towns | Operating <br> Budgets | 1,5 , and 8 | 1 | Low | Low | Deleted, Not applicable | Ongoing |
| GIS | Flooding | Use GIS capacity to map, record all flood and all hazard events | Lexing. County/ Towns | Operating <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & 8, \text { and } 9 \end{aligned}$ | 1 | Low | Low | Deleted, Not applicable | Ongoing |


| ES | Tornados | Improve early warning system in service area for wind events | Gilbert- <br> Summit <br> RWD/ <br> Lexing. <br>  <br> Towns | Capital <br> Improve. <br> Budget | $2,3,7,8$ <br> and 9 | 1 | Low | High | No Action lack of funding | When funding is available |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Gilbert- <br> Summit <br> RWD <br> with <br> towns, <br> county, <br> School <br> Dist. 1 | Capital <br> Improve. <br> Budgets | $2,3,7,8$ and 9 | 2 | Medium | Medium | No Action lack of funding | When funding is available |
| SP | Tornados | "Harden" utility services especially in highly vulnerable areas | Gilbert- <br> Summit <br> RWD | Capital <br> Improve. <br> Budgets | $2,3,7,8$ and 9 | 1 | Medium | Medium | No Action - no funding | When funding is available |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Gilbert- <br> Summit <br> RWD/ <br> Lexing. <br> County/ <br> SCDOT | Capital <br> Improve. <br> Budgets | $2,3,7,8$ <br> and 9 | 1 | Low | Medium | Ongoing | Ongoing |


| PA | Hurricanes | Publicize <br> National <br> Hurricane <br> Awareness <br> Week annually | GilbertSummit RWD | Operating <br> Budget | 4, 6 and 8 | 1 | Low | Low | No Action lack of funding | When funding is available |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Hurricanes | Prepare \& Implement Emergency Operations Plan identifying responsibi.of district employs. and contact list | Gilbert- <br> Summit <br> Rural <br> Water <br> District | Operating <br> Budget | $2,3,7,8$ and 9 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Brought | Amend state drought legislation to stiffen penalties for violators | S.C. <br> General Assem-bly | Operating Budget | 4 and 5 | 3 | Lew | Low | Deleted, Not applicable |  |
| PI | Drought | Publicize water conser. practices | Gilbert- <br> Summit <br> Rural <br> Water <br> Dist. | Operating <br> Budget | 4 and 5 | 1 | Low | Low | No Action lack of funding | When funding is available |


| PA | Forest <br> Firest <br> Wild Fire | Prescribe \& monitor fires by private tand-owners to reduce fire threat | Lexing. County/ towns | Public <br> Works <br> Operating <br> Budgets | $\begin{aligned} & 2,4,5,7, \\ & 8, \text { and } 9 \end{aligned}$ | $\pm$ | Lew | Medium | Deleted, Not applicable | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Forest <br> Fires/ <br> Wild Fire | Conduct detailed assessments of wild fire risks for critical facilities | GilbertSummit RWD | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> 8 , and 9 | 1 | Medium | Medium | No action time and funding | When funding is available |
| GIS | Forest <br> Fires/ <br> Wild Fire | Use GIS capacity to map, record all fire events | Gilbert- <br> Summit <br> RWD <br> Town of Gilbert/ <br> Lexing. County | Capital <br> Improve. <br> Budget | $2,4,5,7,$ <br> 8, and 9 | 1 | Low | Medium | No Action lack of funding | When funding is available |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the county | Lexing. <br> County/ SCANA towns / GilbertSummit RWD | Operating <br> Budget | $2,4,5,6,$ <br> and 8 | 1 | Low | Low | No Action lack of funding | When funding is available |

Source: Gilbert-Summit Rural Water District Director, 2004, Revised by the staff of the Gilbert-Summit Water Distric. Reviewed by the County Corresponding Committee for the 2009 update.

## GOALS OF THE LEXINGTON COUNTY JOINT MUNICIPAL WATER AND SEWER COMMISSION

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters occurring in the service area of the Commission.
2. Increase the commission's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the Commission to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the Commission.
4. Protect the most vulnerable populations, buildings and critical facilities in the Commission through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in the mitigation of risks caused by natural hazards.
6. Increase understanding of all residents in the Commission about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the Commission in the face of natural disasters.
8. Ensure that the residents of the Commission will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the Commission will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE LEXINGTON COUNTY JOINT MUNICIPAL WATER AND SEWER COMMISSION, SC

Natural hazards ranked by priority in the service area of the Commission:

1) Winter Snow \& Ice Storms
2) Hurricanes
3) Earthquakes
4) Earthquakes causing structural and dam failure
5) Flooding
6) Tornados
7) Drought

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Commission participants in the planning process.

The following are the proposed projects to be undertaken/continued in the service area of the Lexington County Joint Municipal Water \& Sewer Commission for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line easement clearance | Joint <br> Comm./ <br> Lexing. <br> County/ <br> SCANA <br> Elect. <br> Coops. | Joint <br> Comm. <br> Lexing. <br> County./ <br> Electric <br> utility <br> providers | $2,3,7,8 \text {, }$ and 9 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Joint <br> Comm./ <br> Lexing. <br> County <br> Public <br> Works and S. C. <br> DOT | Joint <br> Comm./ <br> Lexing. <br> County <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | $2,3,7,8,$ <br> and 9 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Joint <br> Comm./ <br> Lexington County/ school dist cities/ recreation comm. | Capital <br> Improve. budgets or operating budget if rental | $2,3,7,8$ and 9 | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| ES | Hurricanes | Develop portable water treatment facilities | Lexing. <br> Joint <br> Munipi./ <br> City <br> Utilities | Capital Improve. Budgets | $2,3,7,8$ and 9 | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | Lexing. <br> Joint <br> Munipi./ <br> all water <br> provi- <br> ders | Capital Improve. Budgets | $\begin{aligned} & 2,3,7,8 \text {, } \\ & \text { and } 9 \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities | Joint <br> Munici. <br> Water \& Sewer Comm. | Capital Improve. Budget | 2, 3, 4, and 8 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the service area | Joint <br> Munici. <br> Comm./ <br> Lexing. <br> County/ <br> SCANA <br> towns | Operating <br> Budgets | $2,4,5,6,$ <br> and 8 | 1 | Low | Low | Deferred due to funding | 2015 |


| PA | Earthquak. <br> causing <br> dam <br> failure | Work with SCDNR to ensure that dams in the service area are safe | Lexing. <br> Cnty. <br> Joint <br> Comm./ <br> Lexing. <br> County/ <br> SCDNR | Operating <br> Budgets | 2, 3, 4, and 8 | 1 | Low | High | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Earthquak. <br> causing <br> dam <br> failure | Ensure that warning system works for rapid evacu. from lands downstream of larger dams | Lexing. <br> Cnty. <br> Joint <br> Comm./ <br> Lexing. <br> County/ electric utilities | Operating <br> Budgets | $2,3,4$, and 8 | 1 | Low | High | Deferred due to funding | Ongoing |
| PA | Earthquak. <br> causing <br> dam <br> failure | Develop clearly marked and explained evacuation routes for dam failure | Lexing. Cnty. Joint Comm./ Lexing. County/ electric utilities | Operating <br> Budgets | $2,3,4$, and 8 | 1 | Low | High | Deferred due to funding | Ongoing |


| PA | Flooding | Ensure that <br> the FEMA <br> Elevation <br> Certificate is properly completed before issuance on property in flood areas | Lexing. Countyl menicipalities | Operating <br> Budgets | 1,5, and 8 | 4 | Lew | Lew | Deleted Not applicable |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Flooding | Procure and use elec. generators at designated critical facil. | Joint <br> Munici. <br> Water \& Sewer Comm. | Capital Improve. budgets or operating budgets if rentals | $2,3,7,8$ and 9 | 3 | Medium | Medium | Deferred due to funding | Ongoing |
| GIS | Flooding | Use GIS capacity to map, record structures in floodplains served by the Joint Comm. | Lexing. <br> County/ Joint <br> Munici. <br>  <br> Sewer <br> Commi. | Operating <br> Budgets | 1 and 10 | 1 | Low | Low | Ongoing | Ongoing |


| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly vulnerable areas | Joint <br> Munici. <br> Water \& Sewer Comm. | Capital <br> Improve. <br> Budget | $2,3,7,8$ and 9 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Conduct engineering strength studies of critical facil. | Joint <br> Munici. <br> Water \& Sewer Comm. | Capital <br> Improve. <br> Budget | 2, 3, 4, and 8 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Lexing. County/ SCANA /Elect. Coops SCDOT \& Joint Commi. | Capital <br> Improve. <br> Budgets | $2,3,7,8$ and 9 | 1 | Low | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Joint <br> Munici. <br> Water \& Sewer Comm./ Lexing. County/ School | Capital <br> Improve. <br> Budgets | $2,3,7,8,$ <br> and 9 | 2 | Medium | Medium | Deferred due to funding | Ongoing |

\(\left.$$
\begin{array}{|l|l|l|l|l|l|l|l|l|l|}\hline & & & \text { Distric. } & & & & \\
\hline \text { GIS } & \text { Tornados } & \begin{array}{l}\text { Establish } \\
\text { GIS mapping } \\
\text { of all hazard } \\
\text { events by } \\
\text { location, } \\
\text { effect, and } \\
\text { time }\end{array} & \begin{array}{l}\text { Lexing. } \\
\text { County/ } \\
\text { Joint } \\
\text { Comm. } \\
\text { \& } \\
\text { munici. }\end{array}
$$ \& \begin{array}{l}Capital <br>
Improve. <br>

Budgets\end{array} \& 1 and 10\end{array}\right]\) 3 | Ongoing |
| :--- |
| PA |

Source: Lexington County Dept. of Public Works and Public Safety Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF LEXINGTON SCHOOL DISTRICT 1

1. Develop better data for LCSD1 relating to type, impact, location and cost of the mitigation of natural disasters affecting the district.
2. Increase the school district's internal capacity to initiate and sustain emergency response operations in cooperation with other units of government during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the school district to reduce the potential damaging effects of hazards without hindering other district goals or impeding hazard mitigation programming in the district or by other units of government. 4. Protect the most vulnerable buildings and critical facilities in LCSD1 through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
4. Protect the health, safety and welfare of students and staff by increasing their awareness of existing hazards and by fostering responsibility in the mitigation of risks caused by natural hazards.
5. Increase understanding of students and staff in the district about the natural hazards threatening school facilities and the techniques available to minimize vulnerability to those hazards.
6. Ensure that the availability and functioning of the infrastructure serving the district ' s facilities will not be significantly disrupted by a natural disaster.

## ACTION PLAN FOR LEXINGTON COUNTY SCHOOL DISTRICT 1

Natural hazards ranked by priority in Lexington County School District 1:

1) Flooding
2) Tornados
3) Hurricanes
4) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
5) Winter Snow and Ice Storms
6) Forest Fires/Wild Fires

This is not intended to be an exclusive list of natural hazards that threaten the school district. These are the most important natural hazards as rated by Lexington County School District 1 (LCSD1) participants in the planning process.

The following are the proposed projects to be undertaken/continued in the school district for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of <br> Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 <br> highest, 4 <br> lowest | Cost | Benefit |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| PP | Flooding | Designate <br> hazardous <br> road <br> locations and <br> increase <br> elevation or <br> make culvert <br> drainage <br> improvemnts | LCSD1/ <br> Lexing. <br> County <br> Public <br> Works/ <br> palities | Capital <br> Improve. <br> Budgets | $1,2,3,4$, <br> and 7 | 1 | High | Medium | Deferred <br> due to <br> funding |


| SP | Flooding | Flood proof school buildings and critical facilities where needed | LCSD1 | Capital <br> Budget | $\begin{aligned} & 1,2,3,4, \\ & \text { and } 7 \end{aligned}$ | 2 | High | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Flooding | Acquire \& replace radio repeaters on existing towers in county | LCSD1/ <br> Lexing. County/ municipalities in cnty. | Capital <br> Improve. <br> Budgets | $2,3,4$, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Tornados | Conduct engineering strength studies of critical facil. | LCSD1 | Capital <br> Improve. <br> Budget | 2, 3, 4, and 7 | 1 | High | Medium | Deferred due to funding | Ongoing |
| ES | Tornados | Improve availability of bus transport by locating and securing buses at Pelion and | LCSD1 | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,3,4,5, \\ & \text { and } 7 \end{aligned}$ | 1 | Low | Medium | Deferred due to funding | Ongoing |


|  |  | Gilbert High Schools |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those serv. vulnerable populations | LCSD1 | Capital <br> Improve. <br> Budget | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly <br> vulnerable areas | Joint <br> Munici- <br> pal <br> Comm./ <br> munici- <br> palities <br> in <br> county | Capital <br> Improve. <br> Budgets | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Hurricanes | Use identified school buildings as emergency | LCSD1 | Operating. <br> Budget | $2,3,4$, and 7 | 2 | Low | High | Ongoing | Ongoing |


|  |  | shelters |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Rebuild school buildings damaged by hurricane event | LCSD1 | Capital <br> Budget | 2, 3, 4, and 7 | 2 | High | Low | Deferred due to funding | Ongoing |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | LCSD1 | Capital <br> Improve. <br> Budgets | $2,3,4$, and 7 | 1 | Medium | Medium | Deferred <br> due to <br> funding | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power <br> line and utility easements of debris | SCANA <br> / Elec. Coops | Public <br> Works <br> Operating <br> Budgets | $2,3,4$, and 7 | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Lexing. <br> County/ <br> LCSD1, <br> Coops, <br> SCANA | Public <br> Works <br> Operating <br> Budget | $2,3,4$, and 7 | 2 | Low | Medium | Onoing | Ongoing |


| PP | Winter Snow \& Ice Storms | Power line easement clearance | Lexing. <br> County/ SCANA <br> Elect. <br> Coops. | Electric utility providers | 2, 3, 4, and 7 | 1 | Low | Medium | Onoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Lexing. <br> County <br> Public <br> Works <br> and S. C. <br> DOT | Rich. <br> County <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, 3, 4, and 7 | 1 | Low | Medium | Onoging | Ongoing |
| ES | Winter Snow \& Ice Storms | Use school buses when feasible for emergency shelters, evacuation \& communicat. capacity | LCSD1 | Operating budget | $\begin{aligned} & 2,3,4, \text { and } \\ & 7 \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and Use elec. generators at critical facil. | Lexing. County/ LCSD1/ cities | Capital Improve. budgets | $2,3,4$, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| ES | Forest <br> Fire/Wild <br> Fires | Create clear zones near critical facilities to lessen threat from forest/wild fires | LCSD1 | Capital <br> Improve. <br> Budget | 2, 3, 4, and 7 | 1 | Low | Medium | Onoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS technology to map, record wild fires, all hazard events | LCSD1/ <br> Lexing. <br> County | Operating <br> Budgets | $1,2,3,4$, and 7 | 1 | Low | Low | Deferred due to funding | Ongoing |

Source: Lexington County School District 1 Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF LEXINGTON SCHOOL DISTRICT 2

1. Develop better data for LCSD2 relating to type, impact, location and cost of the mitigation of natural disasters affecting the district.
2. Increase the school district's internal capacity to initiate and sustain emergency response operations in cooperation with other units of government during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the school district to reduce the potential damaging effects of hazards without hindering other district goals or impeding hazard mitigation programming in the district or by other units of government. 4. Protect the most vulnerable buildings and critical facilities in LCSD2 through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
4. Protect the health, safety and welfare of students and staff by increasing their awareness of existing hazards and by fostering responsibility in the mitigation of risks caused by natural hazards.
5. Increase understanding of students and staff in the district about the natural hazards threatening school facilities and the techniques available to minimize vulnerability to those hazards.
6. Ensure that the availability and functioning of the infrastructure serving the district 's facilities will not be significantly disrupted by a natural disaster.

## ACTION PLAN FOR LEXINGTON COUNTY SCHOOL DISTRICT 2

Natural hazards ranked by priority in Lexington County School District 2:

1) Winter Snow and Ice Storms
2) Hurricanes
3) Tornados
4) Earthquakes
5) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning

This is not intended to be an exclusive list of natural hazards that threaten the school district. These are the most important natural hazards as rated by Lexington County School District 2 (LCSD2) participants in the planning process.

The following are the proposed projects to be undertaken/continued in the school district for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of <br> Hazard | Activity | Lead <br> Agent | Finance <br> Source | Local Goals <br> Addressed | Priority (1 <br> highest, 4 <br> lowest) | Cost | Benefit | Status |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| by; |  |  |  |  |  |  |  |  |  |


| ES | Winter Snow \& Ice Storms | Use bus and van transit system for emergency shelters, evacuation \& communicat. capacity | LCSD2/ <br> Central Midlands Transit System/ DART system, etc. | CMRTA and DART budgets | 2, 3, 4, and 7 | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Procure and Use elec. generators at critical facil. | Lexing. County/ LCSD2/ cities | Capital Improve. budgets | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Hurricanes | Use identified school buildings as emergency shelters | LCSD2 | Operating. <br> Budget | 2, 3, 4, and 7 | 2 | Low | Medium | Ongoing | Ongoing |
| SP | Hurricanes | Rebuild school buildings damaged by hurricane event | LCSD2 | Capital <br> Improve. <br> Budget | 2, 3, 4, and 7 | 1 | High | Low | Deferred due to funding | Ongoing |
| ES | Tornados | Install safe rooms in critical facilities | LCSD2 | Capital <br> Improve. <br> Budget | $2,3,4$ and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |


|  |  | especially those serv. vulnerable populations |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly vulnerable areas | Cayce/ W. Columbia/ Joint Municip Commis | Capital <br> Improve. <br> Budgets | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in LCSD2 | LCSD 2 | Public <br> Works <br> Depts.' <br> Capital <br> Budgets | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due | 2015 |
| PA | Earthquak. | Work with SCANA to ensure that the Lake Murray Dam withstands future events | Lexing. <br> County, <br> SCANA <br>  <br> LCSD2 | Operating <br> Budgets | $1,2,3,4,$ and 7 | 1 | Low | High | Ongoing | Ongoing |
| ES | Earthquak. causing dam | Ensure that warning signal system | SCANA | Operating <br> Budget | All Goals | 1 | Low | High | Ongoing | Ongoing |


|  | failure | works for rapid evacu. from lands downstream of Lake Dam |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. <br> causing <br> dam <br> failure | Develop clearly marked and explained evacuation routes for dam failure | Lexing. <br> County/ Cayce/ W. Cola./ SCANA /LCSD2 | Capital <br> Improve. <br> Budgets | All Goals | 1 | Low | High | Ongoing | Ongoing |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Install surge protectors in critical facilities | LCSD2 | Capital <br> Improve. <br> Budgets | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | SCANA <br> / Elec. <br> Coops | Public <br> Works <br> Operating <br> Budgets | 2, 3, 4, and 7 | 1 | Low | Medium | Ongoing | Ongoing |

Source: Lexington County School District 2 Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF LEXINGTON SCHOOL DISTRICT 3

1. Develop better data for LCSD3 relating to type, impact, location and cost of the mitigation of natural disasters affecting the district.
2. Increase the school district's internal capacity to initiate and sustain emergency response operations in cooperation with other units of government during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the school district to reduce the potential damaging effects of hazards without hindering other district goals or impeding hazard mitigation programming in the district or by other units of government. 4. Protect the most vulnerable buildings and critical facilities in LCSD3 through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
4. Protect the health, safety and welfare of students and staff by increasing their awareness of existing hazards and by fostering responsibility in the mitigation of risks caused by natural hazards.
5. Increase understanding of students and staff in the district about the natural hazards threatening school facilities and the techniques available to minimize vulnerability to those hazards.
6. Ensure that the availability and functioning of the infrastructure serving the district ' $s$ facilities will not be significantly disrupted by a natural disaster.

## ACTION PLAN FOR LEXINGTON COUNTY SCHOOL DISTRICT 3

Natural hazards ranked by priority in Lexington County School District 3:

1) Tornados
2) Hurricanes
3) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
4) Winter Snow and Ice Storms
5) Forest Fires/Wild Fires

This is not intended to be an exclusive list of natural hazards that threaten the school district. These are the most important natural hazards as rated by Lexington County School District 3 (LCSD3) participants in the planning process.

The following are the proposed projects to be undertaken/continued in the school district for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Conduct engineering strength studies of critical facil. | LCSD3 | Capital <br> Improve. <br> Budget | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Install safe rooms in critical facilities especially those serv. vulnerable populations | LCSD3 | Capital <br> Improve. <br> Budget | $2,3,4$, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Tornados | "Harden" utility services especially in highly vulnerable areas | Joint <br> Municipal <br> Comm./ <br> munici- <br> palities <br> in <br> county | Capital Improve. Budgets | $2,3,4$ and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |


| SP | Hurricanes | Use identified school buildings as emergency shelters | LCSD3 | Operating. <br> Budget | $1,2,3,4,$ and 7 | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Rebuild school buildings damaged by hurricane event | LCSD3 | Capital Budget | 2, 3, 4, and 7 | 2 | High | Low | Deferred due to funding | Ongoing |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | LCSD3 | Capital <br> Improve. <br> Budgets | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | SCANA <br> / Elec. <br> Coops | Public <br> Works <br> Operating <br> Budgets | 2, 3, 4, and 7 | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Lexing. <br> County/ <br> LCSD3, <br> Coops, <br> SCANA | Public <br> Works <br> Operating <br> Budget | 2, 3, 4, and 7 | 2 | Low | Medium | Ongoing | Ongoing |


| PP | Winter Snow \& Ice Storms | Power line easement clearance | Lexing. <br> County/ SCANA <br> Elect. <br> Coops. | Electric utility providers | 2, 3, 4, and 7 | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Lexing. <br> County <br> Public <br> Works <br> and S. C. <br> DOT | Rich. <br> County <br> Public <br>  <br> SCDOT <br> Operating <br> Budgets | 2, 3, 4, and 7 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Use school buses where feasible for emergency shelters, evacuation \& communicat. capacity | LCSD3 | Operating budgets | 2, 3, and 4 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter <br> Snow \& Ice Storms | Procure and Use elec. generators at critical facil. | Lexing. County/ LCSD3/ cities | Capital <br> Improve. <br> Budgets | $2,3,4$, and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| ES | Forest <br> Fire/Wild <br> Fires | Create clear <br> zones near <br> critical <br> facilities to <br> lessen threat <br> from <br> forest/wild <br> fires | LCSD3 | Capital <br> Improve. <br> Budget | $2,3,4$, and 7 | 1 | Low | Medium |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| GIS | Fongoing <br> Fire/Wild <br> Fires | Use GIS <br> capacity to <br> map, record <br> wild fires, all <br> hazards | LCSD3/ <br> County | Operating <br> Budgets | $1,2,3,4$, <br> and 7 | 1 | Ongoing | Ongoing |

Source: Lexington County School District 3 Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF LEXINGTON/RICHLAND SCHOOL DISTRICT 5

1. Develop better data for LRSD5 relating to type, impact, location and cost of the mitigation of natural disasters affecting the district.
2. Increase the school district's internal capacity to initiate and sustain emergency response operations in cooperation with other units of government during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the school district to reduce the potential damaging effects of hazards without hindering other district goals or impeding hazard mitigation programming in the district or by other units of government. 4. Protect the most vulnerable buildings and critical facilities in LRSD5 through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
4. Protect the health, safety and welfare of students and staff by increasing their awareness of existing hazards and by fostering responsibility in the mitigation of risks caused by natural hazards.
5. Increase understanding of students and staff in the district about the natural hazards threatening school facilities and the techniques available to minimize vulnerability to those hazards.
6. Ensure that the availability and functioning of the infrastructure serving the district's facilities will not be significantly disrupted by a natural disaster.

## ACTION PLAN FOR LEXINGTON/RICHLAND SCHOOL DISTRICT 5

Natural hazards ranked by priority in Lexington/Richland School District 5:

1) Winter Snow and Ice Storms
2) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
3) Hurricanes
4) Tornados
5) Earthquakes

This is not intended to be an exclusive list of natural hazards that threaten the school district. These are the most important natural hazards as rated by Lexington/Richland School District 5 (LRSD5) participants in the planning process.

The following are the proposed projects to be undertaken/continued in the school district for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter <br> Snow \& Ice Storms | Power line easement clearance | Lexing. <br> County/ <br> SCANA <br> Elect. <br> Coops. | Electric utility providers | $2,3,4$, and 7 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter <br> Snow \& Ice Storms | Use bus and van transit system for emergency shelters, evacuation \& communicat. capacity | LRSD5/ <br> Central Midlands Transit System/ DART system, etc. | CMRTA/ <br> LRSD5, <br> and DART <br> budgets | $2,3,4$, and 7 | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Lexing. County/ LRSD5/ cities | Capital <br> Improve. budgets | 2, 3,4 , and 7 | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Hurricanes | Use identified school buildings as emergency shelters | LRSD5 | Operating. <br> Budget | $2,3,4,5,6,$ and 7 | 2 | Low | Medium | Ongoing | Ongoing |


| SP | Hurricanes | Rebuild <br> school buildings damaged by hurricane event | LRSD5 | Capital Budget | 2, 3, 4, and 7 | 2 | High | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those serv. vulnerable populations | LRSD5 | Capital <br> Improve. <br> Budget | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Tornados | "Harden" <br> utility <br> services <br> especially in highly <br> vulnerable areas | City of Colum. Public Works | Capital <br> Improve. <br> Budget | $2,3,4$, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Earthquak. | Conduct earthquake impact analysis on critical facilities in LRSD5 | LRSD5 | Capital <br> Improve. <br> Budget | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Earthquak. | Work with SCANA to ensure that the Lake Murray Dam withstands future events | Lexing. <br> County, <br> SCANA <br>  <br> LRSD5 | Operating Budgets | 2, 3, 4, and 7 | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Earthquak. causing dam failure | Ensure that warning signal system works for rapid evacu. from lands downstream of Lake Dam | SCANA | Operating <br> Budget | $2,3,4,5,6$ and 7 | 1 | Low | High | Ongoing | Ongoing |
| PA | Earthquak. <br> causing <br> dam <br> failure | Develop clearly marked and explained evacuation routes for dam failure | Lexing. <br> County/ <br> SCANA <br> /LRSD5 | Capital <br> Improve. <br> Budgets | $2,3,4,5,6$ <br> and 7 | 1 | Low | High | Ongoing | Ongoing |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | LRSD5 | Capital <br> Improve. <br> Budgets | 2, 3, 4, and 7 | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning $)$Clear power <br> line and <br> utility <br> easements of <br> debris | SCANA <br> /Elec. <br> Coops | Public <br> Works <br> Operating <br> Budgets | $2,3,4$, and 7 | 1 | Low | Medium | Ongoing |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Source: Lexington County School District 5 Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF NEWBERRY COUNTY

1. Develop better data for the county relating to type, impact, location and cost of the mitigation of natural disasters occurring in Newberry County.
2. Increase the county's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the county to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the county.
4. Protect the most vulnerable populations, buildings and critical facilities in the county through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the county about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the county in the face of natural disasters.
8. Ensure that the residents of the county will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9 . Ensure that the availability and functioning of the infrastructure of the county will not be significantly disrupted by a natural disaster.
9. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR UNINCORPORATED NEWBERRY COUNTY, SC

Natural hazards ranked by priority in unincorporated Newberry County:

1) Forest Fires/Wild Fires
2) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
3) Winter Snow and Ice Storms
4) Flooding
5) Tornados
6) Hurricanes
7) Drought
8) Earthquake

This is not intended to be an exclusive list of natural hazards that threaten the county. These are the most important natural hazards as rated by Newberry County participants in the planning process.

The following are the proposed projects to be undertaken/continued in unincorporated Newberry County for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key Plan Goals to Be Addressed in the Action Plan are enumerated on page XX

| Type | Type of Hazard | Activity | Lead <br> Agent | Finance Source | Local <br> Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Forest <br> Fire/Wild <br> Fires | Improved suppression response (tankers, dry chemicals) | Newber. County | Capital <br> Budget | 2, , 4, 7, | 1 | Medium | Medium | deferred | ongoing |
| PA | Forest <br> Fire/Wild <br> Fires | Fire break tree \& brush thinning Controlled open burning by permit (Red flag alerts) | Newber. County | Operating budget | 2, , 4, 7, | 2 | Low | Medium | deferred | ongoing |
| PA | Forest <br> Fire/Wild <br> Fires |  <br> Fire Code enforcement/i nspections | Newber. County | Operating budgets |  | 1 | Low | Medium | deferred | Ongoing |
| PP | Forest <br> Fire/Wild <br> Fires | Construct dry hydrant program in rural areas of county | Newber. <br> County/N ewber. <br> County <br>  <br> Sewer <br> Author. | Capital Improve. Budgets | 2, 4, 7, | 1 | Medium | Medium | completed | completed |


| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS parcel-based GIS system to map, record wild fires, all hazards | Newber. County | Operating <br> Budget |  | 1 | Low | Low | deferred | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Forest <br> Fire/Wild <br> Fires | Develop and publish brochures \& articles on techniques to reduce forest \& wild fires | Newber. County | Operating <br> Budget |  | 1 | Low | Low | deferred | Ongoing |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in critical facilities | Newber. <br> County/ School Districts/ cities | Capital <br> Improve. <br> Budgets | $2,4,7$, | 1 | Medium | Medium | deferred | ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt <br> procedure for suspension of operations during lightning storms | Newber. <br> County/ towns in county | Operating <br> Budget | 2, , and 4 | 2 | Low | Low | deferred | ongoing |
| PA | Thunderstorms (Hail, | Clear power line and utility easements of | Newber. County/ Duke/ | Public <br> Works Operating | 2, , 4, 7, | 1 | Low | Medium | deferred | Ongoing |


|  | Wind, Lightning) | debris | Elec. Coops | Budget |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Newber. <br> County/D uke/ Coops | Public <br> Works <br> Operating Budget | 2, , 4, 7, | 2 | Low | Medium | deferred | Ongoing |
| PP | Winter Snow \& Ice Storms | Power line clearance with the Elec. Coop./ Duke Pwr./ SCEG | Rich. <br> County/ <br> Duke/ <br> SCEG <br> Coops./N ewber. <br> City | Electric utility providers | 2, , 4, 7, | 1 | Low | Medium | deferred | Ongoing |
| ES | Winter Snow \& Ice Storms | Debris removal and road clearance work | Newber. <br> County <br> Public <br> Works and <br> S. C. DOT | Newber. <br> County <br> Public <br> Works' <br> Operating <br> Budget | 2, , 4, 7, | 1 | Low | Medium | deferred | Ongoing |
| ES | Winter <br>  <br> Ice Storms | Employ van system for the elderly for emergency shelter, evacuation \& communicat. capacity | Newber. <br> County <br> Council on Aging. | Operating <br> Budget | 2, , 4, 5, | 1 | Low | Medium | deferred | Ongoing |


| ES | Winter Snow \& Ice Storms | Procure and use elec. generators at critical facil. | Newber. <br> County/ school dist/ cities | Capital budgets | $2,3,4,7,8$ and 9 | 1 | Medium | Medium | deferred | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Inspect dams at lakes and ponds to ensure their structural soundness | Newber. County/S. C. DHEC | Operating <br> Budget | 2, , 4, 7, | 1 | Low | High | deferred | Ongoing |
| PA | Flooding | Enforce county zoning to restrict development in flood-plains | Newber. County/ towns in county | Operating <br> Budget | 2 , and 4 | 1 | Low | Medium | deferred | Ongoing |
| PI | Flooding | Declare May of each year to be Flood <br> Awareness Month | Newber. County Council | Operating <br> Budget | 2, and 4 | 2 | Low | Low | deferred | Ongoing |
| PA | Flooding | Develop a parcel based GIS system to track all structures \& demolition permits in | Newber. County | Operating <br> Budget | 2 , and 10 | 2 | Low | Low | deferred | Ongoing |


|  |  | flood areas |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Flooding | Coordinate with other local gov'ts in county to make stream channel improvement | Newber. County towns in county | Capital <br> Improve. <br> Budgets | 2, 4, | 3 | Low | Medium | deferred | Ongoing |
| SP | Flooding | Replace <br> structurally obsolete bridges | Newber. <br> County/S <br> CDOT | Capital <br> Improve. <br> Budgets | 2, 4, 7, | 2 | High | High | deferred | Ongoing |
| PA | Flooding | Identify \& contact all repetitive loss properties | Newb. County/ towns in county | Operating <br> Budgets | 5, | 1 | Low | Low | deferred | ongoing |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Newb. County/ towns in county | Operating <br> Budgets | 5, | 1 | Low | Low | deferred | Ongoing |


| PA | Flooding | Undertake <br> Planning to participate in Community Rating System | Newb. County/ towns in county | Operating <br> Budgets | 5, and 10 | 1 | Low | Low | deferred | ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Maintain status in the NFIP | Newberry <br> County | Operatin <br> g Budget | $\begin{aligned} & 2,4,5,7, \\ & 10 \end{aligned}$ | 1 | Low | High | Ongoing | Ongoing |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Newber. <br> County/ towns in county/ school district | Capital <br> Improve. <br> Budget | 2, 4, 7, | 2 | Medium | Medium | deferred | ongoing |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Newber. <br> County/ <br> SCANA <br> SCDOT <br> Coops | Capital <br> Improve. <br> Budget | 2, 4, 7, | 1 | Low | Medium | deferred | ongoing |
| SP | Tornados | Harden utility services to facilities especi. serv. vulnerable | Newber. <br> County/ towns in county | Capital <br> Improve. <br> Budget | 2, 4, 7, | 1 | Medium | Medium | deferred | ongoing |


|  |  | populations |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | County <br> Council <br> declares <br> Interna. <br> Building <br> Safety Week <br> to promote safety in built environment | Newber. County | Operating <br> Budget | 2, 5, | 3 | Low | Low | deferred | Ongoing |
| ES | Hurricanes | Develop <br> Portable <br> Water <br> Treatment <br> Facilities | Water providers in county | Capital <br> Improve. <br> Budgets | 2, 4, 7, | 2 | Medium | Medium | deferred | ongoing |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | Water providers in county | Capital <br> Improve. <br> Budgets | 2, 4, 7, | 2 | Medium | Medium | deferred | ongoing |
| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the county to handle more debris | Newber. County and solid waste contracto rs | Capital <br> Improve. <br> Budgets and Plans | 2, , 4, 7, | 2 | Medium | Medium | deferred | ongoing |


| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Newber. County | Operating <br> Budget | 5 | 1 | Low | Low | deferred | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend state drought legislation to stiffen penalties \& clarify laws | S. C. <br> General <br> Assem- <br> bly | Operating <br> Budget | 5, | 3 | Low | Low | deferred | ongoing |
| NB | Drought | Add to dry hydrant program in rural areas of county | Newber. <br> County/ <br> Water \& Sewer Author. | Capital <br> Budgets of Public Works Programs | 2, 4, 7, | 2 | Low | Medium | deferred | 2014 |
| NB | Drought | Develop a county water well program in vulnerable areas of county | Newber. <br> County/ Water \& Sewer Author. | Capital <br> Budgets <br> of Public <br> Works <br> Programs | 2, 4, 7, | 2 | Low | Medium | deferred | ongoing |
| NB | Drought | Institute a drought water storage | Newber. County/ towns in | Capital <br> Budgets of Public | 2, 4, 7, | 1 | Medium | Medium | deferred | ongoing |


|  |  | program for fire suppression | county | Works <br> Programs |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Develop and publicize water conservation practices to respond to drought declarations | Newber. County | Operating <br> Budget | 5, | 4 | Lew | Lew | Duplicate objective |  |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the county | Newber. <br> County/ SCANA towns cities | Operating <br> Budgets | 5, | 1 | Low | Low | deferred | Ongoing |
| PA | Earthquak. | Enforce construction codes to ensure that buildings can withstand e'quakes | Newber. <br> County/ towns in county | Operating <br> Budgets | 5, | 1 | Low | High | deferred | Ongoing |

Source: Newberry County Dept. of Emergency Services Staff, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## gOALS OF THE CITY OF NEWBERRY

1. Develop better data for the city relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the City of Newberry.
2. Increase the city's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the city to reduce the potential damaging effects of hazards without hindering other commmity goals or impeding hazard mitigation programming in the city.
4. Protect the most vulnerable populations, buildings and critical facilities in the city through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. . Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the city about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the city in the face of natural disasters.
8. Ensure that the residents of the city will have secure homes, institutions and place of employment that are now vulnerable to natural disasters.
9. Enstre that the availability and functioning of the infrastructure of the city will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE CITY OF NEWBERRY, SC

Natural hazards ranked by priority in the City of Newberry, SC:

1) Winter Snow and Ice Storms
2) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
3) Flooding
4) Tornados
5) Hurricanes
6) Drought
7) Earthquake

This is not intended to be an exclusive list of natural hazards that threaten the city. These are the most important natural hazards as rated by Newberry City participants in the planning process.

The following are the proposed projects to be undertaken/continued in the municipality of Newberry for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local <br> Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line \& road R-O-W clearance | Newber.C ity Public Works | Operating <br> Budget | $2,4,7,$ <br> and | 1 | Low | Medium | Ongoing | Ongoing |
| NB | Winter Snow \& Ice Storms | Creation of alternate debris disposal locations | Newber. City Public Works | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Medium | Low | Deferred due to funding | 2015 |
| ES | Winter Snow \& Ice Storms | Use van system for emerg. shelter, evac. communicat. capacity | Newber. <br> County Council on Aging. | Operating <br> Budget | $\begin{aligned} & 2,, 4,5, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use mobile emergency generators at critical facil. including city hall | Newber. City | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| SP | Winter Snow \& Ice Storms | Primary and Secondary electric line hardening | Newber. City | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Battery operated emergency radio receivers in homes \& businesses | Newber. City | Capital <br> Improve. <br> Budget | 5 and | 1 | Low | High | Deferred due to funding | Ongoing |
| PI | Winter Snow \& Ice Storms | Develop public information program (How to Protect Against \& Respond to Natural Hazards) | Newber. City | Capital <br> Improve. <br> Budget | 5 and | 1 | Low | Medium | Deferred due to funding | 2015 |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Install surge protectors in critical facilities | Newber. <br> City/ <br> School <br> District/c <br> ounty | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt procedure for suspension of operations during lightning storms | Newber. <br> City/ <br> School <br> District/C <br> ounty | Operating <br> Budgets | $2,, 4,7,$ <br> and | 2 | Low | Low | Deferred due to funding` | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Clear power line and utility easements of debris | Newber. City | Public <br> Works <br> Operating <br> Budget | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Newber. <br> City/ <br> County | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Clear and clean Scotts Creek inside city limits | Newber. City | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Low | Deferred due to funding | 2015 |
| PA | Flooding | Enforce city zoning to restrict development in floodplains | Newber. City | Operating <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Newber. <br> City <br> Council | Operating <br> Budget | 5 and | 2 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Use city's parcel based GIS system to track all structures and demolition permits in flood areas | Newber. City | Operating <br> Budget | and 10 | 2 | Low | Low | Deferred due to funding | Ongoing |
| NB | Flooding | Build storm water holding ponds on Scotts Creek | Newber. <br> City | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 3 | Medium | Low | Deferred due to funding | 2015 |
| NP | Flooding | Extend hazardous structure buyout program | Newber. City | Capital <br> Improve. <br> Budget/ <br> FEMA | $2,, 4,7,$ <br> and | 2 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Identify \& contact all repetitive loss properties | Newb. <br> City | Operating <br> Budgets | , 4, and 10 | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Newb. <br> City | Operating <br> Budgets | , 2, 4, and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Undertake Planning to participate in Community Rating System | Newb. <br> City | Operating <br> Budgets | $, 2,, 4$, and 10 | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Maintain status in the NFIP | Newbbery County | Operating <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & 10 \end{aligned}$ | 1 | Low | High | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Identify critical buildings needing hardening especially those serving vulnerable populations | Newber. <br> City/ <br> County/ <br> School <br> District | Capital <br> Improve. <br> Budgets | , 2, , 4, and 10 | 2 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Newber. City/ towns in county/ school district | Capital Improve. Budgets | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Newber. <br> City/ <br> SCANA <br> SCDOT <br> Coops | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Deferred due to funding | 2015 |
| PA | Tornados | City Council declares Interna. Building Safety Week to promote safety in built environment | Newber. City | Operating <br> Budget | 5 and | 3 | Low | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Hurricanes | Develop <br> Back-up <br> Mobile <br> Water Treat. <br> Facilities | Newber. City <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | Newber. City <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | Ongoing |
| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the city | Newber. <br> City and solid waste contractor s | Capital <br> Improve. <br> Budgets | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General <br> Assembly | Operating <br> Budget | 5 and | 3 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Drought | Build an additional clear well and elevated storage tank to add to the city's water supply | Newber. <br> City <br> Public <br> Works <br> Dept. | Capital Improve. Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| NB | Drought | Build ponds near city for raw water storage for fire suppression | Newber. <br> City <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| NB | Drought | Explore new raw water sources for the water treatment plant | Newber. <br> City <br> Public <br> Works <br> Dept. | Capital <br> Budgets of <br> Public <br> Works <br> Programs | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | High | Deferred due to funding | 2015 |
| PI | Drought | Publicize water conser. practices | Newber. City | Operating <br> Budget | 4,5, and | 1 | Low | Low |  | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. | Identify critical facilities in city that need hardening to withstand e'quake | Newber. <br> City <br> Building <br> Official | Capital <br> Improve. <br> Budget | $, 2,, 4,5$ and | 1 | Low | Medium | Deferred due to funding | 2015 |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the city | Newber. <br> City/ <br> County/ towns in county | Operating <br> Budgets | 5 and | 1 | Low | Low | Deferred due to funding | 2015 |
| PA | Earthquak. | Enforce construction codes to ensure that buildings can withstand e'quakes | Newber.C ity/ towns in county | Operating <br> Budgets | , , 4, and | 1 | Low | High | Ongoing | Ongoing |

Source: Newberry City Multi-Task Team, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## gOALS OF THE TOWN OF PEAK

1. Develop better data for the town relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Peak.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. . Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now wilnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF PEAK, SC

Natural hazards ranked by priority in the Town of Peak, SC:

1) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
2) Winter Snow and Ice Storms
3) Forest Fires/ Wild Fires
4) Flooding
5) Tornados
6) Hurricanes
7) Drought
8) Earthquakes

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by Peak Town participants in the planning process.

The following are the proposed projects to be undertaken/continued in the municipality of Peak for hazard mitigation during 20102015:
(Abbreviations for Type of Mitigation are as follows: PA = Preventive Activities. PP = Property Protection Activities. NB = Natural and Beneficial Functions/Resource Preservation Activities. ES = Emergency Services Activities. SP = Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are explained in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Construct \& equip a station of the Newberry Cnty. Rural Fire Dept in Peak | Newber. <br> County/ <br> County <br> Fire <br> System | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Deferred due to funding | 2015 |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power lines easements of debris | SCE\&G | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2,4,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| PP | Winter Snow \& Ice Storms | Power line \& road R-O-W clearance | SCE\&G <br> Newber. <br> County <br> Public <br> Works/ <br> SCDOT/ <br> SCEG | Operating <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | Medium | Ongoing | Ongoing |


| ES | Winter Snow \& Ice Storms | Use van system for emerg. shelter, evac. communicat. capacity | Newber. <br> County <br> Council on Aging./ Peak Fire Depart. | Operating Budget | 4 and | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Winter Snow \& Ice Storms | Develop public information program (How to Protect Against \& Respond to Natural Hazards) | Town of Peak | Operating <br> Budget | 5 and | 1 | Low | Low | Deferred due to funding | 2015 |
| ES | Forest <br> Fire/Wild <br> Fires | Improved suppression response (tankers, dry chemicals) | Newber. <br> County/ <br> Peak <br> Fire <br> Dept. | Capital Budget | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Forest <br> Fire/Wild Fires | Fire break tree \& brush thinning Controlled open burning by permit (Red flag alerts) | Newber. <br> County/ <br> Peak <br> Fire <br> Depart. | Operating budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |


| PA | Forest <br> Fire/Wild <br> Fires | Building \& Fire Code enforcement/ inspections | Newber. County | Operating budgets | $2,, 4,7,$ <br> and | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS parcel-based GIS system to map, record wild fires, all hazards | Newber. <br> County/ <br> Town of Peak | Operating <br> Budget | and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PI | Forest <br> Fire/Wild Fires | Develop and publish brochures \& articles on techniques to reduce forest \& wild fires | Newber. <br> County <br> Public <br> Safety | Operating <br> Budget | 5 and | 1 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Clear and clean creeks inside city limits | Newber. <br> County <br> Public <br> Works | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |


| PA | Flooding | Enforce county zoning in town limits to restrict development in floodplains | Town of <br> Peak/ <br> Newber. <br> County | Operating <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Peak <br> Town <br> Council | Operating <br> Budget | 5 and | 2 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Use county's parcel based GIS system to track all structures and demolition permits in flood areas | Newber. <br> County/ <br> Town of Peak | Operating <br> Budget | and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Identify \& contact all repetitive loss properties | Town of Peak | Operating <br> Budgets | , 5, , and 10 | 1 | Low | Low | Deferred due to funding | Ongoing |


| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Town of Peak | Operating <br> Budgets | , 5, , and 10 | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Maintain status in the NFIP | Town of Peak | Operating <br> Budget | $2,4,5,7,10$ | 1 | Low | High | Ongoing | Ongoing |
| ES | Tornados | Identify any critical buildings needing hardening especially those serving vulnerable populations | Newber. <br> County/ <br> Town of Peak | Operating <br> Budgets | , 2, 4, and 10 | 1 | Low | Medium | Deferred due to funding | 2015 |


| ES | Tornados | Install safe rooms in any identified critical facilities especially those with vulnerable populations | Newber. <br> County <br> Public <br> Safety/ <br> Town of Peak | Operating <br> Budgets | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Newber. <br> County <br> Public <br> Works/ <br> SCEG <br> SCDOT <br> Peak <br> Fire <br> Depart. | Capital <br> Improve. <br> Budgets | $2,, 4,7,$ <br> and | 1 | Low | Medium | Deferred <br> due to <br> funding | 2015 |
| PA | Tornados | Town <br> Council <br> declares <br> Interna. <br> Building <br> Safety Week <br> to promote <br> safety in <br> built <br> environment | Peak <br> Town Council | Operating <br> Budget | 5 and | 2 | Low | Low | Deferred due to funding | Ongoing |


| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General <br> Assembly | Operating <br> Budget | 5 and | 3 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Drought | Publicize water conser. practices | Peak <br> Town <br> Council/ <br> Newber. <br> County <br> Public <br> Safety | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Earthquak. | Identify any critical facilities in town that need hardening to withstand e'quake | Newber. <br> County <br> Public <br> Safety/ <br> Town of Peak | Operating <br> Budgets | , 4, 5, and 10 | 1 | Low | Medium | $\begin{aligned} & \text { Deferred } \\ & \text { due } \quad \text { to } \\ & \text { funding } \end{aligned}$ | 2015 |
| PA | Earthquak. | Enforce construction codes to ensure that buildings can withstand e'quakes | Newber. <br> County/ <br> Town of Peak | Operating <br> Budgets | 2, , 4, and | 1 | Low | Medium | Ongoing | Ongoing |

Source: Peak Town Council and Mayor, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF WHITMIRE

1. Develop better data for the town relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Whitmire.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other commmnity goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. . Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now wilnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF WHITMIRE, SC

Natural hazards ranked by priority in the Town of Whitmire, SC:

1) Tornados
2) Winter Snow and Ice Storms
3) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
4) Flooding
5) Hurricanes
6) Drought
7) Earthquake

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by Whitmire town participants in the planning process.

The following are the proposed projects to be undertaken/continued in the municipality of Whitmire for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local <br> Goals <br> Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Install early warning system for major wind storms | Town of Whitmi./ Newber. County Public Safety | Capital <br> Improve. <br> Budgets | 4, 5, and | 1 | Low | High | Deferred <br> due to <br> funding | 2015 |
| PA | Tornados | Training of Police, Fire, and EMS personnel for major storms | Town of <br> Whitmi./ <br> Newber. <br> County <br> Public <br> Safety | Operating <br> Budgets | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| SP | Tornados | Create alternate non-land line communication with cell phones using new cell phone tower | Town of <br> Whitmi./ Cellular phone provider | Capital Improve. Budgets | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| ES | Tornados | Identify critical buildings needing hardening especially those serving vulner. popu. | Town of WhitmirN ewber. County/ School District | Operating <br> Budgets | , 2, , 4 and | 2 | Low | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town of Whitmi./ towns in county/ school district | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of Whitmi./ Duke Power/ SCDOT | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,4,7, \\ & \text { and } 9 \end{aligned}$ | 1 | Low | Medium | Deferred due to funding | 2015 |


| PA | Tornados | Town <br> Council <br> declares <br> Interna. <br> Building <br> Safety Week <br> to promote <br> safety in built <br> environment | Town of Whitmi. | Operating <br> Budget | 5 and | 3 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line \& road R-O-W clearance | Town of Whitmi. Duke Power/ SCDOT | Operating <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Use van system for emerg. shelter, evac. communicat. capacity | Newber. <br> County <br> Council on Aging. | Operating <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use mobile emergency generators at critical facil. including town hall | Town of Whitmi. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| SP | Winter Snow \& Ice Storms | Primary and Secondary electric line hardening | Duke <br> Power | Capital Improve. Budget | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Battery operated emergency radio receivers in homes, businesses, police \& fire | Town of Whitmi./ Newber. County Public Safety | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Medium | High | Deferred <br> due to <br> funding | Ongoing |
| PI | Winter Snow \& Ice Storms | Develop public information program (How to Protect Against \& Respond to Natural Hazards) | Town of Whitmi./ Newber. County Public Safety | Capital <br> Improve. <br> Budget | 5 and | 1 | Low | Low | Deferred due to funding | Ongoing |
| SP | Thunder- <br> storms <br> (Hail, <br> Wind, Lightning) | Install surge protectors in identified critical facilities | Town of <br> Whitmi./ <br> Newber. <br> County/ <br> School <br> District | Capital Improve. Budgets | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Adopt <br> procedure <br> for <br> suspension <br> of operations <br> during <br> lightning <br> storms | Town of <br> Whitmi./ <br> School <br> District/N <br> ewber. <br> County | Operating <br> Budgets | $2,, 4,7$ <br> and | 2 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | Town of <br> Whitmi./ <br> Duke <br> Power | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2,4,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Town of <br> Whitmi./ <br> Duke <br> Power | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2,4,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Clear and clean creeks inside town limits | Town of Whitmi. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | Low | Deferred due to funding | Ongoing |


| PA | Flooding | Adopt zoning ordinance to restrict development in floodplains | Town of Whitmi. | Operating <br> Budget | 2, , 4, and | 1 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Flooding | Declare May of each year to be Flood Awareness Month | Whitmir <br> Town <br> Council | Operating <br> Budget | 5 and | 2 | Low | Low | Deferred due to funding | Ongoing |
| PA | Flooding | Collaborate with county's parcel based GIS system to track all structures and demolition permits in flood areas | Town of Whitmi. | Operating <br> Budget | and 10 | 2 | Low | Low | Ongoing | Ongoing |
| PA | Flooding | Identify \& contact all repetitive loss properties | Newb. <br> City | Operating <br> Budgets | $\begin{aligned} & , 2,, 47, \\ & \text { and } 10 \end{aligned}$ | 1 | Low | Low | Deferred due to funding | Ongoing |


| PA | Flooding | Ensure that the FEMA Elevation Certificate is properly completed before issuance on property in flood areas | Newb. City | Operating Budgets | , 4, and 10 | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Flooding | Maintain status in the NFIP | Town of Whitmire | Operating <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & 10 \end{aligned}$ | 1 | Low | High | Ongoing | Ongoing |
| ES | Hurricanes | Develop <br> Back-up <br> Mobile <br> Water Treat. <br> Facilities | Town of Whitmi.P ublic Works Dept. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | Town of Whitmi.P ublic Works Dept. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | Ongoin |


| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the town | Town of Whitmi. and solid waste contractor s | Capital Improve. Budgets | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General <br> Assembly | Operating <br> Budget | ,3,4, and | 3 | Low | Low | $\begin{array}{ll} \text { Deferred } & \\ \text { due } & \text { to } \\ \text { funding } & \end{array}$ | 2015 |
| SP | Drought | Build an additional clear well and elevated storage tank to add to the town's water supply | Whitmi.T <br> own <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| NB | Drought | Build ponds near town for raw water storage for fire suppression | Whitmi. <br> Town <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $23,4,7,$ <br> and | 2 | Medium | Medium | $\begin{array}{\|ll} \text { Deferred } \\ \text { due } & \text { to } \\ \text { funding } \end{array}$ | 2015 |


| PI | Drought | Publicize water conser. practices | Town of Whitmir | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. | Identify critical facilities in town that need hardening to withstand e'quake | Town of Whitmi.P ublic Works | Operating <br> Budget | , 4, and 10 | 1 | Low | Medium | Deferred due to funding | 2015 |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the town | Newber. <br> County <br> Public <br> Safety <br> Dept/ <br> Whitmi. <br> Town <br> Council | Operating <br> Budgets | 5 and | 1 | Low | Low | Deferred  <br> due to <br> funding  | 2015 |
| PA | Earthquak. | Adopt building and fire codes to ensure that buildings can withstand e'quakes | Town of Whitmi. | Operating <br> Budgets | 2, and | 1 | Low | Medium | Deferred due to funding | 2015 |

Source: Town of Whitmire staff and Mayor, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF PROSPERITY

1. Develop better data for the town relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Prosperity.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other commmnity goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. . Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now wilnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF PROSPERITY, SC

Natural hazards ranked by priority in the Town of Prosperity, SC:

1) Tornados
2) Winter Snow and Ice Storms
3) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
4) Hurricanes
5) Drought
6) Earthquakes
7) Flooding

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by Town of Prosperity participants in the planning process.

The following are the proposed projects to be undertaken/continued in the municipality of Prosperity for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Install early warning system for major wind storms | Town of <br> Prosperi. <br> /Newber <br> County <br> Public <br> Safety | Capital <br> Improve. <br> Budgets | , 5 , and | 1 | Low | High | Deferred due to funding | 2015 |
| PA | Tornados | Training of Police, Fire, and EMS personnel for major storms | Town of <br> Prosperi <br> Newber. <br> County <br> Public <br> Safety | Operating <br> Budgets | , 2, , 4, and | 1 | Low | Medium | Ongoing | Ongoing |
| SP | Tornados | Create alternate non-land line communication with cell phones using new cell phone tower | Town of Prosperi /Cellular phone provider | Capital <br> Improve. <br> Budgets | , 2, 4, 5, and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| ES | Tornados | Identify critical buildings needing hardening especially those serving vulnerable populations | Town of <br> Prosperi <br> Newber. <br> County/ <br> School <br> District | Operating <br> Budgets | , 2, , 4, and 10 | 2 | Low | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town <br> Prosperi <br> /towns in county/ school district | Capital <br> Improve. <br> Budgets | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of Prosperi. Duke Power/ SCDOT | Capital Improve. Budgets | $2,, 4,7,$ <br> and | 1 | Low | Medium | Deferred due to funding | 2015 |


| PA | Tornados | Town <br> Council declares Interna. Building Safety Week to promote safety in built environment | Town of Whitmi. | Operating Budget | 5 and | 3 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line \& road R-O-W clearance | Town of Prosperi. Duke Power/ SCDOT | Operating Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Use van system for emerg. shelter, evac. communicat. capacity | Newber. <br> County <br> Council on Aging. | Operating <br> Budget | 2, , 4, 7, and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use mobile emergency generators at critical facil. including town hall | Town of Prosperi. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| SP | Winter Snow \& Ice Storms | Primary and Secondary electric line hardening | Town of Prosperi. Duke Power | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Battery operated emergency radio receivers in homes, businesses, police \& fire | Town of <br> Prosperi./ <br> Newber. <br> County <br> Public <br> Safety | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | High | Deferred due to funding | Ongoing |
| PI | Winter Snow \& Ice Storms | Develop public information program (Protect Against \& Respond to Natural Hazards) | Town of <br> Prosperi./ <br> Newber. <br> County <br> Public <br> Safety | Capital <br> Improve. <br> Budget | 5 and | 1 | Low | Low | Deferred due to funding | 2015 |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in identified critical facilities | Town of Prosperi. Newber. County/ School District | Capital Improve. Budgets | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt procedure for suspension of operations during lightning storms | Town of Prosperi. School District/ Newber. County | Operating <br> Budgets | $2,, 4,7,$ <br> and | 2 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | Town of Prosperi. | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Remove taller trees near critical facilities | Town of Prosperi. | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |
| ES | Hurricanes | Develop <br> Back-up <br> Mobile <br> Water Treat. <br> Facilities | Town of Prosperi. /Newber County Water \& Sewer Author. | Capital <br> Improve. <br> Budget | $2,4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |


| SP | Hurricanes | Replace water storage tanks and pumps as needed | Town of <br> Prosperi. <br> /Newber <br> County <br>  <br> Sewer <br> Author. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the town | Newber. <br> County/ Town of Prosperi. / solid waste contract ors | Capital Improve. Budgets | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |
| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General <br> Assembly | Operating <br> Budget | 2, , 4, and | 3 | Low | Low | $\begin{array}{ll} \text { Deferred } & \\ \text { due } & \text { to } \\ \text { funding } & \end{array}$ | 2015 |
| SP | Drought | Build an additional clear well and elevated storage tank to add to the town's water supply | Prosperi. <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |


| NB | Drought | Build ponds near town for raw water storage for fire suppression | Prosperi. <br> Town <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | High | Medium | Deferred due | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PI | Drought | Publicize water conser. practices | Town of Prosperi. | Operating Budget | 5 and | 1 | Low | Low | $\begin{array}{ll} \text { Deferred } \\ \text { due } & \text { to } \\ \text { funding } & \end{array}$ | Ongoing |
| PA | Earthquak. | Identify critical facilities in town that need hardening to withstand e'quake | Town of Prosperi. | Operating <br> Budget | , 2, , 4 and 10 | 1 | Low | Medium | $\begin{array}{\|ll} \text { Deferred } \\ \text { due } & \text { to } \\ \text { funding } \end{array}$ | 2015 |
| PI | Earthquak. | Develop speakers bureau about earthquake and other natural disaster threats to the town | Newber. <br> County <br> Public <br> Safety <br> Dept/ <br> Prosperi. <br> Town <br> Council | Operating <br> Budgets | 5 and | 1 | Low | Low | Deferred due | 2015 |


| PA | Earthquak. | Enforce <br> building and <br> fire codes to <br> ensure that <br> buildings can <br> withstand <br> e'quakes | Town of <br> Prosperi. | Operating <br> Budgets | $2,, 4$, and | 1 | Low | Medium |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| PA | Flooding | Clear <br> drainage <br> channels <br> inside town <br> limits | Town of <br> Prosperi. | Capital <br> Improve. <br> Budget | $2,, 4,7,$, <br> and | 1 | Ong |  |  |
| PA | Flooding | Maintain <br> status in the <br> NFIP | Town of <br> Prosperi <br> ( | Operating <br> Budget | $2,4,5,7,10$ | 1 | Low | Low | Ongoing |

Source: Town of Prosperity staff and Mayor, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## GOALS OF THE TOWN OF POMARIA

1. Develop better data for the town relating to type, impact, location and cost of the mitigation of natural disasters oceurring in the Town of Pomaria.
2. Increase the town's internal capacity to initiate and sustain emergency response operations during and after a natural disaster and thereby mitigate the effects of hazardous events.
3. Enhance existing or design new policies and/or programs in the town to reduce the potential damaging effects of hazards without hindering other community goals or impeding hazard mitigation programming in the town.
4. Protect the most vulnerable populations, buildings and critical facilities in the town through the implementation of cost-effective, environmentally sound, and technically feasible mitigation projects.
5. . Protect the public health, safety and welfare by increasing the public awareness and understanding of existing hazards and by fostering both individual and public responsibility in the mitigation of risks through the techniques available to minimize vulnerability to those hazards
6. Increase understanding of all residents in the town about the natural hazards threatening local areas and the techniques available to minimize vulnerability to those hazards.
7. Maintain the economic vitality of the town in the face of natural disasters.
8. Ensure that the residents of the town will have secure homes, institutions and place of employment that are now wilnerable to natural disasters.
9. Ensure that the availability and functioning of the infrastructure of the town will not be significantly disrupted by a natural disaster.
10. Inventory and map all structures in flood plains and assess properties that are or may be repetitive loss properties.

## ACTION PLAN FOR THE TOWN OF POMARIA, SC

Natural hazards ranked by priority in the Town of Pomaria, SC:

1) Tornados
2) Winter Snow and Ice Storms
3) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
4) Hurricanes
5) Drought
6) Earthquakes
7) Flooding

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by Town of Pomaria participants in the planning process.

The following are the proposed projects to be undertaken/continued in the municipality of Pomaria for hazard mitigation during 20102015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. SP $=$ Structural Projects. PI $=$ Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan goals are listed in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Install early warning system for major wind storms inclu. sirens, etc. | Town of Pomaria /Newber County Public Safety | Capital Improve. Budgets | 5 and | 1 | Low | High | Deferred due to funding | 2015 |
| PA | Tornados | Training of Police, Rescue Squad, Fire \& EMS personnel for major storms | Town of Pomaria / Newber. County Public Safety | Operating <br> Budgets | 2, , 4, 7 and | 1 | Low | Medium | Ongoing | Ongoing |
| SP | Tornados | Create alternate non-land line communication with cell phones using new cell phone tower | Town of Pomaria /Cellular phone provider | Capital <br> Improve. <br> Budgets | 2, , 4, 7 and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| ES | Tornados | Identify critical buildings needing hardening especially those serving vulner. popu. | Town of <br> Pomaria <br> Newber. <br> County/ <br> School <br> District | Operating <br> Budgets | $\begin{aligned} & , 2,, 4,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install shelters in critical facilities especially those with vulnerable populations | Town Pomaria /towns in county/ school district | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of <br> Pomaria. <br> Duke <br> Power/ <br> SCDOT | Capital <br> Improve. <br> Budgets | $2,, 4,7,$ <br> and | 1 | Low | Medium | Deferred due to funding | 2015 |


| PA | Tornados | Town <br> Council declares Interna. Building Safety Week to promote safety in built environment | Town of Whitmi. | Operating Budget | 5 and | 3 | Low | Low | Deferred due to funding | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Hurricanes | Develop <br> Back-up <br> Mobile <br> Water <br> Treatment Facilities | Town of Pomaria. /Newber County Water \& Sewer Author. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | Town of Pomaria. /Newber County Water \& Sewer Author. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Deferred due to funding | 2015 |


| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the town | Newber. <br> County/ <br> Town of <br> Pomaria. <br> / solid <br> waste <br> contract <br> ors | Capital <br> Improve. <br> Budgets | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line \& road R-O-W clearance | Town of Pomaria. Duke Power/ SCDOT | Operating <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter <br> Snow \& Ice Storms | Use van system for emerg. shelter, evac. communicat. capacity | Newber. County Council on Aging. | Operating <br> Budget | 2, , 4, and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use mobile emergency generators at critical facil. including town hall | Town of Pomaria | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | Ongoing |


| SP | Winter Snow \& Ice Storms | Primary and Secondary electric line hardening | Town of Pomaria. Duke Power | Capital Improve. Budget | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Battery operated emergency radio receivers in homes, businesses, police \& fire | Town of <br> Pomaria./ <br> Newber. <br> County <br> Public <br> Safety | Capital <br> Improve. <br> Budget | $2,, 4,5$, and | 1 | Low | High | Deferred due to funding | Ongoing |
| PI | Winter Snow \& Ice Storms | Develop <br> public <br> information <br> program <br> (Protect <br>  <br> Respond to <br> Natural <br> Hazards) | Town of <br> Pomaria./ <br> Newber. <br> County <br> Public <br> Safety | Capital <br> Improve. <br> Budget | 5 and | 1 | Low | Low | Deferred due to funding | 2015 |
| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in identified critical facilities | Town of <br> Pomaria. <br> Newber. <br> County/ <br> School <br> District | Capital Improve. Budgets | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt <br> procedure <br> for <br> suspension <br> of operations <br> during <br> lightning <br> storms | Town of Pomaria. School District/ Newber. County | Operating <br> Budgets | $2,, 4,7,$ <br> and | 2 | Low | Low | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunder- <br> storms <br> (Hail, <br> Wind, <br> Lightning) | Clear power line and utility easements of debris | Town of Pomaria. | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2, \\ & \text { and } \end{aligned}, 7,$ | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Town of Pomaria | Public <br> Works <br> Operating <br> Budget | $\begin{aligned} & 2, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |
| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General <br> Assembly | Operating <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 3 | Low | Low | Deferred  <br> due <br> funding to <br>   | 2015 |


| SP | Drought | Build an additional clear well and elevated storage tank to add to the town's water supply | Pomaria. <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Deferred due to funding | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Drought | Build ponds near town for raw water storage for fire suppression | Pomaria. <br> Town <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | High | Medium | Deferred due to funding | 2015 |
| PI | Drought | Publicize water conser. practices | Town of Pomaria. | Operating <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | Low | Deferred due to funding | Ongoing |
| ES | Forest <br> Fire/Wild <br> Fires | Improved suppression response (tankers, dry chemicals) | Newber. County | Capital <br> Budget | $2,, 4,7,$ <br> and | 1 | Medium | Medium | Deferred due to funding | 2015 |


| PA | Forest <br> Fire/Wild <br> Fires | Fire break tree \& brush thinning Controlled open burning by permit (Red flag alerts) | Newber. County | Operating budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Forest <br> Fire/Wild <br> Fires | Building \& Fire Code enforcement/ inspections | Newber. County | Operating budgets | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| GIS | Forest <br> Fire/Wild <br> Fires | Use GIS parcel-based GIS system to map, record wild fires, all hazards | Newber. <br> County/ <br> Town of Pomaria | Operating <br> Budget | , 2, 4, and 10 | 1 | Low | Low | Ongoing | Ongoing |
| PI | Forest <br> Fire/Wild <br> Fires | Develop and publish brochures \& articles on techniques to reduce forest \& wild fires | Newber. <br> County <br> Public <br> Safety | Operating <br> Budget | 5 and | 1 | Low | Low | Deferred due to funding | Ongoing |


| PA | Flooding | Clear and <br> drainage <br> channels <br> inside town <br> limits | Town of <br> Pomaria | Capital <br> Improve. <br> Budget | $2,, 4,7,$, <br> and | 1 | Low | Ongodium |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Source: Town of Pomaria staff and Mayor, 2004. Reviewed by the County Corresponding Committee for the 2010 update.

## ACTION PLAN FOR THE TOWN OF LITTLE MOUNTAIN, SC

Natural hazards ranked by priority in the Town of Little Mountain, SC:

1) Tornados
2) Winter Snow and Ice Storms
3) Thunderstorms/Summer Storms with accompanying hail, wind \& lightning
4) Hurricanes
5) Drought
6) Earthquakes
7) Flooding

This is not intended to be an exclusive list of natural hazards that threaten the town. These are the most important natural hazards as rated by Town of Little Mountain participants in the planning process.

The following are the proposed projects to be undertaken/continued in the municipality of Little Mountain for hazard mitigation during 2010-2015:
(Abbreviations for Type of Mitigation are as follows: $\mathrm{PA}=$ Preventive Activities. $\mathrm{PP}=$ Property Protection Activities. $\mathrm{NB}=$ Natural and Beneficial Functions/Resource Preservation Activities. ES $=$ Emergency Services Activities. $\mathrm{SP}=$ Structural Projects. PI = Public Information Activities and GIS = Geographical Information Systems Activities.) Key plan umbrella goals are enumerated in Section VII.

| Type | Type of Hazard | Activity | Lead Agent | Finance Source | Local Goals Addressed | Priority (1 highest, 4 lowest) | Cost | Benefit | Status | Completed by: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Tornados | Install early warning system for major wind storms | Town of <br> Little <br> Mountain/ <br> Newber <br> County <br> Public <br> Safety | Capital <br> Improve. <br> Budgets | , 5, and | 1 | Low | High | Ongoing | 2015 |
| PA | Tornados | Training of Police, Fire, and EMS personnel for major storms | Town of Little Mountain Newber. County Public Safety | Operating <br> Budgets | , 2, , 4, and | 1 | Low | Medium | Ongoing | Ongoing |
| SP | Tornados | Create alternate non-land line communication with cell phones using new cell phone tower | Town of Little Mountain/ Cellular phone provider | Capital <br> Improve. <br> Budgets | , $2,4,5$, and | 1 | Medium | Medium | Ongoing | 2015 |


| ES | Tornados | Identify critical buildings needing hardening especially those serving vulnerable populations | Town of Little <br> Mountain/ <br> Newber. <br> County/ <br> School <br> District | Operating <br> Budgets | $, 2,4$, and 10 | 2 | Low | Medium | Ongoing | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Tornados | Install safe rooms in critical facilities especially those with vulnerable populations | Town <br> Little <br> Mountain/t owns in county/ school district | Capital <br> Improve. <br> Budgets | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Ongoing | 2015 |
| ES | Tornados | Emergency response chain saw project and other efforts to remove debris | Town of Little Mountain. Duke Power/ SCDOT | Capital <br> Improve. <br> Budgets | $2,, 4,7,$ <br> and | 1 | Low | Medium | Ongoing | 2015 |


| PA | Tornados | Town <br> Council declares Interna. <br> Building Safety Week to promote safety in built environment | Town of Little <br> Mountain. | Operating <br> Budget | 5 and | 3 | Low | Low | Ongoing | Ongoing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PP | Winter Snow \& Ice Storms | Power line \& road R-O-W clearance | Town of Little Mountain. Duke Power/ SCDOT | Operating <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Use van system for emerg. shelter, evac. communicat. capacity | Newber. <br> County <br> Council on Aging. | Operating <br> Budget | 2, 4, 7, and | 1 | Low | Medium | Ongoing | Ongoing |
| ES | Winter Snow \& Ice Storms | Procure and use mobile emergency generators at critical facil. including town hall | Town of Little Mountain | Capital Improve. Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Ongoing | Ongoing |


| SP | Winter Snow \& Ice Storms | Primary and Secondary electric line hardening | Town of Little Mountain/D uke Power | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Ongoing | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ES | Winter Snow \& Ice Storms | Battery operated emergency radio receivers in homes, businesses, police \& fire | Town of Little Mountain./ Newber. County Public Safety | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Low | High | Ongoing | Ongoing |
| PI | Winter Snow \& Ice Storms | Develop public information program (Protect Against \& Respond to Natural Hazards) | Town of Little <br> Mountain/ <br> Newber. <br> County <br> Public <br> Safety | Capital <br> Improve. <br> Budget | 5 and | 1 | Low | Low | Ongoing | 2015 |


| SP | Thunderstorms (Hail, Wind, Lightning) | Install surge protectors in identified critical facilities | Town of Little Mountain. Newber. County/ School District | Capital Improve. Budgets | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 1 | Medium | Medium | Ongoing | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Thunderstorms (Hail, Wind, Lightning) | Adopt procedure for suspension of operations during lightning storms | Town of Little Mountain. School District/Ne wber. County | Operating <br> Budgets | $2,, 4,7,$ <br> and | 2 | Low | Low | Ongoing | 2015 |
| PA | Thunderstorms (Hail, Wind, Lightning) | Clear power line and utility easements of debris | Town of Little Mountain. | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2,4,7, \\ & \text { and } \end{aligned}$ | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Thunderstorms (Hail, Wind, Lightning) | Remove taller trees near critical facilities | Town of Little Mountain. | Public <br> Works <br> Operating Budget | $\begin{aligned} & 2,, 4,7, \\ & \text { and } \end{aligned}$ | 2 | Low | Medium | Ongoing | Ongoing |
| ES | Hurricanes | Develop <br> Back-up <br> Mobile | Town of Little Mountain./ | Capital <br> Improve. | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Ongoing | 2015 |


|  |  | Water Treat. Facilities | Newber <br> County <br> Water \& Sewer Author. | Budget |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SP | Hurricanes | Replace water storage tanks and pumps as needed | Town of Little Mountain./ NewberCo unty Water \& Sewer Author. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Ongoing | 2015 |
| SP | Hurricanes | Add capacity at solid waste disposal facilities serving the town | Newber. County/To wn of Little Mountain./ solid waste contractors | Capital <br> Improve. <br> Budgets | $2,, 4,7,$ <br> and | 2 | Medium | Medium | Ongoing | 2015 |
| PA | Drought | Amend state drought legislation to stiffen penalties for violators | S. C. <br> General Assem-bly | Operating Budget | 2, 4, and | 3 | Low | Low | Ongoing | 2015 |


| SP | Drought | Build an additional clear well and elevated storage tank to add to the town's water supply | Prosperi.P <br> ublic <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $\begin{aligned} & 2,, 4,7, \text {, } \\ & \text { and } \end{aligned}$ | 2 | Medium | Medium | Ongoing | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NB | Drought | Build ponds near town for raw water storage for fire suppression | Prosperi. <br> Town <br> Public <br> Works <br> Dept. | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 2 | High | Medium | Ongoing | 2015 |
| PI | Drought | Publicize water conser. practices | Town of Little <br> Mountain | Operating <br> Budget | 5 and | 1 | Low | Low | Ongoing | Ongoing |
| PA | Earthquak. | Identify critical facilities in town that need hardening to withstand e'quake | Town of Little <br> Mountain | Operating <br> Budget | , 2, , 4 and 10 | 1 | Low | Medium | Ongoing | 2015 |
| PI | Earthquak. | Develop speakers bureau about | Newber. County Public | Operating <br> Budgets | 5 and | 1 | Low | Low | Ongoing | 2015 |


|  |  | earthquake and other natural disaster threats to the town | Safety <br> Dept/ <br> Little <br> Mountain <br> Town <br> Council |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PA | Earthquak. | Enforce building and fire codes to ensure that buildings can withstand e'quakes | Town of Little Mountain | Operating <br> Budgets | 2, , 4, and | 1 | Low | Medium | Ongoing | Ongoing |
| PA | Flooding | Clear drainage channels inside town limits | Town of Little Mountain | Capital <br> Improve. <br> Budget | $2,, 4,7,$ <br> and | 1 | Low | Low | Ongoing | Ongoing |
| $P A$ | Flooding | Maintain status in the NFIP | Town of <br> Little <br> Mountain | Operating <br> Budget | $\begin{aligned} & 2,4,5,7, \\ & 10 \end{aligned}$ | 1 | Low | High | Ongoing | Ongoing |

Source: Town of Little Mountain staff and Mayor, 2010. Reviewed by the County Corresponding Committee for the 2010 update.

# Section IX. Monitoring, Evaluating and Updating the Hazard Mitigation Plan within a Five-Year Cycle and Measures Providing for Citizen Input and Review 

According to the Disaster Mitigation Act of 2000 regional planning for hazard mitigation must incorporate a method and schedule of monitoring, evaluating, and updating hazard mitigation processes and results within a five-year cycle. In short, the plan shall be working document and not sit on a shelf unused. In the Central Midlands Region, a regional planning team should be the leader in coordinating with county risk assessment and hazard mitigation committees to monitor the efforts that local participating governments are achieving to make communities disaster resistant by the year 2020 .

## A. Monitoring

Using the Action Plans adopted by each participating local government, each county Emergency Management Director will meet with the participating jurisdictions in their respective county every six month to track progress on implementing the action plan of each unit of government. A checklist shall be mailed by the county EMD staff to each government requesting an update on achievements (such as modifying comprehensive to include a section on hazard mitigation) of the past six months. Each unit of government shall also be asked to report on the type, nature and damage of hazard events occurring in the most recent reporting period, e.g., a thunderstorm, winter ice storm, or flood. Some hazards can have localized impact so a twice-yearly report can help determine what has happened and what effect it had on a community. Such events can also indicate modifications that may need to be instituted with Action Plans to ensure that future hazardous events will be less damaging to a community. The first reporting period will extend from January 1 through June 30 of each year and the second reporting period will extend from July 1 through December 31.

## B. Evaluation

At the end of the December 31 reporting period, the county EMD's shall submit the county reports to staff of Central Midlands Council of Goverments to prepare an annual report for dissemination to the board of the Central Midlands Council of Governments (contracted to prepare the original regional plan and the 2010 update) and to the participating units of government in the region.

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 will be highlighted. The report will also address the following points:

- Evaluate the goals and objectives to ensure that address current and expected conditions
- Determine if the nature or magnitude of risk has changed
- Evaluate whether the current resources are adequate for implementing Action Plans
- Document any implementation problems such as technical, political, legal or coordination issues with other agencies
- Document agency and other partner participation in reacting to hazard events, and
- Document progress toward involving new local governments in the regional plan as participating jurisdictions.

Copies of the annual report on activities in the Central Midlands Region of South Carolina will be made available to each of the implementing agencies, the S. C. Emergency Preparedness Division of the S. C. Adjutant General, and to FEMA. Moreover, a notice of the availability of the regional plan will be published as a legal notice in a newspaper of general circulation in each county in the region.

## C. The Comprehensive Update

The regional plan will be updated every five years. For the Central Midlands Region, this means that the next comprehensive revision will be started in early 2014 and completed by the end of that year. Since this will be 10 since the orginal plan was created, and fresh data such as data from the 2010 Census, will be avaialbe for use in the plan update, the process used for the development of the 2005 should be used. A lead agency should be identified prior to the start of the update to help with the formation of the committee structures and coordinate the data collection document development and public involvement. The process should begin in late 2013 with completion of the document scheduled for late 2014.

## D. Citizen Participation

To ensure that the public within the region and the local jurisdictions have an opportunity to make meaningful input into the planning process, the following procedure is recommended for all participating jurisdictions. First, after preparation of a draft annual revision, a notice of review shall be published in a newspaper of general circulation either as a legal or a display ad. Each jurisdiction is encouraged also to run an article of general interest explaining the importance of the plan and its purpose of moving the community towards a more hazard resistant community. The general public will be offered an opportunity to review the annual update for a period of not less than 10 working days prior to its adoption by resolution of a participating local jurisdiction. The time and date and place of the governing body and the proposed action on the adoption shall be advertised either in the measures specified in this paragraph or in an optional additional article or legal notice.

During the preparation of the comprehensive five-year revision of the plan, the public shall be offered an opportunity to attend the meetings of the county committee to give input and also to comment on the action plan of each local jurisdiction prior to its
inclusion in the regional plan. A copy of the regional plan shall be made available at the offices of the agency responsible for preparing the five-year comprehensive revision. Notices of the time and date and place of the meeting of the local jurisdiction adopting the plan by resolution be published as an article of general interest news or as a legal notice in a newspaper of general circulation not less than 10 working days prior to passage of the adopting resolution.

Local jurisdictions may take and are encouraged to take additional measures to involve the public in the planning and evaluation process but should take the above listed measures at a minimum to afford the public an opportunity to be involved in the document preparation process.

A sample form used by a regional planning team and county risk assessment and hazard mitigation committees to undertake the annual evaluation process and annual report preparation should be similar to that included below.

Questionnaire for Six-months and Annual Update of the $\qquad$ Action Plan (Insert Name of Local Government)

| Type of Hazard Event | Date of <br> Hazard Event | Estimate of Hazard Damages | Activities <br> to <br> Implement Plan | Date Activities Effected | Collaborative Activities to Implement Plan | New Obstacles to Implement Plan | Activities Undertaken to Resolve Obstacles to Plan Implementation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

Name and title of person completing form
Date form completed $\qquad$
Signature of persons completing form

# Section X. A Capabilities Assessment of Land Use and Construction Related Development Codes Enforced by Each Jurisdiction and the Process Local Jurisdictions May Use to Incorporate the Requirements of the Mitigation Plan into Land Development Plans, Land Development Regulations, Capital Improvement Plans, ETC. 

A Description of Legal Hazard Mitigation Tools of General Purpose Units of Local Government in the State of South Carolina and the Central Midlands Region<br>Legal Authority

General purpose units of local government in South Carolina have been created by the Legislature and Governor of the state in accord with Article VIII of the South Carolina Constitution and relevant sections of the S. C. Code of Laws. Municipalities derive their powers from Title 5 of the S. C. Code of Laws found in Volume 2 of the Code of Laws giving police powers to towns and cities while counties derive their powers from Title 4, Volume 1A of the Code of Laws. Counties and municipalities, however, have only those powers they are authorized to exercise and no more.

Counties and municipalities in South Carolina have a wide range of tools available to them for implementing mitigation programs, policies and actions. A hazard mitigation program can use any or all of four broad types of government powers granted by the State of South Carolina, these being regulation, acquisition of real and personal property, taxation, and spending. The scope of this local authority is subject to constraints, however, as all of South Carolina's political subdivisions shall not act without proper delegation from the state. Under a principle known as Dillon's Rule, all power is vested in the State and can only be exercised by local governments to the extent it is delegated. Therefore, this chapter dealing with legal hazard mitigation tools will deal with South Carolina's enabling legislation granting the four types of government powers listed above to the extent that it relates to hazard mitigation tools and techniques.

South Carolina's general purpose local governments have been granted broad regulatory powers in their jurisdictions. As shown above, the Constitution and General Assembly have accorded the general police power on local governments allowing them to enact ordinances that define, prohibit, abate, or regulate acts, omissions, or conditions detrimental to the health, safety, and welfare of the people, and to define and abate nuisances (including public health nuisances).

Because hazard mitigation can be included under the police power (as protection of the public health, safety and welfare), units of general-purpose local government
many include requirements for hazard mitigation in local ordinances. Local governments may also use their ordinance making power to abate any activity or condition making people or property more vulnerable to hazards.

## A. Local Codes and Ordinances Regulating Building Location and Construction

Table X-A through X-D detail in this region by county which local governments have adopted zoning, land development (subdivision) regulations, building codes, and participate in the National Flood Insurance Program. In no case have local governments included a hazard mitigation element in the comprehensive plans their respective jurisdictions because that element is not mandated by the 1994 Local Government Comprehensive Planning Enabling Act beginning at Section 6-7-10 of the S. C. Code of Laws. That legislation requires that population, housing, economic development, natural resources, land use and cultural resources elements are required by no natural hazard mitigation element is mandated. This means that such an element is optional and no local government has specifically included such an element.

The recommendation is made in this plan that the local government-planning act be amended to require that a natural hazard mitigation identification and mitigation element be described and included in such an amendment.

Local governments throughout the Central Midlands Region exercising land use regulating powers under state planning enabling legislation have adopted land use controls as specified in Tables X-A through X-D. These ordinances identify the location of floodplains and floodways and specify the types of land use that may be permitted therein. These regulations are satisfactory to FEMA as they are members in good standing of the National Flood Insurance Program.

The conclusion is made in this study that local zoning, land development and building codes are adequate in all jurisdictions to prevent the establishment of new repetitive loss properties that will be a burden on any government having them located within their jurisdiction. There are 24 repetitive loss properties in the region 17 of which are split between the City of Columbia (10) and Lexington County (7). Moreover, local land use ordinances enforced by all jurisdictions in the region prevent the extension or enlargement of structures in floodplains or floodways.

Also, local ordinances require mobile and manufactured homes to be tied down to prevent loss from wind damage. Construction codes enforced in all jurisdictions also make all construction more resistant to high winds and damage from wild fires because of the nature of construction materials required. There is a uniformity of code effectiveness in all these regards across the region.

Further information on regulatory tools that have the effect of mitigating hazards is as follows:

Many structural mitigation measures involve constructing and retrofitting homes, businesses and other structures according to standards designed to make the buildings more resilient to the impacts of natural hazards. The State of South Carolina mandates (through Section 6-9-5 and subsequent paragraphs of the S. C. Code of Laws) the creation of the S. C. Building Codes Council which in turn has mandated uniform construction standards that local governments must use throughout the state. The S . C. Building Codes Council requires that the International Building Code Congress' standards and procedures be used. In 2004, all S. C. local governments that enforce construction codes have adopted the International Residential Building Codes and implement its frequent updates. Multi-family and commercial and industrial construction must use specialized International Buildings relating to HVAC, plumbing, electrical, etc. All local governments enforcing building codes and inspections are in compliance with what the Building Codes Council specifies and this ensures desired uniformity of codes and their enforcement.

## 2. Land Use

Regulatory powers granted by the state to local governments are the most basic manner through which a local government may control the use of land within its jurisdiction. Through various land use regulatory powers, a local government may control the amount, timing, density, quality, and location of new development. All these characteristics of growth can determine the level of vulnerability of the community in the event of a natural hazard. Land use regulatory powers include the power to engage in planning, to adopt official maps, to enact and enforce zoning regulations, floodplain ordinances, and land development controls.

## 3. Planning

In order to exercise the regulatory powers conferred by the Constitution and the General Assembly of South Carolina, local governments in the state are authorized but not required to create a planning commission. The planning commission may perform a number of duties, including: make studies of the area; determine goals and objectives; prepare and adopt plans to achieve these goals and objectives; develop and recommend policies, ordinances, and administrative means to implement plans; and perform other duties. The importance of the planning powers of local governments is emphasized in Section 6-29-510 of the S. C. Code of Laws, as amended. This law requires that a comprehensive plan be prepared and adopted according to set procedures prior to the adoption of a zoning ordinance or other implementing regulations. While the ordinance itself may provide evidence that zoning is being conducted in accordance with a plan, the existence of a separate planning document ensures that the government is developing regulations and ordinances that are consistent with the published goals and objectives of the community.

## 4. Zoning

Zoning is the traditional and most common tool available to local governments to control and guide the use of land. Broad enabling authority for municipalities and counties in South Carolina to engage in zoning is granted by Section 6-7-710 through 830 of the S. C. Code of Laws. This is the codification of the 1994 Local Government Comprehensive Planning Enabling Act of 1994 that replaced the 1967 Act. The statutory purpose for the grant of power is to promote health, safety, morals, or the general welfare of the community. Land uses controlled by zoning include the type of use such as residential, commercial, or industrial as well as minimum specifications relating to density of population, lot size, building height and set backs.

Local governments are authorized to divide their territorial jurisdictions into districts, and to regulate and restrict the erection, construction, reconstruction, alteration, repair or use of buildings, structures, or land within those districts. Districts may include general use districts; overlay districts relating to flood hazards; historic uses or airport clearance zones; etc.; as well as special use districts. Zoning ordinances consist of both a written text and maps.

## 5. Land Development Regulations

Land development regulations control the division of land into parcels for the purpose of building development or sale. The purpose of these ordinances, also known as subdivision is to ensure that improvements such as roads and drainage structures are built to minimum standards if they are to be deeded to a local government for maintenance. In S. C. local governments may require that subdevelopers install adequate drainage facilities and design water and sewer systems to minimize flood damage and contamination in flood prone areas. Land development regulations require that subdivisions plans be approved prior to the division/recording/sale of land. These ordinances are a more limited tool than zoning as they relate to limiting the placement of new structures in flood prone areas but they are a weapon in the local government arsenal to prevent the development of recurring loss properties. See Section 6-7-1010 and subsequent paragraphs in the S. C. Code of Laws.

## 6. Floodplain Regulations

Most jurisdictions participating in this update of the regional risk assessment and natural hazard mitigation plan participate in the National Flood Insurance Program. At this time, those participating in the NFIP are in good standing. The incentive for local governments to participate in the NFIP is so that property owners both inside and outside "A" flood zone and in floodways is to purchase flood insurance underwritten by the federal government though the NFIP. As part of their participation in the NFIP, local governments must adopt land use ordinances that will restrict development in floodplains and floodways.

## B. Acquisition

The power of acquisition of real and personal property can be a useful tool for pursuing local mitigation goals. Local governments may find the most effective method for completely 'hazard-proofing" a particular piece of property or area is to acquire the property either in fee simple or a lesser interest such as a conservation easement, this removing the property from the private market and eliminating or reducing the possibility of inappropriate development occurring or reoccurring. S. C. law empowers municipalities, counties and special purpose districts to acquire property for public purpose by a variety of means including condemnation through exercise of eminent domain. No unit of general-purpose local government has used condemnation of property as a local mitigation tool in recent years because there are only two recurring loss properties in Richland County and that county has not yet used eminent domain for that purpose

For most properties in a recurring loss situation or threatened by recurring flooding, structural elevation is a preferred and less costly technique in most cases to address the problem. Property acquisition is still an option in the cessation of recurring loss situations.

## C. TAXATION

The S. C. Code of Laws allows municipalities and counties to tax real and personal property and to use the proceeds for public health purposes. These may include the expenditure of taxes on flood way channelization, removal of obstructions in a flood channel, or the construction of flood-related structures when there is a public health interest involved. Bonds repaid with taxes levied on real and personal property may also be issued to pay for flood and drainage related improvements.

## D. Spending

The fourth major power that has been delegated from the South Carolina Constitution and General Assembly to local governments is the power to make expenditures in the public interest. Hazard mitigation principles can be made a routing part of all budgeting decisions made by local governments, including the preparation of a Capital Improvements Budget and Long Range Plan. (CIP).

A Capital Improvements Plan is a schedule for the provision of municipal or county services over a specified period of time. Capital programming can be used as a growth management technique with a view to hazard mitigation. By tentatively committing itself to a timetable for the provision of capital to extend services, a community can control growth to some extent especially in areas where the provision of on-site sewage disposal and water supply are unusually expensive.

In addition to formulating a timetable for the provision of services, a local community can regulate the extension of and access to services. A CIP that is coordinated wit
extension and access policies can provide a significant degree of control over the location and timing of growth. These tools can also influence the cost of growth. If the CIP is effective in directing growth away from environmentally sensitive or high hazard areas, for example, it can reduce environmental costs.

Table X-A
Services and Development Related Ordinances of Local Governments
In Fairfield County, SC

| Name of Jurisdiction | Fire Service | Police Service | Emergency <br> Medical <br> Service | Adopted <br> Zoning <br> Ordinance | Adopted <br> Comprehen. <br> Land <br> Development <br> Regulations | Adopted Building Codes | Participates in the National Flood Insurance Program | Added to the NFIP since the last plan | Current <br> Flood <br> Insurance <br> Program <br> Community <br> Rating <br> System | Year <br> 2010Popu <br> la. | Year <br> Proj <br> Popu <br> (not <br> upat <br> refle <br> 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fairfield County | Volunteers serve Unincorpor. County | Sheriff's <br> Department | County Provides Countywide Service | Yes | Yes | Yes | Yes |  | NA | 23,956 | 27 |
| Winnsboro | Provides own fire service | Provides own Police serv. | Provided by County | Yes | Yes | Yes | No |  | No | 3,550 | 4 |
| Ridgeway | Provided by County system | Provides own Police serv. | Provided by County | Yes | Yes | Yes | No |  | No | 319 |  |

NA- Not assigned by FEMA
NP - Not participating in the hazard mitigation plan

Table X-B
Services and Development Related Ordinances of Local Governments in Newberry County, SC

| Name of Jurisdiction | Fire Service | Police Service | Emergency Medical Service | Adopted <br> Zoning <br> Ordinance | Adopted Comprehen. Land Development Regulations | Adopted Building Codes | Participates in National Flood Insurance Program | Added to the NFIP since the last plan | Current <br> Flood <br> Insurance <br> Program <br> CRS | Current Popula. 2010 | Year <br> 2025 <br> Projected <br> Populatio <br> n (not <br> upated to <br> reflect <br> 2010 <br> Census) |
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| Newberry County | Provided by Newberry County Rural Fire Service | Provided by Sheriff's Department | Provided by Countywide Emergency Medical Service | Yes | Yes | Yes | Yes |  | NA | 37,500 | 42,310 |
| Newberry | Provides own fire service | Provides police protection | " | Yes | Yes | Yes | Yes |  | NA | 10,277 | 12,500 |
| Whitmire | Provides own fire service | Provides police protection | " | No | Yes | Yes | Yes |  | NA | 1,441 | 1,300 |
| Prosperity | Provides own fire service | Provides police protection | " | Yes | Yes | Yes | No |  | No | 1,180 | 1,250 |
| Little Mountain | County provides service | Provided by Sheriff's Department | " | Yes | Yes | Yes | No |  | No | 291 | 350 |
| Peak | County provides service | Provided by Sheriff's Department | " | Yes | Yes | Yes | No |  | No | 64 | 80 |
| Pomaria | County provides service | Provides police protection | " | Yes | Yes | Yes | No |  | No | 179 | 225 |
| Silverstreet (NP) | County provides service | Provided by Sheriff's Department | " | Yes | Yes | Yes | No |  | No | 162 | 250 |

NA - Not assigned by FEMA NP- Not participating in the hazard mitigation plan

Table X-C
Services and Development Related Ordinances of Local Governments in Lexington County, SC

| Name of Jurisdiction | Fire Service | Police Service | Emergency Medical Service | Adopted <br> Zoning <br> Ordinance | Adopted Comprehen. <br> Land <br> Development Regulations | Adopted Building Codes | Participates in the <br> National <br> Flood <br> Insurance <br> Program | Added to the NFIP since the last plan | Current <br> Flood <br> Insurance <br> Program <br> Community <br> Rating <br> System | Current <br> Popula. $2010$ | Year <br> 2025 <br> Projected <br> Populatio <br> n (not upated to reflect 2010 Census) |
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| Lexington County | Provided by County Fire Service from stations throughout the county | Provided by Sheriff's Department | EMS provided by Lex. County countywide | Yes | Yes | Yes | Yes |  | 9 | 262,391 | 311,140 |
| Lexington | Provided by County Fire Service | Provides own police protection | " | Yes | Yes | Yes | Yes |  | NA | 17,870 | 15,000 |
| Irmo | Provided by Irmo-Chapin Fire Distr. | Provides own police protection | " | Yes | Yes | Yes | Yes |  | NA | 11,097 | 13,500 |
| Chapin | Provided by Irmo-Chapin Fire District | Provides own police protection | " | Yes | Yes | Yes | Yes |  | NA | 1,445 | 850 |
| Gilbert | Provided by County Fire Service | Provides own police protection | " | Yes | Yes | Yes | Yes |  | NA | 565 | 700 |
| Summit (NP) | Provided by County Fire Service | Provided by Sheriff's Department | " | No | No | No | No |  | No | 402 | 300 |
| Pelion | Provided by County Fire Service | Provides own police protection | " | Yes | Yes | Yes | Yes |  | NA | 674 | 700 |


| Cayce | Provided by the city fire department | Provides own police protection | " | Yes | Yes | Yes | Yes | NA | 12,528 | 14,500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W. Columbia | Provided by the city fire department | Provides own police protection | " | Yes | Yes | Yes | Yes | NA | 14,988 | 15,000 |
| Springdale | Provided by County Fire Service | Provides own police protection | " | Yes | Yes | Yes | Yes | NA | 2,636 | 3,100 |
| Swansea | Provided by the County Fire Service | Provides own police protection | " | Yes | Yes | Yes | Yes | NA | 827 | 1,000 |
| Gaston (NP) | Provided by County Fire Service | Provides own police protection | " | Yes | Yes | Yes | No | NA | 1,645 | 1,800 |
| Pine Ridge (NP) | Provided by County Fire Service | Provides own police protection | " | Yes | Yes | Yes | Yes | NA | 2,064 | 2,000 |
| South <br> Congaree | Provided by County Fire Service | Provides own police protection | " | Yes | Yes | Yes | Yes | NA | 2,306 | 2,500 |
| BatesburgLeesville | Provided by County Fire Service | Provides own police protection | " | Yes | Yes | Yes | Yes | NA | 5,362 | 7,000 |

[^4]Table X-D
Services and Development Related Ordinances of Local Governments in Richland County, SC

| Name of Jurisdiction | Fire Service | Police Service | Emergency Response Service | Adopted Zoning Ordinance | Adopted Comprehen. Land Develop Regulations | Adopted Building Codes | Participates in the <br> National <br> Flood <br> Insurance <br> Program | Added to the NFIP since the last plan | Current <br> Flood <br> Insurance <br> Program <br> Community <br> Rating <br> System | Current <br> Popula. $2010$ | Year <br> 2025 <br> Projected <br> Populatio <br> n (not <br> upated to reflect <br> 2010 <br> Census) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Richland County | Columbia provides to Richland County under contract | Sheriff's Department | EMS provided by Rich. Cnty. countywide | Yes | Yes | Yes | Yes |  | 9 | 384,504 | 387,240 |
| Columbia | Provided by Columbia | Provides own police protection | * | Yes | Yes | Yes | Yes |  | NA | 129,272 | 130,000 |
| Irmo | Provided by the IrmoChapin Fire District | Provides own police protection | " | Yes | Yes | Yes | Yes |  | NA | 11,097 | 13,500 |
| Forest Acres | Provided by Columbia | Provides own police protection | " | Yes | Yes | Yes | Yes |  | NA | 10,361 | 12,500 |
| Arcadia Lakes | Provided by Columbia | Provided by Sheriff's Department | " | Yes | Yes | Yes | Yes |  | NA | 861 | 1,200 |
| Eastover (NP) | Provided by Columbia | Provides own police protection | " | Yes | Yes | Yes | Yes |  | NA | 813 | 1,000 |
| Blythewood | Provided by Columbia | Provides by Sheriff's Department | " | Yes | Yes | Yes | No |  | No | 2,034 | 1,000 |

NA - Not assigned by FEMA NP- Not participating in the hazard mitigation plan*

* It is critical to note here as in other places in this document that even non-participating jurisdictions are included here because as the annual update are
completed in the future efforts will be made to gain their participation and pertinent information will already be included.


# Section XII. The Processes Local Jurisdictions May Use to Incorporate the Requirements of the Mitigation Plan into Land Development Plans, Land Development Regulations Capital Improvement Plans, etc. 

Much of the information in this document should be used by the participating jurisdictions when updating their Comprehensive Plans. State law identifies a minimum of nine elements for inclusion in a comprehensive plan. Below is an example of how the information contained in this document could be included in the findings and recommendations in the following elements:

- Population: The population data, particulary the estimates can help emergency services plan for potential needs, particulary the number and location of the vulnerable population within the jurisdictions
- Natural Resources: The only spatially fixed hazard in the document is flooding. Accuratley depicting flood hazard areas is crtical for future land use planning to guide future development out of those flood hazard areas.
- Housing: Having an understanding of the number of structures and property values is important to determine vulnerability in the event of a natural hazard, but have the number and location of structures in a flood hazard area should be included as part of this element to determine potential risk to those structures.
- Community Facilities: Having the infrastrucuter in place to withstand and hazard event is important for the quicker recovery, particulary the critical facilities identified in this document.
- Transportation: The transporation system plays an important role in two functions: evacuations prior to a natural hazard event such as a hurricane, and providing access to emergency services before and after a natural hazard event
- Land use: Using the location of the hazard events, particualry the flood hazard areas can help jurisdictions identify areas of higher risk.

All units of general purpose of local government participating in this initial version of the risk assessment and hazard mitigation plan have adopted comprehensive plans pursuant to the procedures outlined in the state planning enabling legislation. If they make amendments to the plan or update it as required by state law every five years after adoption, then they must proceed through the process outlined by the state law. The planning commission duly established, appointed and elected must undertake a comprehensive revision of the plan that should from this time forward include a natural hazards assessment and mitigation element. This All Natural Hazard Risk Assessment and Hazard Mitigation Plan for the Central Midlands Region of South Carolina should serve as the basis for the mitigation element and any subsequent implementation documents for the comprehensive plan. After preparation, the revision must be advertised to the public by legal notice at least 15 days before the public hearing. The planning commission shall adopt the plan revision by resolution and then submit the document to the governing council that must hold two readings before adoption by ordinance. The procedure comprehensive plan preparation and revision is the same for
counties except that three readings must be held prior to county council adoption of the plan by ordinance.

Zoning and land development ordiances are the principle tools for implementing the comprehensive plan. The zoning ordinance implements the land use policies by guiding the location of development. The land development ordinances puts standards in place for how that development occurs, particulary the installation of the facilities such as water, sewer and roads. Zoning and land development ordinances must be prepared by the appropriate planning commission and then submitted to the public for a 15 day review and comment period prior to the recommendation of the planning commission to the governing council. Amendments are processed in the same manner. Again, county councils must have three readings to implement an ordinance or ordinance change.

Many of the action items in this document require capital improvements to the facilities in the jurisdictions. Capital improvement plans are prepared by planning commissions working with government staffs. Upon preparation of the draft, the document is submitted to the governing council as a working document. It is usually not formally adopted but is a reference tool for budgeting and prioritizing.

Taxation and spending issues are usually incorporated into the budget cycle which varies from jurisdiction to jurisdiction annually but which usually involves a suggestion of spending priorities by municipal and county departments, a review of these items in work sessions with the administrator who then works with the finance director regarding revenue sources and estimates for the coming year(s). Then a budget is fashioned and presented to the council finance committee for reworking prior to presentation to the entire council. Then, the budget is advertised for a 15 public comment period and then adopted after two readings if a municipality and three if a county. The inclusion of hazard related items would arise from department input and from the government's capital improvements budget and program if one has been developed and properly updated.

## Appendix

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| d W | Wayne Shuler | RE：draft hazard miti．．． | Thu 5／20／2010 2：．．． 18 KB | HMP | Sent Items | 7 |
| \％R | Renee Caviness | RE：draft hazard miti．．． | Thu 5／20／2010 2：．．． 25 KB | HMP | Inbox | $\gamma$ |
| Q R | Renee Caviness | RE：draft hazard miti．．． | Thu 5／20／2010 1．．． 25 KB | HMP | Inbox | $\nabla$ |
| d H | Herbie Rentz | Re：FW：draft hazard．．． | Wed 5／19／2010 ．．． 25 KB | HMP | Inbox | $r$ |
| Q 0 W | Wayne Shuler | goals for lexington／．．． | Wed 5／19／2010 ．．． 64 KB | HMP | Sent Items | $\gamma$ |
| d H | Herbie Rentz | Re：draft hazard mit．．． | Wed 5／19／2010 ．．． 19 KB | HMP | Inbox | $P$ |
| Q W | Wayne Shuler | FW：draft hazard mi．．． | Wed 5／19／2010 ．．． 37 KB | HMP | Sent Items | $\gamma$ |
| Q A | Andy Simmons | Hazard Mitigation P．．． | Wed 5／19／2010 ．．． 9 KB | HMP | Inbox | $\gamma$ |
| Q 0 W | Wayne Shuler | FW：draft hazard mi．．． | Wed 5／19／2010 ．．． 7 MB | HMP | Sent Items | $\gamma$ |
| Q 0 W | Wayne Shuler | document for the w．．． | Wed 5／19／2010 ．．． 7 MB | HMP | Sent Items | $\gamma$ |
| （ $W$ | Wayne Shuler | RE：revised draft \＃H．．． | Wed 5／19／2010 ．．． 18 KB | HMP | Sent Items | $\gamma$ |
| （ A | Andy Brandenburg | Out of Office：draft ．．． | Wed 5／19／2010 ．．． 9 KB | HMP | Inbox | $\gamma$ |
| Q © W | Wayne Shuler | FW：draft hazard mi．．． | Wed 5／19／2010 ．．． 7 MB | HMP | Sent Items | $\nabla$ |
| （ EMR | EMRICH，CHRISTO．．． | Out of Office AutoR．．． | Wed 5／19／2010 ．．． 10 KB | HMP | Inbox | K |
|  | Wayne Shuler | draft hazard mitigat．．． | Wed 5／19／2010 ．．． 7 MB | HMP | Sent Items | $\gamma$ |
| d H | Herbie Rentz | RE：revised draft \＃H．．． | Tue 5／18／2010 1：．．． 30 KB | HMP | Inbox | r |
| Q $W$ | Wayne Shuler | RE：revised draft \＃H．．． | Tue 5／18／2010 1．．． 25 KB | HMP | Sent Items | $P$ |
| Q © Fr | Fred Taylor | Re：revised draft \＃H．．． | Thu 5／13／2010 3：．．． 97 KB | HMP | Inbox | $\gamma$ |
| St | Herbie Rentz | RE：revised draft \＃H．．． | Thu 5／13／2010 2：．．． 25 KB | HMP | Inbox | $\gamma$ |
| d W | Wayne Shuler | RE：revised draft \＃H．．． | Thu 5／13／2010 1：．．． 16 KB | HMP | Sent Items | － |
| O H | Herbie Rentz | Re：revised draft \＃H．．． | Thu 5／13／2010 1．．． 20 KB | HMP | Inbox | $\nabla$ |
| d W | Wayne Shuler | Re：revised draft \＃H．．． | Thu 5／13／2010 1．．． 16 KB | HMP | Sent Items | $Y$ |
| Q D | Doug Currier | RE：revised draft \＃H．．． | Thu 5／13／2010 1．．． 17 KB | HMP | Inbox | $\gamma$ |
| Q 0 W | Wayne Shuler | revised draft \＃HMP | Thu 5／13／2010 1．．． 7 MB | HMP | Sent Items | $\gamma$ |
| （ Phy | Phyllis Watkins | RE：FC goals and act．．． | Wed 5／12／2010 ．．． 25 KB | HMP | Inbox | $\gamma$ |
| Q W | Wayne Shuler | RE：FC goals and act．．． | Wed 5／12／2010 ．．． 17 KB | HMP | Sent Items | $\gamma$ |
| Q 0 | Phyllis Watkins | RE：FC goals and act．．． | Tue 5／11／2010 4：．．． 309 KB | HMP | Inbox | $\gamma$ |
| D N | Neil Ellis | RE：RC goals and ac．．． | Mon 5／10／2010 ．．． 24 KB | HMP | Inbox | $\nabla$ |
| Q C | Charlene Herring | Re：FC goals and act．．． | Sun 5／9／2010 4：1．．． 21 KB | HMP | Inbox | $\nabla$ |
| Q To | Tommy Long | Re：NC goals and ac．．． | Fri 5／7／2010 10：3．．． 26 KB | HMP | Inbox | $\gamma$ |
| Q W | Wayne Shuler | RE：NC goals and ac．．． | Fri 5／7／2010 10：2．．． 18 KB | HMP | Sent Items | r |
| 鄙 T | Tommy Long | Re：NC goals and ac．．． | Fri 5／7／2010 10：1．．． 653 KB | HMP | Inbox | $P$ |
| D W | Wayne Shuler | RE：Town goals and ．．． | Thu 5／6／2010 8：3．．． 9 KB | HMP | Sent Items | $r$ |
| E Bu | Buddy Johnson | Re：Town goals and ．．． | Wed 5／5／2010 4：．．． 12 KB | HMP | Inbox | $P$ |
| Q W | Wayne Shuler | RE：NC goals and ac．．． | Wed 5／5／2010 1．．． 9 KB | HMP | Sent Items | $\checkmark$ |
| 宜 0 | Tommy Long | Re：NC goals and ac．．． | Wed 5／5／2010 1．．． 631 KB | HMP | Inbox | $\nabla$ |
| Q $\quad$ W | Wayne Shuler | Town goals and acti．．． | Wed 5／5／2010 1．．． 77 KB | HMP | Sent Items | 1 |
| d M | Mark Forrester | RE：LC goals and act．．． | Tue 5／4／2010 11：．．． 39 KB | HMP | Inbox | r |
| d W | Wayne Shuler | RE：LC goals and act．．． | Tue 5／4／2010 11：．．． 21 KB | HMP | Sent Items | 1 |
| Com | Mark Forrester | RE：LC goals and act．．． | Tue 5／4／2010 10：．．． 1 MB | HMP | Inbox | $\gamma$ |
| d W | Wayne Shuler | RE：NC goals and ac．．． | Tue 5／4／2010 10：．．． 25 KB | HMP | Sent Items | $\gamma$ |
| －Li | Lisa Jones | RE：NC goals and ac．．． | Tue 5／4／2010 10：．．． 34 KB | HMP | Inbox | r |
| d W | Wayne Shuler | RE：NC goals and ac．．． | Tue 5／4／2010 10：．．． 21 KB | HMP | Sent Items | $\gamma$ |
| －D | Doug Currier | RE：NC goals and ac．．． | Tue 5／4／2010 10：．．． 24 KB | HMP | Inbox | $\gamma$ |
| D W | Wayne Shuler | RE：NC goals and ac．．． | Tue 5／4／2010 9：4．．． 17 KB | HMP | Sent Items | 1 |
| Q D | Doug Currier | RE：NC goals and ac．．． | Tue 5／4／2010 9：4．．． 19 KB | HMP | Inbox | $\bigcirc$ |
| Q W | Wayne Shuler | FC goals and action．．． | Tue 5／4／2010 9：0．．． 309 KB | HMP | Sent Items | $P$ |


| 7: [ 0 From | Subject | Received Size | Categories | In Folder | $\gamma$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (1) Wayne Shuler | NC goals and action... | Tue 5/4/2010 9:0... 478 KB | HMP | Sent Items | $\gamma$ |
| - Wayne Shuler | LC goals and action ... | Tue 5/4/2010 9:0... 861 KB | HMP | Sent Items | $\gamma$ |
| - Wayne Shuler | RC goals and action... | Tue 5/4/2010 9:0... 494 KB | HMP | Sent Items | r |
| Q Mary Arrowood | FW: assessor data \#... | Thu 4/29/2010 9:... 118 KB | HMP | Inbox | $\gamma$ |
| Q © Mary Arrowood | RE: assessor data \#... | Wed 4/28/2010 ... 117 KB | HMP | Inbox | $\gamma$ |
| $\triangle$ Tommy Long | Re: participants in N... | Wed 4/28/2010 ... 16 KB | HMP | Inbox | $\gamma$ |
| $\square$ Wayne Shuler | RE: Assessor Data \#... | Wed 4/28/2010 ... 40 KB | HMP | Sent Items | $\gamma$ |
| - Collins, Tom | FW: county particip... | Wed 4/28/2010 ... 103 KB | HMP | Inbox | $r$ |
| Wendell Irby | Assessor Data \#HMP | Tue 4/27/2010 5:... 12 KB | HMP | Inbox | $\gamma$ |
| ( Mercado, Norma | WSA Info | Tue 4/27/2010 4:... 70 KB | HMP | Inbox | $\gamma$ |
| d Phyllis Watkins | FW: Gregrey D. Giny... | Tue 4/27/2010 4:... 19 KB | HMP | Inbox | $P$ |
| ( Wayne Shuler | RE: county participa... | Tue 4/27/2010 4:... 45 KB | HMP | Sent Items | $\gamma$ |
| - Collins, Tom | FW: county particip... | Tue 4/27/2010 3:... 98 KB | HMP | Inbox | $\nabla$ |
| Gregory Sprouse | Hazard Map Link | Tue 4/27/2010 3.... 8 KB | HMP | Inbox | $\gamma$ |
| d Wayne Shuler | hazard events by jur... | Tue 4/27/2010 2:... 7 KB | HMP | Sent Items | $\gamma$ |
| d Wayne Shuler | county particpant \#... | Tue 4/27/2010 2:... 7 KB | HMP | Sent Items | $r$ |
| ( Wayne Shuler | county participants ... | Tue 4/27/2010 1:... 7 KB | HMP | Sent Items | $\gamma$ |
| - Wayne Shuler | RE: assessor data \#... | Tue 4/27/2010 1... 107 KB | HMP | Sent Items | Y |
| D Tommy Long | Re: assessor data \#... | Tue 4/27/2010 9:... 16 KB | HMP | Inbox | P |
| Q Mary Arrowood | RE: assessor data \#... | Tue 4/27/2010 9:... 19 KB | HMP | Inbox | $\gamma$ |
| Q Mary Arrowood | RE: assessor data \#... | Tue 4/27/2010 9:... 19 KB | HMP | Inbox | $\gamma$ |
| D Tommy Long | Fw: assessor data \#... | Tue 4/27/2010 9:... 36 KB | HMP | Inbox | Pr |
| (1) Wayne Shuler | assessor data \#HMP | Mon 4/26/2010 ... 31 KB | HMP | Sent Items |  |
| - Wayne Shuler | goals and objectives | Mon 4/12/2010 ... 166 KB | HMP | Sent Items | $\gamma$ |
| - Wayne Shuler | FW: data \#HMP | Thu 4/1/2010 9:0... 36 KB | HMP | Sent Items |  |
| - Wayne Shuler | FW: Newberry Coun... | Thu 4/1/2010 8:5... 33 KB | HMP | Sent Items | $\gamma$ |
| d Jeff Shacker | RE: UPDATE; RE: Foll... | Fri 3/12/2010 11:... 16 KB | HMP | Inbox |  |
| - Wayne Shuler | assessed value | Thu 3/11/2010 3:... 20 KB | HMP | Sent Items | $\gamma$ |
| ( Wayne Shuler | RE: Central Midland... | Wed 3/3/2010 1... 12 KB | HMP | Sent Items |  |
| \% Warr, Gray | Central Midlands H... | Wed 3/3/2010 1... 2 MB | HMP | Inbox | $P$ |
| d Rick Thomas | RE: UPDATE; RE: Foll... | Mon 3/1/2010 7:... 26 KB | HMP | Inbox | $\gamma$ |
| ( Rick Thomas | RE: All Natural Haza... | Mon 3/1/2010 7:... 29 KB | HMP | Inbox | $\gamma$ |
| d Buddy Johnson | Re: All Natural Haza... | Mon 3/1/2010 4:... 20 KB | HMP | Inbox | V |
| d Wayne Shuler | RE: UPDATE; RE: Foll... | Mon 3/1/2010 3:... 20 KB | HMP | Sent Items | $\gamma$ |
| S Joan Taylor | RE: UPDATE; RE: Foll... | Mon 3/1/2010 3:... 23 KB | HMP | Inbox | $P$ |
| Q © Wayne Shuler | Delivered: RE: Follo... | Mon 3/1/2010 3:... 5 KB | HMP | Sent Items | $P$ |
| (d) Wayne Shuler | RE: Follow-up All N... | Mon 3/1/2010 3:... 27 KB | HMP | Sent Items | $P$ |
| Sohn Sharpe | RE: Follow-up All N... | Mon 3/1/2010 3:... 33 KB | HMP | Inbox | $\nabla$ |
| d Wayne Shuler | RE: All Natural Haza... | Mon 3/1/2010 2:... 16 KB | HMP | Sent Items | P |
| d Wayne Shuler | RE: All Natural Haza... | Mon 3/1/2010 2:... 13 KB | HMP | Sent Items | $\gamma$ |
| ( Wayne Shuler | RE: All Natural Haza... | Mon 3/1/2010 2:... 17 KB | HMP | Sent Items | P |
| ( Wayne Shuler | RE: Follow-up All N... | Mon 3/1/2010 2:... 24 KB | HMP | Sent Items | 7 |
| ( Wayne Shuler | UPDATE; RE: Follow... | Mon 3/1/2010 2:... 29 KB | HMP | Sent Items | P |
| John Sharpe | RE: Follow-up All N... | Mon 3/1/2010 2:... 29 KB | HMP | Inbox | $\gamma$ |
| (1) Wayne Shuler | Delivered: RE: Follo... | Mon 3/1/2010 2:... 5 KB | HMP | Sent Items | $\gamma$ |
| ( Wayne Shuler | RE: Follow-up All N... | Mon 3/1/2010 2:... 20 KB | HMP | Sent Items | $\nabla$ |
| John Sharpe | RE: Follow-up All N... | Mon 3/1/2010 2:... 27 KB | HMP | Inbox | $\gamma$ |
| (1) Wayne Shuler | FW: Follow-up All ... | Mon 3/1/2010 2:... 7 MB | HMP | Sent Items | $\gamma$ |
| (1) Wayne Shuler | FW: Follow-up All ... | Mon 3/1/2010 2:... 73 KB | HMP | Sent Items | $\gamma$ |
| - M + Extreme Email... | Returned mail: Deliv... | Mon 3/1/2010 2:... 32 KB | HMP | Inbox | $\gamma$ |
| - Wayne Shuler | FW: Follow-up All ... | Mon 3/1/2010 2:... 7 MB | HMP | Sent Items | $\gamma$ |


|  | Subject | Received Size | Categories | In Folder | $\gamma$ |
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| $\square$ Wayne Shuler | FW: Follow-up All ... | Mon 3/1/2010 2:... 7 MB | HMP | Sent Items | $P$ |
| $\square$ Wayne Shuler | Follow-up All Natur... | Mon 3/1/2010 1:... 7 MB | HMP | Sent Items | $\gamma$ |
| Rick Thomas | RE: All Natural Haza... | Wed 2/24/2010 ... 22 KB | HMP | Inbox | $P$ |
| d Wayne Shuler | RE: All Natural Haz... | Wed 2/24/2010 ... 10 KB | HMP | Sent Items | $\gamma$ |
| Buddy Johnson | Re: All Natural Haza... | Wed 2/24/2010 ... 17 KB | HMP | Inbox | $P$ |
| d Wayne Shuler | RE: All Natural Haza... | Wed 2/24/2010 ... 9 KB | HMP | Sent Items | $\nabla$ |
| Buddy Johnson | Re: All Natural Haza... | Wed 2/24/2010 ... 14 KB | HMP | Inbox | $r$ |
| Rick Thomas | All Natural Hazards... | Tue 2/23/2010 7:... 22 KB | HMP | Inbox | $\gamma$ |
| - Wayne Shuler | RE: All Natural Haza... | Tue 2/23/2010 4:... 47 KB | HMP | Sent Items | $\bigcirc$ |
| Natalie McKelvey | RE: All Natural Haza... | Tue 2/23/2010 4:... 22 KB | HMP | Inbox | र |
| d Wayne Shuler | RE: All Natural Haza... | Tue 2/23/2010 4:... 16 KB | HMP | Sent Items | r |
| Natalie McKelvey | RE: All Natural Haza... | Tue 2/23/2010 4:... 18 KB | HMP | Inbox | र |
| - Wayne Shuler | FW: All Natural Haz... | Tue 2/23/2010 4:... 7 MB | HMP | Sent Items | $r$ |
| - M+ Extreme Email... | Returned mail: Deliv... | Tue 2/23/2010 3:... 30 KB | HMP | Inbox | $\gamma$ |
| - Wayne Shuler | All Natural Hazards ... | Tue 2/23/2010 3:... 7 MB | HMP | Sent Items | $\nabla$ |
| Q 0 John Knight | CMCOG - News Rel... | Thu 2/18/2010 1... 11 MB | HMP | Inbox | P |
| ! © John Knight | All Hazards Risk Ass... | Thu 2/18/2010 9:... 11 MB | HMP | Inbox | $\gamma$ |
| Becky Hildebrand | FW: ad for public re... | Tue 2/16/2010 9:... 20 KB | HMP | Inbox | 8 |
| Classifieds@newb... | RE: Legal Ads | Tue 2/16/2010 8:... 11 KB | HMP | Inbox | $\nabla$ |
| D Phyllis Watkins | RE: ad for public rev... | Fri 2/12/2010 4:2... 17 KB | HMP | Inbox | $\nabla$ |
| Pgallery@heraldin... | RE: legal ad | Fri 2/12/2010 2:5... 12 KB | HMP | Inbox | $\gamma$ |
| ( Harriman, Evelyn | RE: leagal ad for Me... | Fri 2/12/2010 2:1... 17 KB | HMP | Inbox | 8 |
| D Doug Currier | RE: ad for public rev... | Fri 2/12/2010 2:0... 14 KB | HMP | Inbox | $P$ |
| E Natalie McKelvey | RE: ad for public rev... | Fri 2/12/2010 12:... 17 KB | HMP | Inbox | $P$ |
| d Andy Simmons | RE: document for th... | Fri 2/12/2010 12:... 16 KB | HMP | Inbox | $P$ |
| © Wayne Shuler | document for the w... | Fri 2/12/2010 9:5... 7 MB | HMP | Sent Items | $P$ |
| Andy Brandenburg |  | Tue 2/2/2010 9:0... 14 KB | HMP | backlog | 7 |
| (d) Brian Carter | RE: goals and work ... | Mon 12/21/2009... 21 KB | HMP | backlog | $\gamma$ |
| Q Ben Mauldin | RE: pop projections ... | Fri 12/18/2009 3:... 13 KB | HMP | backlog | 8 |
| D Michael P. Criss | RE: Follow-up email... | Sun 12/13/2009 ... 22 KB | HMP | backlog | $\gamma$ |
| ( Charlene Herring | RE: Follow-up email... | Fri 12/11/2009 2:... 18 KB | HMP | backlog | $r$ |
| $\square$ JAMES HAYES | RE: Richland County... | Thu 12/10/2009 ... 53 KB | HMP | backlog | Y |
| Qa JAMES HAYES | RE: Richland County... | Wed 12/9/2009 ... 54 KB | HMP | backlog | $\gamma$ |
| Gregory Sprouse | Critical Facilities | Wed 12/9/2009 ... 10 KB | HMP | backlog | Y |
| Charlene Herring | Re: Follow-up email... | Tue 12/8/2009 7:... 21 KB | HMP | backlog | $\gamma$ |
| - Mercado, Norma | RE: Follow-up email... | Tue 12/8/2009 2:... 74 KB | HMP | backlog | r |
| Ch Charlene Herring | RE: Follow-up email... | Tue 12/8/2009 1... 23 KB | HMP | backlog | $r$ |
| Charlene Herring | Re: Follow-up email... | Tue 12/8/2009 1... 16 KB | HMP | backlog | $\nabla$ |
| Charlene Herring | Re: goals and work ... | Sun 12/6/2009 7:... 25 KB | HMP | backlog | $\gamma$ |
| S Neil Ellis | RE: Follow-up email... | Fri 12/4/2009 1:3... 18 KB | HMP | backlog | $\gamma$ |
| ( Mail Delivery Syst... | Mail delivery failed | Fri 12/4/2009 9:1... 15 KB | HMP | backlog | $\gamma$ |
| - Mark Forrester | RE: goals and work ... | Thu 12/3/2009 2:... 66 KB | HMP | backlog | $\checkmark$ |
| Joe Bedenbaugh | RE: goals and work ... | Thu 12/3/2009 1:... 23 KB | HMP | backlog | $\gamma$ |
| Fred Taylor | Re: revised goals an... | Thu 12/3/2009 1... 11 KB | HMP | backlog | $P$ |
| Herbie Rentz | Re: goals and objec... | Thu 12/3/2009 1... 18 KB | HMP | backlog | P |
| $\triangle$ Mercado, Norma | RE: reminder \#HMP | Tue 11/24/2009 ... 800 KB | HMP | backlog | $\gamma$ |
| Charlene Herring | Re: reminder \#HMP | Mon 11/23/2009... 16 KB | HMP | backlog | $\gamma$ |
| Alfred Crouch | RE: reminder \#HMP | Mon 11/23/2009... 22 KB | HMP | backlog | P |
| $\triangle$ BRIAN FITZGERALD | RE: Richland County... | Tue 11/17/2009 ... 26 KB | HMP | backlog | $\gamma$ |
| $\Leftrightarrow$ JOHN CLOYD | RE: Richland County... | Mon 11/16/2009... 18 KB | HMP | backlog | P |
| $\square$ Wayne Shuler | data \#HMP | Thu 11/12/2009 ... 34 KB | HMP | Sent Items | $\checkmark$ |


|  | Subject | Received Size | Categories | In Folder | $\gamma$ |
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| $\square$ Wayne Shuler | Newberry County a... | Thu 11/12/2009 ... 30 KB | HMP | Sent Items | $\gamma$ |
| d Town of Ridgeway | Fw: RE: critical facilit... | Wed 10/28/2009... 29 KB | HMP | backlog | $\gamma$ |
| ( Charlene Herring | RE: critical facilites \#... | Tue 10/27/2009 ... 25 KB | HMP | backlog | $r$ |
| ( Fred Taylor | RE: crtical facilites \#... | Tue 10/27/2009 ... 12 KB | HMP | backlog | r |
| St Fred Taylor | Re: crtical facilites \#... | Mon 10/26/2009... 10 KB | HMP | backlog | $\checkmark$ |
| ( elingle@newberry... | Re: critical facilites \#... | Mon 10/26/2009... 16 KB | HMP | backlog | $\checkmark$ |
| ( Buddy Johnson | Re: critical facilites \#... | Fri 10/23/2009 4:... 15 KB | HMP | backlog | $\checkmark$ |
| D Tommy Long | Re: critical facilites \#... | Fri 10/23/2009 4:... 16 KB | HMP | backlog | $\gamma$ |
| d Jim Hinton | Re: crtical facilites \#... | Fri 10/23/2009 8:... 11 KB | HMP | backlog | $\checkmark$ |
| Natalie McKelvey | RE: crtical facilites \#... | Fri 10/23/2009 8:... 20 KB | HMP | backlog | $\gamma$ |
| S Natalie McKelvey | RE: crtical facilites \#... | Fri 10/23/2009 8:... 16 KB | HMP | backlog | $\gamma$ |
| ( Neil Ellis | RE: Critical facilites | Thu 10/22/2009 ... 18 KB | HMP | backlog | $\checkmark$ |
| d Phyllis Watkins | RE: critical facilites \#... | Thu 10/22/2009 ... 132 KB | HMP | backlog | $\checkmark$ |
| (1) Mercado, Norma | RE: crtical facilites \#... | Thu 10/22/2009 ... 7 MB | HMP | backlog | $\checkmark$ |
| Ca Charlene Herring | Re: critical facilites \#... | Thu 10/22/2009 ... 16 KB | HMP | backlog | $\checkmark$ |
| Buddy Johnson | Re: critical facilites \#... | Thu 10/22/2009 ... 12 KB | HMP | backlog | $\checkmark$ |
| Q Jason Kent | RE: Critical Facilities | Thu 9/3/2009 11:... 55 KB | HMP | backlog | $r$ |
| ( Wayne Shuler | RE: Critical Facilities | Thu 9/3/2009 10:... 13 KB | HMP | Sent Items | r |
| Q - Jason Kent | Critical Facilities | Thu 8/27/2009 2:... 82 KB | HMP | backlog | < |
| d Jason Kent | Critical Facilities | Thu 6/18/2009 1... 8 KB | HMP | backlog | P |
| $\Leftrightarrow$ Tommy Long | Re: | Tue 6/16/2009 3:... 17 KB | HMP | backlog | $\checkmark$ |

Wmembers are that cash flow is not going to sup scussing next port the valuation of that," Counscenario coun cilman Kirkman Finlay said desperate to We're going to Took up and be in the hole $\$ 3$ million
in loan was a Finlay wants to dissolve the ral money and. Eau Claire Development Corp and ncluded: from the de ng and Urbans
 from the de. ngand Urban, e city's general sewer fund ${ }^{\circ}$ ot have to pay grant money, id have to pay Qoan from its M pays for ba ce and fire pro"salvage what we can" of its remaining properties - mainly 35 . ots scattered throughout some north Columbia neighborhoods. LIT don't see how we can continue to pump money there, Finlay said:

But Finlay withdrew his proposal after some intense opposition from Councilman Sam Davis, whose district includes the Eal Cläre community,
"We have to allow the corpo ration to move forward the way it should be phe said.品 a make up the projected shortáals "t's a tough year to do any: thing with the budget, but I dont agree with the premise of massive unfunded liabilities) Harrell said. We've made sure we have prop. erly funded the retirement system and will continue to do so.". कt Wover the past several years awnakers have raised employee contributions to the pension fuid and ncreased the amount the state kels in But the Pew report says etirees also are living longer; putting morestress on the pension system. That raises questions about whether the gap - between the amounts in state pension systems and the amounts they owe will continue to grow:
Uiahnsald states need to do something that may be politically unpopular Promise less to future

"States haveran obligation to make changes oremployees coming into the system; Urah said. The costs are not going away

(pert oodi)
Repuirs 8 Relines While You Wait

## WH General Dentists:

 COLUMBIA DENTURE EENTER COLUMBIA, C .2123 Brequ iver Rd. $\circ$ \%882377

Whan A Natural Hazards Risk Assessmentond Hazard Mitigation Plan What the Central Midands Regon of Sofith Carofina-
The staff of the Central Midands Couhcil of Governments seeks public comiment and input of the update of the regional risk assessmentand natUral hazards mitigation plan, The public can access the draft plan update on the website of the Central Miflands COG at wwwcentralmidindsorg from February 122010 , to March 4 th 2010 Indiyiduals seeking to comment on the dratt plar update should submit their Comments to Mr Wayie Shüler at Centual Midland Council of Government prior to the cose of Business on March th, 2010 (tele (803) 376-5390, email wshuler@cen tramidandsorg
The draft plan update details the nature of the most significant natural haz ards threatening local governments it the tegion to contains goas and objectiyes for many of the local governments in the region as well as mitigation measures to address prioritized naturai hazards threatening those local governments Adoption by resolution of the updated regional plan by the local governments will make them eligible for hazard mitigation grants. It will also inyolve the local government in more detailed record keeping on the occurrence and cost of natural hazard events as well a a process to update and revise the plan periodically $\qquad$
 The purpose of the plan update isto meet the requirements of the Disaster Mitigation Act of 2000 to belp make the local governments in the region more prepared for and resistan to the effects of natural hazards.
For further information on the draft plan update please contact Me Wayne Shuler at the Central Midañds. Coüncil of Governments 236 Stone etidge Drive, Columbia,SC, 29210,

Whrathe
(803) $376-5390$

Email wshiuler@céntralmidlands:org

admeated. so, a God and celenat he created in erences noter ticenter of men ost fuindamental ner God-created her husband. In is husbands to $t$ as Christ loved ns 5:25). Without d, a wornan will $t$ bitterness and and no words of romen will do. A God to be loved by her husband rive. pest need is to be 3. In survey after are asked what their wives, men swer that they $l$, for men equate what Annie Oak5 what wiy wife a man is rade to an. This, ${ }^{\text {to }}$, ${ }^{2}$, ${ }^{\circ} \mathrm{a}$ :"..the wife must nă" (Ephesians
re your wife, and espect four husyou both theill in fferences he creattle and female, for ces cont the "two

 retired edacatot. The program will lso consist of masical selictions by the New Enor雲. Association Måss Choir ayd other guest choirs. Dinfer will be served. Everyde is invited.

Feb. $28,6 \mathrm{p}$, m Emet Ministries on Highway 76 n Prosperity There will be dramatic presentation of Esther, a concert by Will Spires, and children's activities: For info. visit whw: emetministries.com or call (803) 603-7852. An All Natural Hazards Eikk Assessment and Hazard Mitigation Plan for the Central Ndlands Region of South Carolina

The staff of the Central Midhnds Council of Governments seeks public comment and input onthe update of the regional risk as'sessment and natural hazeds mitigation plan. The public can access the draft plan update the website of the Central:Midlands COG at www.centralmidlands lyg from February 12, 2010, to March 4th, 2010. Individuals seekiagop comment on the draft:plan update should submit their comments ti Mr. Wayne Shiuler at Central Midlands Corricii of Government prior to the close of business on March 4th, 2010. (tele (803) 3765390 , email: wshuler@centralmidlands:org)
The draft plan update details the 离ture of the most significant natural hazards threafening localgemenments in the region. It contains goals and objectives for mady of the local governments in the region as well as mitigation measires to address prioritized natural hazards threatening those logligovernments. Adoption byresolution of the updated regional plat by the local governments will make them eligible for hazard mitigation grants. It will also involve the local government in more detailed recad keeping on the occurrence and costsof natural hazard events as wil as as process to update and revise the plan periodicaliy
purpose of the plan update is to med the requirements of the Tisaster"Mitigation Act of 2000 to help make the local governments in the region more prepared for and resistanto the effects of natural. hazards.


For further information on'the draft plan uplate please contact Mr. Wavie Shuler at the Central Midiands Cuncil of Governments, 236 Stoneridge Drive, Coluthia, SC, 29210 Têe. (803) 376-5390.



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For a discounted rate, you can place your online
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Notice of Availability for Review and Public Comment An All Natural Hazards Risk Assessment and Hazard Mitigation Plan for the Central Midlands Region of South Carolina
The staff of the Central Midlands Council of Governments seeks jublic comment and input on the update of the regional risk assessnent and natural hazards mitigation plan. The public can access the draft plan update on the website of the Central Midlands COG at www.centralmidlands.org from February 12, 2010, to March 4th, 2010. Individuals seeking to comment on the draft plan update should submit their comments to Mr. Wayne Shuler at Central Midands Council of Governments prior to the close of business on March 4th, 2010. TeI: (803) 376-5390, email: wshuler@cenralmidlands.org

The draft plan update details the nature of the most significant natral hazards threatening local governments in the region. It contains roals and objectives for many of the local governments in the reyion as well as mitigation measures to address prioritized natural razards threatening those local governments. Adoption by resoluion of the updated regional plan by the local governments will make hem eligible for hazard mitigation grants. It will also involve the ocal government in more detailed record keeping on the occurrence ind cost of natural hazard events as well as a process to update and evise the plan periodically

The purpose of the plan update is to meet the requirements of the Disaster Mitigation Act of 2000 to help make the local govermments n the region more prepared for and resistant to the effects of natual hàzards.

## Older Americans: Connecting the Community

Every May since 1963, and speak their minds. which older adults bring more engaged lives, need for intergenerational and care. Their efforts rewhen President John E. Older Americans Month is inspiration and continuity In fact, older Americans learning to guide and in- mind us that when older Kemnedy designated the our chance to show our to the fabric of our com- are more active in com- spire young minds. They adults are active and enmonth of May as a time to appreciation and support munities. Their shared his- munity life than ever be- offer a take on times gane gaged in their communipay tribute to older Amer- out seniars as they con- tories, diverseexperiences, Iore, thanks in part to by not discussed in any ties, everyanebencifis icans, people intomsand tinue to enrich and and wealth of knowledge advances in heath care, history class - a unique Contact the Fairficld cities across the coumtry strengthen our communi- have made our culture, education, technology, perspectise that sheds County Council on Aging have cornetogethertocel- ties economy and local charebrate the enomnous con- The thente of this ycars acter what they are todny. tributions of older celebration-Older Amer- The theme also highlights Americans-bome of wis- icans: Connecting the themanywaystechnology dom, experience, and the Community - pays hom- is helping olderAmericans
will to realize their dreams age to the many ways in live longer, healthier and will to realize their dreams age to the many ways in live longer, healthier and

Police seek Winnsboro man


## ERROR

the acedentwasnotatyp- Conrad later recanted ical derailment. Paint chose statements through nation of the train's brak- found on the cross tifes bis ationtey, Grant Vamer ing system and deter- where the trein crashralin- of Greenvilf, saying be refned they were in good dieated the train dint nol was in shock at the lime working order aswell. derail, but rather ronted thestatementswremade "Beforc the accident, overand off thetrack. Wolf Conrad was treated and there was no doubt that if said computer models of released from Spartanburg you put the hrakes on, the the incident conflimed Regiunal Huspital after the rain would stop in a very that scenario again and accidem, butwas lateradshont time, Manning said. again. mitted to Village Hospital
Manning said a video The Indings appear to at Pelham in Greer after made by one of the frain's be in concett with state- shaming signs of aconcuspassengers helpert his ments made by Conrad sion. Altempts to reach crewdetermine the spieed shortly after the wreck, Varner for this story were of the train. Dn the firstap, whenhe told police, Twas unsuccessful.
Manning said, the train goingtoo [expletivel fast." Spartarburg County was gohing siuw. On the Accordingta an incident Coroner Rusty Clevenger second lap the train sped report from the Spartan- said the findings have up. And by the third lap, burg Department of Pub- been turned over to the the train had reached a tic Safery Conrad alsa told sth Circuit Solicitor's Ofspeed of 223 MPH at the the officer that "he wonld fice in Charlestnn, whiri point of derailnent. The go slow on the first lap, go will determinewhether or recommended speed in a hit faster on the second not to file criminal the furs where the acci- lap and it was on the third charges in the case. Phone dent accurred Is only B laparound the track when calis to the y th Circuit ofMPH. be 'opened it up' to go fice were uat returned at Investigators also said faster* press time.
n All Natural Hazards Risk Assessment and Hazard Míligatio Plan for the Central Midlands Region of South Carolina

The staff of the Central Midlands Cauncil of Govermments seeks public comment and input on the update of the regional risk asscssment and naturat hazards mitigation plan. A public meeting will be beld at the offices of Centraf Mislands Council or Governments on June 13ih 2011 from 6;10 PM to 7:30 PM. The public can access the draft plan update on the website of the Centrat Midlands COO at wuw.cmeng.org (press reasseses.) Individuals may comment on the plan at the public meeting or they may submit their comments to Mr. Wayne Shuler at Central Midlands Council of Govenmments. (phane (803) 376-5390, email: whinuler @emeng.org) by the clese of business
on Junc 13th, 2011. an June 13th, 2011
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The purpose of his plan update is to meet the requirements of the Disaster Mirigation Aet of 2 KNO and to help inake the local govenuments in the region more prepared for ind resistant to the effects of natuat hazards.
or further inormation an he drat plan updae please comlact Mr. Wayne Shuler at the Central Midlands Council of Governments, 236 Stoneridge Dive, Collubia, SC, 2
Telc. (803) 376-5390.
and inancial stability wever new light on contempo- at 803 -635-3015 tofindout the last several decades rary issues. about volunteer opportuthat have greaty increased Older Americans step nities with programs that their vitality and standard up to help one another as provide services for senof living. Older adults are well. Across the country, iors to improve heallh itout and about giving back seniors connect with other eracy, increase access to and making a differencein seniors by delivering qualityhealhservices, deheir community. meals, helping with home liver food and nutrition Our seniors are mentor- repair, assisting withshop- services and provide fiing the leaders of tomor- ping, and offering com- nancial and housingassisrow, tading to heart the pamlonship, counseling, tance.

## NOTICE OF PUBLIC HEARING Siate of South Caralina Befara tha folifield tounty touncil Caunty of Fairfield

Notise is hereby given that, pursuant it the low, Fairfield County Council will tonduct a publis hearing on the 13lh of June, 2011, 6:00 P.M., in the Countil Chambers, Foirfield County Governmental Complex, ot 350 Columbia Rood, Winnstoro, South Carolina.
The purpose of this publit hearing is to provide for public comment concerting the adoption of an OROINANCE TO AMENO THE FABFFIELD COIGTYY ZOHNNG ORDINANCE, ORDIHANCE, ORDINANCE NO. 49B, IO PROVIDE FOR THE ZONING RECLASSIFICATION FRDH RD [RUSAL

## DEVELDPMENT) TO I-1 (INDUSTRIAL) FOR TWO PARCELS 1) TEN (10.0) ACRE

 PROPERTY (TMS NO. 07)-00-00-027) ZONED RD (RURAL DEVELOPMEMI SERYGES, INC. OWNERS ARE THOMAS W. PEERSON AND KEIIH D. PERIERSON AMD 2) FIVE (5.0) ACRE PROPERTY (TMS NO. 071-00-00-028)

 PEEERSOH. PROPERTY IS LOCATED AT IOS IBISL LANE. WINHSBORO,SC. The general public is inviled to oftend the Publit Hearing. Ronold Stowers, PF., Directer of Plonning, Building ond Zaning.




These are the slaff members of the Blue Granile Medicul Stuff han will serve ou. Pistured (left te right) are: Lisa Cathcart, Office Manager; Gayle Tumey LPN; Dr Larry Cantey, Medical Director, Wrady Lykes, Nurs Practilioncr, and Misc Willians, FMH Administrator

## BLUE GRANITE MEDICAL CENTER

 880 West Moultrie Street, Suite 300(Larated on the lower level of the Mediral Office Building behind the hospital) PHONE: 815-5555

Blue Granite is open to serve our citizens who do not have a medical home. We serve Medicaid and some Medicare patients, insured patients, and some patients with no insurance.


14 Years and Counting -

 bert Martin,Pastor of the Rock Hill Baptist Chishtin Sahdo, S.C.



## SUPPORI

## From Page 3

-cation Center. She will work with Barbara Brenilinger a Registered Nurse and Certiffed Dia beles Educator) to provide education and suppor hat will enable patents take an active role in pre vention and self-management of their diabetes. "Anyone who has diabetes or pre-diabetes, we are asking you to lake an active rale in the selfmanagerment of your diabetes and join this Fairfield Diabetes Support Group," \#rentlinger said For more infamation please call 712-0364 There will be a door prize drawing.
from Page 4
1,200 to 2,000 jobs at our they should have that same fairly big things ingertips, in this econ- right. When you can't and some more whimsifrom that distribution to- omy. If this Amazon deal move around corpo- cal. There is a famousve cation. While there has gets killedit will hurt our rately, then is our per- hicle I wanted to drive been much chalterin re- expansion in S.C. far sonal movement far But, afterthis week! have cent yuars ahout colleci- years to come. We will behind? That's a Nazi drnppedit from thelist. ing tax on Internet become known as the government and we saw no longer want to drive placed orders, mosily not friendly to busincss that once. Which was the Weiner Mobile. thnse purchases are still state.
ax-free. There is cer- "Now we're up in the "Just to get up that tainly a history of giving bigleagues." hill," tax breaks to bring in so the NLRB (National jobs, like BMW and oth- Labor Helations Hoard) wants to sue Bocing be-
That erupted in such a cause they want to open frestorm of opposition it a manufacturing facility warred the five gringon in Chateston. This is lit the mid west There erally crazy Talk aber
 wexe Webs aines set ap overreach by a gaven proclaiming how this ment. The lengths they would take sales away will go to protect their from "Alain Street." Any-Union voters. Tels look at one who has a procitivity the bastiuns of succerssful o shop on line would not union conlrolled citiesi do, or do, it on the basis Detroit, Pitsiburgh and of a warchouse in S.C. It Newark, to name a few, finally passed into law, h's all good!
but there is something Even if dee reasou was ese going on here There completely that they some inturest being wantediofeethadin trod upon that is not ing and smokling dope at being reported. hunch crowd" (t was in But, come on! We have special report recentlyl,

Miy bucke: list has bremment: greyegrey






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Second Notice of Ayallability for Review and Public Comment Public meeting

An All Natural Hazards Risk Assessment and Hazard Mitigation Plan for the Central Midlands Region of South Carolina

The slaff of the Central Midfands Council of Governments seeks public comment and input on the update of the regional risk assessment and natura hazards minigation plan. A pubsic necting will be held at the offices of Central Milliands Council of Governments on Junc 13th 2011 from 6:00 PM to 7:30 PM. The pubitc can access the draft plan update an the website of the Ccniral Midlands COG at www.emcog.org (press releases.) A copy is available for review at the offices of CMCOG. Individuals may comment on the plan at the public meeting or they may submit their comments to Mr. Wayne Stuler at Central Midlands Council of Govemments. (phone (803) 376-5390, email: wshuler@cmcog.org) by the close of husiness on June 13hh, 2011.

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For further infurmation on the draft plan update please cuntact Mr. Wayne Shuler al the Central Midlands Cuuncil of Govemments, 236 Stoneridge Drive, Columbia, SC, 29210.
Tele. (803) 376-5390
Emial wshuler@crncog.org


Basketball camp


Newberry Chamber Chatter
 at the mid-year reception held Thurssday at Prosperily Town Centrr. Wegs and Purrs is one of the newer business members that was honored at the Nowberry Cocinty
Chambar oi Cornuatica's recaption on Thursday.


SMILE - Denisa Cales and Karen Liwingston silt down for a Litta bil and catch up al



Bring in for $\$ 5$ off Walk-ins Wercome!



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DerrickEquipment.net


The state June 9,2011


The State

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\operatorname{may} 27,2011
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An All Natural Hazard Risk Assessment and Hazard Mitigation Plan for the Central Midlands Region of South Carolina 2010 Update

PUBLIC MEETING
June 13, 2011
6:00-7:30 PM


Comments


[^0]:    Source: South Carolina Statistical Abstract, 2001

[^1]:    SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

[^2]:    SCEMD. 2011. County Risk Assessment, Excerpts from the U.S.C. 2008 Hazard Assessment Profile for each county in South Carolina. http://www.scemd.org/Mitigation/County_Risk_Assessment.html. (February 24, 2011).

[^3]:    Law Enforcement

[^4]:    NA - Not assigned by FEMA
    NP- Not participating in the hazard mitigation plan

